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

Environmental Monitoring Data December 2022



Unit 1A Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1A Unit Out of Service 1-20, 26-27 and 29 December 2022.

	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 December	-	-	-	-	-	-
2 December	-	-	-	-	-	-
3 December	-	-	-	-	-	-
4 December	-	-	-	-	-	-
5 December	-	-	-	-	-	-
6 December	-	-	-	-	-	-
7 December	-	-	-	-	-	-
8 December	-	-	-	-	-	-
9 December	-	-	-	-	-	-
10 December	-	-	-	-	-	-
11 December	-	-	-	-	-	-
12 December	-	-	-	-	-	-
13 December	-	-	-	-	-	-
14 December	-	-	-	-	-	-
15 December	-	-	-	-	-	-
16 December	-	-	-	-	-	-
17 December	-	-	-	-	-	-
18 December	-	-	-	-	-	-
19 December	-	-	-	-	-	-
20 December	-	-	-	-	-	-
21 December	453	558	355	671	746	537
22 December	411	491	347	704	771	592
23 December	409	483	328	726	914	650
24 December	411	464	357	807	962	725
25 December	371	400	341	755	854	674
26 December	-	-	-	-	-	-
27 December	-	-	-	-	-	-
28 December	357	384	332	757	809	659
29 December	-	-	-	-	-	-
30 December	369	423	344	870	974	798
31 December	361	372	350	668	924	513

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1B Unit Offline 1-19 December 2022.
NOx Unit Out of Service 20-22 December 2022

	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 December	-	-	-	-	-	-
2 December	-	-	-	-	-	-
3 December	-	-	-	-	-	-
4 December	-	-	-	-	-	-
5 December	-	-	-	-	-	-
6 December	-	-	-	-	-	-
7 December	-	-	-	-	-	-
8 December	-	-	-	-	-	-
9 December	-	-	-	-	-	-
10 December	-	-	-	-	-	-
11 December	-	-	-	-	-	-
12 December	-	-	-	-	-	-
13 December	-	-	-	-	-	-
14 December	-	-	-	-	-	-
15 December	-	-	-	-	-	-
16 December	-	-	-	-	-	-
17 December	-	-	-	-	-	-
18 December	-	-	-	-	-	-
19 December	-	-	-	-	-	-
20 December	-	-	-	774	835	726
21 December	-	-	-	759	803	722
22 December	-	-	-	751	800	709
23 December	367	476	281	731	777	688
24 December	348	383	307	794	820	760
25 December	331	349	306	829	864	799
26 December	317	361	272	862	918	823
27 December	309	344	263	788	847	743
28 December	316	344	280	818	859	790
29 December	328	376	282	789	821	756
30 December	317	367	242	873	942	751
31 December	258	296	224	788	865	711

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Out of Service 1 and 9-10 December 2022
NOx Unit Out of Service 2-5, 8 and 18-19 December 2022

	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 December	-	-	-	-	-	-
2 December	-	-	-	649	713	586
3 December	-	-	-	697	757	635
4 December	-	-	-	669	727	591
5 December	-	-	-	679	861	564
6 December	308	357	279	686	768	571
7 December	303	336	251	693	726	668
8 December	-	-	-	711	787	472
9 December	-	-	-	-	-	-
10 December	-	-	-	-	-	-
11 December	352	400	278	687	766	597
12 December	333	401	290	700	733	665
13 December	333	358	299	693	800	599
14 December	295	354	245	669	733	595
15 December	319	350	277	641	716	602
16 December	313	349	273	672	698	641
17 December	334	367	285	695	773	613
18 December	-	-	-	722	763	681
19 December	-	-	-	683	731	629
20 December	308	371	238	679	751	613
21 December	320	355	275	691	767	612
22 December	312	352	280	672	722	621
23 December	319	357	272	642	692	578
24 December	312	355	273	666	714	638
25 December	318	358	268	711	764	649
26 December	307	360	262	746	848	683
27 December	333	419	260	687	724	638
28 December	365	459	264	695	743	662
29 December	310	359	268	667	687	646
30 December	314	365	271	763	846	671
31 December	354	460	258	724	772	639

Unit 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Out of Service 1 and 9-10 December 2022
SO_2 Unit Out of Service 5 and 11-12 December 2022

	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 December	-	-	-	-	-	-
2 December	245	327	189	504	646	319
3 December	277	327	196	590	730	382
4 December	261	319	184	556	686	347
5 December	260	373	200	-	-	-
6 December	235	285	197	531	695	359
7 December	288	327	236	633	685	577
8 December	293	330	210	664	722	532
9 December	-	-	-	-	-	-
10 December	-	-	-	-	-	-
11 December	284	370	189	-	-	-
12 December	237	336	190	-	-	-
13 December	253	309	182	540	691	339
14 December	220	287	186	516	607	394
15 December	252	305	210	516	625	425
16 December	251	283	198	537	579	490
17 December	278	314	237	580	642	490
18 December	268	293	239	603	639	574
19 December	248	299	178	511	612	322
20 December	249	300	179	540	626	376
21 December	269	326	191	554	665	343
22 December	257	322	211	536	653	444
23 December	272	324	215	549	637	461
24 December	273	327	215	575	700	471
25 December	298	341	212	658	734	490
26 December	273	322	210	655	826	427
27 December	304	423	192	597	705	393
28 December	314	433	200	600	717	408
29 December	261	308	217	551	661	421
30 December	262	331	183	637	818	396
31 December	304	403	196	631	758	404

Unit 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Out of Service 12 and 18-19 December 2022
NOx Unit Out of Service 4-5, 7, 13-14, 16 and 23 December 2022

	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 December	322	370	272	738	905	660
2 December	361	422	302	692	754	657
3 December	377	453	260	706	756	675
4 December	-	-	-	693	734	658
5 December	-	-	-	722	814	660
6 December	338	396	272	717	765	660
7 December	-	-	-	685	717	654
8 December	336	434	240	698	761	646
9 December	360	415	273	713	797	649
10 December	377	505	322	706	769	665
11 December	378	415	312	725	744	700
12 December	-	-	-	-	-	-
13 December	-	-	-	735	800	680
14 December	-	-	-	687	718	664
15 December	341	381	308	688	728	640
16 December	-	-	-	694	721	668
17 December	400	423	375	710	757	662
18 December	-	-	-	-	-	-
19 December	-	-	-	-	-	-
20 December	316	398	213	641	752	421
21 December	360	413	287	700	779	643
22 December	339	386	264	680	734	646
23 December	-	-	-	676	695	660
24 December	376	428	316	738	773	692
25 December	346	369	310	785	812	755
26 December	388	458	335	801	895	724
27 December	388	445	339	758	801	720
28 December	395	475	323	737	768	693
29 December	376	465	313	729	760	705
30 December	334	414	275	800	833	731
31 December	348	397	308	802	858	761

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Out of Service 30 December 2022
SO_2 Unit Out of Service 14 December 2022

	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 December	311	387	275	696	847	623
2 December	351	424	283	656	723	615
3 December	363	432	268	659	690	630
4 December	319	390	288	647	694	623
5 December	323	417	243	679	750	621
6 December	337	412	283	666	697	632
7 December	328	377	255	640	665	618
8 December	323	396	287	651	697	619
9 December	340	398	269	661	735	602
10 December	336	439	284	652	710	608
11 December	339	416	294	665	685	650
12 December	307	325	281	679	695	660
13 December	336	383	265	690	749	641
14 December	308	348	260	-	-	-
15 December	308	363	264	631	666	595
16 December	329	351	290	634	656	616
17 December	353	369	320	651	687	605
18 December	344	358	323	655	682	628
19 December	371	443	319	651	666	621
20 December	312	368	270	648	679	619
21 December	304	399	216	600	675	430
22 December	305	358	245	632	678	611
23 December	321	393	262	625	649	596
24 December	332	404	293	677	698	658
25 December	304	338	278	714	734	698
26 December	348	451	297	732	805	695
27 December	335	408	287	688	727	667
28 December	352	451	295	668	686	647
29 December	348	435	289	666	690	647
30 December	-	-	-	-	-	-
31 December	316	342	285	730	769	689

Unit 4A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4A Out of Service 25-31 December 2022

	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 December	285	338	227	671	821	539
2 December	298	347	260	621	663	545
3 December	309	352	269	653	706	599
4 December	330	377	276	630	667	578
5 December	326	404	269	643	707	586
6 December	316	415	227	652	723	560
7 December	327	396	230	604	661	525
8 December	282	361	199	639	705	577
9 December	308	365	262	629	707	545
10 December	334	423	265	606	637	559
11 December	333	393	279	655	691	607
12 December	303	333	279	676	701	640
13 December	321	385	265	664	722	613
14 December	303	347	275	630	673	559
15 December	324	357	278	640	681	565
16 December	367	422	304	643	673	596
17 December	411	433	355	646	679	593
18 December	403	432	352	660	697	615
19 December	440	486	391	664	719	607
20 December	450	485	399	658	704	596
21 December	432	515	308	616	709	444
22 December	412	513	363	668	719	625
23 December	393	576	337	647	685	545
24 December	403	452	378	690	723	648
25 December	-	-	-	-	-	-
26 December	-	-	-	-	-	-
27 December	-	-	-	-	-	-
28 December	-	-	-	-	-	-
29 December	-	-	-	-	-	-
30 December	-	-	-	-	-	-
31 December	-	-	-	-	-	-

Unit 4B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4B Out of Service 25-31 December 2022
NOx Unit Out of Service 12, 14-15 and 17-23 December 2022
SO_2 Unit Out of Service 1-2 December 2022

	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 December	292	399	224	-	-	-
2 December	312	402	242	-	-	-
3 December	296	350	235	646	758	464
4 December	297	342	232	635	685	519
5 December	330	476	224	651	752	580
6 December	319	464	207	680	743	566
7 December	346	461	228	632	702	523
8 December	276	374	211	640	721	497
9 December	334	438	253	652	739	518
10 December	331	504	251	621	669	521
11 December	304	413	233	651	712	549
12 December	-	-	-	664	719	508
13 December	318	436	257	653	710	406
14 December	-	-	-	644	679	520
15 December	-	-	-	628	673	459
16 December	361	409	261	600	671	520
17 December	-	-	-	566	670	393
18 December	-	-	-	557	653	360
19 December	-	-	-	583	657	481
20 December	-	-	-	595	636	512
21 December	-	-	-	600	703	471
22 December	-	-	-	604	681	463
23 December				643	689	463
24 December	405	434	337	700	764	578
25 December	-	-	-	-	-	-
26 December	-	-	-	-	-	-
27 December	-	-	-	-	-	-
28 December	-	-	-	-	-	-
29 December	-	-	-	-	-	-
30 December	-	-	-	-	-	-
31 December	-	-	-	-	-	-

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	20/04/2022
Fluorine	8.6	mg/m^3	30	20/04/2022
Hydrogen chloride	2.8	mg/m^3	50	20/04/2022
Solid Particles	3.5	mg/m^3	50	20/04/2022
Sulfuric acid mist and sulfur trioxide (as SO3)	1.7	mg/m^3	100	20/04/2022
Volatile organic compounds as n-propane equivalent	<0.05	mg/m^3	10	20/04/2022
Cadmium	<0.0003	mg/m^3	0.2	26/07/2022
Mercury	<0.0002	mg/m^3	0.05	26/07/2022
Solid Particles	1.9	mg/m^3	50	26/07/2022
Type 1 and 2 substances in Aggregate	<0.02	mg/m^3	0.75	26/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	220	m3/sec		20/04/2022
Moisture	5.6	%		20/04/2022
Oxygen	9.8	%		20/04/2022
Solid Particles	4.5	mg/m3		20/04/2022
Temperature	116	degC		20/04/2022
Carbon dioxide	10.3	%		20/04/2022
Chlorine	<0.01	mg/m3		20/04/2022
Fluorine	8.6	mg/m3		20/04/2022
Hydrogen chloride	2.8	mg/m3		20/04/2022
Sulfuric acid mist and sulfur trioxide (as SO3)	1.7	mg/m3		20/04/2022
Volatile organic compounds as n-propane equivalent	<0.05	mg/m3		20/04/2022
Cadmium	<0.0003	mg/m3		26/07/2022
Flow Rate	330	m3/sec		26/07/2022
Mercury	<0.0002	mg/m3		26/07/2022
Moisture	5.4	%		26/07/2022
Oxygen	9.0	%		26/07/2022
Solid Particles	1.8	mg/m3		26/07/2022
Temperature	113	degC		26/07/2022
Type 1 and Type 2 substances in Aggregate	<0.012	mg/m3		26/07/2022
Carbon dioxide	13.1	%		26/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	270	m3/sec		20/04/2022
Moisture	4.1	%		20/04/2022
Oxygen	9.4	%		20/04/2022
Solid Particles	2.7	mg/m3		20/04/2022
Temperature	115	degC		20/04/2022
Carbon dioxide	11.2	%		20/04/2022
Cadmium	0.00026	mg/m3		26/07/2022
Flow Rate	330	m3/sec		26/07/2022
Mercury	<0.0002	mg/m3		26/07/2022
Moisture	4.2	%		26/07/2022
Oxygen	8.8	%		26/07/2022
Solid Particles	1.9	mg/m3		26/07/2022
Temperature	113	degC		26/07/2022
Type 1 and Type 2 substances in Aggregate	<0.03	mg/m3		26/07/2022
Carbon dioxide	11.1	%		26/07/2022

Unit 2 Boiler Emission Test Results

EPA Identification no. 4 - Air emissions monitoring, Boiler 2 stack discharge to air

Name	Reading	Units	Licence Limit	Date
Chlorine	<0.008	mg/m^3	20	21/04/2022
Fluorine	11	mg/m^3	30	21/04/2022
Hydrogen chloride	3.1	mg/m^3	50	21/04/2022
Solid Particles	11	mg/m^3	50	21/04/2022
Sulfuric acid mist and sulfur trioxide (as SO3)	2.5	mg/m^3	100	21/04/2022
Volatile organic compounds as n-propane equivalent	<0.06	mg/m^3	10	21/04/2022
Cadmium	<0.0003	mg/m^3	0.2	27/07/2022
Mercury	0.0013	mg/m^3	0.05	27/07/2022
Solid Particles	11	mg/m^3	50	27/07/2022
Type 1 and 2 substances in Aggregate	<0.02	mg/m^3	0.75	27/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	240	m3/sec		21/04/2022
Moisture	5.5	%		21/04/2022
Oxygen	8.9	%		21/04/2022
Solid Particles	9.7	mg/m3		21/04/2022
Temperature	125	degC		21/04/2022
Carbon dioxide	11.1	%		21/04/2022
Chlorine	<0.008	mg/m3		21/04/2022
Fluorine	11	mg/m3		21/04/2022
Hydrogen chloride	3.1	mg/m3		21/04/2022
Sulfuric acid mist and sulfur trioxide (as SO3)	2.5	mg/m3		21/04/2022
Volatile organic compounds as n-propane equivalent	<0.06	mg/m3		21/04/2022
Cadmium	<0.0003	mg/m3		27/07/2022
Flow Rate	260	m3/sec		27/07/2022
Mercury	0.0013	mg/m3		27/07/2022
Moisture	4.8	%		27/07/2022
Oxygen	9.8	%		27/07/2022
Solid Particles	14	mg/m3		27/07/2022
Temperature	120	degC		27/07/2022
Type 1 and Type 2 substances in Aggregate	<0.029	mg/m3		27/07/2022
Carbon dioxide	10.4	%		27/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	250	m3/sec		21/04/2022
Moisture	4.1	%		21/04/2022
Oxygen	10.6	%		21/04/2022
Solid Particles	12	mg/m3		21/04/2022
Temperature	107	degC		21/04/2022
Carbon dioxide	9.7	%		21/04/2022
Cadmium	<0.0002	mg/m3		27/07/2022
Flow Rate	250	m3/sec		27/07/2022
Mercury	0.0013	mg/m3		27/07/2022
Moisture	4.7	%		27/07/2022
Oxygen	10.2	%		27/07/2022
Solid Particles	8.7	mg/m3		27/07/2022
Temperature	110	degC		27/07/2022
Type 1 and Type 2 substances in Aggregate	<0.018	mg/m3		27/07/2022
Carbon dioxide	12.2	%		27/07/2022

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	22/04/2022
Fluorine	10	mg/m3	30	22/04/2022
Hydrogen chloride	4.8	mg/m3	50	22/04/2022
Solid Particles	7.2	mg/m3	50	22/04/2022
Sulfuric acid mist and sulfur trioxide (as SO3)	2.5	mg/m3	100	22/04/2022
Volatile organic compounds as n-propane equivalent	0.45	mg/m3	10	22/04/2022
Cadmium	<0.0003	mg/m3	0.2	28/07/2022
Mercury	0.00084	mg/m3	0.05	28/07/2022
Solid Particles	8.8	mg/m3	50	28/07/2022
Type 1 and 2 substances in Aggregate	<0.02	mg/m3	0.75	28/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	250	m3/sec		22/04/2022
Moisture	5.6	%		22/04/2022
Oxygen	9.3	%		22/04/2022
Solid Particles	7.8	mg/m3		22/04/2022
Temperature	109	degC		22/04/2022
Carbon dioxide	10.6	%		22/04/2022
Chlorine	<0.01	mg/m3		22/04/2022
Fluorine	10	mg/m3		22/04/2022
Hydrogen chloride	4.8	mg/m3		22/04/2022
Sulfuric acid mist and sulfur trioxide (as SO3)	2.5	mg/m3		22/04/2022
Volatile organic compounds as n-propane equivalent	0.45	mg/m3		22/04/2022
Cadmium	<0.0003	mg/m3		28/07/2022
Flow Rate	240	m3/sec		28/07/2022
Mercury	0.0014	mg/m3		28/07/2022
Moisture	5.0	%		28/07/2022
Oxygen	8.8	%		28/07/2022
Solid Particles	15	mg/m3		28/07/2022
Temperature	116	degC		28/07/2022
Type 1 and Type 2 substances in Aggregate	<0.019	mg/m3		28/07/2022
Carbon dioxide	13.2	%		28/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	230	m3/sec		22/04/2022
Moisture	4.9	%		22/04/2022
Oxygen	8.3	%		22/04/2022
Solid Particles	6.6	mg/m3		22/04/2022
Temperature	115	degC		22/04/2022
Carbon dioxide	11.6	%		22/04/2022
Cadmium	<0.0004	mg/m3		28/07/2022
Flow Rate	210	m3/sec		28/07/2022
Mercury	0.00022	mg/m3		28/07/2022
Moisture	5.1	%		28/07/2022
Oxygen	9.2	%		28/07/2022
Solid Particles	2.1	mg/m3		28/07/2022
Temperature	112	degC		28/07/2022
Type 1 and Type 2 substances in Aggregate	<0.024	mg/m3		28/07/2022
Carbon dioxide	10.8	%		28/07/2022

Unit 4 Boiler Emission Test Results

EPA Identification no. 6 - Air emissions monitoring, Boiler 4 stack discharge to air

Name	Reading	Units	Licence Limit	Date
Chlorine	0.01	mg/m3	20	7/04/2021
Fluorine	13	mg/m3	30	7/04/2021
Hydrogen chloride	2.7	mg/m3	50	7/04/2021
Solid Particles	6.2	mg/m3	50	29/06/2021
Sulfuric acid mist and sulfur trioxide (as SO3)	2.7	mg/m3	100	7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m3	10	7/04/2021
Cadmium	<0.0003	mg/m3	0.2	29/07/2022
Mercury	0.0011	mg/m3	0.05	29/07/2022
Solid Particles	2.4	mg/m3	50	29/07/2022
Type 1 and 2 substances in Aggregate	<0.02	mg/m3	0.75	29/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	500	m^3/sec		7/04/2021
Moisture	5.3	%		7/04/2021
Oxygen	10.4	%		7/04/2021
Solid Particles	9.5	mg/m^3		7/04/2021
Temperature	111	degC		7/04/2021
Carbon dioxide	10.4	%		7/04/2021
Chlorine	0.01	mg/m^3		7/04/2021
Fluorine	13	mg/m^3		7/04/2021
Hydrogen chloride	2.7	mg/m^3		7/04/2021
Sulfuric acid mist and sulfur trioxide (as SO3)	2.7	mg/m^3		7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m^3		7/04/2021
Cadmium	<0.0003	mg/m^3		29/07/2022
Flow Rate	240	m^3/sec		29/07/2022
Mercury	0.0011	mg/m^3		29/07/2022
Moisture	4.5	%		29/07/2022
Oxygen	10.8	%		29/07/2022
Solid Particles	1.5	mg/m^3		29/07/2022
Temperature	101	degC		29/07/2022
Type 1 and Type 2 substances in Aggregate	<0.026	mg/m^3		29/07/2022
Carbon dioxide	9.5	%		29/07/2022

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	400	m^3/sec		29/06/2021
Moisture	5.9	%		29/06/2021
Oxygen	6.9	%		29/06/2021
Solid Particles	2	mg/m^3		29/06/2021
Temperature	121	degC		29/06/2021
Carbon dioxide	13.4	%		29/06/2021
Cadmium	<0.0002	mg/m^3		29/07/2022
Flow Rate	240	m^3/sec		29/07/2022
Mercury	0.0011	mg/m^3		29/07/2022
Moisture	5.3	%		29/07/2022
Oxygen	8.8	%		29/07/2022
Solid Particles	3.3	mg/m^3		29/07/2022
Temperature	109	degC		29/07/2022
Type 1 and Type 2 substances in Aggregate	<0.017	mg/m^3		29/07/2022
Carbon dioxide	13.3	%		29/07/2022

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	0.5	0.5	1.0
E4	18	0.5	0.7	1.2
E6	19	0.6	1.0	1.6
U6	20	0.7	0.5	1.2

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
20.80	0.50	22.31	8.33	18.6	92.8	7.08	1.75

Name	Reading	Units	Date
Aluminium	0.026	mg/L	9/12/2022
Ammonia	<0.005	mg/L	9/12/2022
Arsenic III	<0.004	mg/	9/12/2022
Arsenic V	<0.004	mg/L	9/12/2022
Cadmium	<0.0002	mg/L	9/12/2022
Chromium (Trivalent)	<0.001	mg/L	9/12/2022
Chromium (VI) Compounds	<0.001	mg/L	9/12/2022
Copper	0.001	mg/L	9/12/2022
Iron	0.043	mg/L	9/12/2022
Lead	<0.0002	mg/L	9/12/2022
Manganese	0.0064	mg/L	9/12/2022
Nickel	<0.0005	mg/L	9/12/2022
pH	8.03	pH units	9/12/2022
Selenium	<0.002	mg/L	9/12/2022
Total Suspended Solids	31	mg/L	9/12/2022
Vanadium	0.0021	mg/L	9/12/2022
Zinc	<0.005	mg/L	9/12/2022

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
17.18	0.50	22.68	8.32	18.5	133.0	10.04	3.25

Name	Reading	Units	Date
Aluminium	0.017	mg/L	9/12/2022
Ammonia	<0.005	mg/L	9/12/2022
Arsenic III	<0.004	mg/L	9/12/2022
Arsenic V	<0.004	mg/L	9/12/2022
Cadmium	<0.0002	mg/L	9/12/2022
Chromium (Trivalent)	<0.001	mg/L	9/12/2022
Chromium (VI) Compounds	<0.001	mg/L	9/12/2022
Copper	0.001	mg/L	9/12/2022
Iron	0.023	mg/L	9/12/2022
Lead	<0.0002	mg/L	9/12/2022
Manganese	0.0049	mg/L	9/12/2022
Nickel	<0.0005	mg/L	9/12/2022
pH	8.02	pH units	9/12/2022
Selenium	<0.002	mg/L	9/12/2022
Total Suspended Solids	25	mg/L	9/12/2022
Vanadium	0.0024	mg/L	9/12/2022
Zinc	<0.005	mg/L	9/12/2022

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
15.90	0.50	21.38	8.46	18.8	114.2	8.84	3.25

Name	Reading	Units	Date
Aluminium	0.008	mg/L	9/12/2022
Ammonia	<0.005	mg/L	9/12/2022
Arsenic III	<0.004	mg/L	9/12/2022
Arsenic V	<0.004	mg/L	9/12/2022
Cadmium	<0.0002	mg/L	9/12/2022
Chromium (Trivalent)	<0.001	mg/L	9/12/2022
Chromium (VI) Compounds	<0.001	mg/L	9/12/2022
Copper	<0.001	mg/L	9/12/2022
Iron	0.007	mg/L	9/12/2022
Lead	0.0003	mg/L	9/12/2022
Manganese	0.0049	mg/L	9/12/2022
Nickel	<0.0005	mg/L	9/12/2022
pH	8.07	pH units	9/12/2022
Selenium	<0.002	mg/L	9/12/2022
Total Suspended Solids	48	mg/L	9/12/2022
Vanadium	0.0018	mg/L	9/12/2022
Zinc	<0.005	mg/L	9/12/2022

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
18.90	0.5	24.58	8.20	18.6	113.1	8.43	1.75

Name	Reading	Units	Date
Aluminium	0.052	mg/L	9/12/2022
Ammonia	<0.005	mg/L	9/12/2022
Arsenic III	<0.004	mg/L	9/12/2022
Arsenic V	<0.004	mg/L	9/12/2022
Cadmium	<0.0002	mg/L	9/12/2022
Chromium (Trivalent)	<0.001	mg/L	9/12/2022
Chromium (VI) Compounds	<0.001	mg/L	9/12/2022
Copper	0.001	mg/L	9/12/2022
Iron	0.086	mg/L	9/12/2022
Lead	<0.0002	mg/L	9/12/2022
Manganese	0.0072	mg/L	9/12/2022
Nickel	0.0005	mg/L	9/12/2022
pH	8.01	pH units	9/12/2022
Selenium	<0.002	mg/L	9/12/2022
Total Suspended Solids	29	mg/L	9/12/2022
Vanadium	0.0020	mg/L	9/12/2022
Zinc	<0.005	mg/L	9/12/2022

Eraring Ash Dam Effluent Quality Monitoring

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.060	mg/L	-	8/12/2022
Ammonia	0.62	mg/L	-	8/12/2022
Arsenic III	0.0024	mg/L	-	8/12/2022
Arsenic V	0.0081	mg/L	-	8/12/2022
Cadmium	0.00009	mg/L	-	8/12/2022
Chromium (Trivalent)	<0.001	mg/L	-	8/12/2022
Chromium (VI) Compounds	<0.01	mg/L	-	8/12/2022
Copper	0.0048	mg/L	-	8/12/2022
Iron	0.041	mg/L	-	8/12/2022
Lead	0.0002	mg/L	-	8/12/2022
Manganese	0.0510	mg/L	-	8/12/2022
Nickel	0.0027	mg/L	-	8/12/2022
Nitrite and Nitrate as N	0.29	mg/L	-	8/12/2022
Nitrogen	6.0	mg/L	-	8/12/2022
pH	8.24	pH units	-	8/12/2022
Phosphorus as P	1.08	mg/L	-	8/12/2022
Reactive Phosphorus as P	0.98	mg/L	-	8/12/2022
Selenium	0.0180	mg/L	-	8/12/2022
Total Kjeldahl Nitrogen	1.9	mg/L	-	8/12/2022
Total Suspended Solids	9	mg/L	-	8/12/2022
Vanadium	0.0331	mg/L	-	8/12/2022
Zinc	0.008	mg/L	-	8/12/2022

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	0.110	mg/L	-	8/12/2022
Ammonia	<0.005	mg/L	-	8/12/2022
Arsenic III	<0.004	mg/L	-	8/12/2022
Arsenic V	<0.004	mg/L	-	8/12/2022
Cadmium	<0.0002	mg/L	-	8/12/2022
Chromium (Trivalent)	<0.001	mg/L	-	8/12/2022
Chromium (VI) Compounds	<0.01	mg/L	-	8/12/2022
Copper	0.0008	mg/L	-	8/12/2022
Iron	0.181	mg/L	-	8/12/2022
Lead	<0.0002	mg/L	-	8/12/2022
Manganese	0.0067	mg/L	-	8/12/2022
Nickel	<0.0005	mg/L	-	8/12/2022
pH	7.98	pH units	-	8/12/2022
Selenium	<0.001	mg/L	-	8/12/2022
Total Suspended Solids	<5	mg/L	-	8/12/2022
Vanadium	0.0019	mg/L	-	8/12/2022
Zinc	0.006	mg/L	-	8/12/2022
Dissolved Oxygen	10.33	mg/L	-	8/12/2022
Field Temperature	22.6	degC	-	8/12/2022
Salinity	18.2	ppt	-	8/12/2022
Secchi Disk	2.5	m	-	8/12/2022
Temperature – Average	23.37	deg C	-	December 2022
Temperature – Minimum	20.59	deg C	-	December 2022
Temperature - Maximum	27.44	deg C	-	December 2022

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0025	mg/L	0.005	8/12/2022
Iron	0.542	mg/L	0.3	8/12/2022
Selenium	<0.001	mg/L	0.002	8/12/2022
Temperature – Average	27.99	deg C	37.5	December 2022
Temperature – Minimum	24.01	deg C	37.5	December 2022
Temperature - Maximum	34.80	deg C	37.5	December 2022
Maximum Daily Discharge from Ash Dam	6.01	ML	150	December 2022
Monthly Discharge from Ash Dam	50.29	ML	-	December 2022

Emergency Discharge – Toe Drain Pond

EPA Identification no. 24 - Emergency discharge to toe drain collection pond
No Discharge during December 2022, background sample only

Name	Reading	Units	Licence Limit	Date
Aluminium	0.009	mg/L	-	8/12/2022
Ammonia	2.65	mg/L	-	8/12/2022
Arsenic III	0.0014	mg/L	-	8/12/2022
Arsenic V	0.0006	mg/L	-	8/12/2022
Cadmium	<0.00005	mg/L	-	8/12/2022
Chromium (Trivalent)	<0.001	mg/L	-	8/12/2022
Chromium (VI) Compounds	<0.01	mg/L	-	8/12/2022
Copper	0.0006	mg/L	-	8/12/2022
Iron	3.27	mg/L	-	8/12/2022
Lead	<0.0001	mg/L	-	8/12/2022
Manganese	0.809	mg/L	-	8/12/2022
Nickel	0.0017	mg/L	-	8/12/2022
Nitrite and Nitrate as N	0.174	mg/L	-	8/12/2022
Nitrogen	2.54	mg/L	-	8/12/2022
pH	6.76	pH units	6-9.5	8/12/2022
Phosphorus as P	0.032	mg/L	-	8/12/2022
Reactive Phosphorus as P	0.030	mg/L	-	8/12/2022
Selenium	0.0004	mg/L	-	8/12/2022
Total Kjeldahl Nitrogen	2.37	mg/L	-	8/12/2022
Total Suspended Solids	16	mg/L	50	8/12/2022
Vanadium	0.0006	mg/L	-	8/12/2022
Zinc	0.002	mg/L	-	8/12/2022

MR217

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

MR217 did not discharge throughout December 2022

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	0.168	mg/L	15/12/2022
Ammonia	0.02	mg/L	15/12/2022
Arsenic (III)	<0.0005	mg/L	15/12/2022
Arsenic (V)	<0.0005	mg/L	15/12/2022
Cadmium	<0.00005	mg/L	15/12/2022
Calcium	2	mg/L	15/12/2022
Chromium (trivalent)	<0.01	mg/L	15/12/2022
Chromium (VI) compounds	<0.01	mg/L	15/12/2022
Copper	0.0010	mg/L	15/12/2022
Electrical Conductivity	433	uS/cm	15/12/2022
Iron	0.308	mg/L	15/12/2022
Lead	0.0009	mg/L	15/12/2022
Magnesium	5	mg/L	15/12/2022
Manganese	0.136	mg/L	15/12/2022
Nickel	0.0053	mg/L	15/12/2022
pH	4.84	pH units	15/12/2022
Potassium	4	mg/L	15/12/2022
Selenium	<0.0002	mg/L	15/12/2022
Sodium	68	mg/L	15/12/2022
Standing Water Level	8.115	metres	15/12/2022
Vanadium	0.0003	mg/L	15/12/2022
Zinc	0.024	mg/L	15/12/2022

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	1.02	mg/L	14/12/2022
Ammonia	1.09	mg/L	14/12/2022
Arsenic (III)	<0.001	mg/L	14/12/2022
Arsenic (V)	<0.001	mg/L	14/12/2022
Cadmium	<0.0002	mg/L	14/12/2022
Calcium	306	mg/L	14/12/2022
Chromium (trivalent)	<0.001	mg/L	14/12/2022
Chromium (VI) compounds	<0.001	mg/L	14/12/2022
Copper	<0.001	mg/L	14/12/2022
Electrical Conductivity	34300	uS/cm	14/12/2022
Iron	59.2	mg/L	14/12/2022
Lead	0.0016	mg/L	14/12/2022
Magnesium	639	mg/L	14/12/2022
Manganese	0.640	mg/L	14/12/2022
Nickel	<0.0005	mg/L	14/12/2022
pH	6.82	pH units	14/12/2022
Potassium	227	mg/L	14/12/2022
Selenium	<0.002	mg/L	14/12/2022
Sodium	6590	mg/L	14/12/2022
Standing Water Level	4.025	metres	14/12/2022
Vanadium	0.0032	mg/L	14/12/2022
Zinc	0.013	mg/L	14/12/2022

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminium	0.116	mg/L	14/12/2022
Ammonia	3.35	mg/L	14/12/2022
Arsenic (III)	<0.0005	mg/L	14/12/2022
Arsenic (V)	0.0006	mg/L	14/12/2022
Cadmium	<0.0002	mg/L	14/12/2022
Calcium	442	mg/L	14/12/2022
Chromium (trivalent)	<0.001	mg/L	14/12/2022
Chromium (VI) compounds	<0.001	mg/L	14/12/2022
Copper	<0.001	mg/L	14/12/2022
Electrical Conductivity	20400	uS/cm	14/12/2022
Iron	13.9	mg/L	14/12/2022
Lead	0.0005	mg/L	14/12/2022
Magnesium	251	mg/L	14/12/2022
Manganese	0.409	mg/L	14/12/2022
Nickel	0.0018	mg/L	14/12/2022
pH	6.63	pH units	14/12/2022
Potassium	113	mg/L	14/12/2022
Selenium	<0.002	mg/L	14/12/2022
Sodium	3370	mg/L	14/12/2022
Standing Water Level	1.940	metres	14/12/2022
Vanadium	0.0011	mg/L	14/12/2022
Zinc	0.045	mg/L	14/12/2022

Groundwater Monitoring
Groundwater Well – EGM/D26

EPA Identification no. 35 – Groundwater Monitoring Well D26
Groundwater well was dry during sampling in December 2022

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	-