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

Environmental Monitoring Data August 2023



Unit 1A Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1A Unit Data Invalidated 1, 18-22 August 2023
Unit 1A Unit Offline 10-17 and 23-28 August 2023
SO_2 Unit Data Invalidated 4 and 7 August 2023

	NOx			**SO_2**		
	mg/Nm^3 (7% O_2)			**mg/Nm^3 (7% O_2)**		
	Daily Ave	**Max Hourly**	**Min Hourly**	**Daily Ave**	**Max Hourly**	**Min Hourly**
1 August	-	-	-	-	-	-
2 August	541	602	448	716	786	662
3 August	530	617	442	786	982	633
4 August	515	577	428	-	-	-
5 August	544	686	404	914	1202	602
6 August	574	657	434	760	850	686
7 August	601	663	480	-	-	-
8 August	585	645	489	761	821	692
9 August	555	661	482	771	942	607
10 August	-	-	-	-	-	-
11 August	-	-	-	-	-	-
12 August	-	-	-	-	-	-
13 August	-	-	-	-	-	-
14 August	-	-	-	-	-	-
15 August	-	-	-	-	-	-
16 August	-	-	-	-	-	-
17 August	-	-	-	-	-	-
18 August	-	-	-	-	-	-
19 August	-	-	-	-	-	-
20 August	-	-	-	-	-	-
21 August	-	-	-	-	-	-
22 August	-	-	-	-	-	-
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	-	-	-	-	-	-
26 August	-	-	-	-	-	-
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	502	579	429	659	830	557
30 August	543	594	455	785	975	643
31 August	536	607	446	703	842	635

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1B Unit Data Invalidated of 2 and 18-20 August 2023.
Unit 1B Unit Offline of 10-17 and 23-28 August 2023
NOx Unit Data Invalidated 21 and 29 August 2023.

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 August	481	552	399	1040	1284	896
2 August	-	-	-	-	-	-
3 August	483	549	393	985	1099	921
4 August	456	525	373	950	1314	793
5 August	503	645	407	1040	1246	809
6 August	556	655	446	934	984	906
7 August	556	625	439	1008	1116	923
8 August	529	582	437	1031	1178	929
9 August	514	604	458	1036	1128	913
10 August	-	-	-	-	-	-
11 August	-	-	-	-	-	-
12 August	-	-	-	-	-	-
13 August	-	-	-	-	-	-
14 August	-	-	-	-	-	-
15 August	-	-	-	-	-	-
16 August	-	-	-	-	-	-
17 August	-	-	-	-	-	-
18 August	-	-	-	-	-	-
19 August	-	-	-	-	-	-
20 August	-	-	-	-	-	-
21 August	-	-	-	995	1117	884
22 August	589	638	476	907	1072	856
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	-	-	-	-	-	-
26 August	-	-	-	-	-	-
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	-	-	-	837	891	730
30 August	436	484	407	908	990	839
31 August	464	507	405	892	930	867

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Offline 1-6 August 2023
NOx Unit Data Invalidated 19-21 August 2023

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 August	-	-	-	-	-	-
2 August	-	-	-	-	-	-
3 August	-	-	-	-	-	-
4 August	-	-	-	-	-	-
5 August	-	-	-	-	-	-
6 August	-	-	-	-	-	-
7 August	403	476	291	730	938	349
8 August	427	459	375	863	977	776
9 August	429	472	344	842	950	694
10 August	439	545	368	741	857	576
11 August	433	480	380	784	891	709
12 August	435	508	354	637	706	567
13 August	415	447	369	769	887	627
14 August	439	477	377	801	1085	618
15 August	471	528	399	669	705	633
16 August	413	482	331	677	787	585
17 August	396	530	284	737	841	644
18 August	432	486	360	724	842	646
19 August	-	-	-	710	784	626
20 August	-	-	-	651	772	558
21 August	-	-	-	675	772	587
22 August	388	430	321	617	709	564
23 August	387	439	348	607	713	569
24 August	355	396	307	629	684	588
25 August	347	395	304	651	763	572
26 August	373	445	320	617	685	565
27 August	367	418	328	700	846	572
28 August	357	379	334	729	849	639
29 August	429	513	373	731	817	693
30 August	431	483	385	718	841	649
31 August	437	499	352	737	797	673

Unit 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Offline 1-6 August 2023
Unit 2B Unit Data Invalidated 23 August 2023

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 August	-	-	-	-	-	-
2 August	-	-	-	-	-	-
3 August	-	-	-	-	-	-
4 August	-	-	-	-	-	-
5 August	-	-	-	-	-	-
6 August	-	-	-	-	-	-
7 August	446	484	368	874	1102	569
8 August	457	509	381	981	1157	882
9 August	469	509	365	958	1124	838
10 August	496	560	415	875	1026	711
11 August	483	530	422	924	966	860
12 August	520	575	388	760	852	660
13 August	496	566	427	931	1094	799
14 August	455	499	376	919	1173	707
15 August	488	550	414	769	814	716
16 August	493	603	400	790	909	686
17 August	440	608	319	827	925	752
18 August	478	527	408	811	911	726
19 August	502	534	446	809	862	738
20 August	553	645	485	758	843	670
21 August	479	578	371	791	877	711
22 August	443	505	354	725	806	686
23 August	-	-	-	-	-	-
24 August	433	484	378	749	783	710
25 August	434	541	353	788	830	734
26 August	457	533	375	734	785	709
27 August	451	540	358	827	914	716
28 August	457	504	387	869	939	799
29 August	509	585	423	851	895	784
30 August	523	600	409	862	954	797
31 August	505	584	394	854	897	812

Unit 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Data Invalidated 9 August 2023
NOx Unit Data Invalidated 1 and 11 August 2023.
SO_2 Unit Data Invalidated 13 August 2023
Unit 3A Offline 14-31 August 2023

	NOx			**SO_2**		
	mg/Nm^3 (7% O_2)			**mg/Nm^3 (7% O_2)**		
	Daily Ave	**Max Hourly**	**Min Hourly**	**Daily Ave**	**Max Hourly**	**Min Hourly**
1 August	-	-	-	680	816	483
2 August	312	391	199	560	684	484
3 August	286	358	225	601	709	554
4 August	314	394	232	640	763	538
5 August	312	385	253	632	751	546
6 August	255	289	212	578	662	544
7 August	296	374	220	645	732	589
8 August	366	430	256	694	817	595
9 August	-	-	-	-	-	-
10 August	345	409	261	590	747	456
11 August	-	-	-	649	748	600
12 August	329	381	249	534	590	481
13 August	336	361	267	-	-	-
14 August	-	-	-	-	-	-
15 August	-	-	-	-	-	-
16 August	-	-	-	-	-	-
17 August	-	-	-	-	-	-
18 August	-	-	-	-	-	-
19 August	-	-	-	-	-	-
20 August	-	-	-	-	-	-
21 August	-	-	-	-	-	-
22 August	-	-	-	-	-	-
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	-	-	-	-	-	-
26 August	-	-	-	-	-	-
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	-	-	-	-	-	-
30 August	-	-	-	-	-	-
31 August	-	-	-	-	-	-

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Data Invalidated 13 August 2023
NOx Unit Data Invalidated 1-3, 5-6 and 8-10 August 2023
Unit 3B Offline 14-31 August 2023

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 August	-	-	-	694	826	565
2 August	-	-	-	565	640	499
3 August	-	-	-	613	714	546
4 August	319	388	247	633	758	526
5 August	-	-	-	629	769	549
6 August	-	-	-	575	671	533
7 August	320	407	230	649	752	579
8 August	-	-	-	636	719	565
9 August	-	-	-	660	771	532
10 August	-	-	-	598	724	450
11 August	382	426	306	636	748	575
12 August	352	418	280	516	545	466
13 August	-	-	-	-	-	-
14 August	-	-	-	-	-	-
15 August	-	-	-	-	-	-
16 August	-	-	-	-	-	-
17 August	-	-	-	-	-	-
18 August	-	-	-	-	-	-
19 August	-	-	-	-	-	-
20 August	-	-	-	-	-	-
21 August	-	-	-	-	-	-
22 August	-	-	-	-	-	-
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	-	-	-	-	-	-
26 August	-	-	-	-	-	-
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	-	-	-	-	-	-
30 August	-	-	-	-	-	-
31 August	-	-	-	-	-	-

Unit 4A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4A Data Invalidated 16 August 2023

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 August	204	327	148	346	594	203
2 August	222	366	158	282	347	185
3 August	220	360	142	344	580	212
4 August	257	409	164	366	613	242
5 August	218	244	190	337	539	214
6 August	228	353	174	263	378	133
7 August	208	326	133	316	487	228
8 August	222	347	157	351	575	203
9 August	260	434	158	391	622	219
10 August	310	588	174	351	589	155
11 August	233	484	167	348	665	221
12 August	241	393	170	305	515	163
13 August	210	343	162	338	566	191
14 August	201	347	157	323	644	165
15 August	214	336	163	190	356	122
16 August	-	-	-	-	-	-
17 August	216	346	163	263	400	172
18 August	231	388	174	280	526	177
19 August	248	376	158	308	471	209
20 August	256	428	182	277	518	171
21 August	223	384	186	275	516	177
22 August	205	307	158	267	511	152
23 August	202	283	169	314	725	167
24 August	210	289	173	235	376	175
25 August	204	318	139	262	466	159
26 August	213	328	169	241	415	167
27 August	199	301	138	273	508	160
28 August	198	320	143	284	502	192
29 August	251	412	169	334	587	198
30 August	208	304	179	312	591	178
31 August	216	311	145	329	513	186

Unit 4B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4B Data Invalidated 9-11and 16 August 223
NOx Unit Data Invalidated 12-14, 17 and 23 August 2023

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 August	350	377	278	577	760	466
2 August	364	429	300	476	530	405
3 August	352	393	294	550	648	475
4 August	369	398	306	529	653	406
5 August	354	398	307	559	754	437
6 August	356	397	293	498	583	425
7 August	355	381	300	542	688	442
8 August	358	387	325	570	661	486
9 August	-	-	-	-	-	-
10 August	-	-	-	-	-	-
11 August	-	-	-	-	-	-
12 August	-	-	-	495	554	456
13 August	-	-	-	608	799	488
14 August	-	-	-	603	874	425
15 August	384	431	326	473	526	417
16 August	-	-	-	-	-	-
17 August	-	-	-	506	567	446
18 August	370	430	339	507	585	466
19 August	367	410	296	543	603	473
20 August	378	401	293	483	553	423
21 August	362	381	291	526	587	463
22 August	350	401	297	462	541	424
23 August	-	-	-	480	727	213
24 August	333	390	300	488	554	429
25 August	339	386	283	491	529	456
26 August	319	386	260	468	514	416
27 August	323	367	260	500	610	412
28 August	328	358	285	516	574	478
29 August	357	409	313	533	614	465
30 August	341	392	280	516	632	477
31 August	312	338	273	533	599	474

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	<0.01	mg/m^3	20	18/04/2023
Fluorine	14	mg/m^3	30	18/04/2023
Hydrogen chloride	15	mg/m^3	50	18/04/2023
Solid Particles	1.6	mg/m^3	50	18/04/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	1.5	mg/m^3	100	18/04/2023
Volatile organic compounds as n-propane equivalent	0.18	mg/m^3	10	18/04/2023
Cadmium	<0.0002	mg/m^3	0.2	28/02/2023
Mercury	<0.0004	mg/m^3	0.05	28/02/2023
Solid Particles	1.7	mg/m^3	50	28/02/2023
Type 1 and 2 substances in Aggregate	<0.03	mg/m^3	0.75	28/02/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	310	m3/sec		18/04/2023
Moisture	5.2	%		18/04/2023
Oxygen	8.0	%		18/04/2023
Solid Particles	1.3	mg/m3		18/04/2023
Temperature	116	degC		18/04/2023
Carbon dioxide	11.9	%		18/04/2023
Chlorine	<0.01	mg/m3		18/04/2023
Fluorine	14	mg/m3		18/04/2023
Hydrogen chloride	15	mg/m3		18/04/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	1.5	mg/m3		18/04/2023
Volatile organic compounds as n-propane equivalent	0.18	mg/m3		18/04/2023
Cadmium	<0.0002	mg/m3		28/02/2023
Flow Rate	230	m3/sec		28/02/2023
Mercury	0.00044	mg/m3		28/02/2023
Moisture	5.7	%		28/02/2023
Oxygen	8.3	%		28/02/2023
Solid Particles	1.5	mg/m3		28/02/2023
Temperature	110	degC		28/02/2023
Type 1 and Type 2 substances in Aggregate	<0.012	mg/m3		28/02/2023
Carbon dioxide	10.9	%		28/02/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	320	m3/sec		18/04/2023
Moisture	5.2	%		18/04/2023
Oxygen	7.1	%		18/04/2023
Solid Particles	1.9	mg/m3		18/04/2023
Temperature	114	degC		18/04/2023
Carbon dioxide	13.3	%		18/04/2023
Cadmium	<0.0003	mg/m3		28/02/2023
Flow Rate	220	m3/sec		28/02/2023
Mercury	<0.0003	mg/m3		28/02/2023
Moisture	5.0	%		28/02/2023
Oxygen	8.8	%		28/02/2023
Solid Particles	1.9	mg/m3		28/02/2023
Temperature	109	degC		28/02/2023
Type 1 and Type 2 substances in Aggregate	<0.041	mg/m3		28/02/2023
Carbon dioxide	11.3	%		28/02/2023

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	<0.02	mg/m^3	20	3/05/2023
Fluorine	12	mg/m^3	30	3/05/2023
Hydrogen chloride	15	mg/m^3	50	3/05/2023
Solid Particles	3.4	mg/m^3	50	4/05/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	0.92	mg/m^3	100	3/05/2023
Volatile organic compounds as n-propane equivalent	<0.07	mg/m^3	10	3/05/2023
Cadmium	<0.0003	mg/m^3	0.2	28/02/2023
Mercury	0.0024	mg/m^3	0.05	28/02/2023
Solid Particles	16	mg/m3	50	28/02/2023
Type 1 and 2 substances in Aggregate	<0.06	mg/m3	0.75	28/02/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	240	m3/sec		3/05/2023
Moisture	5.1	%		3/05/2023
Oxygen	9.8	%		3/05/2023
Solid Particles	3.7	mg/m3		3/05/2023
Temperature	118	degC		3/05/2023
Carbon dioxide	10.1	%		3/05/2023
Chlorine	<0.02	mg/m3		3/05/2023
Fluorine	12	mg/m3		3/05/2023
Hydrogen chloride	15	mg/m3		3/05/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	0.92	mg/m3		3/05/2023
Volatile organic compounds as n-propane equivalent	<0.07	mg/m3		3/05/2023
Cadmium	<0.0003	mg/m3		28/02/2023
Flow Rate	240	m3/sec		28/02/2023
Mercury	0.0023	mg/m3		28/02/2023
Moisture	5.8	%		28/02/2023
Oxygen	10.3	%		28/02/2023
Solid Particles	29	mg/m3		28/02/2023
Temperature	124	degC		28/02/2023
Type 1 and Type 2 substances in Aggregate	<0.11	mg/m3		28/02/2023
Carbon dioxide	9.5	%		28/02/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	240	m3/sec		4/05/2023
Moisture	5.0	%		4/05/2023
Oxygen	9.3	%		4/05/2023
Solid Particles	3.0	mg/m3		4/05/2023
Temperature	115	degC		4/05/2023
Carbon dioxide	10.8	%		4/05/2023
Cadmium	<0.0002	mg/m3		28/02/2023
Flow Rate	220	m3/sec		28/02/2023
Mercury	0.0025	mg/m3		28/02/2023
Moisture	5.9	%		28/02/2023
Oxygen	9.0	%		28/02/2023
Solid Particles	2.4	mg/m3		28/02/2023
Temperature	118	degC		28/02/2023
Type 1 and Type 2 substances in Aggregate	<0.014	mg/m3		28/02/2023
Carbon dioxide	10.3	%		28/02/2023

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	<0.01	mg/m3	20	19/04/2023
Fluorine	9.2	mg/m3	30	19/04/2023
Hydrogen chloride	19	mg/m3	50	19/04/2023
Solid Particles	20	mg/m3	50	19/04/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	1.4	mg/m3	100	19/04/2023
Volatile organic compounds as n-propane equivalent	0.76	mg/m3	10	19/04/2023
Cadmium	<0.0003	mg/m3	0.2	1/03/2023
Mercury	0.00058	mg/m3	0.05	1/03/2023
Solid Particles	4	mg/m3	50	1/03/2023
Type 1 and 2 substances in Aggregate	<0.03	mg/m3	0.75	1/03/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	340	m3/sec		19/04/2023
Moisture	5.0	%		19/04/2023
Oxygen	7.6	%		19/04/2023
Solid Particles	32	mg/m3		19/04/2023
Temperature	118	degC		19/04/2023
Carbon dioxide	12.8	%		19/04/2023
Chlorine	<0.01	mg/m3		19/04/2023
Fluorine	9.2	mg/m3		19/04/2023
Hydrogen chloride	19	mg/m3		19/04/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	1.4	mg/m3		19/04/2023
Volatile organic compounds as n-propane equivalent	0.76	mg/m3		19/04/2023
Cadmium	<0.0003	mg/m3		1/03/2023
Flow Rate	320	m3/sec		1/03/2023
Mercury	0.00052	mg/m3		1/03/2023
Moisture	3.9	%		1/03/2023
Oxygen	12.2	%		1/03/2023
Solid Particles	3	mg/m3		1/03/2023
Temperature	92	degC		1/03/2023
Type 1 and Type 2 substances in Aggregate	<0.017	mg/m3		1/03/2023
Carbon dioxide	7.6	%		1/03/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	310	m3/sec		19/04/2023
Moisture	6.1	%		19/04/2023
Oxygen	7.2	%		19/04/2023
Solid Particles	6.9	mg/m3		19/04/2023
Temperature	118	degC		19/04/2023
Carbon dioxide	12.8	%		19/04/2023
Cadmium	<0.0003	mg/m3		1/03/2023
Flow Rate	240	m3/sec		1/03/2023
Mercury	0.00065	mg/m3		1/03/2023
Moisture	5.6	%		1/03/2023
Oxygen	9.9	%		1/03/2023
Solid Particles	5.3	mg/m3		1/03/2023
Temperature	113	degC		1/03/2023
Type 1 and Type 2 substances in Aggregate	<0.052	mg/m3		1/03/2023
Carbon dioxide	10.1	%		1/03/2023

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	0.03	mg/m3	20	5/05/2023
Fluorine	7.4	mg/m3	30	5/05/2023
Hydrogen chloride	8.2	mg/m3	50	5/05/2023
Solid Particles	6.8	mg/m3	50	5/05/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	2.0	mg/m3	100	5/05/2023
Volatile organic compounds as n-propane equivalent	<0.07	mg/m3	10	5/05/2023
Cadmium	<0.0002	mg/m3	0.2	1/03/2023
Mercury	0.0016	mg/m3	0.05	1/03/2023
Solid Particles	5.4	mg/m3	50	1/03/2023
Type 1 and 2 substances in Aggregate	<0.02	mg/m3	0.75	1/03/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	320	m^3/sec		5/05/2023
Moisture	4.6	%		5/05/2023
Oxygen	8.6	%		5/05/2023
Solid Particles	9.1	mg/m^3		5/05/2023
Temperature	112	degC		5/05/2023
Carbon dioxide	11.8	%		5/05/2023
Chlorine	0.03	mg/m^3		5/05/2023
Fluorine	7.4	mg/m^3		5/05/2023
Hydrogen chloride	8.2	mg/m^3		5/05/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	2.0	mg/m^3		5/05/2023
Volatile organic compounds as n-propane equivalent	<0.07	mg/m^3		5/05/2023
Cadmium	<0.0003	mg/m^3		1/03/2023
Flow Rate	240	m^3/sec		1/03/2023
Mercury	0.0023	mg/m^3		1/03/2023
Moisture	5.1	%		1/03/2023
Oxygen	11	%		1/03/2023
Solid Particles	5.7	mg/m^3		1/03/2023
Temperature	114	degC		1/03/2023
Type 1 and Type 2 substances in Aggregate	<0.034	mg/m^3		1/03/2023
Carbon dioxide	8.9	%		1/03/2023

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	290	m^3/sec		4/05/2023
Moisture	5.8	%		4/05/2023
Oxygen	6.7	%		4/05/2023
Solid Particles	4.3	mg/m^3		4/05/2023
Temperature	108	degC		4/05/2023
Carbon dioxide	13.4	%		4/05/2023
Cadmium	<0.0002	mg/m^3		1/03/2023
Flow Rate	260	m^3/sec		1/03/2023
Mercury	0.00099	mg/m^3		1/03/2023
Moisture	4.7	%		1/03/2023
Oxygen	8.5	%		1/03/2023
Solid Particles	5.2	mg/m^3		1/03/2023
Temperature	117	degC		1/03/2023
Type 1 and Type 2 substances in Aggregate	<0.015	mg/m^3		1/03/2023
Carbon dioxide	11	%		1/03/2023

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/m2/month		
		Ash	Combustible	Insoluble
E2	17	0.3	0.5	0.8
E4	18	0.6	1.1	1.7
E6	19	0.9	0.8	1.7
U6	20	2.9	0.5	3.4

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
^{0}C	m	degC	pH unit	ppt	%	mg/L	m
18.04	0.5	17.07	8.77	35.6	92.5	6.97	2.25

Name	Reading	Units	Date
Aluminium	0.029	mg/L	3/08/2023
Ammonia	<0.005	mg/L	3/08/2023
Arsenic III	<0.004	mg/	3/08/2023
Arsenic V	<0.004	mg/L	3/08/2023
Cadmium	<0.0002	mg/L	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	3/08/2023
Chromium (VI) Compounds	<0.001	mg/L	3/08/2023
Copper	0.001	mg/L	3/08/2023
Iron	0.060	mg/L	3/08/2023
Lead	<0.0002	mg/L	3/08/2023
Manganese	0.0044	mg/L	3/08/2023
Nickel	0.0006	mg/L	3/08/2023
pH	8.12	pH units	3/08/2023
Selenium	<0.002	mg/L	3/08/2023
Total Suspended Solids	57	mg/L	3/08/2023
Vanadium	0.0017	mg/L	3/08/2023
Zinc	<0.005	mg/L	3/08/2023

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
^{0}C	m	degC	pH unit	ppt	%	mg/L	m
15.09	0.5	17.12	8.78	35.7	89.8	6.75	4.25

Name	Reading	Units	Date
Aluminium	0.013	mg/L	3/08/2023
Ammonia	<0.005	mg/L	3/08/2023
Arsenic III	<0.004	mg/L	3/08/2023
Arsenic V	<0.004	mg/L	3/08/2023
Cadmium	<0.0002	mg/L	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	3/08/2023
Chromium (VI) Compounds	<0.001	mg/L	3/08/2023
Copper	0.002	mg/L	3/08/2023
Iron	0.011	mg/L	3/08/2023
Lead	<0.0002	mg/L	3/08/2023
Manganese	0.0025	mg/L	3/08/2023
Nickel	0.0006	mg/L	3/08/2023
pH	8.11	pH units	3/08/2023
Selenium	<0.002	mg/L	3/08/2023
Total Suspended Solids	56	mg/L	3/08/2023
Vanadium	0.0026	mg/L	3/08/2023
Zinc	<0.005	mg/L	3/08/2023

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
^{0}C	m	degC	pH unit	ppt	%	mg/L	m
14.15	0.5	15.97	8.84	35.6	110.0	8.54	5.75

Name	Reading	Units	Date
Aluminium	0.010	mg/L	3/08/2023
Ammonia	<0.005	mg/L	3/08/2023
Arsenic III	<0.004	mg/L	3/08/2023
Arsenic V	<0.004	mg/L	3/08/2023
Cadmium	<0.0002	mg/L	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	3/08/2023
Chromium (VI) Compounds	<0.001	mg/L	3/08/2023
Copper	<0.001	mg/L	3/08/2023
Iron	0.020	mg/L	3/08/2023
Lead	0.0010	mg/L	3/08/2023
Manganese	0.0030	mg/L	3/08/2023
Nickel	<0.0005	mg/L	3/08/2023
pH	8.19	pH units	3/08/2023
Selenium	<0.002	mg/L	3/08/2023
Total Suspended Solids	60	mg/L	3/08/2023
Vanadium	0.0015	mg/L	3/08/2023
Zinc	0.014	mg/L	3/08/2023

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
^{0}C	m	degC	pH unit	ppt	%	mg/L	m
15.78	0.5	19.89	8.69	36.0	97.5	6.96	3.75

Name	Reading	Units	Date
Aluminium	0.048	mg/L	3/08/2023
Ammonia	<0.005	mg/L	3/08/2023
Arsenic III	<0.004	mg/L	3/08/2023
Arsenic V	<0.004	mg/L	3/08/2023
Cadmium	<0.0002	mg/L	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	3/08/2023
Chromium (VI) Compounds	<0.001	mg/L	3/08/2023
Copper	0.001	mg/L	3/08/2023
Iron	0.045	mg/L	3/08/2023
Lead	<0.0002	mg/L	3/08/2023
Manganese	0.0042	mg/L	3/08/2023
Nickel	<0.0005	mg/L	3/08/2023
pH	8.14	pH units	3/08/2023
Selenium	<0.002	mg/L	3/08/2023
Total Suspended Solids	80	mg/L	3/08/2023
Vanadium	0.0018	mg/L	3/08/2023
Zinc	<0.005	mg/L	3/08/2023

Eraring Ash Dam Quality Monitoring

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.059	mg/L	-	3/08/2023
Ammonia	1.59	mg/L	-	3/08/2023
Arsenic III	<0.0005	mg/L	-	3/08/2023
Arsenic V	0.0117	mg/L	-	3/08/2023
Cadmium	0.00022	mg/L	-	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	-	3/08/2023
Chromium (VI) Compounds	<0.01	mg/L	-	3/08/2023
Copper	0.0105	mg/L	-	3/08/2023
Iron	0.045	mg/L	-	3/08/2023
Lead	<0.0001	mg/L	-	3/08/2023
Manganese	0.122	mg/L	-	3/08/2023
Nickel	0.0058	mg/L	-	3/08/2023
Nitrite and Nitrate as N	8.94	mg/L	-	3/08/2023
Nitrogen	11.0	mg/L	-	3/08/2023
pH	7.65	pH units	-	3/08/2023
Phosphorus as P	1.12	mg/L	-	3/08/2023
Reactive Phosphorus as P	0.95	mg/L	-	3/08/2023
Selenium	0.0576	mg/L	-	3/08/2023
Total Kjeldahl Nitrogen	2.1	mg/L	-	3/08/2023
Total Suspended Solids	7	mg/L	-	3/08/2023
Vanadium	0.0882	mg/L	-	3/08/2023
Zinc	0.013	mg/L	-	3/08/2023

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	0.027	mg/L	-	3/08/2023
Ammonia	<0.005	mg/L	-	3/08/2023
Arsenic III	<0.004	mg/L	-	3/08/2023
Arsenic V	<0.004	mg/L	-	3/08/2023
Cadmium	<0.0002	mg/L	-	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	-	3/08/2023
Chromium (VI) Compounds	<0.01	mg/L	-	3/08/2023
Copper	0.0013	mg/L	-	3/08/2023
Iron	0.054	mg/L	-	3/08/2023
Lead	<0.0002	mg/L	-	3/08/2023
Manganese	0.0046	mg/L	-	3/08/2023
Nickel	<0.0005	mg/L	-	3/08/2023
pH	8.11	pH units	-	3/08/2023
Selenium	<0.001	mg/L	-	3/08/2023
Total Suspended Solids	44	mg/L	-	3/08/2023
Vanadium	0.0015	mg/L	-	3/08/2023
Zinc	<0.005	mg/L	-	3/08/2023
Dissolved Oxygen	8.89	mg/L	-	3/08/2023
Field Temperature	20.7	degC	-	3/08/2023
Salinity	35.0	ppt	-	3/08/2023
Secchi Disk	2.75	m	-	3/08/2023
Temperature – Average	17.46	deg C	-	August2023
Temperature – Minimum	13.63	deg C	-	August2023
Temperature - Maximum	19.66	deg C	-	August2023

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0016	mg/L	0.005	3/08/2023
Iron	0.085	mg/L	0.3	3/08/2023
Selenium	<0.001	mg/L	0.002	3/08/2023
Temperature – Average	24.70	deg C	37.5	August2023
Temperature – Minimum	19.27	deg C	37.5	August2023
Temperature - Maximum	29.89	deg C	37.5	August2023
Maximum Daily Discharge from Ash Dam	24.9	ML	150	August2023
Monthly Discharge from Ash Dam	190.73	ML	-	August2023

Emergency Discharge – Toe Drain Pond

EPA Identification no. 24 - Emergency discharge to toe drain collection pond.
No Discharge during August 2023, background sample only

Name	Reading	Units	Licence Limit	Date
Aluminium	<0.005	mg/L	-	3/08/2023
Ammonia	1.83	mg/L	-	3/08/2023
Arsenic III	0.0025	mg/L	-	3/08/2023
Arsenic V	0.0006	mg/L	-	3/08/2023
Cadmium	<0.00005	mg/L	-	3/08/2023
Chromium (Trivalent)	<0.001	mg/L	-	3/08/2023
Chromium (VI) Compounds	<0.01	mg/L	-	3/08/2023
Copper	<0.0005	mg/L	-	3/08/2023
Iron	4.01	mg/L	-	3/08/2023
Lead	<0.0001	mg/L	-	3/08/2023
Manganese	0.826	mg/L	-	3/08/2023
Nickel	0.0015	mg/L	-	3/08/2023
Nitrite and Nitrate as N	0.172	mg/L	-	3/08/2023
Nitrogen	2.23	mg/L	-	3/08/2023
pH	6.85	pH units	6-9.5	3/08/2023
Phosphorus as P	0.272	mg/L	-	3/08/2023
Reactive Phosphorus as P	0.050	mg/L	-	3/08/2023
Selenium	0.0003	mg/L	-	3/08/2023
Total Kjeldahl Nitrogen	2.06	mg/L	-	3/08/2023
Total Suspended Solids	21	mg/L	50	3/08/2023
Vanadium	0.0005	mg/L	-	3/08/2023
Zinc	0.002	mg/L	-	3/08/2023

MR217

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

MR217 did not discharge throughout August 2023 and there was insufficient water to sample during routine sampling in August 2023

Name	Reading	Units	Licence Limit	Date
Aluminium		mg/L	-	3/08/2023
Ammonia		mg/L	-	3/08/2023
Arsenic III		mg/L	-	3/08/2023
Arsenic V		mg/L	-	3/08/2023
Cadmium		mg/L	-	3/08/2023
Chromium (Trivalent)		mg/L	-	3/08/2023
Chromium (VI) Compounds		mg/L	-	3/08/2023
Copper		mg/L	-	3/08/2023
Iron		mg/L	-	3/08/2023
Lead		mg/L	-	3/08/2023
Manganese		mg/L	-	3/08/2023
Nickel		mg/L	-	3/08/2023
Nitrite and Nitrate as N		mg/L	-	3/08/2023
Nitrogen		mg/L	-	3/08/2023
pH		pH units	6-9.5	3/08/2023
Phosphorus as P		mg/L	-	3/08/2023
Reactive Phosphorus as P		mg/L	-	3/08/2023
Selenium		mg/L	-	3/08/2023
Total Kjeldahl Nitrogen		mg/L	-	3/08/2023
Total Suspended Solids		mg/L	50	3/08/2023
Vanadium		mg/L	-	3/08/2023
Zinc		mg/L	-	3/08/2023

Groundwater Monitoring
Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Date
Aluminium	0.209	mg/L	14/06/2023
Ammonia	0.06	mg/L	14/06/2023
Arsenic (III)	<0.0005	mg/L	14/06/2023
Arsenic (V)	<0.0005	mg/L	14/06/2023
Cadmium	<0.00005	mg/L	14/06/2023
Calcium	2	mg/L	14/06/2023
Chromium (trivalent)	<0.01	mg/L	14/06/2023
Chromium (VI) compounds	<0.01	mg/L	14/06/2023
Copper	0.0010	mg/L	14/06/2023
Electrical Conductivity	412	uS/cm	14/06/2023
Iron	0.240	mg/L	14/06/2023
Lead	0.0010	mg/L	14/06/2023
Magnesium	5	mg/L	14/06/2023
Manganese	0.133	mg/L	14/06/2023
Nickel	0.0048	mg/L	14/06/2023
pH	5.13	pH units	14/06/2023
Potassium	5	mg/L	14/06/2023
Selenium	<0.0002	mg/L	14/06/2023
Sodium	64	mg/L	14/06/2023
Standing Water Level	8.641	metres	14/06/2023
Vanadium	0.0004	mg/L	14/06/2023
Zinc	0.026	mg/L	14/06/2023

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	0.395	mg/L	14/06/2023
Ammonia	1.42	mg/L	14/06/2023
Arsenic (III)	0.0030	mg/L	14/06/2023
Arsenic (V)	0.0005	mg/L	14/06/2023
Cadmium	<0.00005	mg/L	14/06/2023
Calcium	210	mg/L	14/06/2023
Chromium (trivalent)	<0.01	mg/L	14/06/2023
Chromium (VI) compounds	<0.01	mg/L	14/06/2023
Copper	0.0019	mg/L	14/06/2023
Electrical Conductivity	12000	uS/cm	14/06/2023
Iron	11.1	mg/L	14/06/2023
Lead	0.0014	mg/L	14/06/2023
Magnesium	203	mg/L	14/06/2023
Manganese	1.62	mg/L	14/06/2023
Nickel	0.0053	mg/L	14/06/2023
pH	6.54	pH units	14/06/2023
Potassium	96	mg/L	14/06/2023
Selenium	0.0003	mg/L	14/06/2023
Sodium	2420	mg/L	14/06/2023
Standing Water Level	4.600	metres	14/06/2023
Vanadium	0.0036	mg/L	14/06/2023
Zinc	0.029	mg/L	14/06/2023

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminium	0.018	mg/L	02/06/2023
Ammonia	3.21	mg/L	02/06/2023
Arsenic (III)	0.0050	mg/L	02/06/2023
Arsenic (V)	0.0008	mg/L	02/06/2023
Cadmium	<0.0002	mg/L	02/06/2023
Calcium	449	mg/L	02/06/2023
Chromium (trivalent)	<0.01	mg/L	02/06/2023
Chromium (VI) compounds	<0.01	mg/L	02/06/2023
Copper	<0.001	mg/L	02/06/2023
Electrical Conductivity	20300	uS/cm	02/06/2023
Iron	1.51	mg/L	02/06/2023
Lead	0.0003	mg/L	02/06/2023
Magnesium	246	mg/L	02/06/2023
Manganese	0.434	mg/L	02/06/2023
Nickel	0.0009	mg/L	02/06/2023
pH	6.53	pH units	02/06/2023
Potassium	111	mg/L	02/06/2023
Selenium	<0.002	mg/L	02/06/2023
Sodium	3230	mg/L	02/06/2023
Standing Water Level	1.810	metres	02/06/2023
Vanadium	0.0009	mg/L	02/06/2023
Zinc	0.012	mg/L	02/06/2023

Groundwater Monitoring
Groundwater Well – EGM/D26

EPA Identification no. 35 – Groundwater Monitoring Well D26
Groundwater well was dry during sampling in June 2023

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	-