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

Environmental Monitoring Data October 2024



Unit 1A Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
NOx Unit Data Invalidated 4-6, 10, 12, 13, 16, 20, 22-24 and 27-29 October 2024

	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
01/10/2024	465	542	376	681	832	542
02/10/2024	449	523	377	612	821	503
03/10/2024	411	486	327	663	770	497
04/10/2024	-	-	-	697	885	465
05/10/2024	-	-	-	781	909	598
06/10/2024	-	-	-	789	898	613
07/10/2024	451	518	421	819	901	624
08/10/2024	466	545	352	609	835	463
09/10/2024	462	548	402	507	796	330
10/10/2024	-	-	-	620	791	259
11/10/2024	455	521	372	684	811	453
12/10/2024	-	-	-	573	690	375
13/10/2024	-	-	-	574	720	400
14/10/2024	440	516	346	702	917	458
15/10/2024	402	447	381	577	761	419
16/10/2024	-	-	-	593	755	382
17/10/2024	469	528	408	704	802	409
18/10/2024	459	530	399	756	902	579
19/10/2024	441	526	381	788	1024	601
20/10/2024	-	-	-	689	838	498
21/10/2024	468	525	387	623	748	473
22/10/2024	-	-	-	910	1287	597
23/10/2024	-	-	-	726	847	561
24/10/2024	-	-	-	771	880	525
25/10/2024	408	517	328	730	938	502
26/10/2024	410	447	338	746	988	587
27/10/2024	-	-	-	789	943	633
28/10/2024	-	-	-	849	1078	538
29/10/2024	-	-	-	852	1288	661
30/10/2024	433	480	338	946	1198	672
31/10/2024	448	538	315	890	978	708

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
NOX Unit Data Invalidated 14, 16, 19, 20, 27 and 28 October 2024

	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
01/10/2024	350	393	297	745	792	710
02/10/2024	339	377	296	702	772	652
03/10/2024	323	364	270	724	789	667
04/10/2024	335	378	292	714	760	667
05/10/2024	375	447	285	737	784	706
06/10/2024	361	374	298	740	818	689
07/10/2024	394	447	364	745	780	704
08/10/2024	403	458	342	752	798	722
09/10/2024	360	439	315	640	715	545
10/10/2024	397	519	331	685	793	554
11/10/2024	358	394	315	704	734	675
12/10/2024	386	444	334	683	730	636
13/10/2024	408	445	343	686	735	648
14/10/2024	-	-	-	735	827	669
15/10/2024	347	396	315	687	747	630
16/10/2024	-	-	-	636	667	596
17/10/2024	397	458	334	717	743	590
18/10/2024	373	406	346	752	782	736
19/10/2024	-	-	-	804	906	732
20/10/2024	-	-	-	715	772	644
21/10/2024	389	453	338	706	902	639
22/10/2024	356	403	276	882	1131	642
23/10/2024	362	397	269	643	747	576
24/10/2024	371	449	309	775	808	740
25/10/2024	342	407	305	819	889	778
26/10/2024	346	390	307	830	916	743
27/10/2024	-	-	-	817	953	738
28/10/2024	-	-	-	855	902	803
29/10/2024	344	395	293	848	1152	730
30/10/2024	383	423	293	877	1063	761
31/10/2024	388	443	304	809	853	761

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air

	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
01/10/2024	422	503	322	774	824	723
02/10/2024	403	484	329	696	773	629
03/10/2024	372	479	281	822	901	697
04/10/2024	352	427	303	770	833	719
05/10/2024	376	424	325	761	808	721
06/10/2024	331	380	284	742	802	696
07/10/2024	385	456	336	740	798	700
08/10/2024	300	333	283	786	848	744
09/10/2024	344	485	266	686	827	597
10/10/2024	401	497	284	675	755	611
11/10/2024	359	443	283	679	704	630
12/10/2024	362	473	279	660	706	600
13/10/2024	372	454	286	651	702	605
14/10/2024	389	462	306	706	766	632
15/10/2024	390	425	343	647	691	613
16/10/2024	407	471	318	575	637	548
17/10/2024	428	527	315	672	749	569
18/10/2024	403	457	357	736	821	675
19/10/2024	377	525	296	754	810	709
20/10/2024	402	507	311	726	791	646
21/10/2024	463	521	364	678	718	639
22/10/2024	445	546	322	831	999	721
23/10/2024	388	556	276	659	757	589
24/10/2024	332	418	247	711	798	636
25/10/2024	358	402	312	763	868	663
26/10/2024	406	523	324	849	976	772
27/10/2024	425	553	316	825	940	751
28/10/2024	434	506	341	844	929	779
29/10/2024	440	512	378	799	1028	690
30/10/2024	454	563	321	847	1030	744
31/10/2024	463	545	317	765	807	697

Unit 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Data Invalidated 6-8 and 10 October 2024
NOX Unit Data Invalidated 18 October 2024
SO_2 Unit Data Invalidated 9 October 2024

	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
01/10/2024	391	476	299	736	794	705
02/10/2024	369	427	273	679	729	635
03/10/2024	345	444	265	803	871	694
04/10/2024	370	428	306	760	822	712
05/10/2024	359	381	308	747	778	702
06/10/2024	-	-	-	-	-	-
07/10/2024	-	-	-	-	-	-
08/10/2024	-	-	-	-	-	-
09/10/2024	326	435	267	-	-	-
10/10/2024	-	-	-	-	-	-
11/10/2024	336	422	261	671	706	623
12/10/2024	342	430	260	667	726	626
13/10/2024	361	432	283	655	702	626
14/10/2024	390	462	282	699	759	661
15/10/2024	391	420	360	652	688	618
16/10/2024	398	457	324	570	617	544
17/10/2024	411	511	299	666	721	571
18/10/2024	-	-	-	722	806	666
19/10/2024	369	514	280	731	780	696
20/10/2024	406	510	323	722	772	643
21/10/2024	472	580	345	676	711	642
22/10/2024	447	556	310	819	989	709
23/10/2024	385	555	280	641	739	565
24/10/2024	349	428	261	701	773	638
25/10/2024	370	407	332	765	831	706
26/10/2024	419	526	314	842	935	766
27/10/2024	406	496	308	808	895	744
28/10/2024	422	476	342	827	882	769
29/10/2024	430	470	376	796	991	696
30/10/2024	438	506	331	865	1023	755
31/10/2024	447	504	328	780	831	714

Unit 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Offline 1 to 31 October 2024

	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
01/10/2024	-	-	-	-	-	-
02/10/2024	-	-	-	-	-	-
03/10/2024	-	-	-	-	-	-
04/10/2024	-	-	-	-	-	-
05/10/2024	-	-	-	-	-	-
06/10/2024	-	-	-	-	-	-
07/10/2024	-	-	-	-	-	-
08/10/2024	-	-	-	-	-	-
09/10/2024	-	-	-	-	-	-
10/10/2024	-	-	-	-	-	-
11/10/2024	-	-	-	-	-	-
12/10/2024	-	-	-	-	-	-
13/10/2024	-	-	-	-	-	-
14/10/2024	-	-	-	-	-	-
15/10/2024	-	-	-	-	-	-
16/10/2024	-	-	-	-	-	-
17/10/2024	-	-	-	-	-	-
18/10/2024	-	-	-	-	-	-
19/10/2024	-	-	-	-	-	-
20/10/2024	-	-	-	-	-	-
21/10/2024	-	-	-	-	-	-
22/10/2024	-	-	-	-	-	-
23/10/2024	-	-	-	-	-	-
24/10/2024	-	-	-	-	-	-
25/10/2024	-	-	-	-	-	-
26/10/2024	-	-	-	-	-	-
27/10/2024	-	-	-	-	-	-
28/10/2024	-	-	-	-	-	-
29/10/2024	-	-	-	-	-	-
30/10/2024	-	-	-	-	-	-
31/10/2024	-	-	-	-	-	-

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Offline 1 to 30 October 2024

	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
01/10/2024	-	-	-	-	-	-
02/10/2024	-	-	-	-	-	-
03/10/2024	-	-	-	-	-	-
04/10/2024	-	-	-	-	-	-
05/10/2024	-	-	-	-	-	-
06/10/2024	-	-	-	-	-	-
07/10/2024	-	-	-	-	-	-
08/10/2024	-	-	-	-	-	-
09/10/2024	-	-	-	-	-	-
10/10/2024	-	-	-	-	-	-
11/10/2024	-	-	-	-	-	-
12/10/2024	-	-	-	-	-	-
13/10/2024	-	-	-	-	-	-
14/10/2024	-	-	-	-	-	-
15/10/2024	-	-	-	-	-	-
16/10/2024	-	-	-	-	-	-
17/10/2024	-	-	-	-	-	-
18/10/2024	-	-	-	-	-	-
19/10/2024	-	-	-	-	-	-
20/10/2024	-	-	-	-	-	-
21/10/2024	-	-	-	-	-	-
22/10/2024	-	-	-	-	-	-
23/10/2024	-	-	-	-	-	-
24/10/2024	-	-	-	-	-	-
25/10/2024	-	-	-	-	-	-
26/10/2024	-	-	-	-	-	-
27/10/2024	-	-	-	-	-	-
28/10/2024	-	-	-	-	-	-
29/10/2024	-	-	-	-	-	-
30/10/2024	-	-	-	-	-	-
31/10/2024	-	-	-	-	-	-

Unit 4A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4A Data Invalidated 4 October 2024

	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
01/10/2024	375	546	291	553	747	373
02/10/2024	343	475	278	478	615	339
03/10/2024	333	451	252	556	775	344
04/10/2024	-	-	-	-	-	-
05/10/2024	374	447	285	659	756	554
06/10/2024	406	539	271	676	794	527
07/10/2024	443	650	292	630	755	515
08/10/2024	311	332	289	479	586	389
09/10/2024	313	352	263	400	545	280
10/10/2024	365	598	265	544	782	288
11/10/2024	300	366	257	524	681	406
12/10/2024	311	372	243	467	583	336
13/10/2024	352	410	301	488	642	347
14/10/2024	326	369	263	520	749	394
15/10/2024	294	337	257	437	497	363
16/10/2024	319	402	291	403	490	332
17/10/2024	324	370	296	519	685	346
18/10/2024	301	378	270	543	643	463
19/10/2024	291	374	255	642	793	420
20/10/2024	324	378	266	552	688	414
21/10/2024	330	387	279	510	632	402
22/10/2024	316	399	264	659	975	422
23/10/2024	334	539	269	491	601	395
24/10/2024	303	366	256	542	675	482
25/10/2024	323	398	256	614	843	448
26/10/2024	336	399	288	664	959	469
27/10/2024	344	459	279	630	796	480
28/10/2024	365	492	268	615	807	462
29/10/2024	326	366	271	606	769	468
30/10/2024	332	424	263	705	1058	473
31/10/2024	331	393	269	709	967	492

Unit 4B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4B Data Invalidated 4, 19, 21-25 October 2024
SO_2 Unit Data Invalidated 18 and 20 October 2024

	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
01/10/2024	393	504	353	767	877	707
02/10/2024	389	456	339	709	779	608
03/10/2024	369	468	323	792	900	652
04/10/2024	-	-	-	-	-	-
05/10/2024	384	441	305	784	822	729
06/10/2024	426	540	295	796	864	697
07/10/2024	452	594	323	760	824	711
08/10/2024	355	392	316	757	797	659
09/10/2024	331	375	278	685	788	579
10/10/2024	392	615	334	717	873	591
11/10/2024	341	384	312	695	753	632
12/10/2024	348	392	292	687	744	583
13/10/2024	378	428	350	685	741	594
14/10/2024	350	374	325	725	825	600
15/10/2024	348	392	319	660	722	575
16/10/2024	348	372	328	603	640	584
17/10/2024	360	385	336	708	821	634
18/10/2024	348	366	324	-	-	-
19/10/2024	-	-	-	-	-	-
20/10/2024	359	390	320	-	-	-
21/10/2024	-	-	-	-	-	-
22/10/2024	-	-	-	-	-	-
23/10/2024	-	-	-	-	-	-
24/10/2024	-	-	-	-	-	-
25/10/2024	-	-	-	-	-	-
26/10/2024	346	391	272	843	1041	676
27/10/2024	376	481	324	781	925	652
28/10/2024	382	505	285	753	868	617
29/10/2024	341	375	265	778	1000	619
30/10/2024	381	421	325	854	1168	635
31/10/2024	361	405	263	827	1029	650

Unit 1 Boiler Emission Test Results

EPA Identification no. 3 - Air emissions monitoring, Boiler 1 stack discharge to air

Name	Reading	Units	Licence Limit	Date
Chlorine	<0.01	mg/m^3	20	18/04/2023
Fluorine	14	mg/m^3	30	18/04/2023
Hydrogen chloride	15	mg/m^3	50	18/04/2023
Solid Particles	3.8	mg/m^3	50	27/06/2023
Sulfuric acid mist and sulfur trioxide (as SO3)	1.5	mg/m^3	100	18/04/2023
Volatile organic compounds as n-propane equivalent	0.18	mg/m^3	10	18/04/2023
Cadmium	<0.0003	mg/m^3	0.2	27/02/2024
Mercury	<0.0003	mg/m^3	0.05	27/02/2024
Solid Particles	9.6	mg/m^3	50	27/02/2024
Type 1 and 2 substances in Aggregate	<0.02	mg/m^3	0.75	27/02/2024

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	170	m3/sec		25/06/2024
Moisture	5.6	%		25/06/2024
Oxygen	8.1	%		25/06/2024
Solid Particles	4.4	mg/m3		25/06/2024
Temperature	119	degC		25/06/2024
Carbon dioxide	12	%		25/06/2024
Chlorine	0.11	mg/m3		25/06/2024
Fluorine	7.2	mg/m3		25/06/2024
Hydrogen chloride	21	mg/m3		25/06/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	1.5	mg/m3		25/06/2024
Volatile organic compounds as n-propane equivalent	0.76	mg/m3		25/06/2024
Cadmium	<0.0003	mg/m3		27/02/2024
Flow Rate	370	m3/sec		27/02/2024
Mercury	<0.0003	mg/m3		27/02/2024
Moisture	5.9	%		27/02/2024
Oxygen	7.4	%		27/02/2024
Solid Particles	12	mg/m3		27/02/2024
Temperature	121	degC		27/02/2024
Type 1 and Type 2 substances in Aggregate	<0.018	mg/m3		27/02/2024
Carbon dioxide	12	%		27/02/2024

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	140	m3/sec		27/06/2024
Moisture	5.3	%		27/06/2024
Oxygen	6.6	%		27/06/2024
Solid Particles	3.1	mg/m3		27/06/2024
Temperature	117	degC		27/06/2024
Carbon dioxide	13.1	%		27/06/2024
Cadmium	<0.0003	mg/m3		27/02/2024
Flow Rate	330	m3/sec		27/02/2024
Mercury	<0.0003	mg/m3		27/02/2024
Moisture	5.1	%		27/02/2024
Oxygen	6.3	%		27/02/2024
Solid Particles	6.3	mg/m3		27/02/2024
Temperature	123	degC		27/02/2024
Type 1 and Type 2 substances in Aggregate	<0.017	mg/m3		27/02/2024
Carbon dioxide	13.1	12%		27/02/2024

Unit 2 Boiler Emission Test Results

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

Name	Reading	Units	Licence	Date
Chlorine	<0.02	mg/m^3	20	3/05/2023
Fluorine	12	mg/m^3	30	3/05/2023
Hydrogen chloride	15	mg/m^3	50	3/05/2023
Solid Particles	2.9	mg/m^3	50	28/05/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	0.92	mg/m^3	100	3/05/2023
Volatile organic compounds as n-propane equivalent	<0.07	mg/m^3	10	3/05/2023
Cadmium	<0.0002	mg/m^3	0.2	28/02/2024
Mercury	0.00048	mg/m^3	0.05	28/02/2024
Solid Particles	19	mg/m3	50	28/02/2024
Type 1 and 2 substances in Aggregate	*	mg/m3	0.75	28/02/2024

**Repeat testing recommended*

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

Name	Reading	Units	Licence	Date
Flow Rate	300	m3/sec		28/05/2024
Moisture	6	%		28/05/2024
Oxygen	7.8	%		28/05/2024
Solid Particles	3.6	mg/m3		28/05/2024
Temperature	113	degC		28/05/2024
Carbon dioxide	12.4	%		28/05/2024
Chlorine	0.036	mg/m3		28/05/2024
Fluorine	9	mg/m3		28/05/2024
Hydrogen chloride	9.3	mg/m3		28/05/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	5.7	mg/m3		28/05/2024
Volatile organic compounds as n-propane equivalent	0.77	mg/m3		28/05/2024
Cadmium	<0.0002	mg/m3		28/05/2024
Flow Rate	300	m3/sec		28/05/2024
Mercury	0.0012	mg/m3		28/05/2024
Moisture	6	%		28/05/2024
Oxygen	7.8	%		28/05/2024
Solid Particles	3.6	mg/m3		28/05/2024
Temperature	113	degC		28/05/2024
Type 1 and Type 2 substances in Aggregate	<0.033	mg/m3		28/05/2024
Carbon dioxide	12.4	%		28/05/2024

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

Name	Reading	Units	Licence	Date
Flow Rate	300	m3/sec		28/05/2024
Moisture	6.3	%		28/05/2024
Oxygen	7.2	%		28/05/2024
Solid Particles	2.2	mg/m3		28/05/2024
Temperature	114	degC		28/05/2024
Carbon dioxide	11.9	%		28/05/2024
Cadmium	<0.0003	mg/m3		28/02/2024
Flow Rate	300	m3/sec		28/02/2024
Mercury	0.00039	mg/m3		28/02/2024
Moisture	5.6	%		28/02/2024
Oxygen	6.3	%		28/02/2024
Solid Particles	19	mg/m3		28/02/2024
Temperature	122	degC		28/02/2024
Type 1 and Type 2 substances in Aggregate	<0.14	mg/m3		28/02/2024
Carbon dioxide	12.7	%		28/02/2024

Unit 3 Boiler Emission Test Results

EPA Identification no. 5 - Air emissions monitoring, Boiler 3 stack discharge to air

Name	Reading	Units	Licence Limit	Date
Chlorine	<0.01	mg/m3	20	19/04/2023
Fluorine	9.2	mg/m3	30	19/04/2023
Hydrogen chloride	19	mg/m3	50	19/04/2023
Solid Particles	9.7	mg/m3	50	29/05/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	1.4	mg/m3	100	19/04/2023
Volatile organic compounds as n-propane equivalent	0.76	mg/m3	10	19/04/2023
Cadmium	<0.0002	mg/m3	0.2	29/02/2024
Mercury	<0.0005	mg/m3	0.05	29/02/2024
Solid Particles	5.7	mg/m3	50	29/02/2024
Type 1 and 2 substances in Aggregate	<0.06	mg/m3	0.75	29/02/2024

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	330	m3/sec		29/05/2024
Moisture	6.4	%		29/05/2024
Oxygen	7.5	%		29/05/2024
Solid Particles	10	mg/m3		29/05/2024
Temperature	114	degC		29/05/2024
Carbon dioxide	12.6	%		29/05/2024
Chlorine	<0.01	mg/m3		29/05/2024
Fluorine	14	mg/m3		29/05/2024
Hydrogen chloride	17	mg/m3		29/05/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	1.7	mg/m3		29/05/2024
Volatile organic compounds as n-propane equivalent	0.23	mg/m3		29/05/2024
Cadmium	<0.0003	mg/m3		29/02/2024
Flow Rate	360	m3/sec		29/02/2024
Mercury	<0.0003	mg/m3		29/02/2024
Moisture	5.8	%		29/02/2024
Oxygen	7.2	%		29/02/2024
Solid Particles	2.5	mg/m3		29/02/2024
Temperature	126	degC		29/02/2024
Type 1 and Type 2 substances in Aggregate	<0.011	mg/m3		29/02/2024
Carbon dioxide	11.7	%		29/02/2024

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	300	m3/sec		29/05/2024
Moisture	6.1	%		29/05/2024
Oxygen	7.3	%		29/05/2024
Solid Particles	9.3	mg/m3		29/05/2024
Temperature	116	degC		29/05/2024
Carbon dioxide	11.9	%		29/05/2024
Cadmium	<0.0002	mg/m3		29/02/2024
Flow Rate	420	m3/sec		29/02/2024
Mercury	0.00067	mg/m3		29/02/2024
Moisture	6.6	%		29/02/2024
Oxygen	7.2	%		29/02/2024
Solid Particles	8.4	mg/m3		29/02/2024
Temperature	120	degC		29/02/2024
Type 1 and Type 2 substances in Aggregate	<0.019	mg/m3		29/02/2024
Carbon dioxide	12.4	%		29/02/2024

Unit 4 Boiler Emission Test Results

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

Name	Reading	Units	Licence Limit	Date
Chlorine	0.03	mg/m3	20	5/05/2023
Fluorine	7.4	mg/m3	30	5/05/2023
Hydrogen chloride	8.2	mg/m3	50	5/05/2023
Solid Particles	23	mg/m3	50	30/05/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	2.0	mg/m3	100	5/05/2023
Volatile organic compounds as n-propane equivalent	<0.07	mg/m3	10	5/05/2023
Cadmium	<0.0003	mg/m3	0.2	1/03/2024
Mercury	0.00109	mg/m3	0.05	1/03/2024
Solid Particles	19	mg/m3	50	1/03/2024
Type 1 and 2 substances in Aggregate	<0.05	mg/m3	0.75	1/03/2024

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	300	m^3/sec		30/05/2024
Moisture	5.8	%		30/05/2024
Oxygen	7.5	%		30/05/2024
Solid Particles	28	mg/m^3		30/05/2024
Temperature	120	degC		30/05/2024
Carbon dioxide	11.5	%		30/05/2024
Chlorine	0.033	mg/m^3		30/05/2024
Fluorine	14	mg/m^3		30/05/2024
Hydrogen chloride	15	mg/m^3		30/05/2024
Sulfuric acid mist and sulfur trioxide (as SO3)	1.6	mg/m^3		30/05/2024
Volatile organic compounds as n-propane equivalent	<0.07	mg/m^3		30/05/2024
Cadmium	<0.0004	mg/m^3		1/03/2024
Flow Rate	180	m^3/sec		1/03/2024
Mercury	0.00103	mg/m^3		1/03/2024
Moisture	6.5	%		1/03/2024
Oxygen	8.3	%		1/03/2024
Solid Particles	8.6	mg/m^3		1/03/2024
Temperature	96	degC		1/03/2024
Type 1 and Type 2 substances in Aggregate	<0.044	mg/m^3		1/03/2024
Carbon dioxide	11.4	%		1/03/2024

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

Name	Reading	Units	Licence Limit	Date
Flow Rate	310	m^3/sec		30/05/2024
Moisture	6.1	%		30/05/2024
Oxygen	6.2	%		30/05/2024
Solid Particles	19	mg/m^3		30/05/2024
Temperature	118	degC		30/05/2024
Carbon dioxide	13.7	%		30/05/2024
Cadmium	<0.0003	mg/m^3		1/03/2024
Flow Rate	450	m^3/sec		1/03/2024
Mercury	0.00102	mg/m^3		1/03/2024
Moisture	6.1	%		1/03/2024
Oxygen	8.7	%		1/03/2024
Solid Particles	23	mg/m^3		1/03/2024
Temperature	115	degC		1/03/2024
Type 1 and Type 2 substances in Aggregate	<0.047	mg/m^3		1/03/2024
Carbon dioxide	10.6	%		1/03/2024

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
ER2	17	0.7	0.4	1.1
ER4	18	0.5	1.0	1.5
ER6	19	0.9	1.0	1.9
U6	20	0.6	0.5	1.1

Water Quality - Lake Monitoring LM10

EPA Identification no. 27 - The waters of Lake Macquarie located midway between cooling water inlet and Hungary Point

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
19.69	0.5	20.59	8.03	32.87	95.2	7.06	2.25

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.045	mg/L	5/10/2024
Ammonia	<0.010	mg/L	5/10/2024
Arsenic III	<4.0	mg/L	5/10/2024
Arsenic V	<4.0	mg/L	5/10/2024
Cadmium	<0.0002	mg/L	5/10/2024
Chromium (Trivalent)	<0.001	mg/L	5/10/2024
Chromium (VI) Compounds	<0.001	mg/L	5/10/2024
Copper	<0.001	mg/L	5/10/2024
Iron	0.088	mg/L	5/10/2024
Lead	<0.0002	mg/L	5/10/2024
Manganese	0.0061	mg/L	5/10/2024
Nickel	<0.0005	mg/L	5/10/2024
pH	8.1	pH units	5/10/2024
Selenium	<0.002	mg/L	5/10/2024
Total Suspended Solids	<5	mg/L	5/10/2024
Vanadium	0.0021	mg/L	5/10/2024
Zinc	<0.005	mg/L	5/10/2024

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

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
18.93	0.5	21.00	8.05	34.07	100.4	7.12	2.75

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.04	mg/L	5/10/2024
Ammonia	<0.010	mg/L	5/10/2024
Arsenic III	<4.0	mg/L	5/10/2024
Arsenic V	<4.0	mg/L	5/10/2024
Cadmium	<0.0002	mg/L	5/10/2024
Chromium (Trivalent)	<0.001	mg/L	5/10/2024
Chromium (VI) Compounds	<0.001	mg/L	5/10/2024
Copper	0.001	mg/L	5/10/2024
Iron	0.039	mg/L	5/10/2024
Lead	<0.0002	mg/L	5/10/2024
Manganese	0.0049	mg/L	5/10/2024
Nickel	<0.0005	mg/L	5/10/2024
pH	8.13	pH units	5/10/2024
Selenium	<0.002	mg/L	5/10/2024
Total Suspended Solids	<5	mg/L	5/10/2024
Vanadium	0.0035	mg/L	5/10/2024
Zinc	<0.005	mg/L	5/10/2024

Water Quality - Lake Monitoring LM4

EPA Identification no. 30 - The northern waters of Lake Macquarie east off Lake Macquarie Yacht Club

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
19.81	0.5	19.40	8.14	34.91	115.4	8.63	4.75

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.033	mg/L	5/10/2024
Ammonia	<0.010	mg/L	5/10/2024
Arsenic III	<4.0	mg/L	5/10/2024
Arsenic V	<4.0	mg/L	5/10/2024
Cadmium	<0.0002	mg/L	5/10/2024
Chromium (Trivalent)	<0.001	mg/L	5/10/2024
Chromium (VI) Compounds	<0.001	mg/L	5/10/2024
Copper	<0.001	mg/L	5/10/2024
Iron	0.068	mg/L	5/10/2024
Lead	<0.0002	mg/L	5/10/2024
Manganese	0.005	mg/L	5/10/2024
Nickel	<0.0005	mg/L	5/10/2024
pH	8.13	pH units	5/10/2024
Selenium	<0.002	mg/L	5/10/2024
Total Suspended Solids	<5	mg/L	5/10/2024
Vanadium	0.0018	mg/L	5/10/2024
Zinc	<0.005	mg/L	5/10/2024

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

Field Water Quality Recordings

Air Temp	Depth	Water Temp	pH	Salinity	Dissolved Oxygen		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
20.39	0.5	23.62	8.07	32.80	110.6	7.58	2.75

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.041	mg/L	5/10/2024
Ammonia	<0.010	mg/L	5/10/2024
Arsenic III	<4.0	mg/L	5/10/2024
Arsenic V	<4.0	mg/L	5/10/2024
Cadmium	<0.0002	mg/L	5/10/2024
Chromium (Trivalent)	<0.001	mg/L	5/10/2024
Chromium (VI) Compounds	<0.001	mg/L	5/10/2024
Copper	0.001	mg/L	5/10/2024
Iron	0.066	mg/L	5/10/2024
Lead	<0.0002	mg/L	5/10/2024
Manganese	0.0051	mg/L	5/10/2024
Nickel	<0.0005	mg/L	5/10/2024
pH	8.12	pH units	5/10/2024
Selenium	<0.002	mg/L	5/10/2024
Total Suspended Solids	<5	mg/L	5/10/2024
Vanadium	0.0021	mg/L	5/10/2024
Zinc	<0.005	mg/L	5/10/2024

Eraring Ash Dam Quality Monitoring

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.142	mg/L	-	01/10/24
Ammonia	1.24	mg/L	-	01/10/24
Arsenic III	<0.0005	mg/L	-	01/10/24
Arsenic V	0.0069	mg/L	-	01/10/24
Cadmium	0.00021	mg/L	-	01/10/24
Chromium (Trivalent)	<0.001	mg/L	-	01/10/24
Chromium (VI) Compounds	<0.01	mg/L	-	01/10/24
Copper	0.0046	mg/L	-	01/10/24
Iron	0.073	mg/L	-	01/10/24
Lead	0.0002	mg/L	-	01/10/24
Manganese	0.145	mg/L	-	01/10/24
Nickel	0.0046	mg/L	-	01/10/24
Nitrite and Nitrate as N	5.61	mg/L	-	01/10/24
Nitrogen	7.1	mg/L	-	01/10/24
pH	7.13	pH units	-	01/10/24
Phosphorus as P	0.61	mg/L	-	01/10/24
Reactive Phosphorus as P	0.58	mg/L	-	01/10/24
Selenium	0.0336	mg/L	-	01/10/24
Total Kjeldahl Nitrogen	1.5	mg/L	-	01/10/24
Total Suspended Solids	7	mg/L	-	01/10/24
Vanadium	0.0398	mg/L	-	01/10/24
Zinc	0.01	mg/L	-	01/10/24

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	0.05	mg/L	-	01/10/24
Ammonia	<0.005	mg/L	-	01/10/24
Arsenic III	<0.004	mg/L	-	01/10/24
Arsenic V	<0.004	mg/L	-	01/10/24
Cadmium	<0.0002	mg/L	-	01/10/24
Chromium (Trivalent)	<0.001	mg/L	-	01/10/24
Chromium (VI) Compounds	<0.01	mg/L	-	01/10/24
Copper	0.001	mg/L	-	01/10/24
Iron	0.077	mg/L	-	01/10/24
Lead	<0.0002	mg/L	-	01/10/24
Manganese	0.0045	mg/L	-	01/10/24
Nickel	0.0005	mg/L	-	01/10/24
pH	8.05	pH units	-	01/10/24
Selenium	<0.001	mg/L	-	01/10/24
Total Suspended Solids	44	mg/L	-	01/10/24
Vanadium	0.0022	mg/L	-	01/10/24
Zinc	<0.005	mg/L	-	01/10/24
Dissolved Oxygen	7.29	mg/L	-	01/10/24
Field Temperature	21.5	degC	-	01/10/24
Salinity	33.2	ppt	-	01/10/24
Secchi Disk	3.75	m	-	01/10/24
Temperature – Average	21.76	deg C	-	October 24
Temperature – Minimum	19.05	deg C	-	October 24
Temperature - Maximum	24.97	deg C	-	October 24

Eraring Cooling Water Outlet Canal

EPA Identification no. 36 - Cooling water outlet canal to Myuna Bay

Name	Reading	Units	Licence Limit	Date
Copper	0.0011	mg/L	0.005	01/10/24
Iron	0.075	mg/L	0.3	01/10/24
Selenium	<0.001	mg/L	0.002	01/10/24

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	96.5% Limit	99.8% Limit	100% Limit	Date
Temperature – Average	28.71	deg C	35.5	37.5	38.5	October 24
Temperature – Minimum	22.42	deg C				October 24
Temperature - Maximum	34.66	deg C				October 24

Eraring Cooling Water Outlet Canal

EPA Identification no. 25 – Discharge from Ash Dam

Name	Reading	Units	Licence Limit	Date
Maximum Daily Discharge from Ash Dam	5.88	ML	150	October 24
Monthly Discharge from Ash Dam	66.60	ML	-	October 24

Emergency Discharge – Toe Drain Pond

EPA Identification no. 24 - Emergency discharge to toe drain collection pond.

Toe Drain Pond did not discharge in the month, background sampling only

Name	Reading	Units	Licence Limit	Date
Aluminium	0.024	mg/L	-	01/10/24
Ammonia	1.57	mg/L	-	01/10/24
Arsenic III	0.0022	mg/L	-	01/10/24
Arsenic V	<0.0005	mg/L	-	01/10/24
Cadmium	<0.00005	mg/L	-	01/10/24
Chromium (Trivalent)	<0.001	mg/L	-	01/10/24
Chromium (VI) Compounds	<0.01	mg/L	-	01/10/24
Copper	0.0006	mg/L	-	01/10/24
Iron	3.5	mg/L	-	01/10/24
Lead	<0.0001	mg/L	-	01/10/24
Manganese	0.893	mg/L	-	01/10/24
Nickel	0.002	mg/L	-	01/10/24
Nitrite and Nitrate as N	0.371	mg/L	-	01/10/24
Nitrogen	1.94	mg/L	-	01/10/24
pH	7.00	pH units	6-9.5	01/10/24
Phosphorus as P	0.196	mg/L	-	01/10/24
Reactive Phosphorus as P	0.027	mg/L	-	01/10/24
Selenium	0.0004	mg/L	-	01/10/24
Total Kjeldahl Nitrogen	1.57	mg/L	-	01/10/24
Total Suspended Solids	22	mg/L	50	01/10/24
Vanadium	0.0004	mg/L	-	01/10/24
Zinc	0.002	mg/L	-	01/10/24

MR217

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

MR217 was not sampled in the month, insufficient water.

Name	Reading	Units	Licence Limit	Date
Aluminium		mg/L	-	01/10/24
Ammonia		mg/L	-	01/10/24
Arsenic III		mg/L	-	01/10/24
Arsenic V		mg/L	-	01/10/24
Cadmium		mg/L	-	01/10/24
Chromium (Trivalent)		mg/L	-	01/10/24
Chromium (VI) Compounds		mg/L	-	01/10/24
Copper		mg/L	-	01/10/24
Iron		mg/L	-	01/10/24
Lead		mg/L	-	01/10/24
Manganese		mg/L	-	01/10/24
Nickel		mg/L	-	01/10/24
Nitrite and Nitrate as N		mg/L	-	01/10/24
Nitrogen		mg/L	-	01/10/24
pH		pH units	6-9.5	01/10/24
Phosphorus as P		mg/L	-	01/10/24
Reactive Phosphorus as P		mg/L	-	01/10/24
Selenium		mg/L	-	01/10/24
Total Kjeldahl Nitrogen		mg/L	-	01/10/24
Total Suspended Solids		mg/L	50	01/10/24
Vanadium		mg/L	-	01/10/24
Zinc		mg/L	-	01/10/24

Groundwater Monitoring
Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Date
Aluminium	0.109	mg/L	26/09/24
Ammonia	0.06	mg/L	26/09/24
Arsenic (III)	0.0008	mg/L	26/09/24
Arsenic (V)	<0.0005	mg/L	26/09/24
Cadmium	<0.00005	mg/L	26/09/24
Calcium	2	mg/L	26/09/24
Chromium (trivalent)	<0.01	mg/L	26/09/24
Chromium (VI) compounds	<0.01	mg/L	26/09/24
Copper	<0.0005	mg/L	26/09/24
Electrical Conductivity	430	uS/cm	26/09/24
Iron	0.837	mg/L	26/09/24
Lead	0.0011	mg/L	26/09/24
Magnesium	5	mg/L	26/09/24
Manganese	0.164	mg/L	26/09/24
Nickel	0.0054	mg/L	26/09/24
pH	5.00	pH units	26/09/24
Potassium	4	mg/L	26/09/24
Selenium	<0.0002	mg/L	26/09/24
Sodium	66	mg/L	26/09/24
Standing Water Level	7.36	m	26/09/24
Vanadium	0.0003	mg/L	26/09/24
Zinc	0.044	mg/L	26/09/24

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	0.330	mg/L	26/09/24
Ammonia	5.60	mg/L	26/09/24
Arsenic (III)	<0.004	mg/L	26/09/24
Arsenic (V)	<0.004	mg/L	26/09/24
Cadmium	<0.0002	mg/L	26/09/24
Calcium	307	mg/L	26/09/24
Chromium (trivalent)	<0.10	mg/L	26/09/24
Chromium (VI) compounds	<0.10	mg/L	26/09/24
Copper	0.002	mg/L	26/09/24
Electrical Conductivity	23300	uS/cm	26/09/24
Iron	16.200	mg/L	26/09/24
Lead	0.0008	mg/L	26/09/24
Magnesium	376	mg/L	26/09/24
Manganese	0.856	mg/L	26/09/24
Nickel	0.0010	mg/L	26/09/24
pH	6.64	pH units	26/09/24
Potassium	151	mg/L	26/09/24
Selenium	<0.002	mg/L	26/09/24
Sodium	4110	mg/L	26/09/24
Standing Water Level	4.91	m	26/09/24
Vanadium	0.0035	mg/L	26/09/24
Zinc	0.014	mg/L	26/09/24

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminium	0.061	mg/L	26/09/24
Ammonia	3.25	mg/L	26/09/24
Arsenic (III)	0.0046	mg/L	26/09/24
Arsenic (V)	<0.0005	mg/L	26/09/24
Cadmium	<0.0002	mg/L	26/09/24
Calcium	471	mg/L	26/09/24
Chromium (trivalent)	<0.10	mg/L	26/09/24
Chromium (VI) compounds	<0.10	mg/L	26/09/24
Copper	<0.001	mg/L	26/09/24
Electrical Conductivity	20300	uS/cm	26/09/24
Iron	14.0	mg/L	26/09/24
Lead	0.0004	mg/L	26/09/24
Magnesium	260	mg/L	26/09/24
Manganese	0.422	mg/L	26/09/24
Nickel	0.0012	mg/L	26/09/24
pH	6.58	pH units	26/09/24
Potassium	116	mg/L	26/09/24
Selenium	<0.002	mg/L	26/09/24
Sodium	3550	mg/L	26/09/24
Standing Water Level	1.94	m	26/09/24
Vanadium	0.0010	mg/L	26/09/24
Zinc	0.030	mg/L	26/09/24

Groundwater Monitoring
Groundwater Well – EGM/D26

EPA Identification no. 35 – Groundwater Monitoring Well D26
Groundwater well dry at time of sampling

Name	Reading	Units	Date
Aluminium		mg/L	25/09/24
Ammonia		mg/L	25/09/24
Arsenic (III)		mg/L	25/09/24
Arsenic (V)		mg/L	25/09/24
Cadmium		mg/L	25/09/24
Calcium		mg/L	25/09/24
Chromium (trivalent)		mg/L	25/09/24
Chromium (VI) compounds		mg/L	25/09/24
Copper		mg/L	25/09/24
Electrical Conductivity		uS/cm	25/09/24
Iron		mg/L	25/09/24
Lead		mg/L	25/09/24
Magnesium		mg/L	25/09/24
Manganese		mg/L	25/09/24
Nickel		mg/L	25/09/24
pH		pH units	25/09/24
Potassium		mg/L	25/09/24
Selenium		mg/L	25/09/24
Sodium		mg/L	25/09/24
Standing Water Level		m	25/09/24
Vanadium		mg/L	25/09/24
Zinc		mg/L	25/09/24