WestConnex M4-M5 Link
Rozelle Interchange

Ambient Air Quality Goal Protocol

Condition E32

Revision history

Rev No	Revised by	Reviewed by	Date	Description/Summary of Changes
A	[redacted]	[redacted]	[redacted]	First Draft
B	[redacted]	[redacted]	[redacted]	External draft
C	[redacted]	[redacted]	[redacted]	External draft for AQCCC
D	[redacted]	[redacted]	[redacted]	For DPE
00	[redacted]	[redacted]	[redacted]	For DPE

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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
DPE	NSW Department of Planning and Environment
EMT	Emergency Management Team
EPA	NSW Environment Protection Authority
I&M	Incident and Maintenance
I&M Contractor	The contractor engaged to deliver the incident and maintenance contract for the RICproject.
NEPM	National Environment Protection (Ambient Air Quality) Measure
NATA	National Association of Testing Authorities, Australia
NO_2	Nitrogen Dioxide
OAQMP	Operation Air Quality Management Plan
OEH	NSW Office of Environment and Heritage
OEMP	Operation Environmental Management Plan
PM_{10}	Particulate matter (10 micrometres or less in diameter)
$PM_{2\,5}$	Particulate matter (2.5 micrometres or less in diameter)
Project, the	M4-M5 Link Stage 2 - WestConnex Rozelle Interchange
Project Company	WCXRIC PT Pty Ltd in its capacity as trustee of the WCXRIC Project Trust or its successor intitle 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
RIC	Rozelle Interchange

Secretary	Secretary of the Department of Planning and Environment
Secretary's approval	A written approval from the Secretary
SSI	State Significant Infrastructure
TfNSW	Transport for New South Wales
WHT	Western Harbour Tunnel portion of SSI 8863

1 Introduction

1.1 Purpose and overview

This Ambient Air Quality Goal Protocol has been developed to satisfy the requirements of condition E32 of the Conditions of Approval for the WestConnex M4-M5 Link project. This protocol relates specifically to works under Stage 2 of the M4-M5 Link (the Project), as described in the Staging Report.

Condition E32 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 listed in CoA E6. The Protocol is to include a process for notification of a recording above ambient air quality goals in Condition E6, subject to Condition E33; the template used for the Report on Above-Goal Recording; and the process for appointing an independent person or organisation to prepare the Report on Above-Goal Recording.

1.2 Environmental management system

The Incident and Maintenance (I&M) Contractor will utilise an Integrated Management System for environmental management. The I&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-M5 Link Stage 2. It is to be read in conjunction with the other management system documents including the OEMP, the Operation Air Quality Management Plan and the reporting system for in-tunnel, ambient and ventilation outlet limits.

1.3 Consultation

In accordance with condition E32, the Ambient Air Quality Goal Protocol must be prepared in consultation with the WestConnex M4-M5 Link RIC Air Quality Community Consultative Committee (AQCCC).

The AQCCC were consulted during the preparation of this document. The AQCCC were sent a draft of the protocol prior to the August 2022 meeting where the protocol was then discussed. Minor editorial changes were made following comments provided by the AQCCC.

2 Environmental obligations

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

2.1 Conditions of Approval

Conditions of Approval for WestConnex M4-M5 Link that are relevant to the Ambient Air Quality Goal Protocol (Protocol) are provided in Table 1.

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

Table 1- Conditions of Approval

CoA	Relevant requirement	Reference
A40	**The Secretary must be notified as soon as possible and in any event within 24 hours of any incident.**	Figure 3
E6	Should ambient monitoring of air pollutants exceed the following goals, the provisions of Conditions E32, E33 and E34 will apply: (a) CO – 8 hour rolling average of 9.0 ppm (NEPM); (b) NO2 – One hour average of 0.12 ppm (245 µg/m3) (NEPM); (c) PM10 – 24 hour average of 50 µg/m3 (NEPM); (d) PM2.5 – 24 hour average of 25 µg/m3 (NEPM); (e) PM10 – annual average of 25 µg/m3 (NEPM); and (f) PM2.5 – annual average of 8 µg/m3 (NEPM). Note: The notification and reporting obligations under conditions E32, E33 and E34 relating to ambient monitoring will begin at the commencement of operation of the CSSI. The first annual average concentrations for PM10 and PM2.5 must be calculated on the first day the project has been in operation for 12 months and on a rolling basis thereafter.	Section 3
E7	Conditions E3, E4, E5, and E6 do not apply in an emergency, as defined in the OEMP required by Condition D1.	Refer to Section 3.1
E8	The Proponent must, as soon as reasonably practicable, notify the Secretary and the EPA of any discharge during an emergency.	Refer to Section 3.1
E10	All tunnels must be designed and constructed so as to allow for future modification of the ventilation system if required. The Proponent must submit a report to the Secretary demonstrating how this will be allowed for prior to finalising detailed design.	A separate report has been submitted to the Secretary for information.

E24 The Proponent must monitor (by sampling and obtaining results by analysis) the pollutants and parameters specified in Table 8 using the sampling method, units of measure, and sampling frequency specified in the table. Monitoring must be undertaken at the following locations as a minimum:

(a) two ground level receptors near the Rozelle ventilation outlet, at locations suitable for detecting any impact on air quality from the outlet;

(b) two ground level receptors near the Victoria Road ventilation outlet, at locations suitable for detecting any impact on air quality from the outlet;

(c) two ground level receptors near the Campbell Road ventilation outlet, at locations suitable for detecting any impact on air quality from the outlet with one in a location different to that established under SSI 6788; and

(d) two ground level receptors near the Haberfield ventilation outlet, at location suitable for detecting any impact on air quality from the outlet (these may be the same as those established under SSI 6307).

Refer to Section 4.2

Monitoring for the Campbell Road and Haberfield ventilation outlets are addressed by the M4-M5 Link Stage 1 project in accordance with the M4-M5 Link Staging Report.

Table 8 — Ambient Air Quality Monitoring Methodologies

Pollutant	Units of measurement	Averaging Period	Frequency	Method[1]
NO	pphm	1-hour	Continuous	AM-12
NO_2	pphm	1-hour	Continuous	AM-12
NO_x	pphm	1-hour	Continuous	AM-12
PM_{10}	µg/m³	24-hour	Continuous	AS3580.9.8-2008[2]
$PM_{2.5}$[5]	µg/m³	24-hour	Continuous	AS3580.9.13-2013[3] or as otherwise agreed by the Secretary in consultation with the EPA
CO	ppm	1-hour,8-hour	Continuous	AM-6
Parameter[4]	**Units of measurement**	**Averaging Period**	**Frequency**	**Method[1]**
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 @ 2m	K	1-hour	Continuous	AM-4
Temperature @ 10 m	K	1-hour	Continuous	AM-4
Other	**Units of measurement**	**Averaging Period**	**Frequency**	**Method[1]**
Siting	NA	NA	NA	AM-1 & AM-4

Notes:

1. Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2007) or as otherwise agreed by EPA.

2. AS3580.9.8-2008, Me hods 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. AS 3580.9.13-2013, Methods for the Sampling and Analysis of Ambient Air – Determination of Suspended Particulate Matter – PM2.5 Continuous Direct Mass Method using a Tapered Element Oscillating Microbalance Analyser (Standards Australia, 2013).

4. TBD - loca ion for meteorological monitoring station(s) to be representative of weather conditions likely to occur in the vicinity of the Haberfield, Rozelle (including the Rozelle Rail Yards and Victoria Road) and Campbell Road ventilation outlets.

5. Appropriately modified to include size selective inlet for PM2.5 or as otherwise approved by the EPA.

E32	The Proponent must prepare an Ambient Air Quality Goal Protocol for evaluating a potential measurement that exceeds the goals in Condition E6. The Ambient Air Quality Goal Protocol must be developed by the Proponent in consultation with the AQCCC and submitted to the Secretary for approval at least 12 months prior to the commencement of operation of the CSSI. The Ambient Air Quality Goal Protocol must include: (a) a process for notification of a recording above the ambient air quality goals in Condition E6, subject to Condition E33; (b) the template that would be used for the Report on Above-Goal Recording, required by Condition E34; and (c) a process for appointing an independent person/organisation to prepare the Report on Above-Goal Recording. The process must include - (i) approval of the independent person (independent of the environmental assessment, design and construction of the CSSI) by the Secretary prior to preparation of the report, and (ii) the appointment of the independent person/organisation at least one (1) month prior to the commencement of operation, or at some other time prior to preparation of the report with the agreement of the Secretary.	This document (a) Section 5 and Appendix A (b) Section 5 and Appendix B (c) (i) Section 6 (ii) Section 6
E33	IN addition to the general reporting requirements specified in Condition E27, the Proponent must notify the secretary, EPA, and Ministry of Health of any recordings above the goals in Condition E6 as soon as possible and within 24 hours of the recording. This notification must provide details of the circumstances of the event, including: (a) The nature of the event; (b) The concentration levels that occurred; (c) The timing and duration of the event; (d) The measures employed to minimise the concentration levels; and (e) The date when the Proponent will submit a Report on Above-Goal Recording in accordance with Condition E34.	Section 5 Section 5.1.2 Section 3 Appendix A
E34	Within 20 workings days of any Notification of Above-Goal Recording, the Proponent must prepare and submit to the Secretary for information a Report on Above-Goal Recording that details the cause and major contributor of the exceedance the effectiveness of any action(s) taken in response to the exceedance and the options available to prevent recurrence. Where the operation of the tunnel is identified to be a significant contributor to the recorded above-goal reading, the Report on Above-Goal Recording 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 E10.	Section 5.3 Appendix B

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.

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

REMM	Relevant requirement	Reference
AQ29	Ambient air quality monitoring will be carried out in the vicinity of the ventilation outlets installed as part of the project. Monitoring will occur at key representative locations, identified in consultation with an independent air quality specialist and an Air Quality Community Consultative Committee (AQCCC), to allow direct comparison of measured ambient air quality with dispersion model predictions. The monitoring will commence at least 12 months prior to and continue for at least two years following the commencement of operation. Monitoring results and a comparison of monitoring results against dispersion model predictions and relevant ambient air quality criteria will be made publicly available.	This document Section 5 Section 6 Appendix B

3 Ambient air quality goals

The ambient air quality criteria for the Project are defined in Condition E6 and are provided below in Table 3

Table 3 Ambient air quality criteria (condition E6)

Parameter	Concentration limit	Units of measure	Averaging period	Source
CO	9.0	ppm	Rolling 8-hour	NEPM
NO_2	0.12 (245)	ppm (µg/m^3)	1 hour	NEPM
PM_{10}	50	µg/m^3	24 hour	NEPM
$PM_{2.5}$	25	µg/m^3	24 hour	NEPM
PM_{10}	25	µg/m^3	1 year	NEPM
$PM_{2.5}$	8	µg/m^3	1 year	NEPM

In accordance with Condition E6, should ambient monitoring of air pollutants exceed the goals listed in Table 3, Conditions E32, E33 and E34 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. This is also in accordance with Condition E6.

3.1 Emergency discharge

In accordance with Condition E7, the air quality criteria identified in Table 3 do not apply in an emergency situation. An 'emergency' has been defined in Table 4 below.

Table 4 Definition of 'emergency' by relevant CoA

CoA	Definition of the 'emergency' for each condition
E7 E8	An emergency discharge is an emission from the ventilation system that is caused by an incident or set of circumstances which does not ordinarily occur in the everyday use of the tunnel and is beyond: • Merely heavy traffic or congestion, or • The capacity of the tunnel operator to control or to have prevented by taking steps which a prudent, experienced and competent operator would have taken. Conditions E2A, E3, E4, E5, E6, E9 and E14 do not apply in the event of this emergency.
E9	An emergency smoke management purpose is what is reasonably necessary to manage smoke in response to a fire occurring in the tunnel, including in accordance with instructions given by NSW Emergency Services. An emergency smoke management purpose may also occur during periodic testing of the system.
E142	An emergency to which the Plan applies is an out-of-the-ordinary event, or set of circumstances that causes or threatens to cause harm to the safety or well-being of the community, employees, or users of the Motorway or associated assets. It requires a coordinated response from NSW Emergency Services and the Tunnel Operator.

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

4 Monitoring

4.1 Monitoring methodologies

The Project will monitor the pollutants and parameters, using the sampling method, units of measure and frequency specified in Table 5.

Table 5 Ambient air monitoring methodologies

Pollutant	Units of measure	Averaging period	Frequency	Method[1]
NO	pphm	1-hour	Continuous	AM-12
NO_2	pphm	1-hour	Continuous	AM-12
NOx	pphm	1-hour	Continuous	AM-12
PM_{10}	$\mu g/m^3$	24-hour	Continuous	AS3580.9.8-2008[2]
$PM_{2.5}$[5]	$\mu g/m^3$	24-hour	Continuous	AS3580.9.12:2013[3]
CO	ppm	1-hour, 8-hour	Continuous	AM-6
Parameter[4]	**Units of measure**	**Averaging period**	**Frequency**	**Method[1]**
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[1]**
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 16 August 2022 in consultation with the EPA.
4. TBD - location for meteorological monitoring station(s) to be representative of weather conditions l kely to occur in the vicinity of the northern and southern ventilation outlets.
5. Appropriately modified to include size selective inlet for PM2.5 or as otherwise approved by the EPA

The ambient air quality monitoring stations will be established and operated by Ecotech Pty Ltd. Ecotech Pty Ltd were approved by the Secretary on 11 January 2022 (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 E25.

Ambient monitoring of pollutants for the purposes of notification and reporting obligations under Conditions E32, E33 and E34 will begin 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 four monitoring locations. These are described in Table 6 and shown in Figure 1 and Figure 2.

Table 6 Ambient air quality monitoring locations

No.	AQCCC No.	Location	Condition E24 criteria
1	Site B5	Chapman Road, Annandale	E24(a) near Rozelle Outlets
2	Site A3	Quirk St, Rozelle	E24(a) near Rozelle Outlets
3	Site C6a	Ausgrid Park	E24(b) near Iron Cove Outlets
4	Site D1	Bridgewater Park	E24(b) near Iron Cove Outlets

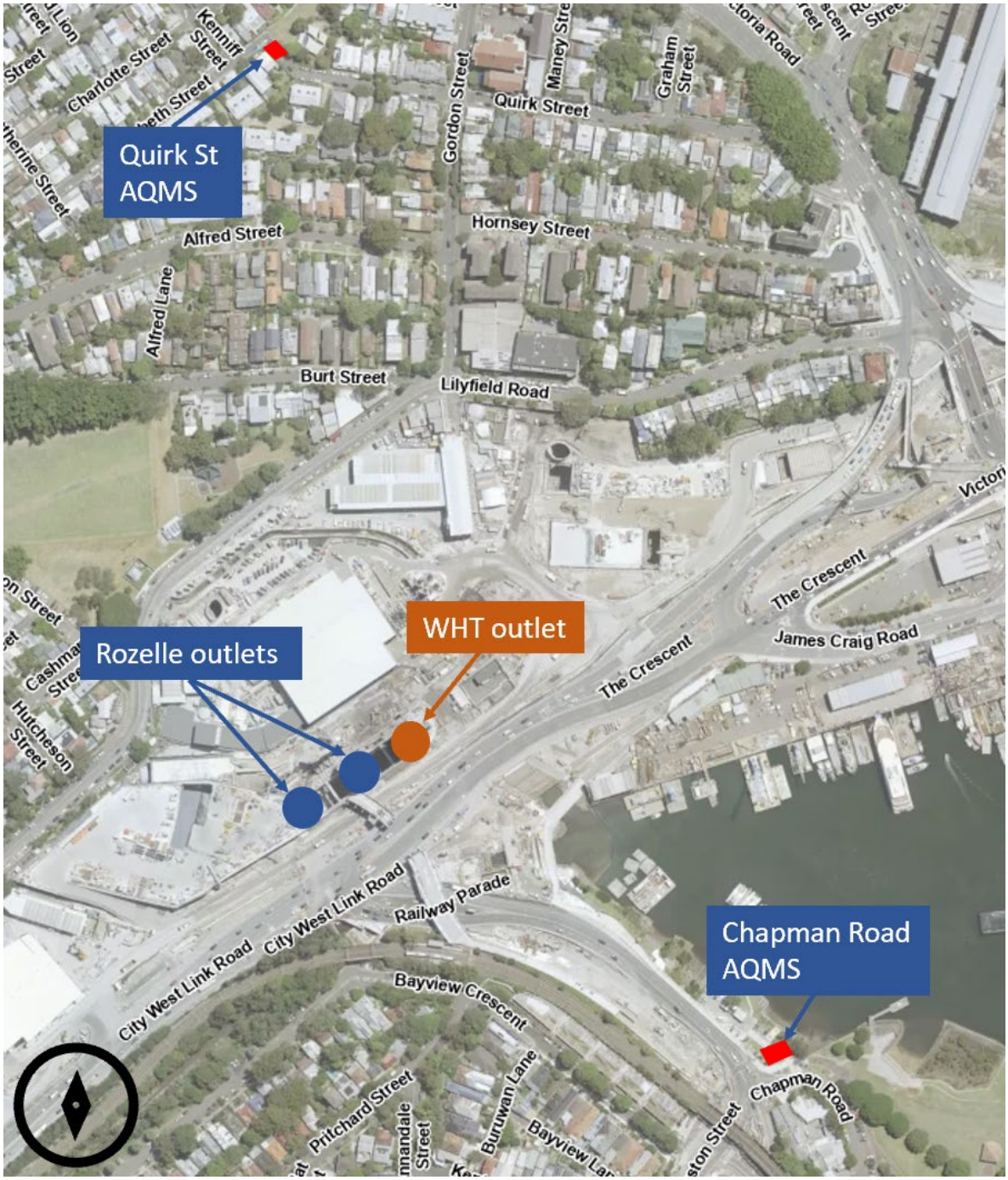

Figure 1 Ambient Air Quality Stations Near Rozelle Outlets

Figure 2 Ambient air quality monitoring stations near Iron Cove Link Outlet

5 Notification and reporting of above-goal readings

The key steps in notification and reporting of above-goal readings are detailed within Figure 3 and include:

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

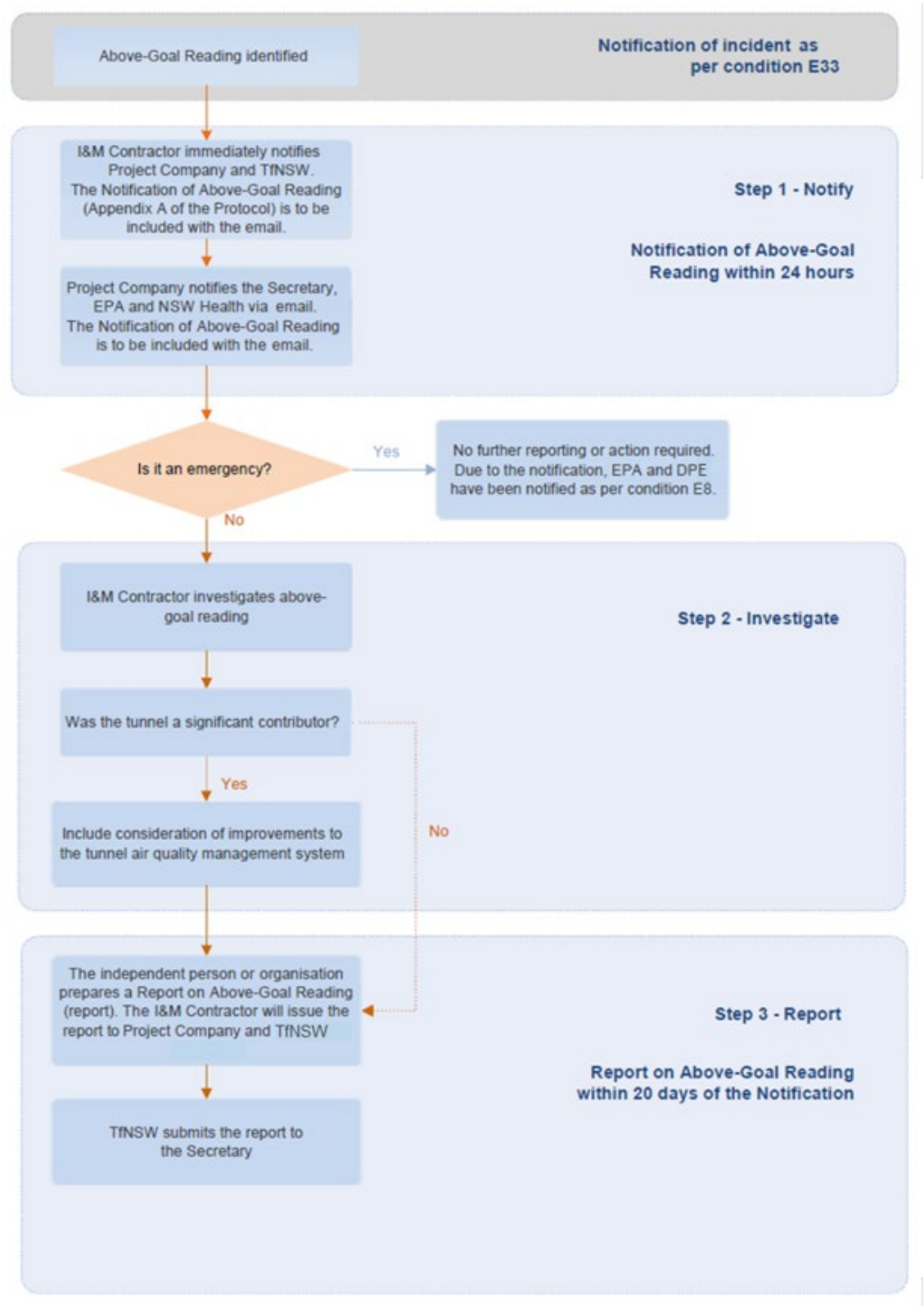

Figure 3-Notification and reporting process for above-goal reading

5.1 Notify the above-goal reading

When ambient monitoring of air quality exceeds the air quality goals detailed within Condition E6, the steps within Section 5.1.1 and Section 5.1.2 will be followed.

5.1.1 Notifying Project Company and TfNSW

Upon identification of an above-goal reading, the I&M Contractor will immediately notify the Project Company and TfNSW.

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

5.1.2 Notifying the Secretary, EPA and NSW Health

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

Form of notification

As per Condition E33 the form of notification will be via the major projects portal for the Secretary and email for all other agencies. The Notification of Above-Goal Reading form (Appendix A) will be attached or included with the email. As required by Condition E33, 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 date when the Proponent will submit a Report on Above-Goal Reading in accordance with Condition E34.

The sample content of the email is indicated in Figure 4. The Notification of Above-Goal Reading form supplements any details included in the email main body and will include the full scope of information as required by Condition E33.

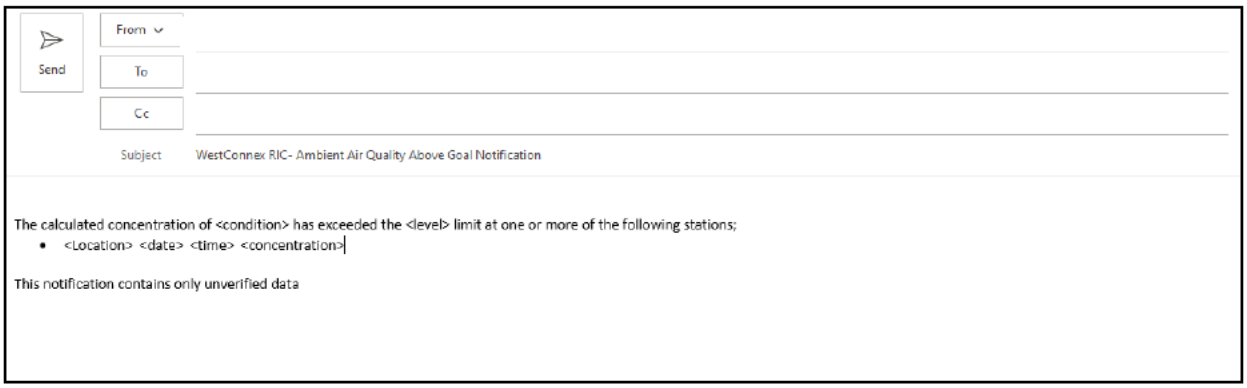

Figure 4- Sample content of the email notification

An example of an email which would be issued is provided in Figure 5.

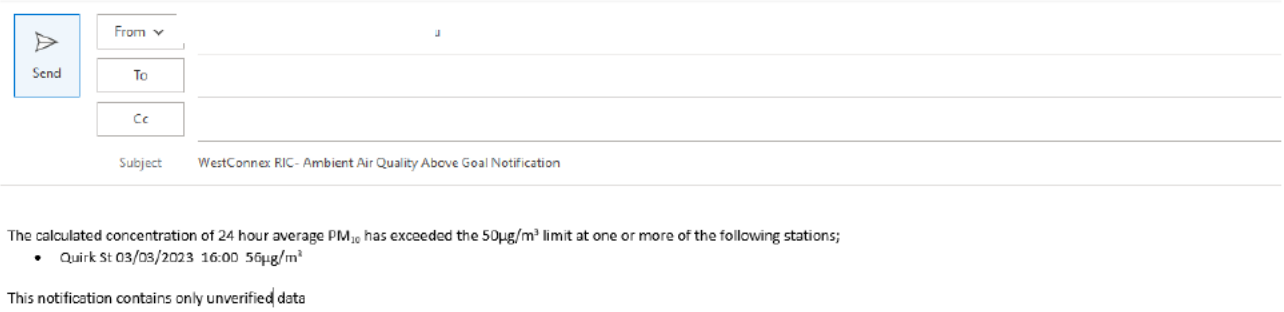

Figure 5 - An example of an email for issue. The form within Appendix A will be included

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 7 provides the contact details for those stakeholders that will be notified.

Table 7 Contact details for stakeholders that are to be notified

Organisation	Contact Position	Telephone	Email
Department of Planning & Environment	Secretary of the Department Team Leader Compliance – Government Projects		Submitted via the Major Projects Planning Portal 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
TfNSW	TBA	TBA	TBA prior to commencement of operation
Project Company	TBA	TBA	TBA prior to commencement of operation

It is the responsibility of the organisations detailed above to contact the I&M Contractor, in writing to I&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-M5 Link RIC 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 TfNSW. TfNSW 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 I&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), 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 E33 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 I&M Contractor and Project Company and TfNSW 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 I&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 I&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 I&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 E10 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[2].

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.[3]

DPE have developed a guideline on the appointment of independent experts titled *Seeking approval from the Department for the appointment of independent experts*. The requirements within the guide plus the ASIC literature will be used to determine the independent expert nominated by the project.

6.2 Selection criteria

Appropriately qualified independent persons/organisations will be identified prior to selection on the basis of meeting the requirements contained within the guide produced by DPIE, *Seeking approval from the Department for the appointment of independent experts.*

In selecting an appropriate independent expert, the following requirements set forth from DPIE will be adhered to;

1. The independent expert will be a member of a relevant professional body
2. not have a close relationship with the proponent/contractor
3. not have any pecuniary interest
4. not accept any inducement or benefit
5. exercise their own independent, professional judgement

Other items to be considered that ASIC states[4] are relevant factors 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 DPIE's guideline (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.[5]
3. Seek written approval from the Secretary ensuring all criteria set forth in the Departments guidelines are met. Nomination and consultation with Project Company andTfNSW.
4. Before commencing work, an expert should obtain written terms of engagement[6] 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 information and explanations it requires to prepare the report
   iv. 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.

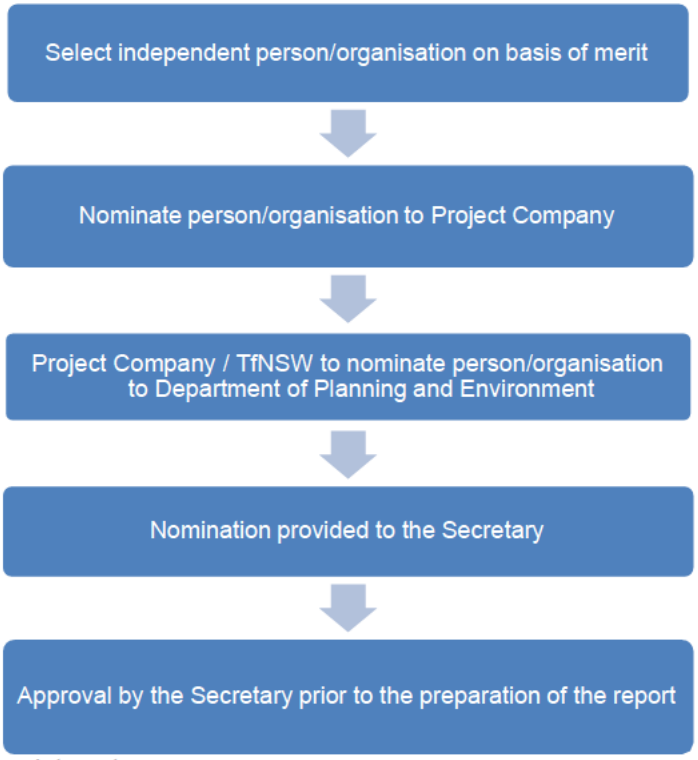

Figure 6- Process of appointment

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.

2 *RG 112.7 Regulatory Guide 112 Independence of Experts (March 2011) Part (a)*
3 *RG 112.31 – 112.35 Regulatory Guide 112 Independence of Experts (March 2011)*
4 *RG 112.40 Regulatory Guide 112 Independence of Experts (March 2011)*
5 *RG 112.41 Regulatory Guide 112 Independence of Experts (March 2011)*
6 *RG 112.42 Regulatory Guide 112 Independence of Experts (March 2011)*

Appendix A Notification of Above-Goal Reading

Notification of above-goal reading WestConnex RIC To be notified immediately to Project Company and TfNSW. Project Company is to notify DPE, EPA and NSW Health within 24 hours.		
Date		
Time (start and finish)		
Relevant location	☐ Quirk Street	☐ Chapman Rd
	☐ Ausgrid Park	☐ Bridgewater Park
Relevant goal	☐ CO – 8 hour rolling average of 9.0 ppm	
	☐ NO_2 – One hour average of 0.12 ppm (245 µg/m^3)	
	☐ PM_{10} – 24 hour average of 50 µg/m^3	
	☐ $PM_{2.5}$ – 24 hour average of 25 µg/m^3	
	☐ PM_{10} – Annual average of 25 µg/m^3	
	☐ $PM_{2.5}$ – Annual average of 8 µg/m^3	
Above-goal reading Detail the above-goal reading thatwas received		
Duration Detail the duration of the above-goal reading or event		
Nature of event Detail nature of the event that contributed to the above-goal reading		
Was the data valid? If unknown at this stage, please indicate. Refer section 5.2.1 of this Protocol.		
Was there an emergency? Refer section 3.1 of this Protocol. If this is unknown at this stage, please indicate.		
Measures employed Detail measures employed to minimise the concentration levels		
Commitment to prepare and submit a Report on Above-Goal Reading 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.		
Person responsible for notification	Name	
	Position	
	Organisation	

Appendix B Report on Above-Goal Reading

Report on Above-Goal Reading WestConnex M4-M5 Link RIC To be submitted to DPE within 20 working days of the Report of Above-Goal Reading	
Details of the Above-Goal Reading Attach relevant Notification of Above-Goal Reading	
Was the data valid? If invalid, include any details or justifications for the invalidity	
Comparison with long term monitoring trends and background air quality data This is not required to be completed	
Cause or major contributorof the Above-Goal Reading If he 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, ventila ion ou let monitoring records etc)	
Options to prevent recurrence and effectiveness of actions taken 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 E10, and discussion of whether those improvements are feasible and reasonable. The effectiveness of any action(s) taken in response to the exceedance shall be documented below.	
Person responsible forreport	Name
	Position
	Organisa ion
	Date

Appendix C Contact list

Environmental contacts

Title	Name	Phone number
I&M Contractor project representatives		
Incident and Maintenance Manager	To be provided prior to commencement of operation	To be provided prior to commencement of operation
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
Project Company representatives		
Project Company Project Representative	To be provided prior to commencement of operation	To be provided prior to commencement of operation
TfNSW		
TfNSW Project Representative	To be provided prior to commencement of operation	To be provided prior to commencement of operation
Stakeholders and relevant agencies		
Department of Planning & Environment (DPE)	Secretary of the Department Team Leader Compliance – Government Projects	Submitted via the Major Projects Planning Portal compliance@planning.nsw.gov.au
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
Transport Management Centre		(02) 8396 1400