

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: JUNE 2021

Obtained Date: 20/07/2021

Publication Date: 20/07/2021

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	26/06/2021	08/07/2021	0.4	3.1	0.9	10.4
	Solid Particles	g/m ² /month	Continuous	1	18/06/2021	13/07/2021	0.4	0.4	0.4	0.4
29	PM10	µg/m ³	Every 6 days	5	26/06/2021	08/07/2021	0.8	9.9	1.6	40.7
	Solid Particles	g/m ² /month	Continuous	1	18/06/2021	13/07/2021	0.8	0.8	0.8	0.8
30	PM10	µg/m ³	Continuous	Continuous	30/6/2021	01/07/2021	-3.8	6.0	7.1	18.4
	Solid Particles	g/m ² /month	Continuous	1	18/06/2021	13/07/2021	0.3	0.3	0.3	0.3
10	Conductivity	µS/cm	Special Frequency 1	1	15/06/2021	28/06/2021	390	390	390	390
	Nitrate	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	1.56	1.56	1.56	1.56
	Nitrogen (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	3.4	3.4	3.4	3.4
	Phosphorus (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	0.05	0.05	0.05	0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	0.03	0.03	0.03	0.03
12	Conductivity	µS/cm	Special Frequency 1	1	15/06/2021	28/06/2021	600	600	600	600
	Nitrate	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	2.94	2.94	2.94	2.94
	Nitrogen (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	4.4	4.4	4.4	4.4
	Phosphorus (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	0.15	0.15	0.15	0.15
	Reactive Phosphorus	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	<0.01	<0.01	<0.01	<0.01
14	Conductivity	µS/cm	Special Frequency 1	1	11/06/2021	24/06/2021	220	220	220	220

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	Nitrate	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	1.5	1.5	1.5	1.5
	Nitrogen (Total)	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	3.3	3.3	3.3	3.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	0.63	0.63	0.63	0.63
	Reactive Phosphorus	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	0.6	0.6	0.6	0.6
14	Conductivity	µS/cm	Special Frequency 1	1	16/6/2021	28/06/2021	420	420	420	420
	Nitrate	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	1.21	1.21	1.21	1.21
	Nitrogen (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	2	2	2	2
	Phosphorus (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.24	0.24	0.24	0.24
	Reactive Phosphorus	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.14	0.14	0.14	0.14
32	Conductivity	µS/cm	Special Frequency 1	1	16/6/2021	28/06/2021	460	460	460	460
	Nitrate	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	1.27	1.27	1.27	1.27
	Nitrogen (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 1	1	16/6/2021	28/06/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.16	0.16	0.16	0.16
	Reactive Phosphorus	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.06	0.06	0.06	0.06
	Total Suspended Solids	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	11	11	11	11
23	Conductivity	µS/cm	Special Frequency 2	1	11/06/2021	24/06/2021	260	260	260	260
	Nitrate	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	2.57	2.57	2.57	2.57
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	4.8	4.8	4.8	4.8
	Oil and Grease	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/06/2021	24/06/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.78	0.78	0.78	0.78
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.31	0.31	0.31	0.31
	Total Suspended Solids	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	70	70	70	70
23	Conductivity	µS/cm	Special Frequency 2	1	16/6/2021	28/06/2021	460	460	460	460

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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
	Nitrate	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	1.15	1.15	1.15	1.15
	Nitrogen (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	1.8	1.8	1.8	1.8
	Oil and Grease	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	16/6/2021	28/06/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.24	0.24	0.24	0.24
	Reactive Phosphorus	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.13	0.13	0.13	0.13
24	Total Suspended Solids	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	9	9	9	9
	Conductivity	µS/cm	Special Frequency 2	1	11/06/2021	24/06/2021	220	220	220	220
	Nitrate	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	1.28	1.28	1.28	1.28
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	2.5	2.5	2.5	2.5
	Oil and Grease	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/06/2021	24/06/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.42	0.42	0.42	0.42
24	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.32	0.32	0.32	0.32
	Total Suspended Solids	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	43	43	43	43
	Conductivity	µS/cm	Special Frequency 2	1	16/6/2021	28/06/2021	700	700	700	700
	Nitrate	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	1.35	1.35	1.35	1.35
	Nitrogen (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	16/6/2021	28/06/2021	8.1	8.1	8.1	8.1
24	Phosphorus (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.25	0.25	0.25	0.25
	Reactive Phosphorus	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.18	0.18	0.18	0.18
	Total Suspended Solids	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	9	9	9	9
25	Conductivity	µS/cm	Special Frequency 2	1	15/06/2021	28/06/2021	300	300	300	300
	Nitrate	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.39	0.39	0.39	0.39

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	Nitrogen (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	1.6	1.6	1.6	1.6
	Oil and Grease	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	15/06/2021	28/06/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.17	0.17	0.17	0.17
	Reactive Phosphorus	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.1	0.1	0.1	0.1
	Total Suspended Solids	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	7	7	7	7
26	Conductivity	µS/cm	Special Frequency 2	1	15/06/2021	28/06/2021	330	330	330	330
	Nitrate	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.41	0.41	0.41	0.41
	Nitrogen (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	1.7	1.7	1.7	1.7
	Oil and Grease	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	15/06/2021	28/06/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.18	0.18	0.18	0.18
	Reactive Phosphorus	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.1	0.1	0.1	0.1
	Total Suspended Solids	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	8	8	8	8
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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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
	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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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
	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*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

WERRIS CREEK COAL EPL – MONTHLY SUMMARY
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	Exceedance (Yes/No)
10	Total Suspended Solids	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	4	4	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	9	9	10	No
	pH	pH	Special Frequency 1	1	15/06/2021	28/06/2021	8.2	8.2	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	10	10	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	6	6	10	No
	pH	pH	Special Frequency 1	1	15/06/2021	28/06/2021	7.9	7.9	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	76	76	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	11/06/2021	24/06/2021	7.5	7.5	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	6	6	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	16/6/2021	28/06/2021	8	8	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	11	11	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	16/6/2021	28/06/2021	8.2	8.2	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

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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)
	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.

- 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*	-	-	-	-	-	-
	Nitrate	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	pH	pH	Every 3 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 3 Months	0*	-	-	-	-	-	-
27	Total Suspended Solids	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Conductivity	µS/cm	Every 3 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	pH	pH	Every 3 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0*	-	-	-	-	-	-
17	Reactive Phosphorus	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 Months	0*	-	-	-	-	-	-
	Conductivity	µS/cm	Every 6 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	pH	pH	Every 6 Months	0*	-	-	-	-	-	-
17	Phosphorus (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	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
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-
18	Conductivity	µS/cm	Every 6 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	pH	pH	Every 6 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-
19	Conductivity	µS/cm	Every 6 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	pH	pH	Every 6 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-
20	Conductivity	µS/cm	Every 6 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	pH	pH	Every 6 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-
21	Conductivity	µS/cm	Every 6 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	pH	pH	Every 6 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	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*	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-
22	Conductivity	µS/cm	Every 6 Months	0*	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	pH	pH	Every 6 Months	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0*	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-

TLTS – too low to sample

*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 °C/100m & / Wind m/s / Wind Direction °)	Observations	(Potential) Non-compliance /breach	Date Obtained
				LA1, 1 Minute	LAeq, 15 Minute					
R24	23 June 2021	60 minutes	10:03am	N/A	51	Day 37	8.1 / 006	Traffic (51), birds (37), WCC (<20)	No	07/07/2021
R12	23 June 2021	60 minutes	11:08am	N/A	46	Day 38	8.0 / 009	Traffic (46), WCC (24)	No	07/07/2021
R96	23 June 2021	60 minutes	12:19pm	N/A	51	Day 38	7.3 / 002	Birds (51), WCC (23)	No	07/07/2021
R98	23 June 2021	60 minutes	1:26pm	N/A	48	Day 36	6.5 / 352	Birds (48), traffic (31), WCC (<20)	No	07/07/2021
R57	23 June 2021	60 minutes	3:19pm	N/A	48	Day 35	10.3 / 001	Trains (45), traffic (43), birds (39), residential (37), WCC (<20)	No	07/07/2021
R24	23 June 2021	60 minutes	9:15pm	27	53	Night 37	Lapse / 3.2 / 005	Insects (50), traffic (47), trains (46), WCC (23)	No	07/07/2021
R12	23 June 2021	60 minutes	10:23pm	28	47	Night 38	Lapse / 3.6 / 002	Traffic (47), WCC (25)	No	07/07/2021
R96	23 June 2021	60 minutes	11:39pm	29	35	Night 38	Lapse / 4.0 / 008	Traffic (34), WCC (25)	No	07/07/2021
R98	24 June 2021	60 minutes	12:46am	34	35	Night 38	Lapse / 5.1 / 016	Dogs (33), WCC (31)	No	07/07/2021
R57	23 June 2021	60 minutes	7:03pm	<20	54	Night 35	Lapse / 1.8 / 321	Traffic (53), train (44), insects (40), WCC (<20)	No	07/07/2021

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	5	100.1	103.0	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	0.13	0.23	10.0	No	30/06/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	99.2	102.4	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	1.06	1.98	10.0	No	30/06/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	103.1	111.9	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	0.49	0.76	10.0	No	30/06/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	101.3	107.8	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	0.35	0.79	10.0	No	30/06/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

