



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

**Environmental Monitoring Data December 2021**



### Unit 1A Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air  
Unit 1A Out of Service 4-7 December 2021*

*NOx Unit Out of Service 9, 10 and 14 December 2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	365	445	307	383	555	305
2 December	310	365	265	404	651	264
3 December	387	425	335	410	552	253
4 December	-	-	-	-	-	-
5 December	-	-	-	-	-	-
6 December	-	-	-	-	-	-
7 December	-	-	-	-	-	-
8 December	326	365	290	495	639	357
9 December	-	-	-	337	479	220
10 December	-	-	-	336	551	181
11 December	356	381	326	356	472	252
12 December	374	432	332	284	528	172
13 December	375	454	316	408	677	178
14 December	-	-	-	538	673	402
15 December	333	374	297	627	796	454
16 December	330	368	284	549	667	468
17 December	333	375	248	539	696	376
18 December	334	421	272	543	676	368
19 December	380	444	315	606	691	534
20 December	311	345	265	600	722	424
21 December	318	354	268	650	700	526
22 December	327	352	301	568	684	401
23 December	285	321	258	445	553	357
24 December	304	326	260	421	626	259
25 December	296	346	261	440	502	400
26 December	300	347	278	391	453	274
27 December	327	352	291	265	305	196
28 December	376	401	351	259	330	156
29 December	361	405	280	293	352	187
30 December	353	393	311	318	559	162
31 December	327	366	217	426	709	193

### Unit 1B Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air  
Unit 1 B Out of Service 4-7 December 2021 and 9-20 December 2021  
NOX Unit Out of Service 3 and 8 December 2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	338	387	305	564	604	510
2 December	294	345	255	608	618	594
3 December	-	-	-	557	601	528
4 December	-	-	-	-	-	-
5 December	-	-	-	-	-	-
6 December	-	-	-	-	-	-
7 December	-	-	-	-	-	-
8 December	-	-	-	634	663	600
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	296	341	263	631	656	623
22 December	302	339	268	624	648	609
23 December	270	309	244	629	648	606
24 December	288	325	234	617	636	599
25 December	280	325	247	585	602	570
26 December	290	333	255	597	613	582
27 December	322	343	271	603	624	592
28 December	381	420	361	710	776	620
29 December	363	409	264	703	779	623
30 December	352	396	299	678	744	610
31 December	324	380	308	665	703	616

**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 4-10 December 2021  
 NOx Unit Out of Service 2-3 December 2021  
 SOX Unit Out of Service 26-31 December 2021

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	450	489	406	518	570	474
2 December	-	-	-	561	573	546
3 December	-	-	-	539	565	521
4 December	-	-	-	-	-	-
5 December	-	-	-	-	-	-
6 December	-	-	-	-	-	-
7 December	-	-	-	-	-	-
8 December	-	-	-	-	-	-
9 December	-	-	-	-	-	-
10 December	-	-	-	-	-	-
11 December	364	398	337	538	574	521
12 December	402	451	333	541	617	482
13 December	385	462	323	558	577	544
14 December	398	462	344	595	623	551
15 December	419	489	371	617	634	581
16 December	381	436	327	594	611	561
17 December	389	445	322	588	611	558
18 December	361	420	291	567	588	541
19 December	370	451	305	548	563	535
20 December	340	384	276	595	615	571
21 December	328	356	274	599	617	584
22 December	337	403	288	578	599	566
23 December	279	305	263	567	601	544
24 December	329	419	274	565	579	557
25 December	316	328	304	557	578	544
26 December	310	356	268	-	-	-
27 December	330	362	297	-	-	-
28 December	370	401	333	-	-	-
29 December	374	448	331	-	-	-
30 December	389	467	365	-	-	-
31 December	404	511	351	-	-	-

## 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 4-7 December 2021*

*NOx Unit Out of Service 3, 8-12 and 14 December 2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	411	488	336	486	553	446
2 December	364	409	294	523	581	464
3 December	--	-	-	516	577	452
4 December	-	-	-	-	-	-
5 December	-	-	-	-	-	-
6 December	-	-	-	-	-	-
7 December	-	-	-	-	-	-
8 December	-	-	-	531	595	486
9 December	-	-	-	516	570	453
10 December	-	-	-	509	583	436
11 December	-	-	-	513	547	450
12 December	-	-	-	506	599	463
13 December	299	350	263	495	572	437
14 December	-	-	-	494	529	439
15 December	296	333	270	507	560	451
16 December	287	312	252	498	576	432
17 December	287	343	238	488	571	432
18 December	268	312	212	482	529	409
19 December	281	343	227	455	495	399
20 December	268	332	221	480	515	411
21 December	237	323	208	476	539	451
22 December	264	371	216	478	539	442
23 December	247	278	220	500	543	458
24 December	282	389	205	494	544	431
25 December	282	322	247	499	537	455
26 December	269	329	207	491	531	416
27 December	293	312	269	519	547	478
28 December	326	359	283	600	694	515
29 December	323	420	264	592	684	488
30 December	327	411	253	549	618	437
31 December	342	472	245	550	620	461



### Unit 3A Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air  
NOX Unit Out of Service 1-2, 5-6, 8, 11-13, 15, 17, 21-23 and 25-31 December 2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	-	-	-	561	622	504
2 December	-	-	-	622	633	604
3 December	365	449	325	575	622	552
4 December	373	455	328	536	581	479
5 December	-	-	-	599	657	566
6 December	-	-	-	626	685	591
7 December	349	445	287	675	715	632
8 December	-	-	-	655	681	635
9 December	294	349	243	630	695	591
10 December	301	355	268	621	655	589
11 December	-	-	-	595	633	527
12 December	-	-	-	571	650	518
13 December	-	-	-	633	683	608
14 December	332	433	254	642	683	610
15 December	-	-	-	667	685	622
16 December	324	410	256	631	670	570
17 December	-	-	-	639	658	584
18 December	339	436	270	626	652	566
19 December	345	459	274	606	636	568
20 December	328	403	280	626	654	595
21 December	-	-	-	639	667	613
22 December	-	-	-	628	639	607
23 December	-	-	-	665	793	549
24 December	303	434	250	658	672	641
25 December	-	-	-	637	650	622
26 December	-	-	-	627	642	616
27 December	-	-	-	646	671	615
28 December	-	-	-	756	836	665
29 December	-	-	-	772	825	690
30 December	-	-	-	691	720	660
31 December	-	-	-	713	746	670

**Unit 3B Boiler Continuous Emission Monitoring Summary**

*EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air  
NOX Unit Out of Service 14 and 30 December 2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	383	473	332	603	669	543
2 December	368	442	292	672	685	654
3 December	379	487	314	627	656	604
4 December	397	502	332	591	627	545
5 December	399	479	327	680	715	652
6 December	375	520	302	692	754	646
7 December	380	514	307	739	775	709
8 December	371	452	331	700	731	672
9 December	325	361	286	674	728	644
10 December	335	409	290	662	690	624
11 December	314	359	285	639	666	598
12 December	331	509	290	625	682	578
13 December	340	435	281	678	712	650
14 December	-	-	-	689	718	645
15 December	373	469	289	711	722	703
16 December	357	444	278	668	699	616
17 December	351	464	276	681	697	643
18 December	320	431	256	654	695	611
19 December	341	446	291	648	679	613
20 December	338	440	281	669	697	644
21 December	364	423	302	677	702	655
22 December	311	365	274	666	674	656
23 December	295	420	256	681	894	607
24 December	289	409	202	620	784	488
25 December	272	295	257	622	631	611
26 December	278	303	254	613	630	599
27 December	316	342	290	634	660	601
28 December	353	375	311	740	817	644
29 December	429	507	343	759	815	688
30 December	-	-	-	683	706	651
31 December	320	446	267	709	740	683

**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 14 and 30 December 2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	355	405	320	558	665	519
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						
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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 2-31 December2021*

	NOx			SO <sup>2</sup>		
	mg/Nm <sup>3</sup> (7% O <sub>2</sub> )			mg/Nm <sup>3</sup> (7% O <sub>2</sub> )		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 December	419	465	375	633	716	566
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	-	-	-	-	-	-
22 December	-	-	-	-	-	-
23 December	-	-	-	-	-	-
24 December	-	-	-	-	-	-
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	0.014	mg/m <sup>3</sup>	20	27/04/2021
Fluorine	11	mg/m <sup>3</sup>	30	27/04/2021
Hydrogen chloride	2.9	mg/m <sup>3</sup>	50	27/04/2021
Solid Particles	<4	mg/m <sup>3</sup>	50	27/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	0.59	mg/m <sup>3</sup>	100	27/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m <sup>3</sup>	10	27/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>	0.2	9/07/2021
Mercury	<0.0002	mg/m <sup>3</sup>	0.05	9/07/2021
Solid Particles	2.3	mg/m <sup>3</sup>	50	9/07/2021
Type 1 and 2 substances in Aggregate	<0.03	mg/m <sup>3</sup>	0.75	9/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	370	m <sup>3</sup> /sec		27/04/2021
Moisture	5.7	%		27/04/2021
Oxygen	8.3	%		27/04/2021
Solid Particles	7.8	mg/m <sup>3</sup>		27/04/2021
Temperature	117	degC		27/04/2021
Carbon dioxide	12.1	%		27/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		9/07/2021
Flow Rate	370	m <sup>3</sup> /sec		9/07/2021
Mercury	0.00016	mg/m <sup>3</sup>		9/07/2021
Moisture	5.2	%		9/07/2021
Oxygen	7.3	%		9/07/2021
Solid Particles	2.2	mg/m <sup>3</sup>		9/07/2021
Temperature	115	degC		9/07/2021
Type 1 and Type 2 substances in Aggregate	<0.040	mg/m <sup>3</sup>		9/07/2021
Carbon dioxide	12.5	%		9/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	400	m <sup>3</sup> /sec		27/04/2021
Moisture	5.2	%		27/04/2021
Oxygen	6.5	%		27/04/2021
Solid Particles	<0.9	mg/m <sup>3</sup>		27/04/2021
Temperature	121	degC		27/04/2021
Carbon dioxide	12.4	%		27/04/2021
Chlorine	0.014	mg/m <sup>3</sup>		27/04/2021
Fluorine	11	mg/m <sup>3</sup>		27/04/2021
Hydrogen chloride	2.9	mg/m <sup>3</sup>		27/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	0.59	mg/m <sup>3</sup>		27/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m <sup>3</sup>		27/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		9/07/2021
Flow Rate	370	m <sup>3</sup> /sec		9/07/2021
Mercury	<0.0002	mg/m <sup>3</sup>		9/07/2021
Moisture	5.7	%		9/07/2021
Oxygen	6.4	%		9/07/2021
Solid Particles	2.3	mg/m <sup>3</sup>		9/07/2021
Temperature	119	degC		9/07/2021
Type 1 and Type 2 substances in Aggregate	<0.021	mg/m <sup>3</sup>		9/07/2021
Carbon dioxide	12.6	%		9/07/2021

## 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 <sup>3</sup>	20	28/04/2021
Fluorine	4.0	mg/m <sup>3</sup>	30	28/04/2021
Hydrogen chloride	1.1	mg/m <sup>3</sup>	50	28/04/2021
Solid Particles	5.1	mg/m <sup>3</sup>	50	28/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	1.7	mg/m <sup>3</sup>	100	28/04/2021
Volatile organic compounds as n-propane equivalent	0.049	mg/m <sup>3</sup>	10	28/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>	0.2	7/07/2021
Mercury	0.0016	mg/m <sup>3</sup>	0.05	7/07/2021
Solid Particles	4.1	mg/m <sup>3</sup>	50	7/07/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m <sup>3</sup>	0.75	7/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	350	m <sup>3</sup> /sec		28/04/2021
Moisture	5.4	%		28/04/2021
Oxygen	7.2	%		28/04/2021
Solid Particles	6.9	mg/m <sup>3</sup>		28/04/2021
Temperature	122	degC		28/04/2021
Carbon dioxide	11.8	%		28/04/2021
Chlorine	<0.008	mg/m <sup>3</sup>		28/04/2021
Fluorine	4.0	mg/m <sup>3</sup>		28/04/2021
Hydrogen chloride	1.1	mg/m <sup>3</sup>		28/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	1.7	mg/m <sup>3</sup>		28/04/2021
Volatile organic compounds as n-propane equivalent	0.049	mg/m <sup>3</sup>		28/04/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		7/07/2021
Flow Rate	250	m <sup>3</sup> /sec		7/07/2021
Mercury	0.0015	mg/m <sup>3</sup>		7/07/2021
Moisture	6.1	%		7/07/2021
Oxygen	8.8	%		7/07/2021
Solid Particles	4.1	mg/m <sup>3</sup>		7/07/2021
Temperature	125	degC		7/07/2021
Type 1 and Type 2 substances in Aggregate	<0.015	mg/m <sup>3</sup>		7/07/2021
Carbon dioxide	10.5	%		7/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	350	m <sup>3</sup> /sec		28/04/2021
Moisture	6.1	%		28/04/2021
Oxygen	5.8	%		28/04/2021
Solid Particles	3.3	mg/m <sup>3</sup>		28/04/2021
Temperature	119	degC		28/04/2021
Carbon dioxide	14.5	%		28/04/2021
Cadmium	<0.0003	mg/m <sup>3</sup>		7/07/2021
Flow Rate	230	m <sup>3</sup> /sec		7/07/2021
Mercury	0.0018	mg/m <sup>3</sup>		7/07/2021
Moisture	11	%		7/07/2021
Oxygen	9.6	%		7/07/2021
Solid Particles	4.2	mg/m <sup>3</sup>		7/07/2021
Temperature	115	degC		7/07/2021
Type 1 and Type 2 substances in Aggregate	<0.019	mg/m <sup>3</sup>		7/07/2021
Carbon dioxide	10.9	%		7/07/2021

### 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	0.016	mg/m3	20	29/04/2021
Fluorine	6.3	mg/m3	30	29/04/2021
Hydrogen chloride	2.2	mg/m3	50	29/04/2021
Solid Particles	2.6	mg/m3	50	29/04/2021
Sulfuric acid mist and sulfur trioxide (as SO3)	1.6	mg/m3	100	29/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m3	10	29/04/2021
Cadmium	<0.0002	mg/m3	0.2	8/07/2021
Mercury	0.00035	mg/m3	0.05	8/07/2021
Solid Particles	4.1	mg/m3	50	8/07/2021
Type 1 and 2 substances in Aggregate	<0.04	mg/m3	0.75	8/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	340	m3/sec		29/04/2021
Moisture	6.0	%		29/04/2021
Oxygen	5.9	%		29/04/2021
Solid Particles	2.7	mg/m3		29/04/2021
Temperature	125	degC		29/04/2021
Carbon dioxide	14.5	%		29/04/2021
Cadmium	<0.0002	mg/m3		8/07/2021
Flow Rate	370	m3/sec		8/07/2021
Mercury	0.00027	mg/m3		8/07/2021
Moisture	5.4	%		8/07/2021
Oxygen	6.7	%		8/07/2021
Solid Particles	7.0	mg/m3		8/07/2021
Temperature	123	degC		8/07/2021
Type 1 and Type 2 substances in Aggregate	<0.040	mg/m3		8/07/2021
Carbon dioxide	13.1	%		8/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	320	m3/sec		29/04/2021
Moisture	5.5	%		29/04/2021
Oxygen	6.8	%		29/04/2021
Solid Particles	2.5	mg/m3		29/04/2021
Temperature	117	degC		29/04/2021
Carbon dioxide	12.2	%		29/04/2021
Chlorine	0.016	mg/m3		29/04/2021
Fluorine	6.3	mg/m3		29/04/2021
Hydrogen chloride	2.2	mg/m3		29/04/2021
Sulfuric acid mist and sulfur trioxide (as SO3)	1.6	mg/m3		29/04/2021
Volatile organic compounds as n-propane equivalent	<0.08	mg/m3		29/04/2021
Cadmium	<0.0002	mg/m3		8/07/2021
Flow Rate	330	m3/sec		8/07/2021
Mercury	0.00044	mg/m3		8/07/2021
Moisture	5.4	%		8/07/2021
Oxygen	6.4	%		8/07/2021
Solid Particles	0.8	mg/m3		8/07/2021
Temperature	120	degC		8/07/2021
Type 1 and Type 2 substances in Aggregate	<0.031	mg/m3		8/07/2021
Carbon dioxide	12.6	%		8/07/2021

### 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/m <sup>3</sup>	20	7/04/2021
Fluorine	13	mg/m <sup>3</sup>	30	7/04/2021
Hydrogen chloride	2.7	mg/m <sup>3</sup>	50	7/04/2021
Solid Particles	6.2	mg/m <sup>3</sup>	50	29/06/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	2.7	mg/m <sup>3</sup>	100	7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m <sup>3</sup>	10	7/04/2021
Cadmium	<0.0003	mg/m <sup>3</sup>	0.2	6/07/2021
Mercury	0.00037	mg/m <sup>3</sup>	0.05	6/07/2021
Solid Particles	4.4	mg/m <sup>3</sup>	50	6/07/2021
Type 1 and 2 substances in Aggregate	<0.02	mg/m <sup>3</sup>	0.75	6/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	500	m <sup>3</sup> /sec		7/04/2021
Moisture	5.3	%		7/04/2021
Oxygen	10.4	%		7/04/2021
Solid Particles	9.5	mg/m <sup>3</sup>		7/04/2021
Temperature	111	degC		7/04/2021
Carbon dioxide	10.4	%		7/04/2021
Chlorine	0.01	mg/m <sup>3</sup>		7/04/2021
Fluorine	13	mg/m <sup>3</sup>		7/04/2021
Hydrogen chloride	2.7	mg/m <sup>3</sup>		7/04/2021
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	2.7	mg/m <sup>3</sup>		7/04/2021
Volatile organic compounds as n-propane equivalent	<0.1	mg/m <sup>3</sup>		7/04/2021
Cadmium	<0.0003	mg/m <sup>3</sup>		6/07/2021
Flow Rate	390	m <sup>3</sup> /sec		6/07/2021
Mercury	0.00049	mg/m <sup>3</sup>		6/07/2021
Moisture	5.3	%		6/07/2021
Oxygen	8.8	%		6/07/2021
Solid Particles	7.0	mg/m <sup>3</sup>		6/07/2021
Temperature	119	degC		6/07/2021
Type 1 and Type 2 substances in Aggregate	<0.030	mg/m <sup>3</sup>		6/07/2021
Carbon dioxide	10.0	%		6/07/2021

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	400	m <sup>3</sup> /sec		29/06/2021
Moisture	5.9	%		29/06/2021
Oxygen	6.9	%		29/06/2021
Solid Particles	2	mg/m <sup>3</sup>		29/06/2021
Temperature	121	degC		29/06/2021
Carbon dioxide	13.4	%		29/06/2021
Cadmium	<0.0002	mg/m <sup>3</sup>		6/07/2021
Flow Rate	380	m <sup>3</sup> /sec		6/07/2021
Mercury	0.00024	mg/m <sup>3</sup>		6/07/2021
Moisture	5.5	%		6/07/2021
Oxygen	6.7	%		6/07/2021
Solid Particles	1.8	mg/m <sup>3</sup>		6/07/2021
Temperature	115	degC		6/07/2021
Type 1 and Type 2 substances in Aggregate	<0.011	mg/m <sup>3</sup>		6/07/2021
Carbon dioxide	13.0	%		6/07/2021

### 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/m <sup>2</sup> /month		
		Ash	Combustible	Insoluble
E2	17	2.6	0.5	3.1
E4	18	0.1	0.1	0.2
E6	19	1.4	1.1	2.5
U6	20	0.9	0.4	1.3

### 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
°C	m	degC	pH unit	ppt	%	mg/L	m
21.50	0.50	22.13	7.99	17.5	87.4	6.74	1.75
Name			Reading		Units		Date
Aluminium			0.049		mg/L		9/12/2021
Ammonia			<0.005		mg/L		9/12/2021
Arsenic III			<0.005		mg/		9/12/2021
Arsenic V			<0.005		mg/L		9/12/2021
Cadmium			<0.0002		mg/L		9/12/2021
Chromium (Trivalent)			<0.001		mg/L		9/12/2021
Chromium (VI) Compounds			<0.001		mg/L		9/12/2021
Copper			0.001		mg/L		9/12/2021
Iron			0.080		mg/L		9/12/2021
Lead			<0.0002		mg/L		9/12/2021
Manganese			0.0141		mg/L		9/12/2021
Nickel			<0.0005		mg/L		9/12/2021
pH			8.00		pH units		9/12/2021
Selenium			<0.002		mg/L		9/12/2021
Total Suspended Solids			11		mg/L		9/12/2021
Vanadium			0.0020		mg/L		9/12/2021
Zinc			<0.005		mg/L		9/12/2021



**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
°C	m	degC	pH unit	ppt	%	mg/L	m
19.69	0.50	22.33	8.13	17.4	85.6	6.58	4.25
Name			Reading	Units		Date	
Aluminium			0.025	mg/L		9/12/2021	
Ammonia			<0.005	mg/L		9/12/2021	
Arsenic III			<0.005	mg/L		9/12/2021	
Arsenic V			<0.005	mg/L		9/12/2021	
Cadmium			<0.0002	mg/L		9/12/2021	
Chromium (Trivalent)			<0.001	mg/L		9/12/2021	
Chromium (VI) Compounds			<0.001	mg/L		9/12/2021	
Copper			0.002	mg/L		9/12/2021	
Iron			0.021	mg/L		9/12/2021	
Lead			<0.0002	mg/L		9/12/2021	
Manganese			0.0048	mg/L		9/12/2021	
Nickel			<0.0005	mg/L		9/12/2021	
pH			8.09	pH units		9/12/2021	
Selenium			<0.002	mg/L		9/12/2021	
Total Suspended Solids			9	mg/L		9/12/2021	
Vanadium			0.0022	mg/L		9/12/2021	
Zinc			<0.005	mg/L		9/12/2021	

## 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
°C	m	degC	pH unit	ppt	%	mg/L	m
18.04	0.50	20.68	8.13	17.3	106.8	8.43	3.25
Name			Reading		Units		Date
Aluminium			0.016		mg/L		9/12/2021
Ammonia			<0.005		mg/L		9/12/2021
Arsenic III			<0.005		mg/L		9/12/2021
Arsenic V			<0.005		mg/L		9/12/2021
Cadmium			<0.0002		mg/L		9/12/2021
Chromium (Trivalent)			<0.001		mg/L		9/12/2021
Chromium (VI) Compounds			<0.001		mg/L		9/12/2021
Copper			<0.001		mg/L		9/12/2021
Iron			0.010		mg/L		9/12/2021
Lead			0.0002		mg/L		9/12/2021
Manganese			0.0050		mg/L		9/12/2021
Nickel			<0.0005		mg/L		9/12/2021
pH			8.07		pH units		9/12/2021
Selenium			<0.002		mg/L		9/12/2021
Total Suspended Solids			5		mg/L		9/12/2021
Vanadium			0.0019		mg/L		9/12/2021
Zinc			<0.005		mg/L		9/12/2021

## 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
°C	m	degC	pH unit	ppt	%	mg/L	m
19.60	0.5	23.78	8.12	17.2	104.6	7.85	3.75
Name			Reading	Units		Date	
Aluminium			0.030	mg/L		9/12/2021	
Ammonia			<0.005	mg/L		9/12/2021	
Arsenic III			<0.005	mg/L		9/12/2021	
Arsenic V			<0.005	mg/L		9/12/2021	
Cadmium			<0.0002	mg/L		9/12/2021	
Chromium (Trivalent)			<0.001	mg/L		9/12/2021	
Chromium (VI) Compounds			<0.001	mg/L		9/12/2021	
Copper			0.002	mg/L		9/12/2021	
Iron			0.038	mg/L		9/12/2021	
Lead			<0.0002	mg/L		9/12/2021	
Manganese			0.0092	mg/L		9/12/2021	
Nickel			<0.0005	mg/L		9/12/2021	
pH			8.10	pH units		9/12/2021	
Selenium			<0.002	mg/L		9/12/2021	
Total Suspended Solids			<5	mg/L		9/12/2021	
Vanadium			0.0022	mg/L		9/12/2021	
Zinc			0.006	mg/L		9/12/2021	

## 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	0.037	mg/L	-	2/12/2021
Ammonia	0.60	mg/L	-	2/12/2021
Arsenic III	<0.0005	mg/L	-	2/12/2021
Arsenic V	0.0050	mg/L	-	2/12/2021
Cadmium	<0.00005	mg/L	-	2/12/2021
Chromium (Trivalent)	<0.001	mg/L	-	2/12/2021
Chromium (VI) Compounds	<0.01	mg/L	-	2/12/2021
Copper	0.0025	mg/L	-	2/12/2021
Iron	0.009	mg/L	-	2/12/2021
Lead	<0.0001	mg/L	-	2/12/2021
Manganese	0.0449	mg/L	-	2/12/2021
Nickel	0.0015	mg/L	-	2/12/2021
Nitrite and Nitrate as N	2.79	mg/L	-	2/12/2021
Nitrogen	4.0	mg/L	-	2/12/2021
pH	7.15	pH units	-	2/12/2021
Phosphorus as P	0.50	mg/L	-	2/12/2021
Reactive Phosphorus as P	0.49	mg/L	-	2/12/2021
Selenium	0.0198	mg/L	-	2/12/2021
Total Kjeldahl Nitrogen	1.2	mg/L	-	2/12/2021
Total Suspended Solids	<1	mg/L	-	2/12/2021
Vanadium	0.0287	mg/L	-	2/12/2021
Zinc	0.003	mg/L	-	2/12/2021

## 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	0.108	mg/L	-	2/12/2021
Ammonia	<0.005	mg/L	-	2/12/2021
Arsenic III	<0.005	mg/L	-	2/12/2021
Arsenic V	<0.005	mg/L	-	2/12/2021
Cadmium	<0.0002	mg/L	-	2/12/2021
Chromium (Trivalent)	<0.001	mg/L	-	2/12/2021
Chromium (VI) Compounds	<0.01	mg/L	-	2/12/2021
Copper	0.0019	mg/L	-	2/12/2021
Iron	0.077	mg/L	-	16/12/2021
Lead	<0.0002	mg/L	-	2/12/2021
Manganese	0.0100	mg/L	-	2/12/2021
Nickel	0.0006	mg/L	-	2/12/2021
pH	8.10	pH units	-	2/12/2021
Selenium	<0.001	mg/L	-	2/12/2021
Total suspended Solids	17	mg/L	-	2/12/2021
Vanadium	0.0023	mg/L	-	2/12/2021
Zinc	<0.005	mg/L	-	2/12/2021
Dissolved Oxygen	25.83	mg/L	-	2/12/2021
Field Temperature	22.6	degC	-	2/12/2021
Salinity	16.8	ppt	-	2/12/2021
Secchi Disk	2.25	m	-	2/12/2021
Temperature – Average	25.01	deg C	-	December2021
Temperature – Minimum	21.18	deg C	-	December2021
Temperature - Maximum	28.95	deg C	-	December2021

## Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0033	mg/L	0.005	2/12/2021
Iron	0.189	mg/L	0.3	16/12/2021
Selenium	<0.001	mg/L	0.002	2/12/2021
Temperature – Average	30.66	deg C	37.5	December2021
Temperature – Minimum	24.46	deg C	37.5	December2021
Temperature - Maximum	35.57	deg C	37.5	December2021
Maximum Daily Discharge from Ash Dam	16.65	ML	150	December2021
Monthly Discharge from Ash Dam	180.12	ML	-	December2021

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**Emergency Discharge – Toe Drain Pond**

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*EPA Identification no. 24 - Emergency discharge to toe drain collection pond  
No Discharge during December 2021, background sample only*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Licence Limit</b>	<b>Date</b>
Aluminium	0.008	mg/L	-	2/12/2021
Ammonia	2.53	mg/L	-	2/12/2021
Arsenic III	0.0015	mg/L	-	2/12/2021
Arsenic V	0.0013	mg/L	-	2/12/2021
Cadmium	<0.00005	mg/L	-	2/12/2021
Chromium (Trivalent)	<0.001	mg/L	-	2/12/2021
Chromium (VI) Compounds	<0.01	mg/L	-	2/12/2021
Copper	<0.0005	mg/L	-	2/12/2021
Iron	6.69	mg/L	-	2/12/2021
Lead	<0.0001	mg/L	-	2/12/2021
Manganese	0.875	mg/L	-	2/12/2021
Nickel	0.0018	mg/L	-	2/12/2021
Nitrite and Nitrate as N	0.022	mg/L	-	2/12/2021
Nitrogen	2.73	mg/L	-	2/12/2021
pH	6.62	pH units	6-9.5	2/12/2021
Phosphorus as P	0.067	mg/L	-	2/12/2021
Reactive Phosphorus as P	0.032	mg/L	-	2/12/2021
Selenium	<0.0002	mg/L	-	2/12/2021
Total Kjeldahl Nitrogen	2.71	mg/L	-	2/12/2021
Total Suspended Solids	42	mg/L	50	2/12/2021
Vanadium	0.0006	mg/L	-	2/12/2021
Zinc	0.005	mg/L	-	2/12/2021



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**MR217**

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*EPA Identification no. 23 - Emergency discharge from ash dam outlet at culvert*  
No Discharge during December 2021

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Licence Limit</b>	<b>Date</b>
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	-	

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**Groundwater Monitoring  
Groundwater Well – MW01**

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*EPA Identification no. 32 – Groundwater Monitoring Well 01*

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<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	0.199	mg/L	7/12/2021
Ammonia	0.07	mg/L	7/12/2021
Arsenic (III)	<0.0005	mg/L	7/12/2021
Arsenic (V)	<0.0005	mg/L	7/12/2021
Cadmium	<0.00005	mg/L	7/12/2021
Calcium	2	mg/L	7/12/2021
Chromium (trivalent)	<0.01	mg/L	7/12/2021
Chromium (VI) compounds	<0.01	mg/L	7/12/2021
Copper	0.0011	mg/L	7/12/2021
Electrical Conductivity	406	uS/cm	7/12/2021
Iron	0.084	mg/L	7/12/2021
Lead	0.0010	mg/L	7/12/2021
Magnesium	4	mg/L	7/12/2021
Manganese	0.148	mg/L	7/12/2021
Nickel	0.0058	mg/L	7/12/2021
pH	4.88	pH units	7/12/2021
Potassium	4	mg/L	7/12/2021
Selenium	<0.0002	mg/L	7/12/2021
Sodium	61	mg/L	7/12/2021
Standing Water Level	8.180	metres	7/12/2021
Vanadium	0.0003	mg/L	7/12/2021
Zinc	0.051	mg/L	7/12/2021

**Groundwater Monitoring  
Groundwater Well – MW02**

*EPA Identification no. 33 – Groundwater Monitoring Well 02*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	0.687	mg/L	7/12/2021
Ammonia	3.14	mg/L	7/12/2021
Arsenic (III)	0.0036	mg/L	7/12/2021
Arsenic (V)	0.0039	mg/L	7/12/2021
Cadmium	<0.00005	mg/L	7/12/2021
Calcium	234	mg/L	7/12/2021
Chromium (trivalent)	<0.01	mg/L	7/12/2021
Chromium (VI) compounds	<0.01	mg/L	7/12/2021
Copper	0.0018	mg/L	7/12/2021
Electrical Conductivity	14500	uS/cm	7/12/2021
Iron	7.88	mg/L	7/12/2021
Lead	0.0024	mg/L	7/12/2021
Magnesium	204	mg/L	7/12/2021
Manganese	0.89	mg/L	7/12/2021
Nickel	0.0012	mg/L	7/12/2021
pH	6.47	pH units	7/12/2021
Potassium	99	mg/L	7/12/2021
Selenium	0.0003	mg/L	7/12/2021
Sodium	2430	mg/L	7/12/2021
Standing Water Level	4.015	metres	7/12/2021
Vanadium	0.0035	mg/L	7/12/2021
Zinc	0.048	mg/L	7/12/2021

**Groundwater Monitoring  
Groundwater Well – MW06**

*EPA Identification no. 34 – Groundwater Monitoring Well 06*

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
Aluminium	0.032	mg/L	7/12/2021
Ammonia	3.18	mg/L	7/12/2021
Arsenic (III)	<0.005	mg/L	7/12/2021
Arsenic (V)	<0.005	mg/L	7/12/2021
Cadmium	<0.0002	mg/L	7/12/2021
Calcium	457	mg/L	7/12/2021
Chromium (trivalent)	<0.01	mg/L	7/12/2021
Chromium (VI) compounds	<0.01	mg/L	7/12/2021
Copper	<0.001	mg/L	7/12/2021
Electrical Conductivity	20400	uS/cm	7/12/2021
Iron	12.4	mg/L	7/12/2021
Lead	<0.0002	mg/L	7/12/2021
Magnesium	266	mg/L	7/12/2021
Manganese	0.407	mg/L	7/12/2021
Nickel	0.0008	mg/L	7/12/2021
pH	6.56	pH units	7/12/2021
Potassium	116	mg/L	7/12/2021
Selenium	<0.002	mg/L	7/12/2021
Sodium	3380	mg/L	7/12/2021
Standing Water Level	1.725	metres	7/12/2021
Vanadium	0.0010	mg/L	7/12/2021
Zinc	0.015	mg/L	7/12/2021

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**Groundwater Monitoring**  
**Groundwater Well – EGM/D26**

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*EPA Identification no. 35 – Groundwater Monitoring Well D26*  
Groundwater well was dry during sampling in December2021

<b>Name</b>	<b>Reading</b>	<b>Units</b>	<b>Date</b>
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	-