

EPL 21672 Monitoring Report, October 2022

Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works

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1. Introduction

1.1. Background

The Sydney Metro Western Sydney Airport will become the transport spine for Greater Western Sydney, connecting communities and travellers with the new Western Sydney International (Nancy-Bird Walton) Airport (referred to as Western Sydney International) and the growing region.

The Project forms part of the broader Sydney Metro network. It involves the construction and operation of a 23km new metro rail line that extends from the existing Sydney Trains suburban T1 Western Line (at St Marys) in the north and the Aerotropolis (at Bringelly) in the south. The alignment includes a combination of tunnels and civil structures, including viaduct, bridges, surface and open-cut troughs between the two tunnel sections (

Figure 1).

The Sydney Metro Western Sydney Airport EIS was prepared in October 2020 to assess the impacts of construction and operation of the Project and was placed on public exhibition between 21 October 2020 and 2 December 2020. The Project was declared a Critical State Significant Infrastructure (CSSI) Project and is listed in Schedule 5 of *State Environmental Planning Policy (State and Regional Development)*.

The Sydney Metro Western Sydney Airport was approved by the Minister for Planning and Public Spaces on 23 July 2021 (SSI 10051) under section 5.19 of the *Environmental Planning and Assessment Act 1997* (EP&A Act).

The Project will be delivered through the following stages:

- **Advanced and Enabling Works (AEW)** – Site investigations, modification of the existing transport network, power and water supply for construction sites, utility and stormwater diversions and some demolition works.
- **Station Boxes and Tunnelling Works (SBT)** – delivered through the following sub-stages:
 - Preparatory Works (the subject of this Plan) – Including NSW (off-airport) demolition works, site levelling/grading, site access and parking, utility and temporary services works, erection of demountable buildings and noise barriers, tunnelling preparatory works and use of ancillary facilities including onsite parking.
 - Bulk Excavation and Tunnelling Works – Preparatory Works (works not completed prior to Final CEMP approval), bulk excavation, acoustic shed installation, tunnelling and cross passage installation.
- **Surface and Civil Alignment Works (SCAW)** – Construction of bridges and viaducts to cross floodplains, watercourses and existing and proposed permanent infrastructure.
- **Stations, Systems, Trains, Operations and Maintenance (SSTOM)**– Station design and fitout, testing and commissioning, and operation of the Western Sydney Airport metro service
- **Finalisation Auxiliary Works.**

Each package of work is to be delivered under separate contracts on behalf of the proponent Sydney Metro.





Figure 1: Overview of the Project



1.1.1. Station Boxes and Tunnelling Works

The CPB Ghella JV has been engaged to deliver the SBT Works. The SBT Works include the design and construction of:

- Two sections of twin tunnels with a total combined length of approximately 9.8km, including associated portal structures; Orchard Hills to St Marys and Western Sydney International (WSI) airport to the new Aerotropolis Station in NSW
- Excavations at either end to enable trains to turn back and stub tunnels to enable future extensions
- Station box excavations with temporary ground support for four stations at St Marys, Orchard Hills, Airport Terminal and Aerotropolis
- Excavations for two intermediate service facilities, one in each of the tunnel sections at Claremont and Bringelly.

Completed sections of the SBT Works, including established construction worksites, will be progressively handed over to Sydney Metro to enable follow-on contractors to commence works. The exception is the on-airport Precast Segment Storage Facility which will be decommissioned and hydroseeded following the completion of segment manufacture.

1.2. Scope of this report

CPB Contractors Pty Limited have been issued an Environmental Protection Licence (EPL No. 21672) from the NSW Environment Protection Authority (EPA) for the Sydney Metro Western Sydney Airport Station Box and Tunnelling Package on behalf of Sydney Metro.

The EPL applies to the works approved under the Infrastructure Approval SSI-10051 associated with the delivery of Sydney Metro Western Sydney Airport SBT Works Off-airport worksites. The EPL does not apply to other Sydney Metro Western Sydney Airport works packages or On-airport SBT Worksites.

An overview of relevant jurisdiction at each SBT Worksite is provided in Table 1.

Table 1: SBT Worksite Jurisdiction

Jurisdiction	Worksite
NSW	St Marys
NSW	Claremont Meadows
NSW	Orchard Hills
On-Airport	Airport Portal Dive Structure
On-Airport	Airport Terminal and TBM shaft
On-Airport	Precast Segment Storage Facility
On-Airport	Primary Spoil Reveal
NSW	Bringelly
NSW	Aerotropolis

Note: Worksites shown in grey are within the boundary of the Western Sydney International (On-Airport), are regulated under the *Commonwealth Airports Act 1996* and are outside the scope of EPL 21672.

This EPL Pollution Monitoring Report provides the results of all pollution monitoring required to be measured or monitored by the licensee of EPL 21672 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 2 provides a summary of the EPL 21672 details.

Table 2: License details

Licence Details	
Number:	21672
Copy of License	ViewPOEOLicence.aspx (nsw.gov.au)
Anniversary Date	30-May
Licensee	CPB Contractors Pty Limited
Premises	Sydney Metro Western Sydney Airport Station Box and Tunnelling Package St Marys to Orchard Hills and Bringelly to Aerotropolis St Marys NSW 2760
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 SBT Works 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 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 3 provides a summary of the pollution monitoring requirements of EPL 21672.



Table 3: EPL 21672 Pollution Monitoring Requirements

EPL Condition	Requirement	Report Reference
Weather		
M5.1	<p>The licensee must monitor and record temperature, wind direction, wind velocity and rainfall at either the project weather station, or through analysis of equivalent weather information obtained from the Australian Bureau of Meteorology.</p> <p>Monitoring must:</p> <ul style="list-style-type: none"> a) be representative of the premises; b) commence prior to any works that may cause sediment to leave the premises; and c) continue to be operated until soil disturbance activities cease at the premises and the site has been stabilised. <p>The rainfall monitoring data collected in compliance with this condition can be used to determine compliance with condition L2.5</p>	<p>Section 3.1 Annexure A</p>
Noise		
L5.9	<p>In undertaking any works and activities outside of standard construction hours under condition L5.8, the licensee must comply with the following:</p> <ul style="list-style-type: none"> a) Prepare a construction noise and vibration impact assessment in accordance with the Interim Construction Noise Guideline (DEC, 2009) that is to include: <ul style="list-style-type: none"> i. a description of the proposed works and activities outside of standard construction hours; ii. predictions of LAeq (15 minute) dB noise levels at noise sensitive receivers from these works and activities, where noise levels are predicted to be greater than those permitted under condition L5.3; and iii. a monitoring plan to validate the noise predictions, based on monitoring at the boundary of representative sensitive receivers during noise generating activities that are representative of the works and activities, including during the period/s predicted to have the highest noise level impacts. b) Undertake noise monitoring in accordance with the monitoring plan required by condition L5.9(a)(iii). 	<p>Section 3.2 Annexure B</p>
M4.4	<p>The licensee must undertake noise and vibration monitoring as directed by an authorised officer of the EPA. Where the monitoring is requested to take place on private land (for example a residential property) the licensee must request permission to access the premises in advance and keep a record of permission requests and responses. If a licensee is unable to obtain permission, the licensee must undertake the monitoring at an indicative location where possible and they must provide the response (including any nil response) to the EPA.</p>	<p>N/A</p> <p>No direction received from EPA to undertake noise and vibration monitoring during this reporting period.</p>



EPL Condition	Requirement	Report Reference																				
Community Agreements																						
The licensee may work outside standard construction hours (as defined in L5.1) in circumstances other than those permitted under conditions L5.3, L5.4, or any other condition of the license, subject to the condition outlined Section E1.																						
E1.4	A noise validation monitoring plan must be submitted to the EPA for approval as part of the community agreement documentation prior to any OOHW occurring.	Section 3.2 Annexure B																				
E1.5	Validation monitoring must be undertaken for any OOHW that are the approved under condition E1.1 and must: a) be undertaken in accordance with the monitoring plan prepared under condition E1.4; b) be performed by a Competent Person; c) be performed on at least the first 2 occasions (day, evening, nights) where OOHW will be undertaken and are likely to impact Noise Sensitive Receivers; d) be performed on any other occasion (day, evening, night) where the nature of the works is likely to cause greater noise impacts than the first 2 occasions; e) be representative of the impacts in terms of monitoring locations, time and duration of measurements; and f) be recorded and provided to an EPA officer upon request																					
Water																						
P1.1	<p>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</p> <table><tr><td>1</td><td>Discharge and Monitoring</td><td>Discharge and Monitoring</td><td>The outlet(s) of the sediment basin(s) on the Orchard Hills site discharging to South Creek referred to in Condition P1.2</td></tr><tr><td>2</td><td>Discharge and Monitoring</td><td>Discharge and Monitoring</td><td>The outlet(s) of the sediment basin(s) on the Claremont site discharging to South Creek referred to in Condition P1.2</td></tr><tr><td>3</td><td>Discharge and Monitoring</td><td>Discharge and Monitoring</td><td>The outlet(s) of the sediment basin(s) on the St Marys site discharging to South Creek referred to in Condition P1.2</td></tr><tr><td>4</td><td>Discharge and Monitoring</td><td>Discharge and Monitoring</td><td>The outlet(s) of the sediment basin(s) on the Bringelly site discharging to Badgerys Creek referred to in Condition P1.2</td></tr><tr><td>5</td><td>Discharge and Monitoring</td><td>Discharge and Monitoring</td><td>The outlet(s) of the sediment basin(s) on the Aerotropolis site discharging to Thompson Creek referred to in Condition P1.2</td></tr></table>	1	Discharge and Monitoring	Discharge and Monitoring	The outlet(s) of the sediment basin(s) on the Orchard Hills site discharging to South Creek referred to in Condition P1.2	2	Discharge and Monitoring	Discharge and Monitoring	The outlet(s) of the sediment basin(s) on the Claremont site discharging to South Creek referred to in Condition P1.2	3	Discharge and Monitoring	Discharge and Monitoring	The outlet(s) of the sediment basin(s) on the St Marys site discharging to South Creek referred to in Condition P1.2	4	Discharge and Monitoring	Discharge and Monitoring	The outlet(s) of the sediment basin(s) on the Bringelly site discharging to Badgerys Creek referred to in Condition P1.2	5	Discharge and Monitoring	Discharge and Monitoring	The outlet(s) of the sediment basin(s) on the Aerotropolis site discharging to Thompson Creek referred to in Condition P1.2	No discharge locations used yet
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L2.1	For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	No discharge locations used yet																				
M2.2	<p>POINT 1,2,3,4,5</p> <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Oil and Grease</td><td>Visible</td><td>Special Frequency 1</td><td>Visual Inspection</td></tr><tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>Probe</td></tr><tr><td>Turbidity</td><td>nephelometric turbidity units</td><td>Special Frequency 1</td><td>Probe</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Oil and Grease	Visible	Special Frequency 1	Visual Inspection	pH	pH	Special Frequency 1	Probe	Turbidity	nephelometric turbidity units	Special Frequency 1	Probe	Noted				
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EPL Condition	Requirement	Report Reference															
M2.3	<p>For the purposes of Condition M2.2 and the Table thereto, 'Special Frequency 1' means:</p> <p>a) less than 24 hours prior to a controlled discharge and daily for any continued controlled discharge, when it is safe to do so; and</p> <p>b) when rainfall causes a discharge from a sediment basin which has not been emptied within the design management period following cessation of a rainfall event, when it is safe to do so.</p>	No discharge locations used yet															
E2.1	<p>The licensee must undertake monthly surface water monitoring at discharge point 1 identified in Condition P1.1 for a minimum of 6 months from the date of issue of this licence. Monthly monitoring results must include:</p> <p>a) quality and quantity of all parameters that are identified in the table in E2.2 at each discharge point; and</p> <p>b) results must be submitted to the EPA no more than 2 weeks after each monthly monitoring event has occurred for a minimum of 6 months from the date of issue of this licence.</p>	No discharge locations used yet															
E2.2	<table border="1"> <thead> <tr> <th>Category</th><th>Measured</th><th>Parameters</th></tr> </thead> <tbody> <tr> <td>Physio-chemical parameters</td><td>In-field using a calibrated multi parameter probe.</td><td> <ul style="list-style-type: none"> • Temperature (°C) • Dissolved Oxygen (% saturation) • Electrical Conductivity (µS/cm) • Reduction-Oxidation Potential (Redox)(mV) • pH • Total suspended solids (TSS) • Turbidity (NTU) • Visible oil and grease </td></tr> <tr> <td>Metals</td><td>Laboratory testing</td><td> <ul style="list-style-type: none"> • Aluminium • Arsenic (III and V) • Cadmium • Cobalt • Chromium (III and VI) • Copper • Lead • Manganese • Mercury • Nickel • Vanadium • Zinc </td></tr> <tr> <td>Organochlorine Pesticides</td><td>Laboratory testing</td><td> <ul style="list-style-type: none"> • Endosulphan • Methoxychlor </td></tr> <tr> <td>Total Petroleum Hydrocarbons</td><td>Laboratory testing</td><td> <ul style="list-style-type: none"> • TPH C10-C36 Fraction • TPH C6-C9 Fraction </td></tr> </tbody> </table>	Category	Measured	Parameters	Physio-chemical parameters	In-field using a calibrated multi parameter probe.	<ul style="list-style-type: none"> • Temperature (°C) • Dissolved Oxygen (% saturation) • Electrical Conductivity (µS/cm) • Reduction-Oxidation Potential (Redox)(mV) • pH • Total suspended solids (TSS) • Turbidity (NTU) • Visible oil and grease 	Metals	Laboratory testing	<ul style="list-style-type: none"> • Aluminium • Arsenic (III and V) • Cadmium • Cobalt • Chromium (III and VI) • Copper • Lead • Manganese • Mercury • Nickel • Vanadium • Zinc 	Organochlorine Pesticides	Laboratory testing	<ul style="list-style-type: none"> • Endosulphan • Methoxychlor 	Total Petroleum Hydrocarbons	Laboratory testing	<ul style="list-style-type: none"> • TPH C10-C36 Fraction • TPH C6-C9 Fraction 	No discharge locations used yet
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Additional Monitoring Conditions																	
M4.5	<p>The licensee must undertake monitoring, sampling, video recording and/or take photographs:</p> <p>a) if the EPA or licensee reasonably suspects that an event has occurred at the premises or in connection with the carrying out of the activities that has caused, is causing, is likely to cause or has the potential to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies);</p> <p>b) as soon as practicable; and</p> <p>c) as directed by an authorised officer.</p>	Noted															



3. Monitoring

Section 3 presents a summary of the monitoring programs completed in the reporting period from 1 October 2022 to 31 October 2022.

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

3.1. Meteorological Data

Meteorological data for the Project has been taken from Badgerys Creek Automatic Weather Station (AWS).

The total rainfall recorded during the reporting period was 186.8 mm with 10 days exceeding one millimetre of rain and five days of rain exceeding 10 mm.

During the reporting period, there were 26 days where the maximum wind gust recorded was greater than 25 km/hr, five days where the maximum wind gust recorded was greater than 50 km/h and one day where the maximum wind gust was greater than 60 km/hr. Winds recorded during the reporting period were predominantly westerly component, however there was variability throughout the month.

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

Table 4 Weather summary and trigger weather events for reporting period¹

Weather Event	Observation
Minimum temperature	6.2 °C
Maximum temperature	28.5 °C
Total rainfall	186.8 mm
Number of days with rain (>1 mm)	10 days
Number of days with rain (>10 mm)	5 days
>25 km/hr wind ²	26 days
>50 km/hr wind	5 days
>60 km/hr wind	1 day

¹Weather summary based on data from the 1 October 2022 to 31 October 2022 (31 days).

²Weather data from Badgerys Creek AWS (station 067108).



3.2. Noise

Noise monitoring is a requirement of the following conditions of EPL 21672:

- L5.9, E1.4 Monitoring to validate the noise predictions for works undertaken outside of the standard construction hours as per the construction noise impact assessment
- M7.6 Noise monitoring following noise and vibration complaints
- M4.4 Noise and vibration monitoring as directed by an authorised officer of the EPA.

Table 5 provides a summary of noise monitoring events conducted during the reporting period. Detailed noise monitoring results and comments are presented in Annexure B. There were no exceedances of the predicted noise level ($L_{Aeq15min}$) during the reporting period.

Table 5: Summary of noise monitoring for reporting period

Date	Monitoring Location	Attended/Continuous	Description
11/10/2022	3 Station Street, St Marys	Attended	Earthworks
11/10/2022	31 Phillip Street, St Marys	Attended	Earthworks
11/10/2022	Cnr GWH and Gipps St, Claremont Meadows	Attended	Earthworks
12/10/2022	8 Dolphin Close, Claremont Meadows	Attended	Piling
12/10/2022	Within Claremont construction site	Attended	Piling
25/10/2022	38 Derwent Rd, Bringelly	Attended	Piling
28/10/2022	145 Badgerys Creel Rd, Bringelly	Attended	Earthworks
30/10/2022	31 Phillip Street, St Marys	Attended	Utility works
30/10/2022	31 Phillip Street, St Marys	Attended	Utility works

3.3. Discharge to Water

No discharge to water has occurred during this reporting period.



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.



Annexure A Weather Observations

Table 6: Weather Observations: Badgerys Creek AWS {station 067108}.

Date	Temperatures		Rain	9am		3pm	
	Min	Max		Temperature	Relative Humidity	Temperature	Relative Humidity
	°C			mm	°C	%	°C
1/10/2022	11.2	19	5.2	13.2	80	14.7	85
2/10/2022	7.4	20.6	0.8	13.3	79	17.6	62
3/10/2022	6.2	20.9	0	12.6	88	20.3	42
4/10/2022	6.9	26.2	0	14.3	77	25.3	34
5/10/2022	12.4	15.6	3.2	13.5	98	14	99
6/10/2022	13	20	47.6	14.6	100	18.4	73
7/10/2022	13	20.3	0.8	15.3	100	18.2	92
8/10/2022	14.4	21.6	5.2	17.5	100	19.6	85
9/10/2022	10	18.2	51	11.3	77	16.1	59
10/10/2022	10	18.7	0.2	12.9	80	17.1	61
11/10/2022	11.3	20.3	0	14.4	83	17.6	61
12/10/2022	10.4	21	0	15.6	76	19.6	65
13/10/2022	11.2	21.8	0	17.1	73	20.6	59
14/10/2022	14.1	24.7	0	17.6	92	21.7	38
15/10/2022	8.6	24.5	0	17.6	56	23.9	37
16/10/2022	11.3	24.3	0	17.4	59	21.3	50
17/10/2022	14	19.4	0	14.7	77	18.8	76
18/10/2022	10.9	19.6	1.2	16.5	77	16.9	87
19/10/2022	14.6	27	0.4	18.9	86	23.7	60
20/10/2022	15.3	22	0	19.1	84	19.1	98
21/10/2022	17.5	24.3	7	18.9	100	23.2	72
22/10/2022	14.7	27.7	0.4	19.5	85	23.6	72
23/10/2022	17.6	21.3	0.2	19	94	20.7	84
24/10/2022	15.8	21	25.6	17.2	100	19.9	100
25/10/2022	14.8	27.7	13.8	18.9	94	26.8	59
26/10/2022	13.6	28.5	24	22.3	74	27.4	42
27/10/2022	13.5	27.5	0.2	23.1	53	25	42
28/10/2022	11.7	24.7	0	20.1	45	23.7	29
29/10/2022	13.2	26.1	0	19.1	42	25.4	24
30/10/2022	8.8	24.9	0	18	49	23.8	31
31/10/2022	12.4	28.1	0	19.5	68	24.4	67



Table 7: Wind Observations: Badgery's Creek AWS {station 067108}.

Date	Maximum wind gusts			9am		3pm	
	Direction	Speed km/h	Time Local	Direction	Speed km/h	Direction	Speed km/h
1/10/2022	S	28	1:01	S	13	SW	6
2/10/2022	SE	31	13:47	SW	9	ESE	17
3/10/2022	E	22	17:29	NNE	6	NNW	6
4/10/2022	SE	35	15:19		Calm	E	6
5/10/2022	NE	26	14:17	SSW	6	NE	13
6/10/2022	NNE	22	15:44	NE	6	N	15
7/10/2022	NE	31	16:10	NNE	6	N	6
8/10/2022	SW	33	18:18	SSE	4	N	11
9/10/2022	SW	44	5:20	S	19	WSW	7
10/10/2022	E	28	16:38	S	6	E	9
11/10/2022	E	26	15:37	ESE	2	NE	13
12/10/2022	ENE	28	17:08	W	2	NE	15
13/10/2022	NE	35	8:51	NNE	7	ENE	20
14/10/2022	WNW	54	10:56	NW	6	WSW	15
15/10/2022	ESE	28	16:15	WSW	13	NNE	7
16/10/2022	E	37	13:26	SW	7	E	17
17/10/2022	SSW	30	5:49	S	6	SW	9
18/10/2022	E	24	12:41	SE	4		Calm
19/10/2022	SE	30	14:16	WNW	4	E	19
20/10/2022	SE	24	15:59	S	7	SE	9
21/10/2022	NE	22	14:44	ENE	4	NE	11
22/10/2022	N	37	12:25	NE	9	NNE	17
23/10/2022	SE	26	14:46	N	4	SE	13
24/10/2022	SW	35	14:20	S	9	SW	19
25/10/2022	WNW	67	14:40	NNE	13	NE	13
26/10/2022	W	44	9:57	WSW	6	WNW	20
27/10/2022	WNW	54	14:18	W	17	W	22
28/10/2022	WNW	57	16:10	WNW	26	W	37
29/10/2022	WSW	39	5:13	WSW	24	W	26
30/10/2022	E	28	15:27	SSW	11	NNE	2
31/10/2022	NW	59	11:40	N	7	NNE	7



Annexure B Noise Monitoring Results

Date	Time	Works Period	Construction Activity	Activity Location	Monitoring Location	NML (dBA)	Predicted (dBA)	Additional Mitigation Measures	Recorded $L_{eq, 15min}$ (dBA)	L _{Amax}	Exceedance of Predicted (dBA)	Exceedance of Predicted	Comments
11/10/2022	10:31am	Standard	Earthworks	SBT Site (St Marys)	3 Station St, St Marys	47	80	LB, M	61.1	80.7	-18.9	No	Verification noise monitoring.
11/10/2022	11:00am	Standard	Earthworks	SBT Site (St Marys)	31 Phillip St, St Marys	47	80	LB, M	66.5	79.0	-13.5	No	Verification noise monitoring. Road traffic noise was the dominant noise source.
11/10/2022	11:37am	Standard	Earthworks	SBT Site (Claremont)	Cnr GWH and Gipps St, Claremont	47	N/A	M	64.2	78.0	N/A	N/A	Background noise monitoring.
12/10/2022	12:14pm	Standard	Piling	SBT Site (Claremont)	8 Dolphin Close, Claremont	47	59	LB, M	50.2	70.4	-8.8	No	Verification noise monitoring.
12/10/2022	11:53am	Standard	Piling	SBT Site (Claremont)	Within construction site	47	N/A	M	72.0	87.7	N/A	N/A	Background noise monitoring and spot check.
25/10/2022	02:20pm	Standard	Piling	SBT Site (Bringelly)	38 Derwent Rd, Bringelly	48	N/A	M	52.9	66.3	N/A	N/A	Background noise monitoring.
28/10/2022	01:05pm	Standard	Earthworks	SBT Site (Aerotropolis)	145 Badgerys Creel Rd, Bringelly	48	N/A	M	52.1	70.2	6.1	N/A	Background noise monitoring.
30/10/2022	10:15pm	Night	Utility works	SBT Site (St Marys)	3 Station St, St Marys	41	80	LB, M, SN	62.5	83.0	-17.5	No	Verification noise monitoring.
30/10/2022	10:48pm	Night	Utility works	SBT Site (St Marys)	31 Phillip St, St Marys	41	76	LB, M, SN	71.4	92.1	-4.6	No	Verification noise monitoring.

OOHW1 is defined as:

- 6:00pm to 10:00pm (evenings) Monday to Saturday
- 7:00am to 8:00am and 1:00pm to 10:00pm (day & evening) Saturday and
- 8:00am to 6:00pm Sunday and public holidays (days).

OOHW2 is defined as:

- 10:00pm to 7:00am (nights) Monday to Saturday and
- 6:00pm to 8:00am (nights) Sundays and public holidays.

Additional Mitigation Measures

LB = Letter box drops
M = Monitoring
SN = Specific Notification
RO = Project Specific Respite Offer
IB = Individual Briefing
PC = Phone Calls and Emails
AA = Alternate Accommodation



Annexure C Discharge to water

Note: No discharge to water was undertaken during the reporting period.

ID	Construction Status	Easting	Northing	AMG Zone	Reference System	Description of location of discharge point	Catchment name	Name of nearest waters	Direct discharge to waters	Total catchment area of basin (ha)	Basin size (operational) m3	Blue Book Criteria	Location description	Date added	Revision Added

