



Eraring Power Station - EPA Licence 1429

Rocky Point Rd, Dora Creek NSW 2264

Environmental Monitoring Data

April 2021



Unit 1A Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1 A Out of Service 1- 12 April 2021. Particulates Unit Out of Service 14 April 2021*

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	-	-	-	-	-	-	-	-	-
2 April	-	-	-	-	-	-	-	-	-
3 April	-	-	-	-	-	-	-	-	-
4 April	-	-	-	-	-	-	-	-	-
5 April	-	-	-	-	-	-	-	-	-
6 April	-	-	-	-	-	-	-	-	-
7 April	-	-	-	-	-	-	-	-	-
8 April	-	-	-	-	-	-	-	-	-
9 April	-	-	-	-	-	-	-	-	-
10 April	-	-	-	-	-	-	-	-	-
11 April	-	-	-	-	-	-	-	-	-
12 April	-	-	-	-	-	-	-	-	-
13 April	159	192	139	23.7	26.0	20.2	233	246	193
14 April	164	187	147	-	-	-	236	246	213
15 April	166	193	147	31.2	37.8	23.2	248	255	240
16 April	169	185	148	26.8	33.8	21.3	239	252	234
17 April	175	195	146	25.0	30.4	20.3	231	245	219
18 April	169	193	132	29.2	45.0	14.5	226	239	218
19 April	183	203	146	26.8	34.6	19.0	228	233	218
20 April	181	200	135	25.4	34.8	14.8	231	238	218
21 April	175	193	152	22.6	29.8	13.7	240	253	232
22 April	170	202	101	22.1	33.1	10.0	239	251	157
23 April	168	194	101	21.1	31.0	12.2	231	244	218
24 April	185	222	157	22.1	33.7	12.0	219	230	202
25 April	178	216	136	22.9	38.7	6.0	218	228	208
26 April	192	212	158	20.4	28.9	8.0	222	231	204
27 April	179	196	105	20.5	26.7	9.8	234	254	213
28 April	169	193	144	20.7	26.8	12.9	240	244	223
29 April	167	182	148	19.5	27.0	3.5	236	246	218
30 April	169	184	154	22.7	36.3	14.2	230	247	212

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.8 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1 B Out of Service 1 - 12 April 2021

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	-	-	-	-	-	-	-	-	-
2 April	-	-	-	-	-	-	-	-	-
3 April	-	-	-	-	-	-	-	-	-
4 April	-	-	-	-	-	-	-	-	-
5 April	-	-	-	-	-	-	-	-	-
6 April	-	-	-	-	-	-	-	-	-
7 April	-	-	-	-	-	-	-	-	-
8 April	-	-	-	-	-	-	-	-	-
9 April	-	-	-	-	-	-	-	-	-
10 April	-	-	-	-	-	-	-	-	-
11 April	-	-	-	-	-	-	-	-	-
12 April	-	-	-	-	-	-	-	-	-
13 April	136	164	120	28.3	38.4	23.6	182	191	160
14 April	146	167	128	23.2	28.7	20.5	184	190	179
15 April	154	186	130	21.8	23.6	20.5	192	199	188
16 April	151	169	129	21.4	22.0	21.0	183	195	178
17 April	165	189	133	24.2	27.1	21.0	176	190	168
18 April	151	182	114	24.4	28.0	20.8	173	180	168
19 April	159	174	133	22.3	26.0	19.7	171	176	142
20 April	155	174	137	21.9	23.8	19.6	176	180	168
21 April	149	189	125	21.0	22.0	20.0	178	192	121
22 April	145	169	121	22.2	26.1	19.9	186	189	178
23 April	152	173	121	21.8	25.1	20.0	173	185	148
24 April	163	188	139	23.3	24.2	21.2	165	172	158
25 April	158	187	120	24.9	28.4	22.2	164	169	160
26 April	165	189	139	23.0	26.2	21.0	165	171	155
27 April	162	175	135	22.3	27.1	19.9	176	189	163
28 April	151	169	126	24.0	30.2	20.9	186	190	182
29 April	150	161	130	23.0	26.2	21.0	183	190	177
30 April	154	163	139	24.3	28.9	20.3	178	190	167

Unit 2A Boiler Continuous Emission Monitoring Summary

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

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	148	167	115	17.6	19.4	16.1	191	207	178
2 April	128	164	117	19.6	25.9	17.4	188	201	177
3 April	125	146	110	20.4	21.4	19.4	180	190	175
4 April	120	137	111	21.4	24.5	19.2	184	193	179
5 April	115	118	111	21.1	23.4	20.2	185	190	183
6 April	124	137	106	20.8	27.7	19.1	183	192	150
7 April	142	168	111	20.5	25.3	17.8	182	240	151
8 April	158	168	142	19.9	25.8	17.7	166	169	163
9 April	138	188	112	17.7	20.6	15.5	170	184	133
10 April	140	162	114	19.6	23.7	18.1	188	200	181
11 April	130	151	116	23.6	27.5	21.2	178	184	174
12 April	144	213	113	23.4	26.4	20.6	175	184	110
13 April	121	151	108	21.9	24.4	17.3	191	198	183
14 April	132	151	118	19.2	23.5	17.1	185	192	181
15 April	135	165	107	20.2	23.1	17.9	194	204	186
16 April	153	162	141	21.1	25.3	19.1	184	190	180
17 April	149	163	127	22.0	25.6	19.3	189	202	182
18 April	144	170	109	15.2	17.6	12.4	182	188	173
19 April	145	176	103	15.2	17.5	13.4	183	191	178
20 April	162	184	134	15.4	18.6	12.4	188	194	183
21 April	158	177	136	15.4	20.8	13.3	196	204	188
22 April	157	170	122	15.8	18.1	13.9	196	202	190
23 April	164	178	130	16.1	18.0	14.9	186	197	173
24 April	133	141	122	17.9	19.0	16.9	178	191	168
25 April	142	181	121	17.6	19.1	16.1	175	180	169
26 April	174	190	158	15.2	17.2	14.1	180	187	170
27 April	176	200	152	15.8	17.4	14.3	184	196	170
28 April	172	198	151	15.8	17.4	15.4	192	201	168
29 April	173	188	151	16.5	20.6	13.9	191	202	186
30 April	166	185	142	16.6	19.0	13.8	189	206	173

Unit 2B Boiler Continuous Emission Monitoring Summary

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

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	142	170	120	7.6	10.1	7.0	150	170	118
2 April	141	154	113	9.6	12.3	7.1	162	182	139
3 April	152	195	128	10.5	13.5	5.1	164	173	142
4 April	136	146	108	10.9	13.4	7.1	163	173	147
5 April	138	142	135	10.8	13.3	8.3	170	173	168
6 April	122	142	110	7.2	12.3	2.1	148	171	135
7 April	138	147	117	5.5	7.1	3.0	141	172	128
8 April	142	156	130	6.8	9.1	5.0	135	150	129
9 April	138	156	122	6.4	9.1	3.9	156	169	134
10 April	138	147	126	6.4	8.6	3.3	169	192	147
11 April	134	147	116	9.4	12.7	6.6	160	170	136
12 April	143	161	119	9.4	13.7	5.5	160	180	143
13 April	142	151	124	10.1	14.0	6.7	179	193	158
14 April	138	157	118	7.9	12.1	5.8	167	173	155
15 April	140	161	117	7.9	12.1	3.9	175	194	156
16 April	143	151	137	9.0	13.5	6.2	156	163	148
17 April	142	154	126	9.6	12.8	6.3	164	181	151
18 April	147	173	126	9.0	14.2	5.6	161	176	150
19 April	146	168	121	9.7	14.1	4.6	162	189	149
20 April	163	197	145	9.7	13.9	5.4	163	177	155
21 April	148	158	132	12.0	18.3	8.7	172	219	156
22 April	147	158	130	13.7	18.5	8.9	165	186	154
23 April	151	165	133	14.5	21.3	10.2	155	192	100
24 April	164	175	154	9.9	15.5	6.0	171	184	167
25 April	164	177	150	9.0	13.2	6.0	166	174	145
26 April	152	166	141	8.8	13.4	4.2	151	165	141
27 April	149	157	136	9.4	12.8	6.4	155	165	147
28 April	145	162	128	9.5	12.8	5.5	160	180	131
29 April	143	169	104	9.1	13.6	3.7	161	218	142
30 April	147	166	128	8.7	12.0	4.4	153	168	137

Unit 3A Boiler Continuous Emission Monitoring Summary

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

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	146	160	132	25.9	28.6	24.5	168	184	153
2 April	145	158	129	26.3	28.5	24.5	166	172	161
3 April	148	173	131	26.4	31.7	24.3	163	173	157
4 April	143	159	131	26.3	32.9	24.1	164	169	159
5 April	162	218	135	27.6	30.3	25.3	164	168	159
6 April	187	217	143	30.1	33.5	27.2	164	168	156
7 April	178	198	157	31.3	40.8	29.0	163	173	147
8 April	179	207	137	29.7	33.1	27.9	158	169	145
9 April	162	184	143	28.9	32.1	26.8	161	168	144
10 April	175	227	150	29.8	35.4	27.7	170	175	165
11 April	176	244	146	29.6	33.2	27.7	167	172	162
12 April	165	184	143	30.3	32.5	28.4	167	175	159
13 April	144	184	120	29.6	31.5	28.4	177	184	170
14 April	152	176	130	28.9	35.0	27.6	173	178	161
15 April	148	173	126	29.3	32.9	27.6	182	190	175
16 April	153	182	123	31.7	34.9	29.8	175	180	168
17 April	155	182	129	31.5	34.0	26.4	175	186	163
18 April	156	193	105	26.6	28.4	25.4	171	178	165
19 April	173	210	109	26.4	29.4	25.2	172	182	165
20 April	176	217	127	26.3	27.2	25.2	172	176	162
21 April	173	203	106	26.8	27.2	26.2	182	188	174
22 April	176	200	138	26.6	26.9	25.9	182	192	174
23 April	184	212	158	26.6	28.0	25.9	173	185	164
24 April	190	226	145	26.9	29.0	24.9	164	175	157
25 April	184	231	136	27.4	28.9	26.9	163	172	158
26 April	187	212	116	28.1	28.9	26.9	163	173	159
27 April	184	214	149	29.2	32.0	27.8	169	182	160
28 April	189	195	177	28.5	32.8	26.6	180	186	173
29 April	175	201	102	29.1	31.6	28.6	176	187	168
30 April	168	189	143	28.2	36.2	7.6	175	193	165

Unit 3B Boiler Continuous Emission Monitoring Summary

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

NOx and SOx Units Out of Service 20 – 30 April 2021.

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	114	125	103	5.9	9.1	2.9	132	145	119
2 April	111	122	102	9.9	16.2	4.8	127	135	121
3 April	120	144	103	12.4	24.8	2.6	124	132	119
4 April	113	131	101	10.7	20.2	2.3	126	136	117
5 April	122	175	103	9.5	15.6	3.3	125	134	118
6 April	143	170	113	6.7	10.4	3.0	129	133	124
7 April	136	151	118	6.1	13.3	2.0	129	133	125
8 April	137	160	109	4.6	9.3	2.0	124	132	115
9 April	123	142	104	9.6	14.2	5.2	123	131	111
10 April	135	178	111	9.6	15.3	2.6	130	137	121
11 April	126	186	101	12.1	17.6	2.6	120	128	104
12 April	120	150	103	9.0	11.0	4.3	121	128	110
13 April	114	132	100	6.0	12.4	2.0	130	143	119
14 April	117	141	100	14.6	19.6	5.2	130	140	115
15 April	112	122	102	8.3	18.5	2.1	134	142	128
16 April	119	139	102	6.4	10.6	2.4	130	142	117
17 April	114	140	100	5.0	10.4	2.2	131	145	119
18 April	122	152	103	7.9	14.5	2.2	121	130	107
19 April	131	154	103	6.0	11.1	2.9	121	129	105
20 April	-	-	-	9.1	20.5	2.9	-	-	-
21 April	-	-	-	8.0	11.0	2.9	-	-	-
22 April	-	-	-	8.7	19.3	2.3	-	-	-
23 April	-	-	-	7.7	13.3	2.3	-	-	-
24 April	-	-	-	8.0	13.1	2.7	-	-	-
25 April	-	-	-	8.8	15.0	2.6	-	-	-
26 April	-	-	-	5.5	9.7	2.4	-	-	-
27 April	-	-	-	6.0	11.7	2.3	-	-	-
28 April	-	-	-	7.2	11.6	2.3	-	-	-
29 April	-	-	-	4.2	10.5	2.2	-	-	-
30 April	-	-	-	5.8	11.5	2.1	-	-	-

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 15- 30 April 2021

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	163	180	149	11.5	13.0	9.9	134	148	112
2 April	176	196	152	11.8	13.7	10.7	131	138	124
3 April	170	185	162	11.3	13.9	9.8	126	136	118
4 April	160	171	147	11.5	14.0	9.9	132	143	122
5 April	158	169	151	11.4	13.0	10.0	131	134	126
6 April	161	170	150	14.2	16.9	11.8	129	134	114
7 April	176	189	152	17.3	21.3	14.2	133	146	117
8 April	174	188	161	15.9	18.9	14.5	127	130	113
9 April	150	177	123	14.7	16.7	12.6	127	135	121
10 April	155	170	146	14.5	15.7	13.7	134	141	128
11 April	161	168	150	15.0	19.1	12.8	130	134	127
12 April	156	165	147	14.9	19.8	13.9	129	136	121
13 April	158	168	142	11.4	14.1	10.0	139	149	123
14 April	158	184	138	12.0	14.1	11.0	139	152	129
15 April	-	-	-	-	-	-	-	-	-
16 April	-	-	-	-	-	-	-	-	-
17 April	-	-	-	-	-	-	-	-	-
18 April	-	-	-	-	-	-	-	-	-
19 April	-	-	-	-	-	-	-	-	-
20 April	-	-	-	-	-	-	-	-	-
21 April	-	-	-	-	-	-	-	-	-
22 April	-	-	-	-	-	-	-	-	-
23 April	-	-	-	-	-	-	-	-	-
24 April	-	-	-	-	-	-	-	-	-
25 April	-	-	-	-	-	-	-	-	-
26 April	-	-	-	-	-	-	-	-	-
27 April	-	-	-	-	-	-	-	-	-
28 April	-	-	-	-	-	-	-	-	-
29 April	-	-	-	-	-	-	-	-	-
30 April	-	-	-	-	-	-	-	-	-

Unit 4B Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4B Out of service 15 – 30 April 2021. NOx and SOx Units Out of Service 1 - 14 April 2021*

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 April	-	-	-	15.0	16.3	14.1	-	-	-
2 April	-	-	-	16.0	17.1	14.1	-	-	-
3 April	-	-	-	15.9	18.2	14.2	-	-	-
4 April	-	-	-	15.8	17.2	14.2	-	-	-
5 April	-	-	-	15.4	18.3	13.1	-	-	-
6 April	-	-	-	16.7	18.2	16.2	-	-	-
7 April	-	-	-	17.8	21.3	16.0	-	-	-
8 April	-	-	-	16.7	18.2	16.2	-	-	-
9 April	-	-	-	15.6	18.2	14.2	-	-	-
10 April	-	-	-	16.6	19.3	15.2	-	-	-
11 April	-	-	-	18.0	21.3	16.1	-	-	-
12 April	-	-	-	19.2	23.4	17.1	-	-	-
13 April	-	-	-	16.6	18.2	14.0	-	-	-
14 April	-	-	-	14.9	18.2	12.1	-	-	-
15 April	-	-	-	-	-	-	-	-	-
16 April	-	-	-	-	-	-	-	-	-
17 April	-	-	-	-	-	-	-	-	-
18 April	-	-	-	-	-	-	-	-	-
19 April	-	-	-	-	-	-	-	-	-
20 April	-	-	-	-	-	-	-	-	-
21 April	-	-	-	-	-	-	-	-	-
22 April	-	-	-	-	-	-	-	-	-
23 April	-	-	-	-	-	-	-	-	-
24 April	-	-	-	-	-	-	-	-	-
25 April	-	-	-	-	-	-	-	-	-
26 April	-	-	-	-	-	-	-	-	-
27 April	-	-	-	-	-	-	-	-	-
28 April	-	-	-	-	-	-	-	-	-
29 April	-	-	-	-	-	-	-	-	-
30 April	-	-	-	-	-	-	-	-	-

Unit 1 Boiler Emission Test Results

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	2/02/2021
Mercury	0.00055	mg/m ³	0.05	2/02/2021
Solid Particles	4.0	mg/m ³	50	2/02/2021
Type 1 and 2 substances in Aggregate	<0.01	mg/m ³	0.75	2/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	2/02/2021
Flow Rate	274	m ³ /sec		2/02/2021
Mercury	0.00021	mg/m ³	0.05	2/02/2021
Moisture	5.4	%		2/02/2021
Oxygen	8.2	%		2/02/2021
Solid Particles	1.0	mg/m ³	50	2/02/2021
Temperature	108	degC		2/02/2021
Type 1 and Type 2 substances in Aggregate	<0.011	mg/m ³	0.75	2/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	2/02/2021
Flow Rate	303	m ³ /sec		2/02/2021
Mercury	0.00085	mg/m ³	0.05	2/02/2021
Moisture	5.1	%		2/02/2021
Oxygen	6.5	%		2/02/2021
Solid Particles	6.8	mg/m ³	50	2/02/2021
Temperature	114	degC		2/02/2021
Type 1 and Type 2 substances in Aggregate	<0.011	mg/m ³	0.75	2/02/2021

Unit 2 Boiler Emission Test Results

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	03/02/2021
Mercury	0.0021	mg/m ³	0.05	03/02/2021
Solid Particles	0.94	mg/m ³	50	03/02/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m ³	0.75	03/08/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	03/02/2021
Flow Rate	281	m ³ /sec		03/02/2021
Mercury	0.0025	mg/m ³	0.05	03/02/2021
Moisture	5.2	%		03/02/2021
Oxygen	7.3	%		03/02/2021
Solid Particles	1.0	mg/m ³	50	03/02/2021
Temperature	122	degC		03/02/2020
Type 1 and Type 2 substances in Aggregate	<0.022	mg/m ³	0.75	03/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	<u>0.2</u>	03/02/2021
Flow Rate	273	m ³ /sec		03/02/2021
Mercury	0.0016	mg/m ³	0.05	03/02/2021
Moisture	5.0	%		03/02/2021
Oxygen	8.2	%		03/02/2021
Solid Particles	0.89	mg/m ³	50	03/02/2021
Temperature	108	degC		03/02/2021
Type 1 and Type 2 substances in Aggregate	<0.016	mg/m ³	0.75	03/02/2021

Unit 3 Boiler Emission Test Results

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	4/02/2021
Mercury	0.00033	mg/m ³	0.05	4/02/2021
Solid Particles	2.1	mg/m ³	50	4/02/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m ³	0.75	4/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	4/02/2021
Flow Rate	270	m ³ /sec		4/02/2021
Mercury	0.00036	mg/m ³		4/02/2021
Moisture	4.9	%	0.05	4/02/2021
Oxygen	7.4	%		4/02/2021
Solid Particles	0.92	mg/m ³	50	4/02/2021
Temperature	118	degC		4/02/2021
Type 1 and Type 2 substances in Aggregate	<0.022	mg/m ³	0.75	4/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0003	mg/m ³	0.2	4/02/2021
Flow Rate	266	m ³ /sec		4/02/2021
Mercury	0.00030	mg/m ³		4/02/2021
Moisture	5.4	%	0.05	4/02/2021
Oxygen	6.7	%		4/02/2021
Solid Particles	3.2	mg/m ³	50	4/02/2021
Temperature	117	degC		4/02/2021
Type 1 and Type 2 substances in Aggregate	<0.021	mg/m ³	0.75	4/02/2021

Unit 4 Boiler Emission Test Results

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	5/02/2021
Mercury	0.00093	mg/m ³	0.05	5/02/2021
Solid Particles	<2	mg/m ³	50	5/02/2021
Type 1 and 2 substances in Aggregate	<0.03	mg/m ³	0.75	5/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	5/02/2021
Flow Rate	252	m ³ /sec		5/02/2021
Mercury	0.00069	mg/m ³	0.05	5/02/2021
Moisture	5.2	%		5/02/2021
Oxygen	8.8	%	0.05	5/02/2021
Solid Particles	<1	mg/m ³	50	5/02/2021
Temperature	118	degC		5/02/2021
Type 1 and Type 2 substances in Aggregate	<0.029	mg/m ³	0.75	5/02/2021

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limits</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	5/02/2021
Flow Rate	349	m ³ /sec		5/02/2021
Mercury	0.0011	mg/m ³	0.05	5/02/2021
Moisture	4.9	%		5/02/2021
Oxygen	8.4	%	0.05	5/02/2021
Solid Particles	2.9	mg/m ³	50	5/02/2021
Temperature	108	degC		5/02/2021
Type 1 and Type 2 substances in Aggregate	<0.026	mg/m ³	0.75	5/02/2021

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 ² /month		
		Ash	Combustible	Insoluble
E2	17	0.2	0.3	0.5
E4	18	0.1	<0.1	0.1
E6	19	0.7	0.4	1.1
U6	20	0.2	<0.1	0.2

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
24.06	0.50	24.21	8.33	20.7	101.1	7.23	1.25
Name	Reading			Units	Date		
Aluminium	0.055			mg/L	6/04/2021		
Ammonia	<0.005			mg/L	6/04/2021		
Arsenic III	<0.005			mg/L	6/04/2021		
Arsenic V	<0.005			mg/L	6/04/2021		
Cadmium	<0.0002			mg/L	6/04/2021		
Chromium (Trivalent)	<0.001			mg/L	6/04/2021		
Chromium (VI) Compounds	<0.01			mg/L	6/04/2021		
Copper	<0.001			mg/L	6/04/2021		
Iron	0.062			mg/L	6/04/2021		
Lead	<0.0002			mg/L	6/04/2021		
Manganese	0.0161			mg/L	6/04/2021		
Nickel	<0.0005			mg/L	6/04/2021		
pH	8.22			pH /units	6/04/2021		
Selenium	<0.002			mg/L	6/04/2021		
Total Suspended Solids	<5			mg/L	6/04/2021		
Vanadium	0.0016			mg/L	6/04/2021		
Zinc	<0.005			mg/L	6/04/2021		

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
22.75	0.50	24.74	8.46	20.7	98.1	7.14	2.25
Name		Reading		Units		Date	
Aluminium		0.049		mg/L		6/04/2021	
Ammonia		<0.005		mg/L		6/04/2021	
Arsenic III		<0.005		mg/L		6/04/2021	
Arsenic V		<0.005		mg/L		6/04/2021	
Cadmium		<0.0002		mg/L		6/04/2021	
Chromium (Trivalent)		<0.001		mg/L		6/04/2021	
Chromium (VI) Compounds		<0.01		mg/L		6/04/2021	
Copper		0.002		mg/L		6/04/2021	
Iron		0.044		mg/L		6/04/2021	
Lead		<0.0002		mg/L		6/04/2021	
Manganese		0.0142		mg/L		6/04/2021	
Nickel		<0.0005		mg/L		6/04/2021	
pH		8.35		pH /units		6/04/2021	
Selenium		<0.002		mg/L		6/04/2021	
Total Suspended Solids		<5		mg/L		6/04/2021	
Vanadium		0.0016		mg/L		6/04/2021	
Zinc		<0.005		mg/L		6/04/2021	

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
21.39	0.50	22.68	8.28	22.7	102.3	7.56	1.75
Name		Reading		Units		Date	
Aluminium		0.033		mg/L		6/04/2021	
Ammonia		<0.005		mg/L		6/04/2021	
Arsenic III		<0.005		mg/L		6/04/2021	
Arsenic V		<0.005		mg/L		6/04/2021	
Cadmium		<0.0002		mg/L		6/04/2021	
Chromium (Trivalent)		<0.001		mg/L		6/04/2021	
Chromium (VI) Compounds		<0.01		mg/L		6/04/2021	
Copper		0.002		mg/L		6/04/2021	
Iron		0.026		mg/L		6/04/2021	
Lead		<0.0002		mg/L		6/04/2021	
Manganese		0.0110		mg/L		6/04/2021	
Nickel		<0.0005		mg/L		6/04/2021	
pH		8.32		pH /units		6/04/2021	
Selenium		<0.002		mg/L		6/04/2021	
Total Suspended Solids		<5		mg/L		6/04/2021	
Vanadium		0.0013		mg/L		6/04/2021	
Zinc		<0.005		mg/L		6/04/2021	

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
22.54	0.5	26.60	8.24	20.9	89.5	6.33	1.75
Name		Reading		Units		Date	
Aluminium		0.060		mg/L		6/04/2021	
Ammonia		<0.005		mg/L		6/04/2021	
Arsenic III		<0.005		mg/L		6/04/2021	
Arsenic V		<0.005		mg/L		6/04/2021	
Cadmium		<0.0002		mg/L		6/04/2021	
Chromium (Trivalent)		<0.001		mg/L		6/04/2021	
Chromium (VI) Compounds		<0.01		mg/L		6/04/2021	
Copper		0.002		mg/L		6/04/2021	
Iron		0.083		mg/L		6/04/2021	
Lead		<0.0002		mg/L		6/04/2021	
Manganese		0.0176		mg/L		6/04/2021	
Nickel		<0.0005		mg/L		6/04/2021	
pH		8.15		pH /units		6/04/2021	
Selenium		<0.002		mg/L		6/04/2021	
Total Suspended Solids		<5		mg/L		6/04/2021	
Vanadium		0.0014		mg/L		6/04/2021	
Zinc		<0.005		mg/L		6/04/2021	

Eraring Ash Dam Effluent Quality Monitoring

*EPA Identification no. 22 - 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>
Aluminium	0.213	mg/L	-	8/04/21
Ammonia	0.24	mg/L	-	8/04/21
Arsenic III	<0.0005	mg/L	-	8/04/21
Arsenic V	0.0039	mg/L	-	8/04/21
Cadmium	0.00010	mg/L	-	8/04/21
Chromium (Trivalent)	<0.001	mg/L	-	8/04/21
Chromium (VI) Compounds	<0.01	mg/L	-	8/04/21
Copper	0.0020	mg/L	-	8/04/21
Iron	0.050	mg/L	-	8/04/21
Lead	<0.0001	mg/L	-	8/04/21
Manganese	0.0520	mg/L	-	8/04/21
Nickel	0.0012	mg/L	-	8/04/21
Nitrite and Nitrate as N	1.18	mg/L	-	8/04/21
Nitrogen	1.8	mg/L	-	8/04/21
pH	8.11	pH /units	-	8/04/21
Phosphorus as P	0.28	mg/L	-	8/04/21
Reactive Phosphorus as P	0.28	mg/L	-	8/04/21
Selenium	0.0087	mg/L	-	8/04/21
Total Kjeldahl Nitrogen	0.6	mg/L	-	8/04/21
Total Suspended Solids	4	mg/L	50	8/04/21
Vanadium	0.0298	mg/L	-	8/04/21
Zinc	0.008	mg/L	-	8/04/21

Eraring Cooling Water Inlet Canal

*EPA Identification no. 31 - 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>
Aluminium	0.109	mg/L	-	8/04/21
Ammonia	0.012	mg/L	-	8/04/21
Arsenic III	<0.005	mg/L	-	8/04/21
Arsenic V	<0.005	mg/L	-	8/04/21
Cadmium	<0.0002	mg/L	-	8/04/21
Chromium (Trivalent)	<0.001	mg/L	-	8/04/21
Chromium (VI) Compounds	<0.01	mg/L	-	8/04/21
Copper	0.0017	mg/L	-	8/04/21
Iron	0.131	mg/L	-	8/04/21
Lead	<0.0002	mg/L	-	8/04/21
Manganese	0.0335	mg/L	-	8/04/21
Nickel	0.0006	mg/L	-	8/04/21
pH	8.01	pH units	-	8/04/21
Selenium	<0.001	mg/L	-	8/04/21
Total suspended Solids	10	mg/L	-	8/04/21
Vanadium	0.0017	mg/L	-	8/04/21
Zinc	<0.005	mg/L	-	8/04/21
Dissolved Oxygen	8.54	mg/L	-	8/04/21
Field Temperature	22.6	degC	-	8/04/21
Salinity	23.1	ppt	-	8/04/21
Secchi Disk	1.75	m	-	8/04/21
Temperature – Average	22.1	deg C	-	April 2021
Temperature – Minimum	19.4	deg C	-	April 2021
Temperature - Maximum	25.8	deg C	-	April 2021

Eraring Cooling Water Outlet Canal

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Copper	0.0019	mg/L	0.005	8/04/21
Iron	0.145	mg/L	0.3	8/04/21
Selenium	<0.001	mg/L	0.002	8/04/21
Temperature – Average	28.3	deg C	37.5	April 2021
Temperature – Minimum	23.3	deg C	37.5	April 2021
Temperature - Maximum	32.6	deg C	37.5	April 2021
Maximum Daily Discharge from Ash	37.28	ML	150	April 2021
Monthly Discharge from Ash Dam	337.2	ML	-	April 2021

Emergency Discharge – Toe Drain Pond

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

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Aluminium	0.092	mg/L	-	8/04/21
Ammonia	1.78	mg/L	-	8/04/21
Arsenic III	0.0011	mg/L	-	8/04/21
Arsenic V	<0.0005	mg/L	-	8/04/21
Cadmium	<0.00005	mg/L	-	8/04/21
Chromium (Trivalent)	<0.001	mg/L	-	8/04/21
Chromium (VI) Compounds	<0.01	mg/L	-	8/04/21
Copper	<0.0005	mg/L	-	8/04/21
Iron	7.50	mg/L	-	8/04/21
Lead	<0.0001	mg/L	-	8/04/21
Manganese	0.727	mg/L	-	8/04/21
Nickel	0.0017	mg/L	-	8/04/21
Nitrite and Nitrate as N	0.272	mg/L	-	8/04/21
Nitrogen	1.92	mg/L	-	8/04/21
pH	6.81	pH /units	6-9.5	8/04/21
Phosphorus as P	0.051	mg/L	-	8/04/21
Reactive Phosphorus as P	0.010	mg/L	-	8/04/21
Selenium	0.0025	mg/L	-	8/04/21
Total Kjeldahl Nitrogen	1.65	mg/L	-	8/04/21
Total Suspended Solids	18	mg/L	50	8/04/21
Vanadium	0.0008	mg/L	-	8/04/21
Zinc	0.002	mg/L	-	8/04/21

MR217

EPA Identification no. 23 - Emergency discharge from ash dam outlet at culvert

Not Discharging April 2021

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
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	-	

Groundwater Monitoring Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Date
Aluminium	0.273	mg/L	26/03/2021
Ammonia	0.03	mg/L	26/03/2021
Arsenic (III)	<0.0005	mg/L	26/03/2021
Arsenic (V)	<0.0005	mg/L	26/03/2021
Cadmium	<0.00005	mg/L	26/03/2021
Calcium	2	mg/L	26/03/2021
Chromium (trivalent)	<0.001	mg/L	26/03/2021
Chromium (VI) compounds	<0.005	mg/L	26/03/2021
Copper	0.0009	mg/L	26/03/2021
Electrical Conductivity	423	uS/cm	26/03/2021
Iron	0.649	mg/L	26/03/2021
Lead	0.001	mg/L	26/03/2021
Magnesium	5	mg/L	26/03/2021
Manganese	0.116	mg/L	26/03/2021
Nickel	0.0046	mg/L	26/03/2021
pH	4.04	pH	26/03/2021
Potassium	3	mg/L	26/03/2021
Selenium	<0.0002	mg/L	26/03/2021
Sodium	65	mg/L	26/03/2021
Standing Water Level	6.835	metres	26/03/2021
Vanadium	0.0006	mg/L	26/03/2021
Zinc	0.021	mg/L	26/03/2021

Groundwater Monitoring Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	2.050	mg/L	26/03/2021
Ammonia	5.28	mg/L	26/03/2021
Arsenic (III)	<0.005	mg/L	26/03/2021
Arsenic (V)	<0.005	mg/L	26/03/2021
Cadmium	<0.000.2	mg/L	26/03/2021
Calcium	290	mg/L	26/03/2021
Chromium (trivalent)	<0.001	mg/L	26/03/2021
Chromium (VI) compounds	0.004	mg/L	26/03/2021
Copper	0.002	mg/L	26/03/2021
Electrical Conductivity	30800	uS/cm	26/03/2021
Iron	43.000	mg/L	26/03/2021
Lead	0.0038	mg/L	26/03/2021
Magnesium	542	mg/L	26/03/2021
Manganese	0.838	mg/L	26/03/2021
Nickel	0.0007	mg/L	26/03/2021
pH	6.33	pH	26/03/2021
Potassium	161	mg/L	26/03/2021
Selenium	<0.002	mg/L	26/03/2021
Sodium	5630	mg/L	26/03/2021
Standing Water Level	3.765	metres	26/03/2021
Vanadium	0.0072	mg/L	26/03/2021
Zinc	0.009	mg/L	26/03/2021

**Groundwater Monitoring
Groundwater Well – MW06**

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminium	0.034	mg/L	25/03/2021
Ammonia	3.21	mg/L	25/03/2021
Arsenic (III)	0.0062	mg/L	25/03/2021
Arsenic (V)	<0.005	mg/L	25/03/2021
Cadmium	<0.00005	mg/L	25/03/2021
Calcium	436	mg/L	25/03/2021
Chromium (trivalent)	<0.001	mg/L	25/03/2021
Chromium (VI) compounds	<0.05	mg/L	25/03/2021
Copper	<0.0005	mg/L	25/03/2021
Electrical Conductivity	20700	uS/cm	25/03/2021
Iron	14.700	mg/L	25/03/2021
Lead	<0.0001	mg/L	25/03/2021
Magnesium	286	mg/L	25/03/2021
Manganese	0.359	mg/L	25/03/2021
Nickel	0.0007	mg/L	25/03/2021
pH	6.55	pH	25/03/2021
Potassium	116	mg/L	25/03/2021
Selenium	0.0007	mg/L	25/03/2021
Sodium	3650	mg/L	25/03/2021
Standing Water Level	1.32	metres	25/03/2021
Vanadium	0.001	mg/L	25/03/2021
Zinc	0.013	mg/L	25/03/2021

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

EPA Identification no. 35 – Groundwater Monitoring Well D26

Groundwater well was dry during sampling in April 2021

Name	Reading	Units	Date
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	
Potassium		mg/L	
Selenium		mg/L	
Sodium		mg/L	
Standing Water Level		metres	
Vanadium		mg/L	
Zinc		mg/L	