

EPL 21784 POLLUTION MONITORING REPORT October 2023





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1. Introduction

1.1. Project overview

Sydney Metro West (SMW) is a new 24-kilometre metro line with nine new stations confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont, and Hunter Street in the Sydney CBD.

The planning process for Sydney Metro West was assessed as a staged infrastructure application under section 5.20 of the *Environment Planning and Assessment Act 1979 (EP&A Act)*.

Stage 1 of the development, the Sydney Metro West Concept and major civil construction work for Sydney Metro West between Westmead and The Bays (SSI-10038 Schedule 2), was approved on 11 March 2021 and includes:

- Construction and operation of new passenger rail infrastructure between Westmead and the central business district of Sydney, including:
 - o Tunnels, stations (including surrounding areas) and associated rail facilities
 - Stabling and maintenance facilities (including associated underground and overground connections to tunnels)
- Modification of existing rail infrastructure, including stations and surrounding areas
- Ancillary development.

The Eastern Tunnelling Package (ETP or this Project) is addressed under the Stage 2 Planning Approval (SSI 19238057). This Project includes all major civil construction work including station excavation (at the Pyrmont Station and Hunter Street Station (Sydney CBD) construction sites) and tunnelling between The Bays and Sydney CBD (Figure 1).

It is noted that the existing Sydney Metro West precast facility at Eastern Creek will be utilised in the delivery of the ETP Works. The facility, which was assessed by Sydney Metro in a Review of Environmental Factors (REF) and approved on 11 March 2021, is outside of the scope of the SWMP.

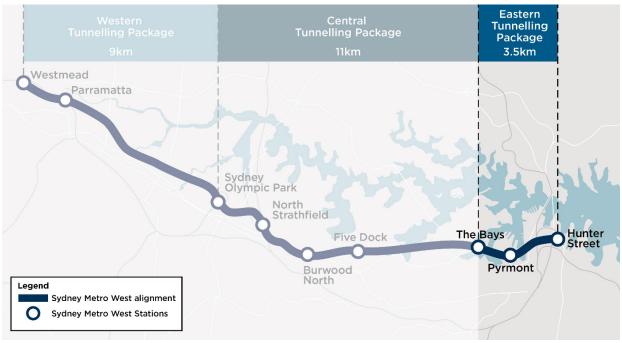


Figure 1: Sydney Metro West alignment



1.2. Project Scope

The ETP Works include design and construction of:

- Demolition of existing buildings at Pyrmont East and West shaft sites and at Hunter Street East and West shaft sites
- Tunnel Boring Machine (TBM) assembly, launch, tunnelling support from an existing shaft at The Bays
- Approximately 2.5 km twin underground eastbound and westbound bored railway tunnels between The Bays and Hunter Street and six cross passages spaced up to 500 metres apart
- Pyrmont Station excavation, including two shaft excavations, associated access adits and nozzle enlargements, including temporary ground support and cast in situ cavern linings
- Excavation and lining of a mined crossover cavern to allow trains to cross from one track to the other
- Hunter Street station mined cavern excavation, including:
 - Two shaft excavations, associated access adits
 - Nozzle enlargements
 - Conversion of an existing temporary connection adit at Bligh Street linking Hunter Street Station to Martin Place Station into a permanent pedestrian connection linking the stations (including temporary ground support and cast in situ linings)
- A turnback extension tunnel, of approximately 675 metres, east of the Hunter Street Station works to enable Sydney Metro train storage and to change tracks and travel direction (eastbound to westbound)
- TBM disassembly and retrieval from Hunter Street East.

1.3. Scope of this report

John Holland CPB Contactors Ghella (JCG) have been issued an Environmental Protection Licence (EPL No. 21784) from the NSW Environment Protection Authority (EPA) for the Sydney Metro West Eastern Tunnelling Package (ETP) Project.

The EPL applies to the works approved under the Infrastructure Approval SSI-19238057 associated with the delivery of the Sydney Metro West Eastern Tunnelling Package (ETP) Project.

This EPL Pollution Monitoring Report provides the results of all pollution monitoring required to be measured or monitored by the licensee of EPL 21784 as required by Section 66 of the Protection of the Environment Operations Act 1997 (POEO Act) and with reference to EPA Publication Requirements for publishing pollution monitoring data (Environment Protection Authority, 2013).

Table 1 provides a summary of the EPL 21784 details.

Table 1: Licence Details

Licence Details	
Number	21784
Copy of Licence	https://apps.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=266460&SYSUID=1&LICID=21784
Anniversary Date	16 March
Licensee	John Holland Pty Ltd
Premises	Sydney Metro West – Eastern Tunnelling Package
Scheduled Activity	Railway activities – railway infrastructure construction



2. Reporting Requirements

Under the POEO Act, holders of environment protection licences (licensees) must publish or make pollution monitoring data available to members of the public.

The POEO Act Section 66 requires:

"66 Conditions requiring monitoring, certification or provision of information, and related offences

- (1) Monitoring The conditions of a licence may require—
 - (a) monitoring by the holder of the licence of the activity or work authorised, required or controlled by the licence, including with respect to—
 - (i) the operation or maintenance of premises or plant, and
 - (ii) discharges from premises, and
 - (iii) relevant ambient conditions prevailing on or outside premises,

and

- (iv) anything required by the conditions of the licence, and
- (b) the provision and maintenance of appropriate measuring and recording devices for the purposes of that monitoring, and
- (c) the analysis, reporting and retention of monitoring data.
- (2) False or misleading information A holder of a licence who supplies information, or on whose behalf information is supplied, to the appropriate regulatory authority under the conditions of the licence is guilty of an offence if the information is false or misleading in a material respect."

The primary objective of the pollution monitoring reporting requirements is that members of the public have access to the results of all pollution monitoring (which a licence specifies must be carried out) in a way that is meaningful to them. Data for the Sydney Metro West Eastern Tunnelling Package is presented on a monthly sampling period.

The monitoring data that must be published and/or made available on request is any data that is obtained as a result of a monitoring condition on a licence that relates to air, water (surface or groundwater), noise and/or land pollution. The data to be published or provided is limited to data that relates to pollutants generated, discharged or emitted from the licensed premises.

The data is provided in tabular format that is easy for the general public to understand. Tables definitively display raw data values, while graphs and charts are useful for overviews and visualisation of long-term trends. Raw data will be provided upon request.

An upfront note will be included on the licensee's website or in this report to explain why any data may appear to be missing because there is no discharge or the level of pollutant being below the detection level of the measurement instrument.

It is possible from time to time that incorrect data may be published in good faith. As soon as practicable after the licensee becomes aware that the published pollution monitoring data is incorrect or misleading, licensees must then publish a correction log to correct this data that is incorrect or misleading (refer to **Section 4**).



Table 1 provides a summary of the pollution monitoring requirements of EPL 21784.

Table 1 EPL 21784 Pollution Monitoring Requirements

EPL Condition	Requirement			Report Reference			
Weather							
M5.1	The licensee must monitor ar velocity and rainfall at either to equivalent weather information Monitoring must: a) be representative of each of b) commence prior to any wo and c) continue to be operated un	Section 3.1 Appendix A3.1					
Noise	and the site has been stabilis	ed.					
L5.9	from these works and active than those permitted under iii. a monitoring plan to valid boundary of representative that are representative of the predicted to have the higher	the following: t assessment in accordance ,2009) that is to include: es outside of standard at noise sensitive receivers is are predicted to be greater ons, based on monitoring at the ring noise generating activities , including during the period/s	Section 3.2 Appendix B				
M4.4	The licensee must undertake authorised officer of the EPA must provide the response to	. If a licensee is unable		N/A			
Water							
P1.1	to water from the point.	nd/or the setting of limi	tified in this licence for the ts for discharges of pollutants	Section 3.3			
	EPA Identi- Type of Monitoring Point fication no.	Type of Discharge Point	Location Description				
	1 Discharge & Monitoring Discharge & Monitoring Discharge from the Hunter St Station WTP to Sydney Harbour Discharge from the Eastern Creek Precast Facility sediment basin Discharge from The Bays temporary WTP to White Bay Discharge & Monitoring Discharge & Monitoring Discharge from the Pyrmont Station WTP to Sydney Harbour Discharge from the Pyrmont Station WTP to Sydney Harbour Discharge from the Eastern Tunnelling Package Eastern Creek Precast Facility Water Treatment Plant into Ropes Creek						
M2.1	For each monitoring/discharg number), the licensee must n analysis) the concentration of must use the sampling metho specified opposite in the other	nonitor (by sampling ar f each pollutant specific od, units of measure, ar	ed in Column 1. The licensee	Section 3.3			



					Section 3.3
	Pollutant	Units of measure	Frequency	Sampling Method	
	Ammonia	micrograms per litre	Monthly during	Grab sample	
	Arsenic	micrograms per litre	discharge Monthly during	Grab sample	
	Manganese	micrograms per litre	discharge Monthly during	Grab sample	
	Nitrogen (total)	micrograms per litre	discharge Monthly during	Grab sample	
	373 31 11	10.7%	discharge		
	Oil and Grease	Visible	Monthly during discharge	Visual Inspection	
	pH	рН	Daily during any discharge	Probe	
	Phosphorus (total)	micrograms per litre	Monthly during discharge	Grab sample	
	TSS	milligrams per litre	Monthly during	Grab sample	
POINT	2		discharge		_
	Pollutant	Units of measure	Frequency	Sampling Method	_
	Oil and Grease	Visible	Special Frequency 1	Visual Inspection	
	pH	рН	Special Frequency 1	Probe	
	TSS	milligrams per litre	Special Frequency 1	Grab sample	
POINT					
	Pollutant	Units of measure	Frequency	Sampling Method	
	Arsenic (III)	micrograms per litre	Monthly during discharge	Grab sample	
	Manganese	micrograms per litre	Monthly during discharge	Grab sample	
	Nitrate + nitrite	micrograms per litre	Monthly during	Grab sample	
	(oxidised nitrogen) Oil and Grease	Visible	discharge Monthly during	Visual Inspection	
	pH	рН	discharge Daily during any	Probe	
	•		discharge		
	Phosphorus (total)	micrograms per litre	Monthly during discharge	Grab sample	
	TSS	milligrams per litre	Monthly during discharge	Grab sample	
POINT	4		around go		_
	Pollutant	Units of measure	Frequency	Sampling Method	_
	Pollutant Aluminium	Units of measure micrograms per litre	Frequency Monthly during	Sampling Method Grab sample	
	Aluminium	micrograms per litre	Monthly during discharge	Grab sample	
	Aluminium	micrograms per litre	Monthly during discharge Monthly during discharge	Grab sample Grab sample	
	Aluminium Ammonia Arsenic (III)	micrograms per litre	Monthly during discharge Monthly during	Grab sample Grab sample Grab sample	
	Aluminium	micrograms per litre	Monthly during discharge Monthly during discharge Monthly during discharge Monthly during	Grab sample Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium	micrograms per litre micrograms per litre micrograms per litre	Monthly during discharge Monthly during discharge Monthly during discharge Monthly during discharge Monthly during	Grab sample Grab sample Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium	micrograms per litre micrograms per litre micrograms per litre micrograms per litre	Monthly during discharge Monthly during discharge Monthly during discharge Monthly during discharge Monthly during discharge Monthly during	Grab sample Grab sample Grab sample Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt	micrograms per litre	Monthly during discharge Monthly during discharge Monthly during discharge Monthly during discharge Monthly during discharge Monthly during discharge	Grab sample Grab sample Grab sample Grab sample Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper	micrograms per litre	Monthly during discharge	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper	micrograms per litre	Monthly during discharge	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper	micrograms per litre	Monthly during discharge Monthly during	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper	micrograms per litre	Monthly during discharge Monthly during	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese	micrograms per litre	Monthly during discharge	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate	micrograms per litre	Monthly during discharge	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total)	micrograms per litre	Monthly during discharge	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH	micrograms per litre vicrograms per litre micrograms per litre	Monthly during discharge Daily during any discharge	Grab sample Visual Inspection Probe	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total)	micrograms per litre visible pH micrograms per litre	Monthly during discharge Daliy during discharge Monthly during discharge Daliy during any discharge Monthly during discharge	Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Cill and Grease pH Phosphorus (total) TSS	micrograms per litre visible pH micrograms per litre milligrams per litre	Monthly during discharge	Grab sample Visual Inspection Probe Grab sample	
	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total)	micrograms per litre visible pH micrograms per litre	Monthly during discharge Daily during any discharge Monthly during	Grab sample	
POINT	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total) TSS Zinc	micrograms per litre visible pH micrograms per litre milligrams per litre	Monthly during discharge Dally during discharge Monthly during discharge Dally during discharge Monthly during	Grab sample Visual Inspection Probe Grab sample	
POINT	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total) TSS Zinc	micrograms per litre visible pH micrograms per litre milligrams per litre milligrams per litre micrograms per litre	Monthly during discharge	Grab sample Visual Inspection Probe Grab sample Grab sample Grab sample Sample Grab sample	
POINT	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total) TSS Zinc	micrograms per litre visible pH micrograms per litre milligrams per litre milligrams per litre	Monthly during discharge	Grab sample Orab sample Orab sample Orab sample Grab sample Grab sample	
POINT	Aluminium Ammonia Arsenic (III) Cadmium Chromium (hexavalent) Cobalt Copper Iron Manganese Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total) TSS Zinc	micrograms per litre visible pH micrograms per litre milligrams per litre milligrams per litre micrograms per litre	Monthly during discharge Daily during any discharge Monthly during discharge	Grab sample Visual Inspection Probe Grab sample Grab sample Grab sample Sample Grab sample	



3. Monitoring

Section 3 presents a summary of the monitoring programs completed in the reporting period from 17 September 2023 to 14 October 2023. Some meteorological data was unavailable on the Bureau of Meteorology at the time of report submission.

Detailed monitoring results for each program are presented in the Appendices.

3.1. Meteorological Data

Meteorological data for the Project has been taken from the Observatory Hill Bureau of Meteorology Weather Station.

The total rainfall recorded during the reporting period was 32.4 mm with 6 days exceeding one millimetre of rain and 0 days of rain exceeding 10mm.

During the reporting period, there were 22 days where the maximum wind gust recorded was greater than 25km/h, 6 days where the maximum wind gust recorded was greater than 50km/h and 3 days where the maximum wind gust recorded was greater than 60km/h. Winds recorded during the reporting period were predominantly westerly in the mornings and varied between an easterly / east-south-east into the afternoons, with some variability throughout the month.

A summary of the weather observations and weather events during the reporting period of relevance to the Soil and Water Management Sub-plan and Air Quality Management Sub-plan Trigger Action Response Plans (TARPs) are summarised in Table 2.

Detailed weather observation records for the reporting period are presented in Appendix A.

Table 2 Weather summary and trigger weather events for the reporting period

Weather Event	Observation
Minimum temperature	9.3 °C
Maximum temperature	35.7 °C
Total rainfall	32.4 mm
Number of days with rain (>1 mm)	6 days
Number of days with rain (>10 mm)	0 days
>25 km/hr wind	22 days
>50 km/hr wind	6 days
>60 km/hr wind	3 days

3.2. Noise

Noise monitoring is a requirement of the following conditions of EPL 21784:

- L5.9 Monitoring to validate the noise predictions for works undertaken outside of the standard construction hours as per the construction noise impact assessment
- M7.5(c) Noise or vibration monitoring following noise and vibration complaints
- M4.4 Noise and vibration monitoring as directed by an authorised officer of the EPA.

Table 3 Summary of noise and vibration monitoring completed during the reporting period

Date	Monitoring Location	Method	Description
24/09/23	2 Hunter St - De Mestre Place	Sound Level Metre	Tower crane hoist installation noise monitoring
24/09/23	30 Hunter St – The Grand Hotel	Sound Level Metre	Tower crane hoist installation noise monitoring



3.3. Discharge to water

Discharge water quality monitoring is a requirement of the following conditions of EPL 21784:

 M2.1 Monitoring the concentration of each pollutant specified using the specified sampling method, units of measure and frequency

During the reporting period sampling was undertaken from Point 1 – Discharge from the Hunter St Station WTP and Point 3 – Discharge from The Bays temporary WTP. No sampling was taken from Point 2 – Discharge from the Eastern Creek Precast Facility, as no water was discharged in the reporting period.

The Eastern Creek Precast Facility and Pyrmont Station water treatment plants are yet to be commissioned. As such no water sampling or discharge has occurred in this recording period.

Table 4 & 5 provide the details of the concentration of pollutants discharged during the reporting period. There were no exceedances of the discharge criteria specified in L2.4 in the water tested from the Hunter St Station WTP, discharge commenced from The Bays WTP on the 05/10/23.

Table 4 Concentration of pollutants discharged from Point 1 during the reporting period

Date	12/10/23		
Туре	Units	Criteria	Discharge
Ammonia	(µg/L)	910	530
Arsenic (III)	(μg/L)	8	<1
Manganese	(μg/L)	80	53
Nitrogen (Total)	(μg/L)	1720	1200
Oil and Grease	Visible	Not Visible	Not visible
pH	pН	7.0-8.5	7.0
Phosphorus (total) (μg/L)	(µg/L)	140	<5

Table 5 Concentration of pollutants discharged from Point 3 during the reporting period

Date	05/10/23		
Туре	Units	Criteria	Discharge
Arsenic (III)	(μg/L)	90	<1
Manganese	(μg/L)	1900	1100
Nitrate + Nitrite (oxidised nitrogen)	(μg/L)	200	91
Oil and Grease	Visible	Not Visible	Not Visible
рН	рН	6.5-8.5	7.9
Phosphorus (total) (μg/L)	(μg/L)	1000	100
TSS (mg/L)	(mg/L)	50	<5

4. Correction Log

It is possible from time to time for incorrect data to get published in good faith.

As soon as practicable after the licensee becomes aware that the published pollution monitoring data is incorrect or misleading, licensees must then publish a correction log to correct this data that is incorrect or misleading.

There are no matters included in the correction log for this reporting period.





Appendix A Weather Data

Table 6 Weather Observations. Temperature and Relative Humidity. Observatory Hill BOM Station.

	Min temperature and Re	elative Humidity. Observati Max temperature		9am	9am relative	3pm	3pm relative
Date	(°C)	(°C)	Rainfall (mm)	Temperature (°C)	humidity (%)	Temperature (°C)	humidity (%)
17/09/2023	16.7	32.8	0	22.9	41	32.6	19
18/09/2023	14.3	29.8	0	20.6	49	27.4	41
19/09/2023	16.4	34.6	0	25.4	39	27.4	47
20/09/2023	20.5	33.9	0	27.2	26	33.6	18
21/09/2023	16	23	0	20	38	20	56
22/09/2023	11.1	19.4	9.4	14.1	84	17	59
23/09/2023	9.3	20.9	1.6	17.3	67	19.7	49
24/09/2023	12.1	21.2	0	16.5	70	20	50
25/09/2023	11.2	23.3	0	18.2	68	22.4	60
26/09/2023	13.8	21.6	0	19.6	82	21	64
27/09/2023	14.8	24	1.4	18.1	91	21.7	72
28/09/2023	15.2	21.5	9.8	17.9	83	20.4	69
29/09/2023	13.3	25.8	0	19.5	78	23	64
30/09/2023	14.6	25	0	21.1	82	23.2	74
01/10/2023	16.5	35.6	0	22.7	50	35.5	17
02/10/2023	16.2	23.4	0	19	63	22.4	59
03/10/2023	17.1	35.7	0	21.2	75	35.2	21
04/10/2023	20	27.9	0	21.1	69	25.9	43
05/10/2023	12.9	23.1	8.2	15.6	48	22.6	22
06/10/2023	11.6	22.9	0.2	15.1	57	18	66
07/10/2023	11.5	20.1	1.8	14.1	70	19	54
08/10/2023	12.6	22.9	0	15.4	74	21.1	55
09/10/2023	11.7	23.2	0	14.8	81	22	54
10/10/2023	13.6	23.6	0	17.7	84	22.7	64
11/10/2023	15.5	nd	0	18.4	84	nd	nd
12/10/2023	nd	nd	nd	nd	nd	nd	nd
13/10/2023	nd	nd	nd	nd	nd	nd	nd
14/10/2023	nd	nd	nd	nd	nd	nd	nd
15/10/2023	nd	nd	nd	nd	nd	nd	nd
16/10/2023	nd	nd	nd	nd	nd	nd	nd

Note: nd = not data available



Table 7 Wind Observations. Observatory Hill BOM Station.

Table T Willa Observation			Time of many	0	0	On my accional	2
Date	Direction of max wind gust	Speed of max wind gust (km/h)	Time of max wind gust	9am wind direction	9am wind speed (km/h)	3pm wind direction	3pm wind speed (km/h)
17/09/2023	WNW	24	9:17	WNW	19	NW	11
18/09/2023	NE	35	16:37	W	17	ESE	15
19/09/2023	NNW	41	12:59	E	2	E	4
20/09/2023	WNW	67	11:56	NW	31	NW	35
21/09/2023	WSW	54	9:47	W	26	SE	24
22/09/2023	S	39	11:46	W	13	SSE	20
23/09/2023	ESE	24	15:15	WNW	11	E	15
24/09/2023	E	28	16:59	WNW	11	E	20
25/09/2023	E	31	15:47	W	11	NE	13
26/09/2023	SSW	39	8:05	SSW	24	SE	13
27/09/2023	E	24	15:40	W	4	E	17
28/09/2023	SE	31	3:57	SSE	13	E	19
29/09/2023	ESE	26	14:13	W	9	ESE	19
30/09/2023	NNE	35	18:40	NNE	15	ENE	19
01/10/2023	S	65	20:07	WNW	9	W	33
02/10/2023	SSE	46	23:22	SE	13	Е	22
03/10/2023	N	52	14:21	ESE	7	NNW	30
04/10/2023	NNW	65	22:49	NE	17	N	28
05/10/2023	NW	54	3:30	WNW	31	WSW	28
06/10/2023	SSE	48	13:36	W	22	SSE	31
07/10/2023	SSE	43	0:53	SSW	17	SSE	17
08/10/2023	ESE	26	13:31	W	13	E	19
09/10/2023	ENE	37	15:11	W	11	ENE	22
10/10/2023	ESE	31	16:40	WNW	9	ESE	22
11/10/2023	nd	nd	nd	W	9	nd	n
12/10/2023	nd	nd	nd	nd	nd	nd	nd
13/10/2023	nd	nd	nd	nd	nd	nd	nd
14/10/2023	nd	nd	nd	nd	nd	nd	nd
15/10/2023	nd	nd	nd	nd	nd	nd	nd
16/10/2023	nd	nd	nd	nd	nd	nd	nd

Note: nd = no data available



Appendix B Noise Monitoring Results

Table 9 Noise Monitoring Results

Table 5 Noise		Works		Activity	Monitoring	NML	Predicted	Recorded		Exceedance	Exceedance		
Date	Time	Period	Construction Activity	Location	Location	(dBA)	(dBA)	Leg, 15min (dBA)	LAmax	of Predicted (dBA)	of Predicted	Comments	
Attended noise monitoring													
24/09/2023	10:24	Day	Tower crane hoist installation	Hunter Street West	2 Hunter St	60	59	63.9	88.9	4.9	Yes	Validation monitoring indicated construction work was not the dominant noise source.	
24/09/2023	10:45	Day	Tower crane hoist installation	Hunter Street West	30 Hunter St	60	59	60.6	78.4	1.6	Yes	Validation monitoring indicated construction work was not the dominant noise source.	
Real time noise and vibration monitoring													
	Continuous		Construction – Noise	Hunter Street	The Ivy (Level 5 External)	*	*	*		*	*	Real time noise and vibration monitoring data is available on request.	
	Continuous		Construction – Noise	Hunter Street	The Ivy (Level 2 Office Printer Room)	*	*	*	*	*	*		
	Continuous		Construction – Vibration	Hunter Street	The Ivy (Basement Carpark)	*	*	*	*	*	*		
	Continuous		Construction – Noise	Hunter Street	The Radisson Blu Plaza Hotel (Basement) 27 O'Connell Street, Sydney, 2000	*	*	•	*		•		
			Construction – Noise	Hunter Street	The Radisson Blu Plaza Hotel (Level 1) 27 O'Connell Street, Sydney, 2000	*	*		*		•		
	Continuo	us	Construction – Vibration	Hunter Street	The Radisson Blu Plaza Hotel (Basement) 27 O'Connell Street, Sydney, 2000	*	*	*	*		*		
	Continuous		Construction – Noise	Hunter Street	Tank Stream Hotel (Level 1 Office) 97-99 Pitt Street, Sydney, 2000	•	•	•	*		•		



Date	Time Works Period	Construction Activity	Activity Location	Monitoring Location	NML (dBA)	Predicted (dBA)	Recorded L _{eg, 15min} (dBA)	LAmax	Exceedance of Predicted (dBA)	Exceedance of Predicted	Comments
	Continuous	Construction – Vibration	Hunter Street	Tank Stream Hotel (Basement) 97-99 Pitt Street, Sydney, 2000	*	*	*	•		*	
	Continuous	Construction – Noise	Pyrmont East	63 Edwards Street, Pyrmont, 2009	*	*	*	*	*	*	
	Continuous	Construction – Vibration	Pyrmont East	63 Edwards Street, Pyrmont, 2009			*	*		*	
	Continuous	Construction – Noise	Pyrmont West	28 Paternoster Row, Pyrmont, 2009			*	•		*	
	Continuous	Construction – Vibration	Pyrmont West	28 Paternoster Row, Pyrmont, 2009	*	*	*	*	*	*	
	Continuous	Construction – Vibration	Pyrmont	13A Union Street, Pyrmont, 2009	*	*	*	*	*	*	

^{*} Data is available upon request