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

Environmental Monitoring Data December 2024



Unit 1A Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1A Data Invalidated 5, 9, 11, 25, 26 & 27 December 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
01/12/2024	387	494	266	792	904	718
02/12/2024	365	468	264	805	940	711
03/12/2024	388	453	292	852	945	797
04/12/2024	416	507	301	762	878	703
05/12/2024	-	-	-	-	-	-
06/12/2024	446	486	392	874	1049	729
07/12/2024	386	483	348	860	1013	740
08/12/2024	384	422	346	688	824	458
09/12/2024	-	-	-	-	-	-
10/12/2024	390	419	363	616	839	432
11/12/2024	-	-	-	-	-	-
12/12/2024	315	356	262	682	821	522
13/12/2024	325	370	302	701	836	474
14/12/2024	327	389	281	764	975	557
15/12/2024	340	383	311	789	1061	540
16/12/2024	339	364	300	711	811	527
17/12/2024	314	348	271	743	934	573
18/12/2024	314	334	291	562	795	460
19/12/2024	352	437	270	739	981	464
20/12/2024	349	414	302	694	859	554
21/12/2024	353	382	292	782	1024	535
22/12/2024	371	414	311	778	898	630
23/12/2024	383	408	342	802	968	613
24/12/2024	373	393	321	788	877	611
25/12/2024	-	-	-	-	-	-
26/12/2024	-	-	-	-	-	-
27/12/2024	-	-	-	-	-	-
28/12/2024	373	400	322	828	926	696
29/12/2024	377	419	338	977	1231	705
30/12/2024	354	378	310	821	933	665
31/12/2024	363	411	316	819	928	632

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
Unit 1B Data Invalidated 5, 9, 11, 24-27 December 2024
NoX Data Invalidated 21-23 December 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
01/12/2024	351	462	248	726	771	667
02/12/2024	324	403	242	694	800	628
03/12/2024	338	395	259	733	808	682
04/12/2024	355	442	275	729	765	679
05/12/2024	-	-	-	-	-	-
06/12/2024	370	430	316	755	881	688
07/12/2024	334	403	303	800	887	690
08/12/2024	347	414	286	725	760	694
09/12/2024	-	-	-	-	-	-
10/12/2024	314	345	284	683	718	651
11/12/2024	-	-	-	-	-	-
12/12/2024	287	327	259	670	752	645
13/12/2024	276	297	261	693	789	627
14/12/2024	293	351	262	765	875	686
15/12/2024	302	335	280	818	984	676
16/12/2024	277	294	259	700	727	674
17/12/2024	281	304	262	691	724	662
18/12/2024	289	313	270	707	728	671
19/12/2024	311	397	256	756	836	712
20/12/2024	304	365	266	736	775	701
21/12/2024	-	-	-	801	855	742
22/12/2024	-	-	-	772	797	746
23/12/2024	-	-	-	762	783	734
24/12/2024	-	-	-	-	-	-
25/12/2024	-	-	-	-	-	-
26/12/2024	-	-	-	-	-	-
27/12/2024	-	-	-	-	-	-
28/12/2024	327	363	281	830	860	812
29/12/2024	335	389	283	902	989	827
30/12/2024	327	350	300	790	846	739
31/12/2024	329	373	294	797	826	743

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Data Invalidated 5 December 2024
Unit 2A Offline 8-30 December 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
01/12/2024	354	418	248	679	757	623
02/12/2024	364	421	257	658	699	627
03/12/2024	407	471	364	679	725	631
04/12/2024	393	424	356	700	744	640
05/12/2024	-	-	-	-	-	-
06/12/2024	377	415	326	701	828	657
07/12/2024	344	398	287	716	848	616
08/12/2024	-	-	-	-	-	-
09/12/2024	-	-	-	-	-	-
10/12/2024	-	-	-	-	-	-
11/12/2024	-	-	-	-	-	-
12/12/2024	-	-	-	-	-	-
13/12/2024	-	-	-	-	-	-
14/12/2024	-	-	-	-	-	-
15/12/2024	-	-	-	-	-	-
16/12/2024	-	-	-	-	-	-
17/12/2024	-	-	-	-	-	-
18/12/2024	-	-	-	-	-	-
19/12/2024	-	-	-	-	-	-
20/12/2024	-	-	-	-	-	-
21/12/2024	-	-	-	-	-	-
22/12/2024	-	-	-	-	-	-
23/12/2024	-	-	-	-	-	-
24/12/2024	-	-	-	-	-	-
25/12/2024	-	-	-	-	-	-
26/12/2024	-	-	-	-	-	-
27/12/2024	-	-	-	-	-	-
28/12/2024	-	-	-	-	-	-
29/12/2024	-	-	-	-	-	-
30/12/2024	-	-	-	-	-	-
31/12/2024	296	346	270	686	723	641

Unit 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2B Data Invalidated 5 December 2024
Unit 2B Offline 8-30 December 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
01/12/2024	372	440	262	723	806	669
02/12/2024	382	470	256	705	746	676
03/12/2024	429	453	397	733	782	688
04/12/2024	413	449	375	746	807	678
05/12/2024	-	-	-	-	-	-
06/12/2024	399	428	342	754	882	700
07/12/2024	372	424	319	786	903	682
08/12/2024	-	-	-	-	-	-
09/12/2024	-	-	-	-	-	-
10/12/2024	-	-	-	-	-	-
11/12/2024	-	-	-	-	-	-
12/12/2024	-	-	-	-	-	-
13/12/2024	-	-	-	-	-	-
14/12/2024	-	-	-	-	-	-
15/12/2024	-	-	-	-	-	-
16/12/2024	-	-	-	-	-	-
17/12/2024	-	-	-	-	-	-
18/12/2024	-	-	-	-	-	-
19/12/2024	-	-	-	-	-	-
20/12/2024	-	-	-	-	-	-
21/12/2024	-	-	-	-	-	-
22/12/2024	-	-	-	-	-	-
23/12/2024	-	-	-	-	-	-
24/12/2024	-	-	-	-	-	-
25/12/2024	-	-	-	-	-	-
26/12/2024	-	-	-	-	-	-
27/12/2024	-	-	-	-	-	-
28/12/2024	-	-	-	-	-	-
29/12/2024	-	-	-	-	-	-
30/12/2024	-	-	-	-	-	-
31/12/2024	314	354	280	724	754	695

Unit 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Offline 1- 6 December 2024
NoX unit data invalidated 16 December 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
01/12/2024	-	-	-	-	-	-
02/12/2024	-	-	-	-	-	-
03/12/2024	-	-	-	-	-	-
04/12/2024	-	-	-	-	-	-
05/12/2024	-	-	-	-	-	-
06/12/2024	-	-	-	-	-	-
07/12/2024	300	332	259	799	878	695
08/12/2024	340	430	273	724	753	705
09/12/2024	309	328	290	689	726	663
10/12/2024	314	356	290	696	709	660
11/12/2024	320	337	294	735	791	687
12/12/2024	326	358	305	701	810	656
13/12/2024	350	438	272	698	797	643
14/12/2024	335	421	261	769	861	712
15/12/2024	352	397	236	820	951	702
16/12/2024	-	-	-	717	734	697
17/12/2024	385	428	286	711	728	694
18/12/2024	333	414	285	735	750	695
19/12/2024	373	456	317	797	840	739
20/12/2024	369	442	329	752	789	717
21/12/2024	385	420	341	853	884	782
22/12/2024	396	471	328	796	852	776
23/12/2024	370	413	298	819	875	777
24/12/2024	394	475	306	773	804	741
25/12/2024	395	477	277	764	807	708
26/12/2024	344	419	251	773	806	749
27/12/2024	346	447	265	800	822	776
28/12/2024	407	447	282	858	965	802
29/12/2024	396	475	276	884	945	813
30/12/2024	350	385	265	785	830	733
31/12/2024	371	425	241	807	834	749

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Offline 1- 6 December 2024
Unit 3B Data invalidated 30 December 2024
NoX data invalidated 15, 16, 23, 27, 28 & 29 December 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
01/12/2024	-	-	-	-	-	-
02/12/2024	-	-	-	-	-	-
03/12/2024	-	-	-	-	-	-
04/12/2024	-	-	-	-	-	-
05/12/2024	-	-	-	-	-	-
06/12/2024	-	-	-	-	-	-
07/12/2024	272	304	238	724	831	625
08/12/2024	319	416	260	671	721	633
09/12/2024	292	312	278	620	654	600
10/12/2024	305	347	259	628	654	614
11/12/2024	297	314	285	661	716	603
12/12/2024	299	338	276	643	731	596
13/12/2024	315	376	265	630	711	590
14/12/2024	317	356	264	704	797	622
15/12/2024	-	-	-	747	896	610
16/12/2024	-	-	-	629	644	609
17/12/2024	383	416	296	642	703	618
18/12/2024	316	372	269	687	709	650
19/12/2024	349	415	295	741	824	647
20/12/2024	331	401	292	696	751	651
21/12/2024	341	368	312	794	868	721
22/12/2024	341	412	284	747	779	716
23/12/2024	-	-	-	770	849	701
24/12/2024	390	434	293	725	785	679
25/12/2024	390	444	267	727	755	677
26/12/2024	337	431	240	744	780	679
27/12/2024	-	-	-	757	800	707
28/12/2024	-	-	-	802	890	706
29/12/2024	-	-	-	837	909	744
30/12/2024	-	-	-	-	-	-
31/12/2024	344	394	240	744	828	670

Unit 4A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4A Offline 31 December 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
01/12/2024	318	399	264	590	752	461
02/12/2024	326	394	251	576	697	500
03/12/2024	320	365	286	554	580	530
04/12/2024	332	435	272	544	659	448
05/12/2024	314	425	261	577	777	440
06/12/2024	310	397	279	606	718	520
07/12/2024	325	386	276	656	827	507
08/12/2024	350	454	290	603	706	493
09/12/2024	302	330	281	493	527	464
10/12/2024	346	402	313	610	727	519
11/12/2024	318	391	277	585	717	457
12/12/2024	359	483	270	551	637	479
13/12/2024	311	334	254	558	675	474
14/12/2024	292	328	250	565	690	490
15/12/2024	313	383	254	662	908	502
16/12/2024	342	439	292	562	713	504
17/12/2024	311	457	177	535	607	481
18/12/2024	373	482	297	519	577	460
19/12/2024	324	391	279	635	846	506
20/12/2024	353	497	276	608	759	480
21/12/2024	353	453	303	666	827	551
22/12/2024	356	429	279	624	733	526
23/12/2024	347	425	261	690	821	534
24/12/2024	370	422	279	657	785	506
25/12/2024	364	394	279	641	752	547
26/12/2024	349	420	286	665	769	555
27/12/2024	311	408	85	707	821	603
28/12/2024	368	444	301	716	786	619
29/12/2024	354	437	298	756	908	607
30/12/2024	352	487	282	661	815	571
31/12/2024	-	-	-	-	-	-

Unit 4B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4B Offline 31 December 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
01/12/2024	358	402	304	698	796	626
02/12/2024	374	411	313	665	740	589
03/12/2024	382	407	362	664	694	622
04/12/2024	387	447	320	657	752	587
05/12/2024	368	424	306	705	872	582
06/12/2024	363	386	339	709	824	618
07/12/2024	356	411	311	753	914	609
08/12/2024	373	409	320	685	753	600
09/12/2024	381	414	335	591	616	567
10/12/2024	366	424	338	722	762	612
11/12/2024	334	386	299	704	782	651
12/12/2024	385	463	330	628	680	573
13/12/2024	362	427	327	634	708	551
14/12/2024	357	380	332	670	795	581
15/12/2024	378	404	335	770	980	596
16/12/2024	393	419	354	643	744	595
17/12/2024	401	478	382	612	682	578
18/12/2024	410	519	361	638	685	579
19/12/2024	375	416	308	727	916	607
20/12/2024	383	449	318	705	790	613
21/12/2024	399	469	316	754	877	653
22/12/2024	396	439	338	703	771	624
23/12/2024	376	440	290	749	840	625
24/12/2024	386	431	336	725	822	624
25/12/2024	384	433	300	713	767	651
26/12/2024	352	409	267	718	789	619
27/12/2024	343	385	277	723	797	624
28/12/2024	346	376	294	758	829	664
29/12/2024	345	388	301	799	929	661
30/12/2024	362	462	312	713	827	652
31/12/2024	-	-	-	-	-	-

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	129	degC	-	25/06/2024
Carbon dioxide	12	%	-	25/06/2024
Chlorine	0.12	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	127	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 Limit	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 Limit	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	123	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	123	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	124	degC	-	28/05/2024
Carbon dioxide	12.9	%	-	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. 12 - 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	124	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	<0.012	mg/m3	-	29/02/2024
Carbon dioxide	12.7	%	-	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	126	degC	-	29/05/2024
Carbon dioxide	12.9	%	-	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	12.5	%	-	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	12.4	%	-	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	128	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	125	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	0.3	0.1	0.4
ER4	18	0.5	0.3	0.8
ER6	19	2.4	2.3	4.7
U6	20	0.9	0.7	1.6

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		Sechi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
23.86	0.5	26.34	7.93	33.91	99.4	6.62	2.75

	Laboratory Analysis			
Name	Reading	Units	Licence Limit	Date
Aluminium	0.057	mg/L	-	05/12/24
Ammonia	<0.010	mg/L	-	05/12/24
Arsenic III	<0.004	mg/L	-	05/12/24
Arsenic V	<0.004	mg/L	-	05/12/24
Cadmium	<0.0002	mg/L	-	05/12/24
Chromium (Trivalent)	0.002	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.001	mg/L	-	05/12/24
Copper	<0.001	mg/L	-	05/12/24
Iron	0.095	mg/L	-	05/12/24
Lead	<0.0002	mg/L	-	05/12/24
Manganese	0.0074	mg/L	-	05/12/24
Nickel	<0.0005	mg/L	-	05/12/24
pH	8.09	pH units	-	05/12/24
Selenium	<0.002	mg/L	-	05/12/24
Total Suspended Solids	<5	mg/L	-	05/12/24
Vanadium	0.0022	mg/L	-	05/12/24
Zinc	<0.005	mg/L	-	05/12/24

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
23.49	0.5	26.76	7.92	34.27	105.4	6.95	4.25

Laboratory Analysis				
Name	**Reading**	**Units**	**Licence Limits**	**Date**
Aluminium	0.012	mg/L	-	05/12/24
Ammonia	<0.010	mg/L	-	05/12/24
Arsenic III	<0.004	mg/L	-	05/12/24
Arsenic V	<0.004	mg/L	-	05/12/24
Cadmium	<0.0002	mg/L	-	05/12/24
Chromium (Trivalent)	<0.001	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.001	mg/L	-	05/12/24
Copper	0.001	mg/L	-	05/12/24
Iron	0.012	mg/L	-	05/12/24
Lead	<0.0002	mg/L	-	05/12/24
Manganese	0.0037	mg/L	-	05/12/24
Nickel	<0.0005	mg/L	-	05/12/24
pH	8.09	pH units	-	05/12/24
Selenium	<0.002	mg/L	-	05/12/24
Total Suspended Solids	<5	mg/L	-	05/12/24
Vanadium	0.0029	mg/L	-	05/12/24
Zinc	<0.005	mg/L	-	05/12/24

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
22.98	0.5	25.18	8.04	34.84	102.4	6.93	4.25

Laboratory Analysis

Name	Reading	Units	Licence Limits	Date
Aluminium	0.014	mg/L	-	05/12/24
Ammonia	<0.010	mg/L	-	05/12/24
Arsenic III	<0.004	mg/L	-	05/12/24
Arsenic V	<0.004	mg/L	-	05/12/24
Cadmium	<0.0002	mg/L	-	05/12/24
Chromium (Trivalent)	<0.001	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.001	mg/L	-	05/12/24
Copper	<0.001	mg/L	-	05/12/24
Iron	0.012	mg/L	-	05/12/24
Lead	0.0002	mg/L	-	05/12/24
Manganese	0.0055	mg/L	-	05/12/24
Nickel	<0.0005	mg/L	-	05/12/24
pH	8.12	pH units	-	05/12/24
Selenium	<0.002	mg/L	-	05/12/24
Total Suspended Solids	<5	mg/L	-	05/12/24
Vanadium	0.0017	mg/L	-	05/12/24
Zinc	<0.005	mg/L	-	05/12/24

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
23.89	0.5	29.77	7.95	34.82	105.4	6.61	2.75

Laboratory Analysis

Name	Reading	Units	Licence Limits	Date
Aluminium	0.044	mg/L	-	05/12/24
Ammonia	<0.010	mg/L	-	05/12/24
Arsenic III	<0.004	mg/L	-	05/12/24
Arsenic V	<0.004	mg/L	-	05/12/24
Cadmium	<0.0002	mg/L	-	05/12/24
Chromium (Trivalent)	<0.001	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.001	mg/L	-	05/12/24
Copper	0.001	mg/L	-	05/12/24
Iron	0.084	mg/L	-	05/12/24
Lead	<0.0002	mg/L	-	05/12/24
Manganese	0.0079	mg/L	-	05/12/24
Nickel	<0.0005	mg/L	-	05/12/24
pH	8.08	pH units	-	05/12/24
Selenium	<0.002	mg/L	-	05/12/24
Total Suspended Solids	<5	mg/L	-	05/12/24
Vanadium	0.0022	mg/L	-	05/12/24
Zinc	<0.005	mg/L	-	05/12/24

Eraring Ash Dam Water Quality Monitoring

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

Name	Reading	Units	Licence Limit	Date
Aluminium	0.088	mg/L	-	05/12/24
Ammonia	1.40	mg/L	-	05/12/24
Arsenic III	<0.0005	mg/L	-	05/12/24
Arsenic V	0.0085	mg/L	-	05/12/24
Cadmium	0.00005	mg/L	-	05/12/24
Chromium (Trivalent)	<0.001	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.01	mg/L	-	05/12/24
Copper	0.0049	mg/L	-	05/12/24
Iron	0.035	mg/L	-	05/12/24
Lead	<0.0001	mg/L	-	05/12/24
Manganese	0.0540	mg/L	-	05/12/24
Nickel	0.0026	mg/L	-	05/12/24
Nitrite and Nitrate as N	4.21	mg/L	-	05/12/24
Nitrogen	5.8	mg/L	-	05/12/24
pH	7.62	pH units	-	05/12/24
Phosphorus as P	0.78	mg/L	-	05/12/24
Reactive Phosphorus as P	0.72	mg/L	-	05/12/24
Selenium	0.0353	mg/L	-	05/12/24
Total Kjeldahl Nitrogen	1.6	mg/L	-	05/12/24
Total Suspended Solids	6	mg/L	-	05/12/24
Vanadium	0.0549	mg/L	-	05/12/24
Zinc	0.004	mg/L	-	05/12/24

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	0.073	mg/L	-	05/12/24
Ammonia	<0.005	mg/L	-	05/12/24
Arsenic III	<0.004	mg/L	-	05/12/24
Arsenic V	<0.004	mg/L	-	05/12/24
Cadmium	<0.0002	mg/L	-	05/12/24
Chromium (Trivalent)	<0.001	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.01	mg/L	-	05/12/24
Copper	0.0010	mg/L	-	05/12/24
Iron	0.125	mg/L	-	05/12/24
Lead	<0.0002	mg/L	-	05/12/24
Manganese	0.0071	mg/L	-	05/12/24
Nickel	<0.0005	mg/L	-	05/12/24
pH	8.10	pH units	-	05/12/24
Selenium	0.002	mg/L	-	05/12/24
Total Suspended Solids	24	mg/L	-	05/12/24
Vanadium	0.0026	mg/L	-	05/12/24
Zinc	<0.005	mg/L	-	05/12/24
Dissolved Oxygen	6.16	mg/L	-	05/12/24
Field Temperature	25.7	degC	-	05/12/24
Salinity	35.42	ppt	-	05/12/24
Secchi Disk	2.25	m	-	05/12/24
Temperature – Average	24.97	deg C	-	December 24
Temperature – Minimum	20.55	deg C	-	December 24
Temperature - Maximum	30.29	deg C	-	December 24

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0013	mg/L	0.005	05/12/24
Iron	0.177	mg/L	0.3	05/12/24
Selenium	0.002	mg/L	0.002	05/12/24

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	30.90	deg C	35.5	37.5	38.5	December 24
Temperature – Minimum	24.21	deg C				December 24
Temperature - Maximum	36.14	deg C				December 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	6.55	ML	150	December 24
Monthly Discharge from Ash Dam	43.83	ML	-	December 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	0.014	mg/L	-	05/12/24
Ammonia	3.65	mg/L	-	05/12/24
Arsenic III	0.0053	mg/L	-	05/12/24
Arsenic V	0.0015	mg/L	-	05/12/24
Cadmium	<0.00005	mg/L	-	05/12/24
Chromium (Trivalent)	<0.001	mg/L	-	05/12/24
Chromium (VI) Compounds	<0.01	mg/L	-	05/12/24
Copper	<0.0005	mg/L	-	05/12/24
Iron	4.66	mg/L	-	05/12/24
Lead	<0.0001	mg/L	-	05/12/24
Manganese	0.732	mg/L	-	05/12/24
Nickel	0.0021	mg/L	-	05/12/24
Nitrite and Nitrate as N	0.049	mg/L	-	05/12/24
Nitrogen	3.93	mg/L	-	05/12/24
pH	6.92	pH units	6-9.5	05/12/24
Phosphorus as P	0.354	mg/L	-	05/12/24
Reactive Phosphorus as P	0.058	mg/L	-	05/12/24
Selenium	0.0006	mg/L	-	05/12/24
Total Kjeldahl Nitrogen	3.88	mg/L	-	05/12/24
Total Suspended Solids	18	mg/L	50	05/12/24
Vanadium	0.0006	mg/L	-	05/12/24
Zinc	<0.001	mg/L	-	05/12/24

MR217

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

MR217 Did not discharge and no background sample taken due to insufficient water.

Name	Reading	Units	Licence Limit	Date
Aluminium		mg/L	-	05/12/24
Ammonia		mg/L	-	05/12/24
Arsenic III		mg/L	-	05/12/24
Arsenic V		mg/L	-	05/12/24
Cadmium		mg/L	-	05/12/24
Chromium (Trivalent)		mg/L	-	05/12/24
Chromium (VI) Compounds		mg/L	-	05/12/24
Copper		mg/L	-	05/12/24
Iron		mg/L	-	05/12/24
Lead		mg/L	-	05/12/24
Manganese		mg/L	-	05/12/24
Nickel		mg/L	-	05/12/24
Nitrite and Nitrate as N		mg/L	-	05/12/24
Nitrogen		mg/L	-	05/12/24
pH		pH units	6-9.5	05/12/24
Phosphorus as P		mg/L	-	05/12/24
Reactive Phosphorus as P		mg/L	-	05/12/24
Selenium		mg/L	-	05/12/24
Total Kjeldahl Nitrogen		mg/L	-	05/12/24
Total Suspended Solids		mg/L	50	05/12/24
Vanadium		mg/L	-	05/12/24
Zinc		mg/L	-	05/12/24

Groundwater Monitoring
Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Licence Limit	Date
Aluminium	0.088	mg/L	-	02/12/24
Ammonia	0.03	mg/L	-	02/12/24
Arsenic (III)	<0.0005	mg/L	-	02/12/24
Arsenic (V)	<0.0005	mg/L	-	02/12/24
Cadmium	<0.00005	mg/L	-	02/12/24
Calcium	2	mg/L	-	02/12/24
Chromium (trivalent)	<0.01	mg/L	-	02/12/24
Chromium (VI) compounds	<0.01	mg/L	-	02/12/24
Copper	0.0006	mg/L	-	02/12/24
Electrical Conductivity	418	uS/cm	-	02/12/24
Iron	0.612	mg/L	-	02/12/24
Lead	0.0006	mg/L	-	02/12/24
Magnesium	5	mg/L	-	02/12/24
Manganese	0.143	mg/L	-	02/12/24
Nickel	0.0046	mg/L	-	02/12/24
pH	4.99	pH units	-	02/12/24
Potassium	4	mg/L	-	02/12/24
Selenium	<0.0002	mg/L	-	02/12/24
Sodium	68	mg/L	-	02/12/24
Standing Water Level	7.11	m	-	02/12/24
Vanadium	<0.0002	mg/L	-	02/12/24
Zinc	0.031	mg/L	-	02/12/24

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Licence Limit	Date
Aluminium	0.201	mg/L	-	03/12/24
Ammonia	5.48	mg/L	-	03/12/24
Arsenic (III)	0.0012	mg/L	-	03/12/24
Arsenic (V)	<0.0005	mg/L	-	03/12/24
Cadmium	<0.00005	mg/L	-	03/12/24
Calcium	0.319	mg/L	-	03/12/24
Chromium (trivalent)	<0.01	mg/L	-	03/12/24
Chromium (VI) compounds	<0.01	mg/L	-	03/12/24
Copper	0.0049	mg/L	-	03/12/24
Electrical Conductivity	21400	uS/cm	-	03/12/24
Iron	10.1	mg/L	-	03/12/24
Lead	0.0005	mg/L	-	03/12/24
Magnesium	336	mg/L	-	03/12/24
Manganese	0.804	mg/L	-	03/12/24
Nickel	0.0081	mg/L	-	03/12/24
pH	6.49	pH units	-	03/12/24
Potassium	146	mg/L	-	03/12/24
Selenium	0.001	mg/L	-	03/12/24
Sodium	3750	mg/L	-	03/12/24
Standing Water Level	5.12	m	-	03/12/24
Vanadium	0.0017	mg/L	-	03/12/24
Zinc	0.161	mg/L	-	03/12/24

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Licence Limit	Date
Aluminium	0.020	mg/L	-	02/12/24
Ammonia	3.10	mg/L	-	02/12/24
Arsenic (III)	0.003	mg/L	-	02/12/24
Arsenic (V)	<0.0005	mg/L	-	02/12/24
Cadmium	<0.00005	mg/L	-	02/12/24
Calcium	404	mg/L	-	02/12/24
Chromium (trivalent)	<0.01	mg/L	-	02/12/24
Chromium (VI) compounds	<0.01	mg/L	-	02/12/24
Copper	0.0008	mg/L	-	02/12/24
Electrical Conductivity	19900	uS/cm	-	02/12/24
Iron	11.6	mg/L	-	02/12/24
Lead	0.0003	mg/L	-	02/12/24
Magnesium	244	mg/L	-	02/12/24
Manganese	0.373	mg/L	-	02/12/24
Nickel	0.0013	mg/L	-	02/12/24
pH	6.44	pH units	-	02/12/24
Potassium	113	mg/L	-	02/12/24
Selenium	0.0007	mg/L	-	02/12/24
Sodium	3270	mg/L	-	02/12/24
Standing Water Level	1.97	m	-	02/12/24
Vanadium	0.001	mg/L	-	02/12/24
Zinc	0.079	mg/L	-	02/12/24

Groundwater Monitoring
Groundwater Well – EGM/D26

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

Name	Reading	Units	Licence Limit	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		m	-	
Vanadium		mg/L	-	
Zinc		mg/L	-	