



## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** January 2021

**Obtained Date:** 29 January 2021

**Publication Date:** 04 February 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	13/01/21	29/01/21	NA	NA	NA	0.8
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during January 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during January 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (KC1US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow event and/or mine discharge occurred during January 2021 (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (KC2US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (KC2DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		0						
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7).</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (KCUS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (KCDS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (PCa)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during January 2021 (PC1)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	<i>Namoi discharge point – Not constructed or currently utilised (NR1).</i>					
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	<i>Namoi discharge point – Not constructed or currently utilised (NRUS).</i>					
	TDS	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRDS).
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	-	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						



EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
33	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis								



# WHITEHAVEN COAL

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during January 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during January 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during January 2021</i>					50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during January 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s) <sup>2, 4</sup>	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant <sup>1</sup> (Yes/No)	Date Obtained
N5						<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
							Evening – 0.5 hrs			
								Night – 1 hr		
N6						<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
							Evening – 0.5 hrs			
								Night – 1 hr		
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9						<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
							Evening – 0.5 hrs			
								Night – 1 hr		

Note: Quarterly attended noise monitoring will be undertaken prior to the end of March 2021. There are no results available at time of reporting.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** February 2021

**Obtained Date:** 8 March 2021

**Publication Date:** 11 March 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	11/02/21	3/03/21	NA	NA	NA	1.2
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during February 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during February 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during February 2021 (KC1US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow event and/or mine discharge occurred during February 2021 (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon	1	26/02/21	8/03/21	NA	NA	NA	120
	TOC	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	23

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	1	26/02/21	8/03/21	NA	NA	NA	<5
	pH	pH	In situ		1	26/02/21	8/03/21	NA	NA	NA	7.2
	TSS	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	17
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during February 2021 (KC2DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7).</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	26/02/21	8/03/21	NA	NA	NA	130
	TOC	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	8
	Oil & Grease	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	<5
	pH	pH	In situ		1	26/02/21	8/03/21	NA	NA	NA	7.3
	TSS	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	50
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	26/02/21	8/03/21	NA	NA	NA	170
	TOC	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	11
	Oil & Grease	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	<5
	pH	pH	In situ		1	26/02/21	8/03/21	NA	NA	NA	7.7

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	115
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during February 2021 (PCa)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	26/02/21	8/03/21	NA	NA	NA	590
	TOC	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	23
	Oil & Grease	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	<5
	pH	pH	In situ		1	26/02/21	8/03/21	NA	NA	NA	PC1
	TSS	mg/L	Lab Analysis		1	26/02/21	8/03/21	NA	NA	NA	148
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NR1).					
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRUS).					
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRDS).					
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during February 2021.</i>					
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling during February 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during February 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during February 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during February 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
33	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during February 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling during February 2021.*



EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

*Not scheduled for sampling during February 2021.*

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during February 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during February 2021</i>					50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during February 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s) <sup>2, 4</sup>	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant <sup>1</sup> (Yes/No)	Date Obtained
N5	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

Note: Quarterly attended noise monitoring was completed during 22-24 February. The results are not available at time of reporting and will be issued in the March EPL report.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** March 2021

**Obtained Date:** 12 April 2021

**Publication Date:** 15 April 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	11/03/21	29/03/21	NA	NA	NA	1.4
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during March 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during March 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	24/03/21	1/04/21	NA	NA	NA	100
	TOC	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	12
	Oil & Grease	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	<5
	pH	pH	In situ		1	24/03/21	1/04/21	NA	NA	NA	7.5
	TSS	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	90
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow and/or mine discharge occurred during March 2021 flow event (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ		1	24/03/21	1/04/21	NA	NA	NA	85

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TOC	mg/L	Lab Analysis	Quarterly, Upon discharge & Flow Event	1	24/03/21	1/04/21	NA	NA	NA	16
	Oil & Grease	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	<5
	pH	pH	In situ		1	24/03/21	1/04/21	NA	NA	NA	7.4
	TSS	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	7
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	24/03/21	1/04/21	NA	NA	NA	190
	TOC	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	13
	Oil & Grease	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	<5
	pH	pH	In situ		1	24/03/21	1/04/21	NA	NA	NA	7.2
	TSS	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	32
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7).</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	24/03/21	1/04/21	NA	NA	NA	235
	TOC	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	12
	Oil & Grease	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	<5
	pH	pH	In situ		1	24/03/21	1/04/21	NA	NA	NA	7.2
	TSS	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	47
20	Conductivity	µs/cm	In situ	Quarterly, Upon	1	24/03/21	1/04/21	NA	NA	NA	195
	TOC	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	13

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	1	24/03/21	1/04/21	NA	NA	NA	<5
	pH	pH	In situ		1	24/03/21	1/04/21	NA	NA	NA	7.2
	TSS	mg/L	Lab Analysis		1	24/03/21	1/04/21	NA	NA	NA	40
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	24/03/21	1/04/21	NA	NA	NA	55
	TOC	mg/L	Lab Analysis		0	24/03/21	1/04/21	NA	NA	NA	13
	Oil & Grease	mg/L	Lab Analysis		0	24/03/21	1/04/21	NA	NA	NA	<5
	pH	pH	In situ		0	24/03/21	1/04/21	NA	NA	NA	6.6
	TSS	mg/L	Lab Analysis		0	24/03/21	1/04/21	NA	NA	NA	142
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	26/03/21	1/04/21	NA	NA	NA	150
	TOC	mg/L	Lab Analysis		1	26/03/21	1/04/21	NA	NA	NA	15
	Oil & Grease	mg/L	Lab Analysis		1	26/03/21	1/04/21	NA	NA	NA	13
	pH	pH	In situ		1	26/03/21	1/04/21	NA	NA	NA	7.5
	TSS	mg/L	Lab Analysis		1	26/03/21	1/04/21	NA	NA	NA	28
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NR1).					
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRUS).					
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ		0	Namoi discharge point – Not constructed or currently utilised (NRDS).					

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TDS	mg/L	Lab Analysis	Upon Discharge (within 4 hrs)	0						
28	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	-	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	1	26/03/21	12/04/21	NA	NA	NA	10825
	pH	pH	In situ		1	26/03/21	12/04/21	NA	NA	NA	7.7
	SWL	mbtoc	In situ		1	26/03/21	12/04/21	NA	NA	NA	5.6
	Bicarbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	638
	Calcium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	56

*Bore was dry during scheduled sampling March 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Carbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	3110
	Magnesium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	129
	Potassium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	10
	Sodium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	2150
	Sulfate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	450
30	Conductivity	µs/cm	In situ	Quarterly	1	26/03/21	12/04/21	NA	NA	NA	19603
	pH	pH	In situ		1	26/03/21	12/04/21	NA	NA	NA	7.6
	SWL	mbtoc	In situ		1	26/03/21	12/04/21	NA	NA	NA	13.8
	Bicarbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	732
	Calcium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	173
	Carbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	6360
	Magnesium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	432
	Potassium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	17
	Sodium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	3670
	Sulfate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	1260

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
31	Conductivity	µs/cm	In situ	Quarterly	0	<i>Insufficient water to sample during scheduled sampling March 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	1	26/03/21	12/04/21	NA	NA	NA	2192
	pH	pH	In situ		1	26/03/21	12/04/21	NA	NA	NA	8.43
	SWL	mbtoc	In situ		1	26/03/21	12/04/21	NA	NA	NA	8.38
	Bicarbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	1020
	Calcium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	2
	Carbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	7
	Chloride	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	291

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Magnesium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	15
	Potassium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	2
	Sodium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	713
	Sulfate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	214
33	Conductivity	µs/cm	In situ	Quarterly	0	<i>Bore was dry during scheduled sampling March 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0	<i>Bore was dry during scheduled sampling March 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	1	26/03/21	12/04/21	NA	NA	NA	10556
	pH	pH	In situ		1	26/03/21	12/04/21	NA	NA	NA	7.1
	SWL	mbtoc	In situ		1	26/03/21	12/04/21	NA	NA	NA	18.8
	Bicarbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	5530
	Calcium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	73
	Carbonate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	1010
	Magnesium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	85
	Potassium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	64



EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	2790
	Sulfate	mg/L	Lab Analysis		1	26/03/21	12/04/21	NA	NA	NA	75

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during March 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during March 2021</i>					50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during March 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) <sup>2</sup> Leq 15min Day	Measured Levels – dB(A) <sup>2</sup> Leq 15min Evening	Measured Levels – dB(A) <sup>2</sup> Leq 15min Night	Measured Levels – dB(A) <sup>2</sup> LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant (Yes/No)	Date Obtained
N5 <sup>1</sup>	22/02/2021	I/A	I/A	I/A	I/A	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	Y/Y/N	Yes	11/03/21
	23/02/2021	I/A	I/A	N/M	N/M		Evening – 0.5 hrs	Y/N/N	Yes	11/03/21
	24/02/2021	N/M	I/A	I/A	I/A		Night – 1 hr	N/N/N	Yes	11/03/21
N6	22/02/2021	N/M	32	29	30	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/N	Yes	11/03/21
	23/02/2021	<28	N/M	I/A	I/A		Evening – 0.5 hrs	Y/N/N	Yes	11/03/21
	24/02/2021	I/A	I/A	I/A	I/A		Night – 1 hr	Y/N/N	Yes	11/03/21
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9 <sup>1</sup>	22/02/2021	N/M	N/M	27	30	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	Y/N/N	Yes	11/03/21
	23/02/2021	<25	I/A	I/A	I/A		Evening – 0.5 hrs	Y/N/N	Yes	11/03/21
	24/02/2021	N/M	I/A	I/A	I/A		Night – 1 hr	N/N/N	Yes	11/03/21

Note: Quarterly attended noise monitoring was completed during 22-24 February.

I/A = Inaudible, N/M = Not Measurable

Note1: Property is owned by Narrabri Coal Operations

Note 2: Noise levels presented are the highest measured noise level under standard weather conditions over the monitoring period.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** April 2021

**Obtained Date:** 6 May 2021

**Publication Date:** 7 May 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	12/04/21	6/05/21	NA	NA	NA	0.8
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during April 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during April 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during April 2021 (KC1US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow event and/or mine discharge occurred during April 2021 (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon	0	<i>No flow events and/or mine discharge occurred during April 2021 (KC2US)</i>					
	TOC	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during April 2021 (KC2DS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0						<i>Not currently constructed (SD7).</i>
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during April 2021 (KCUS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during April 2021 (KCDS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		0						
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during April 2021 (PCa)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during April 2021 (PC1)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NR1).
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRUS).
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRDS).
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during April 2021.</i>
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling during April 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during April 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during April 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during April 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
33	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during April 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling during April 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during April 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0						50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	

	pH	pH	In situ		0		6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during April 2021</i>	50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>	50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.	350	N/A	NR1
	pH	pH	In situ		0		6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during April 2021</i>	50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s) <sup>2, 4</sup>	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant <sup>1</sup> (Yes/No)	Date Obtained
N5	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

**Note:** Quarterly attended noise monitoring will be undertaken prior to the end of June 2021. There are no results available at the time of reporting.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** May 2021

**Obtained Date:** 08 June 2021

**Publication Date:** 17 June 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	12/05/21	8/06/21	NA	NA	NA	2.2
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during May 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during May 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during May 2021 (KC1US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow event and/or mine discharge occurred during May 2021 (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon	0	<i>No flow events and/or mine discharge occurred during May 2021 (KC2US)</i>					
	TOC	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during May 2021 (KC2DS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0						<i>Not currently constructed (SD7).</i>
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during May 2021 (KCUS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during May 2021 (KCDS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		0						
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during May 2021 (PCa)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during May 2021 (PC1)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NR1).
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRUS).
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRDS).
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during May 2021 .</i>
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling during May 2021 .*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during May 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during May 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during May 2021 .</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
33	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling during May 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling during May 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling during May 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during May 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	

	pH	pH	In situ		0		6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during May 2021</i>	50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>	50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.	350	N/A	NR1
	pH	pH	In situ		0		6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during May 2021</i>	50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s) <sup>2, 4</sup>	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant <sup>1</sup> (Yes/No)	Date Obtained
N5	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

**Note:** Quarterly attended noise monitoring will be undertaken prior to the end of June 2021. There are no results available at the time of reporting.

Figure 1 – EPL 12789 Monitoring Locations





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** June 2021

**Obtained Date:** 23 July 2021

**Publication Date:** 26 July 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND 3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	17/06/2021	12/07/2021	NA	NA	NA	0.8
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during June 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during June 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	125
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	9
	Oil & Grease	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.7
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	123
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow and/or mine discharge occurred during March 2021 flow event (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon	1	11/06/2021	23/06/2021	NA	NA	NA	85
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	9

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.6
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	58
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	95
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	8
	Oil & Grease	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.3
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	403
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7).</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	150
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	7
	Oil & Grease	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.5
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	78
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	115
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	8
	Oil & Grease	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.5

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	83
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	176
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	10
	Oil & Grease	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.76
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	39
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	11/06/2021	23/06/2021	NA	NA	NA	235
	TOC	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	8
	Oil & Grease	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	<5
	pH	pH	In situ		1	11/06/2021	23/06/2021	NA	NA	NA	7.4
	TSS	mg/L	Lab Analysis		1	11/06/2021	23/06/2021	NA	NA	NA	77
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NR1).					
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRUS).					
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRDS).					
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0	<i>Bore was dry during scheduled sampling June 2021.</i>					
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	1	20/06/2021	30/06/2021	NA	NA	NA	11200
	pH	pH	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	7.67
	SWL	mbtoc	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	5.43
	Bicarbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	780
	Calcium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	58
	Carbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	3510
	Magnesium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	144
	Potassium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	8

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	2380
	Sulfate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	514
30	Conductivity	µs/cm	In situ	Quarterly	1	20/06/2021	30/06/2021	NA	NA	NA	18900
	pH	pH	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	7.59
	SWL	mbtoc	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	13.7
	Bicarbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	833
	Calcium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	170
	Carbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	6380
	Magnesium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	444
	Potassium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	16
	Sodium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	3780
	Sulfate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	1300
31	Conductivity	µs/cm	In situ	Quarterly	1	20/06/2021	30/06/2021	NA	NA	NA	7330
	pH	pH	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	7.36
	SWL	mbtoc	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	17.04
	Bicarbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	930
	Calcium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	122

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Carbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	1790
	Magnesium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	210
	Potassium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	14
	Sodium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	1260
	Sulfate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	329
32	Conductivity	µs/cm	In situ	Quarterly	1	20/06/2021	30/06/2021	NA	NA	NA	2040
	pH	pH	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	8.53
	SWL	mbtoc	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	7.67
	Bicarbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	929
	Calcium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	<1
	Carbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	102
	Chloride	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	50
	Magnesium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	4
	Potassium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	<1
	Sodium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	523
	Sulfate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	83

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
33	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	1	20/06/2021	30/06/2021	NA	NA	NA	10800
	pH	pH	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	7.37
	SWL	mbtoc	In situ		1	20/06/2021	30/06/2021	NA	NA	NA	18.72
	Bicarbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	5600
	Calcium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	68
	Carbonate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	999
	Magnesium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	99
	Potassium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	64
	Sodium	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	3090
	Sulfate	mg/L	Lab Analysis		1	20/06/2021	30/06/2021	NA	NA	NA	78

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during June 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during June 2021</i>					50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during June 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) <sup>2</sup> Leq 15min Day	Measured Levels – dB(A) <sup>2</sup> Leq 15min Evening	Measured Levels – dB(A) <sup>2</sup> Leq 15min Night	Measured Levels – dB(A) <sup>2</sup> LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant (Yes/No)	Date Obtained
N5 <sup>1</sup>	21/06/2021	I/A	I/A	I/A	I/A	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/N	Yes	23/07/2021
	22/06/2021	I/A	26	22	24		Evening – 0.5 hrs	N/N/N	Yes	23/07/2021
	23/06/2021	N/M	<25	35	42		Night – 1 hr	Y/Y/N	Yes	23/07/2021
N6	21/06/2021	I/A	28	29	30	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/Y/Y	Yes	23/07/2021
	22/06/2021	I/A	I/A	22	24		Evening – 0.5 hrs	N/Y/Y	Yes	23/07/2021
	23/06/2021	I/A	I/A	I/A	I/A		Night – 1 hr	N/Y/Y	Yes	23/07/2021
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9 <sup>1</sup>	21/06/2021	I/A	27	I/A	I/A	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/N	Yes	23/07/2021
	22/06/2021	I/A	I/A	I/A	I/A		Evening – 0.5 hrs	N/Y/Y	Yes	23/07/2021
	23/06/2021	I/A	I/A	I/A	I/A		Night – 1 hr	Y/Y/Y	Yes	23/07/2021

Note: Quarterly attended noise monitoring was completed during 21-23 June 2021

I/A = Inaudible, N/M = Not Measurable

Note1: Property is owned by Narrabri Coal Operations

Note 2: Noise levels presented are the highest measured noise level under standard weather conditions over the monitoring period.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** July 2021

**Obtained Date:** 29 July 2021

**Publication Date:** 3 September 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND 3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	13/07/2021	29/07/2021	NA	NA	NA	2.2
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during July 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during July 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	54
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	17
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.16
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	1030
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	74
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	21
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.4
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	251
16	Conductivity	µs/cm	In situ	Quarterly, Upon	1	9/07/2021	26/07/2021	NA	NA	NA	35
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	18

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.11
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	50
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	52
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	18
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.12
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	42
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7)</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	35
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	17
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.24
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	620
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	9.90
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	18
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.43

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	512
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	171
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	16
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.16
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	109
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/07/2021	26/07/2021	NA	NA	NA	64
	TOC	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	16
	Oil & Grease	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	<5
	pH	pH	In situ		1	9/07/2021	26/07/2021	NA	NA	NA	7.41
	TSS	mg/L	Lab Analysis		1	9/07/2021	26/07/2021	NA	NA	NA	29
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NR1).					
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRUS).					
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRDS).					
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling July 2021.</i>					
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling July 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling July 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling July 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

*Not scheduled for sampling July 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
33	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

*Not scheduled for sampling July 2021.*

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during July 2021</i>				50	N/A	SD4	
	Oil & Grease	mg/L	Lab Analysis		0					10	N/A		
	pH	pH	In situ		0					6.5-8.5	N/A		
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during July 2021</i>				50	N/A	SD2	
	Oil & Grease	mg/L	Lab Analysis		0					10	N/A		
	pH	pH	In situ		0					6.5-8.5	N/A		
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>				50	N/A	SD7	
	Oil & Grease	mg/L	Lab Analysis		0					10	N/A		
	pH	pH	In situ		0					6.5-8.5	N/A		
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.				350	N/A	NR1	
	pH	pH	In situ		0					6.5-8.5	N/A		
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during July 2021</i>				50	N/A	SD8	
	Oil & Grease	mg/L	Lab Analysis		0					10	N/A		
	pH	pH	In situ		0					6.5-8.5	N/A		

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) <sup>2</sup> Leq 15min Day	Measured Levels – dB(A) <sup>2</sup> Leq 15min Evening	Measured Levels – dB(A) <sup>2</sup> Leq 15min Night	Measured Levels – dB(A) <sup>2</sup> LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant (Yes/No)	Date Obtained
N5 <sup>1</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9 <sup>1</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

Note: Quarterly attended noise monitoring is required prior to the end of September. There are no results available at the time of reporting.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** August 2021

**Obtained Date:** 27 August 2021

**Publication Date:** 3 September 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND 3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	12/08/2021	27/08/2021	NA	NA	NA	2.5
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during August 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during August 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during August 2021 (KC1US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during August 2021 (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon	0	<i>No flow events and/or mine discharge occurred during August 2021 (KC2US)</i>					
	TOC	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during August 2021 (KC2DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7)</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during August 2021 (KCUS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during August 2021 (KCDS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		0						
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during August 2021 (PCa)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during August 2021 (PC1)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NR1).
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRUS).
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRDS).
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling August 2021.</i>
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling August 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling August 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling August 2021</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

*Not scheduled for sampling August 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
33	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
<i>Not scheduled for sampling August 2021.</i>											

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during August 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during August 2021</i>					50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during August 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) <sup>2</sup> Leq 15min Day	Measured Levels – dB(A) <sup>2</sup> Leq 15min Evening	Measured Levels – dB(A) <sup>2</sup> Leq 15min Night	Measured Levels – dB(A) <sup>2</sup> LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant (Yes/No)	Date Obtained
N5 <sup>1</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8	<i>Monitoring at N8 to commence when surface activities approach the eastern end of the southern long wall panels. Not currently required.</i>									
N9 <sup>1</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

Note: Quarterly attended noise monitoring is required prior to the end of September. There are no results available at the time of reporting.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** September 2021

**Obtained Date:** 14 October 2021

**Publication Date:** 18 October 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	14/09/21	30/09/21	NA	NA	NA	1.3
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during September 2021 (SD4).</i>					
	TOC	mg/L	Lab Analysis								
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	0	<i>No discharge occurred during September 2021 (SD2).</i>					
	TOC	mg/L	Lab Analysis		0						
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow events and/or mine discharge occurred during September 2021 (KC1US)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0	<i>No flow event and/or mine discharge occurred during September 2021 (KC1DS)</i>					
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
16	Conductivity	µs/cm	In situ	Quarterly, Upon	0	<i>No flow events and/or mine discharge occurred during September 2021 (KC2US)</i>					
	TOC	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during September 2021 (KC2DS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0						<i>Not currently constructed (SD7).</i>
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during September 2021 (KCUS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
20	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during September 2021 (KCDS)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TSS	mg/L	Lab Analysis		0						
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during September 2021 (PCa)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No flow events and/or mine discharge occurred during September 2021 (PC1)</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NR1).
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRUS).
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRDS).
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0						<i>Bore was dry during scheduled sampling.</i>
	pH	pH	In situ		0						
	SWL	-	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	1	6/10/2021	14/10/2021	NA	NA	NA	12100
	pH	pH	In situ		1	6/10/2021	14/10/2021	NA	NA	NA	7.98
	SWL	mbtoc	In situ		1	6/10/2021	14/10/2021	NA	NA	NA	5.17
	Bicarbonate	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	728
	Calcium	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	64
	Carbonate	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	3540
	Magnesium	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	131
	Potassium	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	9

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	2130
	Sulfate	mg/L	Lab Analysis		1	6/10/2021	14/10/2021	NA	NA	NA	507
30	Conductivity	µs/cm	In situ	Quarterly	1	5/10/2021	14/10/2021	NA	NA	NA	19600
	pH	pH	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	7.67
	SWL	mbtoc	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	13.52
	Bicarbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	811
	Calcium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	170
	Carbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	6040
	Magnesium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	438
	Potassium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	17
	Sodium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	3380
	Sulfate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	1260
31	Conductivity	µs/cm	In situ	Quarterly	1	5/10/2021	14/10/2021	NA	NA	NA	7380
	pH	pH	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	7.76
	SWL	mbtoc	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	16.99
	Bicarbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	879
	Calcium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	90
	Carbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	<1

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	1820
	Magnesium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	148
	Potassium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	12
	Sodium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	1120
	Sulfate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	324
32	Conductivity	µs/cm	In situ	Quarterly	1	5/10/2021	14/10/2021	NA	NA	NA	2000
	pH	pH	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	8.54
	SWL	mbtoc	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	7.88
	Bicarbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	954
	Calcium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	1
	Carbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	67
	Chloride	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	40
	Magnesium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	4
	Potassium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	<1
	Sodium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	449
	Sulfate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	67
33	Conductivity	µs/cm	In situ	Quarterly	0	<i>Bore was dry during scheduled sampling.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0						<i>Bore was dry during scheduled sampling.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	1	5/10/2021	14/10/2021	NA	NA	NA	11100
	pH	pH	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	7.19
	SWL	mbtoc	In situ		1	5/10/2021	14/10/2021	NA	NA	NA	18.56
	Bicarbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	5080
	Calcium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	66
	Carbonate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	<1
	Chloride	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	1030
	Magnesium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	79
	Potassium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	59
	Sodium	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	2670
	Sulfate	mg/L	Lab Analysis		1	5/10/2021	14/10/2021	NA	NA	NA	83

\*Note: Access was not available to EPL points 29-32 & 35 in September due to wet weather

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during September 2021</i>					50	N/A	SD4
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

13	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during September 2021</i>	50	N/A	SD2
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>	50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	Namoi discharge point – Not constructed or currently utilised.	350	N/A	NR1
	pH	pH	In situ		0		6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during September 2021</i>	50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0		10	N/A	
	pH	pH	In situ		0		6.5-8.5	N/A	

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions <sup>2</sup> (D/E/N)	Compliant (Yes/No)	Date Obtained
N5 <sup>1</sup>	20/09/2021 <sup>3</sup>	I/A	25	I/A	I/A	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/Y	Yes	08/10/2021
	21/09/2021 <sup>3</sup>	I/A	I/A	I/A	I/A		Evening – 0.5 hrs	Y/N/Y	Yes	08/10/2021
	22/09/2021 <sup>3</sup>	31	I/A	I/A	I/A		Night – 1 hr	Y/Y/N	Yes	08/10/2021
N6	20/09/2021 <sup>3</sup>	I/A	28	30	34	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/Y	Yes	08/10/2021
	21/09/2021 <sup>3</sup>	28	33	34	40		Evening – 0.5 hrs	Y/N/Y	Yes	08/10/2021
	22/09/2021 <sup>3</sup>	27	23	31	34		Night – 1 hr	Y/N/Y	Yes	08/10/2021
N8 <sup>1,4</sup>	20/09/2021 <sup>3</sup>	I/A	24	I/A	I/A	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/N	Yes	08/10/2021
	21/09/2021 <sup>3</sup>	I/A	I/A	I/A	I/A		Evening – 0.5 hrs	N/Y/Y	Yes	08/10/2021
	22/09/2021 <sup>3</sup>	I/A	I/A	25	27		Night – 1 hr	Y/Y/N	Yes	08/10/2021
N9 <sup>1</sup>	20/09/2021	I/A	31	<25	25	<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs	N/N/N	Yes	08/10/2021
	21/09/2021	I/A	I/A	33	39		Evening – 0.5 hrs	N/Y/Y	Yes	08/10/2021
	22/09/2021	I/A	30	I/A	I/A		Night – 1 hr	Y/N/Y	Yes	08/10/2021

I/A = Inaudible, N/M = Not Measurable

Note 1: Property is owned by Narrabri Coal Operations

Note 2: Noise levels presented are the highest measured noise level under standard weather conditions over the monitoring period.

Note 3: Evening and Night monitoring conducted on this date, Day monitoring conducted during the following day period.

Note 4: Due to an error, only one 15-minute measurement was able to be undertaken during the daytime monitoring on 22 September.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** November 2021

**Obtained Date:** 2 December 2021

**Publication Date:** 16 December 2021

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	10/11/2021	30/11/2021	NA	NA	NA	0.4
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	1	24/11/2021	1/12/2021	-	-	-	747
	TOC	mg/L	Lab Analysis		1		1/12/2021	-	-	-	10
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	3	10/11/2021	1/12/2021	344	451	501	508
	TOC	mg/L	Lab Analysis		3	15/11/2021 22/11/2021	1/12/2021	9	11	11	13
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	10/11/2021* 15/11/2021* 22/11/2021 24/11/2021	2/12/2021	98	123	-	148
	TOC	mg/L	Lab Analysis		2		2/12/2021	17	17.5	-	18
	Oil & Grease	mg/L	Lab Analysis		2		2/12/2021	<5	<5	-	<5
	pH	pH	In situ		2		2/12/2021	7.63	7.74	-	7.84
	TSS	mg/L	Lab Analysis		2		2/12/2021	24	45.5	-	67
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	3	10/11/2021* 15/11/2021 22/11/2021 24/11/2021	2/12/2021	136	288.7	350	380
	TOC	mg/L	Lab Analysis		3		2/12/2021	18	19	19	20
	Oil & Grease	mg/L	Lab Analysis		3		2/12/2021	<5	<5	<5	<5
	pH	pH	In situ		3		2/12/2021	7.6	7.81	7.91	7.92
	TSS	mg/L	Lab Analysis		3		2/12/2021	22	41.67	26	77
16	Conductivity	µs/cm	In situ		1	10/11/2021*	1/12/2021	-	-	-	62

\* No flow recorded at sample site

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TOC	mg/L	Lab Analysis	Quarterly, Upon discharge & Flow Event	1	15/11/2021* 22/11/2021 24/11/2021*	1/12/2021	-	-	-	20
	Oil & Grease	mg/L	Lab Analysis		1		1/12/2021	-	-	-	<5
	pH	pH	In situ		1		1/12/2021	-	-	-	7.22
	TSS	mg/L	Lab Analysis		1		1/12/2021	-	-	-	24
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	3	10/11/2021* 15/11/2021 22/11/2021 24/11/2021	2/12/2021	101	280	204	535
	TOC	mg/L	Lab Analysis		3		2/12/2021	11	15.7	17	19
	Oil & Grease	mg/L	Lab Analysis		3		2/12/2021	<5	<5	<5	<5
	pH	pH	In situ		3		2/12/2021	7.4	7.62	7.51	7.94
	TSS	mg/L	Lab Analysis		3		2/12/2021	16	19.67	21	22
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7).</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	3	10/11/2021* 15/11/2021 22/11/2021 24/11/2021	2/12/2021	154	449	517	622
	TOC	mg/L	Lab Analysis		3		2/12/2021	6	13	13	20
	Oil & Grease	mg/L	Lab Analysis		3		2/12/2021	<5	<5	<5	<5
	pH	pH	In situ		3		2/12/2021	7.4	7.71	7.8	7.93
	TSS	mg/L	Lab Analysis		3		2/12/2021	<5	35	<5	96
20	Conductivity	µs/cm	In situ		1	10/11/2021*	2/12/2021	-	-	-	120

\* No flow recorded at sample site

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	TOC	mg/L	Lab Analysis	Quarterly, Upon discharge & Flow Event	1	15/11/2021* 22/11/2021 24/11/2021*	2/12/2021	-	-	-	19
	Oil & Grease	mg/L	Lab Analysis		1		2/12/2021	-	-	-	<5
	pH	pH	In situ		1		2/12/2021	-	-	-	7.44
	TSS	mg/L	Lab Analysis		1		2/12/2021	-	-	-	48
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	0						<i>No ambient flow occurred during November 2021</i>
	TOC	mg/L	Lab Analysis		0						
	Oil & Grease	mg/L	Lab Analysis		0						
	pH	pH	In situ		0						
	TSS	mg/L	Lab Analysis		0						
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	3	10/11/2021* 15/11/2021 22/11/2021 24/11/2021	2/12/2021	118	145.3	153	165
	TOC	mg/L	Lab Analysis		3		2/12/2021	12	16	18	18
	Oil & Grease	mg/L	Lab Analysis		3		2/12/2021	<5	<5	<5	<5
	pH	pH	In situ		3		2/12/2021	7.37	7.56	7.57	7.75
	TSS	mg/L	Lab Analysis		3		2/12/2021	19	58.67	77	80
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NR1).
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0						Namoi discharge point – Not constructed or currently utilised (NRUS).
	TDS	mg/L	Lab Analysis		0						

\* No Flow recorded at sample site

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRDS).					
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling in November 2021.</i>					
	pH	pH	In situ		0						
	SWL	-	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling in November 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
30	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling in November 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
31	Conductivity	µs/cm	In situ	Quarterly	0						<i>Not scheduled for sampling in November 2021.</i>
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
32	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						

*Not scheduled for sampling in November 2021.*

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
33	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling in November 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
34	Conductivity	µs/cm	In situ	Quarterly	0	<i>Not scheduled for sampling in November 2021.</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
35	Conductivity	µs/cm	In situ	Quarterly	0						
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						

*Not scheduled for sampling in November 2021.*

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	1	24/11/2021	1/12/2021	-	-	46	50	No	SD4
	Oil & Grease	mg/L	Lab Analysis		1		1/12/2021	-	-	<5	10	No	
	pH	pH	In situ		1		1/12/2021	-	-	8.28	6.5-8.5	No	
13	TSS	mg/L	Lab Analysis	Upon discharge	3	10/11/2021 15/11/2021 22/11/2021	1/12/2021	6	39	70 <sup>a</sup>	50	No	SD2
	Oil & Grease	mg/L	Lab Analysis		3		1/12/2021	<5	<5	<5	10	No	
	pH	pH	In situ		3		1/12/2021	7.95	8.04	8.13	6.5-8.5	No	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	<i>Namoi discharge point – Not constructed or currently utilised.</i>					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during November 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

<sup>a</sup> EPL limit does not apply as 5 day consecutive rainfall exceeded 38.4 mm

**Table 3 – Quarterly Attended Noise Monitoring results summary table**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions <sup>2</sup> (D/E/N)	Compliant (Yes/No)	Date Obtained
N5 <sup>1</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8 <sup>1,4</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N9 <sup>1</sup>	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

Note: Quarterly attended noise monitoring is required prior to the end of December. There are no results available at the time of reporting.

**Figure 1 – EPL 12789 Monitoring Locations**





## NARRABRI MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 12789

**EPA Website Link:** <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=106922&SYSUID=1&LICID=12789>

**Licensee:** Narrabri Coal Operations Pty Ltd

**Licensee Address:** Narrabri Mine, 10 Kurrajong Creek Road, BAAN BAA NSW 2390

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** December 2021

**Obtained Date:** 14 January 2022

**Publication Date:** 20/01/2022

**Table 1 – No Pollutant Limits Apply**

EPL	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Dates Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
ND3	Deposited Matter	g/m <sup>2</sup> /month	Lab Analysis	Once a month (min. 4 weeks)	1	14/12/2021	4/01/2022	NA	NA	NA	0.9
11	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	1	9/12/2021	15/12/2021	NA	NA	NA	870
	TOC	mg/L	Lab Analysis		1			NA	NA	NA	10
13	Conductivity	µs/cm	In situ	Upon discharge (within 12 hours)	1	10/12/2021	21/12/2021	NA	NA	NA	601
	TOC	mg/L	Lab Analysis		1			NA	NA	NA	13
14	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	9/12/2021 10/12/2021	24/12/2021	106	113	-	120
	TOC	mg/L	Lab Analysis		2			10	10.5	-	11
	Oil & Grease	mg/L	Lab Analysis		2			<5	<5	-	<5
	pH	pH	In situ		2			7.68	7.71	-	7.73
	TSS	mg/L	Lab Analysis		2			38	43.5	-	49
15	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	9/12/2021 10/12/2021	24/12/2021	236	465	-	694
	TOC	mg/L	Lab Analysis		2			13	15.5	-	18
	Oil & Grease	mg/L	Lab Analysis		2			<5	<5	-	<5
	pH	pH	In situ		2			8.04	8.15	-	8.25
	TSS	mg/L	Lab Analysis		2			101	130.5	-	160

16	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	1	9/12/2021 10/12/2021 <sup>1</sup>	21/12/2021	-	-	-	49
	TOC	mg/L	Lab Analysis		1			-	-	-	14
	Oil & Grease	mg/L	Lab Analysis		1			-	-	-	<5
	pH	pH	In situ		1			-	-	-	7.01
	TSS	mg/L	Lab Analysis		1			-	-	-	20
17	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	9/12/2021 10/12/2021	24/12/2021	104	125.5	-	147
	TOC	mg/L	Lab Analysis		2			12	14	-	16
	Oil & Grease	mg/L	Lab Analysis		2			<5	<5	-	<5
	pH	pH	In situ		2			7.42	7.53	-	7.64
	TSS	mg/L	Lab Analysis		2			22	24	-	26
18	Conductivity	µs/cm	In Situ	Upon discharge (within 12 hours)	0	<i>Not currently constructed (SD7).</i>					
	TOC	mg/L	Lab Analysis		0						
19	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	9/12/2021 10/12/2021	24/12/202	211	341	-	471
	TOC	mg/L	Lab Analysis		2			11	13	-	15
	Oil & Grease	mg/L	Lab Analysis		2			<5	<5	-	<5
	pH	pH	In situ		2			7.42	7.58	-	7.74
	TSS	mg/L	Lab Analysis		2			15	34.5	-	54
20	Conductivity	µs/cm	In situ	Quarterly, Upon	1	9/12/2021 10/12/2021*	21/12/2021	-	-	-	130
	TOC	mg/L	Lab Analysis		1			-	-	-	13

<sup>1</sup> No flow recorded at sample site

	Oil & Grease	mg/L	Lab Analysis	discharge & Flow Event	1			-	-	-	<5
	pH	pH	In situ		1			-	-	-	7.41
	TSS	mg/L	Lab Analysis		1			-	-	-	36
21	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	9/12/2021 10/12/2021	24/12/2021	99	172.2	172.2	246
	TOC	mg/L	Lab Analysis		2			18	21.5	21.5	25
	Oil & Grease	mg/L	Lab Analysis		2			<5	<5	<5	<5
	pH	pH	In situ		2			7.48	7.5	7.5	7.51
	TSS	mg/L	Lab Analysis		2			58	65.5	65.5	73
22	Conductivity	µs/cm	In situ	Quarterly, Upon discharge & Flow Event	2	9/12/2021 10/12/2021	24/12/2021	117	126	126	135
	TOC	mg/L	Lab Analysis		2			11	12.5	12.5	14
	Oil & Grease	mg/L	Lab Analysis		2			<5	<5	<5	<5
	pH	pH	In situ		2			7.42	7.64	7.64	7.85
	TSS	mg/L	Lab Analysis		2			87	68.5	68.5	87
24	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NR1).					
	TDS	mg/L	Lab Analysis		0						
25	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRUS).					
	TDS	mg/L	Lab Analysis		0						
26	pH	pH	In situ	Upon Discharge (within 4 hrs)	0	Namoi discharge point – Not constructed or currently utilised (NRDS).					
	TDS	mg/L	Lab Analysis		0						
28	Conductivity	µs/cm	In situ	Quarterly	0	<i>Bore was dry during scheduled sampling</i>					
	pH	pH	In situ		0						
	SWL	-	In situ		0						

	Bicarbonate	mg/L	Lab Analysis		0						
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						
	Magnesium	mg/L	Lab Analysis		0						
	Potassium	mg/L	Lab Analysis		0						
	Sodium	mg/L	Lab Analysis		0						
	Sulfate	mg/L	Lab Analysis		0						
29	Conductivity	µs/cm	In situ	Quarterly	1	11/01/2022	18/01/2022	-	-	-	16505
	pH	pH	In situ		1			-	-	-	7.4
	SWL	mbtoc	In situ		1			-	-	-	4.99
	Bicarbonate	mg/L	Lab Analysis		1			-	-	-	606
	Calcium	mg/L	Lab Analysis		1			-	-	-	88
	Carbonate	mg/L	Lab Analysis		1			-	-	-	<1
	Chloride	mg/L	Lab Analysis		1			-	-	-	5400
	Magnesium	mg/L	Lab Analysis		1			-	-	-	231
	Potassium	mg/L	Lab Analysis		1			-	-	-	6
	Sodium	mg/L	Lab Analysis		1			-	-	-	2670
	Sulfate	mg/L	Lab Analysis		1			-	-	-	666

30	Conductivity	µs/cm	In situ	Quarterly	0	11/01/2022	18/01/2022	-	-	-	19590
	pH	pH	In situ		0			-	-	-	7.05
	SWL	mbtoc	In situ		0			-	-	-	13.40
	Bicarbonate	mg/L	Lab Analysis		0			-	-	-	867
	Calcium	mg/L	Lab Analysis		0			-	-	-	162
	Carbonate	mg/L	Lab Analysis		0			-	-	-	<1
	Chloride	mg/L	Lab Analysis		0			-	-	-	6540
	Magnesium	mg/L	Lab Analysis		0			-	-	-	436
	Potassium	mg/L	Lab Analysis		0			-	-	-	19
	Sodium	mg/L	Lab Analysis		0			-	-	-	3720
Sulfate	mg/L	Lab Analysis	0	-	-	-	1300				
31	Conductivity	µs/cm	In situ	Quarterly	1	04/01/2022	14/01/2022	-	-	-	7080
	pH	pH	In situ		1			-	-	-	7.29
	SWL	mbtoc	In situ		1			-	-	-	15.71
	Bicarbonate	mg/L	Lab Analysis		1			-	-	-	698
	Calcium	mg/L	Lab Analysis		1			-	-	-	81
	Carbonate	mg/L	Lab Analysis		1			-	-	-	<1
	Chloride	mg/L	Lab Analysis		1			-	-	-	1720
	Magnesium	mg/L	Lab Analysis		1			-	-	-	150
	Potassium	mg/L	Lab Analysis		1			-	-	-	12

	Sodium	mg/L	Lab Analysis		1			-	-	-	1100
	Sulfate	mg/L	Lab Analysis		1			-	-	-	309
32	Conductivity	µs/cm	In situ	Quarterly	1	04/01/2022	14/01/2022	-	-	-	2459
	pH	pH	In situ		1			-	-	-	8.33
	SWL	mbtoc	In situ		1			-	-	-	26.4
	Bicarbonate	mg/L	Lab Analysis		1			-	-	-	779
	Calcium	mg/L	Lab Analysis		1			-	-	-	1
	Carbonate	mg/L	Lab Analysis		1			-	-	-	131
	Chloride	mg/L	Lab Analysis		1			-	-	-	182
	Magnesium	mg/L	Lab Analysis		1			-	-	-	10
	Potassium	mg/L	Lab Analysis		1			-	-	-	1
	Sodium	mg/L	Lab Analysis		1			-	-	-	554
	Sulfate	mg/L	Lab Analysis		1			-	-	-	132
33	Conductivity	µs/cm	In situ	Quarterly	0	<i>Bore was dry during scheduled sampling</i>					
	pH	pH	In situ		0						
	SWL	mbtoc	In situ		0						
	Bicarbonate	mg/L	Lab Analysis								
	Calcium	mg/L	Lab Analysis		0						
	Carbonate	mg/L	Lab Analysis		0						
	Chloride	mg/L	Lab Analysis		0						

	Magnesium	mg/L	Lab Analysis		0	<i>Bore was dry during scheduled sampling</i>									
	Potassium	mg/L	Lab Analysis		0										
	Sodium	mg/L	Lab Analysis		0										
	Sulfate	mg/L	Lab Analysis		0										
34	Conductivity	µs/cm	In situ	Quarterly	0						<i>Bore was dry during scheduled sampling</i>				
	pH	pH	In situ		0										
	SWL	mbtoc	In situ		0										
	Bicarbonate	mg/L	Lab Analysis		0										
	Calcium	mg/L	Lab Analysis		0										
	Carbonate	mg/L	Lab Analysis		0										
	Chloride	mg/L	Lab Analysis		0										
	Magnesium	mg/L	Lab Analysis		0										
	Potassium	mg/L	Lab Analysis		0										
	Sodium	mg/L	Lab Analysis		0										
Sulfate	mg/L	Lab Analysis	0												
35	Conductivity	µs/cm	In situ	Quarterly	1	04/01/2022	14/01/2022	-	-	-					
	pH	pH	In situ		1			-	-	-	7.16				
	SWL	mbtoc	In situ		1			-	-	-	18.45				
	Bicarbonate	mg/L	Lab Analysis		1			-	-	-	4510				
	Calcium	mg/L	Lab Analysis		1			-	-	-	50				



	Carbonate	mg/L	Lab Analysis		1			-	-	-	<1
	Chloride	mg/L	Lab Analysis		1			-	-	-	1170
	Magnesium	mg/L	Lab Analysis		1			-	-	-	80
	Potassium	mg/L	Lab Analysis		1			-	-	-	70
	Sodium	mg/L	Lab Analysis		1			-	-	-	2860
	Sulfate	mg/L	Lab Analysis		1			-	-	-	90

**Table 2 - Pollutant Limits Apply (Water)**

EPL ID	Pollutant	Units of Measure	Sample Method	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Max Value	EPL Limit	Exceedance (Yes/No)	Comments (Mine Site Sample ID)
11	TSS	mg/L	Lab Analysis	Upon discharge	1	9/12/2021	15/12/2021	-	-	56 <sup>a</sup>	50	No	SD4
	Oil & Grease	mg/L	Lab Analysis		1			-	-	<5	10	No	
	pH	pH	In situ		1			-	-	8.08	6.5-8.5	No	
13	TSS	mg/L	Lab Analysis	Upon discharge	1	10/12/2021	21/12/2021	-	-	80 <sup>a</sup>	50	No	SD2
	Oil & Grease	mg/L	Lab Analysis		1			-	-	<5	10	No	
	pH	pH	In situ		1			-	-	7.78	6.5-8.5	No	
18	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>Not currently constructed.</i>					50	N/A	SD7
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	
24	TDS	mg/L	Lab Analysis	Upon discharge	0	<i>Namoi discharge point – Not constructed or currently utilised.</i>					350	N/A	NR1
	pH	pH	In situ		0						6.5-8.5	N/A	
27	TSS	mg/L	Lab Analysis	Upon discharge	0	<i>No discharge occurred during November 2021</i>					50	N/A	SD8
	Oil & Grease	mg/L	Lab Analysis		0						10	N/A	
	pH	pH	In situ		0						6.5-8.5	N/A	

<sup>a</sup> EPL limit does not apply as 5 day consecutive rainfall exceeded 38.4 mm

**Table 3 – Quarterly Attended Noise Monitoring results summary table <sup>a</sup>**

EPL ID	Date	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA1 (1 min) Night	Limit(s)	Measurement Periods	Weather Compliant Conditions (D/E/N)	Compliant (Yes/No)	Date Obtained
N5	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N6	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N8	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			
N9	-					<u>Day, Evening &amp; Night:</u> 35 <u>Night</u> <u>LA1 (1 min):</u> 45	Day – 1.5 hrs			
	-						Evening – 0.5 hrs			
	-						Night – 1 hr			

<sup>a</sup> Noise monitoring for December 2021 completed but results have not been received. These results will be published in the January 2022 EPL report.

**Figure 1 – EPL 12789 Monitoring Locations**

