



## Eraring Power Station - EPA Licence 1429

Rocky Point Rd, Dora Creek NSW 2264

### Environmental Monitoring Data

June 2017



## Unit 1 Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 11 - Air emissions monitoring, Boiler 1 stack discharge to air*

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - June	184	201	166	6.3	9.9	5.1	181	204	159
2 - June	171	192	127	6.4	11.3	5.0	179	191	167
3 - June	151	191	132	8.9	10.3	5.5	153	177	141
4 - June	201	237	158	9.9	16.2	4.5	185	193	180
5 - June	216	249	166	7.5	13.1	4.3	170	188	152
6 - June	204	230	163	6.6	8.6	5.5	189	221	159
7 - June	193	213	123	9.6	24.3	5.7	185	215	150
8 - June	200	212	186	7.1	11.1	5.4	172	191	141
9 - June	174	196	125	7.9	15.9	5.4	187	200	162
10 - June	176	198	126	7.3	11.7	5.0	162	179	142
11 - June	179	209	118	7.7	15.1	4.3	149	167	126
12 - June	174	197	133	7.0	10.8	4.9	162	171	156
13 - June	179	199	126	7.0	14.9	4.9	159	164	151
14 - June	184	202	162	10.5	13.3	8.2	161	181	101
15 - June	187	219	140	12.4	20.5	8.9	164	214	120
16 - June	191	206	149	11.5	14.6	7.1	180	208	168
17 - June	192	211	159	19.5	26.5	15.0	202	233	173
18 - June	174	237	135	23.0	26.5	14.7	189	214	175
19 - June	180	210	135	6.7	11.0	5.2	179	192	159
20 - June	161	186	125	9.9	12.7	5.8	173	198	149
21 - June	169	203	142	11.7	21.8	4.9	150	181	126
22 - June	182	207	132	5.1	8.4	3.3	150	173	124
23 - June	186	214	130	10.4	23.3	5.0	158	175	140
24 - June	157	195	125	10.3	17.1	4.7	141	147	130
25 - June	166	203	135	7.5	12.3	4.7	159	181	141
26 - June	193	228	149	7.2	12.5	5.2	144	155	133
27 - June	190	206	146	6.3	8.8	4.6	144	156	133
28 - June	176	188	145	6.4	9.3	5.2	155	165	144
29 - June	172	195	136	6.7	11.0	4.8	150	172	141
30 - June	169	186	140	7.5	12.2	5.7	164	190	142

## Unit 2 Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 12 - Air emissions monitoring, Boiler 2 stack discharge to air*

- Unit out of service 13<sup>th</sup> - 16<sup>th</sup>

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - June	160	173	140	21.6	31.0	20.1	217	246	191
2 - June	166	180	151	20.8	22.5	19.9	210	240	178
3 - June	156	171	138	22.4	25.0	20.4	224	257	167
4 - June	140	155	129	22.7	29.6	21.0	216	245	171
5 - June	152	166	134	21.4	24.8	18.6	212	223	192
6 - June	150	164	131	21.8	26.6	19.6	229	255	199
7 - June	143	154	132	21.2	23.6	19.9	209	236	188
8 - June	146	158	111	21.2	24.0	19.9	210	237	178
9 - June	145	160	136	21.9	24.4	20.7	232	247	193
10 - June	145	170	112	22.4	28.0	20.1	180	190	165
11 - June	146	161	121	21.9	25.6	20.7	183	200	159
12 - June	140	150	126	23.4	28.4	21.3	190	201	180
13 - June									
14 - June									
15 - June									
16 - June									
17 - June	119	129	112	21.2	28.5	18.3	201	216	186
18 - June	133	175	113	19.3	21.4	17.4	205	229	188
19 - June	153	175	125	17.9	30.6	11.3	207	227	166
20 - June	148	158	124	14.6	17.0	13.4	220	235	193
21 - June	143	161	105	17.1	24.9	14.4	192	215	140
22 - June	146	178	111	16.8	22.2	13.8	171	193	142
23 - June	147	163	108	16.9	24.2	14.8	172	197	152
24 - June	143	164	113	18.6	22.8	15.9	176	202	141
25 - June	126	153	103	23.5	31.9	17.7	174	198	151
26 - June	137	167	102	24.0	31.6	19.9	169	198	150
27 - June	136	162	106	22.0	30.2	15.0	164	176	146
28 - June	124	135	108	14.6	20.2	13.0	193	215	172
29 - June	126	145	105	15.4	20.3	13.9	182	198	160
30 June	129	140	106	16.1	22.1	14.4	190	217	163

## Unit 3 Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 13 - Air emissions monitoring, Boiler 3 stack discharge to air*

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - June	158	176	135	18.7	21.3	10.1	188	210	129
2 - June	164	183	130	18.9	21.8	9.1	180	200	169
3 - June	176	199	104	18.0	21.9	6.6	184	216	154
4 - June	161	181	106	17.3	19.7	15.8	189	225	167
5 - June	167	193	113	17.9	22.5	12.9	179	219	158
6 - June	164	189	108	18.1	23.0	9.8	197	231	155
7 - June	166	176	157	19.3	25.7	10.0	197	215	176
8 - June	164	175	138	20.5	24.5	7.4	183	214	160
9 - June	134	151	109	19.0	23.1	13.4	194	208	170
10 - June	134	147	118	19.1	22.9	6.9	173	186	158
11 - June	137	150	113	18.7	23.4	9.4	164	177	149
12 - June	135	143	119	18.8	25.1	9.8	172	177	162
13 - June	135	147	110	17.7	21.6	9.6	169	181	162
14 - June	133	141	119	17.7	21.6	6.8	184	202	167
15 - June	135	147	104	17.2	21.3	6.5	170	199	161
16 - June	144	151	135	19.2	22.9	17.1	174	203	162
17 - June	138	150	117	19.4	22.3	17.6	191	209	169
18 - June	138	155	115	21.7	23.9	19.2	196	210	178
19 - June	153	170	126	19.9	24.5	17.7	191	204	175
20 - June	147	160	113	19.2	23.8	17.1	187	206	162
21 - June	143	155	120	20.0	24.5	18.1	186	220	156
22 - June	152	175	123	20.8	24.9	18.2	174	189	156
23 - June	159	185	106	21.5	30.5	19.2	190	216	169
24 - June	159	191	106	21.2	25.4	19.2	190	207	168
25 - June	145	187	103	22.6	27.0	19.7	185	200	168
26 - June	164	197	108	22.0	26.9	19.2	175	193	161
27 - June	175	190	144	20.8	24.2	19.1	173	183	165
28 - June	145	184	107	22.0	24.8	19.6	186	194	172
29 - June	164	180	134	22.3	27.4	19.6	182	206	173
30 - June	165	186	132	23.3	27.4	21.2	207	227	176

## Unit 4 Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air*

	NOX			Particulates			SOX		
	ppm (7% O <sub>2</sub> )			mg/m <sup>3</sup>			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - June	169	181	156	25.0	26.3	22.8	219	246	189
2 - June	173	189	149	24.6	26.1	20.7	208	254	174
3 - June	179	201	142	25.5	27.9	21.6	228	262	192
4 - June	160	172	149	26.3	30.9	23.0	231	268	186
5 - June	155	172	142	28.8	34.1	23.7	218	232	205
6 - June	148	156	140	31.4	36.7	26.6	227	252	210
7 - June	147	172	123	33.4	36.1	27.3	214	259	152
8 - June	118	176	108	14.3	32.3	11.0	219	260	186
9 - June	163	184	151	24.7	29.2	22.8	226	257	182
10 - June	156	171	123	24.0	27.5	17.6	183	194	157
11 - June	160	181	128	23.6	27.0	21.2	179	196	170
12 - June	144	162	113	23.0	26.0	18.3	195	204	186
13 - June	159	183	129	23.7	25.5	20.8	191	205	179
14 - June	148	165	121	23.1	25.5	18.0	213	231	191
15 - June	170	204	147	24.2	26.1	23.0	199	243	182
16 - June	181	205	149	25.9	29.2	17.1	227	253	197
17 - June	180	192	164	27.8	29.9	25.1	225	241	210
18 - June	198	239	165	26.6	32.1	22.2	202	235	186
19 - June	202	219	171	27.4	30.0	21.6	214	239	195
20 - June	183	200	152	27.5	30.0	22.7	234	247	218
21 - June	177	186	169	28.6	32.3	25.5	206	222	192
22 - June	174	193	157	27.9	34.9	22.7	202	253	175
23 - June	163	179	141	28.2	30.6	23.8	211	253	193
24 - June	153	165	136	28.2	31.6	23.4	216	239	182
25 - June	150	174	115	29.4	34.0	24.0	230	249	209
26 - June	158	179	126	29.3	32.7	25.4	207	239	186
27 - June	162	179	132	29.2	32.1	25.9	205	216	197
28 - June	157	168	147	28.5	30.6	25.9	223	237	205
29 - June	149	166	115	27.1	29.5	21.7	217	240	198
30 - June	158	168	148	28.2	31.4	25.0	240	262	207

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## Unit 1 Boiler Emission Test Results

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*EPA Identification no. 11 - Air emissions monitoring, Boiler 1 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.0012	mg/m <sup>3</sup>	0.20	16/08/2016
Carbon Dioxide (Wet)	12.9	%	-	16/08/2016
Carbon Monoxide	2.0	mg/m <sup>3</sup>	-	16/08/2016
Chlorine	0.24	mg/m <sup>3</sup>	300	16/08/2016
Copper	0.0023	mg/m <sup>3</sup>	-	16/08/2016
Dry Gas Density	1.4	kg/m <sup>3</sup>	-	16/08/2016
Fluoride As HF - Total	8.7	mg/m <sup>3</sup>	50	16/08/2016
Hazardous Substances (Metals) - Total	0.018	mg/m <sup>3</sup>	1.00	16/08/2016
Hydrogen Chloride	1.3	mg/m <sup>3</sup>	100.0	16/08/2016
Mercury	0.00010	mg/m <sup>3</sup>	0.200	16/08/2016
Moisture	5.0	%	-	16/08/2016
Particulates - Total	1.6	mg/m <sup>3</sup>	50	16/08/2016
Stack Gas Molecular Weight	30	kg/k-mole	-	16/08/2016
Temperature	106.6	degC	-	16/08/2016
Velocity	13.0	m/sec	-	16/08/2016
Volatile Organic Compounds (VOC) - Total	0.21	mg/m <sup>3</sup>	-	16/08/2016
Volumetric Flow Rate (Dry At STP)	324	m <sup>3</sup> /sec	-	16/08/2016

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## Unit 2 Boiler Emission Test Results

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*EPA Identification no. 12 - Air emissions monitoring, Boiler 2 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.0050	mg/m <sup>3</sup>	0.20	20/12/2016
Carbon Dioxide (Wet)	11.9	%	-	20/12/2016
Carbon Monoxide	3.0	mg/m <sup>3</sup>	-	20/12/2016
Chlorine	0.61	mg/m <sup>3</sup>	300	20/12/2016
Copper	0.0020	mg/m <sup>3</sup>	-	20/12/2016
Dry Gas Density	1.4	kg/m <sup>3</sup>	-	20/12/2016
Fluoride As HF - Total	7.5	mg/m <sup>3</sup>	50	20/12/2016
Hazardous Substances (Metals) - Total	0.009	mg/m <sup>3</sup>	1.00	20/12/2016
Hydrogen Chloride	0.23	mg/m <sup>3</sup>	100.0	20/12/2016
Mercury	0.0003	mg/m <sup>3</sup>	0.200	20/12/2016
Moisture	4.0	%	-	20/12/2016
Particulates - Total	15.0	mg/m <sup>3</sup>	50	20/12/2016
Stack Gas Molecular Weight	30	kg/k-mole	-	20/12/2016
Temperature	110.0	degC	-	20/12/2016
Velocity	12.0	m/sec	-	20/12/2016
Volatile Organic Compounds (VOC) - Total	0.07	mg/m <sup>3</sup>	-	20/12/2016
Volumetric Flow Rate (Dry At STP)	299	m <sup>3</sup> /sec	-	20/12/2016

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## Unit 3 Boiler Emission Test Results

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*EPA Identification no. 13 - Air emissions monitoring, Boiler 3 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.0040	mg/m <sup>3</sup>	0.20	02/05/2017
Carbon Dioxide (Wet)	13.1	%	-	02/05/2017
Carbon Monoxide	12.0	mg/m <sup>3</sup>	-	02/05/2017
Chlorine	0.037	mg/m <sup>3</sup>	200	02/05/2017
Copper	0.0015	mg/m <sup>3</sup>	-	02/05/2017
Dry Gas Density	1.4	kg/m <sup>3</sup>	-	02/05/2017
Fluoride As HF - Total	13.0	mg/m <sup>3</sup>	50	02/05/2017
Hazardous Substances (Metals) - Total	0.009	mg/m <sup>3</sup>	1.00	02/05/2017
Hydrogen Chloride	4.0	mg/m <sup>3</sup>	100.0	02/05/2017
Mercury	0.00010	mg/m <sup>3</sup>	0.200	02/05/2017
Moisture	5.8	%	-	02/05/2017
Particulates - Total	0.07	mg/m <sup>3</sup>	50	02/05/2017
Stack Gas Molecular Weight	30	kg/k-mole	-	02/05/2017
Temperature	118.0	degC	-	02/05/2017
Velocity	16.0	m/sec	-	02/05/2017
Volatile Organic Compounds (VOC) - Total	0.08	mg/m <sup>3</sup>	-	02/05/2017
Volumetric Flow Rate (Dry At STP)	396	m <sup>3</sup> /sec	-	02/05/2017



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## Unit 4 Boiler Emission Test Results

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*EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.0012	mg/m <sup>3</sup>	0.20	15/02/2017
Carbon Dioxide (Wet)	13.5	%	-	15/02/2017
Carbon Monoxide	15.0	mg/m <sup>3</sup>	-	15/02/2017
Chlorine	0.12	mg/m <sup>3</sup>	200	15/02/2017
Copper	0.0018	mg/m <sup>3</sup>	-	15/02/2017
Dry Gas Density	1.4	kg/m <sup>3</sup>	-	15/02/2017
Fluoride As HF - Total	8.3	mg/m <sup>3</sup>	50	15/02/2017
Hazardous Substances (Metals) - Total	0.009	mg/m <sup>3</sup>	1.00	15/02/2017
Hydrogen Chloride	1.9	mg/m <sup>3</sup>	100.0	15/02/2017
Mercury	0.0001	mg/m <sup>3</sup>	0.200	15/02/2017
Moisture	5.6	%	-	15/02/2017
Particulates - Total	7.8	mg/m <sup>3</sup>	50	15/02/2017
Stack Gas Molecular Weight	31	kg/k-mole	-	15/02/2017
Temperature	121.0	degC	-	15/02/2017
Velocity	17.0	m/sec	-	15/02/2017
Volatile Organic Compounds (VOC) - Total	0.06	mg/m <sup>3</sup>	-	15/02/2017
Volumetric Flow Rate (Dry At STP)	431	m <sup>3</sup> /sec	-	15/02/2017

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## Unit 5 Boiler Emission Test Results

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*EPA Identification no. 19 - Air emissions monitoring, Emergency Turbine Generator Stack discharge to air*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Nitrogen oxides	74	mg/m <sup>3</sup>	86	30/06/2017
Solid Particles	2.2	mg/m <sup>3</sup>	20	30/06/2017
Carbon Dioxide	3.2	%		30/06/2017
Dry gas density	1.3	kg/m <sup>3</sup>		30/06/2017
Moisture	2.8	%		30/06/2017
Molecular weight of stack gas	29.2	g/g.mol		30/06/2017
Oxygen	16.6	%		30/06/2017
Velocity	24	m/s		30/06/2017
Volumetric flowrate	95	m <sup>3</sup> /s		30/06/2017

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## Eraring Depositional Dust Gauges

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*EPA Identification no. 18, 25, 26 & 27 - Depositional dust monitoring within 1km of the coal handling operations*

	Deposited Matter		
	g/m <sup>2</sup> /month		
	Ash	Combustible	Insolubles
<b>E2</b>	0.4	0.2	0.6
<b>E4</b>	3.0	0.6	3.6
<b>E6</b>	0.3	0.4	0.7
<b>U6</b>	0.3	0.1	0.4

## Water Quality - Lake Monitoring LM10

*EPA Identification no. 4 - The waters of Lake Macquarie located midway between cooling water inlet and Hungary Point*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	17.36					
<b>010cm</b>	17.77	7.96	33.8	86.9	6.55	3.0
<b>050cm</b>	17.65	7.96	33.8	84.6	6.34	
<b>100cm</b>	17.61	7.95	34.4	84.4	6.34	
<b>150cm</b>	17.33	7.96	34.4	87.4	6.59	
<b>200cm</b>	17.31	7.95	34.4	89.8	6.79	
<b>250cm</b>	17.19	7.96	34.4	88.0	6.66	
<b>Bottom</b>	17.09	7.95	34.5	89.4	8.78	

## Water Quality - Lake Monitoring LM12

*EPA Identification no. 6 - The waters of Lake Macquarie located at the Eraring/Vales Point mixing zone off Fishery Point*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	16.48					
<b>010cm</b>	17.76	7.97	34.3	82.8	6.20	3.75
<b>050cm</b>	17.86	7.97	34.2	80.1	5.99	
<b>100cm</b>	17.91	7.96	34.3	87.6	6.55	
<b>150cm</b>	17.85	7.95	34.3	90.5	6.78	
<b>200cm</b>	17.82	7.96	34.3	92.3	6.92	
<b>250cm</b>	17.77	7.95	34.3	88.3	6.62	
<b>300cm</b>	17.70	7.96	34.4	94.3	7.08	
<b>350cm</b>	17.60	7.96	34.4	94.3	7.09	
<b>400cm</b>	17.59	7.99	34.4	96.8	7.28	
<b>450cm</b>	17.56	7.99	34.4	98.4	7.40	
<b>500cm</b>	17.56	7.99	34.4	96.6	7.27	
<b>550cm</b>	17.56	7.99	34.5	99.5	7.47	
<b>600cm</b>	17.56	7.99	34.5	97.6	7.34	
<b>650cm</b>	17.56	7.98	34.5	97.0	7.29	
<b>700cm</b>	17.57	7.98	34.5	98.4	7.40	
<b>750cm</b>	17.57	7.99	34.5	97.0	7.29	
<b>Bottom</b>	17.57	7.98	34.5	87.1	6.59	

## Water Quality - Lake Monitoring LM4

*EPA Identification no. 7 - The northern waters of Lake Macquarie east off Lake Macquarie Yacht Club*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	12.47					
<b>010cm</b>	16.28	7.53	34.4	108.5	8.36	4.25
<b>050cm</b>	16.44	7.66	34.9	99.0	7.59	
<b>100cm</b>	16.40	7.65	34.8	97.1	7.44	
<b>150cm</b>	16.41	7.66	34.8	96.3	7.41	
<b>200cm</b>	16.44	7.66	34.8	98.0	7.51	
<b>250cm</b>	16.45	7.66	34.8	99.1	7.59	
<b>300cm</b>	16.44	7.66	34.8	98.2	7.50	
<b>350cm</b>	16.49	7.67	34.8	99.5	7.51	
<b>400cm</b>	16.48	7.67	34.8	99.0	7.58	
<b>450cm</b>	16.48	7.68	34.8	93.0	7.08	
<b>500cm</b>	16.49	7.68	34.8	96.3	7.31	
<b>550cm</b>	16.51	7.68	34.8	99.9	7.65	
<b>600cm</b>	16.52	7.68	34.8	99.6	7.62	
<b>650cm</b>	16.52	7.70	34.8	96.1	7.38	
<b>700cm</b>	16.54	7.70	34.8	99.2	7.58	
<b>750cm</b>	16.54	7.71	34.8	98.8	7.53	
<b>800cm</b>	16.54	7.71	34.8	99.9	7.59	
<b>850cm</b>	16.54	7.73	34.8	99.5	7.61	
<b>900cm</b>	16.54	7.73	34.8	98.6	7.54	
<b>Bottom</b>	16.56	7.74	34.8	99.0	7.57	

## Water Quality - Lake Monitoring LM7

*EPA Identification no. 5 - The waters of Lake Macquarie located off old Wangi power station inlet point in Myuna Bay*

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
<b>Depth/Air</b>	15.02					
<b>010cm</b>	21.36	7.95	34.9	94.4	6.60	3.25
<b>050cm</b>	21.43	7.94	34.9	98.8	6.92	
<b>100cm</b>	21.34	7.94	34.9	107.5	7.53	
<b>150cm</b>	21.34	7.94	34.8	106.1	7.45	
<b>200cm</b>	21.25	7.95	34.9	103.4	7.20	
<b>250cm</b>	21.05	7.95	34.8	105.0	7.40	
<b>300cm</b>	20.94	7.95	34.8	105.9	7.49	
<b>350cm</b>	20.87	7.96	34.8	104.8	7.41	
<b>400cm</b>	20.84	7.96	34.8	98.2	6.82	
<b>450cm</b>	20.59	7.96	34.8	101.2	7.19	
<b>500cm</b>	18.75	7.98	34.7	92.2	6.75	
<b>550cm</b>	18.58	7.98	34.6	87.0	6.42	
<b>Bottom</b>	18.47	7.99	34.6	83.7	6.19	

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## Eraring Ash Dam Effluent Quality Monitoring

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*EPA Identification no. 10 - Discharge point below siphon pond weir at Ash Dam*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.05	ug/L	-	01/06/2017
Copper	1.8	ug/L	-	01/06/2017
Iron	2	ug/L	-	01/06/2017
Lead	<0.1	ug/L	-	01/06/2017
Manganese	19.2	ug/L	-	01/06/2017
Nitrite and Nitrate as N	1330	ug/L	-	01/06/2017
Phosphorus Reactive as P - Total	464	ug/L	-	01/06/2017
Phosphorus as P - Total	499	ug/L	-	01/06/2017
Selenium	19.1	ug/L	-	01/06/2017
Suspended Solids (SS)	6,000	ug/L	-	01/06/2017
Zinc	1	ug/L	-	01/06/2017
pH	8.53		-	01/06/2017

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## Eraring Cooling Water Inlet Canal

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*EPA Identification no. 8 - Inlet canal of the cooling water intake from Lake Macquarie*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Copper	1.0	ug/L	-	01/06/2017
Iron	10	ug/L	-	01/06/2017
Selenium	<1	ug/L	-	01/06/2017
Temperature - Average	16.7	deg C	-	June 2017
Temperature - Minimum	15.5	deg C	-	June 2017
Temperature - Maximum	18.0	deg C	-	June 2017

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## Eraring Cooling Water Outlet Canal

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*EPA Identification no. 1 - Cooling water outlet canal to Myuna Bay*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Copper	3.5	ug/L	5	01/06/2017
Iron	7	ug/L	300	08/06/2017
Selenium	<1	ug/L	2	01/06/2017
Temperature - Average	25.4	deg C	35	June 2017
Temperature - Minimum	20.7	deg C	35	June 2017
Temperature - Maximum	28.1	deg C	35	June 2017
Maximum Daily Discharge from Ash Dam	20.25	ML	150	June 2017
Monthly Discharge from Ash Dam	362.7	ML	-	June 2017

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## Emergency Discharge - Toe Drain Pond

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*EPA Identification no. 17 - Emergency discharge to toe drain collection pond*

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Nitrite and Nitrate as N	300	ug/L	-	01/06/2017
Phosphorus as P - Total	57	ug/L	-	01/06/2017
pH	6.96		-	01/06/2017



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## Groundwater Monitoring

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### Groundwater Well – MW01

EPA Identification no. 21 – Groundwater Monitoring Well 01

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Name	Reading	Units	Date
Arsenic	<0.2	ug/L	02/06/2017
Cadmium	<0.05	ug/L	02/06/2017
Calcium	1000	ug/L	02/06/2017
Chromium	<0.2	ug/L	02/06/2017
Copper	0.7	ug/L	02/06/2017
Electrical Conductivity	0.395	mS/cm	02/06/2017
Iron	331	ug/L	02/06/2017
Lead	0.2	ug/L	02/06/2017
Magnesium	4000	ug/L	02/06/2017
Manganese	75.6	ug/L	02/06/2017
Nickel	3.9	ug/L	02/06/2017
pH	5.15	pH	02/06/2017
Potassium	3000	ug/L	02/06/2017
Selenium	<0.2	ug/L	02/06/2017
Standing Water Level	9.650	ug/L	02/06/2017
Zinc	43	ug/L	02/06/2017

### Groundwater Well – MW02

EPA Identification no. 22 – Groundwater Monitoring Well 02

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Name	Reading	Units	Date
Arsenic	4.2	ug/L	02/06/2017
Cadmium	<0.05	ug/L	02/06/2017
Calcium	297000	ug/L	02/06/2017
Chromium	0.2	ug/L	02/06/2017
Copper	<0.5	ug/L	02/06/2017
Electrical Conductivity	15.300	mS/cm	02/06/2017
Iron	4620	ug/L	02/06/2017
Lead	<0.1	ug/L	02/06/2017
Magnesium	173000	ug/L	02/06/2017
Manganese	1100	ug/L	02/06/2017
Nickel	3.2	ug/L	02/06/2017
pH	6.23	pH	02/06/2017
Potassium	96000	ug/L	02/06/2017
Selenium	0.3	ug/L	02/06/2017
Standing Water Level	4.135	ug/L	02/06/2017
Zinc	36	ug/L	02/06/2017

## Groundwater Well – MW06

EPA Identification no. 23 – Groundwater Monitoring Well 06

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Name	Reading	Units	Date
Arsenic	6.3	ug/L	02/06/2017
Cadmium	<0.05	ug/L	02/06/2017
Calcium	437000	ug/L	02/06/2017
Chromium	0.5	ug/L	02/06/2017
Copper	<0.5	ug/L	02/06/2017
Electrical Conductivity	23.200	mS/cm	02/06/2017
Iron	12100	ug/L	02/06/2017
Lead	<0.1	ug/L	02/06/2017
Magnesium	254000	ug/L	02/06/2017
Manganese	355	ug/L	02/06/2017
Nickel	0.7	ug/L	02/06/2017
pH	6.46	pH	02/06/2017
Potassium	120000	ug/L	02/06/2017
Selenium	0.5	ug/L	02/06/2017
Standing Water Level	1.910	ug/L	02/06/2017
Zinc	3	ug/L	02/06/2017

## Groundwater Well – MW D26

EPA Identification no. 24 – Groundwater Monitoring Well D26

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Groundwater well was dry during sampling in June 2017

Name	Reading	Units	Date
Arsenic		ug/L	02/06/2017
Cadmium		ug/L	02/06/2017
Calcium		ug/L	02/06/2017
Chromium		ug/L	02/06/2017
Copper		ug/L	02/06/2017
Electrical Conductivity		mS/cm	02/06/2017
Iron		ug/L	02/06/2017
Lead		ug/L	02/06/2017
Magnesium		ug/L	02/06/2017
Manganese		ug/L	02/06/2017
Nickel		ug/L	02/06/2017
pH		pH	02/06/2017
Potassium		ug/L	02/06/2017
Selenium		ug/L	02/06/2017
Standing Water Level		ug/L	02/06/2017
Zinc		ug/L	02/06/2017