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

Environmental Monitoring Data October 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 3, 17, and 20-23 October 2023
SO_2 Data Invalidated 18-19 October 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 October	500	612	388	989	1139	806
2 October	535	648	418	1000	1152	788
3 October	-	-	-	-	-	-
4 October	594	672	488	829	1075	582
5 October	530	631	431	783	939	644
6 October	539	639	450	731	907	537
7 October	542	622	443	720	909	524
8 October	558	639	444	747	989	519
9 October	535	634	410	1007	1433	543
10 October	579	667	461	946	1033	837
11 October	538	602	448	1036	1250	780
12 October	503	575	419	1150	1520	772
13 October	501	603	405	910	1076	795
14 October	503	603	423	1047	1305	834
15 October	501	597	399	868	1009	743
16 October	554	658	420	1028	1376	753
17 October	-	-	-	-	-	-
18 October	538	605	457	-	-	-
19 October	535	657	412	-	-	-
20 October	-	-	-	-	-	-
21 October	-	-	-	-	-	-
22 October	-	-	-	-	-	-
23 October	-	-	-	-	-	-
24 October	534	632	398	867	1032	721
25 October	536	659	416	795	919	626
26 October	586	664	468	597	735	453
27 October	531	620	432	636	994	479
28 October	482	609	372	817	1113	484
29 October	482	603	403	864	1137	625
30 October	506	579	401	969	1279	725
31 October	565	615	508	811	981	586

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 17, 20, 23, and 25 October 2023
SO_2 Data Invalidated 24 and 26 October 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 October	441	499	389	1062	1128	1007
2 October	451	530	377	1269	1370	1063
3 October	449	513	396	1120	1257	940
4 October	472	525	436	989	1070	918
5 October	433	505	373	963	1000	906
6 October	448	515	377	953	985	914
7 October	466	524	406	972	1022	909
8 October	475	526	388	962	1064	892
9 October	435	495	366	1185	1370	943
10 October	475	568	389	1142	1346	1000
11 October	449	502	394	1196	1360	999
12 October	439	488	382	1237	1413	1062
13 October	430	496	369	1059	1160	978
14 October	435	489	399	1097	1301	920
15 October	429	491	370	978	1038	882
16 October	491	571	412	1151	1365	939
17 October	-	-	-	-	-	-
18 October	468	517	417	868	957	769
19 October	478	595	388	1184	1356	807
20 October	-	-	-	-	-	-
21 October	421	486	361	1340	1535	1149
22 October	404	447	359	1556	1699	1322
23 October	-	-	-	-	-	-
24 October	460	531	384	-	-	-
25 October	-	-	-	-	-	-
26 October	511	588	447	-	-	-
27 October	470	558	403	925	984	893
28 October	426	501	350	1126	1305	904
29 October	429	503	371	1052	1104	1011
30 October	448	543	383	1044	1136	999
31 October	462	517	401	944	1071	780

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Offline 1-31 October 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 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 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Offline 1-31 October 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 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 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Unit Data Invalidated 18 and 24 October 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 October	319	364	242	676	730	600
2 October	319	371	251	843	927	655
3 October	325	402	275	738	852	605
4 October	373	425	308	632	685	522
5 October	349	415	264	665	710	627
6 October	354	409	232	657	694	634
7 October	333	391	269	676	719	629
8 October	371	422	278	674	744	619
9 October	359	408	243	822	900	662
10 October	358	415	269	804	917	700
11 October	340	412	255	857	1024	712
12 October	322	398	259	850	956	726
13 October	339	389	273	678	754	619
14 October	350	407	278	715	837	631
15 October	329	389	237	641	702	594
16 October	333	379	276	752	868	592
17 October	353	396	278	791	928	683
18 October	-	-	-	-	-	-
19 October	338	436	237	817	973	556
20 October	364	423	272	721	943	666
21 October	337	415	274	853	956	765
22 October	321	367	242	1073	1184	946
23 October	329	401	272	839	935	790
24 October	-	-	-	-	-	-
25 October	356	434	282	659	704	628
26 October	387	436	301	641	681	609
27 October	402	484	291	733	872	627
28 October	395	454	289	862	1022	694
29 October	418	497	315	868	958	811
30 October	407	479	302	841	949	409
31 October	372	460	293	837	1043	692

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 and 30 October 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 October	317	358	252	691	766	622
2 October	316	362	260	837	969	710
3 October	324	375	263	754	878	661
4 October	380	401	335	627	674	564
5 October	332	385	248	674	750	603
6 October	331	363	235	625	702	581
7 October	331	380	285	658	743	586
8 October	360	400	272	655	775	568
9 October	342	374	244	796	965	620
10 October	335	362	271	758	826	700
11 October	309	351	232	824	959	625
12 October	312	387	250	856	1034	714
13 October	-	-	-	-	-	-
14 October	331	365	267	733	916	609
15 October	329	364	236	648	754	563
16 October	330	394	256	742	930	612
17 October	334	394	274	772	974	624
18 October	324	369	269	599	716	498
19 October	316	391	238	769	931	555
20 October	346	420	258	692	809	613
21 October	328	372	269	826	917	737
22 October	315	370	236	1060	1222	870
23 October	310	357	262	805	898	712
24 October	347	394	286	707	794	621
25 October	354	424	286	636	723	587
26 October	357	391	288	595	663	548
27 October	342	395	255	638	760	565
28 October	337	365	252	744	906	612
29 October	338	381	279	730	815	661
30 October	-	-	-	-	-	-
31 October	328	372	255	714	909	575

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 October	235	313	163	529	759	370
2 October	220	345	152	577	809	356
3 October	193	260	162	499	693	379
4 October	192	216	168	383	496	327
5 October	247	383	179	464	700	295
6 October	207	316	163	403	580	317
7 October	235	330	168	382	465	308
8 October	254	362	197	467	724	329
9 October	246	360	198	531	853	322
10 October	233	335	199	477	647	387
11 October	229	310	195	578	855	419
12 October	254	357	201	644	1005	403
13 October	293	397	204	545	697	370
14 October	297	385	232	619	906	409
15 October	293	389	200	508	700	367
16 October	266	385	193	591	916	359
17 October	238	327	185	522	714	403
18 October	260	383	193	430	612	289
19 October	240	309	187	527	813	289
20 October	256	381	188	507	644	378
21 October	270	345	201	719	937	417
22 October	283	365	199	858	1170	532
23 October	266	366	205	611	789	444
24 October	269	380	206	512	729	362
25 October	264	352	208	452	612	346
26 October	208	243	186	318	368	226
27 October	292	486	205	362	480	285
28 October	271	370	199	543	798	297
29 October	291	458	205	578	827	358
30 October	293	370	196	636	766	435
31 October	249	324	201	574	725	451

Unit 4B Boiler Continuous Emission Monitoring Summary

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

	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 October	309	361	256	706	849	605
2 October	308	350	276	847	1010	630
3 October	311	341	287	762	841	622
4 October	327	356	296	621	738	545
5 October	357	408	304	655	757	565
6 October	344	372	313	645	733	595
7 October	347	400	313	657	735	593
8 October	355	411	300	668	805	583
9 October	357	396	288	775	958	594
10 October	352	377	300	758	813	630
11 October	347	390	291	867	1034	713
12 October	367	408	329	866	1117	701
13 October	404	446	360	724	798	597
14 October	402	439	327	803	985	651
15 October	404	439	328	677	775	595
16 October	379	460	316	798	1016	583
17 October	313	341	281	806	982	609
18 October	352	418	296	601	727	479
19 October	350	405	311	760	987	477
20 October	339	381	275	712	947	593
21 October	329	382	281	955	1088	691
22 October	369	390	314	1111	1286	863
23 October	388	435	316	832	958	721
24 October	396	441	308	711	825	574
25 October	411	457	351	653	752	580
26 October	403	425	373	579	633	530
27 October	420	559	353	606	683	536
28 October	365	406	300	754	961	543
29 October	382	466	318	771	898	620
30 October	359	406	317	791	831	724
31 October	326	355	282	757	799	682

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	0.7	0.2	0.9
E4	18	0.7	0.2	0.9
E6	19	1.2	0.6	1.8
U6	20	0.5	0.1	0.6

Water Quality - Lake Monitoring LM10

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

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
19.88	0.5	21.45	8.29	36.6	92.5	6.34	2.25

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.041	mg/L	9/10/2023
Ammonia	<0.005	mg/L	9/10/2023
Arsenic III	<4	mg/	9/10/2023
Arsenic V	<4	mg/L	9/10/2023
Cadmium	<0.0002	mg/L	9/10/2023
Chromium (Trivalent)	<0.001	mg/L	9/10/2023
Chromium (VI) Compounds	<0.001	mg/L	9/10/2023
Copper	0.001	mg/L	9/10/2023
Iron	0.053	mg/L	9/10/2023
Lead	<0.0002	mg/L	9/10/2023
Manganese	0.0073	mg/L	9/10/2023
Nickel	0.0005	mg/L	9/10/2023
pH	8.16	pH units	9/10/2023
Selenium	<0.002	mg/L	9/10/2023
Total Suspended Solids	20	mg/L	9/10/2023
Vanadium	0.002	mg/L	9/10/2023
Zinc	<0.005	mg/L	9/10/2023

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

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
19.66	0.5	21.47	8.32	36.7	99.0	6.80	4.25

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.022	mg/L	9/10/2023
Ammonia	<0.01	mg/L	9/10/2023
Arsenic III	<4	mg/L	9/10/2023
Arsenic V	<4	mg/L	9/10/2023
Cadmium	<0.0002	mg/L	9/10/2023
Chromium (Trivalent)	<0.001	mg/L	9/10/2023
Chromium (VI) Compounds	<0.001	mg/L	9/10/2023
Copper	0.002	mg/L	9/10/2023
Iron	0.024	mg/L	9/10/2023
Lead	<0.0002	mg/L	9/10/2023
Manganese	0.0068	mg/L	9/10/2023
Nickel	0.0005	mg/L	9/10/2023
pH	8.2	pH units	9/10/2023
Selenium	<0.002	mg/L	9/10/2023
Total Suspended Solids	24	mg/L	9/10/2023
Vanadium	0.0024	mg/L	9/10/2023
Zinc	<0.005	mg/L	9/10/2023

Water Quality - Lake Monitoring LM4

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

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
17	0.5	19.69	8.38	37.5	104	7.33	4.75

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.019	mg/L	9/10/2023
Ammonia	<0.01	mg/L	9/10/2023
Arsenic III	<4	mg/L	9/10/2023
Arsenic V	<4	mg/L	9/10/2023
Cadmium	<0.0002	mg/L	9/10/2023
Chromium (Trivalent)	<0.001	mg/L	9/10/2023
Chromium (VI) Compounds	<0.001	mg/L	9/10/2023
Copper	<0.001	mg/L	9/10/2023
Iron	0.016	mg/L	9/10/2023
Lead	0.0003	mg/L	9/10/2023
Manganese	0.0054	mg/L	9/10/2023
Nickel	<0.0005	mg/L	9/10/2023
pH	8.18	pH units	9/10/2023
Selenium	<0.002	mg/L	9/10/2023
Total Suspended Solids	21	mg/L	9/10/2023
Vanadium	0.0016	mg/L	9/10/2023
Zinc	<0.005	mg/L	9/10/2023

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

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
19	0.5	24.31	8.21	36.8	106.4	6.93	3.25

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.036	mg/L	9/10/2023
Ammonia	<0.01	mg/L	9/10/2023
Arsenic III	<4	mg/L	9/10/2023
Arsenic V	<4	mg/L	9/10/2023
Cadmium	<0.0002	mg/L	9/10/2023
Chromium (Trivalent)	<0.001	mg/L	9/10/2023
Chromium (VI) Compounds	<0.001	mg/L	9/10/2023
Copper	0.001	mg/L	9/10/2023
Iron	0.055	mg/L	9/10/2023
Lead	<0.0002	mg/L	9/10/2023
Manganese	0.0084	mg/L	9/10/2023
Nickel	<0.0005	mg/L	9/10/2023
pH	8.16	pH units	9/10/2023
Selenium	<0.002	mg/L	9/10/2023
Total Suspended Solids	14	mg/L	9/10/2023
Vanadium	0.002	mg/L	9/10/2023
Zinc	<0.005	mg/L	9/10/2023

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	0.199	mg/L	-	5/10/23
Ammonia	0.94	mg/L	-	5/10/23
Arsenic III	<0.5	mg/L	-	5/10/23
Arsenic V	6.9	mg/L	-	5/10/23
Cadmium	0.00022	mg/L	-	5/10/23
Chromium (Trivalent)	<0.001	mg/L	-	5/10/23
Chromium (VI) Compounds	<0.01	mg/L	-	5/10/23
Copper	0.0052	mg/L	-	5/10/23
Iron	0.115	mg/L	-	5/10/23
Lead	0.0006	mg/L	-	5/10/23
Manganese	0.0289	mg/L	-	5/10/23
Nickel	0.0033	mg/L	-	5/10/23
Nitrite and Nitrate as N	7.31	mg/L	-	5/10/23
Nitrogen	9.6	mg/L	-	5/10/23
pH	8.37	pH units	-	5/10/23
Phosphorus as P	1.18	mg/L	-	5/10/23
Reactive Phosphorus as P	1.15	mg/L	-	5/10/23
Selenium	0.0368	mg/L	-	5/10/23
Total Kjeldahl Nitrogen	2.3	mg/L	-	5/10/23
Total Suspended Solids	27	mg/L	-	5/10/23
Vanadium	0.0592	mg/L	-	5/10/23
Zinc	0.004	mg/L	-	5/10/23

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	0.112	mg/L	-	5/10/23
Ammonia	<0.005	mg/L	-	5/10/23
Arsenic III	<4.0	mg/L	-	5/10/23
Arsenic V	<4.0	mg/L	-	5/10/23
Cadmium	<0.0002	mg/L	-	5/10/23
Chromium (Trivalent)	<0.001	mg/L	-	5/10/23
Chromium (VI) Compounds	<0.01	mg/L	-	5/10/23
Copper	0.0029	mg/L	-	5/10/23
Iron	0.162	mg/L	-	5/10/23
Lead	0.0002	mg/L	-	5/10/23
Manganese	0.0095	mg/L	-	5/10/23
Nickel	0.0007	mg/L	-	5/10/23
pH	8.17	pH units	-	5/10/23
Selenium	0.001	mg/L	-	5/10/23
Total Suspended Solids	20	mg/L	-	5/10/23
Vanadium	0.0024	mg/L	-	5/10/23
Zinc	<0.005	mg/L	-	5/10/23
Dissolved Oxygen	10	mg/L	-	5/10/23
Field Temperature	24	degC	-	5/10/23
Salinity	36	ppt	-	5/10/23
Secchi Disk	3	m	-	5/10/23
Temperature – Average	21.36	deg C	-	5/10/23
Temperature – Minimum	17.59	deg C	-	5/10/23
Temperature - Maximum	24.97	deg C	-	5/10/23

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0015	mg/L	0.005	5/10/2023
Iron	0.156	mg/L	0.3	5/10/2023
Selenium	<0.001	mg/L	0.002	5/10/2023
Temperature – Average	27.68	deg C	37.5	5/10/2023
Temperature – Minimum	21.44	deg C	37.5	5/10/2023
Temperature - Maximum	34.66	deg C	37.5	5/10/2023
Maximum Daily Discharge from Ash Dam	6.13	ML	150	5/10/2023
Monthly Discharge from Ash Dam	75.09	ML	-	5/10/2023

Emergency Discharge – Toe Drain Pond

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.025	mg/L	-	5/10/2023
Ammonia	1.94	mg/L	-	5/10/2023
Arsenic III	2.3	mg/L	-	5/10/2023
Arsenic V	1.1	mg/L	-	5/10/2023
Cadmium	<0.00005	mg/L	-	5/10/2023
Chromium (Trivalent)	<0.001	mg/L	-	5/10/2023
Chromium (VI) Compounds	<0.01	mg/L	-	5/10/2023
Copper	<0.0005	mg/L	-	5/10/2023
Iron	6.7	mg/L	-	5/10/2023
Lead	<0.0001	mg/L	-	5/10/2023
Manganese	0.868	mg/L	-	5/10/2023
Nickel	0.0013	mg/L	-	5/10/2023
Nitrite and Nitrate as N	0.26	mg/L	-	5/10/2023
Nitrogen	2.98	mg/L	-	5/10/2023
pH	6.93	pH units	6-9.5	5/10/2023
Phosphorus as P	0.266	mg/L	-	5/10/2023
Reactive Phosphorus as P	0.049	mg/L	-	5/10/2023
Selenium	0.0002	mg/L	-	5/10/2023
Total Kjeldahl Nitrogen	2.72	mg/L	-	5/10/2023
Total Suspended Solids	22	mg/L	50	5/10/2023
Vanadium	0.0009	mg/L	-	5/10/2023
Zinc	0.002	mg/L	-	5/10/2023

MR217

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

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