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

Environmental Monitoring Data August 2022



Unit 1A Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1A Power Failure 6-8 August 2022
Unit 1A Out of Service 9-10, 15 and 18-31 August 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 August	453	488	411	595	684	528
2 August	454	528	413	504	577	436
3 August	420	467	344	519	593	481
4 August	436	480	410	516	615	403
5 August	434	509	356	520	618	401
6 August	-	-	-	-	-	-
7 August	-	-	-	-	-	-
8 August	-	-	-	-	-	-
9 August	-	-	-	-	-	-
10 August	-	-	-	-	-	-
11 August	456	562	369	659	768	565
12 August	433	484	334	634	718	555
13 August	430	465	397	617	724	518
14 August	475	519	426	626	787	513
15 August	-	-	-	-	-	-
16 August	458	528	402	629	705	546
17 August	433	516	388	621	708	568
18 August	-	-	-	-	-	-
19 August	-	-	-	-	-	-
20 August	-	-	-	-	-	-
21 August	-	-	-	-	-	-
22 August	-	-	-	-	-	-
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	-	-	-	-	-	-
26 August	-	-	-	-	-	-
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	-	-	-	-	-	-
30 August	-	-	-	-	-	-
31 August	-	-	-	-	-	-

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1B Power Failure 6-8 August 2022
SO_2 Unit Out of Service 9 August 2022
Unit 1B Out of Service 18-31 August 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 August	411	458	318	690	748	622
2 August	420	476	349	610	660	566
3 August	401	460	318	600	675	548
4 August	433	465	404	600	673	525
5 August	415	486	330	605	686	539
6 August	-	-	-	-	-	-
7 August	-	-	-	-	-	-
8 August	-	-	-	-	-	-
9 August	412	464	352	-	-	-
10 August	390	466	324	649	761	577
11 August	386	490	316	718	778	631
12 August	370	415	312	696	720	664
13 August	391	459	346	750	833	672
14 August	425	450	385	714	787	637
15 August	416	457	351	679	711	639
16 August	393	458	343	672	708	648
17 August	386	433	337	689	761	649
18 August	-	-	-	-	-	-
19 August	-	-	-	-	-	-
20 August	-	-	-	-	-	-
21 August	-	-	-	-	-	-
22 August	-	-	-	-	-	-
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	-	-	-	-	-	-
26 August	-	-	-	-	-	-
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	-	-	-	-	-	-
30 August	-	-	-	-	-	-
31 August	-	-	-	-	-	-

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 4, 6-8, 20-22 and 25 August 2022
NOx Unit Out of Service 11 and 27-29 August 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 August	381	435	320	556	605	512
2 August	379	410	363	495	517	481
3 August	372	444	292	486	526	458
4 August	-	-	-	-	-	-
5 August	415	502	308	475	560	380
6 August	-	-	-	-	-	-
7 August	-	-	-	-	-	-
8 August	-	-	-	-	-	-
9 August	427	480	358	540	616	496
10 August	383	492	274	550	631	509
11 August	-	-	-	631	660	611
12 August	296	361	252	585	648	542
13 August	275	322	252	585	633	523
14 August	310	335	264	568	632	511
15 August	321	362	272	532	556	502
16 August	307	351	270	536	551	514
17 August	292	352	259	543	582	515
18 August	259	319	161	527	608	342
19 August	291	346	253	565	623	521
20 August	-	-	-	-	-	-
21 August	-	-	-	-	-	-
22 August	-	-	-	-	-	-
23 August	300	342	247	562	632	498
24 August	294	338	251	557	589	522
25 August	-	-	-	-	-	-
26 August	301	330	267	505	526	483
27 August	-	-	-	646	734	507
28 August	-	-	-	756	866	652
29 August	-	-	-	680	770	596
30 August	308	402	233	637	686	582
31 August	288	358	252	582	622	511

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 6-8 and 27-29 August 2022
SO_2 Unit Out of Service 13-16 August 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 August	345	422	253	490	592	362
2 August	317	371	264	425	481	355
3 August	331	418	227	440	499	353
4 August	338	427	269	427	483	355
5 August	384	496	259	435	534	359
6 August	-	-	-	-	-	-
7 August	-	-	-	-	-	-
8 August	-	-	-	-	-	-
9 August	343	481	226	445	547	309
10 August	312	486	197	460	574	328
11 August	251	360	193	481	608	382
12 August	220	282	192	424	587	328
13 August	232	304	177	-	-	-
14 August	251	289	198	-	-	-
15 August	241	289	197	-	-	-
16 August	222	264	190	-	-	-
17 August	234	287	200	439	510	333
18 August	224	269	154	445	557	295
19 August	251	326	183	471	583	325
20 August	273	394	211	501	649	382
21 August	267	321	183	533	632	386
22 August	254	328	190	487	601	349
23 August	231	290	157	446	594	281
24 August	221	266	156	426	539	267
25 August	204	279	166	472	710	359
26 August	182	274	121	313	457	197
27 August	-	-	-	-	-	-
28 August	-	-	-	-	-	-
29 August	-	-	-	-	-	-
30 August	202	295	119	447	609	229
31 August	173	207	143	358	422	280

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 8, 23-24 and 28 August 2022
NOx Unit Out of Service 4, 7, 12-13, 17, 20, 26 and 29 August 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 August	327	427	285	655	685	621
2 August	317	363	285	606	666	563
3 August	321	398	279	599	634	568
4 August	-	-	-	553	593	492
5 August	331	435	288	620	699	489
6 August	350	377	292	576	666	534
7 August	-	-	-	565	595	541
8 August	-	-	-	-	-	-
9 August	318	363	263	666	725	605
10 August	290	380	257	628	743	566
11 August	284	381	238	702	789	653
12 August	-	-	-	667	690	640
13 August	-	-	-	688	752	625
14 August	296	322	271	677	735	602
15 August	305	385	262	638	662	617
16 August	297	349	257	613	642	578
17 August	-	-	-	645	697	610
18 August	319	460	261	662	702	639
19 August	357	467	282	662	686	630
20 August	-	-	-	688	718	657
21 August	293	345	260	686	717	631
22 August	306	407	254	675	716	627
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	323	387	277	793	888	676
26 August	-	-	-	677	705	648
27 August	329	368	272	841	955	676
28 August	-	-	-	-	-	-
29 August	-	-	-	872	970	766
30 August	357	455	284	806	868	756
31 August	330	387	261	742	798	700

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 23-24 and 30 August 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 August	292	362	249	586	610	553
2 August	296	326	254	547	597	511
3 August	300	373	258	538	572	512
4 August	279	297	261	498	528	445
5 August	299	383	270	555	630	448
6 August	289	313	248	512	552	483
7 August	281	313	259	504	526	484
8 August	281	339	239	609	668	540
9 August	281	318	238	594	644	542
10 August	277	366	233	567	673	516
11 August	265	338	224	632	680	590
12 August	250	290	217	610	640	587
13 August	254	280	240	615	664	560
14 August	258	299	240	605	652	542
15 August	279	342	243	579	598	566
16 August	277	350	226	568	584	547
17 August	268	311	239	590	639	565
18 August	288	423	211	615	649	576
19 August	332	457	262	625	649	600
20 August	301	362	264	650	669	621
21 August	263	292	241	651	681	600
22 August	279	367	245	641	673	601
23 August	-	-	-	-	-	-
24 August	-	-	-	-	-	-
25 August	274	314	246	685	757	596
26 August	303	420	234	582	592	561
27 August	267	296	230	690	798	572
28 August	260	372	230	760	832	709
29 August	296	336	254	729	798	650
30 August	-	-	-	-	-	-
31 August	273	335	236	620	662	606

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 23 August 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 August	361	417	289	612	653	566
2 August	352	428	309	541	571	504
3 August	333	398	274	533	572	502
4 August	306	341	274	507	531	447
5 August	324	362	264	541	641	429
6 August	347	402	303	535	638	471
7 August	355	405	301	512	549	480
8 August	334	397	290	602	680	498
9 August	363	406	308	551	651	483
10 August	339	394	289	582	658	531
11 August	336	389	303	640	667	611
12 August	352	414	317	618	659	585
13 August	389	490	322	615	673	538
14 August	350	421	307	602	666	567
15 August	335	433	283	567	584	550
16 August	359	440	304	569	588	546
17 August	352	406	311	579	652	531
18 August	343	446	294	621	692	579
19 August	340	396	290	613	654	572
20 August	371	448	281	635	678	601
21 August	358	399	293	643	702	597
22 August	351	480	295	606	646	559
23 August	-	-	-	-	-	-
24 August	258	397	166	481	678	353
25 August	353	503	291	712	916	580
26 August	339	406	278	572	636	523
27 August	368	443	282	675	767	564
28 August	315	343	277	773	847	700
29 August	332	384	281	719	795	650
30 August	278	360	240	661	701	616
31 August	284	369	248	627	670	581

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 23 August 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 August	364	448	280	632	710	526
2 August	344	449	292	558	603	443
3 August	328	382	257	537	592	429
4 August	311	362	266	513	556	420
5 August	322	353	271	561	660	381
6 August	307	357	253	544	648	444
7 August	320	361	274	512	571	354
8 August	339	444	225	594	728	297
9 August	341	409	252	570	673	461
10 August	309	394	214	605	690	515
11 August	308	405	218	677	720	560
12 August	305	414	223	636	712	502
13 August	364	484	281	631	722	510
14 August	342	427	268	620	678	488
15 August	325	467	243	589	643	484
16 August	341	440	228	585	627	451
17 August	324	390	242	606	651	504
18 August	315	477	205	644	687	493
19 August	326	422	239	643	687	538
20 August	351	426	218	651	710	544
21 August	336	397	259	649	693	572
22 August	327	494	214	623	679	449
23 August	-	-	-	-	-	-
24 August	311	423	219	625	753	458
25 August	341	421	257	757	961	574
26 August	333	437	251	588	680	303
27 August	361	440	261	723	857	538
28 August	292	337	212	810	941	465
29 August	330	398	218	758	870	631
30 August	292	388	214	699	750	569
31 August	280	350	211	669	717	548

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	0.2	0.4	0.6
E4	18	0.3	0.4	0.7
E6	19	1.0	0.5	1.5
U6	20	1.2	0.5	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
14.00	0.50	15.14	8.46	15.2	107.3	9.60	1.38

Name	Reading	Units	Date
Aluminium	0.096	mg/L	1/08/2022
Ammonia	<0.005	mg/L	1/08/2022
Arsenic III	<0.004	mg/	1/08/2022
Arsenic V	<0.004	mg/L	1/08/2022
Cadmium	<0.0002	mg/L	1/08/2022
Chromium (Trivalent)	<0.001	mg/L	1/08/2022
Chromium (VI) Compounds	<0.001	mg/L	1/08/2022
Copper	0.001	mg/L	1/08/2022
Iron	0.127	mg/L	1/08/2022
Lead	<0.0002	mg/L	1/08/2022
Manganese	0.0098	mg/L	1/08/2022
Nickel	0.0006	mg/L	1/08/2022
pH	8.21	pH units	1/08/2022
Selenium	<0.002	mg/L	1/08/2022
Total Suspended Solids	47	mg/L	1/08/2022
Vanadium	0.0019	mg/L	1/08/2022
Zinc	<0.005	mg/L	1/08/2022

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
14.00	0.50	16.26	8.43	15.6	136.9	11.96	2.21

Name	Reading	Units	Date
Aluminium	0.040	mg/L	1/08/2022
Ammonia	<0.005	mg/L	1/08/2022
Arsenic III	<0.004	mg/L	1/08/2022
Arsenic V	<0.004	mg/L	1/08/2022
Cadmium	<0.0002	mg/L	1/08/2022
Chromium (Trivalent)	<0.001	mg/L	1/08/2022
Chromium (VI) Compounds	<0.001	mg/L	1/08/2022
Copper	0.001	mg/L	1/08/2022
Iron	0.031	mg/L	1/08/2022
Lead	<0.0002	mg/L	1/08/2022
Manganese	0.0066	mg/L	1/08/2022
Nickel	0.0005	mg/L	1/08/2022
pH	8.16	pH units	1/08/2022
Selenium	<0.002	mg/L	1/08/2022
Total Suspended Solids	43	mg/L	1/08/2022
Vanadium	0.0016	mg/L	1/08/2022
Zinc	<0.005	mg/L	1/08/2022

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
13.00	0.50	14.20	8.43	15.9	125.0	11.28	2.25

Name	Reading	Units	Date
Aluminium	0.033	mg/L	1/08/2022
Ammonia	<0.005	mg/L	1/08/2022
Arsenic III	<0.004	mg/L	1/08/2022
Arsenic V	<0.004	mg/L	1/08/2022
Cadmium	0.0002	mg/L	1/08/2022
Chromium (Trivalent)	<0.001	mg/L	1/08/2022
Chromium (VI) Compounds	<0.001	mg/L	1/08/2022
Copper	0.001	mg/L	1/08/2022
Iron	0.018	mg/L	1/08/2022
Lead	0.0002	mg/L	1/08/2022
Manganese	0.0080	mg/L	1/08/2022
Nickel	<0.0005	mg/L	1/08/2022
pH	8.12	pH units	1/08/2022
Selenium	<0.002	mg/L	1/08/2022
Total Suspended Solids	41	mg/L	1/08/2022
Vanadium	0.0014	mg/L	1/08/2022
Zinc	<0.005	mg/L	1/08/2022

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
14.00	0.5	16.53	8.40	15.8	113.3	9.78	2.25

Name	Reading	Units	Date
Aluminium	0.035	mg/L	1/08/2022
Ammonia	<0.005	mg/L	1/08/2022
Arsenic III	<0.004	mg/L	1/08/2022
Arsenic V	<0.004	mg/L	1/08/2022
Cadmium	<0.0002	mg/L	1/08/2022
Chromium (Trivalent)	<0.001	mg/L	1/08/2022
Chromium (VI) Compounds	<0.001	mg/L	1/08/2022
Copper	<0.001	mg/L	1/08/2022
Iron	0.026	mg/L	1/08/2022
Lead	<0.0002	mg/L	1/08/2022
Manganese	0.0070	mg/L	1/08/2022
Nickel	0.0007	mg/L	1/08/2022
pH	8.15	pH units	1/08/2022
Selenium	<0.002	mg/L	1/08/2022
Total Suspended Solids	37	mg/L	1/08/2022
Vanadium	0.0017	mg/L	1/08/2022
Zinc	<0.005	mg/L	1/08/2022

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	0.302	mg/L	-	4/08/2022
Ammonia	0.75	mg/L	-	4/08/2022
Arsenic III	<0.0005	mg/L	-	4/08/2022
Arsenic V	0.0054	mg/L	-	4/08/2022
Cadmium	0.00005	mg/L	-	4/08/2022
Chromium (Trivalent)	<0.001	mg/L	-	4/08/2022
Chromium (VI) Compounds	<0.01	mg/L	-	4/08/2022
Copper	0.0019	mg/L	-	4/08/2022
Iron	0.138	mg/L	-	4/08/2022
Lead	0.0002	mg/L	-	4/08/2022
Manganese	0.162	mg/L	-	4/08/2022
Nickel	0.0002	mg/L	-	4/08/2022
Nitrite and Nitrate as N	3.18	mg/L	-	4/08/2022
Nitrogen	4.9	mg/L	-	4/08/2022
pH	8.38	pH units	-	4/08/2022
Phosphorus as P	0.13	mg/L	-	4/08/2022
Reactive Phosphorus as P	0.08	mg/L	-	4/08/2022
Selenium	0.0268	mg/L	-	4/08/2022
Total Kjeldahl Nitrogen	1.7	mg/L	-	4/08/2022
Total Suspended Solids	64	mg/L	-	4/08/2022
Vanadium	0.0462	mg/L	-	4/08/2022
Zinc	0.003	mg/L	-	4/08/2022

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	0.308	mg/L	-	4/08/2022
Ammonia	<0.005	mg/L	-	4/08/2022
Arsenic III	<0.004	mg/L	-	4/08/2022
Arsenic V	<0.004	mg/L	-	4/08/2022
Cadmium	<0.0002	mg/L	-	4/08/2022
Chromium (Trivalent)	<0.001	mg/L	-	4/08/2022
Chromium (VI) Compounds	<0.01	mg/L	-	4/08/2022
Copper	0.0010	mg/L	-	4/08/2022
Iron	0.175	mg/L	-	4/08/2022
Lead	<0.0002	mg/L	-	4/08/2022
Manganese	0.0097	mg/L	-	4/08/2022
Nickel	0.0015	mg/L	-	4/08/2022
pH	8.05	pH units	-	4/08/2022
Selenium	<0.001	mg/L	-	4/08/2022
Total suspended Solids	30	mg/L	-	4/08/2022
Vanadium	0.0018	mg/L	-	4/08/2022
Zinc	<0.005	mg/L	-	4/08/2022
Dissolved Oxygen	12.07	mg/L	-	4/08/2022
Field Temperature	15.0	degC	-	4/08/2022
Salinity	15.4	ppt	-	4/08/2022
Secchi Disk	2.25	m	-	4/08/2022
Temperature – Average	15.90	deg C	-	August 2022
Temperature – Minimum	14.79	deg C	-	August 2022
Temperature - Maximum	18.23	deg C	-	August 2022

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0012	mg/L	0.005	4/08/2022
Iron	0.162	mg/L	0.3	4/08/2022
Selenium	<0.001	mg/L	0.002	4/08/2022
Temperature – Average	21.57	deg C	37.5	August 2022
Temperature – Minimum	18.49	deg C	37.5	August 2022
Temperature - Maximum	27.97	deg C	37.5	August 2022
Maximum Daily Discharge from Ash Dam	24.90	ML	150	August 2022
Monthly Discharge from Ash Dam	190.73	ML	-	August 2022

Emergency Discharge – Toe Drain Pond

EPA Identification no. 24 - Emergency discharge to toe drain collection pond
No Discharge during August2022, background sample only

Name	Reading	Units	Licence Limit	Date
Aluminium	0.014	mg/L	-	4/08/2022
Ammonia	2.37	mg/L	-	4/08/2022
Arsenic III	0.0012	mg/L	-	4/08/2022
Arsenic V	<0.0005	mg/L	-	4/08/2022
Cadmium	<0.00005	mg/L	-	4/08/2022
Chromium (Trivalent)	<0.001	mg/L	-	4/08/2022
Chromium (VI) Compounds	<0.01	mg/L	-	4/08/2022
Copper	<0.0005	mg/L	-	4/08/2022
Iron	5.08	mg/L	-	4/08/2022
Lead	<0.0001	mg/L	-	4/08/2022
Manganese	0.776	mg/L	-	4/08/2022
Nickel	0.0009	mg/L	-	4/08/2022
Nitrite and Nitrate as N	0.164	mg/L	-	4/08/2022
Nitrogen	2.54	mg/L	-	4/08/2022
pH	6.75	pH units	6-9.5	4/08/2022
Phosphorus as P	0.165	mg/L	-	4/08/2022
Reactive Phosphorus as P	0.036	mg/L	-	4/08/2022
Selenium	<0.0002	mg/L	-	4/08/2022
Total Kjeldahl Nitrogen	2.38	mg/L	-	4/08/2022
Total Suspended Solids	22	mg/L	50	4/08/2022
Vanadium	0.0004	mg/L	-	4/08/2022
Zinc	0.002	mg/L	-	4/08/2022

MR217

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

MR217 did not discharge throughout August 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	0.178	mg/L	8/06/2022
Ammonia	<0.01	mg/L	8/06/2022
Arsenic (III)	<0.0005	mg/L	8/06/2022
Arsenic (V)	<0.0005	mg/L	8/06/2022
Cadmium	<0.00005	mg/L	8/06/2022
Calcium	2	mg/L	8/06/2022
Chromium (trivalent)	<0.01	mg/L	8/06/2022
Chromium (VI) compounds	<0.01	mg/L	8/06/2022
Copper	0.0010	mg/L	8/06/2022
Electrical Conductivity	441	uS/cm	8/06/2022
Iron	0.408	mg/L	8/06/2022
Lead	0.0008	mg/L	8/06/2022
Magnesium	5	mg/L	8/06/2022
Manganese	0.120	mg/L	8/06/2022
Nickel	0.0044	mg/L	8/06/2022
pH	4.85	pH units	8/06/2022
Potassium	4	mg/L	8/06/2022
Selenium	<0.0002	mg/L	8/06/2022
Sodium	66	mg/L	8/06/2022
Standing Water Level	6.720	metres	8/06/2022
Vanadium	0.0003	mg/L	8/06/2022
Zinc	0.022	mg/L	8/06/2022

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	0.091	mg/L	7/06/2022
Ammonia	3.22	mg/L	7/06/2022
Arsenic (III)	0.0055	mg/L	7/06/2022
Arsenic (V)	<0.0005	mg/L	7/06/2022
Cadmium	<0.00005	mg/L	7/06/2022
Calcium	239	mg/L	7/06/2022
Chromium (trivalent)	<0.001	mg/L	7/06/2022
Chromium (VI) compounds	<0.010	mg/L	7/06/2022
Copper	0.0006	mg/L	7/06/2022
Electrical Conductivity	16400	uS/cm	7/06/2022
Iron	8.76	mg/L	7/06/2022
Lead	0.0004	mg/L	7/06/2022
Magnesium	237	mg/L	7/06/2022
Manganese	0.858	mg/L	7/06/2022
Nickel	0.0008	mg/L	7/06/2022
pH	6.44	pH units	7/06/2022
Potassium	106	mg/L	7/06/2022
Selenium	0.0003	mg/L	7/06/2022
Sodium	2770	mg/L	7/06/2022
Standing Water Level	4.015	metres	7/06/2022
Vanadium	0.0017	mg/L	7/06/2022
Zinc	0.007	mg/L	7/06/2022

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminium	0.011	mg/L	7/06/2022
Ammonia	3.13	mg/L	7/06/2022
Arsenic (III)	0.0054	mg/L	7/06/2022
Arsenic (V)	0.0007	mg/L	7/06/2022
Cadmium	<0.00005	mg/L	7/06/2022
Calcium	453	mg/L	7/06/2022
Chromium (trivalent)	<0.001	mg/L	7/06/2022
Chromium (VI) compounds	<0.001	mg/L	7/06/2022
Copper	0.0031	mg/L	7/06/2022
Electrical Conductivity	21000	uS/cm	7/06/2022
Iron	12.6	mg/L	7/06/2022
Lead	0.0002	mg/L	7/06/2022
Magnesium	260	mg/L	7/06/2022
Manganese	0.38	mg/L	7/06/2022
Nickel	0.0010	mg/L	7/06/2022
pH	6.57	pH units	7/06/2022
Potassium	114	mg/L	7/06/2022
Selenium	0.0004	mg/L	7/06/2022
Sodium	3340	mg/L	7/06/2022
Standing Water Level	1.740	metres	7/06/2022
Vanadium	0.0008	mg/L	7/06/2022
Zinc	0.010	mg/L	7/06/2022

Groundwater Monitoring
Groundwater Well – EGM/D26

EPA Identification no. 35 – Groundwater Monitoring Well D26
Groundwater well was dry during sampling in August2022

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	-