



Eraring Power Station - EPA Licence 1429  
Rocky Point Rd, Dora Creek NSW 2264

**Environmental Monitoring Data September 2021**



## Unit 1A Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air*

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	165	188	105	168	230	109
2 September	159	177	145	165	215	114
3 September	155	187	101	161	206	109
4 September	163	185	146	177	212	141
5 September	153	186	139	145	193	105
6 September	162	198	100	158	241	104
7 September	164	212	146	177	220	131
8 September	161	258	103	174	234	120
9 September	185	523	131	193	375	130
10 September	146	183	114	191	243	159
11 September	139	163	125	191	233	145
12 September	149	161	135	265	322	190
13 September	155	171	131	198	242	160
14 September	159	175	147	173	219	153
15 September	160	177	142	147	182	109
16 September	150	198	118	138	193	103
17 September	161	188	137	215	243	127
18 September	149	173	123	219	248	192
19 September	154	176	128	244	282	105
20 September	163	192	131	206	323	116
21 September	178	208	147	162	221	101
22 September	174	205	141	198	257	154
23 September	163	200	127	210	266	105
24 September	162	209	128	213	271	141
25 September	159	190	129	206	239	169
26 September	178	216	148	225	295	175
27 September	189	255	156	211	264	141
28 September	155	186	128	181	245	127
29 September	167	191	142	203	267	142
30 September	157	189	130	210	266	170

## Unit 1B Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air*

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	160	219	138	217	333	186
2 September	154	213	139	220	331	202
3 September	150	220	128	210	350	184
4 September	160	218	141	215	339	188
5 September	150	218	131	201	340	181
6 September	161	219	139	207	334	160
7 September	154	172	138	198	229	168
8 September	152	185	129	211	249	182
9 September	171	349	118	204	382	178
10 September	135	167	112	207	227	183
11 September	134	153	115	225	254	201
12 September	143	163	129	279	331	247
13 September	142	158	129	217	261	179
14 September	146	155	132	197	224	177
15 September	148	166	133	198	215	177
16 September	138	155	115	210	247	145
17 September	151	171	132	205	234	181
18 September	143	163	122	206	228	187
19 September	145	169	127	246	257	221
20 September	159	208	127	253	280	127
21 September	154	182	129	228	244	211
22 September	155	181	124	223	258	190
23 September	149	177	121	249	272	235
24 September	153	183	120	232	257	151
25 September	144	171	119	240	255	216
26 September	158	195	128	256	279	227
27 September	172	266	142	233	256	212
28 September	141	177	115	208	220	193
29 September	150	170	131	204	217	188
30 September	139	167	117	221	233	200

## Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	160	202	125	210	238	109
2 September	158	214	126	207	227	187
3 September	168	211	106	202	228	166
4 September	170	235	135	197	221	166
5 September	166	213	134	191	203	182
6 September	179	221	102	186	223	156
7 September	176	218	129	201	232	178
8 September	169	212	128	195	233	159
9 September	209	287	167	185	201	166
10 September	179	369	116	200	224	135
11 September	143	178	113	213	231	189
12 September	168	202	137	253	304	228
13 September	170	199	148	214	247	189
14 September	162	193	117	196	228	176
15 September	179	196	154	200	211	182
16 September	169	420	104	198	453	112
17 September	161	183	131	196	219	176
18 September	153	183	127	190	209	173
19 September	174	232	148	223	234	209
20 September	210	241	174	235	256	218
21 September	201	228	185	215	227	199
22 September	200	229	134	228	258	198
23 September	181	232	121	234	254	210
24 September	185	229	158	247	279	223
25 September	188	211	172	223	233	210
26 September	195	217	178	236	253	222
27 September	200	261	113	222	255	110
28 September	173	196	148	200	215	181
29 September	183	203	164	200	218	177
30 September	174	199	159	209	226	192

## Unit 2B Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air*

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	134	158	116	180	200	160
2 September	128	156	112	176	196	153
3 September	142	188	117	174	208	133
4 September	138	160	117	170	202	132
5 September	145	168	128	170	183	150
6 September	147	178	115	161	185	125
7 September	139	152	114	177	217	143
8 September	143	255	112	167	200	117
9 September	181	297	128	164	183	148
10 September	135	161	104	180	199	163
11 September	136	157	116	198	228	168
12 September	162	195	123	234	300	190
13 September	128	137	115	172	217	143
14 September	120	136	100	155	190	132
15 September	143	179	108	165	194	136
16 September	127	209	101	154	178	129
17 September	135	160	119	174	217	145
18 September	128	145	110	168	183	149
19 September	154	185	128	206	230	176
20 September	182	248	156	205	244	173
21 September	161	178	145	178	202	154
22 September	166	182	151	193	223	145
23 September	150	167	114	194	213	157
24 September	157	167	147	206	246	170
25 September	154	169	139	183	204	158
26 September	160	173	146	187	210	154
27 September	177	246	145	175	210	141
28 September	143	222	122	161	186	118
29 September	133	157	122	161	185	140
30 September	138	152	122	172	195	151



### Unit 3A Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air*

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	159	188	104	239	250	228
2 September	157	175	102	241	260	228
3 September	181	223	142	237	263	208
4 September	165	201	147	224	238	204
5 September	168	193	112	218	234	205
6 September	177	206	113	213	253	198
7 September	175	222	115	241	272	209
8 September	168	199	132	223	237	208
9 September	170	202	140	213	240	199
10 September	170	216	117	216	241	196
11 September	180	227	102	242	264	224
12 September	196	232	122	290	339	249
13 September	183	227	126	239	277	204
14 September	176	195	112	219	246	197
15 September	174	199	102	212	226	195
16 September	165	198	116	229	257	207
17 September	169	193	127	232	253	203
18 September	171	186	124	225	240	206
19 September	182	206	124	267	282	244
20 September	178	200	123	284	303	255
21 September	193	218	128	271	285	250
22 September	180	214	128	262	279	248
23 September	153	167	110	281	295	257
24 September	158	169	130	276	286	261
25 September	152	171	115	258	273	235
26 September	142	148	129	275	301	251
27 September	153	191	134	276	307	238
28 September	160	203	103	212	238	186
29 September	175	209	139	219	245	192
30 September	169	216	143	230	248	207

### Unit 3B Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air*

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	159	193	110	222	243	180
2 September	156	185	130	231	253	214
3 September	179	240	136	229	251	202
4 September	160	203	141	216	226	185
5 September	163	186	138	207	218	188
6 September	165	189	130	195	227	153
7 September	162	194	111	217	250	197
8 September	154	184	116	203	226	161
9 September	159	188	122	198	228	154
10 September	167	215	132	202	230	181
11 September	180	219	131	228	245	209
12 September	202	243	148	273	317	227
13 September	183	228	124	234	264	208
14 September	181	199	156	215	243	195
15 September	167	195	137	204	223	161
16 September	157	206	128	213	255	135
17 September	149	174	101	211	243	156
18 September	163	170	142	214	236	183
19 September	159	174	126	245	265	186
20 September	167	186	122	264	286	196
21 September	166	185	134	250	270	199
22 September	158	196	126	237	267	186
23 September	138	164	109	254	284	206
24 September	145	156	125	265	275	249
25 September	138	152	112	249	261	231
26 September	126	140	112	265	289	235
27 September	140	180	119	267	297	234
28 September	153	201	123	205	237	170
29 September	173	213	139	217	242	191
30 September	178	224	153	229	248	200

**Unit 4A Boiler Continuous Emission Monitoring Summary**

*EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air*

*Unit 4A Out of Service 1-30 September 2021*

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September						
2 September						
3 September						
4 September						
5 September						
6 September						
7 September						
8 September						
9 September						
10 September						
11 September						
12 September						
13 September						
14 September						
15 September						
16 September						
17 September						
18 September						
19 September						
20 September						
21 September						
22 September						
23 September						
24 September						
25 September						
26 September						
27 September						
28 September						
29 September						
30 September						



**Unit 4B Boiler Continuous Emission Monitoring Summary**

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

	NOX			SOX		
	ppm (7% O <sub>2</sub> )			ppm (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September						
2 September						
3 September						
4 September						
5 September						
6 September						
7 September						
8 September						
9 September						
10 September						
11 September						
12 September						
13 September						
14 September						
15 September						
16 September						
17 September						
18 September						
19 September						
20 September						
21 September						
22 September						
23 September						
24 September						
25 September						
26 September						
27 September						
28 September						
29 September						
30 September						

**Unit 1 Boiler Emission Test Results**

*EPA Identification no. 3 - Air emissions monitoring, Boiler 1 stack discharge to air*

Name	Reading	Units	Licence Limit	Date
Chlorine	0.014	mg/m <sup>3</sup>	20	27/04/2021
Fluorine	11	mg/m <sup>3</sup>	30	27/04/2021
Hydrogen chloride	2.9	mg/m <sup>3</sup>	50	27/04/2021
Solid Particles	<4	mg/m <sup>3</sup>	50	27/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	0.59	mg/m <sup>3</sup>	100	27/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m <sup>3</sup>	10	27/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>	0.2	9/07/2021
Mercury	<0.0002	mg/m <sup>3</sup>	0.05	9/07/2021
Solid Particles	2.3	mg/m <sup>3</sup>	50	9/07/2021
Type 1 and 2 substances in Aggregate	<0.03	mg/m <sup>3</sup>	0.75	9/07/2021

*EPA Identification no. 7 - Air emissions monitoring, Boiler 1 Exhaust Duct A*

Name	Reading	Units	Licence Limit	Date
Flow Rate	370	m <sup>3</sup> /sec		27/04/2021
Moisture	5.7	%		27/04/2021
Oxygen	8.3	%		27/04/2021
Solid Particles	7.8	mg/m <sup>3</sup>		27/04/2021
Temperature	117	degC		27/04/2021
Carbon dioxide	12.1	%		27/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		9/07/2021
Flow Rate	370	m <sup>3</sup> /sec		9/07/2021
Mercury	0.00016	mg/m <sup>3</sup>		9/07/2021
Moisture	5.2	%		9/07/2021
Oxygen	7.3	%		9/07/2021
Solid Particles	2.2	mg/m <sup>3</sup>		9/07/2021
Temperature	115	degC		9/07/2021
Type 1 and Type 2 substances in Aggregate	<0.040	mg/m <sup>3</sup>		9/07/2021
Carbon dioxide	12.5	%		9/07/2021

*EPA Identification no. 8 - Air emissions monitoring, Boiler 1 Exhaust Duct B*

Name	Reading	Units	Licence Limit	Date
Flow Rate	400	m <sup>3</sup> /sec		27/04/2021
Moisture	5.2	%		27/04/2021
Oxygen	6.5	%		27/04/2021
Solid Particles	<0.9	mg/m <sup>3</sup>		27/04/2021
Temperature	121	degC		27/04/2021
Carbon dioxide	12.4	%		27/04/2021
Chlorine	0.014	mg/m <sup>3</sup>		27/04/2021
Fluorine	11	mg/m <sup>3</sup>		27/04/2021
Hydrogen chloride	2.9	mg/m <sup>3</sup>		27/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	0.59	mg/m <sup>3</sup>		27/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m <sup>3</sup>		27/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		9/07/2021
Flow Rate	370	m <sup>3</sup> /sec		9/07/2021
Mercury	<0.0002	mg/m <sup>3</sup>		9/07/2021
Moisture	5.7	%		9/07/2021
Oxygen	6.4	%		9/07/2021
Solid Particles	2.3	mg/m <sup>3</sup>		9/07/2021
Temperature	119	degC		9/07/2021
Type 1 and Type 2 substances in Aggregate	<0.021	mg/m <sup>3</sup>		9/07/2021
Carbon dioxide	12.6	%		9/07/2021

## Unit 2 Boiler Emission Test Results

*EPA Identification no. 4 - Air emissions monitoring, Boiler 2 stack discharge to air*

Name	Reading	Units	Licence Limit	Date
Chlorine	<0.008	mg/m <sup>3</sup>	20	28/04/2021
Fluorine	4.0	mg/m <sup>3</sup>	30	28/04/2021
Hydrogen chloride	1.1	mg/m <sup>3</sup>	50	28/04/2021
Solid Particles	5.1	mg/m <sup>3</sup>	50	28/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	1.7	mg/m <sup>3</sup>	100	28/04/2021
Volatile organic compounds as n-propane equivalent	0.049	mg/m <sup>3</sup>	10	28/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>	0.2	7/07/2021
Mercury	0.0016	mg/m <sup>3</sup>	0.05	7/07/2021
Solid Particles	4.1	mg/m <sup>3</sup>	50	7/07/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m <sup>3</sup>	0.75	7/07/2021

*EPA Identification no. 9 - Air emissions monitoring, Boiler 2 Exhaust Duct A*

Name	Reading	Units	Licence Limit	Date
Flow Rate	350	m <sup>3</sup> /sec		28/04/2021
Moisture	5.4	%		28/04/2021
Oxygen	7.2	%		28/04/2021
Solid Particles	6.9	mg/m <sup>3</sup>		28/04/2021
Temperature	122	degC		28/04/2021
Carbon dioxide	11.8	%		28/04/2021
Chlorine	<0.008	mg/m <sup>3</sup>		28/04/2021
Fluorine	4.0	mg/m <sup>3</sup>		28/04/2021
Hydrogen chloride	1.1	mg/m <sup>3</sup>		28/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	1.7	mg/m <sup>3</sup>		28/04/2021
Volatile organic compounds as n-propane equivalent	0.049	mg/m <sup>3</sup>		28/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		7/07/2021
Flow Rate	250	m <sup>3</sup> /sec		7/07/2021
Mercury	0.0015	mg/m <sup>3</sup>		7/07/2021
Moisture	6.1	%		7/07/2021
Oxygen	8.8	%		7/07/2021
Solid Particles	4.1	mg/m <sup>3</sup>		7/07/2021
Temperature	125	degC		7/07/2021
Type 1 and Type 2 substances in Aggregate	<0.015	mg/m <sup>3</sup>		7/07/2021
Carbon dioxide	10.5	%		7/07/2021

*EPA Identification no. 10 - Air emissions monitoring, Boiler 2 Exhaust Duct B*

Name	Reading	Units	Licence Limit	Date
Flow Rate	350	m <sup>3</sup> /sec		28/04/2021
Moisture	6.1	%		28/04/2021
Oxygen	5.8	%		28/04/2021
Solid Particles	3.3	mg/m <sup>3</sup>		28/04/2021
Temperature	119	degC		28/04/2021
Carbon dioxide	14.5	%		28/04/2021
Cadmium	<0.0003	mg/m <sup>3</sup>		7/07/2021
Flow Rate	230	m <sup>3</sup> /sec		7/07/2021
Mercury	0.0018	mg/m <sup>3</sup>		7/07/2021
Moisture	11	%		7/07/2021
Oxygen	9.6	%		7/07/2021
Solid Particles	4.2	mg/m <sup>3</sup>		7/07/2021
Temperature	115	degC		7/07/2021
Type 1 and Type 2 substances in Aggregate	<0.019	mg/m <sup>3</sup>		7/07/2021
Carbon dioxide	10.9	%		7/07/2021

### Unit 3 Boiler Emission Test Results

*EPA Identification no. 5 - Air emissions monitoring, Boiler 3 stack discharge to air*

Name	Reading	Units	Licence Limit	Date
Chlorine	0.016	mg/m3	20	29/04/2021
Fluorine	6.3	mg/m3	30	29/04/2021
Hydrogen chloride	2.2	mg/m3	50	29/04/2021
Solid Particles	2.6	mg/m3	50	29/04/2021
Sulfuric acid mist and sulfur trioxide (as SO3)	1.6	mg/m3	100	29/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m3	10	29/04/2021
Cadmium	<0.0002	mg/m3	0.2	8/07/2021
Mercury	0.00035	mg/m3	0.05	8/07/2021
Solid Particles	4.1	mg/m3	50	8/07/2021
Type 1 and 2 substances in Aggregate	<0.04	mg/m3	0.75	8/07/2021

*EPA Identification no. 11 - Air emissions monitoring, Boiler 3 Exhaust Duct A*

Name	Reading	Units	Licence Limit	Date
Flow Rate	340	m3/sec		29/04/2021
Moisture	6.0	%		29/04/2021
Oxygen	5.9	%		29/04/2021
Solid Particles	2.7	mg/m3		29/04/2021
Temperature	125	degC		29/04/2021
Carbon dioxide	14.5	%		29/04/2021
Cadmium	<0.0002	mg/m3		8/07/2021
Flow Rate	370	m3/sec		8/07/2021
Mercury	0.00027	mg/m3		8/07/2021
Moisture	5.4	%		8/07/2021
Oxygen	6.7	%		8/07/2021
Solid Particles	7.0	mg/m3		8/07/2021
Temperature	123	degC		8/07/2021
Type 1 and Type 2 substances in Aggregate	<0.040	mg/m3		8/07/2021
Carbon dioxide	13.1	%		8/07/2021

*EPA Identification no. 12 - Air emissions monitoring, Boiler 3 Exhaust Duct B*

Name	Reading	Units	Licence Limit	Date
Flow Rate	320	m3/sec		29/04/2021
Moisture	5.5	%		29/04/2021
Oxygen	6.8	%		29/04/2021
Solid Particles	2.5	mg/m3		29/04/2021
Temperature	117	degC		29/04/2021
Carbon dioxide	12.2	%		29/04/2021
Chlorine	0.016	mg/m3		29/04/2021
Fluorine	6.3	mg/m3		29/04/2021
Hydrogen chloride	2.2	mg/m3		29/04/2021
Sulfuric acid mist and sulfur trioxide (as SO3)	1.6	mg/m3		29/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m3		29/04/2021
Cadmium	<0.0002	mg/m3		8/07/2021
Flow Rate	330	m3/sec		8/07/2021
Mercury	0.00044	mg/m3		8/07/2021
Moisture	5.4	%		8/07/2021
Oxygen	6.4	%		8/07/2021
Solid Particles	0.8	mg/m3		8/07/2021
Temperature	120	degC		8/07/2021
Type 1 and Type 2 substances in Aggregate	<0.031	mg/m3		8/07/2021
Carbon dioxide	12.6	%		8/07/2021

### Unit 4 Boiler Emission Test Results

*EPA Identification no. 6 - Air emissions monitoring, Boiler 4 stack discharge to air*

Name	Reading	Units	Licence Limit	Date
Chlorine	0.01	mg/m <sup>3</sup>	20	7/04/2021
Fluorine	13	mg/m <sup>3</sup>	30	7/04/2021
Hydrogen chloride	2.7	mg/m <sup>3</sup>	50	7/04/2021
Solid Particles	6.2	mg/m <sup>3</sup>	50	29/06/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	2.7	mg/m <sup>3</sup>	100	7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m <sup>3</sup>	10	7/04/2021
Cadmium	<0.0003	mg/m <sup>3</sup>	0.2	6/07/2021
Mercury	0.00037	mg/m <sup>3</sup>	0.05	6/07/2021
Solid Particles	4.4	mg/m <sup>3</sup>	50	6/07/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m <sup>3</sup>	0.75	6/07/2021

*EPA Identification no. 13 - Air emissions monitoring, Boiler 4 Exhaust Duct A*

Name	Reading	Units	Licence Limit	Date
Flow Rate	500	m <sup>3</sup> /sec		7/04/2021
Moisture	5.3	%		7/04/2021
Oxygen	10.4	%		7/04/2021
Solid Particles	9.5	mg/m <sup>3</sup>		7/04/2021
Temperature	111	degC		7/04/2021
Carbon dioxide	10.4	%		7/04/2021
Chlorine	0.01	mg/m <sup>3</sup>		7/04/2021
Fluorine	13	mg/m <sup>3</sup>		7/04/2021
Hydrogen chloride	2.7	mg/m <sup>3</sup>		7/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	2.7	mg/m <sup>3</sup>		7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m <sup>3</sup>		7/04/2021
Cadmium	<0.0003	mg/m <sup>3</sup>		6/07/2021
Flow Rate	390	m <sup>3</sup> /sec		6/07/2021
Mercury	0.00049	mg/m <sup>3</sup>		6/07/2021
Moisture	5.3	%		6/07/2021
Oxygen	8.8	%		6/07/2021
Solid Particles	7.0	mg/m <sup>3</sup>		6/07/2021
Temperature	119	degC		6/07/2021
Type 1 and Type 2 substances in Aggregate	<0.030	mg/m <sup>3</sup>		6/07/2021
Carbon dioxide	10.0	%		6/07/2021

*EPA Identification no. 14 - Air emissions monitoring, Boiler 4 Exhaust Duct B*

Name	Reading	Units	Licence Limit	Date
Flow Rate	400	m <sup>3</sup> /sec		29/06/2021
Moisture	5.9	%		29/06/2021
Oxygen	6.9	%		29/06/2021
Solid Particles	2	mg/m <sup>3</sup>		29/06/2021
Temperature	121	degC		29/06/2021
Carbon dioxide	13.4	%		29/06/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		6/07/2021
Flow Rate	380	m <sup>3</sup> /sec		6/07/2021
Mercury	0.00024	mg/m <sup>3</sup>		6/07/2021
Moisture	5.5	%		6/07/2021
Oxygen	6.7	%		6/07/2021
Solid Particles	1.8	mg/m <sup>3</sup>		6/07/2021
Temperature	115	degC		6/07/2021
Type 1 and Type 2 substances in Aggregate	<0.011	mg/m <sup>3</sup>		6/07/2021
Carbon dioxide	13.0	%		6/07/2021

## Eraring Depositional Dust Gauges

*EPA Identification no. 17, 18, 19 & 20- Depositional dust monitoring within 1km of the coal handling operations*

Eraring Identification	EPA Identification No	Deposited Matter		
		g/m <sup>2</sup> /month		
		Ash	Combustible	Insoluble
E2	17	0.8	0.2	1.0
E4	18	0.4	0.3	0.7
E6	19	3.1	4.1	<b>7.2</b>
U6	20	0.5	0.2	0.7

*E6 anomalous elevated result due to organic material, and hazard reduction burning being undertaken to the west of the Site boundary.*

## Water Quality - Lake Monitoring LM10

*EPA Identification no. 27 - The waters of Lake Macquarie located midway between cooling water inlet and Hungary Point*

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
°C	m	degC	pH unit	ppt	%	mg/L	m
18.53	0.50	17.76	8.12	35.1	81.7	6.08	1.75
Name			Reading		Units		Date
Aluminium			0.062		mg/L		9/09/2021
Ammonia			<0.005		mg/L		9/09/2021
Arsenic III			<0.005		mg/		9/09/2021
Arsenic V			<0.005		mg/L		9/09/2021
Cadmium			<0.0002		mg/L		9/09/2021
Chromium (Trivalent)			<0.001		mg/L		9/09/2021
Chromium (VI) Compounds			<0.001		mg/L		9/09/2021
Copper			0.001		mg/L		9/09/2021
Iron			0.086		mg/L		9/09/2021
Lead			<0.0002		mg/L		9/09/2021
Manganese			0.0057		mg/L		9/09/2021
Nickel			<0.0005		mg/L		9/09/2021
pH			8.08		pH units		9/09/2021
Selenium			<0.002		mg/L		9/09/2021
Total Suspended Solids			7		mg/L		9/09/2021
Vanadium			0.0018		mg/L		9/09/2021
Zinc			<0.005		mg/L		9/09/2021



## Water Quality - Lake Monitoring LM12

*EPA Identification no. 29 - The waters of Lake Macquarie located at the Eraring/Vales Point mixing zone off Fishery Point*

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
°C	m	degC	pH unit	ppt	%	mg/L	m
17.64	0.50	18.01	8.11	34.8	82.6	6.14	2.75
Name			Reading		Units		Date
Aluminium			0.038		mg/L		9/09/2021
Ammonia			<0.005		mg/L		9/09/2021
Arsenic III			<0.005		mg/L		9/09/2021
Arsenic V			<0.005		mg/L		9/09/2021
Cadmium			<0.0002		mg/L		9/09/2021
Chromium (Trivalent)			<0.001		mg/L		9/09/2021
Chromium (VI) Compounds			<0.001		mg/L		9/09/2021
Copper			0.002		mg/L		9/09/2021
Iron			0.032		mg/L		9/09/2021
Lead			<0.0002		mg/L		9/09/2021
Manganese			0.0041		mg/L		9/09/2021
Nickel			0.0008		mg/L		9/09/2021
pH			7.63		pH units		9/09/2021
Selenium			<0.002		mg/L		9/09/2021
Total Suspended Solids			<5		mg/L		9/09/2021
Vanadium			0.002		mg/L		9/09/2021
Zinc			<0.005		mg/L		9/09/2021

## Water Quality - Lake Monitoring LM4

*EPA Identification no. 30 - The northern waters of Lake Macquarie east off  
Lake Macquarie Yacht Club*

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
°C	m	degC	pH unit	ppt	%	mg/L	m
14.66	0.50	16.57	8.14	35.5	86.3	6.55	2.25
Name			Reading		Units		Date
Aluminium			0.014		mg/L		9/09/2021
Ammonia			<0.005		mg/L		9/09/2021
Arsenic III			<0.005		mg/L		9/09/2021
Arsenic V			<0.005		mg/L		9/09/2021
Cadmium			<0.0002		mg/L		9/09/2021
Chromium (Trivalent)			<0.001		mg/L		9/09/2021
Chromium (VI) Compounds			<0.001		mg/L		9/09/2021
Copper			<0.001		mg/L		9/09/2021
Iron			0.013		mg/L		9/09/2021
Lead			<0.0002		mg/L		9/09/2021
Manganese			0.0031		mg/L		9/09/2021
Nickel			<0.0005		mg/L		9/09/2021
pH			8.07		pH units		9/09/2021
Selenium			<0.002		mg/L		9/09/2021
Total Suspended Solids			5		mg/L		9/09/2021
Vanadium			0.0016		mg/L		9/09/2021
Zinc			<0.005		mg/L		9/09/2021

## Water Quality - Lake Monitoring LM7

*EPA Identification no. 28 - The waters of Lake Macquarie located off old Wangi power station inlet point in Myuna Bay*

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
°C	m	degC	pH unit	ppt	%	mg/L	m
16.41	0.5	20.41	8.09	35.2	90.6	6.48	3.25
Name			Reading	Units		Date	
Aluminium			0.033	mg/L		9/09/2021	
Ammonia			<0.005	mg/L		9/09/2021	
Arsenic III			<0.005	mg/L		9/09/2021	
Arsenic V			<0.005	mg/L		9/09/2021	
Cadmium			<0.0002	mg/L		9/09/2021	
Chromium (Trivalent)			<0.001	mg/L		9/09/2021	
Chromium (VI) Compounds			<0.001	mg/L		9/09/2021	
Copper			0.001	mg/L		9/09/2021	
Iron			0.046	mg/L		9/09/2021	
Lead			<0.0002	mg/L		9/09/2021	
Manganese			0.0051	mg/L		9/09/2021	
Nickel			0.0006	mg/L		9/09/2021	
pH			8.07	pH units		9/09/2021	
Selenium			<0.002	mg/L		9/09/2021	
Total Suspended Solids			9	mg/L		9/09/2021	
Vanadium			0.0016	mg/L		9/09/2021	
Zinc			<0.005	mg/L		9/09/2021	

## Eraring Ash Dam Effluent Quality Monitoring

EPA Identification no. 22 - Discharge point below siphon pond weir at  
Ash Dam

Name	Reading	Units	Licence Limit	Date
Aluminium	0.109	mg/L	-	9/09/2021
Ammonia	0.32	mg/L	-	9/09/2021
Arsenic III	<0.0005	mg/L	-	9/09/2021
Arsenic V	0.0029	mg/L	-	9/09/2021
Cadmium	0.00018	mg/L	-	9/09/2021
Chromium (Trivalent)	<0.001	mg/L	-	9/09/2021
Chromium (VI) Compounds	<0.01	mg/L	-	9/09/2021
Copper	0.0026	mg/L	-	9/09/2021
Iron	0.058	mg/L	-	9/09/2021
Lead	<0.0001	mg/L	-	9/09/2021
Manganese	0.0820	mg/L	-	9/09/2021
Nickel	0.0021	mg/L	-	9/09/2021
Nitrite and Nitrate as N	4.62	mg/L	-	9/09/2021
Nitrogen	6.8	mg/L	-	9/09/2021
pH	8.72	pH units	-	9/09/2021
Phosphorus as P	0.39	mg/L	-	9/09/2021
Reactive Phosphorus as P	0.26	mg/L	-	9/09/2021
Selenium	0.0439	mg/L	-	9/09/2021
Total Kjeldahl Nitrogen	2.2	mg/L	-	9/09/2021
Total Suspended Solids	12	mg/L	-	9/09/2021
Vanadium	0.0342	mg/L	-	9/09/2021
Zinc	0.010	mg/L	-	9/09/2021

## Eraring Cooling Water Inlet Canal

*EPA Identification no. 31 - Inlet canal of the cooling water intake from  
Lake Macquarie*

Name	Reading	Units	Licence Limit	Date
Aluminium	0.092	mg/L	-	9/09/2021
Ammonia	<0.005	mg/L	-	9/09/2021
Arsenic III	<0.005	mg/L	-	9/09/2021
Arsenic V	<0.005	mg/L	-	9/09/2021
Cadmium	<0.0002	mg/L	-	9/09/2021
Chromium (Trivalent)	<0.001	mg/L	-	9/09/2021
Chromium (VI) Compounds	<0.01	mg/L	-	9/09/2021
Copper	0.0011	mg/L	-	9/09/2021
Iron	0.106	mg/L	-	9/09/2021
Lead	<0.0002	mg/L	-	9/09/2021
Manganese	0.0061	mg/L	-	9/09/2021
Nickel	<0.0005	mg/L	-	9/09/2021
pH	8.08	pH units	-	9/09/2021
Selenium	<0.001	mg/L	-	9/09/2021
Total suspended Solids	<5	mg/L	-	9/09/2021
Vanadium	0.0017	mg/L	-	9/09/2021
Zinc	<0.005	mg/L	-	9/09/2021
Dissolved Oxygen	93.7	mg/L	-	9/09/2021
Field Temperature	20.5	degC	-	9/09/2021
Salinity	34.4	ppt	-	9/09/2021
Secchi Disk	4.25	m	-	9/09/2021
Temperature – Average	18.1	deg C	-	September 2021
Temperature – Minimum	16.2	deg C	-	September 2021
Temperature - Maximum	20.6	deg C	-	September 2021

## Eraring Cooling Water Outlet Canal

*EPA Identification no. 21 - Cooling water outlet canal to Myuna Bay*

Name	Reading	Units	Licence Limit	Date
Copper	0.0013	mg/L	0.005	9/09/2021
Iron	0.107	mg/L	0.3	9/09/2021
Selenium	<0.001	mg/L	0.002	9/09/2021
Temperature – Average	24.8	deg C	37.5	September 2021
Temperature – Minimum	20.2	deg C	37.5	September 2021
Temperature - Maximum	30.1	deg C	37.5	September 2021
Maximum Daily Discharge from Ash Dam	12.91	ML	150	September 2021
Monthly Discharge from Ash Dam	63.9	ML	-	September 2021

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**Emergency Discharge – Toe Drain Pond**

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*EPA Identification no. 24 - Emergency discharge to toe drain collection pond*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Licence Limit</b>	<b>Date</b>
Aluminium	0.008	mg/L	-	9/09/2021
Ammonia	2.81	mg/L	-	9/09/2021
Arsenic III	0.0016	mg/L	-	9/09/2021
Arsenic V	<0.0005	mg/L	-	9/09/2021
Cadmium	<0.00005	mg/L	-	9/09/2021
Chromium (Trivalent)	<0.001	mg/L	-	9/09/2021
Chromium (VI) Compounds	<0.01	mg/L	-	9/09/2021
Copper	<0.0005	mg/L	-	9/09/2021
Iron	5.72	mg/L	-	9/09/2021
Lead	<0.0001	mg/L	-	9/09/2021
Manganese	0.885	mg/L	-	9/09/2021
Nickel	0.0023	mg/L	-	9/09/2021
Nitrite and Nitrate as N	0.132	mg/L	-	9/09/2021
Nitrogen	3.01	mg/L	-	9/09/2021
pH	6.70	pH units	6-9.5	9/09/2021
Phosphorus as P	0.046	mg/L	-	9/09/2021
Reactive Phosphorus as P	0.038	mg/L	-	9/09/2021
Selenium	<0.0002	mg/L	-	9/09/2021
Total Kjeldahl Nitrogen	2.88	mg/L	-	9/09/2021
Total Suspended Solids	22	mg/L	50	9/09/2021
Vanadium	0.0008	mg/L	-	9/09/2021
Zinc	0.001	mg/L	-	9/09/2021



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**MR217**

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*EPA Identification no. 23 - Emergency discharge from ash dam outlet at culvert*  
No Discharge during September 2021

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Licence Limit</b>	<b>Date</b>
Aluminium		mg/L	-	
Ammonia		mg/L	-	
Arsenic III		mg/L	-	
Arsenic V		mg/L	-	
Cadmium		mg/L	-	
Chromium (Trivalent)		mg/L	-	
Chromium (VI) Compounds		mg/L	-	
Copper		mg/L	-	
Iron		mg/L	-	
Lead		mg/L	-	
Manganese		mg/L	-	
Nickel		mg/L	-	
Nitrite and Nitrate as N		mg/L	-	
Nitrogen		mg/L	-	
pH		pH units	6-9.5	
Phosphorus as P		mg/L	-	
Reactive Phosphorus as P		mg/L	-	
Selenium		mg/L	-	
Total Kjeldahl Nitrogen		mg/L	-	
Total Suspended Solids		mg/L	50	
Vanadium		mg/L	-	
Zinc		mg/L	-	

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**Groundwater Monitoring**  
**Groundwater Well – MW01**

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*EPA 01*  
*Identification no. 32 – Groundwater Monitoring Well*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	0.208	mg/L	29/09/2021
Ammonia	0.01	mg/L	29/09/2021
Arsenic (III)	<0.0005	mg/L	29/09/2021
Arsenic (V)	<0.0005	mg/L	29/09/2021
Cadmium	<0.00005	mg/L	29/09/2021
Calcium	2	mg/L	29/09/2021
Chromium (trivalent)	<0.001	mg/L	29/09/2021
Chromium (VI) compounds	<0.001	mg/L	29/09/2021
Copper	0.0024	mg/L	29/09/2021
Electrical Conductivity	439	uS/cm	29/09/2021
Iron	0.110	mg/L	29/09/2021
Lead	0.0015	mg/L	29/09/2021
Magnesium	5	mg/L	29/09/2021
Manganese	0.155	mg/L	29/09/2021
Nickel	0.0057	mg/L	29/09/2021
pH	4.86	pH units	29/09/2021
Potassium	4	mg/L	29/09/2021
Selenium	<0.0002	mg/L	29/09/2021
Sodium	73	mg/L	29/09/2021
Standing Water Level	8.07	metres	29/09/2021
Vanadium	0.0003	mg/L	29/09/2021
Zinc	0.028	mg/L	29/09/2021

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**Groundwater Monitoring  
Groundwater Well – MW02**

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*EPA Identification no. 33 – Groundwater Monitoring Well 02*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	0.499	mg/L	28/09/2021
Ammonia	4.46	mg/L	28/09/2021
Arsenic (III)	0.0019	mg/L	28/09/2021
Arsenic (V)	<0.001	mg/L	28/09/2021
Cadmium	<0.0002	mg/L	28/09/2021
Calcium	296	mg/L	28/09/2021
Chromium (trivalent)	<0.001	mg/L	28/09/2021
Chromium (VI) compounds	0.006	mg/L	28/09/2021
Copper	<0.001	mg/L	28/09/2021
Electrical Conductivity	26100	uS/cm	28/09/2021
Iron	25.6	mg/L	28/09/2021
Lead	0.0009	mg/L	28/09/2021
Magnesium	490	mg/L	28/09/2021
Manganese	0.820	mg/L	28/09/2021
Nickel	0.0007	mg/L	28/09/2021
pH	6.40	pH units	28/09/2021
Potassium	175	mg/L	28/09/2021
Selenium	<0.002	mg/L	28/09/2021
Sodium	5140	mg/L	28/09/2021
Standing Water Level	4.10	metres	28/09/2021
Vanadium	0.0025	mg/L	28/09/2021
Zinc	0.012	mg/L	28/09/2021

**Groundwater Monitoring  
Groundwater Well – MW06**

*EPA Identification no. 34 – Groundwater Monitoring Well 06*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	0.091	mg/L	28/09/2021
Ammonia	2.97	mg/L	28/09/2021
Arsenic (III)	0.0020	mg/L	28/09/2021
Arsenic (V)	0.0014	mg/L	28/09/2021
Cadmium	<0.00005	mg/L	28/09/2021
Calcium	433	mg/L	28/09/2021
Chromium (trivalent)	<0.001	mg/L	28/09/2021
Chromium (VI) compounds	<0.001	mg/L	28/09/2021
Copper	<0.0005	mg/L	28/09/2021
Electrical Conductivity	20000	uS/cm	28/09/2021
Iron	11.6	mg/L	28/09/2021
Lead	0.0001	mg/L	28/09/2021
Magnesium	253	mg/L	28/09/2021
Manganese	0.342	mg/L	28/09/2021
Nickel	0.0011	mg/L	28/09/2021
pH	6.59	pH units	28/09/2021
Potassium	117	mg/L	28/09/2021
Selenium	0.0003	mg/L	28/09/2021
Sodium	3330	mg/L	28/09/2021
Standing Water Level	1.87	metres	28/09/2021
Vanadium	0.0012	mg/L	28/09/2021
Zinc	0.006	mg/L	28/09/2021

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**Groundwater Monitoring**  
**Groundwater Well – EGM/D26**

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*EPA Identification no. 35 – Groundwater Monitoring Well D26*  
Groundwater well was dry during sampling in September 2021

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	-	mg/L	-
Ammonia	-	mg/L	-
Arsenic (III)	-	mg/L	-
Arsenic (V)	-	mg/L	-
Cadmium	-	mg/L	-
Calcium	-	mg/L	-
Chromium (trivalent)	-	mg/L	-
Chromium (VI) compounds	-	mg/L	-
Copper	-	mg/L	-
Electrical Conductivity	-	uS/cm	-
Iron	-	mg/L	-
Lead	-	mg/L	-
Magnesium	-	mg/L	-
Manganese	-	mg/L	-
Nickel	-	mg/L	-
pH	-	pH units	-
Potassium	-	mg/L	-
Selenium	-	mg/L	-
Sodium	-	mg/L	-
Standing Water Level	-	metres	-
Vanadium	-	mg/L	-
Zinc	-	mg/L	-