

Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 **Publication Date:** 15 February 2016

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/m²/month	Continuous	1	21-01-16	27-01-16	-	-	-	4.5
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	21-01-16	27-01-16	-	-	-	0.5
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	21-01-16	27-01-16	-	-	-	0.7
10	PM ₁₀	μg/m³	Every 6 days	6	Various	10/02/16	0.2	6.22	5.6	12.8
11	Conductivity	μS/cm	Special	0	_		-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	-	-	-	-	ı
12	Conductivity	μS /cm	Special	0			-	-	ı	ı
12	Total organic carbon	mg/L	Frequency 1*	U	-	_	-	-	-	ı
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	ı
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	ı
	Total organic carbon	mg/L					-	-	-	-
	TSS	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	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L	Special				-	-	-	-
	рН	рН	Frequency 2**				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Consist				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Trequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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
	TSS	mg/L	Special				-	-	1	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	1	-	-
	рН	рН	1*				-	-	1	-	
	TSS	mg/L	Special				-	-	1	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	1	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Voorb				-	-	-	-
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	0	-	-	-	-	-	-
	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)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		-	-	L _{eq} 15min Day	Leq 15min Evening	Leq 15min Night	LA 1min Night		-	_	
		-	-						-	_	
	-	-	-						-	-	
		-	-						_	-	
		-	-					25 dD(A) Las (45 min)	-	-	
		-	-					35 dB(A) Leq (15 min) Day, Evening, Night	_	-	
N1	-	-	_						-	-	
		-	-					45dB(A) L₄ (1 min) Night	-	-	
		-	-						-	-	
		-	-						-	-	
	-		-							-	
		-							-		
		-	-						-	-	
		-	-						-	-	
	-	-	-						-	-	
		-	-						-	-	
		-	-						-	-	
		-	-					35 dB(A) Leq (15 min) Day, Evening, Night	-	-	
N2	-	-	-					Day, Evering, Night	-	-	
		-	-					45dB(A) L _A (1 min)	-	-	
		-	-					Night	-	-	
		-	-						-	-	
	-	-	-						-	-	
		-	-						=	-	
		-	-						-	-	

-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	1	1	100.2	120	No
PRI	Blast Vibration	mm/s	Every Blast	1	-	0.19	10	No
DDO	Blast Noise	dB (Lin Peak)	Every Blast	1	-	111.7	120	No
BB3	Blast Vibration	mm/s	Every Blast	1	1	0.48	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Publication Date: 18 March 2016

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/m²/month	Continuous	1	19/02/16	26/02/16	ı	-	-	0.9
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	19/02/16	26/02/16	-	-	-	0.7
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	19/02/16	26/02/16	-	-	-	0.8
10	PM ₁₀	μg/m³	Every 6 days	6	Various	14-3-16	7.2	15.2	13.5	26.2
11	Conductivity	μS/cm	Special	0	_		ı	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	-	ı	-	-	-
12	Conductivity	μS /cm	Special	0			1	-	-	-
12	Total organic carbon	mg/L	Frequency 1*	U	-	-	ı	-	-	-
	TSS	mg/L					1	-	-	-
	Conductivity	μS/cm	Special				1	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	Total organic carbon	mg/L					1	-	-	-
	TSS	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	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L	Special				1	-	ı	-
	рН	рН	Frequency 2**				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Cassial				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Trequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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
	TSS	mg/L	Special				-	-	-	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Voorb				-	-	-	-
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	0	-	-	-	-	-	-
	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) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) L _{A 1min Night}	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		-	-						-	-	
	_	=	=						=	=	
	-	-	-						=	-	
		-	-						-	-	
		ı	ı					35 dB(A) Leq (15 min)	ı	-	
N1		-	-					Day, Evening, Night	=	-	
INI	-	-	-					45dB(A) L _A (1 min)	-	-	
		-	-					Night	-	-	
		-	-						-	-	
	_	-	-						-	-	
	-	-	-						-	-	
		-	-						-	-	
		-	-						-	-	
	_	-	-						-	-	
		-	-						-	-	
		-	-						-	-	
		-	-					35 dB(A) Leq (15 min)	-	-	
N2	_	-	-					Day, Evening, Night	=	-	
''-		-	-					45dB(A) L _A (1 min)	=	-	
		-	-					Night	=	-	
		-	-						-	-	
	_	-	-						-	-	
		-	-						-	-	
		-	-						-	-	

-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	2	104.7	111.8	120	No
DDI	Blast Vibration	mm/s	Every Blast	3	0.06	0.11	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	110.6	113.0	120	No
БВЭ	Blast Vibration	mm/s	Every Blast	3	0.25	0.54	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Obtained Date: 7th April 2016 Publication Date: 11th April 2016

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/m²/month	Continuous	1	21/03/16	31/03/16	1	-	-	2.4
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	21/03/16	31/03/16	ı	-	-	1.7
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	21/03/16	31/03/16	-	-	-	0.6
10	PM ₁₀	μg/m³	Every 6 days	6	Various	7/04/16	6.6	13.48	8.7	23.3
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	_	ı	-	-	ı
12	Conductivity	μS /cm	Special	0			-	-	-	-
12	Total organic carbon	mg/L	Frequency 1*	0	-	-	-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Carainl				-	-	-	-
14	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
14	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Caratal				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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
	TSS	mg/L	Special				-	-	1	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					ı	•	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Ma a ulc.				-	-	-	-
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	2460
	Oil & Grease	mg/L					-	-	-	<5
16	рН	рН	Quarterly	1	1/03/16	29/03/16	-	-	-	9.0
	TOC	mg/L					-	-	-	3
	TSS	mg/L					-	-	-	20



Table 4 - Monitoring (Noise - Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
				Leq 15min Day	Leq 15min Evening	Leq 15min Night	LA 1min Night				
		3:50pm	15	<20					1.8/235	Υ	
	1/03/16-	9:24pm	15		<20				5.3/118	Υ	
	2/03/16	1:02am	15			<20			3.2/37	Υ	
		1:02am	1				<20		3.2/37	Υ	
		9:00am	15	<20				35 dB(A) Leq (15 min)	1.4/249	Υ	
N1	2/03/16	8:30pm	15		<20			Day, Evening, Night	3.9/115	Υ	
INI	2/03/10	10:01pm	15			<20		45dB(A) L _A (1 min)	5.4/68	Υ	
		10:01pm	1				<20	Night	5.4/68	Υ	
		9:13am	15	21					1.5/207	Υ	
	2/02/46	9:15pm	15		<20				4.7/70	Υ	
	3/03/16	11:15pm	15			<20			3.7/50	Υ	
		11:15pm	1				<20		3.7/50	Υ	
		2:05pm	15	<20					2.0/154	Υ	
	4 102 14 6	8.38pm	15		<20				3.9/111	Υ	
	1/03/16	11:42pm	15			<20			4.3/54	Υ	
		11:42pm	1				<20		4.3/54	Υ	
		7:15am	15	33				35 dB(A) Leq (15 min)	0.8/143	Υ	
N2	2/02/16	9:13pm	15		23			Day, Evening, Night	4.6/103	Υ	
IN2	2/03/16	11:14pm	15			<20		45dB(A) L _A (1 min)	4.8/43	Υ	
		11:14pm	1				<20	Night	4.8/43	Υ	
		7:21am	15	31					2.3/162	Υ	
	2/02/16	8:29pm	15		<20				6.0/74	Υ	
	3/03/16	10:01pm	15			<20			3.9/76	Υ	
		10:01pm	1				<20		3.9/76	Υ	

-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	E	94.9	97.8	120	No
DDI	Blast Vibration	mm/s	Every Blast	3	0.1	0.14	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	Е	103.8	105.8	120	No
ББЭ	Blast Vibration	mm/s	Every Blast	5	0.26	0.4	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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

Obtained Date: 11th May 2016 **Publication Date:** 16th May 2016

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/m²/month	Continuous	1	21/04/16	29/04/16	-	-	-	0.4
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	21/04/16	29/04/16	-	-	-	1.1
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	21/04/16	29/04/16	-	-	-	0.9
10	PM ₁₀	μg/m³	Every 6 days	6	Various	11/05/16	8.3	14.9	13.2	22.9
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	-	-	-	-	-
12	Conductivity	μS /cm	Special	0			-	-	-	-
12	Total organic carbon	mg/L	Frequency 1*	0	-	-	-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Consist				-	-	-	-
14	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
14	рН	рН	Trequency 2				-	-	-	1
	Total organic carbon	mg/L					-	-	-	1
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Consist				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Trequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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
	TSS	mg/L	Special				-	-	-	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Va a ale c				-	-	-	-
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	0	-	-	-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) L _{eq 15min Night}	Measured Levels – dB(A) L _{A 1min Night}	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		ı	1	-					-	-	
	_	-	-		-				-	-	
	-	1	-			ı			-	-	
		-	-				-		-	-	
		ı	-	-				35 dB(A) Leq (15 min)	-	-	
N1		ı	1		-			Day, Evening, Night	-	-	
INI	-	-	-			-		45dB(A) L _A (1 min)	-	-	
		-	-				-	Night	-	-	
		-	-	-					-	-	
	_	-	-		-				-	-	
	-	-	-			-			-	-	
		-	-				-		-	-	
		-	-	-					-	-	
	_	-	-		-				-	-	
		-	-			-			-	-	
		-	-				-		-	-	
		-	-	-				35 dB(A) Leq (15 min)	-	-	
N2	_	-	-		-			Day, Evening, Night	-	-	
1112		-	-			-		45dB(A) L _A (1 min)	-	-	
		-	-				-	Night	-	-	
		-	-	-					-	-	
	_	-	-		-				-	-	
		-	-			-			-	-	
		-	-				-		-	-	

-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	98.3	100.7	120	No
PDI	Blast Vibration	mm/s	Every Blast	4	0.1	0.18	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	103.4	110.7	120	No
DB3	Blast Vibration	mm/s	Every Blast	4	0.28	0.41	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Obtained Date: 10th June 2016 Publication Date: 21st June 2016

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/m²/month	Continuous	1	20-05-16	27-05-16	-	-	-	0.5
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	20-05-16	27-05-16	-	-	-	0.5
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	20-05-16	27-05-16	-	-	-	0.7
10	PM ₁₀	μg/m³	Every 6 days	6	Various	10-06-16	0.6	9.6	6.7	23.5
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	0	-	-	-	-	-	-
12	Conductivity	μS /cm	Special	0			-	-	-	-
12	Total organic carbon	mg/L	Frequency 1*	0	-	-	-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Carainl				-	-	-	-
14	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
14	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Caratal				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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
	TSS	mg/L	Special				-	-	1	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					-	-	-	0.48
	Arsenic	mg/L					-	-	-	0.010
	Bicarbonate	mg/L	Va a uli i				-	-	-	327
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	459
	Iron	mg/L					-	-	-	0.27
	Manganese	mg/L					-	-	-	0.016
	Sodium	mg/L					-	-	-	554
	Conductivity	μS/cm					-	-	-	3150
	Oil & Grease	mg/L					-	-	-	9
16	рН	рН	Quarterly	0	-	-	-	-	-	9.1
	TOC	mg/L					-	-	-	20
	TSS	mg/L					-	-	-	22



Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) L _{eq 15min Night}	Measured Levels – dB(A) L _{A 1min Night}	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		ı	-	-					1	-	
		1	-		-				1	-	
	-	1	-			ı			1	-	
		-	-				-		-	-	
		-	-	-				35 dB(A) Leq (15 min)	-	-	
N1		-	-		-			Day, Evening, Night	-	-	
INI	-	-	-			-		45dB(A) L _A (1 min)	-	-	
		-	-				-	Night	-	-	
		-	-	-					-	-	
	_	-	-		-				-	-	
		-	-			-			-	-	
		-	-				-		-	-	
		-	-	-					-	-	
	_	-	-		-				-	-	
		-	-			-			-	-	
		-	-				-		-	-	
		-	-	-				35 dB(A) Leq (15 min)	-	-	
N2	_	-	-		-			Day, Evening, Night	-	-	
''-		-	-			-		45dB(A) L _A (1 min)	-	-	
		-	-				-	Night	-	-	
		-	-	-					-	-	
	_	-	-		-				-	-	
		-	-			-			-	-	
		-	-				-		-	-	

-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	105.5	123.6	120	No
DDI	Blast Vibration	mm/s	Every Blast	4	0.36	0.79	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	97.7	103.7	120	Yes
ББЭ	Blast Vibration	mm/s	Every Blast	4	0.16	0.37	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Obtained Date: 8th July 2016 Publication Date: 14th July 2016

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/m²/month	Continuous	1	17/16/16	27/06/16	1	-	-	0.4
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	17/06/16	27/06/16	1	-	-	0.3
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	17/06/16	27/06/16	-	-	-	0.3
10	PM ₁₀	μg/m³	Every 6 days	6	Various	8/07/16	0.2	2.84	2.6	5.6
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	-	ı	-	-	-
12	Conductivity	μS /cm	Special	0			-	-	-	-
12	Total organic carbon	mg/L	Frequency 1*	0	-	-	ı	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Consist				-	-	-	-
14	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
14	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Constal				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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
	TSS	mg/L	Special				-	-	-	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					1	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Va a wh				-	-	-	-
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	0	-	-	-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) L _{eq 15min Night}	Measured Levels – dB(A) L _{A 1min Night}	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		4:05pm	15	<20					2.2/298	Υ	
	C 10C 117	9:14pm	15		<20				0.8/234	Υ	
	6/06/17	11:16pm	15			<20			2.4/285	Υ	
		11:16pm	1				<20		2.4/285	Υ	
		8:58am	15	<20				35 dB(A) Leq (15 min)	3.7/304	Υ	
NI4	7/06/16	9:13pm	15		<20			Day, Evening, Night	1.0/221	Υ	
N1	//06/16	11:19pm	15			22		45dB(A) L _A (1 min)	1.3/294	Υ	
		11:19pm	1				25	Night	1.3/294	Υ	
		9:50am	15	23					2.2/286	Υ	
	8/06/16-	8:01pm	15		<20				2.5/53	Υ	
	9/06/16	12:03am	15			<20			0.8/15	Υ	
		12/03am	1				<20		0.8/15	Υ	
		2:21pm	15	<20					3.2/295	Υ	
	6/06/17	8:29pm	15		31				1.0/355	Υ	
	0/00/17	10:02pm	15			33			1.0/274	Υ	
		10:02pm	1				38		1.0/274	Υ	
		7:12am	15	33				35 dB(A) Leq (15 min)	1.4/27	Υ	
N2	7/06/16	8:26am	15		30			Day, Evening, Night	2.1/302	Υ	
INZ	7/00/10	10:00pm	15			28		45dB(A) L _A (1 min)	1.5/253	Υ	
		10:00pm	1				34	Night	1.5/253	Υ	
		7:06am	15	25					0.7/232	Υ	
	8/06/16	8:45pm	15		31				1.0/167	Υ	
	3/00/10	10:47pm	15			27			1.0/117	Υ	
		10:47pm	1				31		1.0/117	Υ	

-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	2	92.8	98.6	120	No
PDI	Blast Vibration	mm/s	Every Blast	3	0.03	0.08	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	100.1	108.6	120	No
ББЭ	Blast Vibration	mm/s	Every Blast	3	0.07	0.17	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016
Obtained Date: 9th August 2016
Publication Date: 10th August 2016

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/m²/month	Continuous	1	18-07-16	25-07-16	-	-	-	0.2
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	18-07-16	25-07-16	-	-	-	0.1
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	18-07-16	25-07-16	-	-	-	<0.1
10	PM ₁₀	μg/m³	Every 6 days	6	Various	09-08-16	2.1	4.4	2.8	7.4
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	-	-	-	-	-
12	Conductivity	μS /cm	Special	0			-	-	-	-
12	Total organic carbon	mg/L	Frequency 1*	U	-	-	-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Carriel				-	-	-	-
14	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
14	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Constal				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L]				-	-	-	-

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
	TSS	mg/L	Special				-	-	-	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	1	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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 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
	Aluminium	mg/L					-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Wa a ali				-	-	-	-
16	Chloride	mg/L	Yearly	0	-	-	-	-	-	-
	Iron	mg/L					1	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	0	-	-	-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Table 4 - Monitoring (Noise - Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
			45	Leq 15min Day	Leq 15min Evening	Leq 15min Night	L _{A 1min Night}				
		-	15	-					-	-	
	-	-	15		-				-	-	
		-	15			-			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
N1	-	-	15		-			Day, Evening, Night	-	-	
		-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
		-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				·		-	-	
		1	15	-					-	-	-
		-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
		-	15		-			Day, Evening, Night	-	-	
N2	-	-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
		-	15		-				-	-	
	-	-	15			-			-	-	
		ı	1				-		-	-	

-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	97.4	99.8	120	No
DDI	Blast Vibration	mm/s	Every Blast	4	0.14	0.24	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	106.7	114.4	120	No
DB3	Blast Vibration	mm/s	Every Blast	4	0.22	0.61	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016

Obtained Date: 15th September 2016 **Publication Date:** 19th September 2016

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/m²/month	Continuous	1	17/08/16	29/08/16	-	-	-	<0.1
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	17/08/16	29/08/16	-	-	-	0.4
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	17/08/16	29/08/16	-	-	-	0.2
10	PM ₁₀	μg/m³	Every 6 days	6	Various	15/09/16	2.2	4.7	3.4	8.8
11	Conductivity	μS/cm	Special	3	Various	Various	269	339	301	447
11	Total organic carbon	mg/L	Frequency 1*	3	various	various	3	3.3	3.5	4
12	Conductivity	μS /cm	Special	5	Various	Various	218	246	257	277
12	Total organic carbon	mg/L	Frequency 1*	5	Various	Various	<1	2.8	2.5	4
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Carriel				-	-	-	-
14	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
14	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-
	Conductivity	μS /cm	Constal				-	-	-	-
15	Oil & Grease	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	рН	рН	Frequency 2				-	-	-	-
	Total organic carbon	mg/L]				-	-	-	-

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
	TSS	mg/L	Chasial				6	36	50	No	Controlled
11	Oil & Grease	mg/L	Special Frequency	3	Various	Various	<5	<5	10	No	discharges following
	рН	рН	1*	3	Various	Various	7.26	7.82	6.5-8.5	No	flocculant application
	TSS	mg/L	Coosial				<5	18	50	No	Controlled
12	Oil & Grease	mg/L	Special Frequency	5	Various	Various	<5	<5	10	No	discharges following
12	рН	рН	1*	3	various	various	8.02	8.2	6.5-8.5	No	flocculant application

^{*} 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 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
	Aluminium	mg/L					-	-	-	-
	Arsenic	mg/L					-	ı	-	-
	Bicarbonate	mg/L	Ma auli				-	-	-	-
16	Chloride	mg/L	Yearly	-	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	2690
	Oil & Grease	mg/L					-	-	-	<5
16	рН	рН	Quarterly	1	9/08/16	25/08/16	-	-	-	9.10
	TOC	mg/L					-	-	-	3
	TSS	mg/L					-	-	-	<5

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	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) La 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		-	15	Led 15min Day	Led 15min Evening	Leq 15min Night	EA Imin Night		_	-	
		-	15		-				-	-	
	-	-	15			-			=	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
		-	15		-			Day, Evening, Night	-	-	
N1	-	-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
		-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	
		-	15	-					-	-	-
		-	15		-				-	-	
	-	-	15			=			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
N2	_	-	15		-			Day, Evening, Night	-	-	
INZ		-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
	_	-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	



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

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	91.4	98.0	120	No
DDI	Blast Vibration	mm/s	Every Blast	2	0.3	0.3	10	No
מחמ	Blast Noise	dB (Lin Peak)	Every Blast	2	101.5	108.0	120	No
BB3	Blast Vibration	mm/s	Every Blast	2	0.04	0.06	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Obtained Date: 10th October 2016 Publication Date: 17th October 2016

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/m²/month	Continuous	1	16/09/16	27/09/16	1	-	-	0.3
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	16/09/16	27/09/16	ı	-	-	0.3
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	16/09/16	27/09/16	-	-	-	0.2
10	PM ₁₀	μg/m³	Every 6 days	6	Various	10/10/16	7.1	9.7	7.7	18.9
11	Conductivity	μS/cm	Special	3	Various	Various	301	418.3	431	510
11	Total organic carbon	mg/L	Frequency 1*	3	various	Various	3	4.5	3.5	8
12	Conductivity	μS /cm	Special	5	Various	Various	232	254.8	244.5	277
12	Total organic carbon	mg/L	Frequency 1*	5	various	Various				
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	<5
	Conductivity	μS/cm	Consist				-	-	-	131
14	Oil & Grease	mg/L	Special Frequency 2**	1	16-09-16	23-09-16	-	-	-	<5
14	рН	рН	Frequency 2				-	-	-	7.2
	Total organic carbon	mg/L					-	-	-	13
	TSS	mg/L					-	-	-	<5
	Conductivity	μS /cm	Consist				-	-	-	204
15	Oil & Greace mg/L Special	1	16-09-16	23-09-16	-	-	-	<5		
	рН	рН	Frequency 2**				-	-	-	7.4
	Total organic carbon	mg/L					-	-	-	13

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
	TSS	mg/L					6	30	50	No	Controlled
	Oil & Grease	mg/L	Constal				<5	<5	10	No	discharges following
11	рН	рН	Special Frequency 1*	4	Various	Various	7.26	8.2	6.5-8.5	No	flocculant application, with one uncontrolled discharge
	TSS	mg/L	Chasial				9	47	50	No	Controlled
12	Oil & Grease	mg/L	Special Frequency	5	Various	Various	<5		10	No	discharges following
12	рН	рН	1*	7	various	various	7.95	8.07	6.5-8.5	No	flocculant application

^{*} 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 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
	Aluminium	mg/L					-	1	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Voorb				-	-	-	-
16	Chloride	mg/L	Yearly	-	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	-	-	-	-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	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) L _{A 1min Night}	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		3:49pm	15	<20	Led 15min Evening	Leq 15min Night	EA Imin Night		2.3/147	Υ	
		8:57pm	15		<20				1.3/34	Υ	
	5-9-16	11:33pm	15			<20			1.2/201	Υ	
		11:33pm	1				<20		1.2/201	Υ	
		7:30am	15	39				35 dB(A) Leq (15 min)	1.2/188	N	
		8:56pm	15		20			Day, Evening, Night	1.3/32	Y	
N1	6-9-16	11:35pm	15			<20		45dB(A) L _A (1 min)	3.0/45	Y	
		11:35pm	1				<20	Night	3.0/45	Y	
		10:34am	15	<20					2.7/8	Y	
	7-9-16 – 8-	7:48pm	15		<20				1.7/25	Υ	
	9-16	12:34pm	15			<20			1.7/313	Υ	
		12:34pm	1				<20		1.7/313	Υ	One exceedance of the noise monitoring limits occurred at the Surrey property during the
		1:46pm	15	<20					1.7/157	Υ	morning period on September 6 th .
	5-9-16	8:15pm	15		<20				1.9/30	Υ	
	5-9-10	10:03pm	15			30			1.5/36	Y	
		10:03pm	1				35		1.5/36	Υ	
		9:34am	15	<20				35 dB(A) Leq (15 min)	1.6/165	Υ	
N2	6-9-16	8:06pm			<20			Day, Evening, Night	1.3/229	Y	
INZ	0-5-10	10:02pm	15			23		45dB(A) L _A (1 min)	2.6/37	Υ	
		10:02pm	1				26	Night	2.6/37	Y	
		7:26am	15	32					4.2/33	Y	
	7-9-16	8:34pm	15		<20				2.2/51	Y	
	, , , 10	10:54pm	15			<20			2.7/7	Y	
		10:54pm	1				<20		2.7/7	Υ	



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

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	93.2	99.3	120	No
DDI	Blast Vibration	mm/s	Every Blast	3	0.2	0.29	10	No
מחמ	Blast Noise	dB (Lin Peak)	Every Blast	2	99.4	112.1	120	No
BB3	Blast Vibration	mm/s	Every Blast	3	0.31	0.54	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Obtained Date: 4th November 2016 Publication Date: 14th November 2016

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/m²/month	Continuous	1	17/10/16	24/10/16	1	-	-	0.4
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	17/10/16	24/10/16	1	-	-	0.3
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	17/10/16	24/10/16	-	-	-	0.1
10	PM ₁₀	μg/m³	Every 6 days	5	Various	4/11/16	5.9	8.5	8.9	11.8
11	Conductivity	μS/cm	Special	0			1	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	-	-	-	-	-
12	Conductivity	μS /cm	Special	3	Various	Various	242	266.7	264	294
12	Total organic carbon	mg/L	Frequency 1*	3	Various	Various	2	3	3.7	6
	TSS	mg/L					1	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					1	-	-	-
	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
	TSS	mg/L					-	-	-	
	Conductivity	μS/cm	Consist				-	-	-	
14	Oil & Grease	mg/L	Special Frequency 2**	0			-	-	-	
14	рН	рН	Frequency 2				-	-	-	
	Total organic carbon	mg/L					1	-	-	
	TSS	mg/L					-	-	-	
	Conductivity	μS /cm	Consist				-	-	-	
15	Oil & Grease	mg/L	Special Frequency 2**	0			-	-	-	
	рН	рН					-	-	-	
	Total organic carbon	mg/L					-	-	-	

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
	TSS	mg/L	Special				-	-	1	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	1	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Chasial				6	35	50	No	Controlled
12	Oil & Grease	mg/L	Special Frequency	3	Various	Various	<5	<5	10	No	discharges following
12	рН	рН	1*	3	various	various	7.98	8.35	6.5-8.5	No	flocculant application

^{*} 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 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
	Aluminium	mg/L					-	1	-	-
	Arsenic	mg/L					-	ı	-	-
	Bicarbonate	mg/L	Va a ale c				-	-	-	-
16	Chloride	mg/L	Yearly	-	-	-	-	-	-	-
	Iron	mg/L					-	1	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	-	-	-	-	-	-	-
	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) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) L _{A 1min Night}	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		-	15	-					-	-	
		-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
N1		-	15		-			Day, Evening, Night	-	-	
INI	-	-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
		-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	_
		-	15	-					-	-	_
	_	-	15		-				-	-	
		-	15			-			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
N2	_	-	15		-			Day, Evening, Night	-	-	
"-		-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
	_	-	15		-				-	-	
		-	15			-			-	-	
		-	1				-		-	-	

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

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	Е	96.0	109.0	120	No
PDI	Blast Vibration	mm/s	Every Blast	3	0.08	0.7	10	No
DDO	Blast Noise	dB (Lin Peak)	Every Blast	F	99.2	102.6	120	No
BB3	Blast Vibration	mm/s	Every Blast)	0.22	0.2	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016
Obtained Date: 8 December 2016
Publication Date: 14 December 2016

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/m²/month	Continuous	1	16/11/16	22/11/16	-	-	-	0.9
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	16/11/16	22/11/19	-	-	-	2.3
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	16/11/16	22/11/16	-	-	-	0.3
10	PM ₁₀	μg/m³	Every 6 days	5	Various	8/12/16	8.1	15.5	15.7	21.2
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	0	-	-	-	-	-	-
12	Conductivity	μS /cm	Special	0						
12	Total organic carbon	mg/L	Frequency 1*	0	-	-				
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	
	Conductivity	μS/cm	Consist				-	-	-	
14	Oil & Grease	mg/L	Special Frequency 2**	0			-	-	-	
14	рН	рН	Frequency 2				-	-	-	
	Total organic carbon	mg/L					1	-	-	
	TSS	mg/L					-	-	-	
	Conductivity	μS /cm	Consist				-	-	-	
15	Oil & Grease	mg/L	Special Frequency 2**	0	0		-	-	-	
	рН	рН	Trequency 2				-	-	-	
	Total organic carbon	mg/L					-	-	-	

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
	TSS	mg/L	Special				-	-	-	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	1	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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.



Rocglen 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
	Aluminium	mg/L					ı	1	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L	Wa a ali				-	-	-	-
16	Chloride	mg/L	Yearly	-	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	2010
	Oil & Grease	mg/L					-	-	-	<5
16	рН	рН	Quarterly	1	9/11/16	16/11/16	-	-	-	9.2
	TOC	mg/L					-	-	-	4
	TSS	mg/L					-	-	-	<5



Rocglen Coal Mine- Monthly Monitoring Summary

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EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Measured Levels – dB(A)	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
				Leq 15min Day	Leq 15min Evening	Leq 15min Night	L _{A 1min Night}				
		-	15	-					-	-	
		-	15		-				-	-	
	-	·	15			-			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
N1		·	15		-			Day, Evening, Night	-	-	
INI	-	-	15			-		45dB(A) L _A (1 min)	-	-	
		ī	1				ī	Night	-	-	
		ī	15	ı					-	-	
		i	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	<u>_</u>
		-	15	-					-	-	-
		-	15		-				-	-	
	-	-	15			-			-	-	
		-	1				-		-	-	
		-	15	-				35 dB(A) Leq (15 min)	-	-	
N2	_	-	15		-			Day, Evening, Night	-	-	
1112		-	15			-		45dB(A) L _A (1 min)	-	-	
		-	1				-	Night	-	-	
		-	15	-					-	-	
	_	-	15		-				-	-	
		-	15			-			-	-	
		-	1				-		-	-	

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

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	91.3	99.7	120	No
PPI	Blast Vibration	mm/s	Every Blast	3	0.15	0.27	10	No
מחמ	Blast Noise	dB (Lin Peak)	Every Blast	2	96.7	103.8	120	No
BB3	Blast Vibration	mm/s	Every Blast	3	0.29	0.51	10	No





Figure 1 – EPL 12870 Monitoring Locations



Site Information

EPL No: 12870

EPA Website Link: http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&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 2016 Obtained Date: 13 January 2017 Publication Date: 18 January 2017

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/m²/month	Continuous	1	19/12/16	22/12/16	-	-	-	1.1
6	Particulates- Deposited Matter	g/m²/month	Continuous	1	19/12/16	22/12/16	-	-	-	1.6
7	Particulates- Deposited Matter	g/m²/month	Continuous	1	19/12/16	22/12/16	-	-	-	2.1
10	PM ₁₀	μg/m³	Every 6 days	6	Various	13/01/17	9.2	17.9	19.1	25.8
11	Conductivity	μS/cm	Special	0			-	-	-	-
11	Total organic carbon	mg/L	Frequency 1*	U	-	_	-	-	-	-
12	Conductivity	μS /cm	Special	0						
12	Total organic carbon	mg/L	Frequency 1*	U	-	_				
	TSS	mg/L					-	-	-	-
	Conductivity	μS/cm	Special				-	-	-	-
13	Oil & Grease	mg/L	Frequency 2**	0	-	-	-	-	-	-
	рН	рН					-	-	-	-
	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
	TSS	mg/L					-	-	-	
	Conductivity	μS/cm	Consist				-	-	-	
14	Oil & Grease	mg/L	Special Frequency 2**	0			-	-	-	
14	рН	рН	Frequency 2				-	-	-	
	Total organic carbon	mg/L					1	-	-	
	TSS	mg/L					-	-	-	
	Conductivity	μS /cm	Consist				-	-	-	
15	Oil & Grease	mg/L	Special Frequency 2**	0	0		-	-	-	
	рН	рН	Trequency 2				-	-	-	
	Total organic carbon	mg/L					-	-	-	

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
	TSS	mg/L	Special				-	-	-	-	
11	Oil & Grease	mg/L	Frequency	0	-	-	-	-	1	-	-
	рН	рН	1*				-	-	-	-	
	TSS	mg/L	Special				-	-	-	-	
12	Oil & Grease	mg/L	Frequency	0	-	-	-	-	-	-	-
	рН	рН	1*				-	-	-	-	

^{*} 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.



Rocglen 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
	Aluminium	mg/L					1	1	-	-
	Arsenic	mg/L					1	ı	-	-
	Bicarbonate	mg/L	Voorb				1	•	-	-
16	Chloride	mg/L	Yearly	-	-	-	-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Conductivity	μS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
16	рН	рН	Quarterly	-	-	-	-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Rocglen Coal Mine- Monthly Monitoring Summary

EPL	Data	Chart	Period	Magazirad		Measured	Measured	Limits	Wind speed	Compliant	Comments
ID	Date	Start Time	(mins)	Measured Levels –	Measured Levels –	Levels –	Levels –	Limits	(m/s)	(Y/N)	Comments
			()	dB(A)	dB(A)	dB(A)	dB(A)		/direction	(1,11,	
				Leq 15min Day	Leq 15min Evening	Leq 15min Night	LA 1min Night				
		2:49pm	15	<20					1.5/227	Υ	
	12/12/16	9:05pm	15		<20				2.0/45	Υ	
	12/12/10	11:34pm	15			<20			2.6/32	Υ	
		11:34pm	1				<20		2.6/32	Υ	
		9:03am	15	<20				35 dB(A) Leq (15 min)	3.1/288	Υ	
N1	13/12/16	8:34pm	15		<20			Day, Evening, Night	1.3/293	Υ	
INI	14/12/16	12:19am	15			<20		45dB(A) L _A (1 min)	1.5/8	Υ	
		12:19am	1				<20	Night	1.5/8	Υ	
		9:37am	15	<20					4.3/306	Υ	
	14/12/16	9:06pm	15		<20				2.0/74	Υ	
	14/12/16	11:34pm	15			<20			3.3/159	Υ	
		11:34pm	1				<20		3.3/159	Υ	
		12:40pm	15	<20					1.5/131	Υ	
	12/12/16	8:01pm	15		20				1.7/37	Υ	
	12/12/10	10:00pm	15			23			2.3/18	Υ	
		10:00pm	1				27		2.3/18	Υ	
		7:00am	15	25				35 dB(A) Leq (15 min)	1.7/242	Υ	
N2	13/12/16	7:16pm	15		22			Day, Evening, Night	1.6/261	Υ	
INZ	15/12/10	10:43pm	15			27		45dB(A) L _A (1 min)	1.2/345	Υ	
		10:43pm	1				32	Night	1.2/345	Υ	
		7:36am	15	32					3.4/306	Υ	
	14/12/16	8:03pm	15		24				1.8/74	Υ	
	14/12/10	10:00pm	15			28			3.2/54	Υ	
		10:00pm	1				34		3.2/54	Υ	

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

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	100.0	103.1	120	No
PPI	Blast Vibration	mm/s	Every Blast	4	0.16	0.32	10	No
מחמ	Blast Noise	dB (Lin Peak)	Every Blast	4	106.3	114.3	120	No
BB3	Blast Vibration	mm/s	Every Blast	4	0.46	1.14	10	No





Figure 1 – EPL 12870 Monitoring Locations