

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: January 2014

Publication Date: 25th February 2014 (re-published 29th July 2014)

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/01/2014	20/01/2014	-	-	-	0.3
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/01/2014	20/01/2014	-	-	-	0.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/01/2014	20/01/2014	-	-	-	16.8
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/02/2014	7.4	15.1	17.2	21.4
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

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Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
16	Aluminum	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L		0	-	-	-	-	-	-
	Bicarbonate	mg/L		0	-	-	-	-	-	-
	Chloride	mg/L		0	-	-	-	-	-	-
	Iron	mg/L		0	-	-	-	-	-	-
	Manganese	mg/L		0	-	-	-	-	-	-
	Sodium	mg/L		0	-	-	-	-	-	-
16	Conductivity	μS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TOC	mg/L		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

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Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) L _{eq} 15min Day	Measured Levels – dB(A) L _{eq} 15min Evening	Measured Levels – dB(A) L _{eq} 15min Night	Measured Levels – dB(A) L _A 1min Night	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			No monitoring this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			

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Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	1	-	100.9	120	No
	Blast Vibration	mm/s	Every Blast	1	-	0.22	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	100.1	120	No
	Blast Vibration	mm/s	Every Blast	1	-	0.49	10	No



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Figure 1 – EPL 12870 Monitoring Locations

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: February 2014

Publication Date: 14th March 2014 (re-published 29th July 2014)

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	13/2/2014	19/2/2014	-	-	-	0.1
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	13/2/2014	19/2/2014	-	-	-	0.1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	13/2/2014	19/2/2014	-	-	-	0.7
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/03/2014	14.8	21.7	22.0	30.3
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	



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Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L		0	-	-	-	-	-	-
	Bicarbonate	mg/L		0	-	-	-	-	-	-
	Chloride	mg/L		0	-	-	-	-	-	-
	Iron	mg/L		0	-	-	-	-	-	-
	Manganese	mg/L		0	-	-	-	-	-	-
	Sodium	mg/L		0	-	-	-	-	-	-
16	Conductivity	µS/cm	Quarterly	1	5/2/2014	14/2/2014	-	-	-	2450
	Oil & Grease	mg/L		1	5/2/2014	14/2/2014	-	-	-	<5
	pH	pH		1	5/2/2014	14/2/2014	-	-	-	9.80
	TOC	mg/L		1	5/2/2014	14/2/2014	-	-	-	3
	TSS	mg/L		1	5/2/2014	14/2/2014	-	-	-	13

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Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) L _{eq} 15min Day	Measured Levels – dB(A) L _{eq} 15min Evening	Measured Levels – dB(A) L _{eq} 15min Night	Measured Levels – dB(A) L _A 1min Night	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			No monitoring this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	0	-	-	-	No
	Blast Vibration	mm/s	Every Blast	0	-	-	-	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	0	-	-	-	No
	Blast Vibration	mm/s	Every Blast	0	-	-	-	No



WHITEHAVEN COAL

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Figure 1 – EPL 12870 Monitoring Locations

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: March 2014

Publication Date: 23rd April 2014 (re-published 29th July 2014)

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/3/2014	25/3/2014	-	-	-	0.8
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/3/2014	25/3/2014	-	-	-	<1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/3/2014	25/3/2014	-	-	-	0.8
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/04/2014	5.1	9.0	9.2	13.7
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	1	28/3/2014	8/4/2014	-	-	-	357
	Total organic carbon	mg/L		1	28/3/2014	8/4/2014	-	-	-	<1
13	TSS	mg/L	Special Frequency 2**	2	Various	Various	19	43	43	67
	Conductivity	µS /cm		2	Various	Various	40	49.5	49.5	59
	Oil & Grease	mg/L		2	Various	Various	<5	<5	<5	<5
	pH	pH		2	Various	Various	7.01	7.11	7.11	7.21
	Total organic carbon	mg/L		2	Various	Various	7	8	8	9

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	1	27/3/2014	4/4/2014	-	-	-	67
	Conductivity	µS /cm		1	27/3/2014	4/4/2014	-	-	-	66
	Oil & Grease	mg/L		1	27/3/2014	4/4/2014	-	-	-	<5
	pH	pH		1	27/3/2014	4/4/2014	-	-	-	7.40
	Total organic carbon	mg/L		1	27/3/2014	4/4/2014	-	-	-	8
15	TSS	mg/L	Special Frequency 2**	2	Various	Various	32	36.5	36.5	41
	Conductivity	µS /cm		2	Various	Various	180	199.5	199.5	219
	Oil & Grease	mg/L		2	Various	Various	<5	0	0	5
	pH	pH		2	Various	Various	7.77	7.81	7.81	7.85
	Total organic carbon	mg/L		2	Various	Various	14	14	14	14

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	1	28/3/2014	8/4/2014	1660	1660	50	No	Exceeded 38.4mm of rainfall
	Oil & Grease	mg/L		1	28/3/2014	8/4/2014	<5	<5	10	No	
	pH	pH		1	28/3/2014	8/4/2014	8.2	8.2	6.5 - 8.5	No	

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L		0	-	-	-	-	-	-
	Bicarbonate	mg/L		0	-	-	-	-	-	-
	Chloride	mg/L		0	-	-	-	-	-	-
	Iron	mg/L		0	-	-	-	-	-	-
	Manganese	mg/L		0	-	-	-	-	-	-
	Sodium	mg/L		0	-	-	-	-	-	-
16	Conductivity	µS /cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TOC	mg/L		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) L _{eq} 15min Day	Measured Levels – dB(A) L _{eq} 15min Evening	Measured Levels – dB(A) L _{eq} 15min Night	Measured Levels – dB(A) L _A 1min Night	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1	11/03/2014	2:18 pm	90 mins	17				35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night	2.0 / E	Y	
		8:30 pm	30 mins		Inaudible				2.9 / E	Y	
		10:00 pm	60 mins			Inaudible			4.4 / E	Y	
		10:00 pm	60 mins				na		4.4 / E	Y	
	12/03/2014	9:55 am	90 mins	18					0.9 / SW	Y	
		8:30 pm	30 mins		20				08 / SE	Y	
		10:00 pm	60 mins			20			4.9 / ESE	Y	
		10:00 pm	60 mins				25		4.9 / ESE	Y	
	13/03/2014	7:00 am	90 mins	Inaudible					1.4 / E	Y	
		8:29 pm	30 mins		Inaudible				6.3 / ESE	Y	
		10:00 pm	60 mins			Inaudible			0.4 / E	Y	
		10:00 pm	60 mins				na		0.4 / E	Y	
N2	11/03/2014	4:01 pm	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night	3.0 / SE	Y	
		9:13 pm	30 mins		Inaudible				4.7 / E	Y	
		11:13 pm	60 mins			23			4.2 / E	Y	
		11:13 pm	60 mins				28		4.2 / E	Y	
	12/03/2014	8:09 am	90 mins	Inaudible					0.2 / NNE	Y	
		9:16 pm	30 mins		Inaudible				0.4 / SE	Y	
		11:12 pm	60 mins			20			5.1 / E	Y	
		11:12:pm	60 mins				26		5.1 / E	Y	
	13/03/2014	7:00 am	90 mins	35					1.4 / E	Y	
		9:13 pm	30 mins		Faintly audible				1.1 / E	Y	
		11:13 pm	60 mins			29			0.3 / E	Y	
		11:13:pm	60 mins				35		0.3 / E	Y	

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

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Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	3	99.1	100.8	120	No
	Blast Vibration	mm/s	Every Blast	3	0.18	0.35	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	100.9	105.1	120	No
	Blast Vibration	mm/s	Every Blast	3	0.42	0.93	10	No



WHITEHAVEN COAL

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Figure 1 – EPL 12870 Monitoring Locations

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Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: April 2014

Publication Date: 22nd May 2014 (re-published 29th July 2014)

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/04/2014	23/04/2014	-	-	-	1.1
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/04/2014	23/04/2014	-	-	-	<1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/04/2014	23/04/2014	-	-	-	0.6
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/05/2014	5.8	13.8	13.4	21.1
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L		0	-	-	-	-	-	-
	Bicarbonate	mg/L		0	-	-	-	-	-	-
	Chloride	mg/L		0	-	-	-	-	-	-
	Iron	mg/L		0	-	-	-	-	-	-
	Manganese	mg/L		0	-	-	-	-	-	-
	Sodium	mg/L		0	-	-	-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TOC	mg/L		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) L _{eq} 15min Day	Measured Levels – dB(A) L _{eq} 15min Evening	Measured Levels – dB(A) L _{eq} 15min Night	Measured Levels – dB(A) L _A 1min Night	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			No monitoring this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	1	-	96.6	120	No
	Blast Vibration	mm/s	Every Blast	1	-	0.09	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	114.1	120	No
	Blast Vibration	mm/s	Every Blast	1	-	0.20	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: May 2014

Publication Date: 17th June 2014 (re-published 29th July 2014)

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/05/2014	22/05/2014	-	-	-	1.7
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/05/2014	22/05/2014	-	-	-	0.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/05/2014	22/05/2014	-	-	-	0.7
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	13/06/2014	2.4	7.9	7.6	12.9
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	1	05/05/14	13/05/14	-	-	-	0.77
	Arsenic	mg/L		1	05/05/14	13/05/14	-	-	-	0.012
	Bicarbonate	mg/L		1	05/05/14	13/05/14	-	-	-	309
	Chloride	mg/L		1	05/05/14	13/05/14	-	-	-	404
	Iron	mg/L		1	05/05/14	13/05/14	-	-	-	0.38
	Manganese	mg/L		1	05/05/14	13/05/14	-	-	-	0.024
	Sodium	mg/L		1	05/05/14	13/05/14	-	-	-	388
16	Conductivity	µS/cm	Quarterly	1	05/05/14	13/05/14	-	-	-	2300
	Oil & Grease	mg/L		1	05/05/14	13/05/14	-	-	-	<5
	pH	pH		1	05/05/14	13/05/14	-	-	-	9.06
	TOC	mg/L		1	05/05/14	13/05/14	-	-	-	2
	TSS	mg/L		1	05/05/14	13/05/14	-	-	-	12

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) L _{eq} 15min Day	Measured Levels – dB(A) L _{eq} 15min Evening	Measured Levels – dB(A) L _{eq} 15min Night	Measured Levels – dB(A) L _A 1min Night	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			No monitoring this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	3	97.0	99.5	120	No
	Blast Vibration	mm/s	Every Blast	3	0.21	0.29	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	101.7	108.0	120	No
	Blast Vibration	mm/s	Every Blast	3	0.35	0.43	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: June 2014

Publication Date: 29th July 2014

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/06/2014	25/06/2014	-	-	-	0.9
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/06/2014	25/06/2014	-	-	-	0.7
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/06/2014	25/06/2014	-	-	-	0.3
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	08/07/2014	1.2	4.6	5.0	7.0
11	Conductivity	µS/cm	Special Frequency 1*	1	18/06/2014	26/06/2014	-	-	-	605
	Total organic carbon	mg/L		1	18/06/2014	26/06/2014	-	-	-	18
12	Conductivity	µS /cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS /cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	1	18/06/2014	26/06/2014	-	<5	50	No	Controlled discharge
	Oil & Grease	mg/L		1	18/06/2014	26/06/2014	-	<5	10	No	
	pH	pH		1	18/06/2014	26/06/2014	-	7.89	6.5-8.5	No	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	-	-	-	-	-	-	-
	Arsenic	mg/L		-	-	-	-	-	-	-
	Bicarbonate	mg/L		-	-	-	-	-	-	-
	Chloride	mg/L		-	-	-	-	-	-	-
	Iron	mg/L		-	-	-	-	-	-	-
	Manganese	mg/L		-	-	-	-	-	-	-
	Sodium	mg/L		-	-	-	-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	TOC	mg/L		-	-	-	-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1	25/06/2014	8:58 am	90 mins	31				35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night	3.1 / WNW	Y	
	24/06/2014	9:19 pm	30 mins		Inaudible				Calm	Y	
	24/06/2014	11:20 pm	60 mins			Inaudible			Calm	Y	
	24/06/2014	11:20 pm	60 mins				n/a		Calm	Y	
	26/06/2014	8:59 am	90 mins	26					1.0 / W	Y	
	25/06/2014	9:20 pm	30 mins		29				Calm	Y	
	25/06/2014	5:58 am	60 mins			20			Calm	Y	
	25/06/2014	5:58 am	60 mins				24		Calm	Y	
	27/06/2014	9:14 am	90 mins	28					0.6 / SW	Y	
	26/06/2014	9:14 pm	30 mins		23				Calm	Y	
	26/06/2014	11:18 pm	60 mins			Inaudible			0.3 / E	Y	
	26/06/2014	11:18 pm	60 mins				n/a		0.3 / E	Y	
N2	25/06/2014	7:02 am	90 mins	23				35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night	0.2 / NW	Y	
	24/06/2014	8:32 pm	30 mins		27				Calm	Y	
	24/06/2014	10:04pm	60 mins			33			Calm	Y	
	24/06/2014	10:04 pm	60 mins				37		Calm	Y	
	26/06/2014	7:08 am	90 mins	36					Calm	Y	Elevated result within INP allowable limit
	25/06/2014	8:35 pm	30 mins		28				Calm	Y	
	26/06/2014	10:06 pm	60 mins			22			Calm	Y	
	25/06/2014	10:06 pm	60 mins				26		Calm	Y	
	27/06/2014	7:19 am	90 mins	36					1.3 / E	Y	Elevated result within INP allowable limit
	26/06/2014	8:21 pm	30 mins		31				Calm	Y	
	26/06/2014	10:02 pm	60 mins			28			Calm	Y	
	26/06/2014	10:02 pm	60 mins				33		Calm	Y	

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	2	99.7	106.1	120	No
	Blast Vibration	mm/s	Every Blast	2	0.22	0.38	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	108.2	112.0	120	No
	Blast Vibration	mm/s	Every Blast	2	0.51	0.84	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: July 2014

Publication Date: 17th September 2014

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/07/2014	24/06/2014	-	-	-	0.7
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/07/2014	24/06/2014	-	-	-	0.2
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/07/2014	24/06/2014	-	-	-	<0.1
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	08/08/2014	0.6	7.6	8.0	11.7
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS /cm		-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	-	-	-	-	-	-	-
	Arsenic	mg/L		-	-	-	-	-	-	-
	Bicarbonate	mg/L		-	-	-	-	-	-	-
	Chloride	mg/L		-	-	-	-	-	-	-
	Iron	mg/L		-	-	-	-	-	-	-
	Manganese	mg/L		-	-	-	-	-	-	-
	Sodium	mg/L		-	-	-	-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	TOC	mg/L		-	-	-	-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			No monitoring occurred this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	3	98.8	103.9	120	No
	Blast Vibration	mm/s	Every Blast	3	0.14	0.28	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	103.2	107.6	120	No
	Blast Vibration	mm/s	Every Blast	3	0.32	0.60	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: August 2014

Publication Date: 18th September 2014

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/08/2014	28/08/2014	-	-	-	4.0
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/08/2014	28/08/2014	-	-	-	0.1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/08/2014	28/08/2014	-	-	-	0.3
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	10/09/2014	7.1	11.2	7.8	18.6
11	Conductivity	µS/cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	-	-	-	-	-	-	-
	Total organic carbon	mg/L		-	-	-	-	-	-	-
13	TSS	mg/L	Special Frequency 2**	1	27/08/2014	04/09/2014	-	-	-	25
	Conductivity	µS/cm					-	-	-	63
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	7.26
	Total organic carbon	mg/L					-	-	-	16

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	1	27/08/2014	04/09/2014	-	-	-	16
	Conductivity	µS/cm					-	-	-	63
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	7.30
	Total organic carbon	mg/L					-	-	-	11
15	TSS	mg/L	Special Frequency 2**	1	27/08/2014	04/09/2014	-	-	-	30
	Conductivity	µS /cm					-	-	-	185
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	7.79
	Total organic carbon	mg/L					-	-	-	12

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	-	-	No discharge
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	-	-	-	-	-	-	-
	Arsenic	mg/L		-	-	-	-	-	-	-
	Bicarbonate	mg/L		-	-	-	-	-	-	-
	Chloride	mg/L		-	-	-	-	-	-	-
	Iron	mg/L		-	-	-	-	-	-	-
	Manganese	mg/L		-	-	-	-	-	-	-
	Sodium	mg/L		-	-	-	-	-	-	-
16	Conductivity	µS/cm	Quarterly	1	06/08/2014	13/08/2014	-	-	-	1880
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	8.81
	TOC	mg/L					-	-	-	3
	TSS	mg/L					-	-	-	<5

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			No monitoring occurred this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night			

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	5	97.1	93.5	120	No
	Blast Vibration	mm/s	Every Blast	5	0.17	0.35	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	5	97.9	99.4	120	No
	Blast Vibration	mm/s	Every Blast	5	0.50	1.15	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: September 2014

Publication Date: 24th October 2014

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/09/2014	22/09/2014	-	-	-	0.5
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/09/2014	22/09/2014	-	-	-	0.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/09/2014	22/09/2014	-	-	-	0.4
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	10/10/2014	2.1	7.96	6.9	14.8
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS /cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1	01/09/2014	3:34pm	90	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night	°	Y	
		9:10pm	30		Inaudible				°	Y	
		11:16pm	60			Inaudible			°	Y	
		11:16pm	60				n/a		1.4 / 26°	Y	
	02/09/2014	8:47am	90	24					°	Y	
		9:09pm	30		30				°	Y	
		11:15pm	60			32			°	Y	
		11:15pm	60				38		2.7 / 250°	Y	
	03/09/2014	8:58pm	90	26					°	Y	
		9:15pm	30		33				°	Y	
		11:17pm	60			33			°	Y	
		11:17pm	60				38		1.5 / 30°	Y	
N2	01/09/2014	1:47pm	90	27				35 dB(A) Leq (15 min) Day, Evening, Night 45 dB(A) L _A (1min) Night	°	Y	
		8:22pm	30		32				°	Y	
		10:00pm	60			34			°	Y	
		10:00pm	60				40		1.7 / 30°	Y	
	02/09/2014	7:00am	90	26					°	Y	
		8:17pm	30		Inaudible				°	Y	
		10:00pm	60			23			°	Y	
		10:00pm	60				27		2.0 / 278°	Y	
	03/09/2014	7:09pm	90	26					°	Y	
		8:30pm	30		24				°	Y	
		10:00pm	60			Inaudible			°	Y	
		10:01pm	60				n/a		1.4 / 146°	Y	

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	3	103.7	105.5	120	No
	Blast Vibration	mm/s	Every Blast		0.19	0.21	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	115.9	116.1	120	Yes
	Blast Vibration	mm/s	Every Blast		0.34	0.38	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: October 2014

Publication Date: 18th November 2014

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/10/2014	29/10/2014	-	-	-	0.9
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/10/2014	29/10/2014	-	-	-	3.5
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/10/2014	29/10/2014	-	-	-	1.5
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	13/11/2014	13.4	19.7	18.4	28.8
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS /cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	



ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1											No monitoring this month.
N2											

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	5	96.3	101.5	120	No
	Blast Vibration	mm/s	Every Blast		0.15	0.32	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	5	104.9	112.3	120	No
	Blast Vibration	mm/s	Every Blast		0.28	0.43	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: November 2014

Publication Date: 17th December 2014

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/11/2014	27/11/2014	-	-	-	1.0
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/11/2014	27/11/2014	-	-	-	1.5
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/11/2014	27/11/2014	-	-	-	0.5
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	12/12/2014	7.0	12.9	11.4	21.0
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS /cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminum	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	1	12/11/2014	20/11/2014	-	-	-	2260
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	9.00
	TOC	mg/L					-	-	-	3
	TSS	mg/L					-	-	-	16

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1											No monitoring this month.
N2											

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	4	98.6	101.0	120	No
	Blast Vibration	mm/s	Every Blast		0.17	0.26	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	102.7	106.4	120	No
	Blast Vibration	mm/s	Every Blast		0.37	0.69	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: December 2014

Publication Date: 20th January 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/12/2014	12/01/2015	-	-	-	1.0
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/12/2014	12/01/2015	-	-	-	1.5
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/12/2014	12/01/2015	-	-	-	0.5
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	12/01/2015	11.7	15.6	12.7	27.5
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS /cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS /cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

ROCGLN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1	15/12/2014	02:35pm	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	4.0 / S	Y	
		08:44pm	30 mins		Inaudible				4.0 / E	Y	
		10:17pm	60 mins			Inaudible			1.2 / E	Y	
		10:17pm	60 mins				n/a		1.2 / E	Y	
	16/12/2014	09:26am	90 mins	26					0.5 / S	Y	
		08:33pm	30 mins		23				2.9 / E	Y	
		10:01pm	60 mins			Inaudible			1.3 / NE	Y	
		10:01pm	60 mins				n/a		1.3 / NE	Y	
	17/12/2014	11:31am	90 mins	Inaudible					5.9 / WNW	Y	
		08:39pm	30 mins		Faintly audible				0.2 / ESE	Y	
		10:14pm	60 mins			27			1.1 / NW	Y	
		10:14pm	60 mins				31		1.1 / NW	Y	
N2	15/12/2014	4:26pm	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	4.2 / SSE	Y	
		09:28pm	30 mins		Inaudible				2.2 / E	Y	
		11:39pm	60 mins			Inaudible			3.7 / E	Y	
		11:39pm	60 mins				n/a		3.7 / E	Y	
	16/12/2014	11:14am	90 mins	23					4.3 / WNW	Y	
		09:15pm	30 mins		28				1.3 / E	Y	
		11:33pm	60 mins			Faintly audible			Calm	Y	
		11:33pm	60 mins				22		Calm	Y	
	17/12/2014	01:17pm	90 mins	Inaudible					3.4 / E	Y	
		09:27pm	30 mins		Faintly audible				1.8 / E	Y	
		11:33pm	60 mins			Faintly Audible			0.5 / WNW	Y	
		11:33pm	60 mins				22		0.5 / WNW	Y	

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

ROCGLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	4	100.1	108.0	120	No
	Blast Vibration	mm/s	Every Blast		0.14	0.4	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	106.2	109.4	120	No
	Blast Vibration	mm/s	Every Blast		0.26	0.55	10	No



WHITEHAVEN COAL

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations