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

Environmental Monitoring Data August 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 3, 6 to 8, 26 and 27 August 2024
Unit 1A Offline 11 to 25 August 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
01/08/2024	319	405	245	575	806	295
02/08/2024	352	400	297	841	1044	680
03/08/2024	-	-	-	687	855	519
04/08/2024	372	412	285	616	760	395
05/08/2024	371	403	314	532	644	401
06/08/2024	-	-	-	500	628	370
07/08/2024	-	-	-	649	1155	355
08/08/2024	-	-	-	742	912	314
09/08/2024	438	468	412	846	1010	673
10/08/2024	462	483	431	744	877	566
11/08/2024	-	-	-	-	-	-
12/08/2024	-	-	-	-	-	-
13/08/2024	-	-	-	-	-	-
14/08/2024	-	-	-	-	-	-
15/08/2024	-	-	-	-	-	-
16/08/2024	-	-	-	-	-	-
17/08/2024	-	-	-	-	-	-
18/08/2024	-	-	-	-	-	-
19/08/2024	-	-	-	-	-	-
20/08/2024	-	-	-	-	-	-
21/08/2024	-	-	-	-	-	-
22/08/2024	-	-	-	-	-	-
23/08/2024	-	-	-	-	-	-
24/08/2024	-	-	-	-	-	-
25/08/2024	-	-	-	-	-	-
26/08/2024	-	-	-	774	883	525
27/08/2024	-	-	-	763	876	616
28/08/2024	433	480	362	741	852	579
29/08/2024	404	475	320	797	875	719
30/08/2024	401	496	315	833	920	708
31/08/2024	399	464	349	863	975	697

Unit 1B Boiler Continuous Emission Monitoring Summary

EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air
NOX Unit Data Invalidated 1, 4 to 5 and 8 August 2024
Unit 1B Offline 11 to 25 August 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
01/08/2024	-	-	-	910	1038	821
02/08/2024	320	364	270	1035	1161	919
03/08/2024	300	348	247	834	887	813
04/08/2024	-	-	-	769	826	694
05/08/2024	-	-	-	741	784	674
06/08/2024	296	336	268	696	756	633
07/08/2024	303	355	266	894	1034	746
08/08/2024	-	-	-	780	917	725
09/08/2024	335	355	318	816	975	744
10/08/2024	337	354	323	702	764	624
11/08/2024	-	-	-	-	-	-
12/08/2024	-	-	-	-	-	-
13/08/2024	-	-	-	-	-	-
14/08/2024	-	-	-	-	-	-
15/08/2024	-	-	-	-	-	-
16/08/2024	-	-	-	-	-	-
17/08/2024	-	-	-	-	-	-
18/08/2024	-	-	-	-	-	-
19/08/2024	-	-	-	-	-	-
20/08/2024	-	-	-	-	-	-
21/08/2024	-	-	-	-	-	-
22/08/2024	-	-	-	-	-	-
23/08/2024	-	-	-	-	-	-
24/08/2024	-	-	-	-	-	-
25/08/2024	-	-	-	-	-	-
26/08/2024	345	386	304	821	896	769
27/08/2024	359	416	310	777	891	692
28/08/2024	351	414	288	669	733	585
29/08/2024	335	382	258	762	822	716
30/08/2024	348	444	273	757	836	707
31/08/2024	339	422	286	812	881	740

Unit 2A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2A Data Invalidated 28 and 29 August 2024
Unit 2A Offline 10 to 22 August 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
01/08/2024	388	447	326	876	941	774
02/08/2024	380	428	339	931	1089	831
03/08/2024	391	467	330	799	847	751
04/08/2024	426	468	376	762	823	691
05/08/2024	416	466	347	685	787	630
06/08/2024	431	457	376	695	768	616
07/08/2024	417	473	347	789	878	708
08/08/2024	407	445	347	777	948	669
09/08/2024	387	420	320	730	912	662
10/08/2024	-	-	-	-	-	-
11/08/2024	-	-	-	-	-	-
12/08/2024	-	-	-	-	-	-
13/08/2024	-	-	-	-	-	-
14/08/2024	-	-	-	-	-	-
15/08/2024	-	-	-	-	-	-
16/08/2024	-	-	-	-	-	-
17/08/2024	-	-	-	-	-	-
18/08/2024	-	-	-	-	-	-
19/08/2024	-	-	-	-	-	-
20/08/2024	-	-	-	-	-	-
21/08/2024	-	-	-	-	-	-
22/08/2024	-	-	-	-	-	-
23/08/2024	426	547	331	654	762	488
24/08/2024	420	488	369	711	795	647
25/08/2024	422	464	346	707	759	653
26/08/2024	414	468	344	761	820	715
27/08/2024	512	596	393	744	838	682
28/08/2024	-	-	-	-	-	-
29/08/2024	-	-	-	-	-	-
30/08/2024	485	550	409	755	798	699
31/08/2024	434	536	378	749	839	688

Unit 2B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2 B Offline 10 22 August 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
01/08/2024	388	413	353	930	982	860
02/08/2024	377	409	342	958	1087	868
03/08/2024	386	453	328	831	862	798
04/08/2024	431	503	373	795	836	745
05/08/2024	441	485	387	715	772	672
06/08/2024	447	500	400	712	774	657
07/08/2024	440	485	352	809	868	742
08/08/2024	426	475	375	805	914	723
09/08/2024	427	471	378	768	896	717
10/08/2024	-	-	-	-	-	-
11/08/2024	-	-	-	-	-	-
12/08/2024	-	-	-	-	-	-
13/08/2024	-	-	-	-	-	-
14/08/2024	-	-	-	-	-	-
15/08/2024	-	-	-	-	-	-
16/08/2024	-	-	-	-	-	-
17/08/2024	-	-	-	-	-	-
18/08/2024	-	-	-	-	-	-
19/08/2024	-	-	-	-	-	-
20/08/2024	-	-	-	-	-	-
21/08/2024	-	-	-	-	-	-
22/08/2024	-	-	-	-	-	-
23/08/2024	483	614	376	759	857	579
24/08/2024	434	519	366	724	797	665
25/08/2024	442	493	366	713	743	679
26/08/2024	448	518	374	771	825	738
27/08/2024	536	615	399	762	839	677
28/08/2024	485	582	421	709	754	645
29/08/2024	435	524	347	778	861	699
30/08/2024	502	564	419	752	781	697
31/08/2024	471	539	439	748	820	676

Unit 3A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3A Offline 25 to 31 August 2024 (major outage)

	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
01/08/2024	341	405	275	1020	1084	938
02/08/2024	317	412	254	1083	1149	924
03/08/2024	320	430	251	884	925	832
04/08/2024	352	411	287	829	885	788
05/08/2024	371	426	326	801	816	773
06/08/2024	352	388	286	779	797	760
07/08/2024	356	402	270	933	1053	779
08/08/2024	354	406	278	843	920	797
09/08/2024	358	398	264	792	925	734
10/08/2024	355	385	282	753	805	699
11/08/2024	356	385	280	798	836	742
12/08/2024	329	389	282	747	834	633
13/08/2024	337	371	257	665	777	639
14/08/2024	359	383	291	780	872	675
15/08/2024	366	424	264	793	857	762
16/08/2024	363	420	262	689	770	631
17/08/2024	415	467	311	803	945	696
18/08/2024	384	447	318	865	954	736
19/08/2024	376	414	352	892	1043	688
20/08/2024	384	447	329	820	903	678
21/08/2024	391	459	323	769	822	704
22/08/2024	432	501	364	775	832	659
23/08/2024	435	496	353	810	971	674
24/08/2024	338	408	297	807	959	753
25/08/2024	-	-	-	-	-	-
26/08/2024	-	-	-	-	-	-
27/08/2024	-	-	-	-	-	-
28/08/2024	-	-	-	-	-	-
29/08/2024	-	-	-	-	-	-
30/08/2024	-	-	-	-	-	-
31/08/2024	-	-	-	-	-	-

Unit 3B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air
Unit 3B Offline 25 to 31 August 2024 (major outage)

	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
01/08/2024	314	351	243	895	962	802
02/08/2024	292	396	231	976	1084	798
03/08/2024	280	368	229	753	839	671
04/08/2024	314	365	252	697	770	653
05/08/2024	343	384	305	666	708	635
06/08/2024	322	351	265	663	741	617
07/08/2024	330	371	239	788	954	654
08/08/2024	321	359	262	712	810	648
09/08/2024	318	347	248	654	740	600
10/08/2024	305	326	248	624	723	562
11/08/2024	306	340	252	665	788	599
12/08/2024	274	326	220	595	677	490
13/08/2024	300	339	240	546	629	518
14/08/2024	328	356	277	644	784	551
15/08/2024	343	392	244	661	717	614
16/08/2024	330	383	243	568	616	510
17/08/2024	365	407	266	679	769	565
18/08/2024	332	368	289	721	874	587
19/08/2024	320	349	299	739	896	559
20/08/2024	335	373	292	693	807	552
21/08/2024	326	370	278	632	667	574
22/08/2024	353	401	317	638	697	538
23/08/2024	384	484	307	695	826	615
24/08/2024	296	368	242	692	778	635
25/08/2024	-	-	-	-	-	-
26/08/2024	-	-	-	-	-	-
27/08/2024	-	-	-	-	-	-
28/08/2024	-	-	-	-	-	-
29/08/2024	-	-	-	-	-	-
30/08/2024	-	-	-	-	-	-
31/08/2024	-	-	-	-	-	-

Unit 4A Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 4 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
01/08/2024	257	353	210	644	879	509
02/08/2024	273	347	221	714	980	519
03/08/2024	248	349	209	541	753	378
04/08/2024	250	365	216	503	668	450
05/08/2024	234	256	215	470	533	401
06/08/2024	272	361	214	516	624	455
07/08/2024	259	390	216	609	878	458
08/08/2024	261	397	212	551	702	438
09/08/2024	295	409	228	595	771	487
10/08/2024	252	372	218	492	619	419
11/08/2024	284	466	226	511	682	427
12/08/2024	261	298	228	466	529	395
13/08/2024	270	341	237	424	557	386
14/08/2024	264	298	246	495	569	419
15/08/2024	286	358	261	491	598	421
16/08/2024	301	327	278	469	602	421
17/08/2024	317	374	284	567	715	448
18/08/2024	294	351	241	578	757	437
19/08/2024	279	360	248	543	707	425
20/08/2024	310	364	258	522	684	393
21/08/2024	317	438	267	530	669	432
22/08/2024	319	403	266	567	808	445
23/08/2024	357	500	283	537	689	430
24/08/2024	311	376	264	583	740	479
25/08/2024	309	370	250	561	707	453
26/08/2024	337	395	290	650	804	528
27/08/2024	357	470	269	596	826	409
28/08/2024	373	479	279	589	740	462
29/08/2024	327	388	281	656	768	426
30/08/2024	372	446	285	686	848	513
31/08/2024	395	448	292	640	809	499

Unit 4B Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air
SO2 Unit Data Invalidated 8 August 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
01/08/2024	335	361	309	967	1064	876
02/08/2024	334	395	298	996	1120	813
03/08/2024	346	372	304	796	866	715
04/08/2024	365	389	333	735	789	690
05/08/2024	372	393	355	698	765	618
06/08/2024	370	428	324	711	789	670
07/08/2024	360	442	325	853	985	702
08/08/2024	348	416	321	-	-	-
09/08/2024	357	447	311	777	835	691
10/08/2024	359	405	311	687	774	610
11/08/2024	350	491	287	712	790	637
12/08/2024	372	413	324	677	773	580
13/08/2024	354	405	303	591	619	580
14/08/2024	358	381	332	714	819	606
15/08/2024	380	407	338	701	757	621
16/08/2024	385	417	360	647	737	593
17/08/2024	414	431	366	747	856	646
18/08/2024	403	433	380	814	910	652
19/08/2024	379	423	358	799	994	612
20/08/2024	379	415	343	694	792	560
21/08/2024	378	409	325	665	721	609
22/08/2024	386	418	347	720	869	633
23/08/2024	408	488	367	697	832	616
24/08/2024	364	387	339	727	870	656
25/08/2024	353	370	338	708	765	651
26/08/2024	388	440	348	796	942	715
27/08/2024	415	458	346	783	942	673
28/08/2024	393	445	342	688	788	599
29/08/2024	364	395	333	780	871	639
30/08/2024	408	445	377	804	917	711
31/08/2024	376	441	327	706	785	611

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	0.00089	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	0.00083	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	0.00092	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	0.6	0.1	0.7
ER4	18	0.3	0.1	0.4
ER6	19	0.7	0.4	1.1
U6	20	1.8	1.8	3.6

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		Secchi
^{0}C	m	^{0}C	pH unit	ppt	%	mg/L	m
14.81	0.5	15.29	7.84	31.4	100.6	8.28	2.5

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	<0.005	mg/L	5/08/2024
Ammonia	<0.005	mg/L	5/08/2024
Arsenic III	<4	mg/L	5/08/2024
Arsenic V	<4	mg/L	5/08/2024
Cadmium	<0.0002	mg/L	5/08/2024
Chromium (Trivalent)	<0.001	mg/L	5/08/2024
Chromium (VI) Compounds	<0.001	mg/L	5/08/2024
Copper	<0.001	mg/L	5/08/2024
Iron	<0.005	mg/L	5/08/2024
Lead	<0.0002	mg/L	5/08/2024
Manganese	0.0017	mg/L	5/08/2024
Nickel	0.0006	mg/L	5/08/2024
pH	8.02	pH units	5/08/2024
Selenium	<0.002	mg/L	5/08/2024
Total Suspended Solids	10	mg/L	5/08/2024
Vanadium	0.0019	mg/L	5/08/2024
Zinc	<0.005	mg/L	5/08/2024

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
15.85	0.5	16.2	7.8	31.25	111.3	9.07	3.25

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.028	mg/L	5/08/2024
Ammonia	<0.005	mg/L	5/08/2024
Arsenic III	<4	mg/L	5/08/2024
Arsenic V	<4	mg/L	5/08/2024
Cadmium	<0.0002	mg/L	5/08/2024
Chromium (Trivalent)	<0.001	mg/L	5/08/2024
Chromium (VI) Compounds	<0.001	mg/L	5/08/2024
Copper	0.001	mg/L	5/08/2024
Iron	0.027	mg/L	5/08/2024
Lead	<0.0002	mg/L	5/08/2024
Manganese	0.0047	mg/L	5/08/2024
Nickel	0.0007	mg/L	5/08/2024
pH	8.02	pH units	5/08/2024
Selenium	<0.002	mg/L	5/08/2024
Total Suspended Solids	<5	mg/L	5/08/2024
Vanadium	0.003	mg/L	5/08/2024
Zinc	<0.005	mg/L	5/08/2024

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
14.38	0.5	15.1	7.85	30.78	124.4	10.38	6.25

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	<0.005	mg/L	5/08/2024
Ammonia	<0.005	mg/L	5/08/2024
Arsenic III	<4	mg/L	5/08/2024
Arsenic V	<4	mg/L	5/08/2024
Cadmium	<0.0002	mg/L	5/08/2024
Chromium (Trivalent)	<0.001	mg/L	5/08/2024
Chromium (VI) Compounds	<0.001	mg/L	5/08/2024
Copper	<0.001	mg/L	5/08/2024
Iron	<0.005	mg/L	5/08/2024
Lead	<0.0002	mg/L	5/08/2024
Manganese	0.0008	mg/L	5/08/2024
Nickel	<0.0005	mg/L	5/08/2024
pH	8.04	pH units	5/08/2024
Selenium	<0.002	mg/L	5/08/2024
Total Suspended Solids	<5	mg/L	5/08/2024
Vanadium	0.0021	mg/L	5/08/2024
Zinc	<0.005	mg/L	5/08/2024

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
13.64	0.5	18.65	7.84	31.68	110.4	8.59	4.75

Laboratory Analysis

Name	Reading	Units	Date
Aluminium	0.018	mg/L	5/08/2024
Ammonia	<0.005	mg/L	5/08/2024
Arsenic III	<4	mg/L	5/08/2024
Arsenic V	<4	mg/L	5/08/2024
Cadmium	<0.0002	mg/L	5/08/2024
Chromium (Trivalent)	<0.001	mg/L	5/08/2024
Chromium (VI) Compounds	<0.001	mg/L	5/08/2024
Copper	<0.001	mg/L	5/08/2024
Iron	0.028	mg/L	5/08/2024
Lead	<0.0002	mg/L	5/08/2024
Manganese	0.0034	mg/L	5/08/2024
Nickel	0.0006	mg/L	5/08/2024
pH	8.04	pH units	5/08/2024
Selenium	<0.002	mg/L	5/08/2024
Total Suspended Solids	5	mg/L	5/08/2024
Vanadium	0.0024	mg/L	5/08/2024
Zinc	<0.005	mg/L	5/08/2024

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	0.166	mg/L	-	05-07/08/24
Ammonia	2.06	mg/L	-	05-07/08/24
Arsenic III	<0.0005	mg/L	-	05-07/08/24
Arsenic V	0.0148	mg/L	-	05-07/08/24
Cadmium	0.0001	mg/L	-	05-07/08/24
Chromium (Trivalent)	<0.001	mg/L	-	05-07/08/24
Chromium (VI) Compounds	<0.01	mg/L	-	05-07/08/24
Copper	0.003	mg/L	-	05-07/08/24
Iron	0.096	mg/L	-	05-07/08/24
Lead	<0.0001	mg/L	-	05-07/08/24
Manganese	0.182	mg/L	-	05-07/08/24
Nickel	0.0035	mg/L	-	05-07/08/24
Nitrite and Nitrate as N	7.35	mg/L	-	05-07/08/24
Nitrogen	10	mg/L	-	05-07/08/24
pH	7.1	pH units	-	05-07/08/24
Phosphorus as P	0.49	mg/L	-	05-07/08/24
Reactive Phosphorus as P	0.4	mg/L	-	05-07/08/24
Selenium	0.0514	mg/L	-	05-07/08/24
Total Kjeldahl Nitrogen	2.6	mg/L	-	05-07/08/24
Total Suspended Solids	10	mg/L	-	05-07/08/24
Vanadium	0.0693	mg/L	-	05-07/08/24
Zinc	0.016	mg/L	-	05-07/08/24

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	0.039	mg/L	-	05/08/24
Ammonia	<0.005	mg/L	-	05/08/24
Arsenic III	<0.004	mg/L	-	05/08/24
Arsenic V	<0.004	mg/L	-	05/08/24
Cadmium	<0.0002	mg/L	-	05/08/24
Chromium (Trivalent)	<0.001	mg/L	-	05/08/24
Chromium (VI) Compounds	<0.01	mg/L	-	05/08/24
Copper	0.001	mg/L	-	05/08/24
Iron	0.048	mg/L	-	05/08/24
Lead	<0.0002	mg/L	-	05/08/24
Manganese	0.0034	mg/L	-	05/08/24
Nickel	0.0006	mg/L	-	05/08/24
pH	7.99	pH units	-	05/08/24
Selenium	<0.001	mg/L	-	05/08/24
Total Suspended Solids	16	mg/L	-	05/08/24
Vanadium	0.0021	mg/L	-	05/08/24
Zinc	<0.005	mg/L	-	05/08/24
Dissolved Oxygen	9.38	mg/L	-	05/08/24
Field Temperature	15.9	degC	-	05/08/24
Salinity	15.91	ppt	-	05/08/24
Secchi Disk	3.5	m	-	05/08/24
Temperature – Average	16.58	deg C	-	August 24
Temperature – Minimum	13.69	deg C	-	August 24
Temperature - Maximum	20.90	deg C	-	August 24

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0012	mg/L	0.005	05/08/24
Iron	0.055	mg/L	0.3	05/08/24
Selenium	<0.001	mg/L	0.002	05/08/24

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	23.18	deg C	35.5	37.5	38.5	August 24
Temperature – Minimum	17.47	deg C				August 24
Temperature - Maximum	29.06	deg C				August 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	20.18	ML	150	August 24
Monthly Discharge from Ash Dam	76.52	ML	-	August 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	0.03	mg/L	-	05-07/08/24
Ammonia	2.49	mg/L	-	05-07/08/24
Arsenic III	1.7	mg/L	-	05-07/08/24
Arsenic V	<0.5	mg/L	-	05-07/08/24
Cadmium	0.00006	mg/L	-	05-07/08/24
Chromium (Trivalent)	<0.001	mg/L	-	05-07/08/24
Chromium (VI) Compounds	<0.01	mg/L	-	05-07/08/24
Copper	0.0006	mg/L	-	05-07/08/24
Iron	6.93	mg/L	-	05-07/08/24
Lead	<0.0001	mg/L	-	05-07/08/24
Manganese	1.01	mg/L	-	05-07/08/24
Nickel	0.0026	mg/L	-	05-07/08/24
Nitrite and Nitrate as N	0.27	mg/L	-	05-07/08/24
Nitrogen	3.03	mg/L	-	05-07/08/24
pH	6.9	pH units	6-9.5	05-07/08/24
Phosphorus as P	0.236	mg/L	-	05-07/08/24
Reactive Phosphorus as P	0.013	mg/L	-	05-07/08/24
Selenium	0.0005	mg/L	-	05-07/08/24
Total Kjeldahl Nitrogen	2.76	mg/L	-	05-07/08/24
Total Suspended Solids	35	mg/L	50	05-07/08/24
Vanadium	0.0006	mg/L	-	05-07/08/24
Zinc	0.004	mg/L	-	05-07/08/24

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	-	05/08/24
Ammonia		mg/L	-	05/08/24
Arsenic III		mg/L	-	05/08/24
Arsenic V		mg/L	-	05/08/24
Cadmium		mg/L	-	05/08/24
Chromium (Trivalent)		mg/L	-	05/08/24
Chromium (VI) Compounds		mg/L	-	05/08/24
Copper		mg/L	-	05/08/24
Iron		mg/L	-	05/08/24
Lead		mg/L	-	05/08/24
Manganese		mg/L	-	05/08/24
Nickel		mg/L	-	05/08/24
Nitrite and Nitrate as N		mg/L	-	05/08/24
Nitrogen		mg/L	-	05/08/24
pH		pH units	6-9.5	05/08/24
Phosphorus as P		mg/L	-	05/08/24
Reactive Phosphorus as P		mg/L	-	05/08/24
Selenium		mg/L	-	05/08/24
Total Kjeldahl Nitrogen		mg/L	-	05/08/24
Total Suspended Solids		mg/L	50	05/08/24
Vanadium		mg/L	-	05/08/24
Zinc		mg/L	-	05/08/24

Groundwater Monitoring
Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Date
Aluminium	0.134	mg/L	11/06/24
Ammonia	0.74	mg/L	11/06/24
Arsenic (III)	0.0048	mg/L	11/06/24
Arsenic (V)	<0.0005	mg/L	11/06/24
Cadmium	<0.00005	mg/L	11/06/24
Calcium	2	mg/L	11/06/24
Chromium (trivalent)	<0.01	mg/L	11/06/24
Chromium (VI) compounds	<0.01	mg/L	11/06/24
Copper	0.0005	mg/L	11/06/24
Electrical Conductivity	420	uS/cm	11/06/24
Iron	2.89	mg/L	11/06/24
Lead	0.0005	mg/L	11/06/24
Magnesium	6	mg/L	11/06/24
Manganese	0.352	mg/L	11/06/24
Nickel	0.0065	mg/L	11/06/24
pH	5.45	pH units	11/06/24
Potassium	5	mg/L	11/06/24
Selenium	<0.0002	mg/L	11/06/24
Sodium	69	mg/L	11/06/24
Standing Water Level	6.69	m	11/06/24
Vanadium	0.0006	mg/L	11/06/24
Zinc	0.013	mg/L	11/06/24

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Aluminium	0.643	mg/L	06/06/24
Ammonia	5.73	mg/L	06/06/24
Arsenic (III)	0.0021	mg/L	06/06/24
Arsenic (V)	<0.0005	mg/L	06/06/24
Cadmium	<0.0005	mg/L	06/06/24
Calcium	312	mg/L	06/06/24
Chromium (trivalent)	<0.01	mg/L	06/06/24
Chromium (VI) compounds	<0.01	mg/L	06/06/24
Copper	0.0018	mg/L	06/06/24
Electrical Conductivity	25400	uS/cm	06/06/24
Iron	21.2	mg/L	06/06/24
Lead	0.002	mg/L	06/06/24
Magnesium	460	mg/L	06/06/24
Manganese	0.855	mg/L	06/06/24
Nickel	0.001	mg/L	06/06/24
pH	6.48	pH units	06/06/24
Potassium	162	mg/L	06/06/24
Selenium	0.0008	mg/L	06/06/24
Sodium	4810	mg/L	06/06/24
Standing Water Level	4.65	m	06/06/24
Vanadium	0.0041	mg/L	06/06/24
Zinc	0.022	mg/L	06/06/24

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Aluminum	0.015	mg/L	11/06/24
Ammonia	3.42	mg/L	11/06/24
Arsenic (III)	0.0048	mg/L	11/06/24
Arsenic (V)	0.0011	mg/L	11/06/24
Cadmium	<0.0002	mg/L	11/06/24
Calcium	475	mg/L	11/06/24
Chromium (trivalent)	<0.01	mg/L	11/06/24
Chromium (VI) compounds	<0.01	mg/L	11/06/24
Copper	<0.001	mg/L	11/06/24
Electrical Conductivity	20400	uS/cm	11/06/24
Iron	13.6	mg/L	11/06/24
Lead	0.0002	mg/L	11/06/24
Magnesium	281	mg/L	11/06/24
Manganese	0.422	mg/L	11/06/24
Nickel	0.0012	mg/L	11/06/24
pH	6.56	pH units	11/06/24
Potassium	123	mg/L	11/06/24
Selenium	<0.002	mg/L	11/06/24
Sodium	3740	mg/L	11/06/24
Standing Water Level	1.67	m	11/06/24
Vanadium	0.0008	mg/L	11/06/24
Zinc	0.022	mg/L	11/06/24

Groundwater Monitoring
Groundwater Well – EGM/D26

EPA Identification no. 35 – Groundwater Monitoring Well D26

Name	Reading	Units	Date
Aluminium	0.390	mg/L	12/06/24
Ammonia	0.2	mg/L	12/06/24
Arsenic (III)	<0.0005	mg/L	12/06/24
Arsenic (V)	<0.0005	mg/L	12/06/24
Cadmium	<0.0005	mg/L	12/06/24
Calcium	5	mg/L	12/06/24
Chromium (trivalent)	<0.01	mg/L	12/06/24
Chromium (VI) compounds	<0.01	mg/L	12/06/24
Copper	0.0005	mg/L	12/06/24
Electrical Conductivity	180	uS/cm	12/06/24
Iron	1.07	mg/L	12/06/24
Lead	0.0003	mg/L	12/06/24
Magnesium	3	mg/L	12/06/24
Manganese	0.003	mg/L	12/06/24
Nickel	0.0009	mg/L	12/06/24
pH	4.99	pH units	12/06/24
Potassium	<1	mg/L	12/06/24
Selenium	0.0002	mg/L	12/06/24
Sodium	24	mg/L	12/06/24
Standing Water Level	1.50	m	12/06/24
Vanadium	0.0017	mg/L	12/06/24
Zinc	0.007	mg/L	12/06/24