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

Environmental Monitoring Data July 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 10 and 17 July 2023
NOx Unit Data Invalidated 3 and 11 July 2023
SO_2 Unit Data Invalidated 14 July 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 July	558	656	460	819	988	714
2 July	545	636	463	778	833	707
3 July	-	-	-	807	907	659
4 July	589	672	503	775	892	655
5 July	557	656	436	800	951	619
6 July	551	621	466	755	844	671
7 July	557	648	486	782	907	703
8 July	516	572	452	829	942	664
9 July	495	562	409	832	937	684
10 July	-	-	-	-	-	-
11 July	-	-	-	912	1134	681
12 July	532	676	436	814	970	709
13 July	500	589	440	880	1000	727
14 July	566	678	461	-	-	-
15 July	576	722	437	875	1062	789
16 July	606	731	404	802	887	692
17 July	-	-	-	-	-	-
18 July	611	767	394	1007	1307	778
19 July	634	772	458	755	831	685
20 July	575	719	423	820	927	689
21 July	570	665	436	1033	1269	906
22 July	627	742	494	904	1122	790
23 July	544	620	423	853	958	733
24 July	556	637	450	968	1119	775
25 July	615	656	571	883	971	788
26 July	564	644	430	835	989	707
27 July	569	645	435	858	1020	717
28 July	559	646	424	866	974	715
29 July	537	601	441	918	1079	716
30 July	533	604	400	767	914	598
31 July	584	635	499	788	965	689

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 10 and 17 July 2023.
NOx Unit Data Invalidated 11-16, 18-19 and 27 July 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 July	533	623	447	1007	1147	945
2 July	523	607	440	955	1012	904
3 July	551	605	468	921	955	904
4 July	561	654	458	900	945	826
5 July	527	619	399	893	964	822
6 July	496	556	430	915	975	862
7 July	525	622	449	948	1008	872
8 July	488	576	404	994	1070	937
9 July	477	535	383	1005	1086	955
10 July	-	-	-	-	-	-
11 July	-	-	-	1041	1231	891
12 July	-	-	-	953	982	934
13 July	-	-	-	990	1053	953
14 July	-	-	-	993	1079	945
15 July	-	-	-	968	1003	932
16 July	-	-	-	930	964	911
17 July	-	-	-	-	-	-
18 July	-	-	-	1161	1477	915
19 July	-	-	-	936	994	910
20 July	515	635	367	996	1186	905
21 July	526	669	400	1174	1312	1068
22 July	570	702	416	1076	1338	1006
23 July	500	570	386	1046	1150	932
24 July	510	592	414	1120	1323	1004
25 July	548	594	512	967	997	934
26 July	501	588	390	977	1035	930
27 July	-	-	-	1014	1088	960
28 July	507	600	380	972	1019	922
29 July	502	571	407	1021	1150	861
30 July	488	548	360	903	967	846
31 July	529	572	440	928	962	858

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Data Invalidated 10 and 17 July 2023
NOx Unit Data Invalidated 1-3 July 2023
Unit 2A Offline 25-31 July 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 July	-	-	-	821	927	757
2 July	-	-	-	750	812	689
3 July	-	-	-	714	758	685
4 July	507	586	442	702	771	657
5 July	468	558	396	710	743	689
6 July	397	452	301	739	784	694
7 July	418	516	369	753	827	690
8 July	408	443	358	787	863	697
9 July	416	459	372	806	909	728
10 July	-	-	-	-	-	-
11 July	389	434	332	852	1105	710
12 July	396	437	345	757	875	714
13 July	377	431	346	779	876	726
14 July	405	435	350	781	863	736
15 July	406	451	368	759	809	708
16 July	416	460	314	743	814	711
17 July	-	-	-	-	-	-
18 July	412	485	328	903	1214	688
19 July	428	465	393	768	831	705
20 July	409	526	342	823	982	695
21 July	395	433	360	971	1199	852
22 July	413	499	379	889	1171	782
23 July	425	487	373	866	993	787
24 July	434	491	390	955	1186	843
25 July	-	-	-	-	-	-
26 July	-	-	-	-	-	-
27 July	-	-	-	-	-	-
28 July	-	-	-	-	-	-
29 July	-	-	-	-	-	-
30 July	-	-	-	-	-	-
31 July	-	-	-	-	-	-

Unit 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Unit Data Invalidated 9-10, 13, and 17 July 2023
NOx Unit Data Invalidated 1-3, 11, 15-16 and 18-20 July 2023
Unit 2B Offline 25-31 July 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 July	-	-	-	997	1132	924
2 July	-	-	-	900	979	833
3 July	-	-	-	873	900	846
4 July	669	781	581	862	941	815
5 July	587	682	509	893	957	864
6 July	510	574	445	927	1010	865
7 July	513	579	464	943	1093	856
8 July	494	550	454	996	1165	882
9 July	-	-	-	-	-	-
10 July	-	-	-	-	-	-
11 July	-	-	-	1104	1417	915
12 July	477	529	435	964	1121	914
13 July	-	-	-	-	-	-
14 July	440	466	354	880	939	824
15 July	-	-	-	856	908	807
16 July	-	-	-	834	867	797
17 July	-	-	-	-	-	-
18 July	-	-	-	1006	1277	802
19 July	-	-	-	845	943	791
20 July	-	-	-	897	1026	808
21 July	466	525	407	1098	1332	962
22 July	478	545	389	943	1257	833
23 July	479	536	373	916	1062	822
24 July	498	555	458	1011	1192	859
25 July	-	-	-	-	-	-
26 July	-	-	-	-	-	-
27 July	-	-	-	-	-	-
28 July	-	-	-	-	-	-
29 July	-	-	-	-	-	-
30 July	-	-	-	-	-	-
31 July	-	-	-	-	-	-

Unit 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Data Invalidated 6 July 2023
NOx Unit Data Invalidated 3, 13, 17-18, 20-21, 24 and 26 July 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 July	299	377	269	779	838	728
2 July	308	366	260	718	776	678
3 July	-	-	-	687	747	653
4 July	345	392	276	666	703	611
5 July	376	485	238	700	718	632
6 July	-	-	-	-	-	-
7 July	393	497	300	709	746	669
8 July	393	500	294	738	766	719
9 July	360	492	281	736	772	691
10 July	390	531	281	729	766	709
11 July	372	509	269	792	864	709
12 July	434	520	263	733	822	700
13 July	-	-	-	748	822	699
14 July	454	535	297	758	835	728
15 July	420	548	286	749	780	708
16 July	450	531	283	719	756	704
17 July	-	-	-	619	716	496
18 July	-	-	-	695	997	547
19 July	305	369	200	585	659	511
20 July	-	-	-	625	822	526
21 July	-	-	-	718	838	567
22 July	356	422	252	687	816	597
23 July	325	397	257	685	784	612
24 July	-	-	-	650	731	610
25 July	350	415	256	612	674	569
26 July	-	-	-	617	712	561
27 July	364	420	322	609	626	593
28 July	360	416	249	591	677	557
29 July	298	386	223	678	796	563
30 July	285	331	199	532	610	486
31 July	346	450	265	587	637	496

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Data Invalidated 6, 11, 17, 20, 24, and 30 July 2023
NOx Unit Data Invalidated 1-2, 5, 7, 15, 25, 27-28 and 31 July 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 July	-	-	-	736	791	685
2 July	-	-	-	691	754	651
3 July	329	394	271	649	687	625
4 July	350	416	276	639	677	590
5 July	-	-	-	664	681	633
6 July	-	-	-	-	-	-
7 July	-	-	-	676	710	640
8 July	391	500	294	702	726	682
9 July	364	504	294	704	735	668
10 July	-	-	-	695	733	670
11 July	-	-	-	-	-	-
12 July	452	551	277	700	751	670
13 July	424	511	268	687	708	663
14 July	439	524	262	675	686	649
15 July	-	-	-	683	705	654
16 July	455	548	288	660	676	651
17 July	-	-	-	-	-	-
18 July	375	522	247	682	970	546
19 July	299	352	246	566	701	487
20 July	-	-	-	-	-	-
21 July	342	387	254	713	851	591
22 July	369	426	272	678	840	572
23 July	359	438	291	719	807	632
24 July	-	-	-	-	-	-
25 July	-	-	-	620	710	547
26 July	370	460	251	616	702	567
27 July	-	-	-	610	646	589
28 July	-	-	-	599	687	547
29 July	309	355	239	685	795	554
30 July	-	-	-	-	-	-
31 July	-	-	-	587	641	535

Unit 4A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4A Offline 12-21 July 2023
SO_2 Unit Data Invalidated 22-23 July 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 July	401	438	359	704	835	621
2 July	405	444	347	657	691	614
3 July	431	453	389	639	675	589
4 July	445	498	369	610	657	561
5 July	433	475	378	585	632	512
6 July	413	455	350	625	685	549
7 July	405	469	364	648	697	583
8 July	392	432	337	655	699	576
9 July	396	441	344	676	725	589
10 July	411	468	375	652	679	597
11 July	379	430	275	681	842	471
12 July	-	-	-	-	-	-
13 July	-	-	-	-	-	-
14 July	-	-	-	-	-	-
15 July	-	-	-	-	-	-
16 July	-	-	-	-	-	-
17 July	-	-	-	-	-	-
18 July	-	-	-	-	-	-
19 July	-	-	-	-	-	-
20 July	-	-	-	-	-	-
21 July	-	-	-	-	-	-
22 July	286	396	194	-	-	-
23 July	253	370	184	-	-	-
24 July	227	376	196	346	449	203
25 July	273	421	161	335	488	215
26 July	256	430	171	358	670	199
27 July	245	385	192	366	638	228
28 July	224	267	169	357	485	217
29 July	246	364	169	443	684	261
30 July	285	537	166	372	615	219
31 July	246	377	188	353	551	197

Unit 4B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4A Offline 12-21 July 2023
NOx Unit Data Invalidated 28 July2023
SO_2 Unit Data Invalidated 26-27 and 29-30 July 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 July	463	520	365	781	954	698
2 July	467	557	342	721	760	641
3 July	516	553	390	711	752	628
4 July	521	562	376	673	720	608
5 July	531	581	446	649	692	551
6 July	448	539	337	676	755	584
7 July	441	522	332	704	755	620
8 July	424	503	307	703	749	616
9 July	418	511	313	740	782	626
10 July	442	530	337	709	750	610
11 July	406	498	274	744	953	448
12 July	-	-	-	-	-	-
13 July	-	-	-	-	-	-
14 July	-	-	-	-	-	-
15 July	-	-	-	-	-	-
16 July	-	-	-	-	-	-
17 July	-	-	-	-	-	-
18 July	-	-	-	-	-	-
19 July	-	-	-	-	-	-
20 July	-	-	-	-	-	-
21 July	-	-	-	-	-	-
22 July	385	482	295	658	776	411
23 July	405	502	293	707	827	556
24 July	481	573	360	848	1082	644
25 July	488	570	397	688	730	600
26 July	422	532	310	-	-	-
27 July	349	391	294	-	-	-
28 July	-	-	-	533	617	453
29 July	337	375	282	-	-	-
30 July	393	534	322	-	-	-
31 July	351	391	277	523	605	460

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	0.4	0.3	0.7
E4	18	0.8	2.0	2.8
E6	19	0.1	0.2	0.3
U6	20	0.6	0.8	1.4

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
17.61	0.5	15.41	8.76	35.1	94.1	7.31	2.5

Name	Reading	Units	Date
Aluminium	0.024	mg/L	4/07/2023
Ammonia	<0.01	mg/L	4/07/2023
Arsenic III	<0.004	mg/	4/07/2023
Arsenic V	<0.004	mg/L	4/07/2023
Cadmium	<0.0002	mg/L	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	4/07/2023
Chromium (VI) Compounds	<0.001	mg/L	4/07/2023
Copper	0.001	mg/L	4/07/2023
Iron	0.033	mg/L	4/07/2023
Lead	<0.0002	mg/L	4/07/2023
Manganese	0.0033	mg/L	4/07/2023
Nickel	0.0006	mg/L	4/07/2023
pH	8.13	pH units	4/07/2023
Selenium	<0.002	mg/L	4/07/2023
Total Suspended Solids	42	mg/L	4/07/2023
Vanadium	0.002	mg/L	4/07/2023
Zinc	<0.005	mg/L	4/07/2023

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
14.3	0.5	16.26	8.48	35.3	90.4	6.84	4.25

Name	Reading	Units	Date
Aluminium	0.030	mg/L	4/07/2023
Ammonia	<0.01	mg/L	4/07/2023
Arsenic III	<0.004	mg/L	4/07/2023
Arsenic V	<0.004	mg/L	4/07/2023
Cadmium	<0.0002	mg/L	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	4/07/2023
Chromium (VI) Compounds	<0.001	mg/L	4/07/2023
Copper	0.002	mg/L	4/07/2023
Iron	0.032	mg/L	4/07/2023
Lead	<0.0002	mg/L	4/07/2023
Manganese	0.0045	mg/L	4/07/2023
Nickel	0.0008	mg/L	4/07/2023
pH	8.11	pH units	4/07/2023
Selenium	<0.002	mg/L	4/07/2023
Total Suspended Solids	46	mg/L	4/07/2023
Vanadium	0.0033	mg/L	4/07/2023
Zinc	<0.005	mg/L	4/07/2023

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
14.5	0.5	15.31	7.88	35.7	92.1	7.19	7.75

Name	Reading	Units	Date
Aluminium	0.008	mg/L	4/07/2023
Ammonia	<0.01	mg/L	4/07/2023
Arsenic III	<0.004	mg/L	4/07/2023
Arsenic V	<0.004	mg/L	4/07/2023
Cadmium	<0.0002	mg/L	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	4/07/2023
Chromium (VI) Compounds	<0.001	mg/L	4/07/2023
Copper	<0.001	mg/L	4/07/2023
Iron	0.008	mg/L	4/07/2023
Lead	<0.0002	mg/L	4/07/2023
Manganese	0.0021	mg/L	4/07/2023
Nickel	<0.0005	mg/L	4/07/2023
pH	8.14	pH units	4/07/2023
Selenium	<0.002	mg/L	4/07/2023
Total Suspended Solids	44	mg/L	4/07/2023
Vanadium	0.0017	mg/L	4/07/2023
Zinc	<0.005	mg/L	4/07/2023

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
15.18	0.5	20.02	8.41	35.5	101.7	7.31	4.25

Name	Reading	Units	Date
Aluminium	0.028	mg/L	4/07/2023
Ammonia	<0.01	mg/L	4/07/2023
Arsenic III	<0.004	mg/L	4/07/2023
Arsenic V	<0.004	mg/L	4/07/2023
Cadmium	<0.0002	mg/L	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	4/07/2023
Chromium (VI) Compounds	<0.001	mg/L	4/07/2023
Copper	0.002	mg/L	4/07/2023
Iron	0.040	mg/L	4/07/2023
Lead	<0.0002	mg/L	4/07/2023
Manganese	0.0038	mg/L	4/07/2023
Nickel	0.0006	mg/L	4/07/2023
pH	8.13	pH units	4/07/2023
Selenium	<0.002	mg/L	4/07/2023
Total Suspended Solids	37	mg/L	4/07/2023
Vanadium	0.0021	mg/L	4/07/2023
Zinc	<0.005	mg/L	4/07/2023

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	0.53	mg/L	-	4/07/2023
Ammonia	1.60	mg/L	-	4/07/2023
Arsenic III	<0.0005	mg/L	-	4/07/2023
Arsenic V	0.0144	mg/L	-	4/07/2023
Cadmium	0.00018	mg/L	-	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	-	4/07/2023
Chromium (VI) Compounds	<0.01	mg/L	-	4/07/2023
Copper	0.0125	mg/L	-	4/07/2023
Iron	0.309	mg/L	-	4/07/2023
Lead	0.0006	mg/L	-	4/07/2023
Manganese	0.116	mg/L	-	4/07/2023
Nickel	0.0062	mg/L	-	4/07/2023
Nitrite and Nitrate as N	7.45	mg/L	-	4/07/2023
Nitrogen	9.6	mg/L	-	4/07/2023
pH	8.25	pH units	-	4/07/2023
Phosphorus as P	0.94	mg/L	-	4/07/2023
Reactive Phosphorus as P	0.96	mg/L	-	4/07/2023
Selenium	0.064	mg/L	-	4/07/2023
Total Kjeldahl Nitrogen	2.1	mg/L	-	4/07/2023
Total Suspended Solids	78	mg/L	-	4/07/2023
Vanadium	0.0763	mg/L	-	4/07/2023
Zinc	0.017	mg/L	-	4/07/2023

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	0.053	mg/L	-	4/07/2023
Ammonia	0.006	mg/L	-	4/07/2023
Arsenic III	<0.004	mg/L	-	4/07/2023
Arsenic V	<0.004	mg/L	-	4/07/2023
Cadmium	<0.0002	mg/L	-	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	-	4/07/2023
Chromium (VI) Compounds	<0.01	mg/L	-	4/07/2023
Copper	0.0012	mg/L	-	4/07/2023
Iron	0.078	mg/L	-	4/07/2023
Lead	<0.0002	mg/L	-	4/07/2023
Manganese	0.0037	mg/L	-	4/07/2023
Nickel	<0.0005	mg/L	-	4/07/2023
pH	8.12	pH units	-	4/07/2023
Selenium	<0.001	mg/L	-	4/07/2023
Total Suspended Solids	37	mg/L	-	4/07/2023
Vanadium	0.0020	mg/L	-	4/07/2023
Zinc	<0.005	mg/L	-	4/07/2023
Dissolved Oxygen	10.11	mg/L	-	4/07/2023
Field Temperature	17.3	degC	-	4/07/2023
Salinity	35.6	ppt	-	4/07/2023
Secchi Disk	3.75	m	-	4/07/2023
Temperature – Average	15.21	deg C	-	July2023
Temperature – Minimum	9.51	deg C	-	July2023
Temperature - Maximum	20.93	deg C	-	July2023

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	4/07/2023
Iron	0.056	mg/L	0.3	4/07/2023
Selenium	<0.001	mg/L	0.002	4/07/2023
Temperature – Average	23.21	deg C	37.5	July2023
Temperature – Minimum	18.09	deg C	37.5	July2023
Temperature - Maximum	27.22	deg C	37.5	July2023
Maximum Daily Discharge from Ash Dam	6.22	ML	150	July2023
Monthly Discharge from Ash Dam	41.18	ML	-	July2023

Emergency Discharge – Toe Drain Pond

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.014	mg/L	-	4/07/2023
Ammonia	1.87	mg/L	-	4/07/2023
Arsenic III	0.0029	mg/L	-	4/07/2023
Arsenic V	0.0015	mg/L	-	4/07/2023
Cadmium	<0.00005	mg/L	-	4/07/2023
Chromium (Trivalent)	<0.001	mg/L	-	4/07/2023
Chromium (VI) Compounds	<0.01	mg/L	-	4/07/2023
Copper	<0.0005	mg/L	-	4/07/2023
Iron	4.89	mg/L	-	4/07/2023
Lead	<0.0001	mg/L	-	4/07/2023
Manganese	0.794	mg/L	-	4/07/2023
Nickel	0.0015	mg/L	-	4/07/2023
Nitrite and Nitrate as N	0.163	mg/L	-	4/07/2023
Nitrogen	1.64	mg/L	-	4/07/2023
pH	6.91	pH units	6-9.5	4/07/2023
Phosphorus as P	0.254	mg/L	-	4/07/2023
Reactive Phosphorus as P	0.117	mg/L	-	4/07/2023
Selenium	0.0003	mg/L	-	4/07/2023
Total Kjeldahl Nitrogen	1.48	mg/L	-	4/07/2023
Total Suspended Solids	22	mg/L	50	4/07/2023
Vanadium	0.0007	mg/L	-	4/07/2023
Zinc	0.006	mg/L	-	4/07/2023

MR217

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

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

Name	Reading	Units	Licence Limit	Date
Aluminium		mg/L	-	4/07/2023
Ammonia		mg/L	-	4/07/2023
Arsenic III		mg/L	-	4/07/2023
Arsenic V		mg/L	-	4/07/2023
Cadmium		mg/L	-	4/07/2023
Chromium (Trivalent)		mg/L	-	4/07/2023
Chromium (VI) Compounds		mg/L	-	4/07/2023
Copper		mg/L	-	4/07/2023
Iron		mg/L	-	4/07/2023
Lead		mg/L	-	4/07/2023
Manganese		mg/L	-	4/07/2023
Nickel		mg/L	-	4/07/2023
Nitrite and Nitrate as N		mg/L	-	4/07/2023
Nitrogen		mg/L	-	4/07/2023
pH		pH units	6-9.5	4/07/2023
Phosphorus as P		mg/L	-	4/07/2023
Reactive Phosphorus as P		mg/L	-	4/07/2023
Selenium		mg/L	-	4/07/2023
Total Kjeldahl Nitrogen		mg/L	-	4/07/2023
Total Suspended Solids		mg/L	50	4/07/2023
Vanadium		mg/L	-	4/07/2023
Zinc		mg/L	-	4/07/2023

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	-