



# Pollution Monitoring Report June 2023 M12 Motorway West

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**Document Approval** 

Rev.	Date	Prepared by	Reviewed by	Approved by	Remarks
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#### 1 Introduction

#### 1.1 Background

Western Sydney's population is anticipated to increase from 2.5 million in 2021 to 3 million by 2036, which is an average of 46,000 additional residents per year. This strong forecast growth is driven by a number of transformational changes in the region, including the Western Sydney International Airport (WSIA), South West Growth Area, Western Sydney Employment Area and Western Sydney Aerotropolis. Additional travel demand associated with these planned developments is expected to put significant pressure on the existing transport network and negatively impact traffic efficiency and road safety in the region.

The M12 Motorway will connect The Northern Road at Luddenham and the M7 Motorway at Cecil Hills, over a distance of about 16 km. The M12 Motorway project will provide the main access from the WSIA at Badgerys Creek to Sydney's motorway network and must be opened to traffic six months before the opening of the WSIA.

The M12 Motorway will provide the capacity to meet traffic demand generated by Western Sydney urban development, provide a high standard connection to WSIA to meet future freight and passenger needs and will support and integrate with the broader transport network. The M12 Motorway Project objectives include:

- Provide direct access from the M7 Motorway to the planned Western Sydney airport at Badgerys Creek, and from the M4 via The Northern Road.
- Provide sufficient road capacity to meet traffic demand generated by the planned Western Sydney urban development.
- Provide a road which supports and integrates with the broader transport network.
- Support the provision of an integrated regional and local public transport system.
- Provide active local transport within the east-west corridor.

Approval for the Project under the EP&A Act was granted by the Minister for Planning on 23 April 2021. Approval for the Project under the EPBC Act was granted by the Federal Minister for the Environment on 3 June 2021. The project must be carried out in accordance with the terms of the NSW and Federal Approvals.

## 2 Project Details

## 2.1 M12 Motorway West Project Details

The M12 Motorway West Project involves construction of a new approximately 6km of dual carriageway motorway predominantly through greenfield area between The Northern Road, Luddenham and approximately 250m east of Badgerys Creek, including WSIA Interchange and Elizabeth Drive Interchange. The works are within the Liverpool and Penrith City Councils (Council) local government areas (LGA).

Features of these Works include:

- Construction of 6km of dual carriageway motorway predominantly through greenfield area between The Northern Road, Luddenham and approximately 250m east of Badgerys Creek.
- Construction of 11 bridges.
- A grade-separated interchange referred to as the Western Sydney International Airport interchange, including a dual-carriageway four-lane airport access road (two lanes in each direction for about 1.5 kilometres) connecting with the Western Sydney International Airport Main Access Road.
- Connection to the signalised at grade intersection at The Northern Road with provision for grade separation in the future as part of the future Outer Sydney Orbital.
- Realignment and duplication of approximately 1,500m of Elizabeth Drive with a new bridge over the Airport Access Road and Metro Rail corridor including associated utility adjustments.
- A four-way signalised intersection east of Airport Access Road.



- A left-in/left-out intersection west of Airport Access Road.
- A signalised single point interchange with north facing ramps from Elizabeth Drive to M12 and south facing ramps from Elizabeth Drive to Airport Access Road.

#### Activities included in the Works:

- site establishment
- control of traffic including the provision of approved Traffic Management Plans to facilitate the construction of the works
- provision for pedestrians and cyclists
- provision of site accommodation for the Principal
- searching for and protecting public utility services
- maintenance of the existing roadways
- drainage works (both surface and subsurface)
- permanent and temporary erosion and sedimentation controls
- removal and disposal of some existing roads, kerbs, gutters, footpaths, stormwater and other minor structures
- demolition of structures including houses and sheds
- earthworks including clearing and grubbing, removal and stockpiling of topsoil, excavation of cuttings, placing of general fill, management of potentially/ actually contaminated materials, possible off-Site disposal of spoil material, foundation treatments, placement of upper zone material and Selected Material Zone using imported materials
- construction of rigid pavements including lean-mix concrete sub-base, continuously reinforced concrete pavement, dense grade asphalt intermediate and wearing courses
- flexible sub-base and base pavements
- ancillary works, including new kerbs and/or gutters and paving of cycleways/footpaths
- construction of bridges
  - Bridge over Luddenham Road (BR01)
  - Bridge over Cosgroves Creek (BR02)
  - Bridge over Airport Access Road (AAR) on Elizabeth Drive (BR04A)
  - Bridge over Sydney Metro on Elizabeth Drive (BR04B)
  - Bridge over Western Sydney Airport (WSA) Channel on Northbound Off Ramp (BR04C)
  - Bridge over WSA Channel on Southbound On Ramp (BR04D)
  - Twin Bridges over Badgerys Creek (BR05)
  - Bridge over M12 Motorway and Airport Access Road Ramps (BR21)
  - Bridge over M12 (BR22)
  - Bridge over M12 Motorway on ramp (BR24)
- construction of a RCBC as a stock underpass
- construction of precast arch structures as a shared use path underpass
- construction of retaining walls
- construction of reinforced soil walls
- design development and installation of pits and conduits for an underground Intelligent Transport
  System cableway including supply and installation of Closed-Circuit Television Cameras, Electronic
  Message Signs, Emergency Telephones, Vehicle Detection Sites and Permanent Automatic
  Weather Stations
- relocation of existing and installation of new (or upgraded) public utilities
- property access and property adjustments
- Road furniture
- pavement marking and raised pavement markers





- signposting including sign structures
- opening to traffic
- revegetation and landscaping of exposed new works and of areas disturbed by construction activities
- clean up and restoration of work areas and the areas disturbed by utility authorities in carrying out adjustments within the Site
- preparation of "work-as-executed" drawings and asset acceptance documentation
- all other work which CPBGG JV are obliged to undertake by the terms of the Contract.

CPB Contractors Pty Limited and Georgiou Group Joint Venture (CPBGG JV) were engaged by Transport for New South Wales (TfNSW) to construct the M12 Motorway West Package.



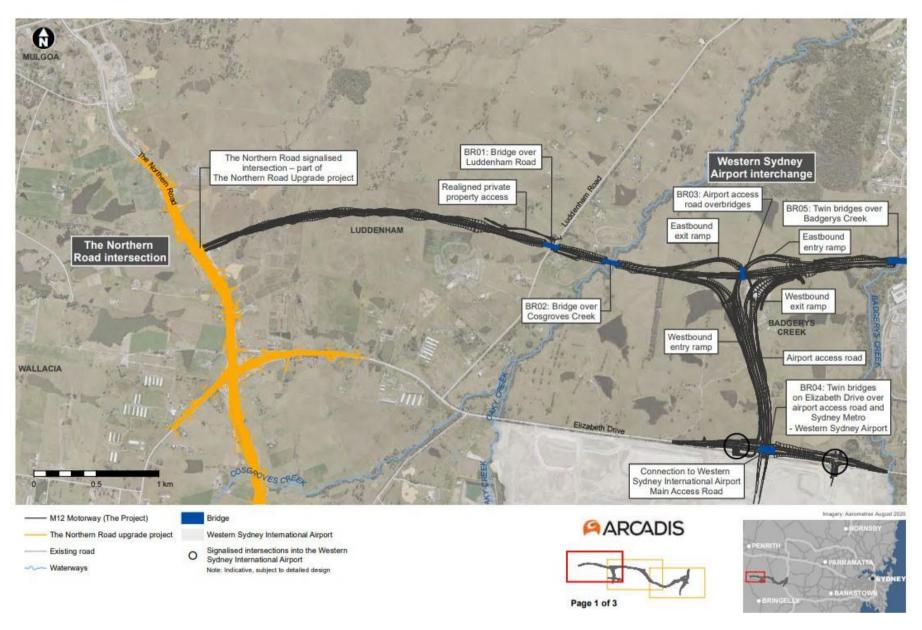


Figure 2-1 Keys features of the M12 Motorway West Project



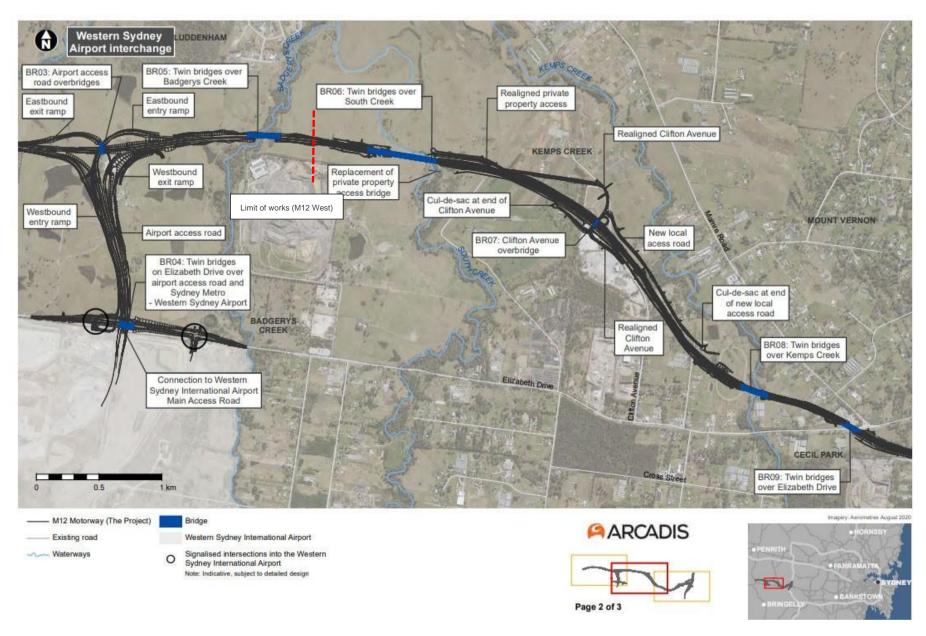


Figure 2-2 Keys features of the M12 Motorway West Project



## 3 Scope of this Report

Transport for New South Wales (TfNSW) were issued an Environmental Protection Licence (EPL21595) from the NSW Environment Protection Authority (EPA) on 21 March 2021 under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act) for the M12 Motorway West package. This EPL was transferred to CPB Contractors Pty Limited on 17 June 2022.

The EPL applies to the works approved under the Infrastructure Approval SSI-9364 associated with the delivery of the M12 Motorway project.

This EPL Pollution Monitoring Report provides the results of all pollution monitoring required to be measured or monitored by the licensee of EPL 21595 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 3-1 provides a summary of the pollution monitoring requirements of EPL 21595.

Table 3-1 Licence Details

Licence D	etails
Number	21595
Copy of Licence	https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=257133&SYSUID=1&LICID=21595
Anniversary Date	21 March
Licensee	CPB Contractors Pty Ltd
Premises	The M12 Motorway Project – West Package, Elizabeth Drive, Penrith NSW 2740
Scheduled Activity	Road Construction (>=50,000T & road to be constructed <10km)



## **4 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 M12 Motorway West 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 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's possible from time to time that incorrect data may 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 (refer to Section 6).

Table 4-1 provides a summary of the pollution monitoring requirements of EPL 21595

Table 4-1 EPL 21595 Pollution Monitoring Requirements

EPL Condition	Requirement	Report Reference
M5.1	Monitor and record temperature, humidity, 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.	Section 5.1 Appendix A1
L5.6	Monitoring to validate the noise predictions for works undertaken outside of the standard construction hours as per the construction noise impact assessment	Section 5.2 Appendix A2



EPL Condition	Requirement	Report Reference
M2.2	Discharge of pollutants to water from nominated discharge points	Section 0 Appendix A3
M4.4	Noise and vibration monitoring as directed by an authorised officer of the EPA	Section 5.2 AppendixA2
M7.6	Noise and vibration monitoring of noise and vibration complaints	Section 5.2 AppendixA2
L2.5	Discharge from sediment basins solely as a result of rainfall measured at the premise the rainfall depth value	Section 0 Appendix A3



## 5 Monitoring

Section 5 presents summaries of the monitoring programs completed in the reporting period from 1<sup>st</sup> June 2023 – 30<sup>th</sup> June 2023.

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

#### 5.1 Weather Monitoring

EPL Condition M 5.1 requires CPB to collect and store meteorological data. Meteorological data is not considered to be pollution data and therefore does not have to be published. However, the meteorological data is published with the pollution monitoring data to provide additional context to the water discharge pollution.

The meteorological observations are based on Badgerys Creek AWS (station 067108) and supported by M12 West AWS observations from 1<sup>st</sup> June 2023 – 30<sup>th</sup> June 2023.

The total rainfall (days with >1mm of rain) for the reporting period:

• June was 14.8mm with three (3) rain days

Rainfall did not exceed the 85th percentile (32.2mm) design rainfall events. Detailed weather observations are presented in Appendix A-1.

A summary of the reporting period's monthly meteorological observations summarised in Table 5-1. A comparison between long term monthly means and recorded values can be found in Figure 5-1 for rainfall.

Table 5-1 Weather Summary and Trigger Weather Events during May 2023

Weather Event – May 2023	M12W Project AWS	Badgerys Creek BOM AWS
Minimum temperature	-1.7°C	-1.7°C
Maximum temperature	24.08°C	24.4°C
Total Rainfall	14.8 mm	14.6 mm
Number of days with rain (>1mm)	3 days	4 days
>25km/hr wind	15 days	18 days
>50km/hr wind	1 day	4 days

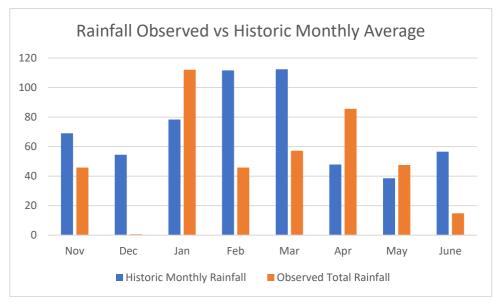


Figure 5-1 Rainfall received compared to historic monthly averages (Source BOM & M12 West AWS)



#### 5.2 Noise and Vibration

Attended noise monitoring was conducted during the reporting period for the use of new equipment and out of hours works. One validation noise assessment was required for out of hours works, in accordance with EPL condition L5.6. The noise monitoring results are outlined below in Table 5.1 and detailed noise and vibration monitoring results are presented in Appendix A2.

Noise and vibration monitoring was not directed by an authorized officer of the EPA during the reporting period, in accordance with EPL condition M4.4.

No complaints pertaining to noise or vibration were received during the reporting period to required investigation/ verification monitoring, in accordance with EPL condition M7.6.

Real-time unattended noise monitoring is undertaken during day, evening and night periods via SiteHIVE hexanode locations at main alignment (Luddenham Road) and EDR/AAR (Elizabeth Drive). Noise monitoring results capture a range of activities including utilities/drainage, earthworks, piling and bridge works. No exceedances of the Highly Noise Affected criteria of 75dB(A) or predicted levels occurred during construction within the reporting period.

No vibratory compaction activities have occurred within 50m of residential buildings during the reporting period. Nor have any activities occurred within the safe working distances for cosmetic damage.

Table 5-1 Summary of Attended Noise Monitoring during June 2023

Date	Monitoring Location	Description
19/06/2023	M12 West – AF1	Background noise monitoring during operation of topsoil screen. Attended monitoring determined that use of the equipment was within RBL+ 10 dB at the closest receiver.
21/06/2023	Utilities Installation– Elizabeth Drive	Background noise monitoring during out of hours utilities installation works on Elizabeth Drive. Attended monitoring confirmed that equipment noise level was below the predicted levels within the Transport for NSW construction noise calculator at the nearest receiver.

### 5.3 Discharge to Water

The EPL discharge criteria apply to the sediment basins referred to in condition P1.3 are the active basins and discharge points identified and located in the document titled "M12 Motorway West Sediment Basins Schedule 3July2023" and maintained on electronic file EF21/13233. The active basins and discharge points during the reporting period are summarised in Appendix A3.

Table 5-2 provides a summary of the discharges by CPBGGJV at the current active monitoring/ discharge points that complied with condition P1.3. There were a total 2 discharges from these points during the reporting period. Discharge was done following testing of the sediment basins to make sure the water had a pH in between 6.5 and 8.5, and turbidity <50 as per EPL's requirements.

Table 5-3 provides a summary discharge events that occurred solely as a result of rainfall measured at the premises exceeding the design rainfall depth value for the corresponding discharge point. There were no discharge events as a result of rainfall exceeding the design rainfall depth value during the reporting period.

Table 5-2 - Summary of Sediment Basin Discharges during June 2023

Sediment Basin ID	Date tested	рН	Turbidity	Visible Oil or Grease?	Date discharged
SB12100E	26/06/23	8.12	42.9	Not Visible	26/06/23
SB12500E	26/06/23	7.81	33.7	Not Visible	26/06/23

<sup>\*</sup> Water extracted from sediment basins for dust suppression or transferred for reuse during construction activities wherever possible.



#### Table 5-3 Discharge Events as a result in exceedance of rainfall design capacity

Date of discharge	Sediment Basin	Five-day Rainfall Event
N/A	N/A	N/A





## **6 Correction Log**

It's possible from time to time that incorrect data may 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.





# **Appendices**

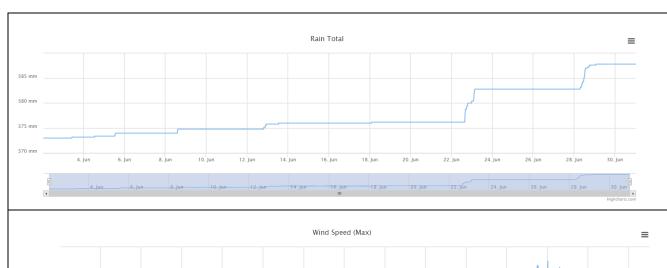


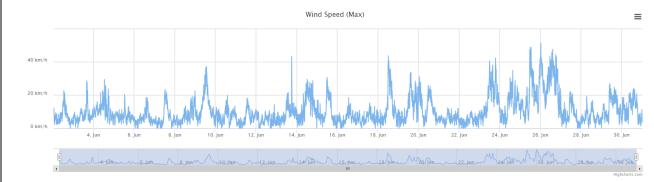
#### Badgerys Creek, New South Wales June 2023 Daily Weather Observations

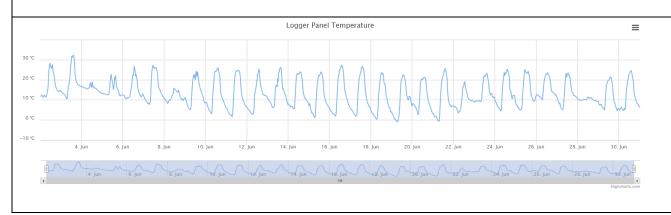
		Tem	ps	Dain	Evan	c	Max	wind	gust			9	am					3	pm		
Date	Day	Min I	Max	Kain	Evap	Sun	Dir	Spd	Time	Temp	RH	Cld	Dir	Spd	MSLP	Temp	RH	Cld	Dir	Spd	MSLP
		°C	°C	mm	mm	hours		km/h	local	°C	%	8 <sup>th</sup>		km/h	hPa	°C	%	8 <sup>th</sup>		km/h	hPa
1	Th	10.2 2	20.4	0			ENE	17	13:58	12.6	89		SSE	4	1018.1	20.1	61		ENE	7	1017.3
2	Fr	9.4 2	21.6	0			ENE	24	13:09	14.5	91		Е	6	1025.8	19.7	63		NE	9	1022.9
3	Sa	9.6	24.4	0.2			N	24	15:59	14.2	100		ENE	6	1025.7	23.5	45		NE	7	1023.2
4	Su	13.9	17.7	0			NNW	22	12:40	15.4	79		WNW	7	1034.1	15.2	80		N	6	1032.2
5	Мо	11.3	17.4	0.4			Е	30	12:42	14.7	75		NW	6	1032.8	16.2	74		SSE	4	1028.5
6	Tu	9.8	20.3	0.2			ENE	22	14:39	12.7	99		ENE	4	1030.0	18.8	63		ENE	7	1026.4
7	We	6.7	20.4	0			ENE	26	12:43	12.1	100		(	Calm	1027.3	19.7	59		Е	11	1023.0
8	Th	7.4	14.1	0.2			SSW	24	22:43	10.7	100		ENE	4	1017.5	13.1	100		NE	2	1012.0
9	Fr	4.7		1.0			SSE		13:05	13.1	70		SSE		1016.8	18.9	44		S		1015.1
10	Sa	3.1		0			WNW		13:14	8.2	88				1023.6	18.0	39		SW		1021.3
11	Su	1.1	18.3	0			ENE	20	13:30	7.6	95		C	Calm	1026.6	17.7	42		ENE	13	1022.4
12	Мо	2.3	18.7	0.2			NE	15	21:33	7.6	100		(	Calm	1022.9	16.5	60		ENE	4	1018.1
13	Tu	4.5	20.4	1.2			SSW	59	18:02	8.8	100		ENE	4	1015.1	20.3	46		ESE	9	1010.3
14	We	5.3	17.7	0			S	43	15:30	13.4	55		SSE	11	1013.5	17.0	32		SSW	24	1012.9
15	Th	1.8	17.8	0			SSW	30	13:13	7.8	74		SSE	6	1018.2	17.3	42		SW	19	1015.7
16	Fr	1.1	19.6	0			SW	28	13:35	9.2	82		SSW	4	1022.3	19.3	42		WSW	13	1019.9
17	Sa	0.5	19.0	0			ENE	13	14:39	6.5	99		S		1022.9	18.7	41		ENE		1017.2
18	Su	-0.3	19.4	0.2			S	44	12:12	5.7	100		C	Calm	1015.9	16.7	37		S	31	1013.1
19	Мо	-1.7	17.3	0.2			SSW	39	20:27	3.6	99		(	Calm	1017.0	16.3	33		SE	20	1011.7
20	Tu	3.0	15.3	0			SSW	39	00:34	9.1	53		ENE	4	1020.9	15.1	32		SSW	15	1019.9
21	We	0.5	16.8	0			S	13	09:16	7.2	66		SSW	4	1025.2	16.0	36		NNE	2	1022.3
22	Th	2.8	14.8	0			ENE	11	13:38	8.1	83		NW	4	1021.2	13.2	66		Е	7	1016.3
23	Fr	7.7	18.0	6.0			SSE	56	19:22	10.1	100		ESE	9	1009.3	17.6	40		S	24	1006.8
24	Sa	2.6		0			SSE		15:23	11.1	75		SSE		1014.8	19.3			S		1010.5
25	Su	4.7		0			SSE		12:33	11.4	58		SE		1012.9	18.6	26		S		1010.1
26	Мо	9.1	18.4	0			SW	59	20:32	14.8	44		SSW	30	1013.7	17.3	36		SW	30	1013.2
27	Tu	4.8	18.0	0			S	28	10:35	11.4	64		S	6	1022.2	17.0	43		SW	13	1018.9
28	We	9.2	10.9	0.6			SSW		06:21	10.0	85		SW		1018.0	10.2	99		ESE	6	1013.2
29	Th	6.6	15.1	4.2			WSW		10:48	10.7	62		SW		1017.4	14.2	43		WSW	19	1015.7
30	Fr	4.8	18.5	0			SW	33	01:22	11.6	54		S	13	1018.5	16.9	45		WSW	17	1017.1
Statis	stics	for J	une	2023																	
		5.2								10.5	81				1020.7	17.3	50				1017.6
		-1.7		0						3.6	44		(	Calm	1009.3	10.2	26		#	2	1006.8
Hig	hest	13.9	24.4	6.0			SSE	65		15.4	100		SSW	30	1034.1	23.5	100		S	31	1032.2
7	Total			14.6																	

IDCJDW2005.202306 Prepared at 13:00 UTC on Friday 7 July 2023

Badgerys Creek AWS #067108 - June 2023





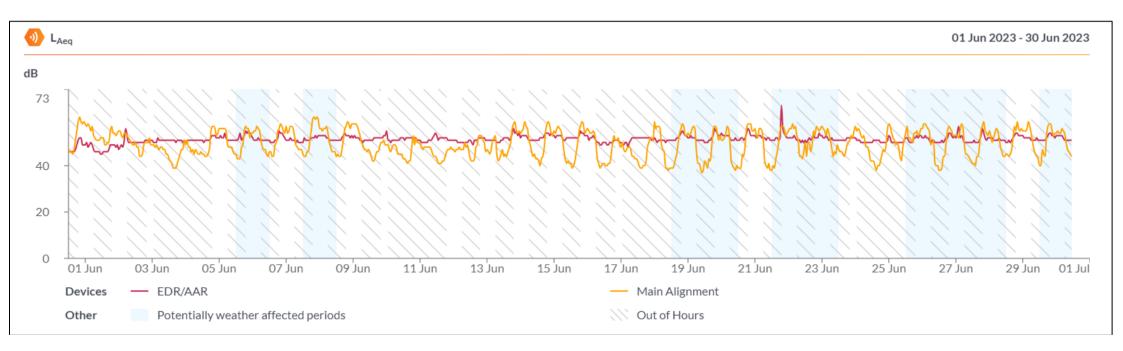






# Appendix A2 – Noise and Vibration Monitoring Results

Monitoring Event No.	B Date	te 1	Time	Period	Site	Location	Zone	< 500 m from residence T/F? ¬	Leq	La-max	La-min	La- 10	La-15 mins	NML	Predicted	Exceedance of NML	La- 90	Comments	by	Equipment	Weighting Filter	Time Weighting	Time (min)	Receiver Number		Actions carried out in the event of an exceedance.
23	19/06/2	2023 09	9:30am	Dayti me	M12 West	AF1 - Top soil Screen	NCA10	F	69.9	78.1	N/A	N/A	42	36	N/A	N/A	N/A	Background noise during screening community traffic – Background 60 dB(A) Leq Measured distance from equipment is 10 m equipment unning consistently for full 15 mins is based on location of nearest receiver (765 Luddenham Road). UAeq 15 mins at the nearest receiver (32 dB(A)LAeq15mins which is within the RBL + 10 db recommendations in the CNNS	AB	Rion NL	N/A	15	15	N/A	Earthworks	N/A
2.	4 21/06/	/2023 083	30 pm E	evening	M12 West	Elizabeth Drive, Southern End	NCA07	т	80	90	N/A	N/A	46	44	N/A	N/A	N/A	Background noise during screening community traffic – Background SS dB(A) Leq Measured distance from equipment is 10 m for Road Saw and S m for Lighting 10 wern in 15 based on location of nearest receiver (Lst. 1D = 2007)8. The Lag mins at the nearest receiver is 46 dB(A)LAeq15mins which is within the Road SB recommendations in the CNVIS for evening shift outside of Sandard Background noise at the receiver is higher than the calculated noise of the equipment at the roceiver	AB	Rion NL	N/A	15	15	N/A	Utilities	N/A



# Appendix A3 – Active Discharge Points

#### Sediment Basin Sizing based upon "Soils and Construction - Volume 1 - 4th Edition - March 2004"

Revised Universal Soil Loss Equ	nation (RUSLE) Coefficients:
R=	2500
P=	1.3
C=	1

Settling Zone Parameters:										
Cv = 0.64										
R	%ile	80	85							
2 day	mm	15.0	20.3	Blacktown						
5 day	mm	24.6	32.2	Blacktown						

All licenced discharge points are located at the spillway of the associated basin.

Discharge Criteria (EPL#21595 condition	рН	Turbidity (NTU)	Oil and Grease	
12.4)	6.5-8.5	50	Not visible	

Desilting and dewatering managed in accordance with approved CSWMP and EWMS.

Basins removed from the licence (and onsite) are shown with the font strikethrough option used.

Basin Name	Basin Type	Chainage / Location	Date Constructed	Catchment area	Rainfall Intensity	Percentile	Design Rainfall Depth	Required Sediment Storage (soil) Volume	Required Settling (water) Volume	Required Total Volume	Non designed volume sump / excavation	Discharge Point Coordinates (MGA)		Active	Comments / Recommendations
				(ha)	day	%	mm	m³	m³	m³		Easting (m)	Northing (m)	Y/N	
SB10925E	Т	10925	-	2.09	5	85	32.2	111	431	542	-	287112.160	6251486.779	N	Temporary sediment basin removed to facilitate permanent drainage and landscaping
SB11150E	т	11150	-	3.19	5	85	32.2	203	657	860	-	287348.797	6251563.857	N	Temporary sediment basin removed to facilitate permanent drainage installation.
SB11655E	Т	11655	·	1.29	5	85	32.2	96	266	362	-	287839.726	6251654.770	N	Temporary sediment basin removed to facilitate permanent drainage and landscaping
SB12100E	Т	12100	,	0.7	5	85	32.2	52	144	196	-	288271.213	6251666.295	N	Temporary sediment basin removed to facilitate permanent drainage and landscaping
SB12500E	Т	12500	-	0.75	5	85	32.2	60	155	215	-	288739.035	6251618.550	N	Temporary sediment basin removed to facilitate permanent drainage and landscaping
SB12550E	Т	12550	•	3.0	5	85	32.2	222	618	840	-	288700.547	6251608.234	Y	Currently not discharging off site

Basin Name	Basin Type	Chainage / Location	Date Constructed	Catchment area	Rainfall Intensity	Percentile	Design Rainfall Depth	Required Sediment Storage (soil) Volume	Required Settling (water) Volume	Required Total Volume	Non designed volume sump / excavation	Discharge Point Coordinates (MGA)		Active	Comments / Recommendations
				(ha)	day	%	mm	m³	m³	m³		Easting (m)	Northing (m)	Y/N	
SB13000W	т	13000	-	1.25	5	85	32.2	93	258	351	-	289207.554	6251436.058	Y	Currently not discharging off site
SB13350W	Т	13350	-	2.37	5	85	32.2	176	488	564	-	289547.743	6251336.070	Y	Currently not discharging off site
SB13800E	т	13800	-	1.61	5	85	32.2	119	332	451	-	289945.705	6251275.233	Υ	Currently not discharging off site
SB13825W	т	13825	-	1.11	5	85	32.2	82	229	311	-	289953.598	6251216.021	Υ	Currently not discharging off site
SB14550A	т	14550	-	2.23	5	85	32.2	142	460	602	-	290719.632	6251247.275	Y	Currently not discharging off site
SB14650A	Т	14650	-	3.99	5	85	32.2	254	822	1076	-	290770.284	6251255.682	Y	Currently not discharging off site
SB14650B	Т	14650B	-	9.76	5	85	32.2	622	2011	2633	-	290803.487	6251202.105	Y	Currently not discharging off site
SB14650C	Т	14650	-	12.07	5	85	32.2	769	2487	3256	-	290810.182	6251033.341	Y	Currently not discharging off site
SB15900S	т	15900	-	0.98	5	85	32.2	73	202	275	-	292033.039	6251179.298	Y	Currently not discharging off site
SB16500E	Т	16500	-	1.59	5	85	32.2	101	328	429	-	292648.484	6251264.859	Y	Currently not discharging off site
SB1629	Т	1629	-	1.42	5	85	32.2	9	103	112	-	291340.049	6250482.677	Y	Currently not discharging off site
SB1700	т	1700	-	1.74	5	85	32.2	105	293	398	-	291348.192	6250344.778	Y	Currently not discharging off site
SB2150	т	2150	-	2.93	5	85	32.2	67	604	671	-	291445.615	6249899.417	Y	Currently not discharging off site
SB125	т	125	-	2.19	2	85	32.2	22	285	307	-	291223.210	6249814.564	N	Temporary basin removed to allow for permanent construction to occur
SB1600	т	1600	-	10.34	5	85	32.2	766	2131	2897	-	292135.594	6249645.845	Υ	Currently not discharging off site
AF02 Stage 1	т	AF02	20/08/2022	5.14	5	85	32.2	90	1059	1149	-	291013.354	6249852.803	Υ	Currently not discharging off site
AFO2 Stage 2	т	AF02	-	3.65	5	85	32.2	64	752	816	-	291247.773	6249848.331	Υ	Currently not discharging off site
AF02 Stage 2 Laydown	т	AF02	01/09/2022	1.58	5	85	32.2	36	326	362	-	290998.102	6250129.015	Υ	Currently not discharging off site
AF11 Stage 1	Т	AF11		1.36	5	85	32.2	17	280	297	-	-	-	N	Not yet constructed
AF11 Stage 2	T	AF11		2.21	5	85	32.2	85	455	540	-	-	-	N	Not yet constructed
SB Dam 9 Footprint	Т	AF02		13	5	85	32.2	227	2679	2906		291629.729	6249868.001	Y	Currently not discharging off site

Notes:

• T - Temporary Sediment Basin (Type D)