



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: January 2017

Obtained Date: 14th February 2017

Publication Date: 21st February 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	16/01/17	23/01/17	-	-	-	2.2
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/02/17	6.0	21.9	25.0	32.8
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/02/17	7.8	17.5	17.9	24.1
6	Conductivity	ms/cm	Each overflow event	0			-	-	-	
	Oil and Grease	mg/L		0			-	-	-	
	Total Organic Carbon	mg/L		0			-	-	-	
	Total Suspended Solids	mg/L		0			-	-	-	
	pH	pH		0	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	1	30/01/17	6/02/17	-	-	-	1580
	Oil and Grease	mg/L		1	30/01/17	6/02/17	-	-	-	<5
	Total Organic Carbon	mg/L		1	30/01/17	6/02/17	-	-	-	24
	Total Suspended Solids	mg/L		1	30/01/17	6/02/17	-	-	-	32



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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		1	30/01/17	6/02/17	-	-	-	8.9

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	mg/L	-	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	-	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	-	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



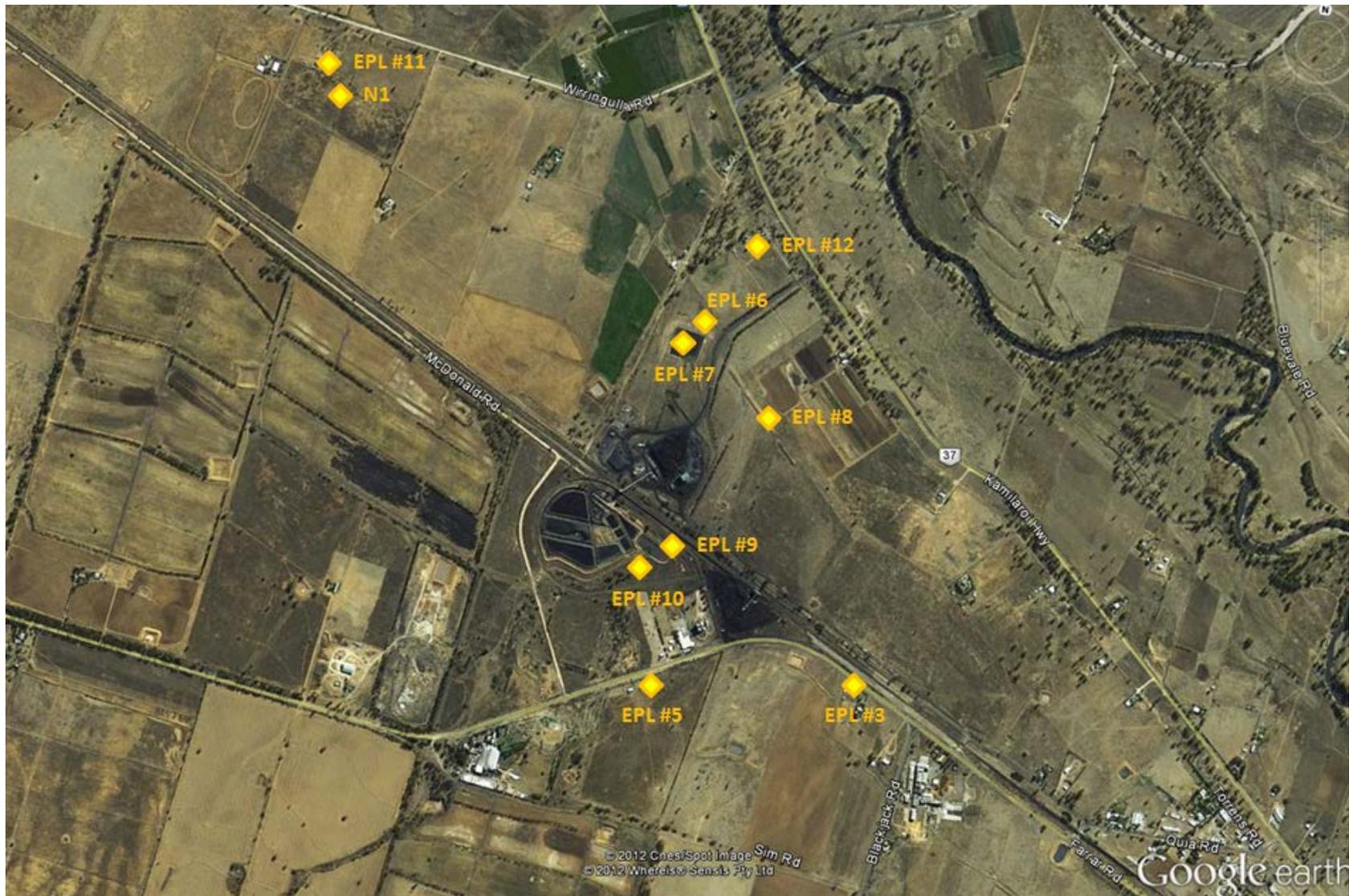
WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Weather (wind speed/direction)	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15} Minute				
N1	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: February 2017

Obtained Date: 8 March 2017

Publication Date: 20 March 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	17/02/17	27/02/17	-	-	-	2.2
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	8/03/17	17.6	27.6	29	24.8
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	4	Various	8/03/17	13.7	19.8	20.6	23.6
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	-

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	mg/L	-	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	-	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	-	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



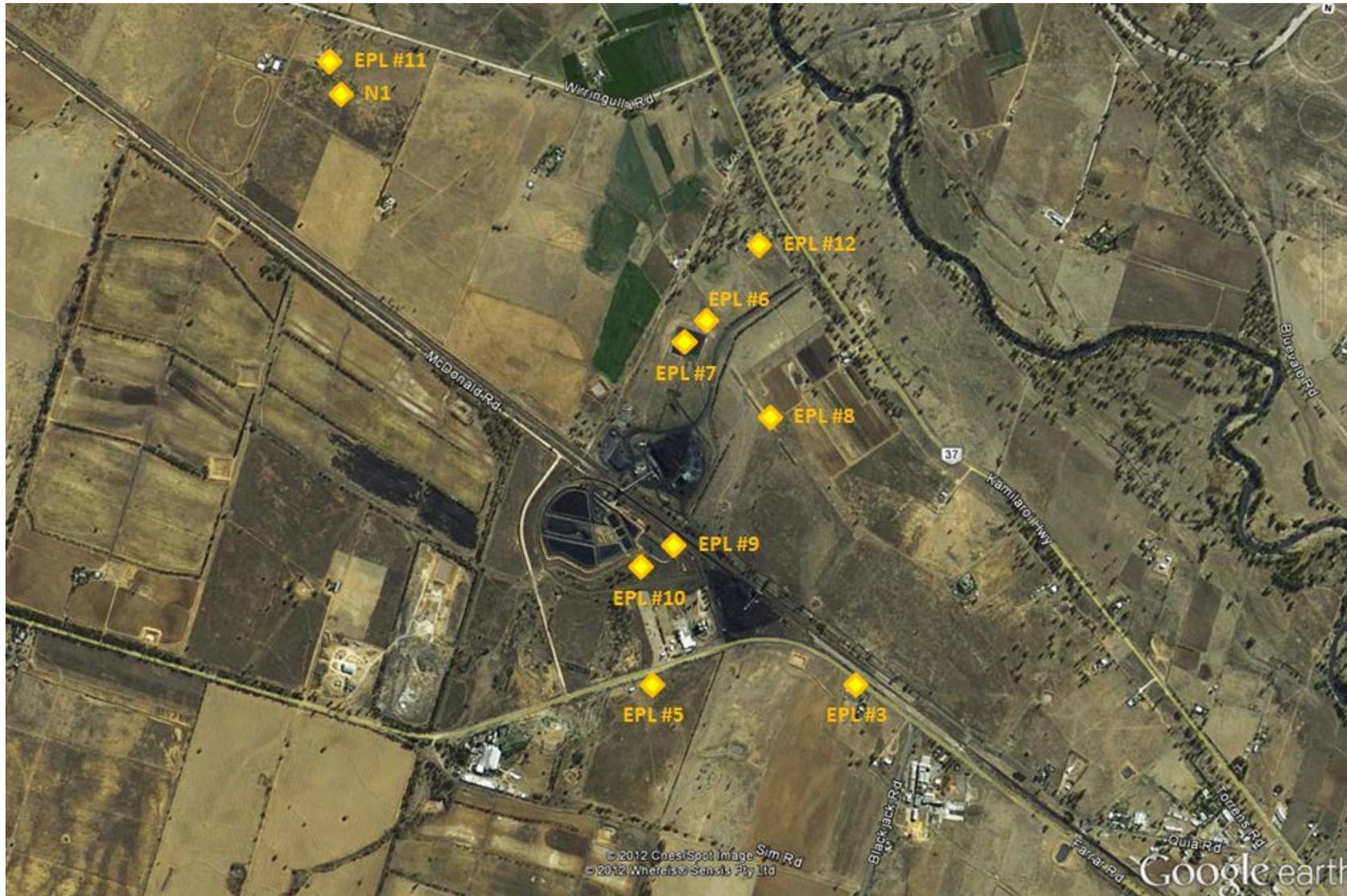
WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Weather (wind speed/direction)	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15} Minute				
N1	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: March 2017

Obtained Date: 24th April 2017

Publication Date: 26th April 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	20/03/17	28/03/17	-	-	-	2.2
5	PM ₁₀	µg/m ³	Every 6 days	6	Various	12/01/17	5.2	8.1	8.6	10.6
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days							
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	-

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	mg/L	Quarterly	1	1/03/17	8/03/17	-	-	-	0.03
	Bicarbonate	mg/L					-	-	-	1320
	Calcium	mg/L					-	-	-	29
	Chloride	mg/L					-	-	-	1210
	Conductivity	µs/cm					-	-	-	7570
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	111
	Nitrate	mg/L					-	-	-	1.10
	Potassium	mg/L					-	-	-	29
	Sodium	mg/L					-	-	-	1540
	Standing Water Level	m					-	-	-	5.01
	Sulphate	mg/L					-	-	-	669
pH	pH	-	-	-	8.5					
9	Ammonia	mg/L	Quarterly	1	1/03/17	8/03/17	-	-	-	0.14
	Bicarbonate	mg/L					-	-	-	779
	Calcium	mg/L					-	-	-	223
	Chloride	mg/L					-	-	-	1080



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	6140
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	239
	Nitrate	mg/L					-	-	-	0.26
	Potassium	mg/L					-	-	-	140
	Sodium	mg/L					-	-	-	724
	Standing Water Level	m					-	-	-	2.08
	Sulphate	mg/L					-	-	-	727
	pH	pH					-	-	-	7.00
10	Ammonia	mg/L	Quarterly	1	1/03/17	8/03/17	-	-	-	0.68
	Bicarbonate	mg/L					-	-	-	719
	Calcium	mg/L					-	-	-	177
	Chloride	mg/L					-	-	-	1290
	Conductivity	µs/cm					-	-	-	5800
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	219
	Nitrate	mg/L					-	-	-	13.6
	Potassium	mg/L					-	-	-	70
	Sodium	mg/L					-	-	-	725
	Standing Water Level	m					-	-	-	1.45
	Sulphate	mg/L					-	-	-	243
pH	pH	-	-	-	7.20					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15 Minute}				
N1	22/03/17	13:54	15 mins		Inaudible	35	2.0m/s	Nil	No
	23/03/17	19:08	15 mins		Not measurable	35	3.6m/s	Nil	
	23/03/17	22:07	15 mins		33	35	3.1m/s	Nil	
	23/03/17	22:07	1 min	46		45	3.1m/s	Not applicable due to weather conditions	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- *site noise levels were insignificant and unlikely, in many cases, to be even noticed; or*
- *site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: April 2017

Obtained Date: 16 May 2017

Publication Date: 16 May 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	0	-	-	-	-	-	-
5	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
11	PM ₁₀	µg/m ³	Every 6 days	5	Various	16/5/2017	4.9	19.7	8.0	63.3
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	16/5/2017	2.8	7.3	5.1	12.5
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	-

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

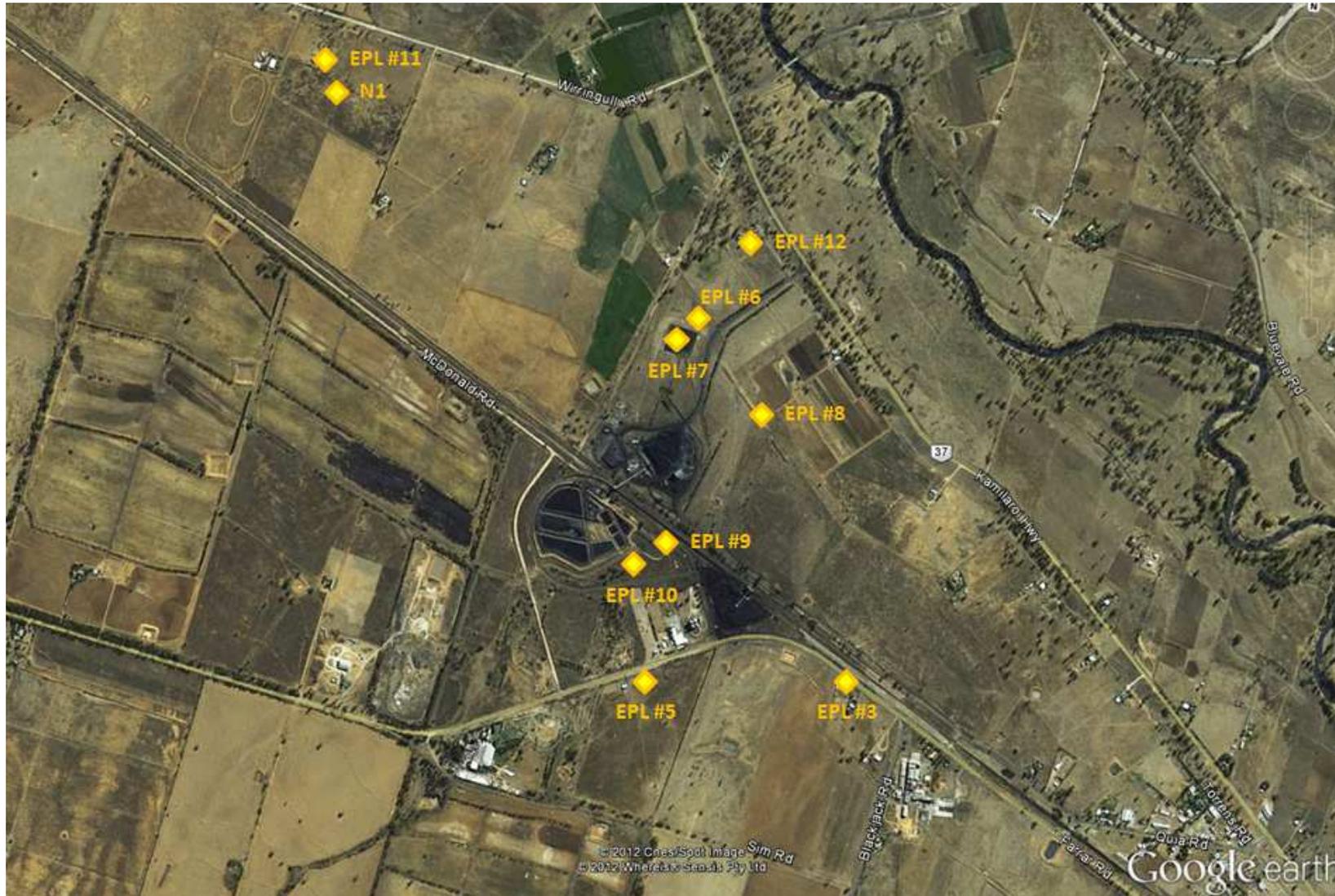
EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
				L _{A1,1} Minute	L _{Aeq, 15 Minute}				
N1	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

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- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





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Site Information

EPL No: 3637

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Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: May 2017

Obtained Date: 14 June 2017

Publication Date: 22 June 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	20/05/17	24/05/17	-	-	-	1.4
5	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
11	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/6/17	0.4	17.4	16.3	39.0
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/6/17	2.6	9.6	11.9	14.1
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	1	9/05/17	22/05/17	-	-	-	2620
	Oil and Grease	mg/L		1	9/05/17	22/05/17	-	-	-	<5
	Total Organic Carbon	mg/L		1	9/05/17	22/05/17	-	-	-	<1
	Total Suspended Solids	mg/L		1	9/05/17	22/05/17	-	-	-	34



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		1	9/05/17	22/05/17	-	-	-	8.32

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L		-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15 Minute}				
N1	23/05/17	10:11	15 mins	-	Inaudible	35	1.2m/s	CHPP inaudible	No
	23/05/17	18:26	15 mins	-	Inaudible	35	0.8m/s	CHPP inaudible	
	24/26/17	01:20	15 mins	-	Inaudible	35	2.4m/s	Criterion not applicable	
	24/06/17	01:20	1 min	Inaudible	-	45	2.4m/s	Criterion not applicable	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- *site noise levels were insignificant and unlikely, in many cases, to be even noticed; or*
- *site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: June 2017

Obtained Date: 14th July 2017

Publication Date: 18th July 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	19/06/17	26/06/17	-	-	-	1.2
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/07/17	3.4	17.5	17.8	32.4
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/07/17	3.2	10.1	11.8	16.0
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	-

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	1	20/06/17	27/06/17	-	-	-	0.03
	Bicarbonate	mg/L					-	-	-	1250
	Calcium	mg/L					-	-	-	31
	Chloride	mg/L					-	-	-	1270
	Conductivity	µs/cm					-	-	-	7040
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	107
	Nitrate	mg/L					-	-	-	1.24
	Potassium	mg/L					-	-	-	20
	Sodium	mg/L					-	-	-	1600
	Standing Water Level	m					-	-	-	8.15
	Sulphate	mg/L					-	-	-	669
pH	pH	-	-	-	8.5					
9	Ammonia	mg/L		1	20/06/17	27/06/17	-	-	-	0.03
	Bicarbonate	mg/L					-	-	-	667
	Calcium	mg/L					-	-	-	185
	Chloride	mg/L					-	-	-	1140



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	5710
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	228
	Nitrate	mg/L					-	-	-	0.77
	Potassium	mg/L					-	-	-	120
	Sodium	mg/L					-	-	-	753
	Standing Water Level	m					-	-	-	2.05
	Sulphate	mg/L					-	-	-	554
	pH	pH					-	-	-	7.3
10	Ammonia	mg/L	Quarterly	1	20/06/17	27/06/16	-	-	-	0.02
	Bicarbonate	mg/L					-	-	-	607
	Calcium	mg/L					-	-	-	164
	Chloride	mg/L					-	-	-	1360
	Conductivity	µs/cm					-	-	-	5590
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	209
	Nitrate	mg/L					-	-	-	13.3
	Potassium	mg/L					-	-	-	60
	Sodium	mg/L					-	-	-	763
	Standing Water Level	m					-	-	-	1.49
	Sulphate	mg/L					-	-	-	130
	pH	pH					-	-	-	7.7



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15 Minute}				
N1	-	-	-	-	-	35	-	-	-
	-	-	-	-	-	35	-	-	
	-	-	-	-	-	35	-	-	
	-	-	-	-	-	45	-	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: July 2017

Obtained Date: 15th August 2017

Publication Date: 28th August 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	20/07/17	27/07/17	-	-	-	0.6
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/08/17	9.3	14.7	12.7	23.1
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/08/17	8.4	10.7	10.2	14.9
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	-

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L		-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

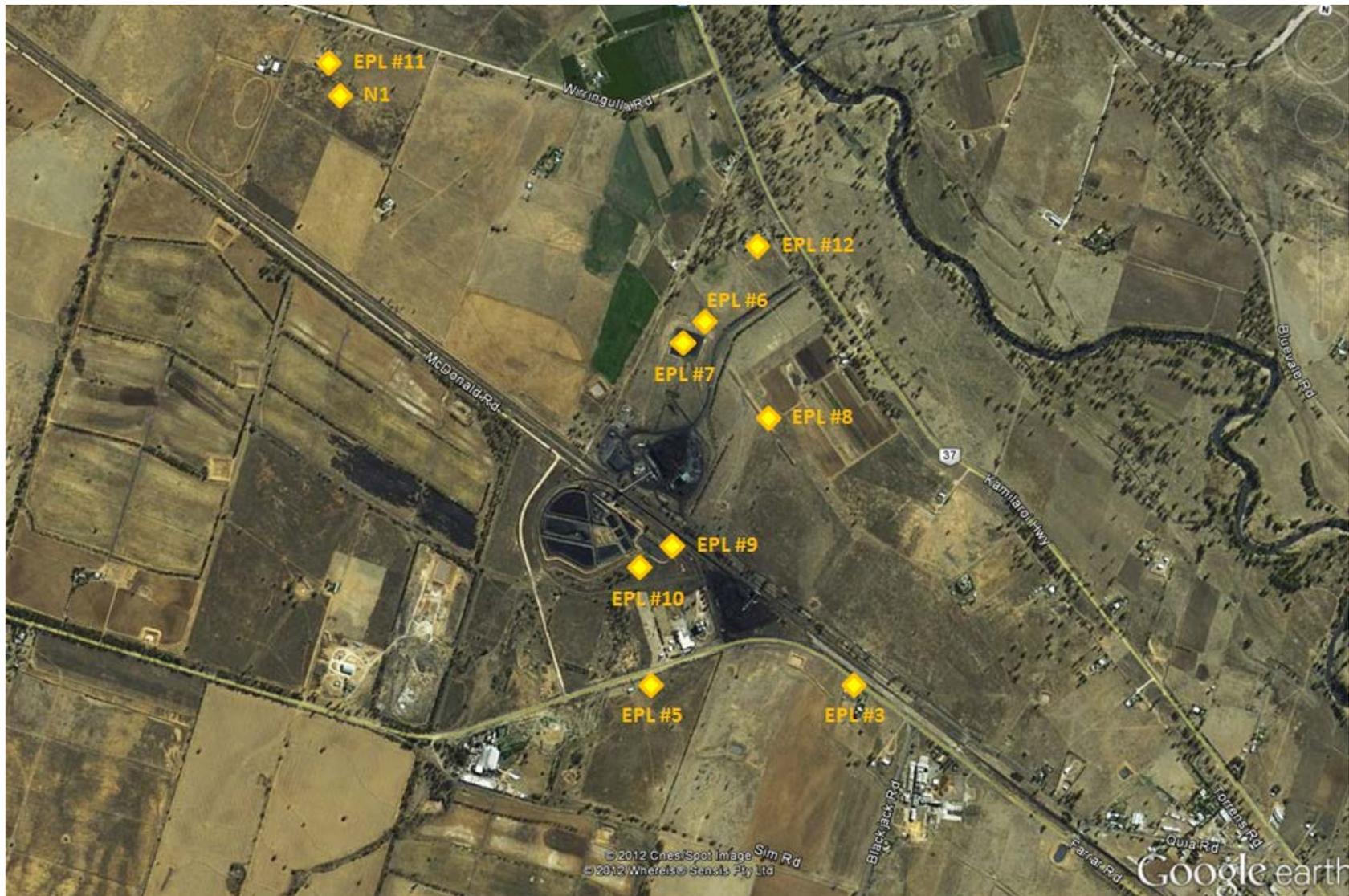
EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15 Minute}				
N1	-	-	-	-	-	35	-	-	-
	-	-	-	-	-	35	-	-	
	-	-	-	-	-	35	-	-	
	-	-	-	-	-	45	-	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- *site noise levels were insignificant and unlikely, in many cases, to be even noticed; or*
- *site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: August 2017

Obtained Date: 15th September 2017

Publication Date: 21st September 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	18/08/17	28/08/17	-	-	-	0.3
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/09/17	3.6	31.9	18.8	75.9
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/09/17	6.1	17.4	13.2	35.9
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	1	9/08/17	16/08/17	-	-	-	2940
	Oil and Grease	mg/L		1	9/08/17	16/08/17	-	-	-	<5
	Total Organic Carbon	mg/L		1	9/08/17	16/08/17	-	-	-	3
	Total Suspended Solids	mg/L			9/08/17	16/08/17	-	-	-	24



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		1	9/08/17	16/08/17	-	-	-	8.9

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	1	22/08/17	31/08/17	-	-	-	0.03
	Bicarbonate	mg/L					-	-	-	1190
	Calcium	mg/L					-	-	-	32
	Chloride	mg/L					-	-	-	1270
	Conductivity	µs/cm					-	-	-	7180
	Lead	mg/L					-	-	-	0.003
	Magnesium	mg/L					-	-	-	114
	Nitrate	mg/L					-	-	-	1.38
	Potassium	mg/L					-	-	-	20
	Sodium	mg/L					-	-	-	1530
	Standing Water Level	m					-	-	-	8.14
	Sulphate	mg/L					-	-	-	679
pH	pH	-	-	-	8.7					
9	Ammonia	mg/L		1	22/08/17	31/08/17	-	-	-	0.02
	Bicarbonate	mg/L					-	-	-	767
	Calcium	mg/L					-	-	-	239
	Chloride	mg/L					-	-	-	1080



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	5870
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	230
	Nitrate	mg/L					-	-	-	0.26
	Potassium	mg/L					-	-	-	112
	Sodium	mg/L					-	-	-	680
	Standing Water Level	m					-	-	-	1.92
	Sulphate	mg/L					-	-	-	683
	pH	pH					-	-	-	7.3
10	Ammonia	mg/L	Quarterly	1	22/08/17	31/08/17	-	-	-	0.02
	Bicarbonate	mg/L					-	-	-	618
	Calcium	mg/L					-	-	-	164
	Chloride	mg/L					-	-	-	1340
	Conductivity	µs/cm					-	-	-	5620
	Lead	mg/L					-	-	-	0.003
	Magnesium	mg/L					-	-	-	214
	Nitrate	mg/L					-	-	-	15.4
	Potassium	mg/L					-	-	-	57
	Sodium	mg/L					-	-	-	692
	Standing Water Level	m					-	-	-	1.35
	Sulphate	mg/L					-	-	-	227
pH	pH	-	-	-	7.7					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

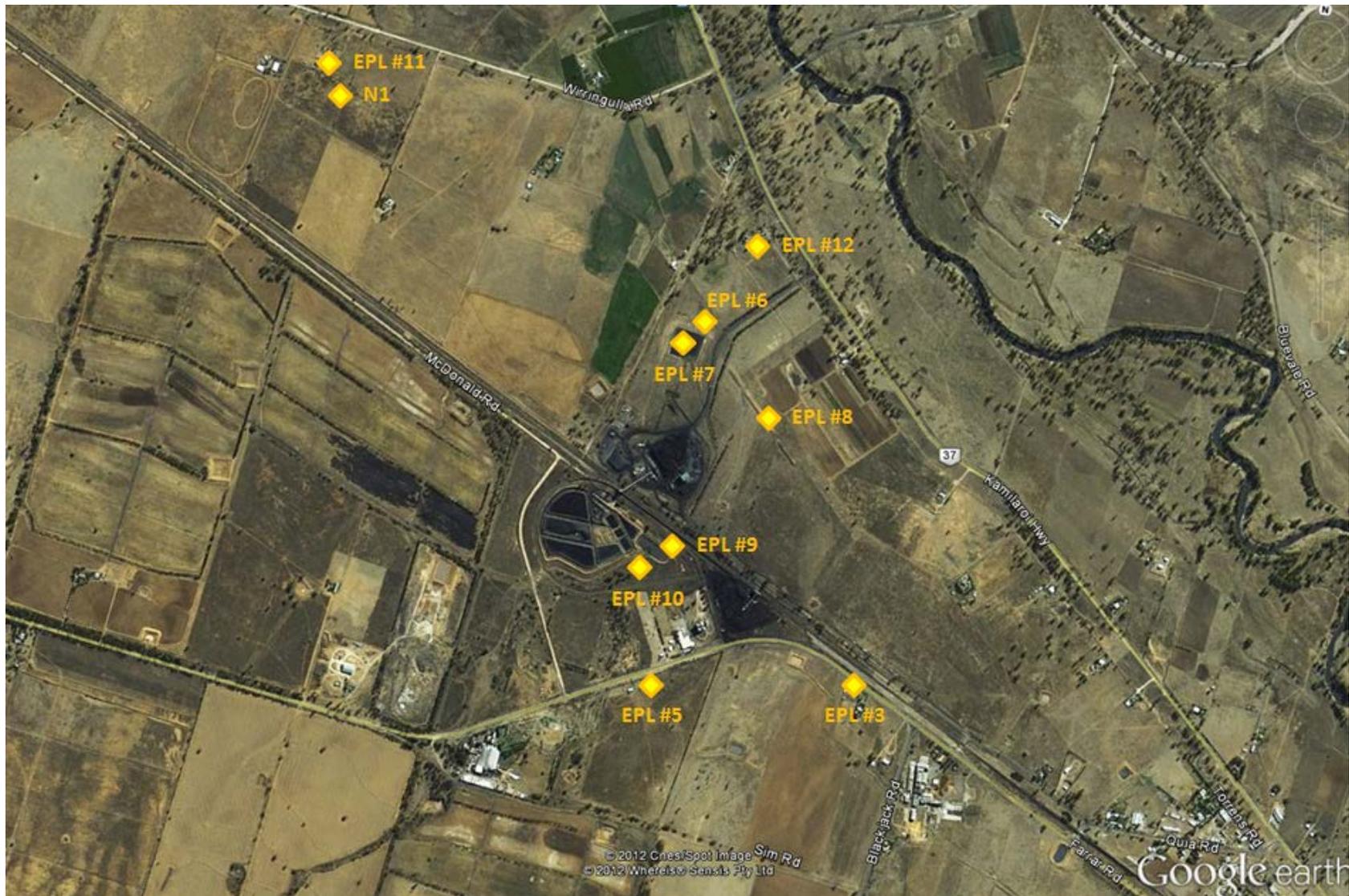
EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
				L _{A1, 1} Minute	L _{Aeq, 15 Minute}				
N1	15/08/17	10:57	15 mins		<20	35	1.5	-	No
	15/08/17	18:50	15 mins		IA	35	1.0	-	
	16/08/17	00:57	15 mins		IA	35	1.8	-	
	16/08/17	00:57	1 min	IA		45	1.8	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- *site noise levels were insignificant and unlikely, in many cases, to be even noticed; or*
- *site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: September 2017

Obtained Date: 11th October 2017

Publication Date: 24th October 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	19/09/17	28/09/17	-	-	-	1.1
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/10/17	5.8	24.3	23.9	43.4
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/10/17	16.1	22.7	20.6	33.9
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
N1	15/08/17	10:57	15 mins		-	-	-	-	-
	15/08/17	18:50	15 mins		-	-	-	-	
	16/08/17	00:57	15 mins		-	-	-	-	
	16/08/17	00:57	1 min	-		-	-	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: October 2017

Obtained Date: 9th November 2017

Publication Date: 17th November 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	19/10/17	26/10/17	-	-	-	1.4
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	9/11/17	4.8	7.3	6.8	12.0
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	9/11/17	6.0	8.6	8.7	10.8
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		-	-	-	-	-	-	

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed	Observations	(Potential) Non-compliance /breach
N1	15/08/17	10:57	15 mins		-	-	-	-	-
	15/08/17	18:50	15 mins		-	-	-	-	
	16/08/17	00:57	15 mins		-	-	-	-	
	16/08/17	00:57	1 min	-		-	-	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: November 2017

Obtained Date: 11th December 2017

Publication Date: 14th December 2017

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	17/11/17	22/11/17	-	-	-	1.6
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/12/17	3.7	12.4	12.7	22.0
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/12/17	5.2	15.4	11.5	40.9
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	1	8-11-17	15-11-17	-	-	-	2690
	Oil and Grease	mg/L		1	8-11-17	15-11-17	-	-	-	<5
	Total Organic Carbon	mg/L		1	8-11-17	15-11-17	-	-	-	7
	Total Suspended Solids	mg/L		1	8-11-17	15-11-17	-	-	-	28



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH		1	8-11-17	15-11-17	-	-	-	8.6

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

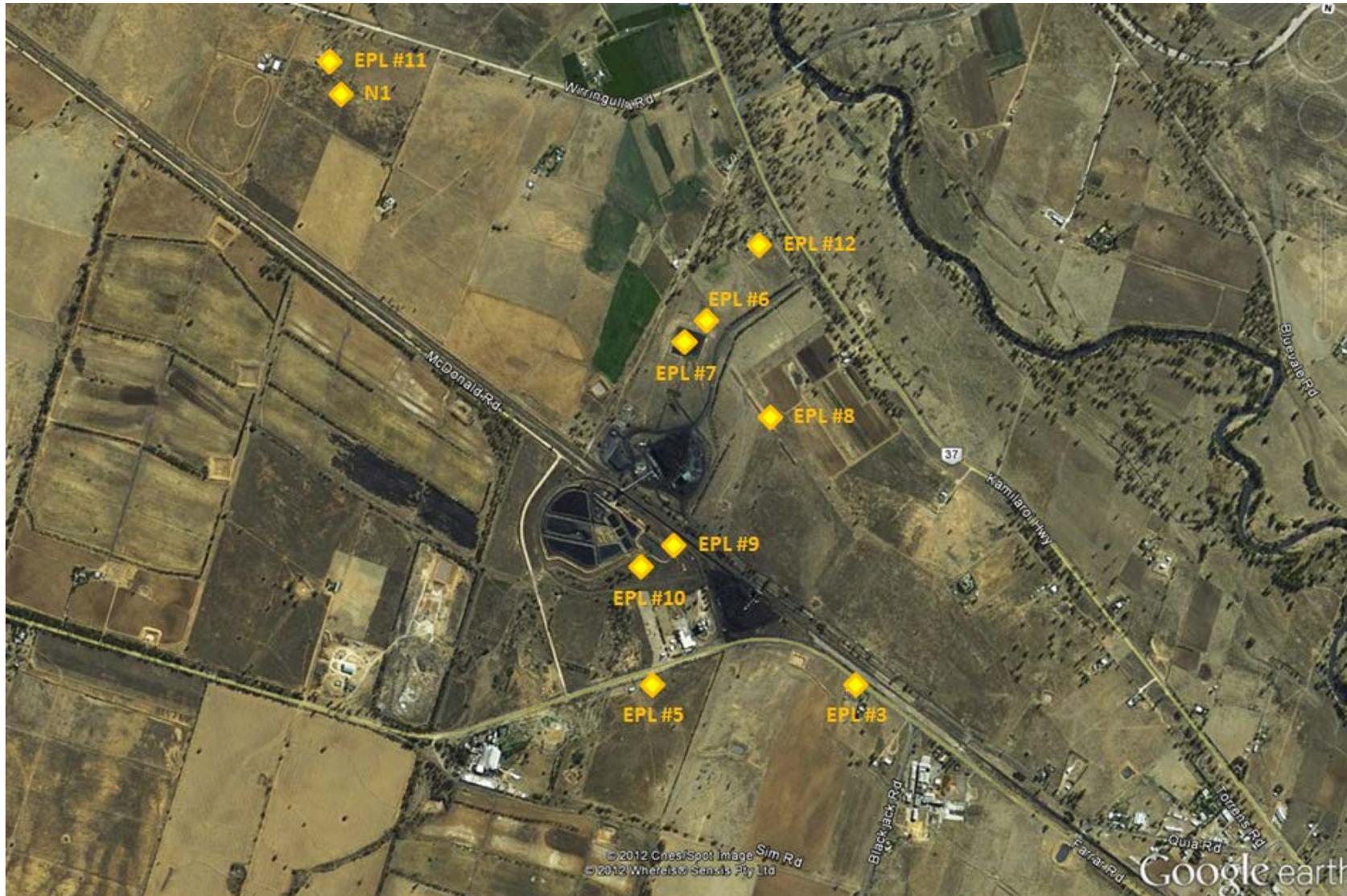
EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
N1	14/11/17	11:21	15 mins		IA	35	2.4		Y
	14/11/17	18:18	15 mins		<30	35	2.0		
	15/11/17	00:56	15 mins		36	35	2.3		
	15/11/17	00:56	1 min	44		45	2.3		

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- *site noise levels were insignificant and unlikely, in many cases, to be even noticed; or*
- *site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations





WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: December 2017

Obtained Date: 5th January 2018

Publication Date: 16th January 2018

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m ² /month	Continuous	1	18/12/17	4/01/18	-	-	-	2
5	PM ₁₀	µg/m ³	Every 6 days	5	Various	5/01/18	6.9	20.3	23.2	32.0
11	PM ₁₀	µg/m ³	Every 6 days	0	-	-	-	-	-	-
12	PM ₁₀	µg/m ³	Every 6 days	4	Various	5/01/18	8.0	21.4	23.6	30.3
6	Conductivity	ms/cm	Each overflow event	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
7	Conductivity	ms/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	pH	pH			-	-	-	-	-	-

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
8	Ammonia	/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					
9	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	-	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
pH	pH	-	-	-	-					



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Start Time	Measurement Period	Measured levels – All sources – dB(A)		Limit(s)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
N1	-	-	15 mins		-	-	-	-	-
	-	-	15 mins		-	-	-	-	
	-	-	15 mins		-	-	-	-	
	-	-	1 min	-		-	-	-	

When site noise is noted as inaudible, no site noise was audible at the monitoring location. Not Measurable indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- *site noise levels were insignificant and unlikely, in many cases, to be even noticed; or*
- *site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.*

WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations

