

# WestConnex M4 East

## Ambient Air Quality Goal Protocol

Condition E10

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**Revision history**

This document interfaces with the Operation Air Quality Management Plan, within the Operation Environmental Management Plan (OEMP), which together describe the proposed overall management system for the O&M Services.

The latest revision of this document is available on Contract Workspace. If any unsigned hard copies of this document are printed, they are valid only on the day of printing.

The revision number is included at the bottom of each page. When revisions occur, the entire document will be issued with the revision number updated accordingly.

Appendices to this plan may be revised independently of this plan.

Rev No	Revised by	Reviewed and Approved by:	Date	Description/Summary of Changes
0	R Walker-Edwards	G Khoury	16/10/18	Issue for AQCCC review
0.1	J.Hill	G Khoury	12/12/18	DPE comments re Appointment of an Independent Expert & contact details addressed.
0.2	K Hincks	G Khoury	19/12/18	Amended to incorporate DPE comments

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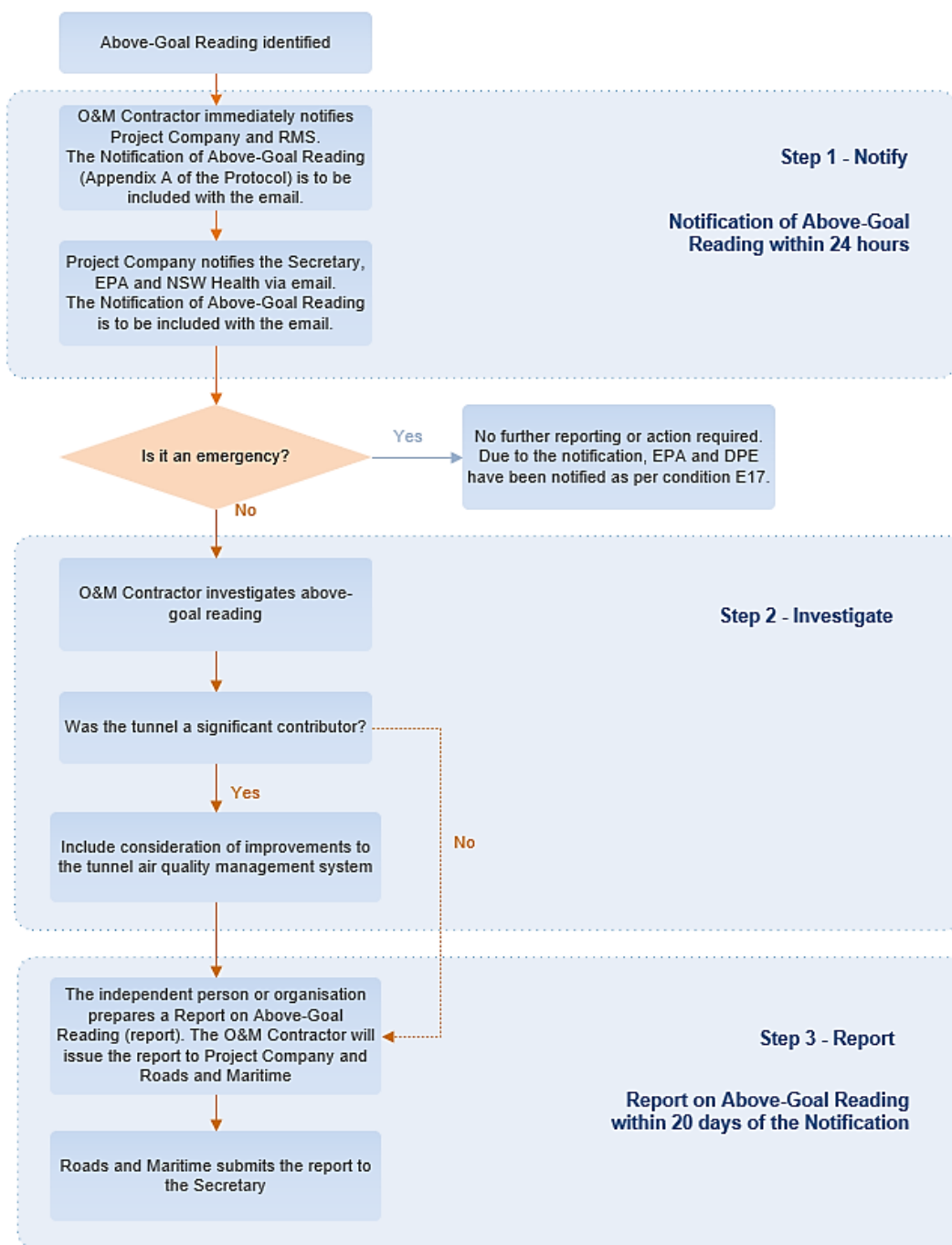
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## Notification and reporting process



### Contact details

Organisation	Contact Position	Telephone	Email
Department of Planning & Environment (DPE)	Director Infrastructure Management		infrastructure.notifications@planning.nsw.gov.au
	Director Compliance (Post Approvals)		compliance@planning.nsw.gov.au
EPA	Duty Officer	(02) 9995 5000 or 131 555	info@environment.nsw.gov.au
NSW Health	Director, Environmental Health	(02) 9424 5817	Moh-ehp@health.nsw.gov.au
Roads and Maritime Services	Samuel Levi, Environment Manager, Motorways		sam.levi@rms.nsw.gov.au
Project Company	Gunhan Guven, Project Company Project Representative	0475 970 938	gunhan.guven@westconnex.com.au

## Glossary

Term Used	Explanation
AM-1	Ambient monitoring – guide for the siting of sampling units
AM-2	Ambient monitoring – guide for measurement of horizontal wind for air quality applications
AM-4	Ambient monitoring – meteorological guidance for regulatory modelling applications
AM-6	Ambient monitoring – Carbon monoxide
AM-12	Ambient monitoring – Nitrogen oxides
AGR	Above-goal reading (ambient monitoring only)
AQCCC	Air Quality Community Consultative Committee
Background levels	Existing concentrations of pollutants in the ambient air
CO	Carbon Monoxide
CoA	Minister's Conditions of Approval
DP&E	NSW Department of Planning and Environment
EMT	Emergency Management Team
EPA	NSW Environment Protection Authority
NEPM	National Environment Protection (Ambient Air Quality) Measure 2016
NATA	National Association of Testing Authorities, Australia
NO <sub>2</sub>	Nitrogen Dioxide
O&M	Operation and Maintenance
O&M Contractor	The contractor engaged to deliver the operations and maintenance contract for the M4 East project.
OAQMP	Operation Air Quality Management Plan
OEH	NSW Office of Environment and Heritage
OEMP	Operation Environmental Management Plan
PM <sub>10</sub>	Particulate matter (10 micrometres or less in diameter)
PM <sub>2.5</sub>	Particulate matter (2.5 micrometres or less in diameter)
Project, the	WestConnex M4 East Project, SSI-6307
Project Company	WCXM4 PT Pty Ltd in its capacity as trustee of the WCXM4 Project Trust or its successor in title or assigns
Reasonable and Feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account the cost of mitigation versus benefits provided, community expectations and nature and extent of potential improvements.
Relevant council(s)	Inner West Council, Burwood Council, Strathfield Council and City of Canada Bay Council, as applicable.
Roads and Maritime, RMS	Roads and Maritime Services - the Proponent for the M4 East Project. Roads and Maritime Services has engaged the Project Company to deliver the M4 East project.
Secretary	Secretary of the Department of Planning and Environment
Secretary's approval	A written approval from the Secretary

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SMC	Sydney Motorway Corporation Pty Limited (SMC) (ABN 601 507 591) is a special purpose entity that has been created by the NSW Government to manage the delivery of WestConnex. For the purposes this M4 East Motorway Ambient Air Quality Goal Protocol, WCX M4 PT Pty Ltd will act on behalf of Sydney Motorway Corporation Pty Limited (SMC).
SSI	State Significant Infrastructure

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# 1 Introduction

## 1.1 Purpose and overview

This Ambient Air Quality Goal Protocol has been developed to satisfy the requirements of condition E10 of the Conditions of Approval for the WestConnex M4 East project (the project).

Condition E10 requires that an Ambient Air Quality Goal Protocol (Protocol) be prepared for the evaluation of a potential measurement that exceeds the ambient air quality goals. The Protocol is to include a form and process for notifying the measurement that exceeds the goal; the form and contents for reporting the measurement; and the process for appointing an independent person to prepare the report.

## 1.2 Environmental management system

The O&M Contractor will utilise an Integrated Management System for environmental management. The O&M Contractor's environmental management system (EMS) has been certified as complying with AS/NZS ISO 14001.

The EMS includes the Operation Environmental Management Plan (OEMP) which provides the detail of how the environmental aspects of the project will be managed during the operational phase. The OEMP provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled.

This Ambient Air Quality Goal Protocol forms part of the management system documents which are to be implemented on WestConnex M4 East. It is to be read in conjunction with the other management system documents including the OEMP, the Operation Air Quality Management Plan and the E20 Reporting system for in-tunnel, ambient and ventilation outlet limits.

## 1.3 Consultation

In accordance with condition E10, the Ambient Air Quality Goal Protocol must be prepared in consultation with the WestConnex M4 East Air Quality Community Consultative Committee (AQCCC).

The AQCCC were consulted during the preparation of this document.

A document titled 'Consultation for the M4 East Ambient Air Quality Goal Protocol' has been prepared separately to this document to provide detail relating to the consultation received and where feedback has been addressed within this Ambient Air Quality Goal Protocol.



## 2 Environmental obligations

Legislative obligations relating to air quality, including ambient air quality, are detailed within the Operation Air Quality Management Plan.

### 2.1 Conditions of Approval

Conditions of the Infrastructure Approval for WestConnex M4 East that are relevant to the Ambient Air Quality Goal Protocol (Protocol) are provided in Table 2-1.

A cross-reference is included to indicate where each condition is addressed in this Protocol or other project management documents.

Table 2-1 Conditions of Approval

CoA	Relevant requirement	Reference
E9	<p>Should ambient monitoring of air pollutants exceed the following goals, the provisions of conditions E10, E11 and E12 will apply:</p> <ul style="list-style-type: none"> <li>(a) CO – 8 hour rolling average of 9.0 ppm (NEPM);</li> <li>(b) NO<sub>2</sub> – One hour average of 0.12 ppm (245 µg/m<sup>3</sup>) (NEPM);</li> <li>(c) PM<sub>10</sub> – 24 hour average of 50 µg/m<sup>3</sup> (NEPM);</li> <li>(d) PM<sub>2.5</sub> – 24 hour average of 25 µg/m<sup>3</sup> (proposed NEPM);</li> <li>(e) PM<sub>10</sub> – annual average of 25 µg/m<sup>3</sup> (Meeting of Environment Ministers – Agreed Statement); and</li> <li>(f) PM<sub>2.5</sub> – annual average of 8 µg/m<sup>3</sup> (Meeting of Environment Ministers – Agreed Statement).</li> </ul> <p>Note: Ambient monitoring of pollutants for the purposes of notification and reporting obligations under conditions E10, E11 and E12 will commence at the commencement of operation of the SSI. As such, the first annual average of pollutants will be available 12 months following the commencement of operations.</p>	Section 3
E10	<p>In addition to the general reporting requirements specified in condition E20, the Proponent must prepare a Ambient Air Quality Goal Protocol for the evaluation of a potential measurement that exceeds the goals. The Ambient Air Quality Goal Protocol must be developed by the Proponent in consultation with the AQCCC and approved by the Secretary.</p> <p>The Ambient Air Quality Goal Protocol must include:</p> <ul style="list-style-type: none"> <li>(a) the form of and process for providing a Notification of Above-Goal Recording, subject to condition E11;</li> <li>(b) the form and contents of a Report on Above-Goal Reading, subject to condition E12; and</li> <li>(c) a process for appointing an independent person/organisation to prepare the Report on Above-Goal Reading. The process must include - <ul style="list-style-type: none"> <li>(i) approval of the independent person/organisation by the Secretary prior to preparation of the report, and</li> <li>(ii) the appointment of the independent person/organisation prior to the commencement of operation, or at some other time prior to preparation of the report with the agreement of the Secretary.</li> </ul> </li> </ul>	<p>This document</p> <p>The evaluation occurs by Section 5.2 and Section 5.3</p> <p>Section 5 and Appendix A</p> <p>Section 5 and Appendix B</p> <p>Section 6</p> <p>Section 6</p> <p>Section 6</p>
E11	<p>The Ambient Air Quality Goal Protocol must provide a Notification of Above-Goal Recording if ambient monitoring of air pollutants records an exceedance of the goals in condition E9. The Notification of Above-Goal Recording is to be submitted within 24 hours of the recording, to the Secretary, EPA and NSW Health. The Notification of Above-Goal Recording must detail:</p>	Section 5, Section 5.1.2 and Section 3

	(a) the nature of the event;	Appendix A
	(b) the concentration levels that occurred;	Appendix A
	(c) the duration of the event;	Appendix A
	(d) the measures employed to minimise the concentration levels; and	Appendix A
	(e) the Proponent's commitment to prepare and submit a Report on Above-Goal Reading in accordance with condition E12.	Appendix A
E12	<p>Within 20 working days of any Notification of Above-Goal Reading, the Proponent must prepare and submit to the Secretary a Report on Above-Goal Reading that details the cause and major contributor of the exceedance and the options available to prevent recurrence.</p> <p>Where the operation of the tunnel is identified to be a significant contributor to the recorded above-goal reading, the Report on Above-Goal Reading must include consideration of improvements to the tunnel air quality management system so as to achieve compliance with the ambient air quality goals, including but not limited to installation of the additional ventilation management facilities allowed for under condition B5, and discussion of whether those improvements are feasible and reasonable.</p> <p>The Proponent must comply with any requirements arising from the Secretary's review of the Report on Above-Goal Reading.</p>	<p>Section 5.3</p> <p>Appendix B</p>
E17	<p>Conditions E2, E3, E4, E9 and E14 do not apply in an emergency (as defined in the OEMP required by condition E26).</p> <p>The Proponent must, as soon as reasonably practicable, notify the Secretary and the EPA of any such discharge.</p>	Refer to Section 3.1.
E20	The Proponent must develop and implement a reporting system for in-tunnel, ambient and ventilation outlet limits in consultation with the EPA. The reporting system must be approved by the Secretary and fully implemented and operational prior to operation. Minimum analytical reporting requirements for air pollution monitoring stations must be as specified in the Approved Methods of Modelling and Assessment of Air Pollutants in NSW (EPA 2007, or as updated).	A reporting system for in-tunnel, ventilation outlet and ambient air quality limits will be developed in consultation with the EPA.

## 2.2 Revised environmental management measures

The revised environmental management measures (REMMs) relevant to ambient air quality monitoring during the operations and maintenance of the Asset are included in Table 2-2.

Table 2-2 Revised environmental management measures relevant to ambient air quality monitoring

REMM	Relevant requirement	Reference
AQ45	Ambient air quality will be monitored continuously for at least twelve months prior to project opening, during construction and for at least two years after project opening. Monitoring results will be made publicly available and will be subject to an independent audit.	Ambient air quality commenced in December 2017. After a period of two years from the commencement of operation (in accordance with CoA E8), the need for the continuation of ambient monitoring stations will be reviewed. Ambient air quality monitoring results are available on the WestConnex website. Refer to the OAQMP for these details.

### 3 Ambient air quality goals

The ambient air quality criteria for WestConnex M4 East are defined in condition E9 and are provided below in Table 3-1.

Table 3-1 Ambient air quality criteria (condition E9)

Parameter	Concentration limit	Units of measure	Averaging period	Source
CO	9.0	ppm	Rolling 8-hour	NEPM
NO <sub>2</sub>	0.12 (245)	ppm (µg/m <sup>3</sup> )	1 hour	NEPM
PM <sub>10</sub>	50	µg/m <sup>3</sup>	24 hour	NEPM
PM <sub>2.5</sub>	25	µg/m <sup>3</sup>	24 hour	Proposed NEPM
PM <sub>10</sub>	25	µg/m <sup>3</sup>	1 year	Meeting of Environment Ministers – Agreed Statement
PM <sub>2.5</sub>	8	µg/m <sup>3</sup>	1 year	Meeting of Environment Ministers – Agreed Statement

In accordance with condition E9, should ambient monitoring of air pollutants exceed the goals listed in Table 3-1, conditions E10, E11 and E12 apply and notification and reporting of the above-goal reading shall occur as required.

For the reporting of above-goal readings of the annual average (1 year averaging period), the first annual average result will not be available until at least 12 months following the commencement of operation. As the first annual average result will not be available until this time, any notifications or reports of above-goal readings of the annual average will also not be available until at least 12 months following the commencement of operation.

#### 3.1 Emergency discharge

In accordance with condition E17, the air quality criteria identified in Table 3-1 do not apply in an emergency situation. An 'emergency' has been defined in Section 8.2 of the OEMP<sup>1</sup>

In the event of an emergency situation that results in discharge(s) that exceed the nominated criteria, the Secretary and the EPA would be notified.

<sup>1</sup> OEMP is currently under review by the Department of Planning and Environment

## 4 Monitoring

### 4.1 Monitoring methodologies

The O&M Contractor will monitor the pollutants and parameters, using the sampling method, units of measures and frequency specified in Table 4-1.

Table 4-1 Ambient air monitoring methodologies

Pollutant	Units of measure	Averaging period	Frequency	Method <sup>1</sup>
NO	pphm	1-hour	Continuous	AM-12
NO <sub>2</sub>	pphm	1-hour	Continuous	AM-12
NO <sub>x</sub>	pphm	1-hour	Continuous	AM-12
PM <sub>10</sub>	µg/m <sup>3</sup>	24-hour	Continuous	AS3580.9.8-2008 <sup>2</sup>
PM <sub>2.5</sub> <sup>5</sup>	µg/m <sup>3</sup>	24-hour	Continuous	AS3580.9.12:2013 <sup>3</sup>
CO	ppm	1-hour, 8-hour	Continuous	AM-6
Parameter <sup>4</sup>	Units of measure	Averaging period	Frequency	Method <sup>1</sup>
Wind speed @10 m	m/s	1-hour	Continuous	AM-2 & AM-4
Wind direction @ 10 m	°	1-hour	Continuous	AM-2 & AM-4
Sigma Theta @ 10 m	°	1-hour	Continuous	AM-2 & AM-4
Temperature @ 2 m	K	1-hour	Continuous	AM-4
Temperature @ 10 m	K	1-hour	Continuous	AM-4
Other	Units of measure	Averaging period	Frequency	Method <sup>1</sup>
Siting	N/A	N/A	N/A	AM-1 & AM-4

#### TABLE NOTES

1. Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2007) or as otherwise agreed to in writing by the Secretary in consultation with the EPA.
2. AS3580.9.8-2008, Methods for the Sampling and Analysis of Ambient Air – Determination of Suspended Particulate Matter – PM10 Continuous Direct Mass Method using Tapered Element Oscillating Microbalance Analyser (Standards Australia, 2008).
3. AS3580.9.12:2013, Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM2.5 beta attenuation monitors. This alternate methodology was approved by the Secretary on 8 September 2017 in consultation with the EPA.
4. TBD - location for meteorological monitoring station(s) to be representative of weather conditions likely to occur in the vicinity of the northern and southern ventilation outlets.
5. Use of tapered element oscillating microbalance monitor was approved by the Secretary on 8 September 2017 in consultation with the EPA.

The ambient air quality monitoring stations were established and are operated by Ecotech Pty Ltd. Ecotech Pty Ltd were approved by the Secretary on 4 December 2017 (after satisfactory consultation with the EPA and AQCCC) as being an organisation sufficiently skilled and accredited by the National Association of Testing Authorities Australia to supply and monitor the air quality monitoring station as required under condition E8.

Ambient monitoring of pollutants for the purposes of notification and reporting obligations under conditions E10, E11 and E12 will commence at the commencement of operation. As such, the first annual average of pollutants will be available 12 months following the commencement of operations.

## 4.2 Monitoring locations

Ambient air quality monitoring occurs at six monitoring locations. These are described in Table 4-2 and shown in Figure 1 to Figure 3.

Table 4-2 Ambient air quality monitoring locations

No.	AQCCC No.	Location	Condition E8 criteria	Landowner
1	Site 3	Allen Street road reserve, near Allen Street, Homebush	E8(b) near Underwood Road ventilation outlet	Strathfield City Council
2	Site 4	Near Powells Creek, Concord	E8(b) near Underwood Road ventilation outlet	Roads and Maritime Services
3	Site 5	St Luke's Park, Concord	E8(d) background reference data	Canada Bay Council
4	Site 6	Concord Oval, Concord	E8(c) Parramatta Road	Canada Bay Council
5	Site 8	Ramsay Street, near Martin Street, Haberfield	E8(a) near Parramatta Road ventilation outlet	Roads and Maritime Services
6	Site 10	Haberfield Public School, Chandos Street, Haberfield	E8(a) near Parramatta Road ventilation outlet	Department of Education

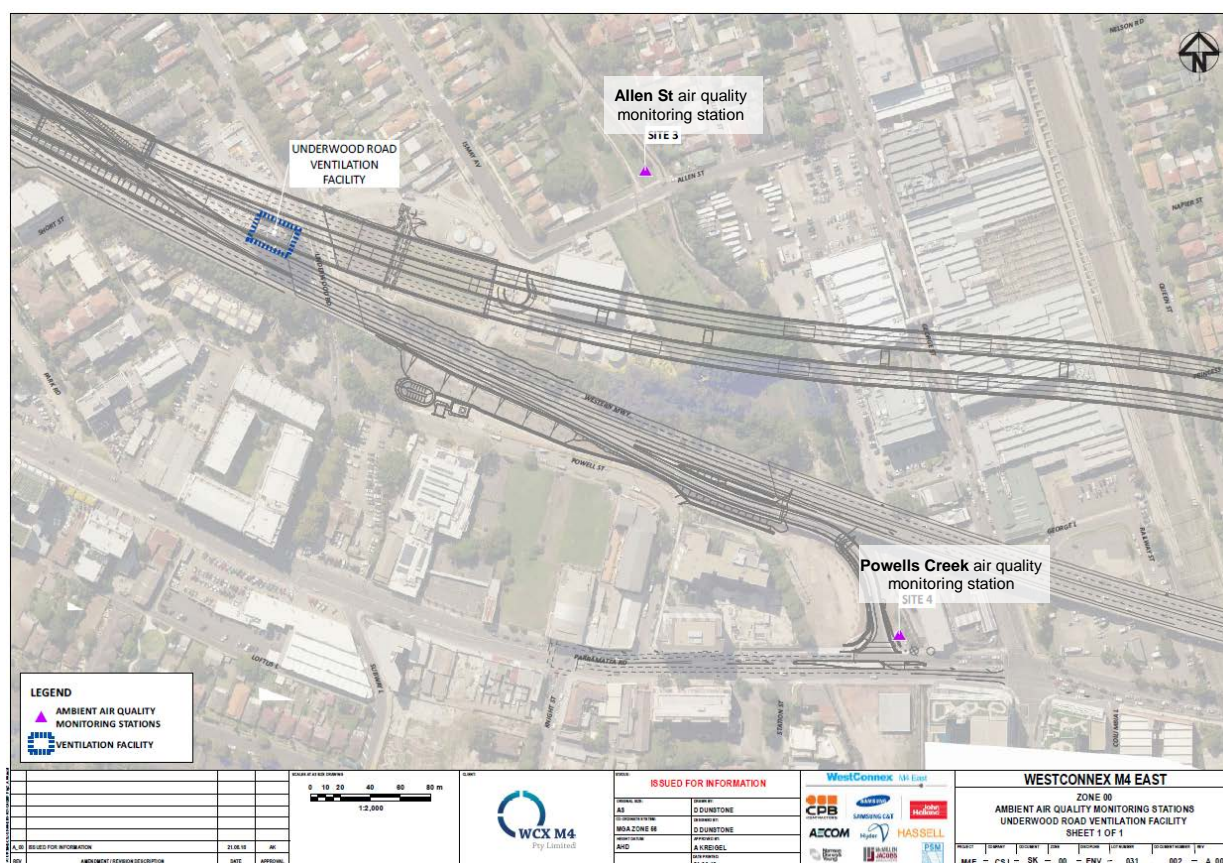


Figure 1: Ambient air quality monitoring stations near Underwood Road ventilation facility



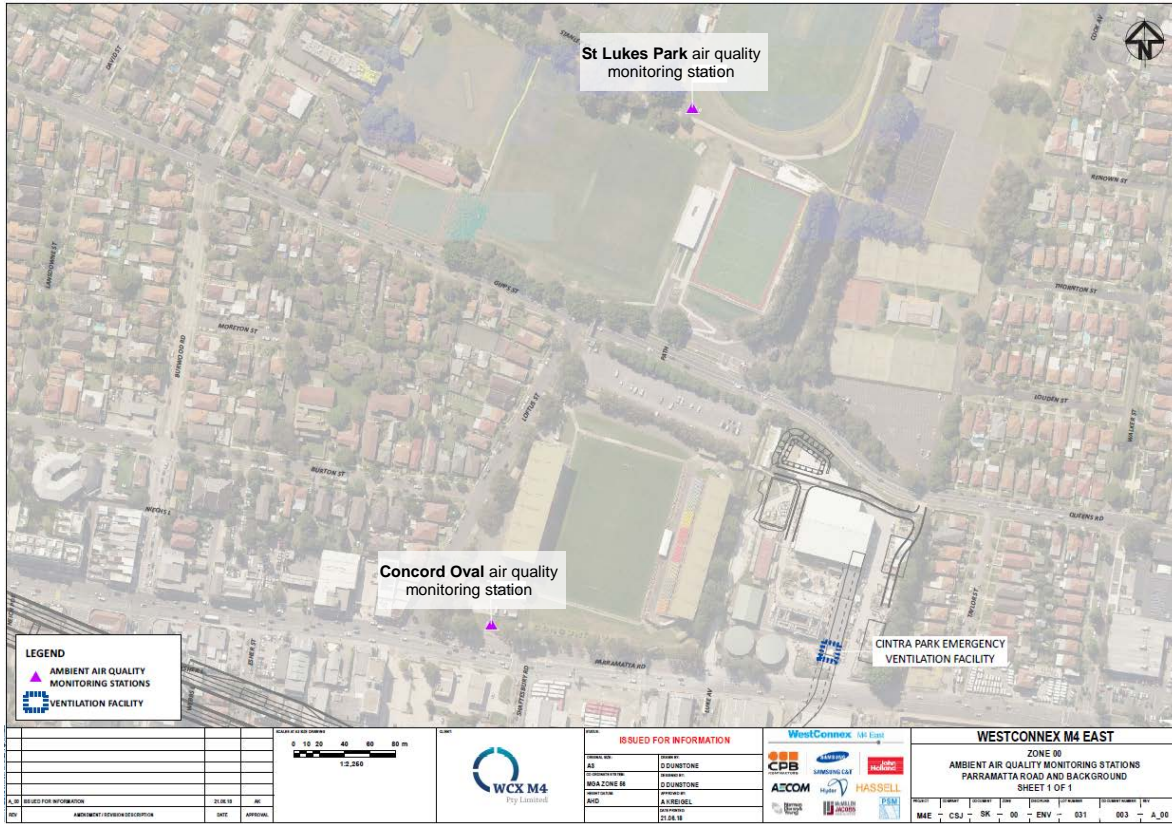


Figure 2: Ambient air quality monitoring stations near Parramatta Road and background



Figure 3: Ambient air quality monitoring stations near the Parramatta Road ventilation facility

## 5 Notification and reporting of above-goal readings

The key steps in notification and reporting of above-goal readings are detailed within Figure 4 and include:

1. Notify the above-goal reading.
2. Investigate the above-goal reading.
3. Report the above-goal reading.

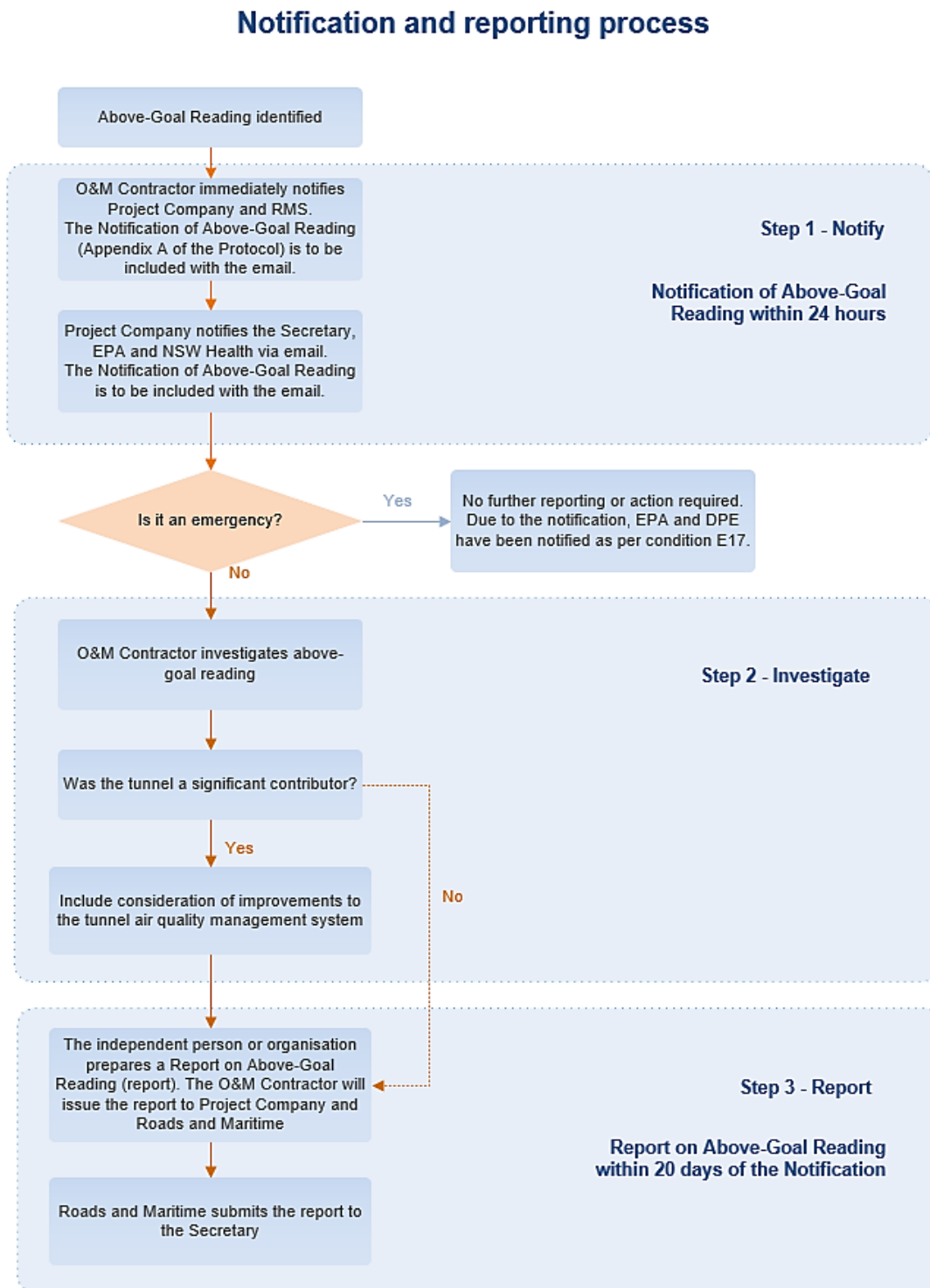


Figure 4: Notification and reporting process for above-goal readings

## 5.1 Notify the above-goal reading

When ambient monitoring of air quality exceeds the air quality goals detailed within condition E9, the steps within Section 5.1.1 and 5.1.2 will be followed.

### 5.1.1 Notifying Project Company and Roads and Maritime

Upon identification of an above-goal reading, the O&M Contractor will **immediately notify** Project Company and Roads and Maritime Services.

The email notification included in section 5.1.2 will be provided along with the completed form within Appendix A.

### 5.1.2 Notifying DPE, EPA and NSW Health

Project Company will notify Department of Planning and Environment, EPA and NSW Health. The notification is to be provided **within 24 hours** of the reading.

#### Form of notification

The form of notification will be via email with the Notification of Above-Goal Reading form (Appendix A) attached or included with the email. As required by condition E11, the Notification of Above-Goal Reading form will provide details of:

- (a) the nature of the event;
- (b) the concentration levels that occurred;
- (c) the duration of the event;
- (d) measures employed to minimise the concentration levels;
- (e) the Proponent's commitment to prepare a Report on Above-Goal Reading in accordance with condition E12.

The sample content of the email is indicated in Figure 5.

The screenshot shows an email composition window. The subject line is "WestConnex M4 East - Ambient Air Quality Above-Goal Notification". The main body text reads: "The calculated <condition> concentration has exceeded the <level> limit at one of more of the following stations." followed by a bulleted list item: "Monitoring location <date> <time> <concentration>". Below this, it states "This report only contains unvalidated data." The interface includes fields for "To...", "Cc...", and "Subject", along with a "Send" button and a scrollable list of numbers from 1 to 19.

Figure 5: Sample content of the email notification



An example of an email which would be issued is provided in Figure 6.

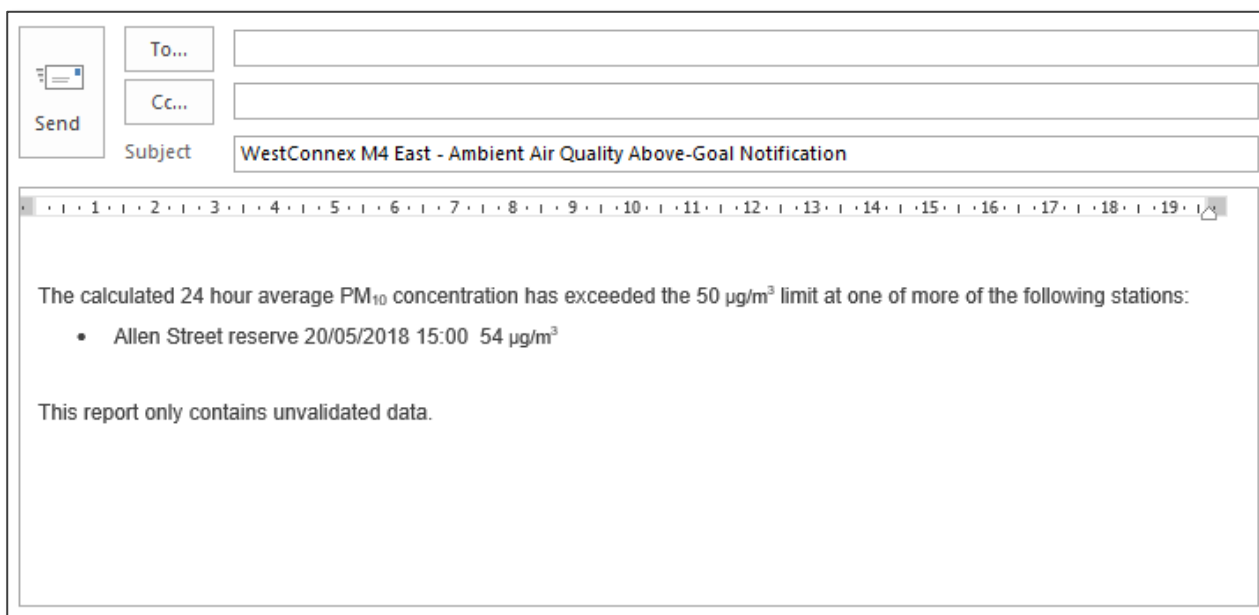


Figure 6: An example of an email for issue. The form within Appendix A will be included.

The Notification of Above-Goal Reading form within Appendix A will be attached or included with the email notification.

### 5.1.3 Contact details for notification

Table 5-1 provides the contact details for those stakeholders that will be notified.

Table 5-1 Contact details for stakeholders that are to be notified

Organisation	Contact Position	Telephone	Email
Department of Planning & Environment	Secretary of the Department		
	Director Compliance (Post Approvals)		<a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a>
	Director Infrastructure Management		infrastructure.notifications@planning.nsw.gov.au
EPA	Duty Officer	(02) 9995 5000 or 131 555	info@environment.nsw.gov.au
NSW Health	Director, Environmental Health	(02) 9424 5817	Moh-ehp@health.nsw.gov.au
RMS	TBA	TBA	TBA
Project Company	Gunhan Guven, Project Company Project Representative	0475 970 938	gunhan.guven@westconnex.com.au

It is the responsibility of the organisations detailed above to contact the O&M Contractor, in writing to O&M Manager (MCC) should their contact details change.

## 5.2 Investigate the above-goal reading

To determine whether an Above-Goal Reading is attributable to external phenomena or events or emissions from the M4 East Motorway tunnel outlets, the below investigations will be undertaken.

### 5.2.1 Validate results

Within two days of the above-goal reading, the data will be quality validated.

If the data validity checks confirm that the recorded Above-Goal Reading was not valid and was due to an instrument fault or data error, the independent person will complete the Report for Above-Goal Reading (Appendix B) and will submit this document to Project Company and Roads and Maritime. Roads and Maritime will submit the report to Department of Planning and Environment.

A copy will also be placed on the WestConnex website.

If the data validity checks confirm that the recorded Above-Goal Reading was valid, the O&M Contractor will proceed to section 5.2.2.

### 5.2.2 Assess whether an emergency occurred

Should the investigation determine that an emergency occurred (as defined in Section 3.1.1), no further reporting shall occur.

It is considered that notification of the above-goal reading to DPE and EPA has occurred in accordance with condition E17 through submission of the *Notification of Above-Goal Reading*.

A written record of the result of the investigation (ie that it is an emergency) is to be retained by the O&M Contractor and Project Company and RMS are to be advised of the finding.

### 5.2.3 Further investigation of valid results

If the investigation confirms that the data is valid, and an emergency does not appear to have occurred, further investigations will be undertaken, and the O&M Contractor will request the independent person/organisation prepare a Report on Above-Goal Reading.

Further investigations of the potential cause may include the below steps.

#### Sydney-wide events

Obtain data for other ambient air quality monitoring stations in the Sydney Basin from the EPA for concurrent monitoring periods to determine whether the Above-Goal Reading is a Sydney-wide event.

If the monitored Above-Goal Reading is widespread, it is likely that there was an external cause. In this instance, the O&M Contractor will contact relevant authorities such as the Bureau of Meteorology and State Emergency Services to determine if a regional event has occurred consistent with the recorded Above-Goal Reading.

#### Locally specific events

If the Above-Goal Reading is not widespread throughout the Sydney basin, a local cause is possible and supplementary investigations should be undertaken, such as consulting with relevant stakeholders such as (for example) EPA or relevant Councils, with the aim of establishing whether a specific localised source may have affected one or more monitoring stations. Localised activity (e.g. rubbish burning or unusually high emissions from an industrial premise (with unfavourable weather conditions)) may adversely affect the readings.

### Monitoring equipment calibration

In the circumstance where the investigations are unable to identify a logical cause of the Above-Goal Reading, further investigations may be undertaken to investigate whether the monitoring equipment is calibrated and functioning effectively.

### Assessment of outlet emissions

A review of the ventilation outlet emissions data will be checked to determine whether emissions are higher or considerably different to emissions over previous periods, with similar traffic conditions within the tunnel.

### Assessment of background data

An assessment against background data (or pre-operational data) may also occur.

## 5.3 Report the above-goal reading

If the investigation confirms that there was not an emergency, the O&M Contractor will request the independent person/organisation to prepare a *Report on Above-Goal Reading*.

The *Report on Above-Goal Reading* (Report) (Appendix B) will detail the cause and major contributor of the Above-Goal Reading and options available to prevent recurrence.

Where the operation of the tunnel is identified as a significant contributor to the recorded Above-Goal reading, the *Report on Above-Goal Reading* must include consideration of improvements to the Air Quality Management System so as to achieve compliance with the ambient air quality goals, including but not limited to installation of the additional ventilation management facilities allowed for under condition B5 and discussion of whether or not those improvements are reasonable and feasible.

The Report will be submitted within 20 working days of any *Notification of Above-Goal Reading* and the Proponent will comply with any requirements arising from the Secretary's review of the Report.

## 6 Process of appointing an independent person / organisation

### 6.1 Definition of an independent person / organisation

The Australian Securities and Investment Commission (ASIC) *Regulatory Guide 112 Independence of Experts (March 2011)* states that an expert must not be associated with certain interested parties, and must disclose certain interests and relationships, when preparing reports<sup>2</sup>.

Any disclosures should be contained within the report/s, relate to relationships or interests existing at the time of preparation of the report or existing in the previous two years and be timely, prominent, specific and meaningful.<sup>3</sup>

### 6.2 Selection on the basis of merit

In selecting an appropriate expert, ASIC states<sup>4</sup> relevant factors are likely to include:

- (a) Whether the expert has adequate resources (which may include access to appropriate third-party specialists) to perform the necessary work
- (b) The qualifications of the expert and whether the expert has the requisite level of technical expertise (including whether the expert meets the requirements of any relevant industry codes)
- (c) The experience of the expert. For example, a commissioning party may ask what comparable transactions the expert has given an opinion on and whether that experience is relevant to the current transaction
- (d) Whether the expert can meet the timeframe required for the report to be produced, and
- (e) Whether there are any independence issues

### 6.3 Appointment Process

The process for appointing an independent person/organisation to prepare a Report for Above-Goal Reading is as follows:

1. Select independent person/organisation on the basis of merit (refer above).
2. Ensure that any pre-engagement discussions do not compromise the expert's independence. For example, these discussions should not deal with how the expert proposes to evaluate the transaction or the merits of the transaction.<sup>5</sup>
3. Seek written approval from the Secretary. Nomination and consultation with Project Company and Roads and Maritime.
4. Before commencing work, an expert should obtain written terms of engagement<sup>6</sup> from the commissioning party that:
  - i. set out the scope and purpose of the report
  - ii. set out the facts of the proposal and relevant data
  - iii. recognise the expert's right to refuse to give an opinion or report at all if it is not given the

<sup>2</sup> RG 112.7 *Regulatory Guide 112 Independence of Experts (March 2011) Part (a)*

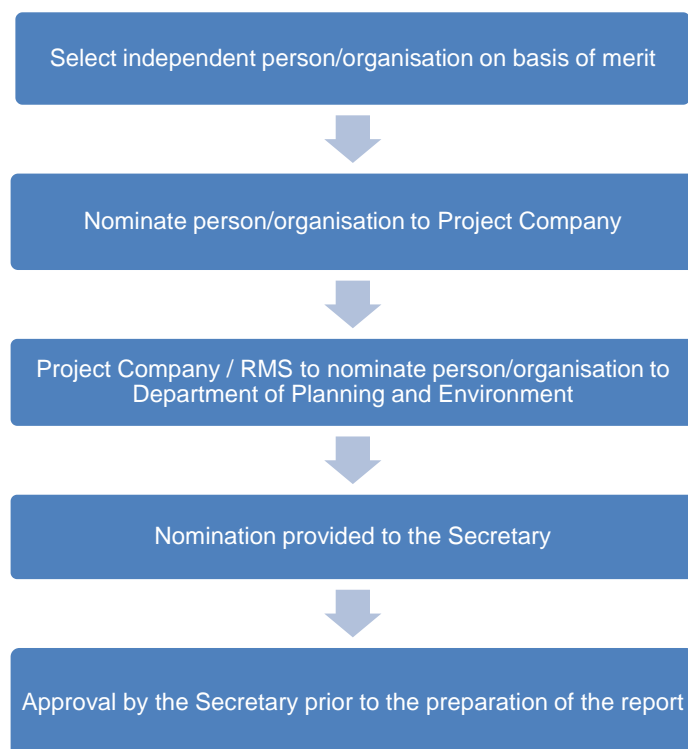
<sup>3</sup> RG 112.31 – 112.35 *Regulatory Guide 112 Independence of Experts (March 2011)*

<sup>4</sup> RG 112.40 *Regulatory Guide 112 Independence of Experts (March 2011)*

<sup>5</sup> RG 112.41 *Regulatory Guide 112 Independence of Experts (March 2011)*

<sup>6</sup> RG 112.42 *Regulatory Guide 112 Independence of Experts (March 2011)*

- iv. information and explanations it requires to prepare the report  
give the expert the same access to the commissioning party's records as the auditor of the commissioning party; and
  - v. set out the fee.
5. Ensure appointment of the independent person/organisation is prior to commencement of operation, or at some other time prior to preparation of the report with agreement of the Secretary.



**Figure 7: Process of appointment**

The independent person or organisation shall not prepare a *Report on Above-Goal Reading* until approval has been received.

The Secretary may ask for additional information where a document is required to be submitted to the Secretary and the document is considered incomplete or not fully addressing the requirements of a condition. When further information is requested, the Proponent will respond with an updated submission.

# Appendix A

## Notification of Above-Goal Reading

<b>Notification of above-goal reading</b> WestConnex M4 East		
To be notified immediately to Project Company and RMS. Project Company is to notify DPE, EPA and NSW Health within 24 hours.		
<b>Date</b>		
<b>Time</b> (start and finish)		
<b>Relevant location</b>	<input type="checkbox"/> Allen Street	<input type="checkbox"/> Powells Creek
	<input type="checkbox"/> St Lukes Park	<input type="checkbox"/> Concord Oval
	<input type="checkbox"/> Haberfield Public School	<input type="checkbox"/> Ramsay Street
<b>Relevant goal</b>	<input type="checkbox"/> CO – 8 hour rolling average of 9.0 ppm	
	<input type="checkbox"/> NO <sub>2</sub> – One hour average of 0.12 ppm (245 µg/m <sup>3</sup> )	
	<input type="checkbox"/> PM <sub>10</sub> – 24 hour average of 50 µg/m <sup>3</sup>	
	<input type="checkbox"/> PM <sub>2.5</sub> – 24 hour average of 25 µg/m <sup>3</sup>	
	<input type="checkbox"/> PM <sub>10</sub> – Annual average of 25 µg/m <sup>3</sup>	
	<input type="checkbox"/> PM <sub>2.5</sub> – Annual average of 8 µg/m <sup>3</sup>	
<b>Above-goal reading</b> Detail the above-goal reading that was received		
<b>Duration</b> Detail the duration of the above-goal reading or event		
<b>Nature of event</b> Detail nature of the event that contributed to the above-goal reading		
<b>Was the data valid?</b> If unknown at this stage, please indicate. Refer section 5.2.1 of this Protocol.		
<b>Was there an emergency?</b> Refer section 3.1 of this Protocol. If this is unknown at this stage, please indicate.		
<b>Measures employed</b> Detail measures employed to minimise the concentration levels		
<b>Commitment to prepare and submit a Report on Above-Goal Reading</b>		
A Report on Above-Goal Reading will be prepared for this notification. Please note that a Report is not required in the event of an emergency.		
<b>Person responsible for notification</b>	Name	
	Position	
	Organisation	

## **Appendix B**

### Report on Above-Goal Reading



<b>Report on Above-Goal Reading</b> WestConnex M4 East To be submitted to DPE within 20 days of the Report of Above-Goal Reading	
<b>Details of the Above-Goal Reading</b>  Attach relevant Notification of Above-Goal Reading	
<b>Was the data valid?</b>  If invalid, include any details or justifications for the invalidity	
<b>Comparison with long term monitoring trends and background air quality data</b>  This is not required to be completed, however if available and	
<b>Cause or major contributor of the Above-Goal Reading</b>  If the cause or major contributor are not able to be determined, then known facts of what was occurring at the time should be included (eg traffic information, ventilation outlet monitoring records etc)	
<b>Options to prevent recurrence</b>  This is to include consideration of improvements to the tunnel air quality management system so as to achieve compliance with the ambient air quality goals, including but not limited to installation of the additional ventilation management facilities allowed for under condition B5, and discussion of whether those improvements are feasible and reasonable	
<b>Person responsible for report</b>	Name
	Position
	Organisation
	Date

## **Appendix C**

### **Contact list**

## Environmental contacts

Title	Name	Phone number
<b>O&amp;M Contractor project representatives</b>		
Operation and Maintenance Manager	Aedan Hewitt	0413 962 732
QSE Manager	To be provided prior to commencement of operation	To be provided prior to commencement of operation
Role TBC	To be provided prior to commencement of operation	To be provided prior to commencement of operation
<b>Project Company representatives</b>		
Project Company Project Representative	Gunhan Guven	0475 970 938
<b>Roads and Maritime</b>		
Roads and Maritime Project Representative	To be provided prior to commencement of operation	To be provided prior to commencement of operation
<b>Stakeholders and relevant agencies</b>		
Department of Planning & Environment (DPE)	Director Infrastructure Management Director Compliance (Post Approvals)	<a href="mailto:infrastructure.notifications@planning.nsw.gov.au">infrastructure.notifications@planning.nsw.gov.au</a> <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a>
Fire and Rescue NSW		000 (emergency) 1300 729 579 (non-emergency)
EPA		(02) 9995 5000 131 555
Ministry of Health / Camperdown Public Health Unit		Business hours: (02) 9515 9420 After hours: (02) 9515 6111 (ask for Public Health Officer on call)
SafeWork NSW		131 050
Inner West Council		(02) 9392 5000
Burwood Council		(02) 9911 9911
City of Canada Bay Council		(02) 9911 6555
Strathfield Council		(02) 9748 9999
Transport Management Centre		(02) 8396 1400