



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

Environmental Monitoring Data October 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 ₂)			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 October	154	189	117	213	252	178
2 October	151	193	136	180	268	143
3 October	143	152	119	179	211	150
4 October	140	148	122	185	225	126
5 October	151	211	132	178	245	128
6 October	154	183	138	168	211	133
7 October	159	205	140	201	254	127
8 October	182	233	152	193	245	142
9 October	176	252	108	193	263	122
10 October	158	172	135	206	247	163
11 October	166	204	141	196	290	108
12 October	172	212	141	178	283	102
13 October	159	187	145	223	265	132
14 October	166	193	141	225	335	128
15 October	171	228	142	232	301	184
16 October	201	217	168	210	291	116
17 October	205	229	179	232	322	153
18 October	197	237	161	245	343	178
19 October	178	198	157	202	286	160
20 October	198	465	145	157	286	112
21 October	164	179	137	179	259	134
22 October	155	178	129	199	345	123
23 October	169	181	155	219	370	121
24 October	175	188	155	217	268	174
25 October	173	209	142	184	286	137
26 October	179	228	144	194	295	147
27 October	186	207	161	203	248	156
28 October	165	192	144	216	241	176
29 October	168	208	141	211	244	147
30 October	187	206	153	161	216	121
31 October	152	161	144	131	176	115

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 ₂)			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 October	149	269	0	222	247	123
2 October	141	180	128	228	235	217
3 October	140	156	122	239	256	223
4 October	140	149	127	265	287	246
5 October	151	282	129	224	257	137
6 October	138	154	128	219	233	205
7 October	152	264	125	248	286	143
8 October	161	204	140	235	257	219
9 October	162	231	140	235	242	226
10 October	142	158	125	235	270	227
11 October	141	173	123	255	283	228
12 October	155	207	132	243	261	231
13 October	183	276	124	245	271	125
14 October	152	176	133	264	282	244
15 October	158	199	134	273	301	248
16 October	192	213	148	292	331	241
17 October	189	205	171	296	316	259
18 October	188	359	154	288	362	170
19 October	168	183	151	252	274	228
20 October	173	199	150	228	245	213
21 October	163	177	140	257	275	238
22 October	162	175	137	283	332	217
23 October	171	188	144	254	298	216
24 October	173	188	153	264	312	228
25 October	170	213	147	228	253	208
26 October	168	209	141	226	248	203
27 October	176	200	145	212	229	189
28 October	160	191	132	218	235	210
29 October	157	182	138	214	236	190
30 October	178	203	141	212	217	207
31 October	145	155	130	210	217	201

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 ₂)			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 October	179	258	139	220	256	118
2 October	167	193	149	213	224	202
3 October	165	180	146	216	235	204
4 October	157	169	144	234	254	221
5 October	161	191	135	211	223	197
6 October	161	179	143	203	218	189
7 October	173	203	143	212	223	190
8 October	176	201	157	218	229	210
9 October	179	203	162	214	234	206
10 October	164	175	147	220	250	214
11 October	163	193	146	240	271	203
12 October	198	224	168	221	238	205
13 October	178	191	160	218	229	210
14 October	164	196	141	244	271	222
15 October	160	185	138	257	272	228
16 October	178	207	143	271	304	240
17 October	169	204	149	277	297	251
18 October	159	220	131	272	317	202
19 October	152	165	135	237	261	211
20 October	154	170	139	205	215	192
21 October	150	160	137	242	278	220
22 October	149	187	133	245	282	201
23 October	146	168	132	250	280	223
24 October	158	174	137	235	273	211
25 October	152	178	102	208	223	201
26 October	162	195	105	198	208	189
27 October	156	185	101	196	208	180
28 October	159	196	142	189	195	181
29 October	149	170	131	197	220	185
30 October	158	177	141	191	215	187
31 October	146	156	133	191	226	184

Unit 2B Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
SOx Unit Out of Order 25-31 October 2021*

	NOX			SOX		
	ppm (7% O ₂)			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 October	133	155	120	194	245	169
2 October	134	165	105	168	196	145
3 October	134	156	109	170	184	154
4 October	136	158	111	191	212	169
5 October	136	179	107	161	181	113
6 October	141	164	106	173	205	148
7 October	152	195	120	181	202	156
8 October	143	170	124	182	202	157
9 October	155	184	129	186	201	164
10 October	148	171	112	193	216	165
11 October	122	143	107	187	215	113
12 October	153	170	133	178	211	156
13 October	150	184	115	185	204	159
14 October	133	151	115	202	229	171
15 October	125	146	106	220	268	178
16 October	164	233	109	241	295	197
17 October	146	286	113	239	267	126
18 October	150	240	117	237	306	132
19 October	133	159	106	195	235	161
20 October	131	151	109	171	187	148
21 October	127	168	102	203	248	165
22 October	128	181	101	204	255	151
23 October	129	178	104	210	244	174
24 October	142	170	100	152	184	119
25 October	133	165	110	-	-	-
26 October	137	213	103	-	-	-
27 October	126	148	104	-	-	-
28 October	131	199	102	-	-	-
29 October	137	270	115	-	-	-
30 October	134	162	108	-	-	-
31 October	135	150	104	-	-	-

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 ₂)			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 October	152	208	116	237	245	221
2 October	153	190	136	240	249	222
3 October	155	182	128	243	258	221
4 October	165	188	142	261	286	241
5 October	153	193	133	238	251	228
6 October	153	174	132	226	243	212
7 October	156	181	132	252	271	223
8 October	150	203	132	242	255	226
9 October	189	478	121	233	247	182
10 October	171	191	123	248	254	239
11 October	169	236	136	255	268	229
12 October	170	229	139	251	266	244
13 October	158	213	120	246	258	233
14 October	178	245	114	277	300	245
15 October	160	185	138	257	272	228
16 October	178	207	143	271	304	240
17 October	169	204	149	277	297	251
18 October	159	220	131	272	317	202
19 October	152	165	135	237	261	211
20 October	154	170	139	205	215	192
21 October	150	160	137	242	278	220
22 October	142	153	122	283	319	261
23 October	156	231	115	288	331	250
24 October	162	209	135	279	313	245
25 October	168	243	143	249	279	228
26 October	171	225	114	232	242	221
27 October	177	198	157	225	243	208
28 October	172	205	116	221	230	208
29 October	156	181	136	226	230	222
30 October	173	222	106	222	228	216
31 October	153	184	136	218	221	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 ₂)			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 October	154	220	123	235	243	209
2 October	151	202	127	237	243	216
3 October	146	165	121	238	258	203
4 October	154	178	128	255	277	234
5 October	145	194	128	232	243	219
6 October	141	161	115	218	238	189
7 October	149	189	102	231	266	103
8 October	145	216	129	236	254	212
9 October	185	501	136	218	234	152
10 October	166	184	146	235	239	211
11 October	162	226	126	241	263	203
12 October	167	222	124	243	257	230
13 October	155	208	128	236	244	222
14 October	166	220	142	266	290	222
15 October	129	146	115	220	268	178
16 October	182	233	120	241	295	197
17 October	146	286	113	239	267	126
18 October	150	240	117	237	306	132
19 October	131	159	104	195	235	161
20 October	134	151	118	171	187	148
21 October	134	168	111	203	248	165
22 October	141	165	125	274	309	238
23 October	157	236	122	283	321	249
24 October	161	222	125	271	301	228
25 October	165	246	128	249	275	230
26 October	174	234	142	238	248	220
27 October	170	188	154	231	248	208
28 October	170	209	150	228	237	211
29 October	154	189	138	228	237	208
30 October	171	231	115	222	228	201
31 October	157	182	121	220	225	196

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 1-31 October2021

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

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 1-31 October2021

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

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 ³	20	27/04/2021
Fluorine	11	mg/m ³	30	27/04/2021
Hydrogen chloride	2.9	mg/m ³	50	27/04/2021
Solid Particles	<4	mg/m ³	50	27/04/2021
Sulfuric acid mist and sulfur trioxide (as SO ₃)	0.59	mg/m ³	100	27/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m ³	10	27/04/2021
Cadmium	<0.0002	mg/m ³	0.2	9/07/2021
Mercury	<0.0002	mg/m ³	0.05	9/07/2021
Solid Particles	2.3	mg/m ³	50	9/07/2021
Type 1 and 2 substances in Aggregate	<0.03	mg/m ³	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 ³ /sec		27/04/2021
Moisture	5.7	%		27/04/2021
Oxygen	8.3	%		27/04/2021
Solid Particles	7.8	mg/m ³		27/04/2021
Temperature	117	degC		27/04/2021
Carbon dioxide	12.1	%		27/04/2021
Cadmium	<0.0002	mg/m ³		9/07/2021
Flow Rate	370	m ³ /sec		9/07/2021
Mercury	0.00016	mg/m ³		9/07/2021
Moisture	5.2	%		9/07/2021
Oxygen	7.3	%		9/07/2021
Solid Particles	2.2	mg/m ³		9/07/2021
Temperature	115	degC		9/07/2021
Type 1 and Type 2 substances in Aggregate	<0.040	mg/m ³		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 ³ /sec		27/04/2021
Moisture	5.2	%		27/04/2021
Oxygen	6.5	%		27/04/2021
Solid Particles	<0.9	mg/m ³		27/04/2021
Temperature	121	degC		27/04/2021
Carbon dioxide	12.4	%		27/04/2021
Chlorine	0.014	mg/m ³		27/04/2021
Fluorine	11	mg/m ³		27/04/2021
Hydrogen chloride	2.9	mg/m ³		27/04/2021
Sulfuric acid mist and sulfur trioxide (as SO ₃)	0.59	mg/m ³		27/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m ³		27/04/2021
Cadmium	<0.0002	mg/m ³		9/07/2021
Flow Rate	370	m ³ /sec		9/07/2021
Mercury	<0.0002	mg/m ³		9/07/2021
Moisture	5.7	%		9/07/2021
Oxygen	6.4	%		9/07/2021
Solid Particles	2.3	mg/m ³		9/07/2021
Temperature	119	degC		9/07/2021
Type 1 and Type 2 substances in Aggregate	<0.021	mg/m ³		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 ³	20	28/04/2021
Fluorine	4.0	mg/m ³	30	28/04/2021
Hydrogen chloride	1.1	mg/m ³	50	28/04/2021
Solid Particles	5.1	mg/m ³	50	28/04/2021
Sulfuric acid mist and sulfur trioxide (as SO ₃)	1.7	mg/m ³	100	28/04/2021
Volatile organic compounds as n-propane equivalent	0.049	mg/m ³	10	28/04/2021
Cadmium	<0.0002	mg/m ³	0.2	7/07/2021
Mercury	0.0016	mg/m ³	0.05	7/07/2021
Solid Particles	4.1	mg/m ³	50	7/07/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m ³	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 ³ /sec		28/04/2021
Moisture	5.4	%		28/04/2021
Oxygen	7.2	%		28/04/2021
Solid Particles	6.9	mg/m ³		28/04/2021
Temperature	122	degC		28/04/2021
Carbon dioxide	11.8	%		28/04/2021
Chlorine	<0.008	mg/m ³		28/04/2021
Fluorine	4.0	mg/m ³		28/04/2021
Hydrogen chloride	1.1	mg/m ³		28/04/2021
Sulfuric acid mist and sulfur trioxide (as SO ₃)	1.7	mg/m ³		28/04/2021
Volatile organic compounds as n-propane equivalent	0.049	mg/m ³		28/04/2021
Cadmium	<0.0002	mg/m ³		7/07/2021
Flow Rate	250	m ³ /sec		7/07/2021
Mercury	0.0015	mg/m ³		7/07/2021
Moisture	6.1	%		7/07/2021
Oxygen	8.8	%		7/07/2021
Solid Particles	4.1	mg/m ³		7/07/2021
Temperature	125	degC		7/07/2021
Type 1 and Type 2 substances in Aggregate	<0.015	mg/m ³		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 ³ /sec		28/04/2021
Moisture	6.1	%		28/04/2021
Oxygen	5.8	%		28/04/2021
Solid Particles	3.3	mg/m ³		28/04/2021
Temperature	119	degC		28/04/2021
Carbon dioxide	14.5	%		28/04/2021
Cadmium	<0.0003	mg/m ³		7/07/2021
Flow Rate	230	m ³ /sec		7/07/2021
Mercury	0.0018	mg/m ³		7/07/2021
Moisture	11	%		7/07/2021
Oxygen	9.6	%		7/07/2021
Solid Particles	4.2	mg/m ³		7/07/2021
Temperature	115	degC		7/07/2021
Type 1 and Type 2 substances in Aggregate	<0.019	mg/m ³		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 ³	20	7/04/2021
Fluorine	13	mg/m ³	30	7/04/2021
Hydrogen chloride	2.7	mg/m ³	50	7/04/2021
Solid Particles	6.2	mg/m ³	50	29/06/2021
Sulfuric acid mist and sulfur trioxide (as SO ₃)	2.7	mg/m ³	100	7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m ³	10	7/04/2021
Cadmium	<0.0003	mg/m ³	0.2	6/07/2021
Mercury	0.00037	mg/m ³	0.05	6/07/2021
Solid Particles	4.4	mg/m ³	50	6/07/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m ³	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 ³ /sec		7/04/2021
Moisture	5.3	%		7/04/2021
Oxygen	10.4	%		7/04/2021
Solid Particles	9.5	mg/m ³		7/04/2021
Temperature	111	degC		7/04/2021
Carbon dioxide	10.4	%		7/04/2021
Chlorine	0.01	mg/m ³		7/04/2021
Fluorine	13	mg/m ³		7/04/2021
Hydrogen chloride	2.7	mg/m ³		7/04/2021
Sulfuric acid mist and sulfur trioxide (as SO ₃)	2.7	mg/m ³		7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m ³		7/04/2021
Cadmium	<0.0003	mg/m ³		6/07/2021
Flow Rate	390	m ³ /sec		6/07/2021
Mercury	0.00049	mg/m ³		6/07/2021
Moisture	5.3	%		6/07/2021
Oxygen	8.8	%		6/07/2021
Solid Particles	7.0	mg/m ³		6/07/2021
Temperature	119	degC		6/07/2021
Type 1 and Type 2 substances in Aggregate	<0.030	mg/m ³		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 ³ /sec		29/06/2021
Moisture	5.9	%		29/06/2021
Oxygen	6.9	%		29/06/2021
Solid Particles	2	mg/m ³		29/06/2021
Temperature	121	degC		29/06/2021
Carbon dioxide	13.4	%		29/06/2021
Cadmium	<0.0002	mg/m ³		6/07/2021
Flow Rate	380	m ³ /sec		6/07/2021
Mercury	0.00024	mg/m ³		6/07/2021
Moisture	5.5	%		6/07/2021
Oxygen	6.7	%		6/07/2021
Solid Particles	1.8	mg/m ³		6/07/2021
Temperature	115	degC		6/07/2021
Type 1 and Type 2 substances in Aggregate	<0.011	mg/m ³		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 ² /month		
		Ash	Combustible	Insoluble
E2	17	0.5	0.3	0.8
E4	18	0.6	0.4	1.0
E6	19	23.6	15.2	38.8
U6	20	0.6	0.3	0.9

E6 anomalous elevated result due to organic material.

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
20.0	0.50	19.93	8.10	17.5	105.7	8.24	2.25
Name			Reading		Units		Date
Aluminium			0.104		mg/L		5/10/2021
Ammonia			<0.005		mg/L		5/10/2021
Arsenic III			<0.005		mg/		5/10/2021
Arsenic V			<0.005		mg/L		5/10/2021
Cadmium			<0.0002		mg/L		5/10/2021
Chromium (Trivalent)			<0.001		mg/L		5/10/2021
Chromium (VI) Compounds			<0.001		mg/L		5/10/2021
Copper			0.001		mg/L		5/10/2021
Iron			0.128		mg/L		5/10/2021
Lead			<0.0002		mg/L		5/10/2021
Manganese			0.0098		mg/L		5/10/2021
Nickel			0.0012		mg/L		5/10/2021
pH			8.07		pH units		5/10/2021
Selenium			<0.001		mg/L		5/10/2021
Total Suspended Solids			8		mg/L		5/10/2021
Vanadium			0.0018		mg/L		5/10/2021
Zinc			<0.005		mg/L		5/10/2021

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
21.0	0.50	19.98	8.11	17.7	94.4	7.55	4.25
Name			Reading		Units		Date
Aluminium			0.014		mg/L		5/10/2021
Ammonia			<0.010		mg/L		5/10/2021
Arsenic III			<0.005		mg/L		5/10/2021
Arsenic V			<0.005		mg/L		5/10/2021
Cadmium			<0.0002		mg/L		5/10/2021
Chromium (Trivalent)			<0.001		mg/L		5/10/2021
Chromium (VI) Compounds			<0.001		mg/L		5/10/2021
Copper			0.002		mg/L		5/10/2021
Iron			0.013		mg/L		5/10/2021
Lead			<0.0002		mg/L		5/10/2021
Manganese			0.0040		mg/L		5/10/2021
Nickel			0.0013		mg/L		5/10/2021
pH			8.11		pH units		5/10/2021
Selenium			<0.001		mg/L		5/10/2021
Total Suspended Solids			9		mg/L		5/10/2021
Vanadium			0.0018		mg/L		5/10/2021
Zinc			<0.005		mg/L		5/10/2021

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
17.0	0.50	18.51	8.13	17.6	112.2	9.18	4.25
Name			Reading		Units		Date
Aluminium			0.012		mg/L		5/10/2021
Ammonia			<0.005		mg/L		5/10/2021
Arsenic III			<0.005		mg/L		5/10/2021
Arsenic V			<0.005		mg/L		5/10/2021
Cadmium			0.0002		mg/L		5/10/2021
Chromium (Trivalent)			<0.001		mg/L		5/10/2021
Chromium (VI) Compounds			<0.001		mg/L		5/10/2021
Copper			<0.001		mg/L		5/10/2021
Iron			0.010		mg/L		5/10/2021
Lead			<0.0002		mg/L		5/10/2021
Manganese			0.0032		mg/L		5/10/2021
Nickel			0.0013		mg/L		5/10/2021
pH			8.08		pH units		5/10/2021
Selenium			<0.001		mg/L		5/10/2021
Total Suspended Solids			<5		mg/L		5/10/2021
Vanadium			0.0015		mg/L		5/10/2021
Zinc			<0.005		mg/L		5/10/2021

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
18.0	0.5	21.27	8.08	17.8	99.6	7.78	2.75
Name			Reading	Units		Date	
Aluminium			0.039	mg/L		5/10/2021	
Ammonia			<0.005	mg/L		5/10/2021	
Arsenic III			<0.005	mg/L		5/10/2021	
Arsenic V			<0.005	mg/L		5/10/2021	
Cadmium			<0.0002	mg/L		5/10/2021	
Chromium (Trivalent)			<0.001	mg/L		5/10/2021	
Chromium (VI) Compounds			<0.001	mg/L		5/10/2021	
Copper			0.001	mg/L		5/10/2021	
Iron			0.052	mg/L		5/10/2021	
Lead			<0.0002	mg/L		5/10/2021	
Manganese			0.0069	mg/L		5/10/2021	
Nickel			0.0012	mg/L		5/10/2021	
pH			8.09	pH units		5/10/2021	
Selenium			<0.001	mg/L		5/10/2021	
Total Suspended Solids			<5	mg/L		5/10/2021	
Vanadium			0.0017	mg/L		5/10/2021	
Zinc			<0.005	mg/L		5/10/2021	

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	0.047	mg/L	-	7/10/2021
Ammonia	0.71	mg/L	-	7/10/2021
Arsenic III	<0.0005	mg/L	-	7/10/2021
Arsenic V	0.0051	mg/L	-	7/10/2021
Cadmium	0.00010	mg/L	-	7/10/2021
Chromium (Trivalent)	<0.001	mg/L	-	7/10/2021
Chromium (VI) Compounds	<0.01	mg/L	-	7/10/2021
Copper	0.0029	mg/L	-	7/10/2021
Iron	0.006	mg/L	-	7/10/2021
Lead	<0.0001	mg/L	-	7/10/2021
Manganese	0.0553	mg/L	-	7/10/2021
Nickel	0.0020	mg/L	-	7/10/2021
Nitrite and Nitrate as N	3.73	mg/L	-	7/10/2021
Nitrogen	5.0	mg/L	-	7/10/2021
pH	7.80	pH units	-	7/10/2021
Phosphorus as P	0.56	mg/L	-	7/10/2021
Reactive Phosphorus as P	0.48	mg/L	-	7/10/2021
Selenium	0.0461	mg/L	-	7/10/2021
Total Kjeldahl Nitrogen	1.3	mg/L	-	7/10/2021
Total Suspended Solids	<1	mg/L	-	7/10/2021
Vanadium	0.0438	mg/L	-	7/10/2021
Zinc	0.005	mg/L	-	7/10/2021

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	0.082	mg/L	-	7/10/2021
Ammonia	<0.005	mg/L	-	7/10/2021
Arsenic III	<0.005	mg/L	-	7/10/2021
Arsenic V	<0.005	mg/L	-	7/10/2021
Cadmium	<0.0002	mg/L	-	7/10/2021
Chromium (Trivalent)	<0.001	mg/L	-	7/10/2021
Chromium (VI) Compounds	<0.01	mg/L	-	7/10/2021
Copper	0.0012	mg/L	-	7/10/2021
Iron	0.102	mg/L	-	7/10/2021
Lead	<0.0002	mg/L	-	7/10/2021
Manganese	0.0070	mg/L	-	7/10/2021
Nickel	<0.0005	mg/L	-	7/10/2021
pH	8.04	pH units	-	7/10/2021
Selenium	<0.001	mg/L	-	7/10/2021
Total suspended Solids	16	mg/L	-	7/10/2021
Vanadium	0.0019	mg/L	-	7/10/2021
Zinc	<0.005	mg/L	-	7/10/2021
Dissolved Oxygen	11.31	mg/L	-	7/10/2021
Field Temperature	19.0	degC	-	7/10/2021
Salinity	17.3	ppt	-	7/10/2021
Secchi Disk	2.75	m	-	7/10/2021
Temperature – Average	21.1	deg C	-	October2021
Temperature – Minimum	18.5	deg C	-	October2021
Temperature - Maximum	24.5	deg C	-	October2021

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0031	mg/L	0.005	7/10/2021
Iron	0.098	mg/L	0.3	7/10/2021
Selenium	<0.001	mg/L	0.002	7/10/2021
Temperature – Average	26.7	deg C	37.5	October2021
Temperature – Minimum	22.6	deg C	37.5	October2021
Temperature - Maximum	33.2	deg C	37.5	October2021
Maximum Daily Discharge from Ash Dam	10.47	ML	150	October2021
Monthly Discharge from Ash Dam	74.1	ML	-	October2021

Emergency Discharge – Toe Drain Pond

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.021	mg/L	-	7/10/2021
Ammonia	1.18	mg/L	-	7/10/2021
Arsenic III	0.0007	mg/L	-	7/10/2021
Arsenic V	<0.0005	mg/L	-	7/10/2021
Cadmium	<0.00005	mg/L	-	7/10/2021
Chromium (Trivalent)	<0.001	mg/L	-	7/10/2021
Chromium (VI) Compounds	<0.01	mg/L	-	7/10/2021
Copper	<0.0005	mg/L	-	7/10/2021
Iron	2.59	mg/L	-	7/10/2021
Lead	<0.0001	mg/L	-	7/10/2021
Manganese	0.878	mg/L	-	7/10/2021
Nickel	0.0013	mg/L	-	7/10/2021
Nitrite and Nitrate as N	0.107	mg/L	-	7/10/2021
Nitrogen	1.58	mg/L	-	7/10/2021
pH	6.86	pH units	6-9.5	7/10/2021
Phosphorus as P	0.086	mg/L	-	7/10/2021
Reactive Phosphorus as P	0.007	mg/L	-	7/10/2021
Selenium	0.0002	mg/L	-	7/10/2021
Total Kjeldahl Nitrogen	1.47	mg/L	-	7/10/2021
Total Suspended Solids	9	mg/L	50	7/10/2021
Vanadium	0.0004	mg/L	-	7/10/2021
Zinc	0.005	mg/L	-	7/10/2021

MR217

EPA Identification no. 23 - Emergency discharge from ash dam outlet at culvert
No Discharge during October2021

Name	Reading	Units	Licence Limit	Date
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 01
Identification no. 32 – Groundwater Monitoring Well*

Name	Reading	Units	Date
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

**Groundwater Monitoring
Groundwater Well – MW02**

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
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

Name	Reading	Units	Date
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

Groundwater Monitoring
Groundwater Well – EGM/D26

EPA Identification no. 35 – Groundwater Monitoring Well D26
Groundwater well was dry during sampling in October2021

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 units	-
Potassium	-	mg/L	-
Selenium	-	mg/L	-
Sodium	-	mg/L	-
Standing Water Level	-	metres	-
Vanadium	-	mg/L	-
Zinc	-	mg/L	-