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

Environmental Monitoring Data September 2022



Unit 1A Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1A Unit Offline 1-30 September 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 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 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1B Unit Offline 1-30 September 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 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 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Out of Service 3-6, 13 and 25-26 September 2022
NOx Unit Out of Service 12 and 28 September 2022
SO_2 Unit Out of Service 10 and 16 September 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 September	269	312	243	628	756	548
2 September	284	358	230	678	770	630
3 September	-	-	-	-	-	-
4 September	-	-	-	-	-	-
5 September	-	-	-	-	-	-
6 September	-	-	-	-	-	-
7 September	294	346	245	629	696	568
8 September	299	351	231	554	641	458
9 September	327	379	256	640	710	551
10 September	303	357	266	-	-	-
11 September	335	392	267	615	680	551
12 September	-	-	-	633	737	594
13 September	-	-	-	-	-	-
14 September	294	374	234	692	839	561
15 September	284	349	238	685	804	614
16 September	314	374	233	-	-	-
17 September	371	389	348	819	899	757
18 September	336	372	248	828	963	736
19 September	293	334	232	775	838	727
20 September	309	334	220	751	789	710
21 September	326	340	314	795	841	734
22 September	329	335	320	783	824	754
23 September	301	333	233	740	806	684
24 September	291	306	251	746	793	667
25 September	-	-	-	-	-	-
26 September	-	-	-	-	-	-
27 September	305	381	260	601	671	545
28 September	-	-	-	629	775	545
29 September	294	347	250	568	636	496
30 September	288	345	216	575	613	510

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 3-6 September 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 September	165	198	138	391	465	303
2 September	174	241	132	404	475	304
3 September	-	-	-	-	-	-
4 September	-	-	-	-	-	-
5 September	-	-	-	-	-	-
6 September	-	-	-	-	-	-
7 September	189	205	158	417	472	326
8 September	194	223	150	364	470	310
9 September	213	321	164	410	489	328
10 September	195	215	138	435	541	370
11 September	202	213	176	407	492	346
12 September	196	220	169	392	467	333
13 September	196	255	157	444	593	331
14 September	221	307	168	554	753	413
15 September	199	234	181	482	617	368
16 September	283	512	189	685	873	426
17 September	335	358	307	763	812	712
18 September	295	337	183	745	918	563
19 September	258	305	163	720	798	564
20 September	281	319	162	708	770	539
21 September	308	326	263	782	847	723
22 September	292	308	284	742	767	713
23 September	265	312	185	680	798	537
24 September	257	291	186	693	783	508
25 September	251	288	173	635	717	511
26 September	252	439	193	504	612	389
27 September	233	337	191	462	612	373
28 September	200	244	165	455	632	373
29 September	199	268	157	413	624	273
30 September	192	231	173	399	550	315

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 13 September 2022
NOx Unit Out of Service 1, 4, 16-19 and 21 September 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 September	-	-	-	838	940	736
2 September	328	428	285	871	1007	780
3 September	400	470	330	935	1013	819
4 September	-	-	-	822	916	746
5 September	333	399	264	742	790	696
6 September	334	407	282	848	925	767
7 September	340	433	287	849	931	743
8 September	353	425	301	788	881	730
9 September	314	358	229	857	996	695
10 September	311	403	266	808	911	680
11 September	367	448	281	771	831	690
12 September	353	428	266	760	834	689
13 September	-	-	-	-	-	-
14 September	338	447	271	765	838	694
15 September	321	376	256	791	915	698
16 September	-	-	-	829	985	698
17 September	-	-	-	812	856	738
18 September	-	-	-	846	1029	761
19 September	-	-	-	801	886	707
20 September	380	445	298	820	1003	716
21 September	-	-	-	828	888	778
22 September	320	408	218	813	873	712
23 September	333	452	237	810	926	705
24 September	379	446	297	803	873	745
25 September	355	417	289	770	859	716
26 September	358	433	263	657	738	587
27 September	385	435	318	713	759	654
28 September	360	435	292	764	829	665
29 September	375	472	247	681	753	615
30 September	375	428	273	676	732	626

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 13 and 30 September 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 September	263	328	237	703	776	633
2 September	269	316	233	737	810	675
3 September	297	320	264	757	774	688
4 September	297	337	268	673	734	641
5 September	279	350	236	634	671	598
6 September	276	338	241	725	813	668
7 September	280	353	218	722	815	638
8 September	287	342	242	673	741	618
9 September	285	325	247	773	820	678
10 September	267	326	239	712	786	593
11 September	300	345	246	679	742	630
12 September	306	396	237	697	746	547
13 September	-	-	-	-	-	-
14 September	300	370	244	724	806	659
15 September	293	352	221	744	854	655
16 September	300	367	233	756	941	537
17 September	284	307	261	785	819	724
18 September	401	548	318	827	1001	730
19 September	379	504	261	769	824	672
20 September	343	390	266	769	942	667
21 September	333	391	276	785	847	752
22 September	294	384	222	766	828	677
23 September	308	411	216	763	874	649
24 September	351	427	261	761	845	695
25 September	316	392	268	726	813	666
26 September	325	394	250	616	676	558
27 September	355	403	293	661	697	607
28 September	335	414	261	715	781	659
29 September	338	413	248	630	677	570
30 September	-	-	-	-	-	-

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 4 and 27-28 September 2022
NOx Unit Out of Service 16-17 September 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 September	320	383	278	701	788	637
2 September	314	378	277	725	810	640
3 September	331	378	283	783	829	707
4 September	-	-	-	-	-	-
5 September	275	360	173	601	691	409
6 September	320	393	261	702	820	594
7 September	328	376	294	745	837	644
8 September	330	395	276	641	740	540
9 September	312	356	279	739	782	687
10 September	304	373	260	709	770	636
11 September	311	368	269	685	764	643
12 September	337	410	284	689	748	637
13 September	321	374	282	677	758	638
14 September	313	356	244	688	776	610
15 September	281	326	262	668	776	560
16 September	-	-	-	714	790	614
17 September	-	-	-	762	799	717
18 September	292	323	152	727	909	341
19 September	293	319	247	737	817	628
20 September	281	318	239	750	809	668
21 September	304	335	274	729	785	678
22 September	309	350	274	740	799	674
23 September	339	401	301	713	789	620
24 September	377	426	318	714	776	643
25 September	355	382	327	675	738	620
26 September	352	417	316	637	707	544
27 September	-	-	-	-	-	-
28 September	-	-	-	-	-	-
29 September	294	452	190	547	692	396
30 September	386	520	253	730	1006	654

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 4, and 27-30 September 2022
SO_2 Unit Out of Service 5 and 21 September 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 September	317	388	223	744	863	636
2 September	298	409	224	752	846	527
3 September	303	372	249	696	868	476
4 September	-	-	-	-	-	-
5 September	303	391	239	-	-	-
6 September	322	399	235	799	947	628
7 September	341	409	247	830	907	570
8 September	337	445	251	690	804	477
9 September	326	402	236	766	845	579
10 September	310	391	255	745	827	511
11 September	308	381	220	721	807	616
12 September	335	445	207	731	784	612
13 September	330	420	251	708	778	588
14 September	303	343	239	708	836	588
15 September	293	323	198	715	811	555
16 September	335	452	224	758	867	567
17 September	290	349	233	775	872	603
18 September	301	344	147	768	976	205
19 September	281	336	198	754	858	568
20 September	273	361	206	774	826	557
21 September	326	367	232	-	-	-
22 September	312	353	260	766	861	671
23 September	337	416	260	748	850	560
24 September	392	453	295	742	804	610
25 September	380	463	288	704	796	496
26 September	333	390	295	658	737	532
27 September	-	-	-	-	-	-
28 September	-	-	-	-	-	-
29 September	-	-	-	-	-	-
30 September	-	-	-	-	-	-

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	0.8	0.3	1.1
E4	18	0.4	0.2	0.6
E6	19	2.0	2.7	4.7
U6	20	1.3	0.4	1.7

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
17.80	0.50	17.01	8.45	17.1	108.6	9.22	2.25

Name	Reading	Units	Date
Aluminium	0.080	mg/L	7/09/2022
Ammonia	<0.005	mg/L	7/09/2022
Arsenic III	<0.004	mg/	7/09/2022
Arsenic V	<0.004	mg/L	7/09/2022
Cadmium	<0.0002	mg/L	7/09/2022
Chromium (Trivalent)	<0.001	mg/L	7/09/2022
Chromium (VI) Compounds	<0.001	mg/L	7/09/2022
Copper	<0.001	mg/L	7/09/2022
Iron	0.071	mg/L	7/09/2022
Lead	<0.0002	mg/L	7/09/2022
Manganese	0.0055	mg/L	7/09/2022
Nickel	<0.0005	mg/L	7/09/2022
pH	8.03	pH units	7/09/2022
Selenium	<0.002	mg/L	7/09/2022
Total Suspended Solids	21	mg/L	7/09/2022
Vanadium	0.0022	mg/L	7/09/2022
Zinc	<0.005	mg/L	7/09/2022

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
17.80	0.50	18.50	8.41	16.9	103.6	8.38	3.25

Name	Reading	Units	Date
Aluminium	0.070	mg/L	7/09/2022
Ammonia	<0.005	mg/L	7/09/2022
Arsenic III	<0.004	mg/L	7/09/2022
Arsenic V	<0.004	mg/L	7/09/2022
Cadmium	<0.0002	mg/L	7/09/2022
Chromium (Trivalent)	<0.001	mg/L	7/09/2022
Chromium (VI) Compounds	<0.001	mg/L	7/09/2022
Copper	<0.001	mg/L	7/09/2022
Iron	0.051	mg/L	7/09/2022
Lead	<0.0002	mg/L	7/09/2022
Manganese	0.0067	mg/L	7/09/2022
Nickel	<0.0005	mg/L	7/09/2022
pH	8.04	pH units	7/09/2022
Selenium	<0.002	mg/L	7/09/2022
Total Suspended Solids	19	mg/L	7/09/2022
Vanadium	0.0025	mg/L	7/09/2022
Zinc	<0.005	mg/L	7/09/2022

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
-	0.50	16.12	8.42	17.7	123.4	10.62	4.00

Name	Reading	Units	Date
Aluminium	0.040	mg/L	7/09/2022
Ammonia	<0.005	mg/L	7/09/2022
Arsenic III	<0.004	mg/L	7/09/2022
Arsenic V	<0.004	mg/L	7/09/2022
Cadmium	<0.0002	mg/L	7/09/2022
Chromium (Trivalent)	<0.001	mg/L	7/09/2022
Chromium (VI) Compounds	<0.001	mg/L	7/09/2022
Copper	<0.001	mg/L	7/09/2022
Iron	0.033	mg/L	7/09/2022
Lead	<0.0002	mg/L	7/09/2022
Manganese	0.0039	mg/L	7/09/2022
Nickel	<0.0005	mg/L	7/09/2022
pH	8.07	pH units	7/09/2022
Selenium	<0.002	mg/L	7/09/2022
Total Suspended Solids	18	mg/L	7/09/2022
Vanadium	0.0019	mg/L	7/09/2022
Zinc	<0.005	mg/L	7/09/2022

Note: - Air Temp not recorded

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
16.00	0.5	18.17	8.36	16.4	105*	10.03	2.75

Name	Reading	Units	Date
Aluminium	0.111	mg/L	7/09/2022
Ammonia	<0.005	mg/L	7/09/2022
Arsenic III	<0.004	mg/L	7/09/2022
Arsenic V	<0.004	mg/L	7/09/2022
Cadmium	<0.0002	mg/L	7/09/2022
Chromium (Trivalent)	<0.001	mg/L	7/09/2022
Chromium (VI) Compounds	<0.001	mg/L	7/09/2022
Copper	<0.001	mg/L	7/09/2022
Iron	0.091	mg/L	7/09/2022
Lead	<0.0002	mg/L	7/09/2022
Manganese	0.0072	mg/L	7/09/2022
Nickel	<0.0005	mg/L	7/09/2022
pH	8.04	pH units	7/09/2022
Selenium	<0.002	mg/L	7/09/2022
Total Suspended Solids	20	mg/L	7/09/2022
Vanadium	0.0020	mg/L	7/09/2022
Zinc	<0.005	mg/L	7/09/2022

Note: * Calculated from Temp and DO mg/L

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	0.073	mg/L	-	1/09/2022
Ammonia	0.35	mg/L	-	1/09/2022
Arsenic III	<0.0005	mg/L	-	1/09/2022
Arsenic V	0.0031	mg/L	-	1/09/2022
Cadmium	0.00024	mg/L	-	1/09/2022
Chromium (Trivalent)	0.001	mg/L	-	1/09/2022
Chromium (VI) Compounds	<0.01	mg/L	-	1/09/2022
Copper	0.0027	mg/L	-	1/09/2022
Iron	0.065	mg/L	-	1/09/2022
Lead	<0.0001	mg/L	-	1/09/2022
Manganese	0.108	mg/L	-	1/09/2022
Nickel	0.0034	mg/L	-	1/09/2022
Nitrite and Nitrate as N	2.49	mg/L	-	1/09/2022
Nitrogen	3.7	mg/L	-	1/09/2022
pH	8.26	pH units	-	1/09/2022
Phosphorus as P	0.12	mg/L	-	1/09/2022
Reactive Phosphorus as P	0.09	mg/L	-	1/09/2022
Selenium	0.0212	mg/L	-	1/09/2022
Total Kjeldahl Nitrogen	1.2	mg/L	-	1/09/2022
Total Suspended Solids	8	mg/L	-	1/09/2022
Vanadium	0.0171	mg/L	-	1/09/2022
Zinc	0.004	mg/L	-	1/09/2022

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	0.076	mg/L	-	1/09/2022
Ammonia	<0.005	mg/L	-	1/09/2022
Arsenic III	<0.004	mg/L	-	1/09/2022
Arsenic V	<0.004	mg/L	-	1/09/2022
Cadmium	<0.0002	mg/L	-	1/09/2022
Chromium (Trivalent)	<0.001	mg/L	-	1/09/2022
Chromium (VI) Compounds	<0.01	mg/L	-	1/09/2022
Copper	0.0010	mg/L	-	1/09/2022
Iron	0.102	mg/L	-	1/09/2022
Lead	<0.0002	mg/L	-	1/09/2022
Manganese	0.0068	mg/L	-	1/09/2022
Nickel	<0.0005	mg/L	-	1/09/2022
pH	8.00	pH units	-	1/09/2022
Selenium	<0.001	mg/L	-	1/09/2022
Total suspended Solids	19	mg/L	-	1/09/2022
Vanadium	0.0017	mg/L	-	1/09/2022
Zinc	<0.005	mg/L	-	1/09/2022
Dissolved Oxygen	20.8	mg/L	-	16/09/2022
Field Temperature	17.9	degC	-	1/09/2022
Salinity	16.8	ppt	-	1/09/2022
Secchi Disk	2.25	m	-	1/09/2022
Temperature – Average	17.93	deg C	-	September 2022
Temperature – Minimum	16.00	deg C	-	September 2022
Temperature - Maximum	20.62	deg C	-	September 2022

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0016	mg/L	0.005	1/09/2022
Iron	0.257	mg/L	0.3	1/09/2022
Selenium	<0.001	mg/L	0.002	1/09/2022
Temperature – Average	24.02	deg C	37.5	September 2022
Temperature – Minimum	18.88	deg C	37.5	September 2022
Temperature - Maximum	28.87	deg C	37.5	September 2022
Maximum Daily Discharge from Ash Dam	21.65	ML	150	September 2022
Monthly Discharge from Ash Dam	197.83	ML	-	September 2022

Emergency Discharge – Toe Drain Pond

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.012	mg/L	-	1/09/2022
Ammonia	2.72	mg/L	-	1/09/2022
Arsenic III	0.0016	mg/L	-	1/09/2022
Arsenic V	0.0009	mg/L	-	1/09/2022
Cadmium	<0.00005	mg/L	-	1/09/2022
Chromium (Trivalent)	<0.001	mg/L	-	1/09/2022
Chromium (VI) Compounds	<0.01	mg/L	-	1/09/2022
Copper	<0.0005	mg/L	-	1/09/2022
Iron	5.78	mg/L	-	1/09/2022
Lead	<0.0001	mg/L	-	1/09/2022
Manganese	0.852	mg/L	-	1/09/2022
Nickel	0.0017	mg/L	-	1/09/2022
Nitrite and Nitrate as N	0.148	mg/L	-	1/09/2022
Nitrogen	2.73	mg/L	-	1/09/2022
pH	6.76	pH units	6-9.5	1/09/2022
Phosphorus as P	0.302	mg/L	-	1/09/2022
Reactive Phosphorus as P	0.012	mg/L	-	1/09/2022
Selenium	<0.0002	mg/L	-	1/09/2022
Total Kjeldahl Nitrogen	2.58	mg/L	-	1/09/2022
Total Suspended Solids	22	mg/L	50	1/09/2022
Vanadium	0.0006	mg/L	-	1/09/2022
Zinc	<0.001	mg/L	-	1/09/2022

MR217

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

MR217 did not discharge throughout September 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	0.463	mg/L	13/09/2022
Ammonia	0.02	mg/L	13/09/2022
Arsenic (III)	<0.0005	mg/L	13/09/2022
Arsenic (V)	<0.0005	mg/L	13/09/2022
Cadmium	<0.00005	mg/L	13/09/2022
Calcium	2	mg/L	13/09/2022
Chromium (trivalent)	<0.01	mg/L	13/09/2022
Chromium (VI) compounds	<0.01	mg/L	13/09/2022
Copper	0.0010	mg/L	13/09/2022
Electrical Conductivity	420	uS/cm	13/09/2022
Iron	0.608	mg/L	13/09/2022
Lead	0.0012	mg/L	13/09/2022
Magnesium	5	mg/L	13/09/2022
Manganese	0.143	mg/L	13/09/2022
Nickel	0.0047	mg/L	13/09/2022
pH	4.94	pH units	13/09/2022
Potassium	4	mg/L	13/09/2022
Selenium	<0.0002	mg/L	13/09/2022
Sodium	66	mg/L	13/09/2022
Standing Water Level	7.025	metres	13/09/2022
Vanadium	0.0009	mg/L	13/09/2022
Zinc	0.025	mg/L	13/09/2022

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	1.21	mg/L	3/09/2022
Ammonia	5.83	mg/L	3/09/2022
Arsenic (III)	<0.004	mg/L	3/09/2022
Arsenic (V)	<0.004	mg/L	3/09/2022
Cadmium	<0.0002	mg/L	3/09/2022
Calcium	312	mg/L	3/09/2022
Chromium (trivalent)	<0.01	mg/L	3/09/2022
Chromium (VI) compounds	<0.01	mg/L	3/09/2022
Copper	0.004	mg/L	3/09/2022
Electrical Conductivity	26500	uS/cm	3/09/2022
Iron	36.4	mg/L	3/09/2022
Lead	0.0033	mg/L	3/09/2022
Magnesium	471	mg/L	3/09/2022
Manganese	0.725	mg/L	3/09/2022
Nickel	0.0008	mg/L	3/09/2022
pH	6.33	pH units	3/09/2022
Potassium	171	mg/L	3/09/2022
Selenium	<0.002	mg/L	3/09/2022
Sodium	4900	mg/L	3/09/2022
Standing Water Level	4.065	metres	3/09/2022
Vanadium	0.0050	mg/L	3/09/2022
Zinc	0.040	mg/L	3/09/2022

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminium	0.103	mg/L	14/09/2022
Ammonia	3.14	mg/L	14/09/2022
Arsenic (III)	<0.004	mg/L	14/09/2022
Arsenic (V)	<0.004	mg/L	14/09/2022
Cadmium	<0.0002	mg/L	14/09/2022
Calcium	466	mg/L	14/09/2022
Chromium (trivalent)	<0.01	mg/L	14/09/2022
Chromium (VI) compounds	<0.01	mg/L	14/09/2022
Copper	<0.001	mg/L	14/09/2022
Electrical Conductivity	21100	uS/cm	14/09/2022
Iron	14.8	mg/L	14/09/2022
Lead	0.0005	mg/L	14/09/2022
Magnesium	270	mg/L	14/09/2022
Manganese	0.456	mg/L	14/09/2022
Nickel	0.0006	mg/L	14/09/2022
pH	6.55	pH units	14/09/2022
Potassium	119	mg/L	14/09/2022
Selenium	<0.002	mg/L	14/09/2022
Sodium	3430	mg/L	14/09/2022
Standing Water Level	1.795	metres	14/09/2022
Vanadium	0.0008	mg/L	14/09/2022
Zinc	0.019	mg/L	14/09/2022

Groundwater Monitoring
Groundwater Well – EGM/D26

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