

# Pollution Incident Response Management Plan— WestConnex Stacks

A Transurban Group plan

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**Document code**

WOM-HSE-PL-002

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**Approval authority**

Asset Operations Manager

Maintenance Operations Manager

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# Revision history

Date	Version*	Author	Nature of change (including review history)
26-Feb-20	1	Kris Hincks	Internal Development
5-Nov-20	2	Kris Hincks	review
19-Nov-21	3	Kris Hincks	review
21-Oct-22	4	Kris Hincks	review
1-Sep-23	5	Kris Hincks	Review following testing
3-Jun-24	6	Kris Hincks, Operational Environmental Specialist  <b>Ashley Parnell, Maintenance Operations Manager</b>  <b>Tassos Plakogiannis, Asset Operations Manager</b>	Reviewed with no changes.  <b>Reviewed and approved for publishing.</b>

**Review Frequency:** Annual

\* An automatic version of this document will be stored upon modifying. Before printing please insert the current version number into the table above and into the footer.

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# Pollution Incident Response Management Plan – WestConnex Stacks

## 1. Abbreviations, acronyms and definitions

Term or acronym	Description
<b>EPA</b>	Environment Protection Authority (EPA)
<b>DPIE</b>	Department of Planning Industry and Environment
<b>HSEMS</b>	Health Safety and Environment Management System
<b>HSE</b>	Health, Safety and Environment
<b>MCoA</b>	Minister's Conditions of Approval
<b>O&amp;M</b>	Operations and Maintenance
<b>ACT</b>	Protection of the Environment Operations Act 1997
<b>OEMP</b>	Operational Environmental Management Plan
<b>OMCS</b>	Operations Motorway Control System
<b>PMCS</b>	Plant Management Control Systems
<b>SWMS</b>	Safe Work Method Statement
<b>TUWCX</b>	Transurban WestConnex
<b>TMCS</b>	Traffic Management Control System
<b>FHEOM</b>	Fulton Hogan Egis - Maintenance Service Provider

## 2. Introduction

### 2.1 Background

WestConnex Transurban Pty Ltd (WCX TU) holds an Environment Protection Licence (Lic# 21372) with the NSW Environment Protection Authority (EPA) for five ventilation facilities associated with the M4 East and the M8. As per the Protection of the Environment Operations Act 1997 (the POEO Act), WCX TU as holder has prepared the following Pollution Incident Response Management Plan (PIRMP) that complies with Part 5.7A of the Protection of the Environment Operations Act 1997 and in-line with Protection of the Environment Operations (General) Regulation 2009 95A (1) that restricts this plan to only cover pollution events from "Road Tunnel Emissions".

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, WCX TU will immediately implement this plan in relation to the activity required by Part 5.7A of the POEO Act. A written copy of this plan is kept at the Homebush and SPI Motorway Control Centre (10 Homebush Bay Drive, Homebush,

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NSW, 2140 and 10 Burrows Road, St Peters, NSW 2044) a, and is made available on request by an authorised NSW EPA Officer and publicly at (<https://www.linkt.com.au>)

## 2.2 Objectives

The objectives of this PIRMP are to:

- Minimise and control the risk of an emission pollution incident at the project by requiring identification of risks and the development of planned actions to minimise those risks.
- Ensure comprehensive and timely communication about an incident to the Environment Protection Authority (EPA) and other relevant government authorities and the community who may be affected by the impacts of an emission pollution incident.

## 2.3 Description

The road tunnel ventilation facilities work by exploiting the natural mixing of the atmosphere to efficiently disperse air pollutants, this results in nearby residents experiencing little, if any, exposure to emissions.

Tunnel ventilation is required to enable the tunnel to operate with low risk, and acceptable air quality at all times. The tunnel ventilation system is part of the overall Plant Monitoring and Control System (PMCS) and consists of:

- Exhaust fans
- Supply fans
- Jet fans mounted throughout the tunnel and ramps
- Shutoff and balancing dampers
- Air-flow, pollution and thermal measurement equipment both within the tunnel and at the ventilation outlets
- Plant control system
- Underwood Road Ventilation Facility (URVF) located within the existing M4 Motorway reserve near Underwood Road at Homebush (See Figure 1) – the facility serves the westbound traffic within the project tunnel
- Tunnel support facility at Cintra Park – the facility provides exhaust in emergency conditions
- Parramatta Road Ventilation Facility (PRVF) located near the Wattle Street (City West Link) and Parramatta Road interchanges at Haberfield (See Figure 2) – the facility provides exhaust from the mainline eastbound
- Kingsgrove Ventilation Facility – Located at Kingsgrove with the M8 road reserve. The facility serves the westbound traffic within the project tunnel (See Figure 3)
- Arncliffe Ventilation Facility – Located at Arncliffe with the M8 road reserve. The facility serves the westbound and east bound traffic within the project tunnel (See Figure 4)
- St Peters Interchange Ventilation Facility – Located at St Peters Interchange with the M8 road reserve. The facility serves the eastbound traffic within the project tunnel (See Figure 5)
- Campbell Road Ventilation Facility – Located at St Peters Interchange. The facility serves the southbound traffic within the project tunnel (See Figure 6)
- Parramatta Rd Link Ventilation Facility – located near the Wattle Street (City West Link) and Parramatta Road interchanges at Haberfield. The facility serves the northbound traffic within the project tunnel (See Figure 2)
- Rozelle Ventilation Facility – located near the City West Link at Lilyfield. The facility serves the City West Link traffic within the project tunnel (See Figure 7)

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→ Iron Cove Ventilation Facility – located near the City West Link at Lilyfield. The facility serves the City West Link traffic within the project tunnel (See Figure 8)

The broader location is shown in *Appendix C – Broader Location Map*:

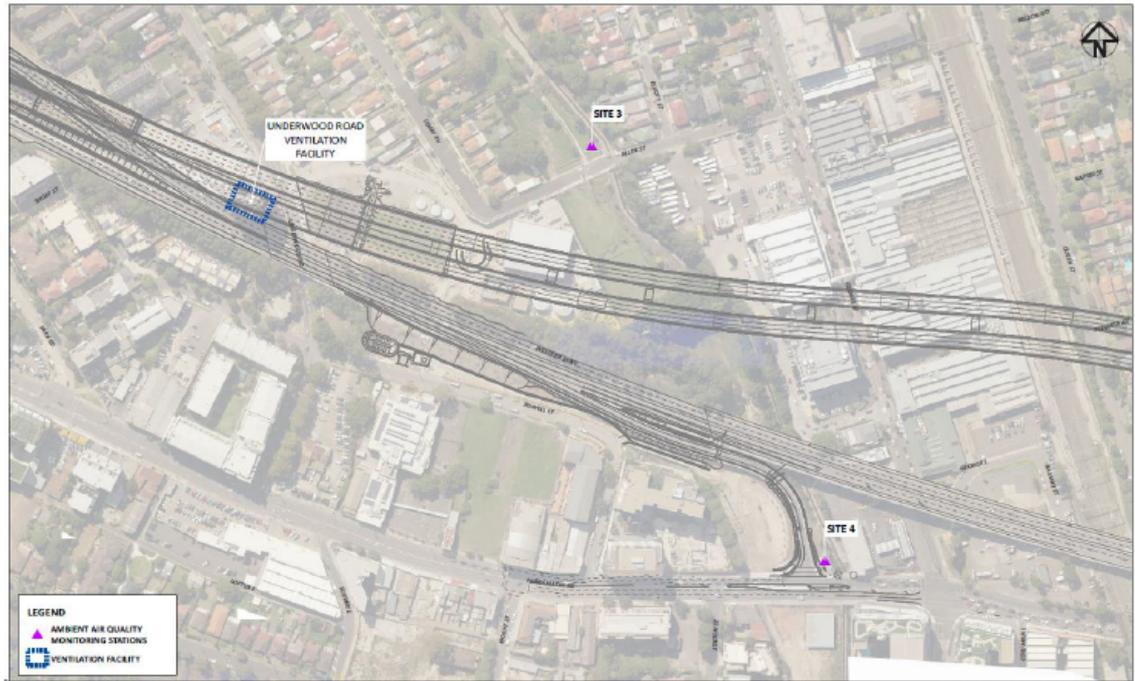


Figure 1: Underwood Road Ventilation Facility

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Figure 2 Parramatta Road Ventilation Facility



Figure 3 Kingsgrove Ventilation Facility

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Figure 4 Arncliffe Ventilation Facility



Figure 5 St Peters Interchange Ventilation Facility

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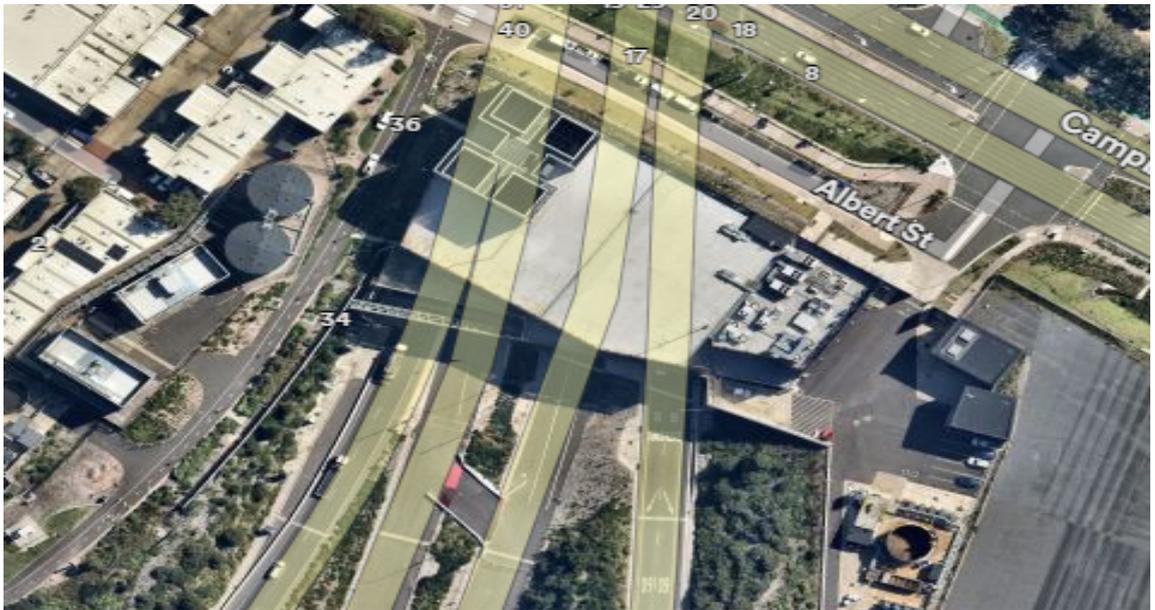


Figure 6 Campbell Rd Ventilation Facility

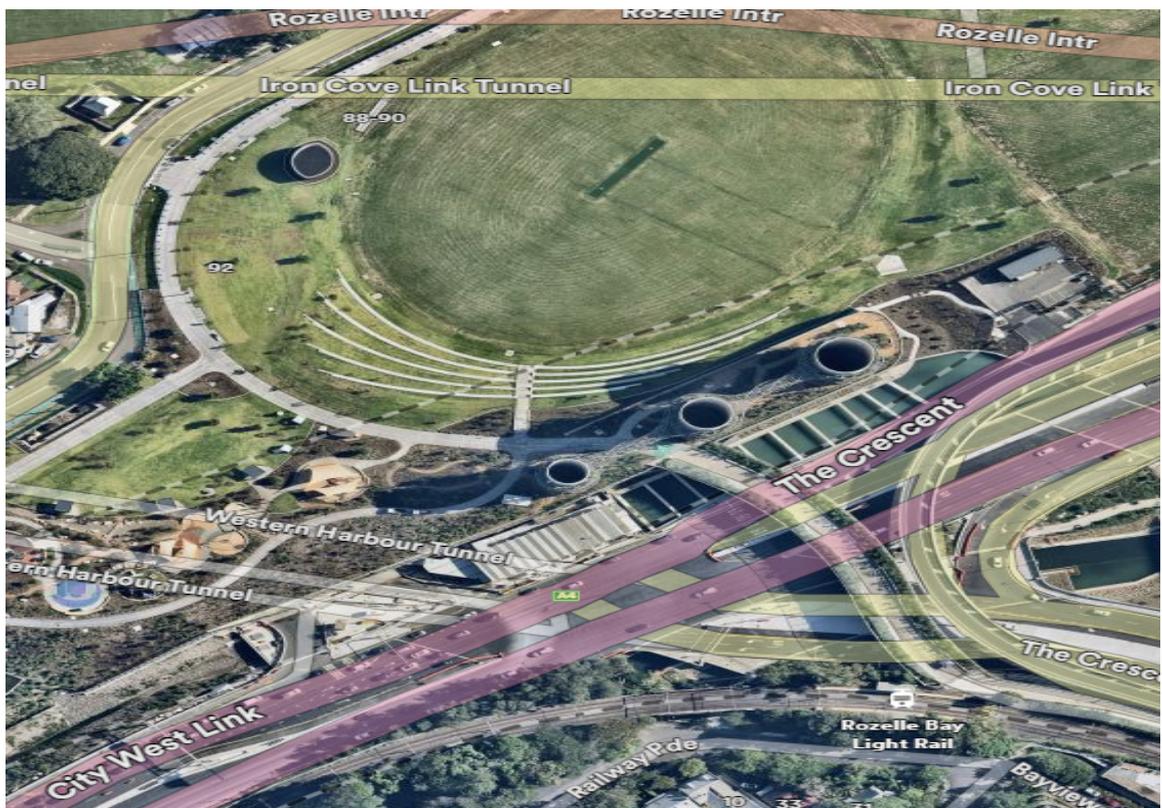


Figure 7 Rozelle Ventilation Facility

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Figure 8 Iron Cove Ventilation Facility

## 2.4 Incident Notification Information

The relevant information about a pollution incident required under S150 of the Protection of the Environment Operations Act 1997 consists of the following:

- (1)
  - a) time, date, nature, duration and location of the incident,
  - b) location of the place where pollution is occurring or is likely to occur,
  - c) nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,
  - d) circumstances in which the incident occurred (including the cause of the incident, if known,
  - e) action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,
  - f) other information prescribed by the regulations.
- (2) The information required by this section is the information known to the person notifying the incident when the notification is required to be given.
- (3) If the information required to be included in a notice of a pollution incident by subsection (1) (c), (d) or (e) is not known to that person when the initial notification is made but becomes known

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afterwards, that information must be notified in accordance with section 148 immediately after it becomes known.

## 2.5 Testing, Review and Amendment

The PIRMP will be tested in accordance with the requirements set out in the Protection of the Environment Operations (General) 2009 as follows:

- To ensure that the information included in the plan is accurate and up to date, and the plan is capable of being implemented in a workable and effective manner; and
- Any such test is to be carried out:
  - At least once every 12 months; and
  - Within 1 month of any pollution incident occurring

WestConnex as a whole has a number of potential scenarios that may impact the environment; detailed in the *Operational Environmental Management Plan; Appendix D Environmental Risk Register*. PIRMP testing will be limited to ventilation facility exceedance scenarios.

In the PIRMP, the following details will be recorded on a continuous basis:

- Review: Date, version, author and nature of change (Page 2)
- Test: Date (tested), description of test, conducted by, date (update) (Appendix A).

## 3. Inventory of Pollutants

There will be no pollutants kept on the premises for use during operation and maintenance. As per the requirements set out in the Act; there will be no pollutant register detailing pollutant type, maximum quantity and location of potential pollutants appended to the PIRMP.

## 4. Roles and Responsibilities

As required by the act; the roles and responsibilities are described below of those key individuals who are responsible for activating the plan, managing the response and notifying relevant authorities:

Role	Responsibility	Contact Details (24hr)
<b>Control Room – TCRO</b>	<ul style="list-style-type: none"> <li>■ Responsible for managing the response to a pollution incident.</li> <li>● Responsible for activating the PIRMP.</li> <li>■ Authorised to notify relevant authorities under section 148 of the POEO Act.</li> </ul>	<p>(02) 8746 0045</p> <p>(02) 9595 9600</p>

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## 5. Hazards to the Environment and Human Health

Due to the licence relating to the scheduled activity 'Road Tunnel Emissions' the following hazards related to the environment and human health are exclusively:

- Exceedance of the solid particles exceedance limit – ventilation facility
- Exceedance of the NO<sub>2</sub> or NO or both, as NO<sub>2</sub> equivalent exceedance limit – ventilation facility
- Exceedance of the NO<sub>2</sub> exceedance limit – ventilation facility
- Exceedance of the CO exceedance limit – ventilation facility
- Exceedance of the VOC (as η-propane) exceedance limit – ventilation facility

As required under the Act; the likelihood of the abovementioned environmental hazards are detailed in the *Operational Environmental Management Plan*. The Plan is publicly available on the WestConnex Website.

### 5.1 Controlling Hazards to the Environment

In order to mitigate the abovementioned hazards, WCX TU implements constant air monitoring at the ventilation facilities in accordance with the conditions of the EPL and MCoA. Further physical controls are detailed in *5.3 Environmental Pollution Control Equipment*. Site personnel are also trained in, and implement the following related management plans to control factors that may influence an exceedance with ventilation facility limits:

Document #	Description
M4E-ES-PLN-PWD-06956	M4E Operational Environmental Management Plan
M4E-ES-PLN-PWD-07014	Operational Air Quality Management Plan
M5N-ES-PLN-PWD-0047	M8 Operational Environmental Management Plan

Specifically in the *OEMP Annexure D: Environmental Risk Register* describes the environmental impact and the mitigation, management and monitoring strategies that are being employed to manage hazards.

### 5.2 Controlling Hazards to Human Health

To minimise the risk of harm to people at the premises the following measures are implemented as per Transurban minimum requirements:

- All person(s) accessing site are required to wear the appropriate PPE including:
  - Long pants
  - Long sleeved shirt
  - Hard hat
  - High visibility vest

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- Steel capped boots
- Safety glasses.
- All person(s) are made aware of the PIRMP including notification/response procedures during site induction.
- All personnel are made aware of all site exits and emergency evacuation points.
- The community are to be notified of any changes to works that may affect them, including works outside of normal working hours.

## 5.3 Environmental Pollution Control Equipment

As per *Operational Air Quality Management Plan*, the tunnel's air quality is managed by the use of a fan circulation system that links to ventilation facilities located at PRVF and URVF.

The equipment is operated by WCX TU and continuous air quality monitoring is undertaken.

Alarms are sounded at the point where the asset is operating within a set per cent of the exceedance limits. The Traffic Control Room is able to adjust the ventilation system to improve the air quality in the tunnel.

## 5.4 Process to be taken following a Pollution Incident

If ventilation facility monitoring shows either a validated or non-validated non-compliance then the following step in *Operational Air Quality Management Plan* must be followed, as summarised.

- Notify the DPI&E, EPA and DoH immediately in the event of an exceedance of ventilation stack limits to be followed up with a detailed report to the Director-General within 20 working days.

The flowchart in Figure 3 shows the steps in more detail

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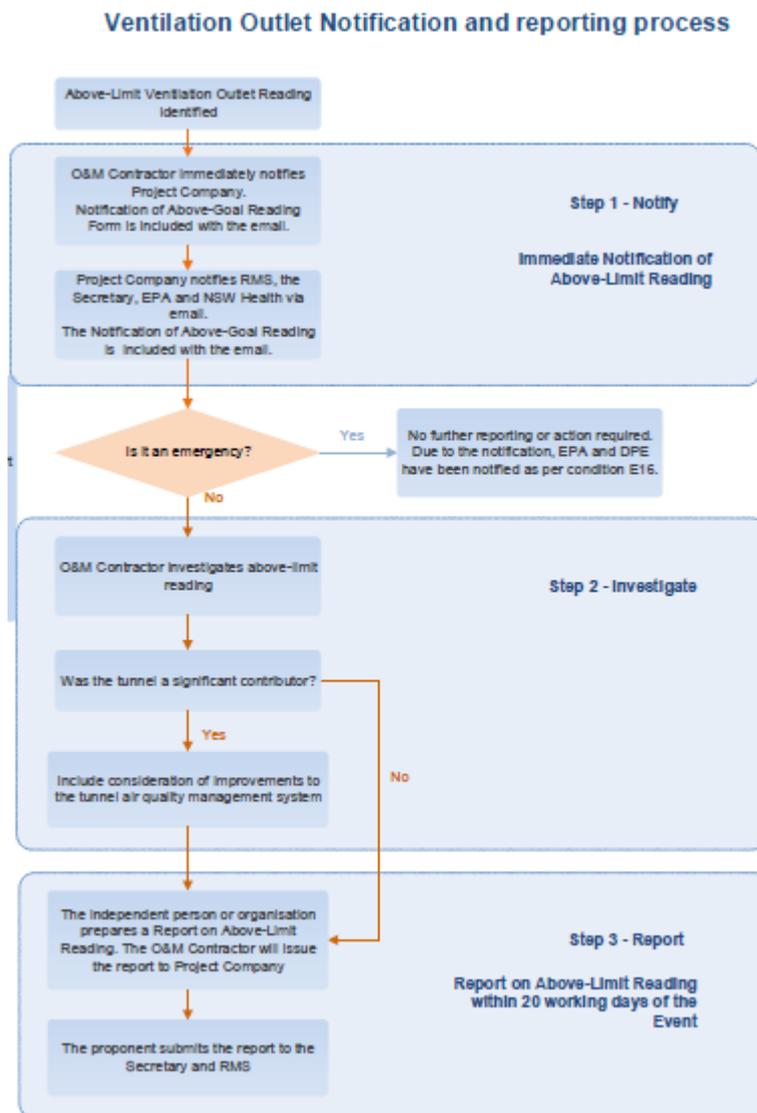


Figure 3 Ventilation Outlet Notification Process

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## 5.5 Regulatory Authorities

As above, the TCRO or equivalent is responsible for notifying relevant authorities. The current contact details of the relevant authorities under section 148 of the POEO Act include;

Authority	Email	Phone
<b>EPA (NSW)</b>	info@epa.nsw.gov.au	131 555
<b>Health (NSW)</b>	MOH-EHB@health.nsw.gov.au	(02) 9424 5817
<b>DPIE</b>	infrastructure.notifications@planning.nsw.gov.au compliance@planning.nsw.gov.au	
<b>WorkCover NSW</b>	contact@safework.nsw.gov.au	131 050
<b>Fire and Rescue</b>	contact@frnsw.nsw.gov.au	1800 679 737

## 5.6 Community Stakeholders

The requirements surrounding community consultation and involvement are detailed within *the OEMP* which was required as part of the conditions of approval.

In order to ensure consultation with each community stakeholder is effective, different stakeholders will be notified depending on the severity of the incident and in terms of whether they would be directly affected by the incident.

## 5.7 Staff Training

All TCROs receive training during the induction process to ensure they can effectively implement the PIRMP. Ongoing training ensures they are able to prevent and respond to exceedances should they occur. Training includes, but is not limited to:

- Employee responsibilities and legal obligations in relation to ventilation outlet exceedances and reporting requirements.
- Identification of site issues that may lead to a ventilation outlet exceedance.
- Appropriate immediate action to control and contain an incident including provision of contact details of relevant personnel for notification.
- Staff must be provided with information to reflect the following hierarchy in their response to an environmental incident.

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## Appendix A: Testing Register

Date (Tested)	Description of Test	Conducted By	Date (Updated)
25/9/2020	Exceedance of stack limits	KH	Nov 2020
16/12/2021	M4 Desktop Exercise	KH	Nov 2021
21/10/22	Exceedance of stack limits	KH	Oct 2022
12/09/2023	Exceedance of stack limits	KH	Sep 2023

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## Appendix B: Compliance Register

Below describes how the above PIRMP complies with the requirements under Section 3 General requirements for preparing pollution incident response management plans the EPA Guideline (2012): Preparation of pollution incident response plans:

Requirement	Section of PIRMP
<b>3.3.1 Description and likelihood of hazards [clause 98C(1)(a) and (b)]</b>	5.0 Hazards to the Environment and Human Health
<b>3.3.2 Pre-emptive actions to be taken [clause 98C(1)(c)]</b>	5.1 Controlling Hazards to the Environment 5.2 Controlling Hazards to Human Health
<b>3.3.3 Inventory of pollutants [clause 98C(1)(d) and (e)]</b>	3.0 Inventory of Pollutants
<b>3.3.4 Safety equipment [clause 98C(1)(f)]</b>	5.3 Environmental Pollution Control Equipment
<b>3.3.5 Contact details [clause 98C(1)(g) and (h)]</b>	4.0 Roles and Responsibilities 6.2 Regulatory Authorities
<b>3.3.6 Communicating with neighbours and the local community [clause 98C(1)(i)]</b>	7.0 Community Stakeholders
<b>3.3.7 Minimising harm to persons on the premises [clause 98C(1)(j)]</b>	5.2 Controlling Hazards to Human Health
<b>3.3.8 Maps [clause 98C(1)(k)]</b>	2.3 Description Appendix D: Broader Location Map
<b>3.3.9 Actions to be taken during or immediately after a pollution incident [clause 98C(1)(l)]</b>	5.4 Process to be taken following a Pollution Incident
<b>3.3.10 Staff training [clause 98C(1)(m)]</b>	7.4 Staff Training

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## Appendix C: Broader Location Map

