

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: AUGUST 2023

Obtained Date: 18/09/2023

Publication Date: 18/09/2023

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	27/08/2023	07/09/2023	0.3	3.6	1.8	7.8
	Solid Particles	g/m ² /month	Continuous	1	15/08/2023	31/08/2023	0.2	0.2	0.2	0.2
29	PM10	µg/m ³	Every 6 days	5	28/07/2023	14/08/2023	4.2	9.5	10.6	15.0
	Solid Particles	g/m ² /month	Continuous	1	15/08/2023	31/08/2023	0.4	0.4	0.4	0.4
30	PM10	µg/m ³	Continuous	Continuous	31/08/2023	01/09/2023	4.2	9.5	10.6	15.0
	Solid Particles	g/m ² /month	Continuous	1	15/08/2023	31/08/2023	0.4	0.4	0.4	0.4
10	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-



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14	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
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*	-	-	-	-	-	-
23	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
24	Total Suspended Solids	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Conductivity	µS/cm	Special Frequency 2	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 2	0*	-	-	-	-	-	-

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	pH	pH	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*	-	-	-	-	-	-
25	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
26	Total Suspended Solids	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33	Total Suspended Solids	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.04	0.04	0.04	0.04
	Arsenic (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Barium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.079	0.079	0.079	0.079

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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
	Beryllium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	BOD	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<2	<2	<2	<2
	Cadmium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.0001	<0.0001	<0.0001	<0.0001
	Chromium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Cobalt (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Copper (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.003	0.003	0.003	0.003
	Iron (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.05	<0.05	<0.05	<0.05
	Lead (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Magnesium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	46	46	46	46
	Manganese (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.015	0.015	0.015	0.015
	Nickel (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.002	0.002	0.002	0.002
	Potassium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	17	17	17	17
	Selenium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
	Sodium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	168	168	168	168
	Total dissolved solids	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	1470	1470	1470	1470
	Vanadium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
Zinc (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.028	0.028	0.028	0.028	
34	Aluminium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.01	0.01	0.01	0.01
	Arsenic (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Barium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.087	0.087	0.087	0.087
	Beryllium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	BOD	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<2	<2	<2	<2
	Cadmium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.0001	<0.0001	<0.0001	<0.0001
	Chromium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Cobalt (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001

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	Copper (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.001	0.001	0.001	0.001
	Iron (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.05	<0.05	<0.05	<0.05
	Lead (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Magnesium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	38	38	38	38
	Manganese (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.005	0.005	0.005	0.005
	Nickel (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Potassium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	16	16	16	16
	Selenium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
	Sodium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	188	188	188	188
	Total dissolved solids	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	1140	1140	1140	1140
	Vanadium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
Zinc (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.005	0.005	0.005	0.005	
35	Aluminium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.03	0.03	0.03	0.03
	Arsenic (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Barium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.081	0.081	0.081	0.081
	Beryllium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	BOD	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<2	<2	<2	<2
	Cadmium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.0002	0.0002	0.0002	0.0002
	Chromium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Cobalt (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Copper (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.001	0.001	0.001	0.001
	Iron (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.05	<0.05	<0.05	<0.05
	Lead (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	44	44	44	44	

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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
	Manganese (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.014	0.014	0.014	0.014
	Nickel (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.001	<0.001	<0.001	<0.001
	Potassium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	17	17	17	17
	Selenium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
	Sodium	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	194	194	194	194
	Total dissolved solids	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	1340	1340	1340	1340
	Vanadium (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
	Zinc (dissolved)	mg/L	Special Frequency 3	1	08/08/2023	18/08/2023	0.007	0.007	0.007	0.007

¹NS – No sample.

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)	Comments
10	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	
12	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	

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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)	Comments
14	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	
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No	
33	Electrical Conductivity	µS/cm	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	µS/cm	Special Frequency 4	3	09/08, 17/08 & 25/08/2023	25/08/2023	1678	1692	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	1	08/08/2023	18/0/2023	<5	<5	10	No	
	pH	pH	Special Frequency 4	3	09/08, 17/08 & 25/08/2023	25/08/2023	7.59	8.21	9	No	
35	Electrical Conductivity	µS/cm	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

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

#The discharge sample was inconsistent with pre-discharge sampling of the dam and has been discussed with the EPA. This will be documented in the Annual Return.



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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	1	08/08/2023	18/08/2023	2060	2060	2060	2060
	Nitrate	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	2.28	2.28	2.28	2.28
	Nitrogen (Total)	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	2.9	2.9	2.9	2.9
	Oil and Grease	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	08/08/2023	18/08/2023	7.86	7.86	7.86	7.86
	Phosphorus (Total)	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	0.07	0.07	0.07	0.07
	Reactive Phosphorus	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	<5	<5	<5	<5
27	Conductivity	µS/cm	Every 3 Months	1	08/08/2023	18/08/2023	2030	2030	2030	2030
	Nitrate	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	0.01	0.01	0.01	0.01
	Nitrogen (Total)	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	0.3	0.3	0.3	0.3
	Oil and Grease	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	08/08/2023	18/08/2023	7.58	7.58	7.58	7.58
	Phosphorus (Total)	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	0.12	0.12	0.12	0.12
	Reactive Phosphorus	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	08/08/2023	18/08/2023	11	11	11	11
17	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*	-	-	-	-	-	-

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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*	-	-	-	-	-	-
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	29 August 2023	60 minutes	10:15am	N/A	48	Day 37	1.8 / 348	Traffic (48), birds (35), train (32), WCC (<20)	No	15/09/2023
R12	29 August 2023	60 minutes	11:23am	N/A	38	Day 38	2.1 / 029	Traffic (38), aeroplane (26), WCC (<20)	No	15/09/2023
R96	29 August 2023	60 minutes	9:30am	N/A	37	Day 38	3.0 / 002	Birds (37), WCC (<20)	No	15/09/2023
R98	29 August 2023	60 minutes	10:42am	N/A	35	Day 35	1.5 / 016	Birds (34), insects (25), WCC (<20)	No	15/09/2023
R57	29 August 2023	60 minutes	12:33pm	N/A	47	Day 35	2.6 / 352	Traffic (45), birds (42), WCC (<20)	No	15/09/2023
R24	28 August 2023	60 minutes	8:48pm	<20	42	Night 37	+1.9 / 0.5 / 080	Trains (41), traffic (36), WCC (<20)	No	15/09/2023
R12	28 August 2023	60 minutes	7:00pm	<20	36	Night 38	+0.4 / 2.1 / 162	Traffic (36), insects (23), WCC (<20)	No	15/09/2023
R96	28 August 2023	60 minutes	8:17pm	<20	32	Night 37	+1.8 / 0.4 / 255	Frogs (30), insects (28), WCC (<20)	No	15/09/2023
R98	28 August 2023	60 minutes	9:24pm	<20	29	Night 35	+0.1 / 3.2 / 019	Frogs (29), WCC (<20)	No	15/09/2023
R57	28 August 2023	60 minutes	11:13pm	<20	38	Night 35	+2.6 / 0.7 / 307	Traffic (37), Crawford's ¹ (28), frogs (22), WCC (<20)	No	15/09/2023

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

IA = Inaudible.

¹ Crawford's Freightlines Werris Creek

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	94.4	102.5	120.0	No	01/09/2023
	Blast Vibration	mm/s	Every Blast	5	0.07	0.10	10.0	No	01/09/2023
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	96.8	100.9	120.0	No	01/09/2023
	Blast Vibration	mm/s	Every Blast	5	0.59	0.90	10.0	No	01/09/2023
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	96.9	98.3	120.0	No	01/09/2023
	Blast Vibration	mm/s	Every Blast	5	0.38	0.57	10.0	No	01/09/2023
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	95.6	97.2	120.0	No	01/09/2023
	Blast Vibration	mm/s	Every Blast	5	0.17	0.25	10.0	No	01/09/2023

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

