

management plan

PIRMP – Lane Cove Tunnel

A Transurban Group plan

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1. Abbreviations, acronyms and definitions

Term or acronym	Description
LCT	Lane Cove Tunnel
DPIE	Department of Planning Industry and Environment
EPA	New South Wales Environment Protection Authority formerly known as Department of Environment and Climate Change (DECC), Department of Environment and Conservation (DEC), Department of Environment and Climate Change and Water (DECCW), Office of Environment and Heritage (OEH)
EPL	Environment Protection Licence issued by the EPA
HSE	Health, Safety and Environment
MCoA	Minister's Conditions of Approval for LCT
O&M	Operations and Maintenance
OEMP	Operational Environmental Management Plan
POEO Act	Protection of the Environment Operations Act 1997
SWMS	Safe Work Method Statement
Ventia	Ventia Contractors Australia Pty Ltd (formerly Leighton Services) Maintenance Contractor

2. Introduction

2.1 Background

LCT-MRE holds an Environment Protection Licence (EPL) issued by the NSW Environment Protection Authority (EPA) for two ventilation stacks associated with the Lane Cove Tunnel. As per the *Protection of the Environment Operations Act 1997* (the POEO Act), LCT-MRE as holder has prepared the following Pollution Incident Response Management Plan (PIRMP) that complies with Part 5.7A of the POEO Act 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, LCT-MRE 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 Lane Cove Tunnel Office (5 Sirius Road, Lane Cove West) and is made available on request by an authorised NSW EPA Officer and publicly at (<https://www.linkt.com.au>).

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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 EPA and other relevant government authorities and the community who may be affected by the impacts of an emission pollution incident.

2.3 Description

Both road tunnel emission outlets work utilise the natural mixing of the atmosphere to efficiently disperse air pollutants. This results in nearby residents experiencing little, if any, exposure to emissions. The first ventilation outlet is located at 5 Sirius Road, Lane Cove and the second stack located at 6 Marden Street, Artarmon as pictured. The broader location is shown in *Appendix B – Broader Location Map*:



Figure 1: Location Map - 5 Sirius Road, Lane Cove West

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Figure 2: Location Map - 6 Marden Street, Artarmon

2.4 Process to be implemented during and immediately after a Pollution Incident

Pollution incidents causing or threatening material harm to the environment must be notified to EPA. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. Material harm to the environment includes on site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

An incident is considered to be notifiable to EPA if the actual or potential harm to the health or safety of human beings or ecosystems is not trivial OR if actual or potential loss or property damage (including clean-up costs) associated with a pollution incident exceeds \$10,000.

In accordance with the POEO Act 1997, it is an offence not to report incidents to the EPA where actual or potential harm to the health or safety of human beings or ecosystems is not trivial OR if actual or potential loss or property damage (including clean-up costs) associated with a pollution incident exceeds \$10,000.

Notification must be given immediately, i.e. promptly and without delay, after the person becomes aware of the incident

The process outlined in *LCT-OP-CL-002 Air Quality Exceedance* is followed during and immediately after a Road Tunnel Emission incident.

If the incident presents an imminent threat to health or property call '000'.

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2.5 Incident Notification Information

The relevant information to be recorded about a pollution incident required under S150 of the POEO Act consists of the following:

- (1)
 - a) the time, date, nature, duration and location of the incident
 - b) the location of the place where pollution is occurring or is likely to occur
 - c) the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
 - d) the circumstances in which the incident occurred (including the cause of the incident, if known
 - e) the 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 afterwards, that information must be notified in accordance with section 148 immediately after it becomes known.

Appendix C outlines the information that may be required if there is an exceedance following the initial notification and who is responsible for providing it.

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 POEO 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 PIRMP, managing the response and notifying relevant authorities:

Role	Responsibility	Contact Details (24hr)
LCT Incident Control Room – TCRO	<ul style="list-style-type: none">Responsible for managing the response to a pollution incident.Responsible for activating the PIRMP.	13 31 11
HSE Team	<ul style="list-style-type: none">Authorised to notify relevant authorities under section 148 of the POEO Act.	13 31 11

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5. Hazards to the Environment and Human Health

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

- Exceedance of the CO exceedance limits – Stack
- Exceedance of NO2 exceedance limits – Stack
- Exceedance of PM10 exceedance limits – Stack
- Exceedance of VOC exceedance limits – Stack.

As required under the POEO Act; the likelihood of the abovementioned environmental hazards are detailed under *LCT-EV-PL-001 Operational Environmental Management Plan for Lane Cove Tunnel Appendix E Environmental Aspects Register* in the publicly available OEMP.

5.1 Controlling Hazards to the Environment

In order to mitigate the abovementioned hazards LCT-MRE implements constant air monitoring at the outlets 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 outlet limits:

Document #	Description
<i>LCT-EV-PL-001</i>	<i>Operational Environmental Management Plan for Lane Cove Tunnel</i>
<i>LCT-EV-PL-006</i>	<i>Air Quality Management Sub-Plan for Lane Cove Tunnel</i>
<i>LCT-OP-CL-002</i>	<i>Air Quality Exceedance</i>

- Specifically, in the *OEMP Table D.1 Significant Environmental Aspects, Impacts and Risks* describes the environmental impact and the mitigation, management and monitoring strategies that are being employed to manage hazards.
- The internal procedure, *LCT-OP-CL-002 Air Quality Exceedance* (section 3.2 In-Stack Air Quality Exceedance) describes measures to be taken by Traffic Control Room Officers when alerts are received.

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
 - Steel capped boots

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- 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 s6.2 of LCT-EV-PL-001 Operational Environmental Management Plan for Lane Cove Tunnel the tunnel's air quality is managed by the use of a fan circulation system that links to ventilation outlets.

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

Alarms and alerts are generated at various point where the asset is operating within a set percent of the exceedance limits. The Traffic Control Room is able to adjust the fans and ventilation system to improve the air quality in the tunnel.

5.4 Regulatory Authorities

As above the HSE Team 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
EPA (NSW)	info@epa.nsw.gov.au	131 555
Health (NSW)	ENHWU@doh.health.nsw.gov.au	(02) 9391 9000
DPIE	rob.sherry@planning.nsw.gov.au; info@environment.nsw.gov.au;	1300 305 695
SafeWork NSW	contact@safework.nsw.gov.au	131 050
Fire and Rescue	contact@frnsw.nsw.gov.au	1800 679 737

5.5 Community Stakeholders

The requirements surrounding community consultation and involvement are detailed within LCT-CS-PL-001 Community Involvement Plan 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.

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5.6 Testing, Review and Amendment

This PIRMP will be tested in accordance with the requirements set out in the *Protection of the Environment Operations (General) Regulation 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.
- Any such test is to be carried out:
 - At least once every 12 months
 - Within 1 month of any pollution incident occurring.

The LCT as a whole has a number of potential scenarios that may impact the environment; detailed in the *LCT-EV-PL-001 Operational Environmental Management Plan for Lane Cove Tunnel; Appendix E Significant Environmental Impacts and Risks*. PIRMP testing will be limited to ventilation outlet 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) register available in the Transurban DMS (NSW O&M Documents – NOM.1600 WHSE).

5.7 Staff Training

All TCROs receive training during the induction process and to ensure that they can effectively implement the PIRMP. Ongoing training ensures that 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 stack exceedances and reporting requirements.
- Identification of site issues that may lead to an outlet exceedance.
- Appropriate immediate action to control and contain an incident including provision of contact details of relevant personnel for notification.
- Staff would be provided with information to reflect their response to an environmental incident.

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6. Appendix A: Compliance Register

Below describes how the above PIRMP complies with the requirements under Section 3 of The Guideline: Pollution Incident Response Management Plans (EPA 2020): for the preparation of PIRMP's:

Requirement	Section of PIRMP
3.3.1 Description and likelihood of hazards [clause 98C(1)(a) and (b)]	5.0 Hazards to the Environment and Human Health
3.3.2 Pre-emptive actions to be taken [clause 98C(1)(l)]	5.1 Controlling Hazards to the Environment 5.2 Controlling Hazards to Human Health
3.3.3 Inventory of pollutants [clause 98C(1)(d) and (e)]	3.0 Inventory of Pollutants
3.3.4 Safety equipment [clause 98C(1)(f)]	5.3 Environmental Pollution Control Equipment
3.3.5 Contact details [clause 98C(1)(g) and (h)]	4.0 Roles and Responsibilities 5.4 Regulatory Authorities
3.3.6 Communicating with neighbours and the local community [clause 98C(1)(i)]	5.5 Community Stakeholders
3.3.7 Minimising harm to persons on the premises [clause 98C(1)(j)]	5.2 Controlling Hazards to Human Health
3.3.8 Maps [clause 98C(1)(k)]	2.3 Description Appendix B: Broader Location Map
3.3.9 Actions to be taken during or immediately after a pollution incident [clause 98C(1)(l)]	2.4 Process to be taken during or immediately after a Pollution Incident
3.3.10 Staff training [clause 98C(1)(m)]	5.7 Staff Training

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7. Appendix B: Broader Location Map

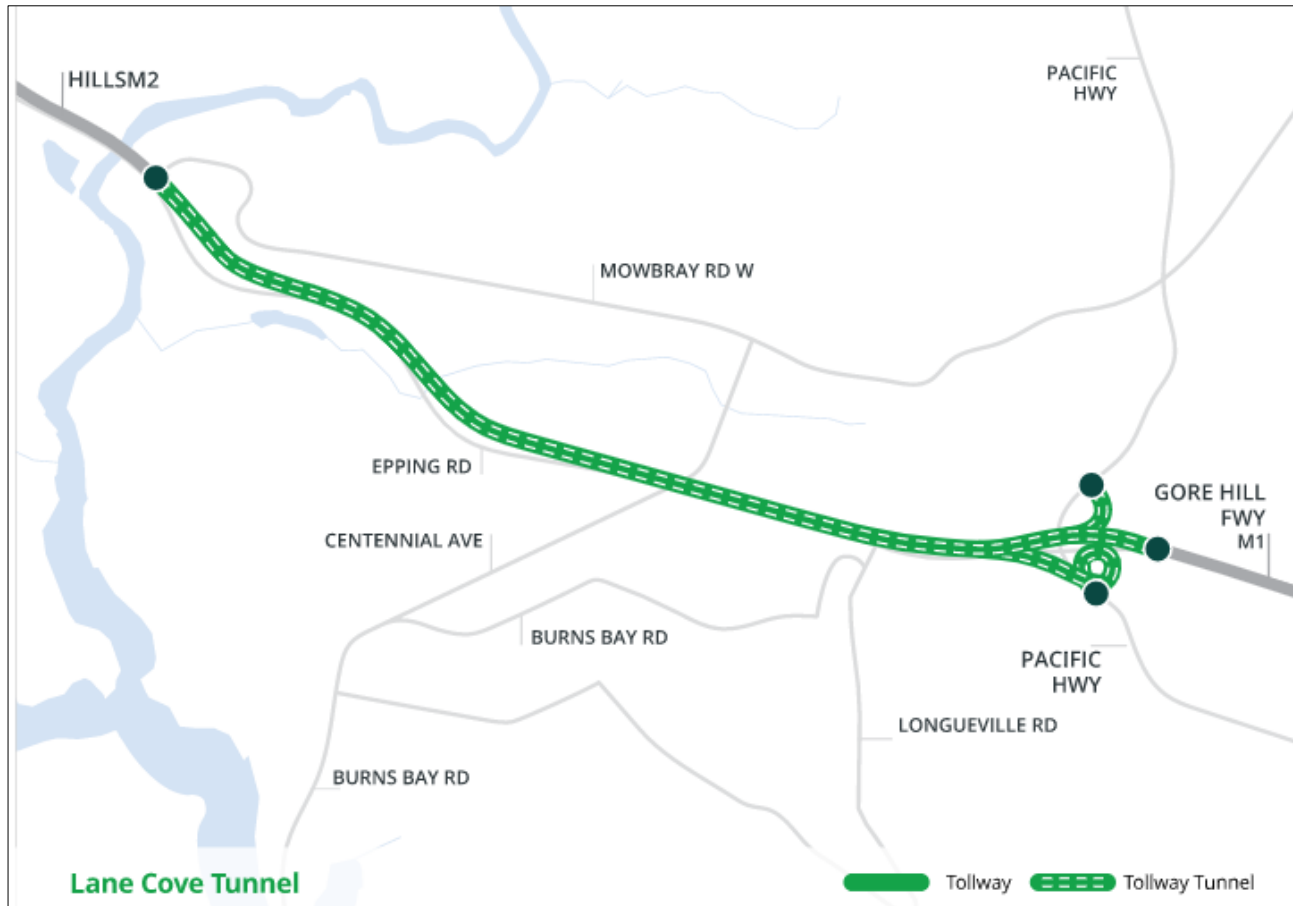


Figure 3: Broader Schematic Location Map

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Figure 4: Broader Aerial Location Map

Green Star – 6 Marden Street, Artarmon

Red Star – 5 Sirius Road, Land Cove West

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8. Appendix C: Responsibility for Exceedance Information

Information	Responsibility
Copies of emails sent to DPE, NSW EPA and NSW Health, notifying them of the exceedance.	NSW Environmental Specialist
Hourly average traffic counts and hourly average vehicle speeds for the relevant LCT tunnel, covering a minimum period of 12 hours preceding the exceedance and 12 hours post the exceedance.	Asset Operations Lead
Copy of OMCS alarms log, highlighting when various alert level alarms for the relevant pollutant were triggered.	Asset Operations Lead
Copy of OMCS concentration graphs for the relevant pollutant, covering the period three hours prior to and three hours post the exceedance.	Asset Operations Lead
Copies of relevant Traffic Control Room Officer incident reports for the exceedance, including details of actions taken in response to alert level alarms and the times the actions occurred.	Asset Operations Lead
List of contractors working in the tunnel during the period of the exceedance and the preceding hour, together with a description of their activities during this period and contact details to enable further information to be obtained.	Asset Operations Lead
In-tunnel video footage covering the exceedance period and the preceding 30 minutes, together with relevant photographs, where available.	Asset Operations Lead
Responses to previous Helix Environmental exceedance report recommendations.	NSW Environmental Specialist

Read and Acknowledge

If required for training purposes, please indicate that you have read this document by selecting the link below:

[Click here to acknowledge that you have read this document.](#)