



## Eraring Power Station - EPA Licence 1429

Rocky Point Rd, Morriset NSW 2264

## Coal Unloader - EPA Licence 4297

Eraring Coal Delivery Facility, Construction Rd, Dora Creek NSW 2264

## Environmental Monitoring Data

December 2013



## 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% O2)			mg/m3			ppm (7% O2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - Dec	190	202	182	15	17	12	207	233	180
2 - Dec	192	209	168	14	19	11	180	198	164
3 - Dec	169	189	150	13	17	10	212	244	186
4 - Dec	167	185	133	11	16	9	234	277	182
5 - Dec	187	213	155	11	15	9	200	237	166
6 - Dec	181	194	144	14	16	12	237	267	209
7 - Dec	167	198	113	15	19	8	223	234	200
8 - Dec	124	129	120	13	15	12	187	221	140
9 - Dec	135	169	124	10	17	5	176	224	128
10 - Dec	164	188	134	10	18	6	243	294	198
11 - Dec	167	175	154	13	17	10	217	278	194
12 - Dec	169	184	147	12	16	11	212	242	180
13 - Dec	165	198	144	14	20	11	225	265	197
14 - Dec	163	177	144	11	14	9	240	301	197
15 - Dec	175	182	168	12	14	10	215	234	186
16 - Dec	177	200	144	16	24	11	212	230	183
17 - Dec	138	172	113	15	21	11	181	199	163
18 - Dec	149	196	125	15	21	11	168	196	153
19 - Dec	185	223	160	17	23	12	196	220	169
20 - Dec	192	222	164	17	23	13	214	244	129
21 - Dec	207	246	187	14	19	12	179	211	154
22 - Dec	208	252	149	17	28	12	185	206	162
23 - Dec	200	224	166	15	20	12	183	225	160
24 - Dec	214	221	200	15	18	13	226	262	178
25 - Dec	209	219	183	15	19	12	198	212	183
26 - Dec	205	223	189	14	18	12	201	227	180
27 - Dec	208	221	186	14	18	12	210	234	188
28 - Dec	209	227	181	15	23	10	165	185	137
29 - Dec	213	224	199	12	16	11	169	183	160
30 - Dec	219	230	196	12	16	10	164	177	148
31 - Dec	203	229	172	12	17	9	178	234	156

## Unit 2 Boiler Continuous Emission Monitoring Summary

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

- 14th - 15th NOx instrument malfunction.

	NOX			Particulates			SOX		
	ppm (7% O2)			mg/m3			ppm (7% O2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - Dec	161	170	146	13	16	12	148	201	108
2 - Dec	171	201	153	16	21	12	133	188	101
3 - Dec	152	163	144	15	20	12	151	195	101
4 - Dec	152	163	139	13	18	11	169	214	124
5 - Dec	156	166	147	12	15	9	154	182	135
6 - Dec	159	167	149	14	18	12	161	195	120
7 - Dec	162	173	146	14	17	11	157	212	102
8 - Dec	160	179	147	12	16	10	173	236	118
9 - Dec	158	182	115	14	21	11	169	249	110
10 - Dec	144	185	115	13	18	10	199	261	141
11 - Dec	163	199	143	15	21	11	177	214	140
12 - Dec	150	160	143	14	18	11	169	220	114
13 - Dec	141	177	101	17	22	13	180	221	132
14 - Dec	0	0	0	13	16	11	160	225	108
15 - Dec	0	0	0	14	18	11	161	207	109
16 - Dec	131	169	106	18	25	13	159	209	123
17 - Dec	140	213	113	18	22	14	143	182	107
18 - Dec	143	179	113	17	22	14	150	175	106
19 - Dec	150	198	112	19	24	15	183	224	118
20 - Dec	133	174	110	16	24	10	167	225	131
21 - Dec	143	163	125	15	21	11	169	206	151
22 - Dec	172	225	123	17	24	12	177	270	127
23 - Dec	215	299	172	19	24	15	169	188	151
24 - Dec	183	195	175	18	25	14	179	223	131
25 - Dec	178	190	161	19	30	16	172	190	150
26 - Dec	175	194	159	17	26	14	176	192	153
27 - Dec	187	204	166	18	25	15	188	207	156
28 - Dec	192	226	169	17	30	12	154	179	141
29 - Dec	211	228	180	18	27	16	131	143	125
30 - Dec	207	216	187	17	22	14	129	131	126
31 - Dec									

## 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% O2)			mg/m3			ppm (7% O2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - Dec	173	192	143	5	7	4	182	219	151
2 - Dec	174	229	143	8	16	4	142	166	104
3 - Dec	208	254	129	7	11	4	183	229	113
4 - Dec	183	215	154	6	11	3	180	212	150
5 - Dec	174	191	137	7	12	5	167	189	125
6 - Dec	171	208	145	9	14	7	199	232	142
7 - Dec	180	215	147	8	12	7	181	205	125
8 - Dec	204	221	146	8	12	7	190	236	137
9 - Dec	241	324	209	3	5	2	201	235	171
10 - Dec	184	199	134	5	10	3	204	233	125
11 - Dec	186	207	163	6	10	4	207	228	182
12 - Dec	183	201	163	6	10	5	190	209	149
13 - Dec	204	238	171	5	9	2	194	209	170
14 - Dec	192	209	164	6	10	5	199	237	153
15 - Dec	198	219	161	6	10	4	191	212	130
16 - Dec	192	242	155	5	10	2	190	227	143
17 - Dec	164	205	118	5	9	2	163	182	113
18 - Dec	172	217	126	5	10	1	165	209	145
19 - Dec	169	221	135	5	10	2	203	221	165
20 - Dec	180	231	128	5	19	2	190	218	154
21 - Dec	140	178	125	5	10	3	167	206	105
22 - Dec	192	252	129	4	8	2	165	208	150
23 - Dec	187	249	129	3	9	3	167	220	109
24 - Dec	154	172	128	7	11	5	197	245	159
25 - Dec	157	180	130	7	10	6	180	194	130
26 - Dec	158	176	130	6	9	5	182	208	125
27 - Dec	161	173	153	8	14	5	193	210	178
28 - Dec	166	172	159	11	14	10	151	191	135
29 - Dec	164	171	134	8	14	5	141	147	135
30 - Dec	170	175	166	6	10	5	136	140	133
31 - Dec	169	182	161	6	10	4	152	210	132

## 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% O2)			mg/m3			ppm (7% O2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 - Dec	203	215	193	3	6	3	206	231	176
2 - Dec	202	242	138	2	5	3	174	190	159
3 - Dec	169	190	145	2	4	2	204	242	183
4 - Dec	193	209	173	2	4	2	226	257	201
5 - Dec	229	249	191	3	6	3	225	254	193
6 - Dec	204	248	184	4	7	3	233	279	206
7 - Dec	203	221	186	4	8	3	212	248	185
8 - Dec	248	271	202	4	8	3	232	303	165
9 - Dec	241	324	209	3	5	2	201	235	171
10 - Dec	217	252	180	2	6	2	253	287	222
11 - Dec	194	226	171	3	7	2	224	266	210
12 - Dec	175	216	158	2	6	2	227	248	205
13 - Dec	185	234	142	2	4	2	232	247	218
14 - Dec	137	162	122	2	7	3	220	276	174
15 - Dec	155	173	129	1	6	4	224	255	195
16 - Dec	174	238	144	2	6	2	214	243	200
17 - Dec	167	233	128	2	4	2	193	212	178
18 - Dec	158	213	124	2	6	3	187	221	163
19 - Dec	164	234	130	2	6	2	221	231	208
20 - Dec	204	273	145	4	26	2	229	247	207
21 - Dec	148	158	130	2	5	2	187	227	153
22 - Dec	174	207	138	2	6	3	193	228	170
23 - Dec	217	266	180	2	5	2	188	235	168
24 - Dec	186	203	168	4	7	3	243	292	207
25 - Dec	197	210	170	5	6	4	224	246	202
26 - Dec	186	205	171	4	6	4	195	228	162
27 - Dec	200	211	181	3	6	4	212	226	185
28 - Dec	208	227	184	2	6	1	187	224	157
29 - Dec	224	247	200	2	6	4	165	194	146
30 - Dec	230	241	216	2	5	3	163	167	159
31 - Dec	237	257	217	2	5	3	175	251	156

## Dora Creek Ambient Air Monitoring Summary

*EPA Identification no. 16 - Ambient air monitoring station at Dora Creek - alongside oval at Dora Creek*

	Fluoride Gaseous	Fluoride Particulate	Fluoride Total	Nitrogen Dioxide (NO <sub>2</sub> )	Nitrogen Monoxide (NO)	Nitrogen Oxides (NO <sub>x</sub> )	Sulphur Dioxide (SO <sub>2</sub> )
	ug/m3	ug/m3	ug/m3	pphm	pphm	pphm	pphm
Maximum	0.059	0.005	0.062	1.800	0.500	1.900	0.100
Average	0.040	0.004	0.044	0.710	0.019	0.723	0.013
Minimum	0.002	0.004	0.006	0.100	0.000	0.100	0.000
90th Percentile	0.059	0.005	0.062	1.600	0.000	1.650	0.100
Std Deviation	0.023	0.000	0.022	0.470	0.090	0.492	0.034

	Rainfall	Sigma Theta at 10m	Solar Radiation	Temperatur e at 10m	Temperatur e at 2m	Wind Direction at 10m	Wind Speed at 10m
	mm	deg	W/m2	degC	degC	deg	m/s
Maximum	8.89	32.48	350.20	28.97	28.33	267.25	3.30
Average	0.34	23.36	270.17	22.06	21.65	187.21	1.88
Minimum	0.00	15.03	43.52	16.76	16.86	114.72	1.05
90th Percentile	0.38	27.55	342.53	27.83	26.77	223.29	2.65
Std Deviation	1.57	4.50	76.95	3.13	2.91	28.81	0.47



## Marks Point Ambient Air Monitoring Summary

EPA Identification no. 15 - Ambient air monitoring station at Marks Point primary school

	Nitrogen Dioxide (NO <sub>2</sub> )	Nitrogen Monoxide (NO)	Nitrogen Oxides (NO <sub>x</sub> )	Sulphur Dioxide (SO <sub>2</sub> )
	pphm	pphm	pphm	pphm
Maximum	1.800	0.300	2.095	0.155
Average	0.335	0.035	0.368	0.037
Minimum	0.065	0.000	0.080	0.000
90th Percentile	0.628	0.060	0.700	0.113
Std Deviation	0.381	0.052	0.421	0.044

	Relative Humidity	Sigma Theta at 2m	Temperatur e at 2m	Wind Direction at 2m	Wind Speed at 2m
	%	deg	degC	deg	m/s
Maximum	93.48	34.61	28.17	256.45	2.93
Average	75.76	22.93	22.26	135.80	2.17
Minimum	51.61	19.48	17.73	54.07	1.56
90th Percentile	86.56	26.46	25.65	206.35	2.62
Std Deviation	9.38	2.92	2.25	50.66	0.36

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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	0.0033	mg/m3	0.20	12/11/2012
Carbon Dioxide (Wet)	11.0	%	-	12/11/2012
Carbon Monoxide	5.1	mg/m3	-	12/11/2012
Chlorine	0.53	mg/m3	300	12/11/2012
Copper	0.0017	mg/m3	-	12/11/2012
Dry Gas Density	0.93	kg/m3	-	12/11/2012
Fluoride As HF - Total	18.6	mg/m3	50	12/11/2012
Hazardous Substances (Metals) - Total	0.07	mg/m3	1.00	12/11/2012
Hydrogen Chloride	4.0	mg/m3	100.0	12/11/2012
Mercury	0.0013	mg/m3	0.200	12/11/2012
Moisture	8.0	%	-	12/11/2012
Particulates - Total	10.2	mg/m3	50	12/11/2012
Stack Gas Molecular Weight	29	kg/k-mole	-	12/11/2012
Temperature	109.0	degC	-	12/11/2012
Velocity	11.8	m/sec	-	12/11/2012
Volatile Organic Compounds (VOC) - Total	5.4	mg/m3	-	12/11/2012
Volumetric Flow Rate (Dry At STP)	280	m3/sec	-	12/11/2012



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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	0.0011	mg/m3	0.20	06/05/2013
Carbon Dioxide (Wet)	10.4	%	-	06/05/2013
Carbon Monoxide	0.90	mg/m3	-	06/05/2013
Chlorine	0.30	mg/m3	300	06/05/2013
Copper	0.0011	mg/m3	-	06/05/2013
Dry Gas Density	0.93	kg/m3	-	06/05/2013
Fluoride As HF - Total	6.4	mg/m3	50	06/05/2013
Hazardous Substances (Metals) - Total	0.025	mg/m3	1.00	06/05/2013
Hydrogen Chloride	3.2	mg/m3	100.0	06/05/2013
Mercury	0.0022	mg/m3	0.200	06/05/2013
Moisture	7.5	%	-	06/05/2013
Particulates - Total	3.8	mg/m3	50	06/05/2013
Stack Gas Molecular Weight	29	kg/k-mole	-	06/05/2013
Temperature	108.0	degC	-	06/05/2013
Velocity	12.2	m/sec	-	06/05/2013
Volatile Organic Compounds (VOC) - Total	5.4	mg/m3	-	06/05/2013
Volumetric Flow Rate (Dry At STP)	293	m3/sec	-	06/05/2013

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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	0.0011	mg/m3	0.20	05/08/2013
Carbon Dioxide (Wet)	10.3	%	-	05/08/2013
Carbon Monoxide	9.9	mg/m3	-	05/08/2013
Chlorine	0.30	mg/m3	200	05/08/2013
Copper	0.0011	mg/m3	-	05/08/2013
Dry Gas Density	0.94	kg/m3	-	05/08/2013
Fluoride As HF - Total	9.6	mg/m3	50	05/08/2013
Hazardous Substances (Metals) - Total	0.06	mg/m3	1.00	05/08/2013
Hydrogen Chloride	4.1	mg/m3	100.0	05/08/2013
Mercury	0.0007	mg/m3	0.200	05/08/2013
Moisture	6.7	%	-	05/08/2013
Particulates - Total	15.0	mg/m3	50	05/08/2013
Stack Gas Molecular Weight	29	kg/k-mole	-	05/08/2013
Temperature	103.0	degC	-	05/08/2013
Velocity	11.1	m/sec	-	05/08/2013
Volatile Organic Compounds (VOC) - Total	5.7	mg/m3	-	05/08/2013
Volumetric Flow Rate (Dry At STP)	270	m3/sec	-	05/08/2013

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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	0.0020	mg/m3	0.20	14/01/2013
Carbon Dioxide (Wet)	10.6	%	-	14/01/2013
Carbon Monoxide	7.4	mg/m3	-	14/01/2013
Chlorine	0.59	mg/m3	200	14/01/2013
Copper	0.0020	mg/m3	-	14/01/2013
Dry Gas Density	0.91	kg/m3	-	14/01/2013
Fluoride As HF - Total	12.3	mg/m3	50	14/01/2013
Hazardous Substances (Metals) - Total	0.07	mg/m3	1.00	14/01/2013
Hydrogen Chloride	13.2	mg/m3	100.0	14/01/2013
Mercury	0.0012	mg/m3	0.200	14/01/2013
Moisture	7.8	%	-	14/01/2013
Particulates - Total	18.9	mg/m3	50	14/01/2013
Stack Gas Molecular Weight	29	kg/k-mole	-	14/01/2013
Temperature	112.0	degC	-	14/01/2013
Velocity	9.4	m/sec	-	14/01/2013
Volatile Organic Compounds (VOC) - Total	4.8	mg/m3	-	14/01/2013
Volumetric Flow Rate (Dry At STP)	232	m3/sec	-	14/01/2013

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## Eraring Coal Unloader Dust Gauges

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*EPA Identification no. 18 - Depositional dust monitoring within 1 km of the coal handling operations*

	Deposited Matter		
	g/m2/month		
	Ash	Combustible	Insolubles
<b>U1</b>	0.40	0.10	0.50
<b>U2</b>	0.40	0.30	0.70
<b>U3</b>	0.40	0.20	0.60
<b>U4</b>	0.80	0.30	1.10
<b>U5</b>	0.50	0.30	0.80
<b>U6</b>	0.80	0.40	1.20

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## Eraring Due Diligence Dust Gauges

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*EPA Identification no. 18 - Depositional dust monitoring within 1 km of the coal handling operations*

	Deposited Matter		
	g/m2/month		
	Ash	Combustible	Insolubles
<b>E1</b>	0.50	0.20	0.70
<b>E2</b>	0.70	0.50	1.20
<b>E3</b>	0.60	0.30	0.90
<b>E4</b>	0.50	0.20	0.70
<b>E5</b>	0.40	0.10	0.50
<b>E6</b>	0.30	0.20	0.50

## 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
Depth/Air	32.40					
010cm	25.18	8.05	33.92	107.00	7.25	2.50
050cm	25.24	8.05	33.94	107.00	7.24	
100cm	25.09	8.05	33.93	107.00	7.26	
150cm	24.62	8.05	33.77	106.20	7.27	
200cm	24.45	8.07	33.90	105.30	7.23	
250cm	24.46	8.08	33.88	109.20	7.49	
Bottom	24.47	8.09	33.90	111.80	7.67	

## 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	
	degC		ppt	%	mg/L
<b>010cm</b>	24.01	8.07	34.09	105.90	7.32
<b>050cm</b>	23.97	8.07	34.09	106.00	7.32
<b>100cm</b>	23.88	8.07	34.05	106.50	7.37
<b>150cm</b>	23.82	8.07	34.03	106.20	7.36
<b>200cm</b>	23.55	8.07	34.06	105.90	7.37
<b>250cm</b>	23.53	8.07	34.09	105.60	7.35
<b>300cm</b>	23.55	8.07	34.11	104.80	7.29
<b>350cm</b>	23.55	8.06	34.11	104.10	7.24
<b>400cm</b>	23.55	8.06	34.12	102.90	7.16
<b>450cm</b>	23.57	8.06	34.14	102.00	7.09
<b>500cm</b>	23.60	8.05	34.14	101.20	7.04
<b>550cm</b>	23.58	8.05	34.16	100.80	7.01
<b>600cm</b>	23.56	8.05	34.12	100.80	7.01
<b>650cm</b>	23.09	8.00	34.28	100.30	7.03
<b>700cm</b>	22.58	7.89	34.58	72.50	5.12
<b>750cm</b>	22.52	7.85	34.56	62.50	4.41
<b>Bottom</b>	22.53	7.85	34.57	60.10	4.24

## 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
Depth/Air	26.00					
010cm	22.94	7.99	33.82	107.50	7.57	3.50
050cm	22.92	8.02	33.82	107.70	7.59	
100cm	22.92	8.04	33.83	107.60	7.58	
150cm	22.92	8.05	33.84	107.40	7.57	
200cm	22.89	8.06	33.84	107.40	7.58	
250cm	22.87	8.06	33.89	107.40	7.58	
300cm	22.88	8.07	33.92	107.20	7.56	
350cm	22.79	8.07	33.94	107.30	7.57	
400cm	22.32	8.06	34.23	104.00	7.39	
450cm	22.12	8.05	34.49	101.40	7.20	
500cm	21.91	8.06	34.93	100.50	7.17	
550cm	21.71	8.05	35.25	99.80	7.13	
600cm	21.65	8.04	35.37	96.30	6.88	
650cm	21.62	8.04	35.45	95.00	6.79	
700cm	21.63	8.05	35.49	95.20	6.80	
750cm	21.58	8.04	35.55	93.70	6.70	
800cm	21.58	8.05	35.62	93.40	6.67	
850cm	21.48	8.04	35.81	95.60	6.83	
900cm	21.43	8.02	35.86	89.50	6.40	
Bottom	21.44	8.01	35.81	84.70	6.06	



## 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
Depth/Air	34.70					
010cm	26.62	8.06	34.03	121.20	8.01	2.20
050cm	26.64	8.05	34.03	121.10	8.00	
100cm	26.39	8.05	33.85	121.90	8.09	
150cm	25.85	8.06	33.85	121.70	8.15	
200cm	25.08	8.07	33.82	118.90	8.08	
250cm	24.78	8.07	34.01	115.40	7.87	
300cm	24.52	8.08	33.99	114.30	7.83	
350cm	24.18	8.06	34.04	109.10	7.51	
400cm	23.78	8.02	34.11	103.80	7.20	
450cm	23.40	7.99	33.99	96.40	6.73	
500cm	22.73	7.93	34.40	88.00	6.20	
550cm	22.42	7.89	34.58	69.50	4.92	
Bottom	22.46	7.85	34.45	63.70	4.51	

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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	0.20	ug/L	-	05/12/2013
Copper	1.00	ug/L	-	05/12/2013
Iron	53	ug/L	-	05/12/2013
Lead	0.20	ug/L	-	05/12/2013
Manganese	58	ug/L	-	05/12/2013
Nitrite and Nitrate as N	8.0	ug/L	-	05/12/2013
Phosphorus Reactive as P - Total	211	ug/L	-	05/12/2013
Phosphorus as P - Total	254	ug/L	-	05/12/2013
Selenium	13.0	ug/L	-	05/12/2013
Suspended Solids (SS)	5.0	mg/L	-	05/12/2013
Zinc	5.0	ug/L	-	05/12/2013
pH	9.0	-	-	05/12/2013

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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	2.00	ug/L	-	05/12/2013
Iron	56.0	ug/L	-	05/12/2013
Selenium	1.00	ug/L	-	05/12/2013
Temperature - Average	25.3	deg C	-	Dec 2013
Temperature - Minimum	21.8	deg C	-	Dec 2013
Temperature - Maximum	28.3	deg C	-	Dec 2013

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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	1.00	ug/L	5	05/12/2013
Iron	62.0	ug/L	300	05/12/2013
Selenium	1.00	ug/L	2	05/12/2013
Temperature - Average	30.2	deg C	35	Dec 2013
Temperature - Minimum	25.8	deg C	35	Dec 2013
Temperature - Maximum	35.6	deg C	35	Dec 2013
Maximum Daily Discharge from Ash Dam	23.6	ML	50	Dec 2013
Monthly Discharge from Ash Dam	456	ML	-	Dec 2013

- Under EPL 1429, The outlet temperature can go between 35.00 and 37.50 Degrees for up to 131 hours a year. With an additional 69 hours in the event of electricity shortfall.

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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	13.0	ug/L	-	05/12/2013
Phosphorus as P - Total	79	ug/L	-	05/12/2013
pH	6.4	-	-	05/12/2013