

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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: OCTOBER 2020

Obtained Date: 16/11/2020

Publication Date: 20/11/2020

Table 1 - No Pollutant Limits Apply

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
28	PM10	µg/m ³	Every 6 days	5	29/10/2020	12/11/2020	3.3	8.9	6.9	17.3
	Solid Particles	g/m ² /month	Continuous	1	20/10/2020	06/11/2020	1.7	1.7	1.7	1.7
29	PM10	µg/m ³	Every 6 days	5	29/10/2020	12/11/2020	11.6	17.0	14.6	22.5
	Solid Particles	g/m ² /month	Continuous	1	20/10/2020	06/11/2020	1.4	1.4	1.4	1.4
30	PM10	µg/m ³	Continuous	Continuous	31/10/2020	01/11/2020	-4.7	9.3	9.7	21.7
	Solid Particles	g/m ² /month	Continuous	1	20/10/2020	06/11/2020	0.4	0.4	0.4	0.4
10	Conductivity	µS/cm	Special Frequency 1	1	26/10/2020	05/11/2020	330	330	330	330
	Nitrate	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	0.5	0.5	0.5	0.5
	Nitrogen (Total)	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	1.6	1.6	1.6	1.6
	Phosphorus (Total)	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	0.49	0.49	0.49	0.49
	Reactive Phosphorus	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	0.07	0.07	0.07	0.07
10	Conductivity	µS/cm	Special Frequency 1	1	30/10/2020	16/11/2020	340	340	340	340
	Nitrate	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	0.15	0.15	0.15	0.15
	Nitrogen (Total)	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	0.8	0.8	0.8	0.8
	Phosphorus (Total)	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	0.04	0.04	0.04	0.04
12	Conductivity	µS/cm	Special Frequency 1	1	30/10/2020	16/11/2020	460	460	460	460

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	Nitrate	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	2.5	2.5	2.5	2.5
	Nitrogen (Total)	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	3.6	3.6	3.6	3.6
	Phosphorus (Total)	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	0.03	0.03	0.03	0.03
14	Conductivity	µS/cm	Special Frequency 1	1	26/10/2020	05/11/2020	170	170	170	170
	Nitrate	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	0.21	0.21	0.21	0.21
	Nitrogen (Total)	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	2.5	2.5	2.5	2.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	0.49	0.49	0.49	0.49
	Reactive Phosphorus	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	0.27	0.27	0.27	0.27
32	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	pH	pH	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	1	26/10/2020	05/11/2020	230	230	230	230
	Nitrate	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.37	0.37	0.37	0.37
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	1.6	1.6	1.6	1.6
	Oil and Grease	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/10/2020	05/11/2020	8.0	8.0	8.0	8.0
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.36	0.36	0.36	0.36
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.17	0.17	0.17	0.17
	Total Suspended Solids	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	119	119	119	119
24	Conductivity	µS/cm	Special Frequency 2	1	26/10/2020	05/11/2020	230	230	230	230

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	Nitrate	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.8	0.8	0.8	0.8
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	2.6	2.6	2.6	2.6
	Oil and Grease	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/10/2020	05/11/2020	8.0	8.0	8.0	8.0
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.64	0.64	0.64	0.64
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.36	0.36	0.36	0.36
	Total Suspended Solids	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	717	717	717	717
25	Conductivity	µS/cm	Special Frequency 2	1	26/10/2020	05/11/2020	320	320	320	320
	Nitrate	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.19	0.19	0.19	0.19
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	1.7	1.7	1.7	1.7
	Oil and Grease	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/10/2020	05/11/2020	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.32	0.32	0.32	0.32
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.26	0.26	0.26	0.26
25	Total Suspended Solids	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	38	38	38	38
	Conductivity	µS/cm	Special Frequency 2	1	30/10/2020	16/11/2020	330	330	330	330
	Nitrate	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	0.23	0.23	0.23	0.23
	Nitrogen (Total)	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	1.2	1.2	1.2	1.2
	Oil and Grease	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	30/10/2020	16/11/2020	8.4	8.4	8.4	8.4
	Phosphorus (Total)	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	-	-	-	-
26	Reactive Phosphorus	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	0.16	0.16	0.16	0.16
	Total Suspended Solids	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	10	10	10	10
26	Conductivity	µS/cm	Special Frequency 2	1	26/10/2020	05/11/2020	300	300	300	300
	Nitrate	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.23	0.23	0.23	0.23

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	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/10/2020	05/11/2020	7.9	7.9	7.9	7.9
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.46	0.46	0.46	0.46
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	0.33	0.33	0.33	0.33
	Total Suspended Solids	mg/L	Special Frequency 2	1	26/10/2020	05/11/2020	63	63	63	63
26	Conductivity	µS/cm	Special Frequency 2	1	30/10/2020	16/11/2020	340	340	340	340
	Nitrate	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	0.2	0.2	0.2	0.2
	Nitrogen (Total)	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	1.3	1.3	1.3	1.3
	Oil and Grease	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	30/10/2020	16/11/2020	7.9	7.9	7.9	7.9
	Phosphorus (Total)	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	0.17	0.17	0.17	0.17
	Total Suspended Solids	mg/L	Special Frequency 2	1	30/10/2020	16/11/2020	15	15	15	15
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
34	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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	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*	-	-	-	-	-	-
35	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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	Exceedance (Yes/No)
10	Total Suspended Solids	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	2710	2710	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	<5	<5	10	No
	pH	pH	Special Frequency 1	1	26/10/2020	05/11/2020	7.9	7.9	6.5-8.5	No
10	Total Suspended Solids	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	38	38	50	No
	Oil and Grease	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	<5	<5	10	No
	pH	pH	Special Frequency 1	1	30/10/2020	16/11/2020	7.3	7.3	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	14	14	50	No
	Oil and Grease	mg/L	Special Frequency 1	1	30/10/2020	16/11/2020	<5	<5	10	No
	pH	pH	Special Frequency 1	1	30/10/2020	16/11/2020	7.4	7.4	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	290	290	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	26/10/2020	05/11/2020	<5	<5	10	No
	pH	pH	Special Frequency 1	1	26/10/2020	05/11/2020	7.6	7.6	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
33^	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
34	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
35	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	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

^ 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.



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- 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.

WERRIS CREEK COAL EPL – MONTHLY SUMMARY
Table 3 – Monitoring (Quarterly & 6 monthly – no limits apply)

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
16	Conductivity	µS/cm	Every 3 Months	0*	0	-	-	-	-	-
	Nitrate	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Oil and Grease	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	pH	pH	Every 3 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 3 Months	0*	0	-	-	-	-	-
27	Total Suspended Solids	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Conductivity	µS/cm	Every 3 Months	0*	0	-	-	-	-	-
	Nitrate	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Oil and Grease	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	pH	pH	Every 3 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0*	0	-	-	-	-	-
17	Reactive Phosphorus	mg/L	Every 3 Months	0*	0	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 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	-	-	-	-	-
	pH	pH	Every 6 Months	0*	0	-	-	-	-	-
17	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	0	-	-	-	-	-

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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
	Standing Water Level	Metres	Every 6 Months	0*	0	-	-	-	-	-
18	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	-	-	-	-	-
	pH	pH	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	-	-	-	-	-
19	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	-	-	-	-	-
	pH	pH	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	-	-	-	-	-
20	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	-	-	-	-	-
	pH	pH	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	-	-	-	-	-
21	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	-	-	-	-	-
	pH	pH	Every 6 Months	0*	0	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	0	-	-	-	-	-

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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	-	-	-	-	-
22	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	-	-	-	-	-
	pH	pH	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	-	-	-	-	-

*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.

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

Location	Date	Measurement Period	Start Time	Measured levels – dB(A)		Limit(s)	Weather (inversion oC/100m, wind m/s & °)	Observations	(Potential) Non-compliance /breach	Date Obtained
				LA1, 1 Minute	L _{Aeq} , 15 Minute					
R24	29 October 2020	60 minutes	10:07am	N/A	50	Day 37	1.8m/s, 332 degrees	Traffic (50), birds (39), insects (33), WCC (<20)	No	10/11/2020
R12	29 October 2020	60 minutes	11:11am	N/A	57	Day 38	3.4m/s, 24 degrees	Traffic (57), train (46), birds (38), WCC (<20)	No	10/11/2020
R96	29 October 2020	60 minutes	12:06pm	N/A	36	Day 38	3.9m/s, 49 degrees	Birds (34), insects (31), WCC (<20)	No	10/11/2020
R98	29 October 2020	60 minutes	1:14pm	N/A	57	Day 36	3.4m/s, 359 degrees	Birds (55), dogs (53), insects (42), WCC (<20)	No	10/11/2020
R57	29 October 2020	60 minutes	2:46pm	N/A	51	Day 35	3.3m/s, 68 degrees	Traffic (50), birds (43), residential (38), WCC (<20)	No	10/11/2020
R24	29 October 2020	60 minutes	7:59pm	<20	47	Night 37	Lapse, 4.1m/s, 52 degrees	Traffic (45), frogs (40), insects (38), WCC (<20)	No	10/11/2020
R12	29 October 2020	60 minutes	9:04pm	<20	40	Night 38	Lapse, 1.4m/s, 81 degrees	Traffic (39), frogs (32), insects (30), WCC (<20)	No	10/11/2020
R96	29 October 2020	60 minutes	10:12pm	<20	36	Night 38	Lapse, 1.8m/s, 68 degrees	Frogs (35), insects (31), birds (26), train (25), WCC (<20)	No	10/11/2020
R98	29 October 2020	60 minutes	11:26pm	<20	32	Night 38	+1.9°C/100, 1.2m/s, 357 degrees	Frogs (30), insects (28), WCC (<20)	No	10/11/2020
R57	30 October 2020	60 minutes	1:02am	<20	46	Night 35	+1.6°C/100, 0.2m/s, 335 degrees	Frogs (44), insects (42), traffic (27), 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.

WERRIS CREEK COAL EPL – MONTHLY SUMMARY
Table 5 – Monitoring (Blasts – Limits Apply)

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non-compliance /breach	Date Obtained
R11	Blast Noise	dB (Lin Peak)	Every Blast	6	98.3	105.4	120.0	No	30/10/2020
	Blast Vibration	mm/s	Every Blast	6	0.13	0.17	10.0	No	30/10/2020
R98	Blast Noise	dB (Lin Peak)	Every Blast	6	98.9	101.7	120.0	No	30/10/2020
	Blast Vibration	mm/s	Every Blast	6	0.86	1.09	10.0	No	30/10/2020
R62	Blast Noise	dB (Lin Peak)	Every Blast	6	98.6	105.8	120.0	No	30/10/2020
	Blast Vibration	mm/s	Every Blast	6	0.48	0.95	10.0	No	30/10/2020
R92	Blast Noise	dB (Lin Peak)	Every Blast	6	100.3	106.3	120.0	No	30/10/2020
	Blast Vibration	mm/s	Every Blast	6	0.29	0.50	10.0	No	30/10/2020

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

