

# **ENVIRONMENT PROTECTION LICENCE NO: 21029**

**June 2020 Monthly Report** 

FOR

Princes Highway Upgrade between Berry and Bomaderry



### **Document control**

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# **Revision history**

Revision	Date	Description	Approval
0	09/07/20	Final	J. McKenzie / G. Anderson
1	17/08/20	Update to correct Figure 5-1	J. McKenzie / G. Anderson

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### 1 INTRODUCTION

The Downer Seymour Whyte Joint Venture (DSWJV) is contracted by Roads and Maritime Services (Roads and Maritime) to upgrade 10.3 kilometres of the Princes Highway between Mullers Lane (south of Berry) and Cambewarra Road, Bomaderry in New South Wales (NSW) (the Project). The project will provide a four-lane divided highway (two lanes in each direction) with median separation.

The project is one of a series of upgrades to sections of the Princes Highway which aims to provide a four-lane divided highway between Waterfall and Jervis Bay Road, Falls Creek. This would improve road safety and traffic efficiency, including for freight, on the NSW South Coast.

Figure 1 provides an overview of the project location.



Figure 1-1 Project location

This report provides the results of monitoring undertaken during June 2020 as required by the project's Environment Protection Licence (EPL 21029) Condition R4.1.



#### 2 NON-COMPLIANCES

No non-compliances occurred against EPL conditions during the month of June.

### 3 RAINFALL AND WEATHER

The RMS automatic weather station is situated at Ison Lane, Jaspers Brush, located adjacent to the project's main ancillary compound (Ison Lane Compound) for the project. The results of rainfall monitoring for June 2020 are provided in Table 3-1 and Figure 3-1 below.

Table 3-1 June 2020 Rainfall monitoring results

Location	Monthly rainfall recorded (mm)
Ison Lane, Jaspers Brush (RMS automatic weather station)	32.2

June experienced a total of 32.2 mm rainfall recorded at the project specific weather station at Ison Lane, Jaspers Brush (RMS automatic weather station). The weather during June was drier than average as the long-term mean expected rainfall is 116.9 mm for June as taken from the Nowra RAN Air Station Bureau of Meteorology Weather Station (Station Number 068076).

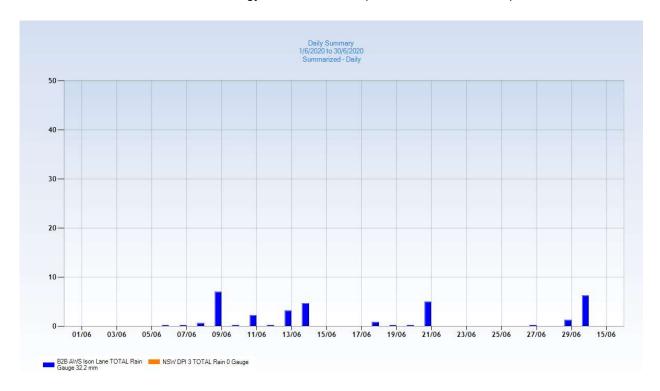


Figure 3-1 June Rainfall Results from Ison Compound Weather Station



Very mild conditions prevailed during June with several days experiencing high wind speeds. The predominant wind direction for June was from the WSW. The highest wind gust recorded was 62.7 km/h and the maximum wind speed was 42.0 km/h (refer Figure 3-2). DSWJV continue to monitor site activities, implement dust suppressant across site, utilise a fleet of water carts during working hours and limit dust generating activities and/or suspend work activities on days of high wind.

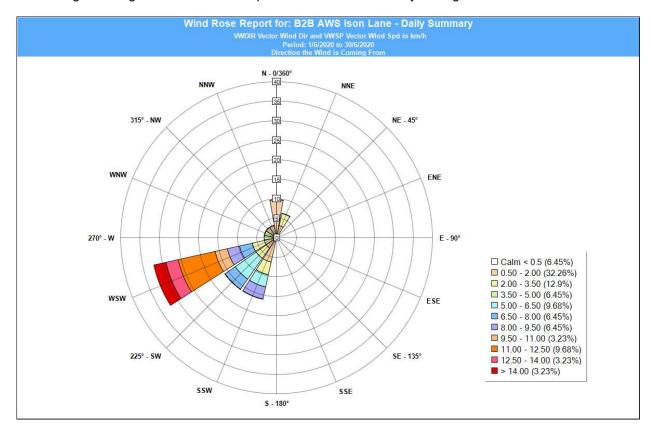


Figure 3-2 June 2020 Wind Rose Results from Ison Lane Compound Weather Station. Average Wind direction and Average Wind Speed shown.

### 4 SEDIMENT BASIN DISCHARGE

Sixteen sediment basins and two discharge points were licensed under the EPL during June 2020.

On the  $20^{th}$  of June in accordance with licence condition L2.6, DSWJV began to use a statistical correlation for the calculation of TSS (mg/L) from Turbidity (NTU). The correlation uses the formula of TSS (mg/L) = 0.43 \* (NTU) + 1.00. Given that the threshold value for TSS is 50 mg/l, samples if less than 114 NTU would be deemed suitable for discharge. For a factor of safety, the acceptable discharge limit was reduced to 90 NTU.

See Table 4.1 below for details on sediment basin discharges.



Table 4-1 June 2020 Sediment basin discharge(s)

EPA Identification No.	Location (adjacent address)	Discharge Date	pH (6.5- 8.5)	Nephelometric Turbidity Units (<90NTU)	Oil and Grease (none visible)		
PB19.82.S	9.82.S Mullers Lane		No discharges in June 2020				
PB24.45.N	PB24.45.N B660 Princes Highway			No discharges in June 2020			
TB21.15.N	Opposite O'Keefes Lane	01/06/20	7.5	20	None visible		
		17/06/20	7.5	20	None visible		
TB21.50.N	Opposite Jaspers Brush Road		No discha	arges in June 2020			
TB21.70.S	Intersection at Jaspers Brush Road		No discha	arges in June 2020			
TB21.90.S	Jaspers Brush Ancillary Site		No discha	arges in June 2020			
TB22.10.N	Strongs Road		No discha	arges in June 2020			
TB22.25S	Opposite Strongs Road	17/06/20	8	30	None visible		
TB22.30.N	South of Strongs Road	No discharges in June 2020					
TB22.65.S	Opposite Ison Lane	No discharges in June 2020					
TB22.65N	North of Ison Lane	19/06/20	8	30	None visible		
TB22.80.N	Ison Compound	16/06/20	8	30	None visible		
TB23.60N	South of Ison Lane	01/06/20	6.6	9	None visible		
		23/06/20	7.5	40	None visible		
TB25.10.N	Devitts Lane	No discharges in June 2020					
TB26.15S	North of Tandingulla Creek		No discha	arges in June 2020			
TB28.90.N	Abernethy's Lane	No discharges in June 2020					
CH20.50S	Adjacent to Flying Fox Creek		No discha	arges in June 2020			
CH27.81N	Pestells Lane		No discha	arges in June 2020			

#### 5 AIR MONITORING RESULTS

Dust deposition gauges for the project were installed on 19 May 2020 and changed on 19 June 2020 for a total of 31 days of deployment, ie within the NATA accredited window (30 days +/- 2 days), according to the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (EPA, 2016).

No monitoring points exceeded the monthly criteria for total insoluble matter of 4  $g/m^2/m$ onth and the rolling annual average for deposited dust also remained under the criteria for all monitoring locations during the month.

Princes Highway Upgrade between Berry and Bomaderry



Table 5-1 June 2020 Air quality monitoring results

EPA Identification No.	Location (adjacent address)	Ash Content g/m²,month	Combustible Matter g/m²,month	Total Insoluble Matter g/m²,month	Rolling Average (Total Insoluble Matter) g/m²,month
1-DDG A	10 Croziers Lane, Jaspers Brush	0.9	0.7	1.6	3.9
2-DDG B	10A Jaspers Brush Road, Jaspers Brush	0.9	0.1	1.0	2.7
3-DDG C	20C Strongs Road, Jaspers Brush	0.5	<0.1	0.5	2.3
4-DDG D	10C Jaspers Brush Road, Jaspers Brush	0.6	<0.1	0.6	3.1
5-DDG E	30 Ison Lane, Jaspers Brush	0.2	<0.1	0.2	1.0
6-DDG F	Lot 209 DP 1210788	0.4	<0.1	0.4	2.0
7-DDG H	10 Lamonds Lane, Meroo Meadow	0.3	<0.1	0.3	2.6
8-DDG I	19 Boxsells Lane, Meroo Meadow	0.4	0.1	0.5	1.6
9-DDG J/K	265 Princes Highway, Meroo Meadow	0.3	0.1	0.4	2.7
10-DDG L	1028 Meroo Meadow, Meroo Meadow	0.7	<0.1	0.7	3.3
11-DDG M	32 Elvin Drive, Bomaderry	0.5	0.4	0.9	3.1
12-DDG N	9 Devitt's Lane, Meroo Meadow	0.4	<0.1	0.4	1.7
13-DDG P	24 Abernethys Lane, Meroo Meadow	1.3	0.7	2.0	1.8

Note: bold type indicates a result above the relevant criteria

Figure 5-1 provides air quality data from the nearest OEH ambient air quality monitoring stations to the project (Wollongong, Kembla Grange and Albion Park, approximately 25 km north of the project area). Generally regional air quality was good or very good for the month of June.



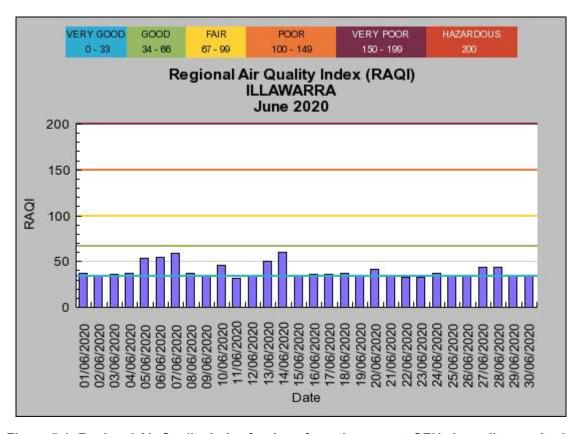


Figure 5-1: Regional Air Quality Index for June from the nearest OEH air quality monitoring stations – Illawarra (NSW OEH).

#### **6 NOISE MONITORING RESULTS**

Noise monitoring was undertaken in accordance with the Construction Noise and Vibration Management Plan (CNVMP) for the project in June 2020. No exceedances above predicted levels for the relevant activity were recorded.

Table 6-1 below summarises the attended noise monitoring undertaken in June 2020.

Table 6-1 June 2020 Noise Monitoring Results

EPA ID No.	Location description	Construction activity	Date	Time	L(A)eq 15min	Comments
15	L1 - B210 Princes Highway, Jaspers	No construction woks in the vicinity	23/6/2020	16:22	59.7	Constant traffic noise from the Princes Highway
16	L2 - 20C Strongs Road, Jaspers Brush	Earthworks	23/6/2020	16:00	53.0	<ul> <li>Excavator working on opposite side of the highway.</li> <li>Water cart applying water on Strongs Road</li> <li>Traffic from the Princes Highway the main noise source</li> </ul>



EPA ID No.	Location description	Construction activity	Date	Time	L(A)eq 15min	Comments
17	L3 - 30 Ison Lane,	Earthworks &	23/6/2020	15:35	56.8	Traffic from Princes Highway the main noise source. Local road traffic on Ison Lane
17	Jaspers Brush	Furnishings	25/0/2020	10.00	30.0	Main construction noise source from Agi Truck and excavator operating in works area adjacent to the highway
						Traffic from Princes Highway
18	L5 - 15 Turner Lane, Jaspers Brush	Earthworks	25/6/2020	10:01	59.4	Material haul observed with excavators loading truck and dogs near Wileys Creek on opposite side of the highway
	Druen.					Several occurrences of local traffic on Turners Lane
	L6 - B710 Princes					Main noise source traffic from Princes Highway.
19	Highway, Jaspers Brush	Earthworks	23/6/2020	15:11	61.0	Bogey truck tipping material then being loaded.
	Bradin					Birds chirping
	L7 - 310C					Main noise source traffic from Princes Highway.
20	Princes Highway, Jaspers	Earthworks	23/6/2020	8:42	59.8	Excavator working next to     Boxsells Lane.
	Brush					Water cart entering Lamonds     Lane and filling from water main
21	BG08 - 19 Boxsells Lane,	Earthworks	23/6/2020	14:31	56.6	Drainage blanket being imported into Cut 9 in the distance.
	Meroo Meadow					Traffic from the Princes Highway.
22	BG09 - 1028 Meroo	Bridgeworks	23/6/2020	8:23	59.2	Constant traffic from the     Princes Highway the main     noise source
	Road, Meroo Meadow					Workers on Pestells Overpass     Bridge working with hand tools     the main noise source
23	L8 - 24 Abernethys Lane,	Earthworks	23/6/2020	13:56	54.9	Grader and trucks operating nearby the main noise source.
	Meroo Meadow			. 3.50	1	Some local traffic on Abernethys Lane.
24	BG10 - 35 Gardenia	No construction	23/6/2020	9:05	51.2	No construction works in the area.
<b></b>	Crescent, Bomaderry	woks in the vicinity	201012020	9.00	01.2	Only local traffic from residents in the area
25	BG11 - 38 Elvin Drive, Bomaderry	No construction woks in the vicinity	23/6/2020	13:25	58.9	Constant traffic from the     Princes Highway the main     noise source.

## 7 ENVIRONMENTAL COMPLAINTS

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No environmental complaints were received in June 2020