

Site Information EPL No.: 12290

EPA Website Link: http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=31280&SYSUID=1&LICID=12290

Licensee: Werris Creek Coal Pty Limited

Premises: Werris Creek Coal, 1435 Werris Creek Road, WERRIS CREEK NSW 2341

EPL Monitoring Points: See figure at end of document

Sampling Period: NOVEMBER 2020

Obtained Date: 18/12/2020 Publication Date: 21/12/2020

Table 1 - No Pollutant Limits Apply

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
20	PM10	μg/m³	Every 6 days	5	28/11/2020	11/12/2020	5.3	8.4	6.6	15.7
28	Solid Particles	g/m²/month	Continuous	1	20/11/2020	13/12/2020	1.0	1.0	1.0	1.0
29	PM10	μg/m³	Every 6 days	5	28/11/2020	11/12/2020	10.5	16.8	14.4	26.2
29	Solid Particles	g/m²/month	Continuous	1	20/11/2020	13/12/2020	2.6	2.6	2.6	2.6
30	PM10	μg/m³	Continuous	Continuous	30/11/2020	01/12/2020	2.4	12.3	12.2	23.1
30	Solid Particles	g/m²/month	Continuous	1	20/11/2020	13/12/2020	1.1	1.1	1.1	1.1
	Conductivity	μS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
10	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
12	Nitrogen (Total)	mg/L	Special Frequency 1	0*	ı	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
14	Conductivity	μS/cm	Special Frequency 1	1	14/11/2020	16/11/2020	210	210	210	210

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Nitrate	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	1	1	1	1
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	1	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	0.29	0.29	0.29	0.29
	Conductivity	μS/cm	Special Frequency 1	1	14/11/2020	16/11/2020	230	230	230	230
	Nitrate	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	< 0.01	< 0.01	<0.01	< 0.01
	Nitrogen (Total)	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	0.8	0.8	0.8	0.8
	Oil and Grease	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	<5	<5	<5	<5
32	рН	рН	Special Frequency 1	1	14/11/2020	16/11/2020	7.5	7.5	7.5	7.5
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	1	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	0.48	0.48	0.48	0.48
	Total Suspended Solids	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	5	5	5	5
	Conductivity	μS/cm	Special Frequency 2	1	14/11/2020	16/11/2020	680	680	680	680
	Nitrate	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	0.42	0.42	0.42	0.42
	Nitrogen (Total)	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	0.7	0.7	0.7	0.7
	Oil and Grease	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	<5	<5	<5	<5
23	рН	рН	Special Frequency 2	1	14/11/2020	16/11/2020	8.4	8.4	8.4	8.4
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	1	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	0.09	0.09	0.09	0.09
	Total Suspended Solids	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	10	10	10	10
	Conductivity	μS/cm	Special Frequency 2	1	14/11/2020	16/11/2020	680	680	680	680
	Nitrate	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	0.43	0.43	0.43	0.43
24	Nitrogen (Total)	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	0.7	0.7	0.7	0.7
24	Oil and Grease	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	8	8	8	8
	рН	рН	Special Frequency 2	1	14/11/2020	16/11/2020	8.5	8.5	8.5	8.5
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Reactive Phosphorus	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	0.09	0.09	0.09	0.09
	Total Suspended Solids	mg/L	Special Frequency 2	1	14/11/2020	16/11/2020	8	8	8	8
	Conductivity	μS/cm	Special Frequency 2	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
25	рН	рН	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 2	0*	-	-	-	ı	-	-
	Conductivity	μS/cm	Special Frequency 2	0*	-	-	-	ı	-	-
	Nitrate	mg/L	Special Frequency 2	0*	1	-	-	ı	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
26	рН	рН	Special Frequency 2	0*	ı	-	-	ı	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	ı	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	1	-	-	ı	-	-
	Total Suspended Solids	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
33*	Barium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Chromium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	ı	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0*	-	ı	ı	ı	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	ı	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0*	-	-	ı	ı	-	-
	Potassium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Selenium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Sodium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Total dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
34	Cadmium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Manganese (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Potassium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Selenium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	1	-	-
	Sodium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Total dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	1	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0*	1	-	ı	ı	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	ı	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	•	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
35	Copper (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0*	-	-	1	1	-	-
	Potassium	mg/L	Special Frequency 3	0*	-	-	-	ı	-	-
	Selenium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	1	-	-
	Sodium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Total dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	•	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedanœ (Yes/No)
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
10	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	рН	рН	Special Frequency 1	0*	-	-			6.5-8.5	No
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	ı			50~	No
12	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	рН	рН	Special Frequency 1	0*	-	ı			6.5-8.5	No
	Total Suspended Solids	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	19	19	50~	No
14	Oil and Grease	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	<5	<5	10	No
	рН	рН	Special Frequency 1	1	14/11/2020	16/11/2020	7.7	7.7	6.5-8.5	No
	Total Suspended Solids	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	5	5	50~	No
32	Oil and Grease	mg/L	Special Frequency 1	1	14/11/2020	16/11/2020	<5	<5	10	No
	рН	рН	Special Frequency 1	1	14/11/2020	16/11/2020	7.5	7.5	6.5-8.5	No
	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No
33^	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	рН	рН	Special Frequency 4	0*	-	-	-	-	9	No
34	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedanœ (Yes/No)
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	рН	рН	Special Frequency 4	0*	-	ı	-	-	9	No
	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No
35	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	рН	рН	Special Frequency 4	0*	-	-	-	-	9	No

[~] Total Suspended Solids permitted to exceed 50mg/L if 5 day rainfall is greater than 39.2mm prior to discharge

- For the purposes of this condition, Special Frequency 1 means as soon as practicable after overflow commences and in any case not more than 12 hours after any overflow commencing.
- For the purposes of this condition, Special Frequency 2 means within 12 hours after any overflow from a storage dam(s) on the premises occurring.
- For the purposes of this condition, Special Frequency 3 means every three months. If no mine void water is planned to be provided for agricultural purposes within the three months following scheduled sampling, then sampling is not required.
- For the purposes of this condition, Special Frequency 4 means prior to, but not more than 24 hours prior to providing mine void water for agricultural purposes and then weekly thereafter, until the provision of water ceases. Samples are only required to be taken from the void water dam that is supplying water for agricultural purposes.

[^] EPL ID Point 33 is the point of discharge for discharge sampling

^{*}No Special Frequency Events occurred during Sampling Period, therefore no data has been collected.

Table 3 – Monitoring (Quarterly & 6 monthly – no limits apply)

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Conductivity	μS/cm	Every 3 Months	0*	11/11/2020	20/11/2020	1420	1420	1420	1420
	Nitrate	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	0.69	0.69	0.69	0.69
	Nitrogen (Total)	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	1	1	1	1
	Oil and Grease	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	<5	<5	<5	<5
16	pН	рН	Every 3 Months	0*	11/11/2020	20/11/2020	7.31	7.31	7.31	7.31
	Phosphorus (Total)	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	9	9	9	9
	Conductivity	μS/cm	Every 3 Months	0*	11/11/2020	20/11/2020	1560	1560	1560	1560
	Nitrate	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	0.52	0.52	0.52	0.52
	Nitrogen (Total)	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	0.8	0.8	0.8	0.8
	Oil and Grease	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	<5	<5	<5	<5
27	рН	рН	Every 3 Months	0*	11/11/2020	20/11/2020	7.42	7.42	7.42	7.42
	Phosphorus (Total)	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	0*	11/11/2020	20/11/2020	11	11	11	11
	Conductivity	μS/cm	Every 6 Months	0*	0	-	-	1	-	-
	Nitrate	mg/L	Every 6 Months	0*	0	-	-	-	-	-
17	Nitrogen (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
1/	рН	рН	Every 6 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	1	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-
	Conductivity	μS/cm	Every 6 Months	0*	0	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
18	рН	рН	Every 6 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-
	Conductivity	μS/cm	Every 6 Months	0*	0	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
19	рН	рН	Every 6 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-
	Conductivity	μS/cm	Every 6 Months	0*	0	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
20	рН	рН	Every 6 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-
	Conductivity	μS/cm	Every 6 Months	0*	0	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	0	-	-	-	-	-
21	Nitrogen (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	рН	рН	Every 6 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-
	Conductivity	μS/cm	Every 6 Months	0*	0	-	1	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	0	-	1	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
22	рН	рН	Every 6 Months	0*	0	-	1	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-

^{*}This reporting period does not include measurements for the 6 monthly or 3 monthly monitoring as they did not occur in this period. These will be reported in their relevant periods.



Table 4 – Monitoring (Noise – Limits Apply)

Location	Date	Measuremen t Period	Start Time		ed levels – B(A) LAeq, 15 Minute	Limit(s)	Weather (inversion oC/100m, wind m/s & °)	Observations	(Potential) Non- compliance /breach	Date Obtained
R24	24 November 2020	60 minutes	10:17am	N/A	50	Day 37	3.7m/s,172 degrees	Traffic (49), birds (42), insects (37), WCC (<20)	No	17/12/2020
R12	24 November 2020	60 minutes	11:21am	N/A	39	Day 38	2.9m/s, 159 degrees	Traffic (38), birds (32), WCC (<20)	No	10/11/2020
R96	24 November 2020	60 minutes	12:30pm	N/A	38	Day 38	3.9m/s, 177 degrees	Insects (36), birds (33), traffic (25), WCC (<20)	No	10/11/2020
R98	24 November 2020	60 minutes	1:39pm	N/A	43	Day 36	3.2m/s, 175 degrees	Birds (41), residential (39), traffic (26), WCC (<20)	No	10/11/2020
R57	24 November 2020	60 minutes	3:10pm	N/A	54	Day 35	4.7m/s, 162 degrees	Birds (51), traffic (49), residential (47), Crawfords* (30), WCC (<20)	No	10/11/2020
R24	24 November 2020	60 minutes	8:04pm	<20	47	Night 37	+0.8°C/100, 2.4m/s, 165 degrees	Traffic (46), birds (39), insects (37), WCC (<20)	No	10/11/2020
R12	24 November 2020	60 minutes	9:09pm	<20	42	Night 38	+0.9°C/100, 2.7m/s, 154 degrees	Birds (39), traffic (38), insects (31), WCC (<20)	No	10/11/2020
R96	24 November 2020	60 minutes	10:16pm	<20	39	Night 38	+0.1°C/100, 2.5m/s, 156 degrees	Insects (38), traffic (32), WCC (<20)	No	10/11/2020
R98	24 November 2020	60 minutes	11:26pm	<20	50	Night 38	+0.6°C/100, 2.2m/s, 139 degrees	Insects (50), traffic (34), WCC (<20)	No	10/11/2020
R57	25 November 2020	60 minutes	1:08am	<20	40	Night 35	+0.9°C/100, 1.0m/s, 158 degrees	Insects (37), traffic (36), trains (30), WCC (<20)	No	10/11/2020

NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified. IA = Inaudible.

Table 5 – Monitoring (Blasts – Limits Apply)

Location	Parameter	Units of	Frequency	No. of Blasts	Average	Max	100%ile	(Potential) Non-	Date
		Measure		for the Month	Value	Value	Limit	compliance /breach	Obtained
R11	Blast Noise	dB (Lin Peak)	Every Blast	3	99.6	97.7	120.0	No	30/11/2020
	Blast Vibration	mm/s	Every Blast	3	0.20	0.12	10.0	No	30/11/2020
R98	Blast Noise	dB (Lin Peak)	Every Blast	3	101.0	99.2	120.0	No	30/11/2020
	Blast Vibration	mm/s	Every Blast	3	1.13	0.71	10.0	No	30/11/2020
R62	Blast Noise	dB (Lin Peak)	Every Blast	3	104.6	99.2	120.0	No	30/11/2020
	Blast Vibration	mm/s	Every Blast	3	0.45	0.39	10.0	No	30/11/2020
R92	Blast Noise	dB (Lin Peak)	Every Blast	3	101.3	98.7	120.0	No	30/11/2020
	Blast Vibration	mm/s	Every Blast	3	0.33	0.26	10.0	No	30/11/2020



