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

Environmental Monitoring Data September 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 20-21 September 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 September	593	734	490	632	746	479
2 September	538	740	411	682	883	462
3 September	530	659	428	690	948	477
4 September	485	541	394	723	899	504
5 September	556	636	469	844	1018	695
6 September	571	666	453	870	1177	636
7 September	506	631	372	813	1065	605
8 September	581	738	459	772	867	651
9 September	628	825	539	670	856	477
10 September	614	705	531	676	910	460
11 September	599	686	466	797	1084	505
12 September	569	637	520	693	873	573
13 September	547	678	463	764	1054	603
14 September	526	594	459	870	1287	566
15 September	527	608	450	827	1202	618
16 September	549	636	438	1030	1334	669
17 September	567	645	500	1022	1247	686
18 September	558	703	448	970	1367	677
19 September	520	601	426	1027	1218	842
20 September	-	-	-	-	-	-
21 September	-	-	-	-	-	-
22 September	579	661	490	689	964	609
23 September	521	665	360	707	874	540
24 September	528	617	440	747	1001	542
25 September	567	648	454	824	1120	543
26 September	497	622	351	761	943	561
27 September	550	630	445	865	1068	649
28 September	591	642	513	685	869	536
29 September	525	622	374	763	1032	553
30 September	496	593	349	828	1007	642

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 15 September 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 September	501	608	413	839	971	708
2 September	464	592	374	925	1144	714
3 September	452	536	364	855	1148	721
4 September	417	483	339	928	985	876
5 September	458	518	377	953	1078	887
6 September	443	474	397	1062	1358	839
7 September	437	534	355	937	1074	833
8 September	487	629	408	948	1039	841
9 September	547	728	443	850	920	781
10 September	562	702	435	890	943	848
11 September	495	552	434	1009	1066	874
12 September	482	579	420	875	1097	800
13 September	461	523	407	963	1091	826
14 September	451	513	410	1094	1263	903
15 September	-	-	-	-	-	-
16 September	448	505	399	1053	1163	955
17 September	466	533	424	1108	1172	966
18 September	461	566	405	1022	1265	900
19 September	444	493	405	1047	1213	900
20 September	458	523	409	933	991	878
21 September	424	465	381	1004	1180	842
22 September	470	555	423	969	1104	885
23 September	448	541	337	914	1021	867
24 September	451	486	411	937	1027	866
25 September	487	533	423	955	1093	859
26 September	439	525	349	932	1100	843
27 September	466	528	394	997	1094	841
28 September	487	558	423	876	910	833
29 September	456	554	372	873	973	797
30 September	426	477	346	965	1050	893

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Offline 1-30 September 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 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 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Offline 1-30 September 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 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 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Offline 1 September 2023

	NOx			SO_2		
	mg/Nm³ (7% O_2)			mg/Nm³ (7% O_2)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 September	-	-	-	-	-	-
2 September	352	406	267	579	697	484
3 September	323	408	218	571	703	485
4 September	283	333	203	556	614	505
5 September	318	380	249	598	669	548
6 September	301	337	225	656	853	544
7 September	269	319	221	588	659	509
8 September	277	332	209	644	776	583
9 September	296	355	237	553	602	515
10 September	318	377	254	558	623	509
11 September	315	374	240	643	717	547
12 September	289	328	255	559	655	521
13 September	297	344	238	602	666	547
14 September	289	347	223	714	872	585
15 September	302	377	243	653	763	569
16 September	260	270	245	729	780	655
17 September	283	329	257	737	846	625
18 September	285	348	250	723	887	606
19 September	275	351	244	758	807	660
20 September	286	327	213	601	656	545
21 September	294	343	209	665	847	580
22 September	315	388	235	643	740	576
23 September	326	397	253	643	688	589
24 September	343	385	227	644	697	600
25 September	324	362	226	663	795	563
26 September	300	335	212	604	749	542
27 September	299	352	204	683	762	611
28 September	306	361	226	562	612	538
29 September	318	362	232	567	597	513
30 September	314	363	233	619	695	551

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Offline 1 September 2023
Unit 3B Data Invalidated 12, 17 and 30 September 2023
NOx Unit Data Invalidated 13 September 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 September	-	--	-	-	-	-
2 September	385	432	265	558	674	463
3 September	325	365	234	551	686	471
4 September	307	344	240	571	624	507
5 September	347	407	277	623	704	553
6 September	323	396	235	638	871	565
7 September	286	329	234	608	707	521
8 September	313	383	245	676	828	577
9 September	357	421	299	575	644	514
10 September	355	446	269	568	653	482
11 September	315	387	231	664	760	569
12 September	-	-	-	-	-	-
13 September	-	-	-	618	693	529
14 September	310	370	243	730	925	565
15 September	314	383	255	667	767	562
16 September	268	276	256	758	809	678
17 September	-	-	-	-	-	-
18 September	324	410	288	761	954	637
19 September	305	395	268	807	855	696
20 September	317	364	239	632	712	564
21 September	307	333	242	678	921	566
22 September	315	387	226	630	688	533
23 September	321	369	253	624	689	546
24 September	336	383	228	624	697	555
25 September	341	405	252	644	788	543
26 September	323	361	229	590	717	529
27 September	311	365	209	680	794	595
28 September	325	358	248	568	632	536
29 September	331	359	256	576	647	527
30 September	-	-	-	-	-	-

Unit 4A Boiler Continuous Emission Monitoring Summary

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

	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 September	224	333	171	293	441	182
2 September	221	313	168	336	495	191
3 September	266	430	160	395	547	256
4 September	225	317	162	380	631	238
5 September	258	355	189	449	644	265
6 September	229	373	163	450	770	265
7 September	235	368	167	402	632	225
8 September	249	389	170	405	517	255
9 September	244	345	125	382	541	200
10 September	244	331	127	385	563	197
11 September	232	336	173	439	717	243
12 September	236	336	166	371	526	208
13 September	236	372	156	431	583	216
14 September	230	329	141	491	741	219
15 September	258	474	152	444	633	274
16 September	228	301	160	521	724	315
17 September	276	404	175	568	773	352
18 September	260	425	172	515	875	207
19 September	230	308	157	516	697	250
20 September	243	362	174	465	620	255
21 September	217	355	145	444	783	267
22 September	200	297	142	375	492	277
23 September	216	341	153	388	554	266
24 September	235	363	166	421	652	299
25 September	206	304	148	445	731	299
26 September	192	286	151	359	486	206
27 September	193	294	150	421	572	306
28 September	192	222	147	317	380	212
29 September	227	344	180	377	555	234
30 September	221	357	164	434	655	308

Unit 4B Boiler Continuous Emission Monitoring Summary

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

	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 September	304	341	276	502	579	372
2 September	308	338	268	530	656	382
3 September	372	461	281	585	756	452
4 September	351	457	292	577	613	500
5 September	358	410	318	616	668	558
6 September	343	380	312	676	874	553
7 September	342	404	296	582	666	532
8 September	351	433	314	628	713	560
9 September	322	352	293	546	578	477
10 September	313	362	268	559	611	498
11 September	324	414	251	670	902	524
12 September	341	385	308	585	705	506
13 September	329	397	293	642	783	540
14 September	305	348	256	705	870	570
15 September	338	451	292	621	765	497
16 September	297	331	263	712	779	580
17 September	342	409	289	759	861	653
18 September	336	410	307	724	987	509
19 September	310	345	274	702	821	558
20 September	332	410	290	631	703	556
21 September	310	372	269	671	887	496
22 September	305	360	262	634	766	520
23 September	308	348	268	619	687	533
24 September	319	344	271	631	705	554
25 September	324	382	265	671	910	544
26 September	325	407	278	590	780	507
27 September	313	344	286	666	820	544
28 September	345	369	309	562	641	500
29 September	335	369	289	575	627	528
30 September	327	377	289	645	754	536

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	0.8	0.4	1.2
E4	18	0.7	0.6	1.3
E6	19	1.7	2.4	4.1
U6	20	0.6	0.5	1.1

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
17.41	0.5	19.18	8.29	35.9	100.0	7.23	1.5

Name	Reading	Units	Date
Aluminium	0.032	mg/L	6/09/23
Ammonia	<0.025	mg/L	6/09/23
Arsenic III	<0.004	mg/	6/09/23
Arsenic V	<0.004	mg/L	6/09/23
Cadmium	<0.0002	mg/L	6/09/23
Chromium (Trivalent)	<0.001	mg/L	6/09/23
Chromium (VI) Compounds	<0.001	mg/L	6/09/23
Copper	<0.001	mg/L	6/09/23
Iron	0.049	mg/L	6/09/23
Lead	<0.0002	mg/L	6/09/23
Manganese	0.0045	mg/L	6/09/23
Nickel	0.0019	mg/L	6/09/23
pH	8.09	pH units	6/09/23
Selenium	<0.002	mg/L	6/09/23
Total Suspended Solids	18	mg/L	6/09/23
Vanadium	0.002	mg/L	6/09/23
Zinc	<0.005	mg/L	6/09/23

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
16.86	0.5	19.64	8.27	35.5	99.5	7.16	4.25

Name	Reading	Units	Date
Aluminium	0.013	mg/L	6/09/23
Ammonia	<0.025	mg/L	6/09/23
Arsenic III	<0.004	mg/L	6/09/23
Arsenic V	<0.004	mg/L	6/09/23
Cadmium	<0.0002	mg/L	6/09/23
Chromium (Trivalent)	<0.001	mg/L	6/09/23
Chromium (VI) Compounds	<0.001	mg/L	6/09/23
Copper	0.001	mg/L	6/09/23
Iron	0.008	mg/L	6/09/23
Lead	<0.0002	mg/L	6/09/23
Manganese	0.0034	mg/L	6/09/23
Nickel	0.001	mg/L	6/09/23
pH	8.1	pH units	6/09/23
Selenium	<0.002	mg/L	6/09/23
Total Suspended Solids	17	mg/L	6/09/23
Vanadium	0.0028	mg/L	6/09/23
Zinc	<0.005	mg/L	6/09/23

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
15.42	0.5	17.46	8.35	34.5	114.0	8.65	4.25

Name	Reading	Units	Date
Aluminium	0.014	mg/L	6/09/23
Ammonia	<0.005	mg/L	6/09/23
Arsenic III	<0.004	mg/L	6/09/23
Arsenic V	<0.004	mg/L	6/09/23
Cadmium	<0.0002	mg/L	6/09/23
Chromium (Trivalent)	<0.001	mg/L	6/09/23
Chromium (VI) Compounds	<0.001	mg/L	6/09/23
Copper	<0.001	mg/L	6/09/23
Iron	0.012	mg/L	6/09/23
Lead	<0.0002	mg/L	6/09/23
Manganese	0.0034	mg/L	6/09/23
Nickel	<0.0005	mg/L	6/09/23
pH	8.15	pH units	6/09/23
Selenium	<0.002	mg/L	6/09/23
Total Suspended Solids	<5	mg/L	6/09/23
Vanadium	0.0017	mg/L	6/09/23
Zinc	<0.005	mg/L	6/09/23

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
18.16	0.5	22.32	8.24	36.1	107.6	7.33	3.25

Name	Reading	Units	Date
Aluminium	0.022	mg/L	6/09/23
Ammonia	<0.025	mg/L	6/09/23
Arsenic III	<0.004	mg/L	6/09/23
Arsenic V	<0.004	mg/L	6/09/23
Cadmium	<0.0002	mg/L	6/09/23
Chromium (Trivalent)	<0.001	mg/L	6/09/23
Chromium (VI) Compounds	<0.001	mg/L	6/09/23
Copper	0.001	mg/L	6/09/23
Iron	0.03	mg/L	6/09/23
Lead	<0.0002	mg/L	6/09/23
Manganese	0.0048	mg/L	6/09/23
Nickel	0.0006	mg/L	6/09/23
pH	8.09	pH units	6/09/23
Selenium	<0.002	mg/L	6/09/23
Total Suspended Solids	21	mg/L	6/09/23
Vanadium	0.0018	mg/L	6/09/23
Zinc	<0.005	mg/L	6/09/23

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	0.137	mg/L	-	5/09/23
Ammonia	0.59	mg/L	-	5/09/23
Arsenic III	<0.0005	mg/L	-	5/09/23
Arsenic V	0.0104	mg/L	-	5/09/23
Cadmium	0.0008	mg/L	-	5/09/23
Chromium (Trivalent)	<0.001	mg/L	-	5/09/23
Chromium (VI) Compounds	<0.01	mg/L	-	5/09/23
Copper	0.0093	mg/L	-	5/09/23
Iron	0.119	mg/L	-	5/09/23
Lead	0.0005	mg/L	-	5/09/23
Manganese	0.05	mg/L	-	5/09/23
Nickel	0.0053	mg/L	-	5/09/23
Nitrite and Nitrate as N	7.85	mg/L	-	5/09/23
Nitrogen	9.4	mg/L	-	5/09/23
pH	7.98	pH units	-	5/09/23
Phosphorus as P	1.08	mg/L	-	5/09/23
Reactive Phosphorus as P	1.05	mg/L	-	5/09/23
Selenium	0.0461	mg/L	-	5/09/23
Total Kjeldahl Nitrogen	1.6	mg/L	-	5/09/23
Total Suspended Solids	19	mg/L	-	5/09/23
Vanadium	0.0587	mg/L	-	5/09/23
Zinc	0.024	mg/L	-	5/09/23

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	0.071	mg/L	-	5/09/23
Ammonia	<0.025	mg/L	-	5/09/23
Arsenic III	<0.004	mg/L	-	5/09/23
Arsenic V	<0.004	mg/L	-	5/09/23
Cadmium	<0.0002	mg/L	-	5/09/23
Chromium (Trivalent)	<0.001	mg/L	-	5/09/23
Chromium (VI) Compounds	<0.01	mg/L	-	5/09/23
Copper	0.0011	mg/L	-	5/09/23
Iron	0.093	mg/L	-	5/09/23
Lead	<0.0002	mg/L	-	5/09/23
Manganese	0.0052	mg/L	-	5/09/23
Nickel	0.0006	mg/L	-	5/09/23
pH	8.08	pH units	-	5/09/23
Selenium	<0.001	mg/L	-	5/09/23
Total Suspended Solids	33	mg/L	-	5/09/23
Vanadium	0.0018	mg/L	-	5/09/23
Zinc	<0.005	mg/L	-	5/09/23
Dissolved Oxygen	11.08	mg/L	-	5/09/23
Field Temperature	21.0	degC	-	5/09/23
Salinity	35.3	ppt	-	5/09/23
Secchi Disk	3.0	m	-	5/09/23
Temperature – Average	20.09	deg C	-	Sep 2023
Temperature – Minimum	13.63	deg C	-	Sep 2023
Temperature - Maximum	24.18	deg C	-	Sep 2023

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	5/09/23
Iron	0.122	mg/L	0.3	5/09/23
Selenium	<0.001	mg/L	0.002	5/09/23
Temperature – Average	26.42	deg C	37.5	Sep 2023
Temperature – Minimum	21.44	deg C	37.5	Sep 2023
Temperature - Maximum	32.33	deg C	37.5	Sep 2023
Maximum Daily Discharge from Ash Dam	5.94	ML	150	Sep 2023
Monthly Discharge from Ash Dam	34.2	ML	-	Sep 2023

Emergency Discharge – Toe Drain Pond

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.011	mg/L	-	5/09/23
Ammonia	2.42	mg/L	-	5/09/23
Arsenic III	0.0013	mg/L	-	5/09/23
Arsenic V	<0.0005	mg/L	-	5/09/23
Cadmium	<0.00005	mg/L	-	5/09/23
Chromium (Trivalent)	<0.001	mg/L	-	5/09/23
Chromium (VI) Compounds	<0.01	mg/L	-	5/09/23
Copper	<0.0005	mg/L	-	5/09/23
Iron	4.34	mg/L	-	5/09/23
Lead	<0.0001	mg/L	-	5/09/23
Manganese	0.872	mg/L	-	5/09/23
Nickel	0.0017	mg/L	-	5/09/23
Nitrite and Nitrate as N	0.212	mg/L	-	5/09/23
Nitrogen	2.48	mg/L	-	5/09/23
pH	7.03	pH units	6-9.5	5/09/23
Phosphorus as P	0.131	mg/L	-	5/09/23
Reactive Phosphorus as P	0.012	mg/L	-	5/09/23
Selenium	0.0003	mg/L	-	5/09/23
Total Kjeldahl Nitrogen	2.27	mg/L	-	5/09/23
Total Suspended Solids	20	mg/L	50	5/09/23
Vanadium	0.0004	mg/L	-	5/09/23
Zinc	0.002	mg/L	-	5/09/23

MR217

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

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

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 Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Date
Aluminium	0.129	mg/L	18/09/2023
Ammonia	<0.01	mg/L	18/09/2023
Arsenic (III)	<0.0005	mg/L	18/09/2023
Arsenic (V)	<0.0005	mg/L	18/09/2023
Cadmium	<0.00005	mg/L	18/09/2023
Calcium	1	mg/L	18/09/2023
Chromium (trivalent)	<0.001	mg/L	18/09/2023
Chromium (VI) compounds	<0.01	mg/L	18/09/2023
Copper	0.0007	mg/L	18/09/2023
Electrical Conductivity	362	uS/cm	18/09/2023
Iron	0.091	mg/L	18/09/2023
Lead	0.0004	mg/L	18/09/2023
Magnesium	4	mg/L	18/09/2023
Manganese	0.107	mg/L	18/09/2023
Nickel	0.0040	mg/L	18/09/2023
pH	4.86	pH units	18/09/2023
Potassium	4	mg/L	18/09/2023
Selenium	<0.0002	mg/L	18/09/2023
Sodium	58	mg/L	18/09/2023
Standing Water Level	9.30	metres	18/09/2023
Vanadium	0.0002	mg/L	18/09/2023
Zinc	0.022	mg/L	18/09/2023

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	0.508	mg/L	20/09/2023
Ammonia	4.06	mg/L	20/09/2023
Arsenic (III)	0.0014	mg/L	20/09/2023
Arsenic (V)	<0.0005	mg/L	20/09/2023
Cadmium	0.00007	mg/L	20/09/2023
Calcium	355	mg/L	20/09/2023
Chromium (trivalent)	<0.001	mg/L	20/09/2023
Chromium (VI) compounds	<0.01	mg/L	20/09/2023
Copper	0.0021	mg/L	20/09/2023
Electrical Conductivity	16900	uS/cm	20/09/2023
Iron	8.58	mg/L	20/09/2023
Lead	0.0016	mg/L	20/09/2023
Magnesium	251	mg/L	20/09/2023
Manganese	1.18	mg/L	20/09/2023
Nickel	0.0035	mg/L	20/09/2023
pH	6.49	pH units	20/09/2023
Potassium	121	mg/L	20/09/2023
Selenium	0.0006	mg/L	20/09/2023
Sodium	2860	mg/L	20/09/2023
Standing Water Level	3.955	metres	20/09/2023
Vanadium	0.0034	mg/L	20/09/2023
Zinc	0.059	mg/L	20/09/2023

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminum	0.020	mg/L	18/09/2023
Ammonia	3.36	mg/L	18/09/2023
Arsenic (III)	0.0045	mg/L	18/09/2023
Arsenic (V)	0.0006	mg/L	18/09/2023
Cadmium	<0.00005	mg/L	18/09/2023
Calcium	489	mg/L	18/09/2023
Chromium (trivalent)	<0.001	mg/L	18/09/2023
Chromium (VI) compounds	<0.01	mg/L	18/09/2023
Copper	0.0007	mg/L	18/09/2023
Electrical Conductivity	19800	uS/cm	18/09/2023
Iron	14.6	mg/L	18/09/2023
Lead	0.0002	mg/L	18/09/2023
Magnesium	279	mg/L	18/09/2023
Manganese	0.390	mg/L	18/09/2023
Nickel	0.0006	mg/L	18/09/2023
pH	6.53	pH units	18/09/2023
Potassium	122	mg/L	18/09/2023
Selenium	0.0005	mg/L	18/09/2023
Sodium	3390	mg/L	18/09/2023
Standing Water Level	1.90	metres	18/09/2023
Vanadium	0.0013	mg/L	18/09/2023
Zinc	0.006	mg/L	18/09/2023

Groundwater Monitoring
Groundwater Well – EGM/D26

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