



## 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 2022

Obtained Date: 15 February 2022

Publication Date: 21 February 2022

**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 <sup>2</sup> /month	Continuous	1	17/01/22	27/01/22	-	-	-	1.63
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	Various	15/02/22	4.9	6.7	7	9.7
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	Various	15/02/22	4	6.5	7.1	9.4
6	Conductivity	µs/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	µs/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L		-	-	-	-	-	-	-
	Total Organic Carbon	mg/L		-	-	-	-	-	-	-
	Total Suspended Solids	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-



## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

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	0	-	-	-	-	-	-
	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	0	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	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
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
	Standing Water Level	m					-	-	-	-
	Sulphate	mg/L					-	-	-	-
	pH	pH					-	-	-	-
10	Ammonia	mg/L	Quarterly	0	-	-	-	-	-	-
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	-	-	-	-	-
		15 mins evening	-	-	-	-	-	
		15 mins night	-	-	-	-	-	
		1 min night	-	-	-	-	-	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

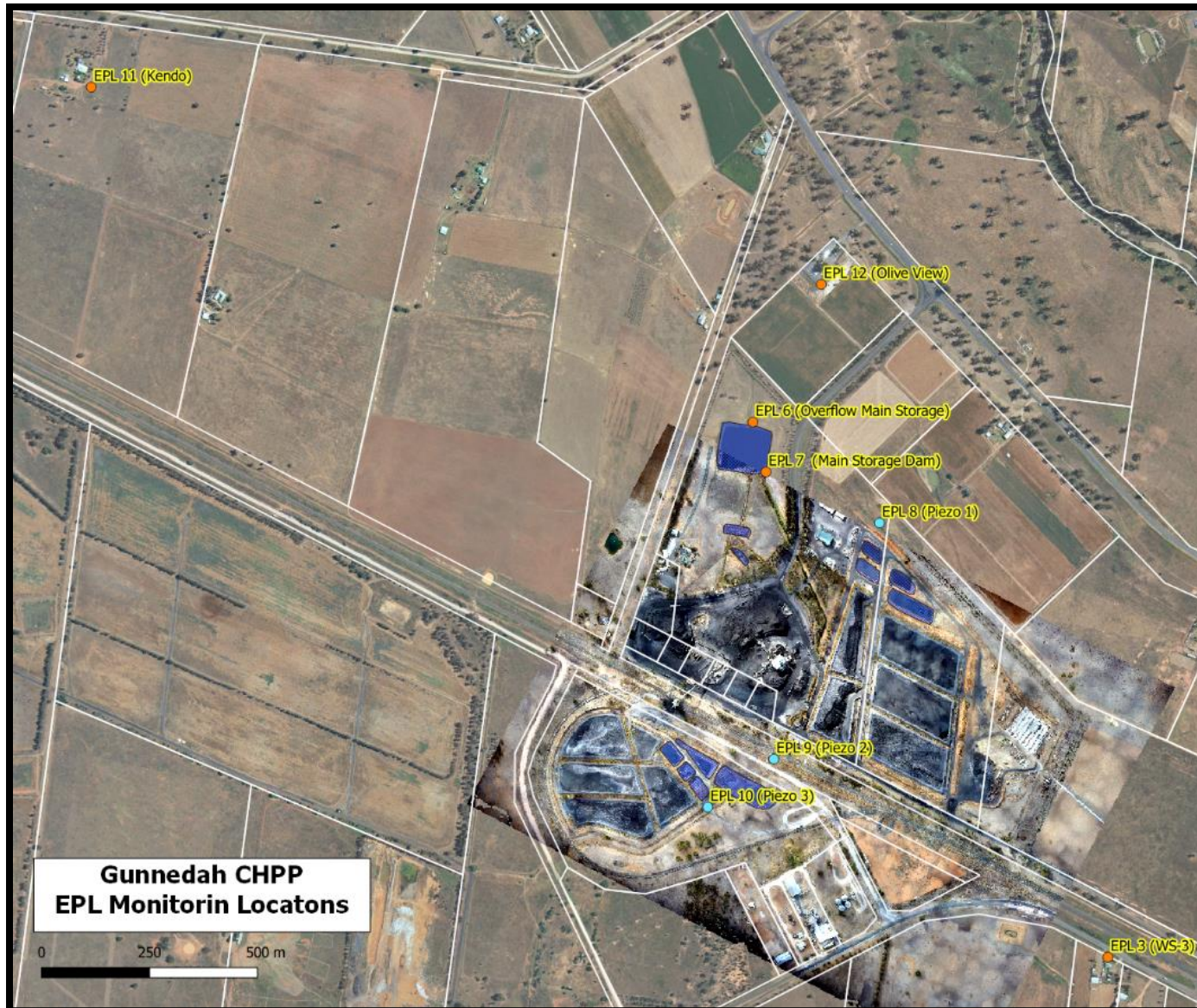
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

Obtained Date: 16 March 2022

Publication Date: 17 March 2022

**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 <sup>2</sup> /month	Continuous	1	16/02/22	24/02/22	-	-	-	0.97
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	6	Various	16/03/22	3.6	11.9	7.2	29.6
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	6	Various	16/03/22	3.2	6.8	7.5	10.6
6	Conductivity	µs/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	µs/cm	Quarterly	-	-	-	-	-	-	1350
	Oil and Grease	mg/L		-	-	-	-	-	-	5
	Total Organic Carbon	mg/L		-	-	-	-	-	-	3
	Total Suspended Solids	mg/L		-	-	-	-	-	-	15
	pH	pH		-	-	-	-	-	-	7.71



## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

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	24/02/22	7/03/22	-	-	-	3.79
	Bicarbonate	mg/L					-	-	-	1330
	Calcium	mg/L					-	-	-	71
	Chloride	mg/L					-	-	-	2210
	Conductivity	µs/cm					-	-	-	9830
	Lead	mg/L					-	-	-	0.002
	Magnesium	mg/L					-	-	-	184
	Nitrate	mg/L					-	-	-	0.09
	Potassium	mg/L					-	-	-	27
	Sodium	mg/L					-	-	-	2090
	Standing Water Level	m					-	-	-	6.79
	Sulphate	mg/L					-	-	-	1310
pH	pH	-	-	-	8.04					
9	Ammonia	mg/L	Quarterly	1	24/02/22	7/03/22	-	-	-	1.23
	Bicarbonate	mg/L					-	-	-	839
	Calcium	mg/L					-	-	-	264
	Chloride	mg/L					-	-	-	1160
	Conductivity	µs/cm					-	-	-	5790
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	227
	Nitrate	mg/L					-	-	-	0.20



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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
	Potassium	mg/L					-	-	-	96
	Sodium	mg/L					-	-	-	708
	Standing Water Level	m					-	-	-	0.81
	Sulphate	mg/L					-	-	-	747
	pH	pH					-	-	-	7.66
10	Ammonia	mg/L	Quarterly	1	24/02/22	7/03/22	-	-	-	0.38
	Bicarbonate	mg/L					-	-	-	746
	Calcium	mg/L					-	-	-	228
	Chloride	mg/L					-	-	-	1420
	Conductivity	µs/cm					-	-	-	5620
	Lead	mg/L					-	-	-	0.002
	Magnesium	mg/L					-	-	-	216
	Nitrate	mg/L					-	-	-	0.32
	Potassium	mg/L					-	-	-	51
	Sodium	mg/L					-	-	-	717
	Standing Water Level	m					-	-	-	0.94
	Sulphate	mg/L					-	-	-	262
	pH	pH					-	-	-	7.93





## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	-	-	-	-	-
		15 mins evening	-	-	-	-	-	
		15 mins night	-	-	-	-	-	
	-	1 min night	-	-	-	-	-	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

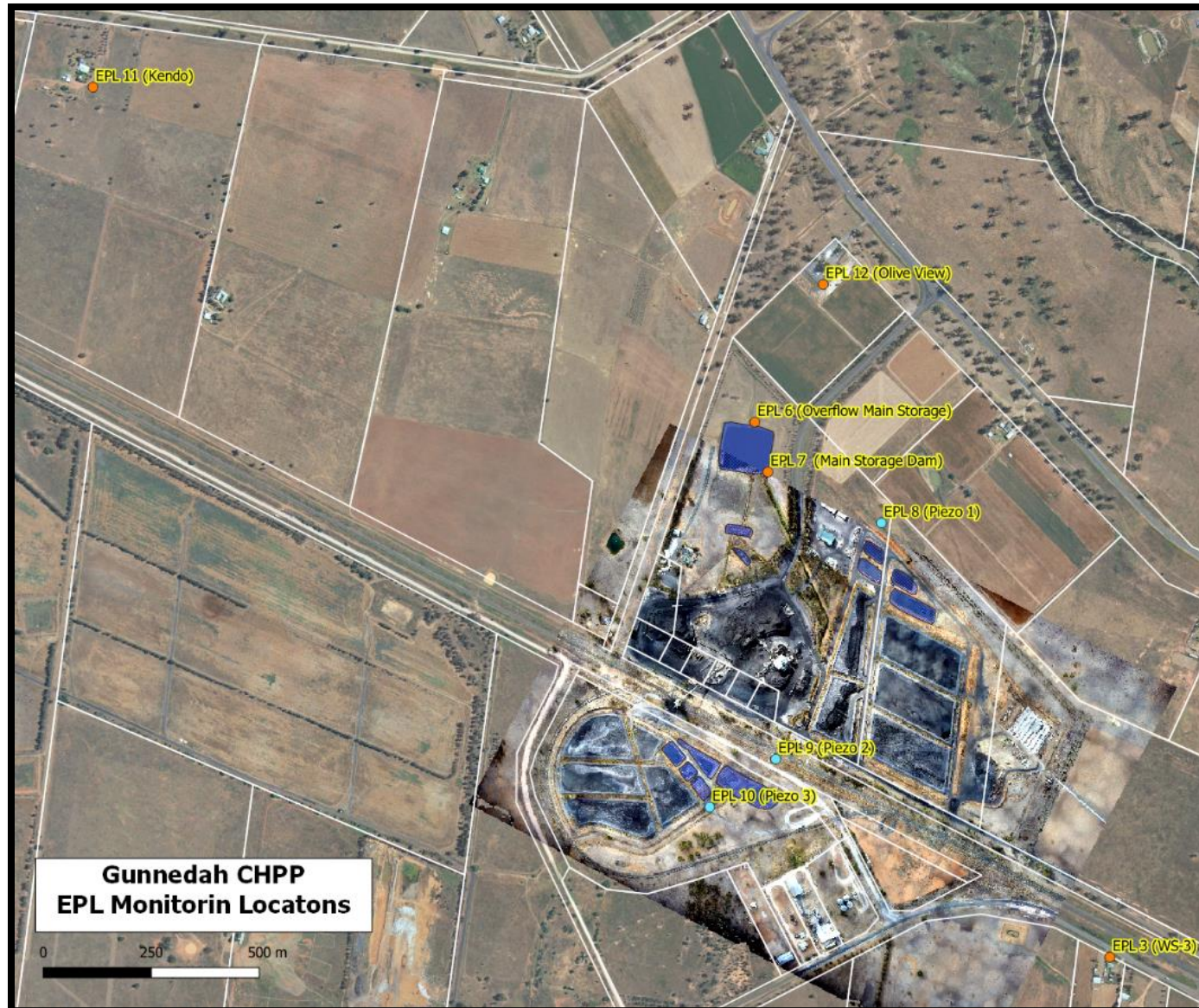
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

**Obtained Date:** 14 April 2022

**Publication Date:** 14 April 2022

**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 <sup>2</sup> /month	Continuous	1	18/03/2022	8/04/2022	-	-	-	1.83
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	6	Various	(Last sample) 14/04/2022	4.8	12.7	14.1	20.4
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	6	Various	(Last sample) 14/04/2022	4.3	9.7	7.7	20.4
6	Conductivity	µs/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	µs/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L					-	-	-	-
	Total Organic Carbon	mg/L					-	-	-	-
	Total Suspended Solids	mg/L					-	-	-	-



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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					-	-	-	-

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	-			-	-	-	-
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	I/A	35	1.9	Site related noise inaudible	No
		15 mins evening	-	30	35	1.5	Onsite engine revs and dozer operations slightly audible	
		15 mins night	-	34	35	0.6	Onsite engine revs and dozer operations slightly audible	
	-	1 min night	44	-	45	0.6	Onsite engine revs and dozer operations slightly audible	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

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**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

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## 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 2022

**Obtained Date:** 18<sup>th</sup> May 2022

**Publication Date:** 18<sup>th</sup> May 2022

**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 <sup>2</sup> /month	Continuous	1	19/04/2022	11/05/2022	-	-	-	1.79	
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	28/04/2022	18/05/2022	2.8	6.2	6.9	9	
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	28/04/2022	18/05/2022	3	4.2	4.4	5.7	
6	Conductivity	µs/cm	Each overflow event	No overflow occurred during reporting period.	-	-	-	-	-	-	
	Oil and Grease	mg/L			-	-	-	-	-	-	
	Total Organic Carbon	mg/L			-	-	-	-	-	-	
	Total Suspended Solids	mg/L			-	-	-	-	-	-	
	pH	pH			-	-	-	-	-	-	
7	Conductivity	µs/cm	Quarterly	-	-	-	-	-	-	-	
	Oil and Grease	mg/L					-	-	-	-	-
	Total Organic Carbon	mg/L					-	-	-	-	-
	Total Suspended Solids	mg/L					-	-	-	-	-
	pH	pH					-	-	-	-	-





## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

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	-	-	-	-	-	-	-
	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					-	-	-	-
	Conductivity	µs/cm					-	-	-	-
	Lead	mg/L					-	-	-	-
	Magnesium	mg/L					-	-	-	-
	Nitrate	mg/L					-	-	-	-
	Potassium	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-



# WHITEHAVEN COAL

## 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
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-		35			
		15 mins evening	-		35			
		15 mins night	-		35			
	-	1 min night		-	45			

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

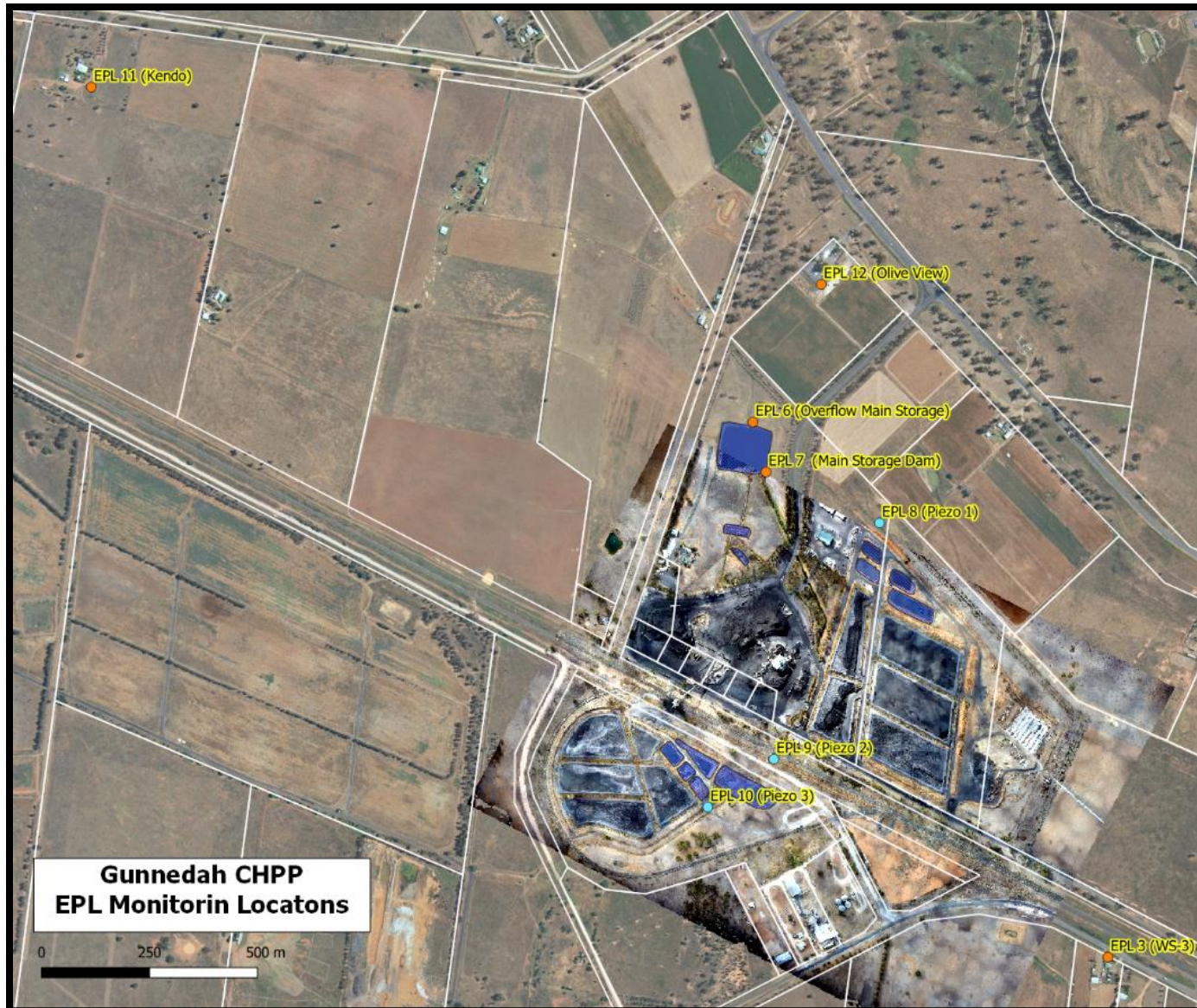
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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: May 2022

Obtained Date: 14<sup>th</sup> June 2022

Publication Date: 20<sup>th</sup> June 2022

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 <sup>2</sup> /month	Continuous	1	17/05/2022	1/06/2022				1.17
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	4/05/2022 10/05/2022 16/05/2022 22/05/2022 28/05/2022	14/06/2022 (Last sampled received)	2.5	10.3	5.5	32.8
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	4/05/2022 10/05/2022 16/05/2022 22/05/2022 28/05/2022	14/06/2022 (Last sampled received)	2.1	5.6	6.6	7.7
6	Conductivity	µs/cm	Each overflow event	No overflow occurred during reporting period.	-	-	-	-	-	-
	Oil and Grease	mg/L			-	-	-	-	-	-
	Total Organic Carbon	mg/L			-	-	-	-	-	-
	Total Suspended Solids	mg/L			-	-	-	-	-	-
	pH	pH			-	-	-	-	-	-
7	Conductivity	µs/cm	Quarterly	1	24/05/2022	2/06/2022	-	-	-	1220
	Oil and Grease	mg/L					-	-	-	<5
	Total Organic Carbon	mg/L					-	-	-	5



### 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
	Total Suspended Solids	mg/L					-	-	-	22
	pH	pH					-	-	-	7.6

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	mg/L	Quarterly	0	-	-	-	-	-	-
	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	0	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	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
	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					-	-	-	-
10	Ammonia	mg/L	Quarterly	0	-	-	-	-	-	-
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-		35			
		15 mins evening	-		35			
		15 mins night	-		35			
	-	1 min night		-	45			

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** 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.

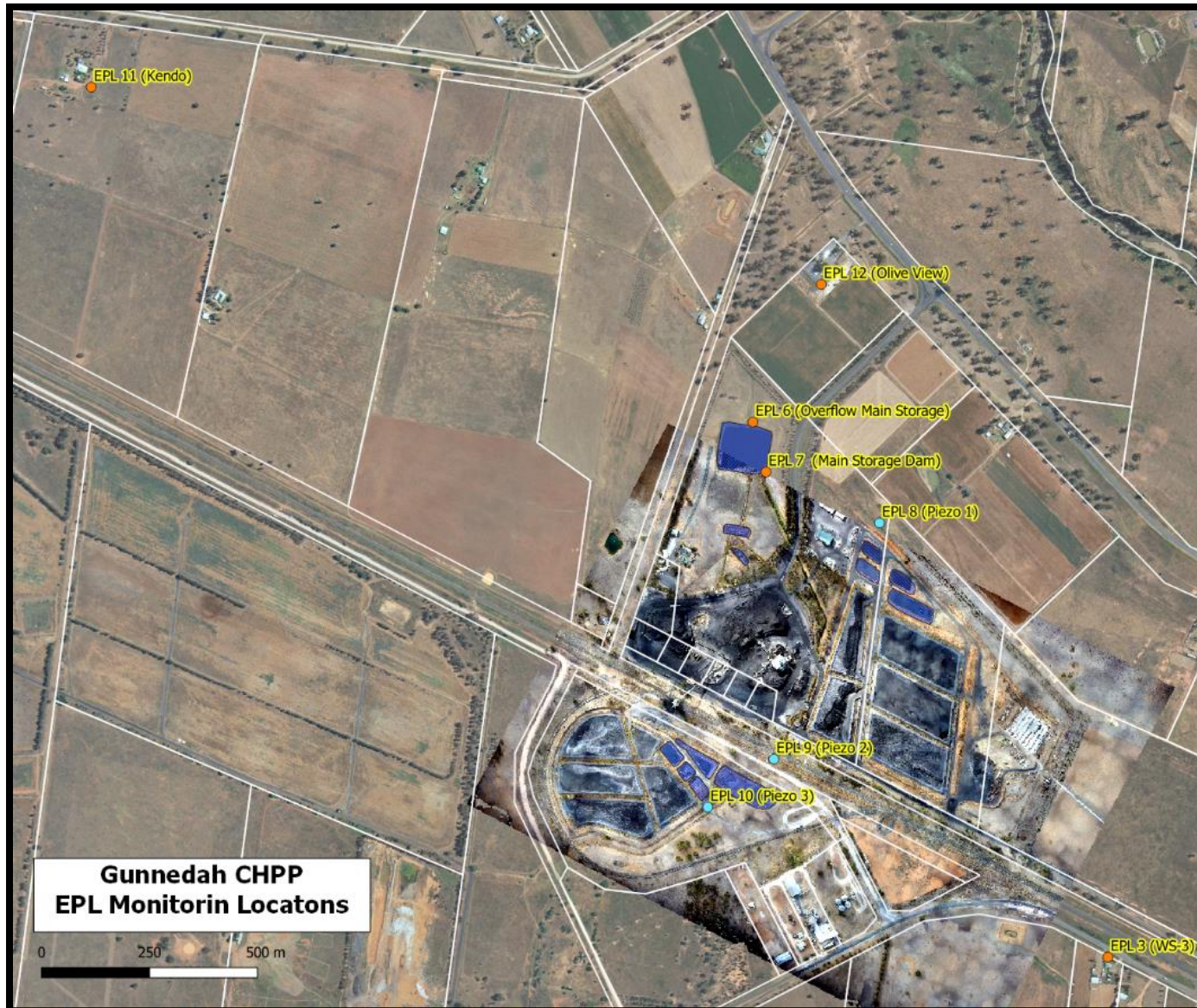




# WHITEHAVEN COAL

## 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 2022

**Obtained Date:** 13<sup>th</sup> July 2022

**Publication Date:** 19<sup>th</sup> July 2022

**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 <sup>2</sup> /month	Continuous	1	16/06/2022	29/06/2022				0.6
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	3/06/2022 9/06/2022 15/06/2022 21/06/2022 27/06/2022	8/07/2022 (Last sampled received)	1.3	18.1	9.7	43.9
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	3/06/2022 9/06/2022 15/06/2022 21/06/2022 27/06/2022	8/07/2022 (Last sampled received)	1.7	6.2	6	11.2
6	Conductivity	µs/cm	Each overflow event	No overflow occurred during reporting period.	-	-	-	-	-	-
	Oil and Grease	mg/L			-	-	-	-	-	-
	Total Organic Carbon	mg/L			-	-	-	-	-	-
	Total Suspended Solids	mg/L			-	-	-	-	-	-
	pH	pH			-	-	-	-	-	-
7	Conductivity	µs/cm	Quarterly	0	-	-	-	-	-	-
	Oil and Grease	mg/L			-	-	-	-	-	
	Total Organic Carbon	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
	Total Suspended Solids	mg/L					-	-	-	-
	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	3/06/2022	15/06/2022	-	-	-	1.54
	Bicarbonate	mg/L					-	-	-	1120
	Calcium	mg/L					-	-	-	58
	Chloride	mg/L					-	-	-	1990
	Conductivity	µs/cm					-	-	-	10700
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	171
	Nitrate	mg/L					-	-	-	<0.01
	Potassium	mg/L					-	-	-	25
	Sodium	mg/L					-	-	-	1920
	Standing Water Level	m					-	-	-	5.79
	Sulphate	mg/L					-	-	-	1290
pH	pH	-	-	-	7.50					
9	Ammonia	mg/L	Quarterly	1	3/06/2022	15/06/2022	-	-	-	0.01
	Bicarbonate	mg/L					-	-	-	786
	Calcium	mg/L					-	-	-	230



### 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
	Chloride	mg/L					-	-	-	1180
	Conductivity	µs/cm					-	-	-	6070
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	218
	Nitrate	mg/L					-	-	-	2.69
	Potassium	mg/L					-	-	-	109
	Sodium	mg/L					-	-	-	666
	Standing Water Level	m					-	-	-	5.79
	Sulphate	mg/L					-	-	-	680
	pH	pH					-	-	-	7.4
10	Ammonia	mg/L	Quarterly	1	3/06/2022	15/06/2022	-	-	-	0.1
	Bicarbonate	mg/L					-	-	-	744
	Calcium	mg/L					-	-	-	199
	Chloride	mg/L					-	-	-	1430
	Conductivity	µs/cm					-	-	-	6040
	Lead	mg/L					-	-	-	0.001
	Magnesium	mg/L					-	-	-	207
	Nitrate	mg/L					-	-	-	5.28
	Potassium	mg/L					-	-	-	67
	Sodium	mg/L					-	-	-	666
	Standing Water Level	m					-	-	-	0.54
	Sulphate	mg/L					-	-	-	256
	pH	pH					-	-	-	7.7



## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	31	35	2.0	General site activity and dozer operations audible. Other noises included birds, traffic, residence and aircraft.	-
		15 mins evening	-	33	35	2.1	General site activity and dozer operations audible. Other noises included birds and traffic.	
		15 mins night	-	31	35	1.7	General site activity and dozer operations audible. Other noises include traffic.	
	-	1 min night	35	-	45	1.7	General site activity and dozer operations audible. Other noises include traffic.	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

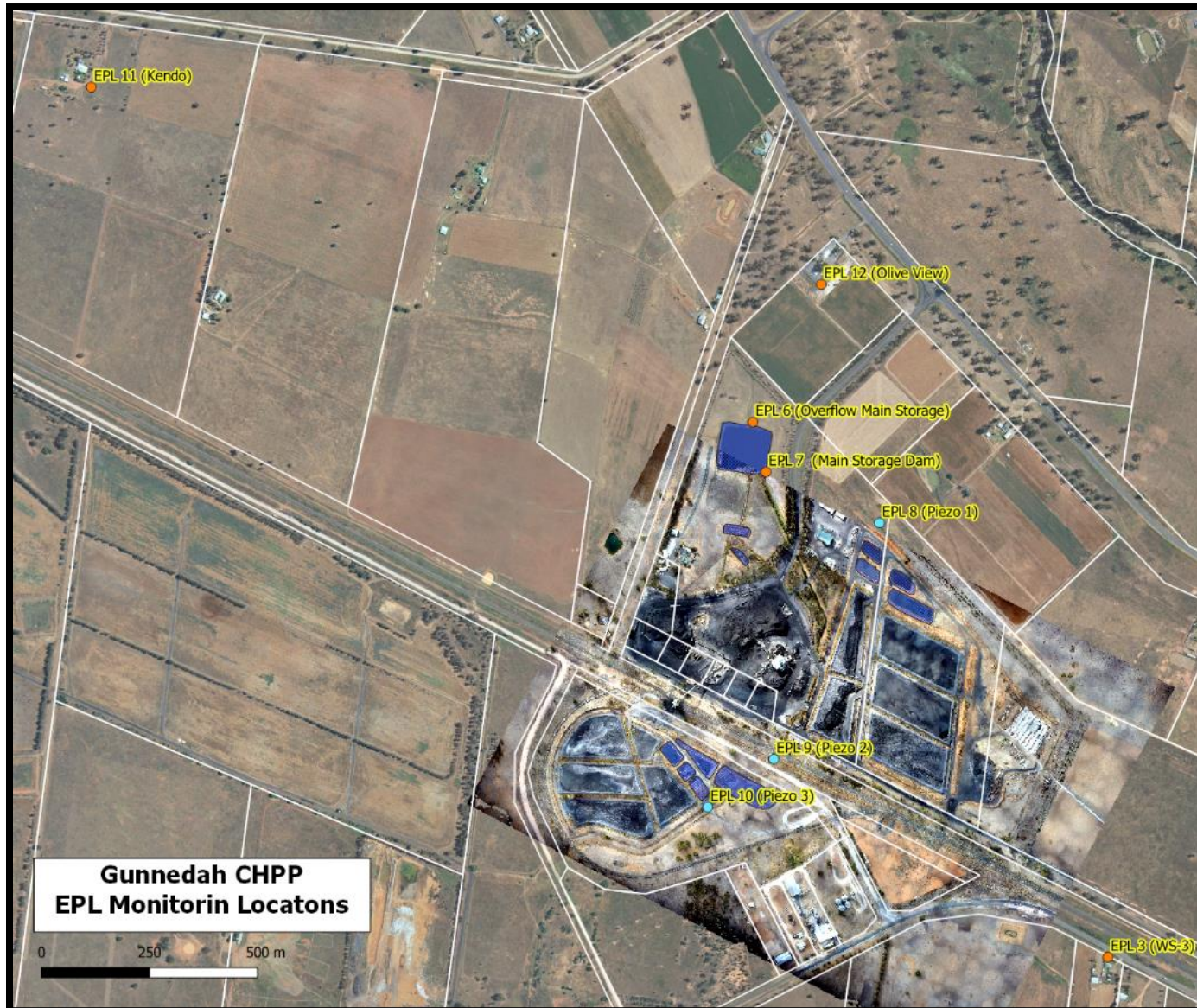
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

**Obtained Date:** 9<sup>th</sup> August 2022

**Publication Date:** 19<sup>th</sup> August 2022

**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 <sup>2</sup> /month	Continuous	1	18/07/2022	3/08/2022				0.62
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	3/07/2022 9/07/2022 15/07/2022 21/07/2022 27/07/2022	9/08/2022 (Last sampled received)	1.7	5.6	2.4	16.6
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	3/07/2022 9/07/2022 15/07/2022 21/07/2022 27/07/2022	9/08/2022 (Last sampled received)	1	4.9	5	9.9
6	Conductivity	µs/cm	Each overflow event	No overflow occurred during reporting period.	-	-	-	-	-	-
	Oil and Grease	mg/L			-	-	-	-	-	-
	Total Organic Carbon	mg/L			-	-	-	-	-	-
	Total Suspended Solids	mg/L			-	-	-	-	-	-
	pH	pH			-	-	-	-	-	-
7	Conductivity	µs/cm	Quarterly	0	-	-	-	-	-	-
	Oil and Grease	mg/L			-	-	-	-	-	
	Total Organic Carbon	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
	Total Suspended Solids	mg/L					-	-	-	-
	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	0	-	-	-	-	-	-
	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	0	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	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
	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					-	-	-	-
10	Ammonia	mg/L	Quarterly	0	-	-	-	-	-	-
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	-	35	-	-	-
		15 mins evening	-	-	35	-	-	
		15 mins night	-	-	35	-	-	
	-	1 min night	-	-	45	-	-	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

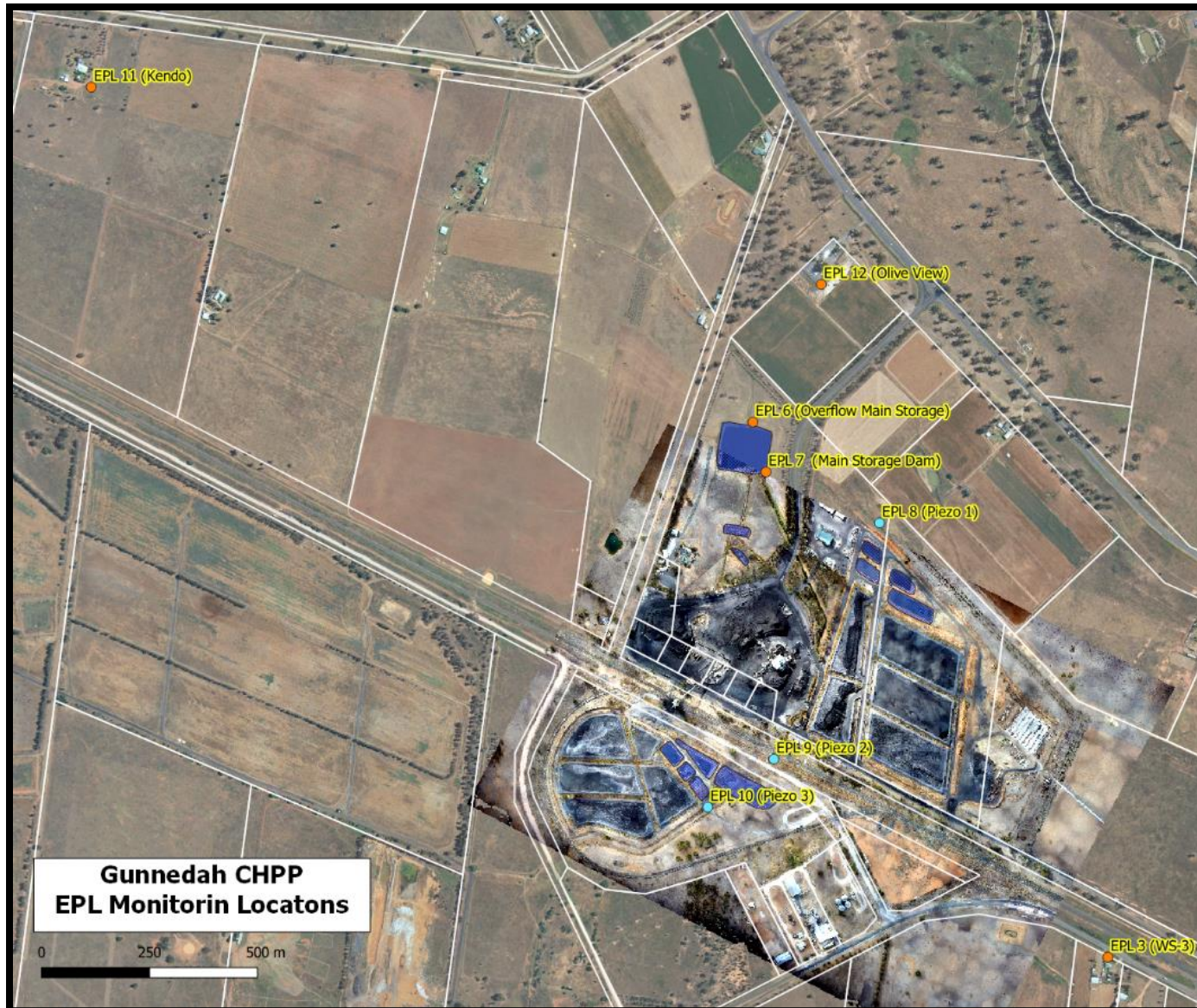
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

Obtained Date: 7<sup>th</sup> September 2022

Publication Date: 19<sup>th</sup> September 2022

**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 <sup>2</sup> /month	Continuous	1	17/08/2022	25/08/2022				1.07
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	2/08/2022 8/08/2022 14/08/2022 20/08/2022 26/08/2022	6/09/2022 (Last sampled received)	0.4	2.5	2.9	3.5
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	2/08/2022 8/08/2022 14/08/2022 20/08/2022 26/08/2022	6/09/2022 (Last sampled received)	0.5	3.4	3.3	6.8
6	Conductivity	µs/cm	Each overflow event	No overflow occurred during reporting period.	-	-	-	-	-	-
	Oil and Grease	mg/L			-	-	-	-	-	-
	Total Organic Carbon	mg/L			-	-	-	-	-	-
	Total Suspended Solids	mg/L			-	-	-	-	-	-
	pH	pH			-	-	-	-	-	-
7	Conductivity	µs/cm	Quarterly	1	8/08/2022	16/08/2022	-	-	-	1260
	Oil and Grease	mg/L					-	-	-	<5
	Total Organic Carbon	mg/L					-	-	-	4



## 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
	Total Suspended Solids	mg/L					-	-	-	10
	pH	pH					-	-	-	7.20

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	30/08/2022	7/09/2022	-	-	-	0.74
	Bicarbonate	mg/L					-	-	-	1300
	Calcium	mg/L					-	-	-	66
	Chloride	mg/L					-	-	-	2110
	Conductivity	µs/cm					-	-	-	10100
	Lead	mg/L					-	-	-	0.003
	Magnesium	mg/L					-	-	-	187
	Nitrate	mg/L					-	-	-	0.01
	Potassium	mg/L					-	-	-	27
	Sodium	mg/L					-	-	-	2090
	Standing Water Level	m					-	-	-	5.80
	Sulphate	mg/L					-	-	-	1330
pH	pH	-	-	-	8.01					
9	Ammonia	mg/L	Quarterly	1	30/08/2022	7/09/2022	-	-	-	0.02
	Bicarbonate	mg/L					-	-	-	920
	Calcium	mg/L					-	-	-	280
	Chloride	mg/L					-	-	-	1150



### 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					-	-	-	5900
	Lead	mg/L					-	-	-	0.003
	Magnesium	mg/L					-	-	-	230
	Nitrate	mg/L					-	-	-	0.38
	Potassium	mg/L					-	-	-	113
	Sodium	mg/L					-	-	-	700
	Standing Water Level	m					-	-	-	0.73
	Sulphate	mg/L					-	-	-	776
	pH	pH					-	-	-	7.69
10	Ammonia	mg/L	Quarterly	1	30/08/2022	7/09/2022	-	-	-	<0.01
	Bicarbonate	mg/L					-	-	-	760
	Calcium	mg/L					-	-	-	228
	Chloride	mg/L					-	-	-	1370
	Conductivity	µs/cm					-	-	-	5980
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	216
	Nitrate	mg/L					-	-	-	7.51
	Potassium	mg/L					-	-	-	59
	Sodium	mg/L					-	-	-	711
	Standing Water Level	m					-	-	-	0.71
	Sulphate	mg/L					-	-	-	283
pH	pH	-	-	-	7.91					



## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	-	35	-	-	-
		15 mins evening	-	-	35	-	-	
		15 mins night	-	-	35	-	-	
	-	1 min night	-	-	45	-	-	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

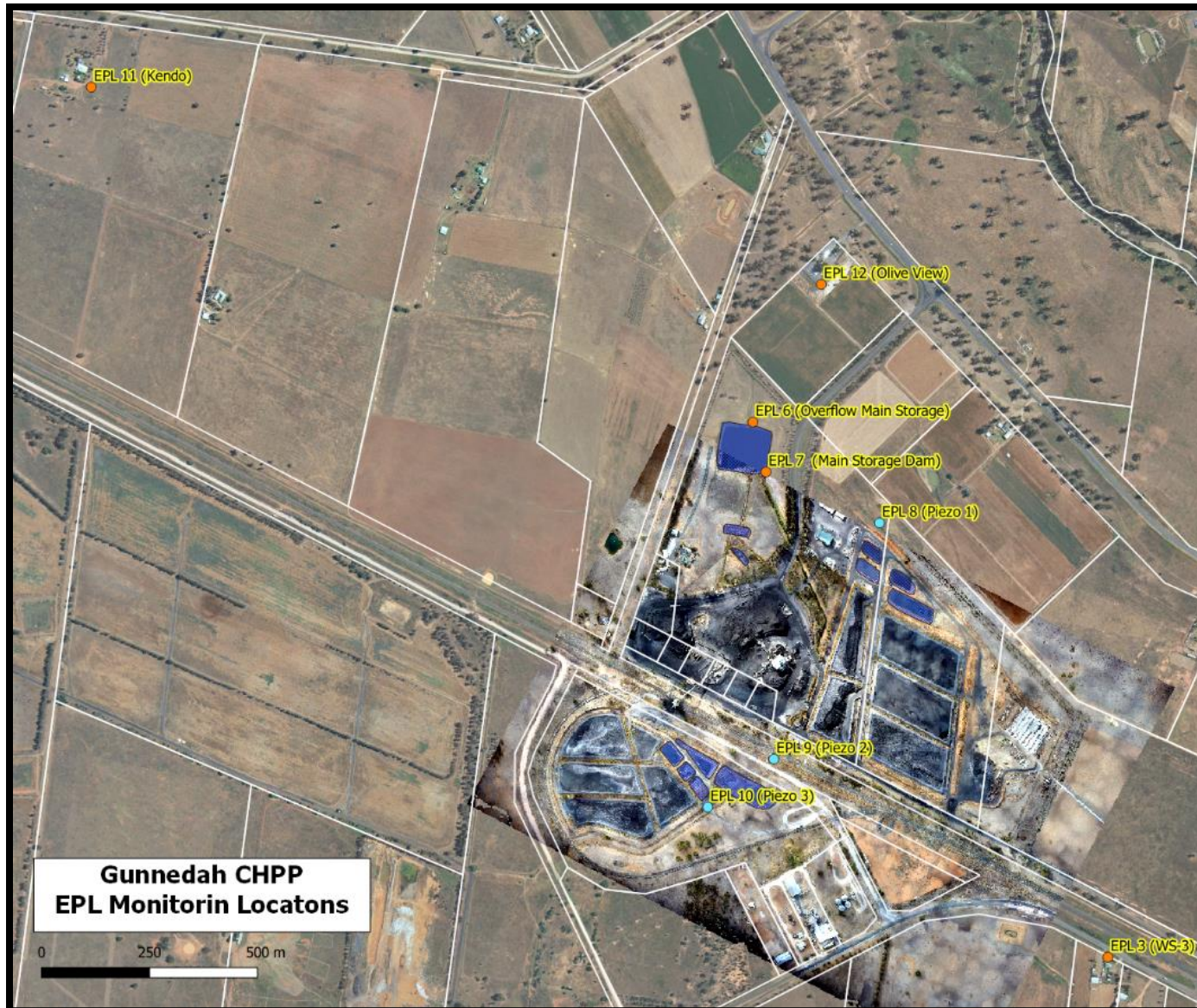
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

**Obtained Date:** 12<sup>th</sup> October 2022

**Publication Date:** 19<sup>th</sup> October 2022

**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 <sup>2</sup> /month	Continuous	1	22/09/2022	30/09/2022				0.38
11	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	1/09/2022 7/09/2022 13/09/2022 19/09/2022 25/09/2022	10/10/2022 (Last sampled received)	8.2	18.5	13	41.1
12	PM <sub>10</sub>	µg/m <sup>3</sup>	Every 6 days	5	1/09/2022 7/09/2022 13/09/2022 19/09/2022 25/09/2022	10/10/2022 (Last sampled received)	4.2	6.7	6.4	10.7
6	Conductivity	µs/cm	Each overflow event	2	16/09/2022 22/09/2022	28/09/2022 12/10/2022	793	855	854.5	916
	Oil and Grease	mg/L					<5	<5	<5	<5
	Total Organic Carbon	mg/L					6	15	15	24
	Total Suspended Solids	mg/L					20	35	34.5	49
	pH	pH				6.84	7.2	7.2	7.56	
7	Conductivity	µs/cm	Quarterly	-	-	-	-	-	-	-
	Oil and Grease	mg/L					-	-	-	-
	Total Organic Carbon	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
	Total Suspended Solids	mg/L					-	-	-	-
	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	-			-	-	-	-
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	12/09/2022	15 mins day	-	I/A	35	2.1	Inaudible	N
		15 mins evening	-	34	35	1.5	Dozer operations, insects and birds	
		15 mins night	-	27	35	1.2	Dozer operations, traffic, Insects, dogs	
	12/09/2022	1 min night	33	-	45	1.2	Dozer operations, traffic, Insects, dogs	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

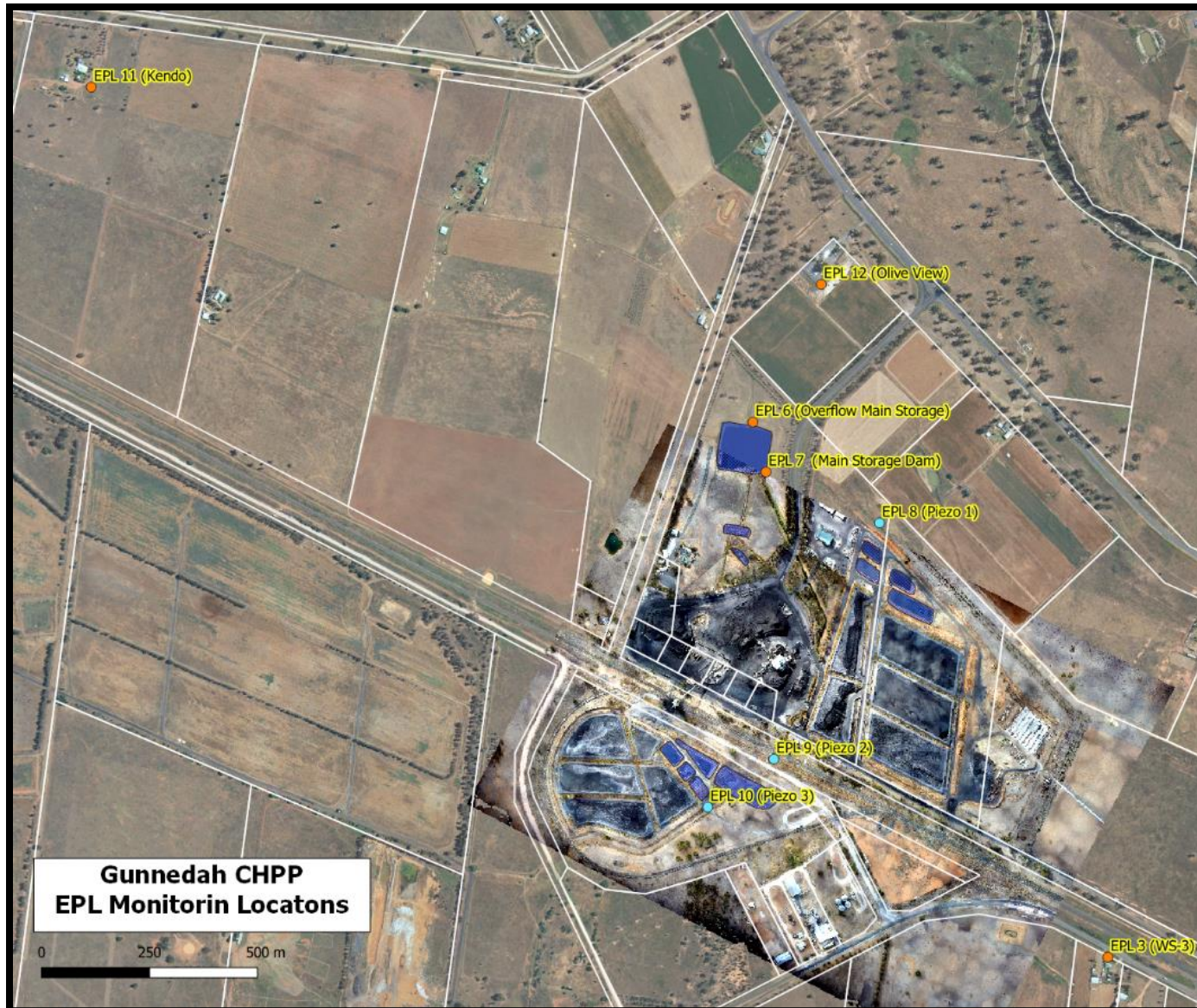
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

Obtained Date: 17<sup>th</sup> November 2022

Publication Date: 17<sup>th</sup> November 2022

**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 <sup>2</sup> /month	Continuous	1	17/10/2022	06/11/2022				1.14
11	PM <sub>10</sub> Kendo	µg/m <sup>3</sup>	Every 6 days	6	1/10/2022 7/10/2022 13/10/2022 19/10/2022 25/10/2022 31/10/2022	17/11/2022 (Last sampled received)	4.1	12	7.05	32.5
12	PM <sub>10</sub> Olive View	µg/m <sup>3</sup>	Every 6 days	6	1/10/2022 7/10/2022 13/10/2022 19/10/2022 25/10/2022 31/10/2022	17/11/2022 (Last sampled received)	0.8	6	6.3	9.5
6	Conductivity	µs/cm	Each overflow event	2	9/10/2022 21/10/2022	28/10/2022 3/11/2022	865	917	916.5	698
	Oil and Grease	mg/L					<5	<5	<5	<5
	Total Organic Carbon	mg/L					11	21	21	31
	Total Suspended Solids	mg/L					50	50	50	50
	pH	pH					7.37	7.57	7.57	7.77
7	Conductivity	µs/cm	Quarterly	-			-	-	-	-



### 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
	Oil and Grease	mg/L			-	-	-	-	-	-
	Total Organic Carbon	mg/L					-	-	-	-
	Total Suspended Solids	mg/L					-	-	-	-
	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	-	-	-	-	-	-	-
	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					-	-	-	-



### 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
	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					-	-	-	-
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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1		15 mins day	-		35			
		15 mins evening	-		35			
		15 mins night	-		35			
		1 min night		-	45			

Notes:

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** indicates that some site noise was audible, but indeterminate due to one of the following reasons:

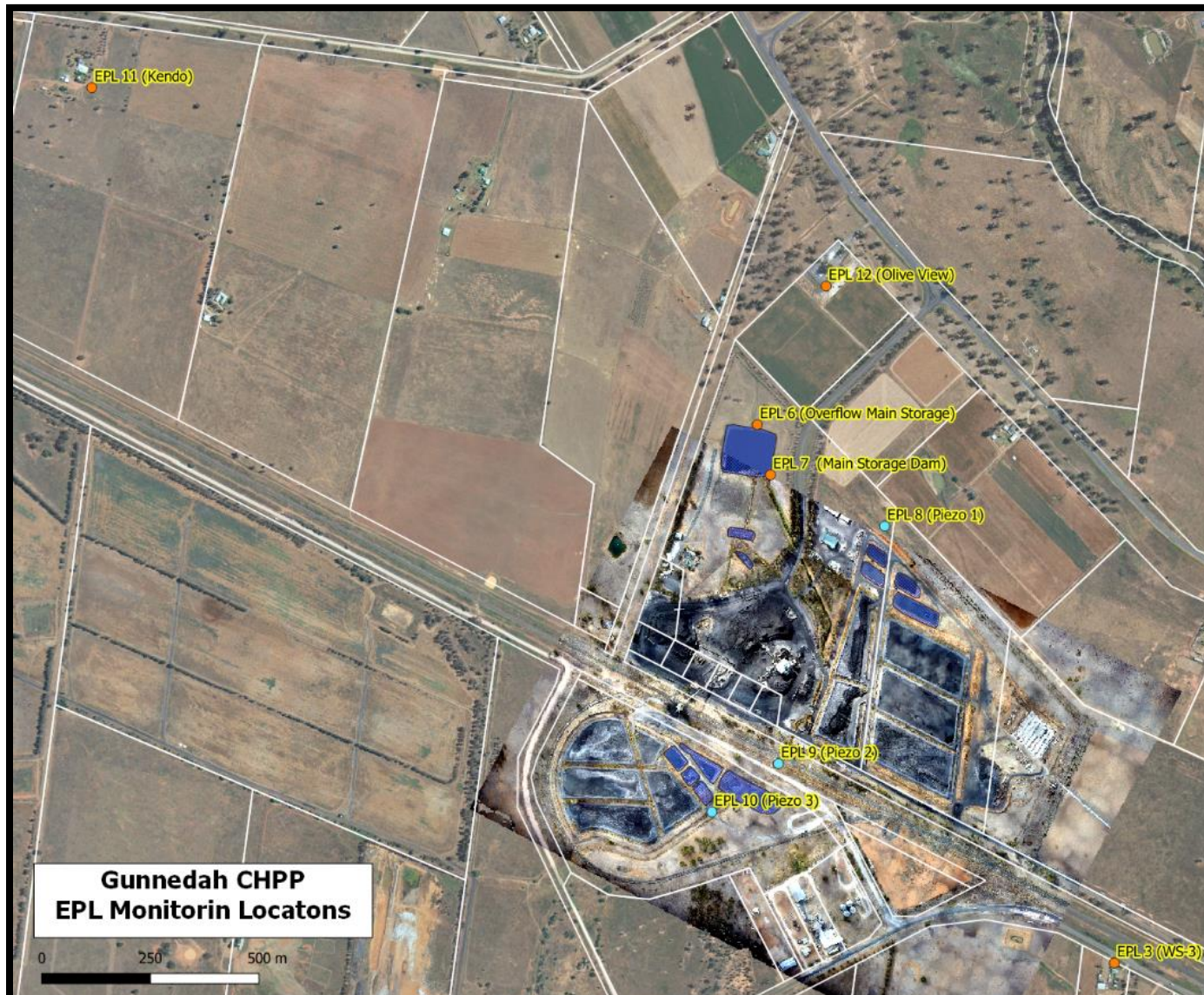
- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than LAeq 30 dB, which is insignificant in terms of any applicable criterion.



# WHITEHAVEN COAL

## 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 2022

Obtained Date: 16<sup>th</sup> December 2022

Publication Date: 20<sup>th</sup> December 2022

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 <sup>2</sup> /month	Continuous	1	17/11/2022	12/12/2022				
11	PM <sub>10</sub> Kendo	µg/m <sup>3</sup>	Every 6 days	5	6/11/2022 12/11/2022 18/11/2022 24/11/2022 30/11/2022	16/12/2022 (Last sampled received)	4.5	6.4	7.1	7.9
12	PM <sub>10</sub> Olive View	µg/m <sup>3</sup>	Every 6 days	5	6/11/2022 12/11/2022 18/11/2022 24/11/2022 30/11/2022	16/12/2022 (Last sampled received)	0.2	5.5	7.8	8.1
6	Conductivity	µs/cm	Each overflow event	2	9/11/2022 14/11/2022	17/11/2022 22/11/2022	817	841	841	865
	Oil and Grease	mg/L					<5	<5	<5	<5
	Total Organic Carbon	mg/L					10	11	11	12
	Total Suspended Solids	mg/L					47	72	72	97
	pH	pH				6.94	7.16	7.16	7.37	
7	Conductivity	µs/cm	Quarterly	1	17/11/2022	25/11/2022				1130
	Oil and Grease	mg/L								<5
	Total Organic Carbon	mg/L								10



## 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
	Total Suspended Solids	mg/L								51
	pH	pH								7.2

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	30/11/2022	8/12/2022	-	-	-	0.14
	Bicarbonate	mg/L					-	-	-	1310
	Calcium	mg/L					-	-	-	62
	Chloride	mg/L					-	-	-	2220
	Conductivity	µs/cm					-	-	-	10,200
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	191
	Nitrate	mg/L					-	-	-	0.48
	Potassium	mg/L					-	-	-	26
	Sodium	mg/L					-	-	-	2150
	Standing Water Level	m					-	-	-	4.14
	Sulphate	mg/L					-	-	-	1320
pH	pH	-	-	-	7.7					
9	Ammonia	mg/L	Quarterly	1	30/11/2022	8/12/2022	-	-	-	3.1
	Bicarbonate	mg/L					-	-	-	955
	Calcium	mg/L					-	-	-	278
	Chloride	mg/L					-	-	-	1170



# WHITEHAVEN COAL

## 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					-	-	-	6180
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	230
	Nitrate	mg/L					-	-	-	0.16
	Potassium	mg/L					-	-	-	123
	Sodium	mg/L					-	-	-	727
	Standing Water Level	m					-	-	-	0.42
	Sulphate	mg/L					-	-	-	264
	pH	pH					-	-	-	7.1
10	Ammonia	mg/L	Quarterly	1	30/11/2022	8/12/2022	-	-	-	0.07
	Bicarbonate	mg/L					-	-	-	759
	Calcium	mg/L					-	-	-	240
	Chloride	mg/L					-	-	-	1440
	Conductivity	µs/cm					-	-	-	6100
	Lead	mg/L					-	-	-	<0.001
	Magnesium	mg/L					-	-	-	226
	Nitrate	mg/L					-	-	-	10.3
	Potassium	mg/L					-	-	-	66
	Sodium	mg/L					-	-	-	739
	Standing Water Level	m					-	-	-	0.13
	Sulphate	mg/L					-	-	-	264
pH	pH	-	-	-	7.1					



## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly Noise – Limits Apply)

EPL ID	Date	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	24/11/2022 – 25/11/2022	15 mins day	-	28	35	0.7	general site activity, traffic, birds and animals	No
		15 mins evening	-	29	35	0.8	General site activity, dozer operations, birds, insects, mechanical plant, animals	
		15 mins night	-	30	35	0.5	General site activity, dozer operations, insects dog	
	1 min night	34	-	45	0.5	General site activity, dozer operations, insects dog		

Notes:

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** 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 COAL

## 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 2022

Obtained Date: 16<sup>th</sup> January 2023

Publication Date: 17<sup>th</sup> January 2023

**Table 1 - No Pollutant Limits Apply**

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value
3	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	16/12/2022	16/01/2023	-	-	-	1.22
11	PM <sub>10</sub> Kendo	µg/m <sup>3</sup>	Every 6 days	5	6/12/2022 12/12/2022 18/12/2022 24/12/2022 30/12/2022	16/01/2023 (Last sampled received)	2.1	7.8	6	19.5
12	PM <sub>10</sub> Olive View	µg/m <sup>3</sup>	Every 6 days	5	6/12/2022 12/12/2022 18/12/2022 24/12/2022 30/12/2022	16/01/2023 (Last sampled received)	2.3	6.68	4.2	18
6	Conductivity	µs/cm	Each overflow event	0	-	-	-	-	-	-
	Oil and Grease	mg/L					-	-	-	-
	Total Organic Carbon	mg/L					-	-	-	-
	Total Suspended Solids	mg/L					-	-	-	-
	pH	pH					-	-	-	-
7	Conductivity	µs/cm	Quarterly	0	-	-	-	-	-	-
	Oil and Grease	mg/L					-	-	-	-
	Total Organic Carbon	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
	Total Suspended Solids	mg/L					-	-	-	-
	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	0	-	-	-	-	-	-
	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	0	-	-	-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Calcium	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-



# WHITEHAVEN COAL

## 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	0	-	-	-	-	-	-
	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	Measurement Period	Measured levels – CHPP – dB(A)		Limit(s)- dB(A)	Wind speed (m/s)	Observations	(Potential) Non-compliance /breach
			LA1, 1 minute	LAeq, 15 minute				
N1	-	15 mins day	-	-	-	-	-	-
		15 mins evening	-	-	-	-	-	
		15 mins night	-	-	-	-	-	
		1 min night	-	-	-	-	-	

**Notes:**

**dB(A):** The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

**LAeq, 15 minute:** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

**LA1, 1 minute:** The noise level exceeded for 1% of the 15 minute interval.

**I/A:** When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

**Not Measurable (NM):** 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 COAL

## WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Figure 1 – EPL 3637 Monitoring Locations

