

# Upper South Creek Advanced Water Recycling Facility (AWRC) Pollution Incident Response Management Plan (PIRMP)

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# 1. Introduction

## 1.1 Purpose

It is a requirement of the *Protection of the Environment Operations Act 1997* (POEO Act) that the holder of an environment protection licence (EPL) must prepare a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

This PIRMP is for the Upper South Creek (USC) Advanced Water Recycling Centre (AWRC) and covers the remainder of the construction period (EPL 21800 transferred from Delivery Partner to Sydney Water on 18/7/25) until operation (expected mid 2026).

## 1.2 Key Requirements

Key requirements associated with this PIRMP includes:

- ✓ Compliance with the POEO Act Part 5.7A to prepare, keep, test and implement a Pollution Incident Response Management Plan for EPL holders.
- ✓ Compliance with Sydney Water's Incident Management Procedures.
- ✓ Compliance with Sydney Water's Work Health & Safety Management System (WHMS) standards and procedures.
- ✓ Compliance with Fire & Rescue NSW requirements.

## 1.3 Scope

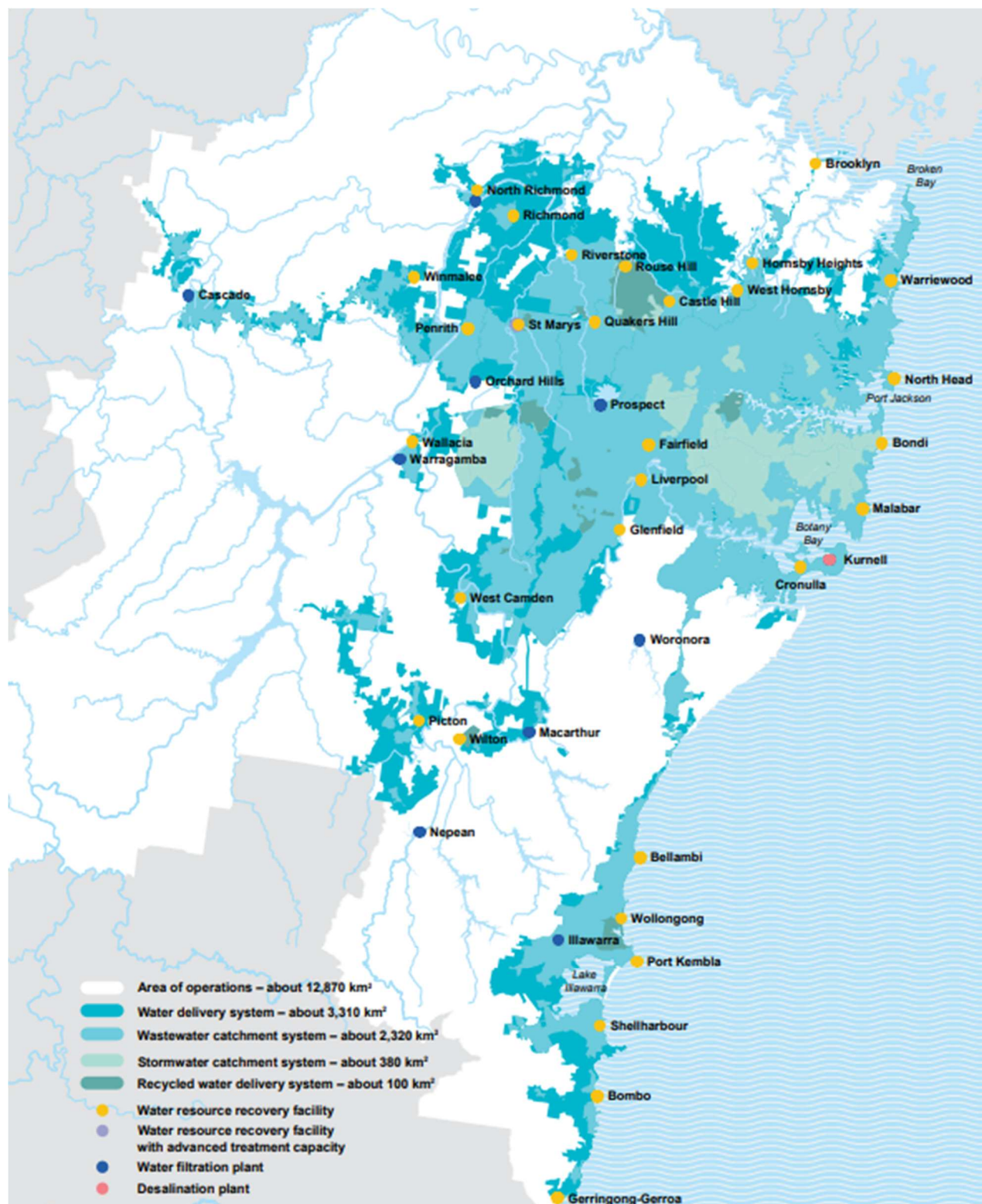
Sydney Water Corporation (SWC) is the licensee of EPL No. 21800 (issued by the NSW Environment Protection Authority (EPA)) for the project and is responsible for notifications of incidences. The construction EPL was transferred to SWC (from John Holland Group (JHG)) on 18/07/25, and will be further revised through a LVA process to incorporate commissioning and operational requirements, loads and limits.

JHG is the Delivery Partner for this project. Due to the progressive nature of the works, JHG is completing construction and preparing for commissioning. JHG hold operational control as principal contractor, therefore all on-site pollution incidences will be under managed under JHG's EMS, management system and the project's CEMP. The project is currently in an interim phase between construction and operation, therefore relevant extracts from JHG's management system apply to incident management and are attached in **Appendix A**. Any incidents will be reported by SWC in accordance with SWC's incident management systems and reporting requirements.

## 1.4 Operating Context

Sydney Water has 24 separate systems that are licenced by the EPA. Wastewater is treated at any of 30 water resource recovery facilities. The area of SWC operations is depicted in Figure 1.

Figure 1 – SWC Areas of Operation



## 2. Background

### 2.1 Site description

The AWRC, is currently under construction and will support the population and economic growth of Western Sydney, including the Western Sydney International Airport, Southwest growth area and Western Sydney Aerotropolis growth area (refer to Figure 2). Once operational, the project will provide wastewater services to Western Sydney, supporting approximately 400,000 people by 2056. The project will also produce high-quality treated water for non-drinking reuse and for release to local waterways.

The project comprises the following components:

- A new wastewater treatment facility to collect wastewater from businesses and homes and treat it with advanced technology, producing high-quality treated water, renewable energy and biosolids for beneficial reuse
- A new green space area around the AWRC, adjacent to South Creek and Kemps Creek, to support the ongoing development of a green spine through Western Sydney
- New infrastructure from the AWRC to South Creek, to release excess treated water during significant wet weather events, estimated to occur about 3 – 14 days each year
- A new treated water pipeline from the AWRC to Nepean River at Wallacia Weir, to release high-quality treated water to the river during normal weather conditions
- A new brine pipeline from the AWRC connecting into Sydney Water's existing wastewater system to transport brine to the Malabar Wastewater Treatment Plant
- A range of ancillary infrastructure.

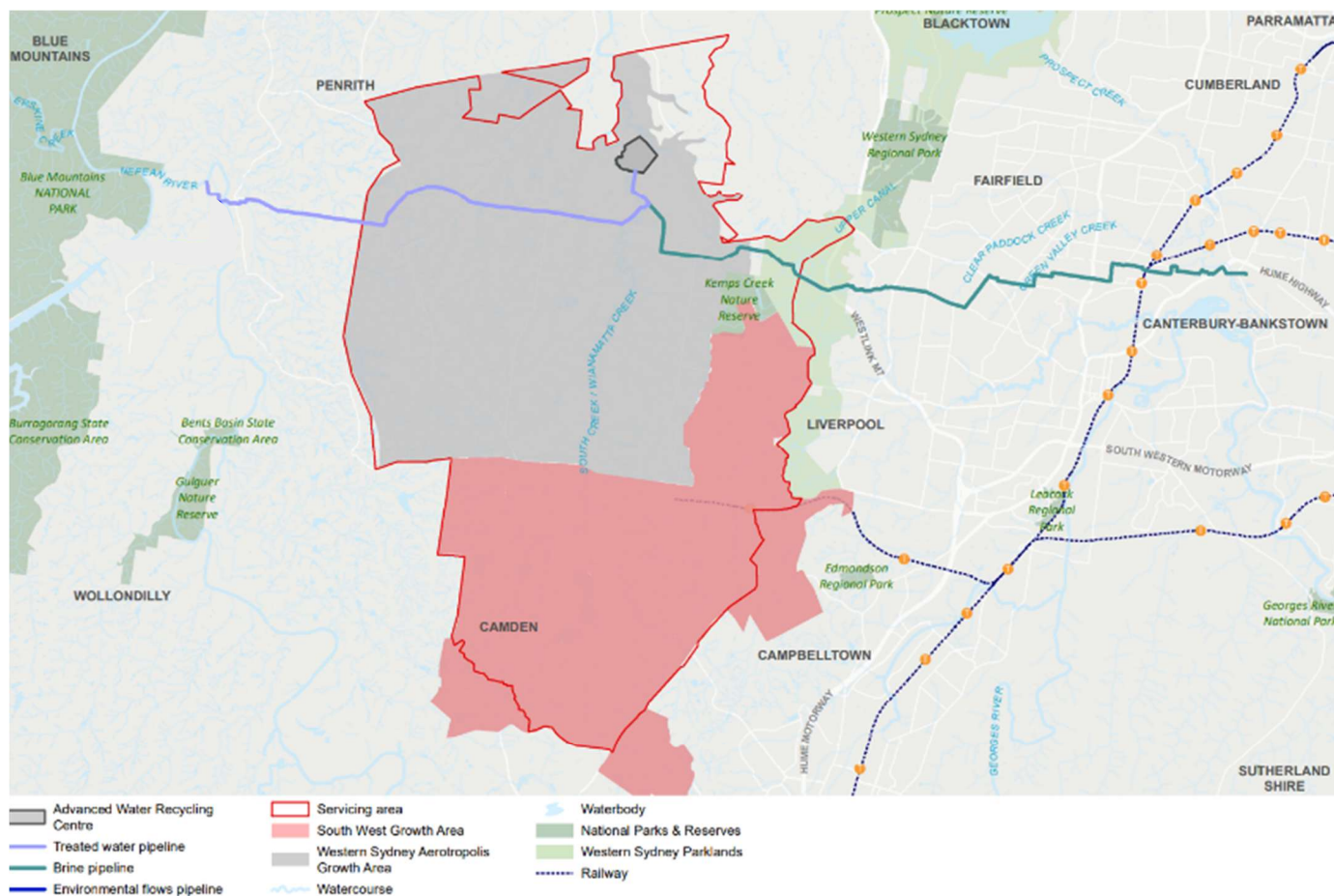
The Project will be constructed in two stages. Stage 1 of the project is being completed by JHG on behalf of SWC, with expected construction completion in 2025. After commissioning, the project will handover to Trility John Holland Operation and Maintenance Joint Venture (TJH OMC) in 2026.

Stage 1 consists of building and operating the AWRC to treat an average dry weather flow (ADWF), of up to 35 megalitres per day (ML/day). Additionally, this stage includes construction of the treated water pipeline and brine pipeline which will allow for up to 70ML/day flow going through the AWRC (but only operating them to transport and release volumes produced by Stage 1).

Stage 2 involves the expansion of the AWRC to treat wastewater flows of up to 70ML/day and SWC will remain flexible on sizing and timing of future plans to accommodate changes in populations projections over time.



Figure 2 - Project location and servicing area



## 2.2 Location of Premise

For this PIRMP, the AWRC site is the premise, located at 28 Badu Muru Grove, Kemps Creek (end of new access road off Clifton Ave). With the pending LVA, the premise will likely be expanded to also include the wastewater network of the USC Catchment.

## 2.3 Hazards and Potential Pollutants

The potential hazards to human health and the environment related to construction activities at AWRC are documented in the CEMP and Safety Management Plans. They generally include inputs to construction, such as chemicals and materials (epoxy, concrete, etc) as well as fuels, oils and lubricants. Refuelling at the site is managed by independent Mini-Tankers.

Please see **Appendix B** for the Spill Response Procedure (managed by delivery partner during construction until operation). Numerous spill kits are maintained on-site. During construction, no raw sewage is being treated or received to the facility. Therefore, any storage, use and management of chemical and hazardous gases associated with the treatment of sewage are not applicable to this PIRMP.

### 3. Pollution Incident Response Procedure

This Pollution Incident Response Procedure is implemented whenever a pollution incident occurs and material harm to the environment is caused or threatened as defined in Section 147 of the POEO Act:

*147 Meaning of material harm to the environment*

*(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*

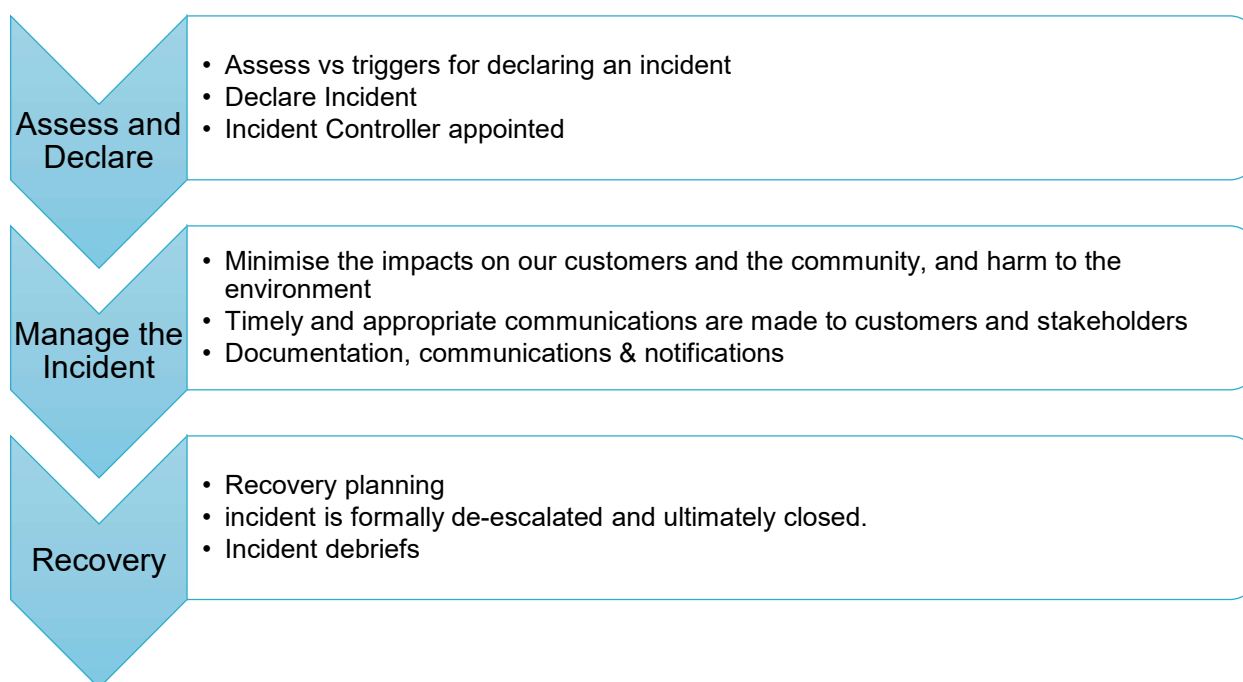
*(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and*

*(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.*

Sydney Water takes an 'All Hazards' approach to managing incidents. The generic response procedure is documented in the Incident & Emergency Management Response Procedure (3084788) and Responding to incidents with an environmental impact (SWEMS0009).

The PIRMP response procedure is arranged to match relevant tasks in the standard procedure.



## 3.1 Process overview

### 3.1.1 Assess and Declare

Customers can call the 24-hour SWC emergency line on **13 20 90** to report incidents or receive updates.

Customer calls received by the Customer Experience Team, and IICATS alarms monitored by the System Operations Centre (SOC) are the primary mechanisms for identification of pipe failures, including leaks, breaks, odours, or sewage overflows that could cause material harm, the majority of which are not relevant to the AWRC during construction. However, the SOC will be able to inform the SWC Project Director, on the details noted below:

- Dimitrios Shortland (AWRC Project Director) **0475 931 220**

Table 1 - Assess and Declare roles and responsibilities

Role	Responsibilities
Customer Experience Team, System Operations Centre (SOC), AWRC PM	<ul style="list-style-type: none"><li>• Triage Service Fault</li><li>• Create workorder</li></ul>
Response Team (Dispatcher) Delivery Partner, where applicable	<ul style="list-style-type: none"><li>• Dispatch first responder &amp;/or crew (if required)</li></ul>
Network Technician &/or Network Maintenance Crew (first responder)	<ul style="list-style-type: none"><li>• Assess impact</li><li>• Test for ammonia</li><li>• Contact Dispatch to declare incident</li></ul>
Response Team (Dispatcher) Delivery Partner, if required	<ul style="list-style-type: none"><li>• Complete material harm checklist</li><li>• Internal notifications</li><li>• Create and dispatch follow-on workorders for other teams</li></ul>

### 3.1.2 Manage Incident

This activity refers to the real time management tasks associated with response, control, and handling of an incident at the operational level and includes notifying persons required by Section 148 of the POEO Act:

- |                                       |              |
|---------------------------------------|--------------|
| • Environmental Protection Authority  | 131-555      |
| • The Local Council (Penrith Council) | 4732-7777    |
| • NSW Health                          | 9391-9049    |
| • SafeWork NSW                        | 131-050      |
| • Fire and Rescue NSW                 | 1300-729-579 |

Internal notifications are made to assist business units and teams to make decisions and plan and prioritise during an incident. Internal notifications and communications are sent via:

- Email to Duty Manager or All User groups
- SMS alert groups

Pollution incidents that require community notification (including owners or occupiers of premises within the vicinity) will trigger activating relevant Business or Corporate procedures (Incident and Emergency Management Procedure).

Sydney Water, or JHG (AWRC Delivery Partner) where applicable, will contact impacted communities through:

- Door knocking individual households
- Letter box drops
- Media releases

Further details regarding incident management specific to construction incidents that will continue to be managed by JHG are detailed within **Appendix A**.

Any major pollution incident or emergency that requires emergency services assistance will trigger activation of Sydney Water's Emergency Coordination Centre (ECC) for coordinated monitoring and management of the incident by the emergency management team. For incidents that threaten health & safety of the community, SWC is subjected to the legislative combat agency communication strategy for dissemination of key information related to urgent actions to be taken by the public.

In the unlikely event of an incident impacting on the surrounding community, Sydney Water, with other emergency authorities, will ensure that relevant warnings including what action to take is issued to the potentially affected community.

**HAZMAT** response may be required for some **hazardous gases**.

Table 2 - Manage Incident roles and responsibilities

Role	Responsibilities
Network Technician, Network Maintenance Crew, &/or Delivery Partner, where applicable	<ul style="list-style-type: none"> <li>• Install containment</li> <li>• Erect signs and barricades</li> <li>• Communicate with community</li> </ul>
SWC Environmental Operations – Liaison, or SWC Project Team	<ul style="list-style-type: none"> <li>• Notify authorities as required by Sec 148 of the POEO Act.</li> <li>• Provide regular updates</li> <li>• Formal reporting to EPA</li> </ul>
Network Maintenance Crew, &/or Delivery Partner, where applicable	<ul style="list-style-type: none"> <li>• Rectify problem and provide updates</li> <li>• Complete minor clean-up</li> </ul>
SWC Project Team	<ul style="list-style-type: none"> <li>• Update Sydney Water incident management system</li> </ul>
Field Sampling & Testing Group (FST)	<ul style="list-style-type: none"> <li>• Carry out sampling &amp; testing, provide field results and toxicity assessment</li> </ul>
Environmental Operations Environmental Specialists (previously called SERT)	<ul style="list-style-type: none"> <li>• Assess site &amp; identify impacts / risks</li> <li>• Engage experts as required</li> <li>• Advise on clean-up plan, and remediation</li> </ul>
Clean-up crew, &/or Delivery Partner, where applicable	<ul style="list-style-type: none"> <li>• Complete clean-up activities</li> </ul>
SWC Project Team	<ul style="list-style-type: none"> <li>• Validate site clean-up</li> <li>• Direct clean-up crew if rework is required</li> </ul>
Field Sampling & Testing Group (FST)	<ul style="list-style-type: none"> <li>• Carry out additional / follow-up sampling &amp; testing to confirm site clean</li> </ul>
Network Maintenance Crew, &/or Delivery Partner, where applicable	<ul style="list-style-type: none"> <li>• Remove containment, signs and barricades</li> </ul>



Further details on community notification and action protocols specific to the AWRC construction Delivery Partner's areas of responsibility are included in **Appendix A**.

### 3.1.3 Recovery

#### Recording

Sydney Water's system for recording incident related data is the Sydney Water Governance, Risk, Compliance, Safety, Health, Environment, Quality (GRCSHEQ) application (Camms).

Each activation of this PIRMP will result in an incident record being created and recording of incident related data.

#### Debriefs

Debriefing focuses on the management of the response and recovery activities. The objective of debriefing is to identify lessons, associated actions, and opportunities for improvement.

## 3.2 Training

Staff who are likely to respond to an incident must be trained. These roles are:

- Delivery Partner workforce
- Customer Hub Duty Managers
- Dispatchers / Schedulers
- Planners
- Network Coordinators
- Environmental Operations Team
- Environmental Regulation Team
- Network Operators
- Network Technicians
- Network Maintenance crews
- Contractor Crews
- Field Sampling Team

Response staff must be trained in activating this PIRMP, any on site specific and other relevant procedures. Responsibilities during construction regarding incident management are included in the AWRC site induction, managed by JHG.

## 4. Context

### 4.1 Availability

This plan shall be made available to all personnel responsible for implementing the plan, and to an authorised officer (as defines in the POEO Act) on request. A digital copy will be maintained on the project website <https://www.sydneywater.com.au/water-the-environment/what-we-are-doing/projects-in-your-area/uppersouthcreek-advanced-water-recycling-centre.html>

### 4.2 References

Document type	Title
<b>Compliance obligations</b>	Protection of the Environment Operations Act 1997 No 156, Part 5.7A Protection of the Environment Operations (General) Regulation 2009, Part 3A Guideline: Pollution Incident Response Management Plans (2020)
<b>Policies and procedures</b>	Detailed PIRMP, procedures and work instructions

## 5. Ownership

Role	Title
<b>Group</b>	Major Projects
<b>Author</b>	Cheryl Cahill

### 5.1 Change history

Version	Issue Date	Approved by	Brief description of change and consultation
1	18/07/2025	Cheryl Cahill	Developed for AWRC transferred EPL

## Appendix A – Delivery Partner Management System Extracts

Upper South Creek Project  
Advanced Water Recycling Centre

**JOHN  
HOLLAND**

### Preamble

John Holland has been engaged by Sydney Water to design and construct the Upper South Creek Advanced Water Recycling Centre (AWRC) project (the project). John Holland has been granted an Environmental Protection Licence (EPL) No. 21800 by the NSW Environment Protection Authority (EPA).

The Workplace Emergency Response Management Plan (USCP-JHG-MPL-HSE-0001) has been prepared to comply with the requirements under the Protection of the Environment Operations (POEO) Act 1997 Part 5.7A Duty to Prepare and implement Pollution Incident Response Management Plans and POEO (General) Regulation 2009 Part 3A.

A Pollution Incident Response Management Plan must be prepared for all projects based in NSW that hold an Environment Protection Licence (EPL), or for any project if directed to prepare one by the EPA.

It is a requirement under Clause 98D of the Protection of the Environment Operation Amendment Regulations 2012 that certain sections of the Plan are made publicly available on the website within 14 days after being prepared and approved for issue. The sections are those that cover procedures for contacting the relevant authorities and communicating with the community.

Section 2.24 of the Workplace Emergency Response Plan meet the requirements of Clause 98D and have been extracted and made available on the John Holland website.

Upper South Creek Project  
Advanced Water Recycling Centre

The Authorities must be notified in the order listed below.

When notifying authorities that a pollution incident has occurred, the following information must be provided:

1. The time, date, nature, duration and location of the incident
2. The location of the place where pollution is occurring or is likely to occur
3. The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
4. The circumstances in which the incident occurred (including the cause of the incident, if known)
5. The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.

The information required is the information known to the person notifying the incident when the notification is required to be given.

If the information required to be included in a notice of a pollution incident under items 3, 4 and 5 is not known when the initial notification is made but becomes known afterwards, that information must be notified immediately after it becomes known.

## Section 2.24 Notification of Agencies of a Pollution Incident if there is a risk of Material Harm to the Environment

	Name		Details
1	Emergency Services*	Police Fire & Rescue Ambulance HAZMAT	000
* Only ring 000 if the incident presents an immediate threat to human health or property and requires Emergency Services. If the incident does not require an initial combat agency or once the 000 call has been made, notify as listed below.			
2	NSW EPA (if not ARA)	Pollution Line	131 555
3	NSW Health	Public Health Unit - Liverpool Unit	Standard Hours – 02 9794 0855 After Hours – 02 8738 3000
4	NSW Health	Public Health Unit – Penrith Unit	Standard Hours – 02 4734 2022 After Hours – 02 4734 2000
5	Water NSW (Upper Canal)	Report a hazard	1800 061 069
6	Department of Primary Industries	Fisheries NSW	1300 550 474
7	Western Sydney Parklands		02 9895 7500
8	Comcare		1300 366 979
9	SafeWork NSW	Information Line	131 050
10	Wollondilly Shire Council		02 4677 1100
11	Penrith City Council		02 4732 7777
12	Liverpool City Council		1300 362 170
13	Fairfield City Council		02 9725 0222
14	Canterbury-Bankstown City Council		02 9707 9000

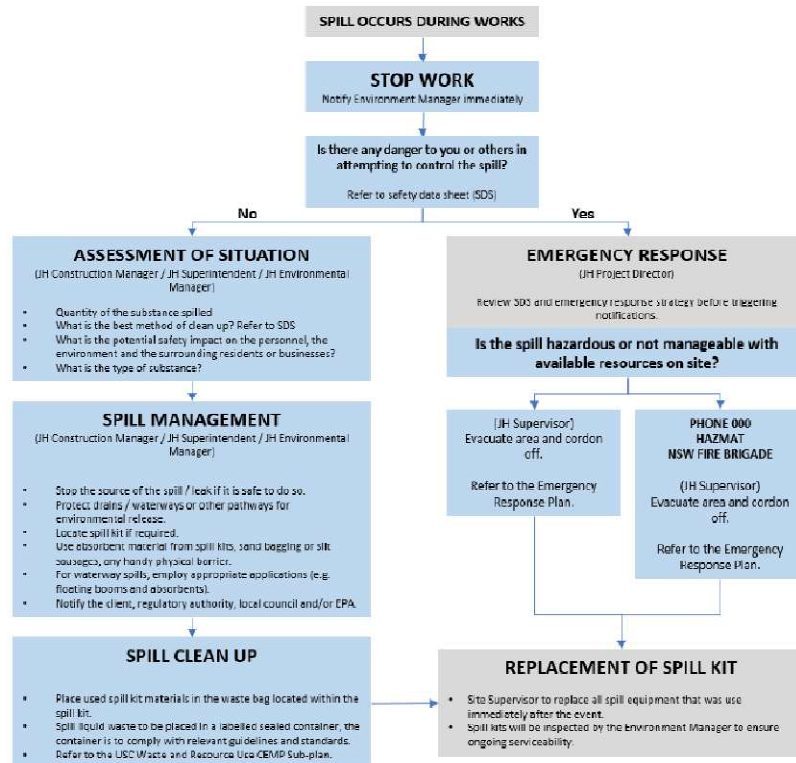


## Section 2.24 Community Notification and Action Protocol of the Workplace Emergency Response Plan

Pollution Incident Scenario	Potential Impacts	What to do	Who to notify	When	Communication Mechanism
Fuel or oil spill into waterway	Damage to ecosystem	Notify users	Principal	Principal within 15 minutes	Notification (e.g. door knock / telephone, letter drop)
			Water NSW (for Upper Canal)	Within 15 minutes	
			Downstream users	1 hour Following clean-up	
Large release from sediment basin	Siltation of watercourse	Avoid entering watercourse.	Principal	Principal within 15 minutes	Notification (e.g. door knock / telephone, letter drop)
		Cease pumping any water	Downstream users	3 hours  When water has been removed	
Chemical spill entering drain	Exposure to chemicals	Avoid entering drain.	Principal	Principal within 15 minutes	Notification (e.g. door knock / telephone, letter drop)
		Don't drink / use any water originating from drain	Adjacent residents / businesses	3 hours  When chemical has been removed	



## Appendix B – Spill Response Flowchart



### Response Procedure

- In the event of a spill, this Spill Response Procedure will be implemented.
- Appropriate security measures will be implemented to prevent unauthorised access by the public to the work site.
- Fuel, chemical storage and handling areas will be clearly identified with signage
- Fuel, chemical storage and handling areas will be regularly checked for signs of spills and ensure the capacity of secondary containment is maintained
- Bunds must have 110% capacity of the total volume of liquids stored (Australian Standard AS 1940-2004: The storage and handling of flammable and combustible liquids)
- Hazardous substances will be stored onsite in lockable containers, in their original receptacles only
- All hazardous substances will be clearly labelled and have Safety Data Sheets available nearby
- All hazardous substances will be stored and managed in accordance with the *Storage and Handling of Dangerous Goods Code of Practice* (WorkCover NSW, 2005) and Hazardous and Offensive Development Application Guidelines
- An up-to-date register of hazardous substances will be kept onsite at all times
- Hazardous substance use that could result in a spill will not be carried out near drainage or stormwater lines and, where possible, will be conducted within defined bunds. Where practical, small bunds will be provided on site to provide temporary storage for small containers at the point of use.
- Spill kit and fire response equipment will be located where chemicals are stored and where refuelled plant are operated or maintained. If refuelling is undertaken on site, it will be in a designated area away from drainage lines. All refuelling activities will be supervised.
- All spills or leakages will be immediately contained and cleaned up, ensuring waste material is appropriately disposed of
- Used packages (drums and containers) and containers storing waste liquids must be sealed and disposed of in accordance with the Waste and Resource Use Management Procedure
- Plan and execute the works so as to minimise the possibility of pollution of the site and adjoining areas by chemicals, dangerous goods and other potential contaminants.

### Incident Management

- Incidents are managed in accordance with Section 3.7 of the CEMP. The investigation will include a review of events leading up to the incident and implement improved practices as required, with findings reported to Sydney Water.
- Corrective actions may include monitoring groundwater and/ or nearby surface waters for possible contamination if required and spills are considered to be substantial.
- In accordance with Part 5.7 the Protection of the Environment Operations Act 1997, should the incident be deemed to have resulted in or potential for material environmental harm, or the associated clean-up costs exceed \$10,000, the Environmental Manager or Project Director will notify the relevant authorities and stakeholders.

Extract from Delivery Partner's USC Soils and Contamination CEMP Sub-Plan (Appendix B), dated 19/08/2024