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

Environmental Monitoring Data December 2025



Compliance Summary:

Were all EPL monitoring limits met	Yes

Details of EPL Non- compliances

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Reading	Units	Licence Limit	Date	Comments

EPL1429 Environment Protection Licence monitoring locations are shown here
https://www.originenergy.com.au/wp-content/uploads/3/Eraring_Power_Station_EPL_Monitoring_Locations_Map.pdf

Unit 1 Boiler Continuous Emission Monitoring Summary

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

	NOx			SO_2		
	mg/Nm³ (7% O_2)			mg/Nm³ (7% O_2)		
	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average
01/12/2025	447	473	416	710	814	619
02/12/2025	446	487	355	639	741	569
03/12/2025	458	483	425	726	836	547
04/12/2025	455	496	414	783	878	593
05/12/2025	471	524	347	859	908	767
06/12/2025	415	521	349	819	866	789
07/12/2025	426	494	342	720	840	634
08/12/2025	400	450	355	749	824	632
09/12/2025	368	426	328	736	826	667
10/12/2025	373	412	324	678	801	606
11/12/2025	372	395	298	690	813	501
12/12/2025	373	405	346	630	870	456
13/12/2025	386	446	306	705	831	489
14/12/2025	407	470	339	817	955	643
15/12/2025	369	419	311	694	831	651
16/12/2025	366	406	315	651	827	576
17/12/2025	349	427	270	703	800	563
18/12/2025	429	474	337	751	851	648
19/12/2025	424	482	352	797	977	749
20/12/2025	405	477	357	761	872	711
21/12/2025	386	431	349	811	877	707
22/12/2025	399	446	347	804	946	666
23/12/2025	375	432	316	737	846	655
24/12/2025	430	492	343	732	796	614
25/12/2025	434	567	359	687	815	555
26/12/2025	400	494	329	625	795	465
27/12/2025	399	430	340	668	825	454
28/12/2025	404	436	349	744	905	520
29/12/2025	443	530	353	862	1049	543
30/12/2025	426	484	327	909	1046	680
31/12/2025	426	465	392	800	951	702

Unit 2 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 4 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2 offline 26-31 December 2025

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average
01/12/2025	338	409	291	547	738	509
02/12/2025	369	427	290	548	660	502
03/12/2025	274	405	232	593	706	556
04/12/2025	271	285	257	608	780	590
05/12/2025	298	350	269	622	777	589
06/12/2025	366	435	314	612	775	565
07/12/2025	379	434	314	572	720	540
08/12/2025	385	457	321	573	700	538
09/12/2025	343	488	287	570	699	529
10/12/2025	283	372	253	556	701	538
11/12/2025	305	412	260	575	732	542
12/12/2025	375	445	326	584	706	529
13/12/2025	352	415	288	593	717	551
14/12/2025	357	452	286	608	784	563
15/12/2025	402	485	356	560	695	527
16/12/2025	402	465	352	550	663	511
17/12/2025	389	471	325	553	650	523
18/12/2025	408	493	337	551	626	521
19/12/2025	398	461	332	562	672	539
20/12/2025	372	495	350	577	748	551
21/12/2025	372	466	344	587	671	529
22/12/2025	380	435	332	615	754	561
23/12/2025	385	464	345	592	754	565
24/12/2025	380	507	344	576	710	552
25/12/2025	584	584	584	705	705	705
26/12/2025	-	-	-	-	-	-
27/12/2025	-	-	-	-	-	-
28/12/2025	-	-	-	-	-	-
29/12/2025	-	-	-	-	-	-
30/12/2025	-	-	-	-	-	-
31/12/2025	-	-	-	-	-	-

Unit 3 Boiler Continuous Emission Monitoring Summary

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

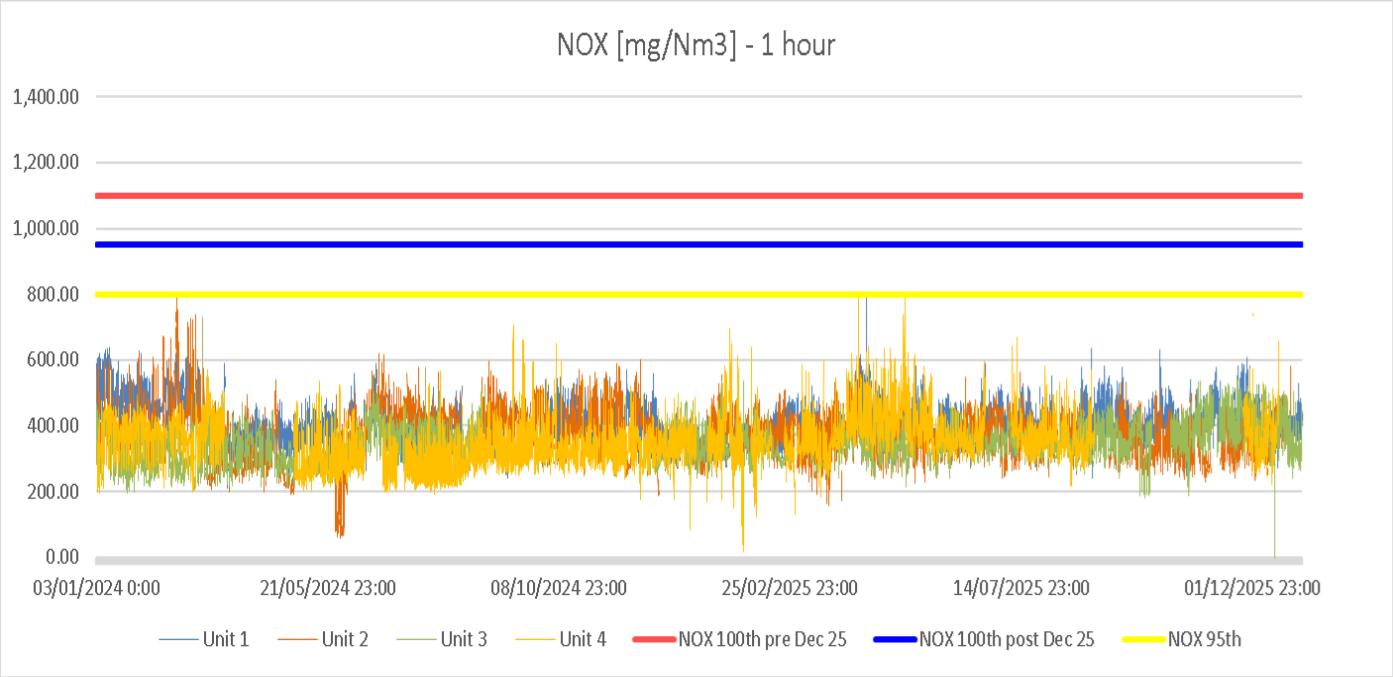
	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average
01/12/2025	408	478	351	688	730	655
02/12/2025	416	493	342	688	721	600
03/12/2025	415	483	316	743	771	676
04/12/2025	410	525	354	757	773	731
05/12/2025	399	472	279	781	845	675
06/12/2025	384	437	302	753	965	370
07/12/2025	362	406	320	734	931	670
08/12/2025	412	526	346	791	896	694
09/12/2025	426	513	339	716	743	653
10/12/2025	433	520	335	698	745	611
11/12/2025	400	498	336	723	744	702
12/12/2025	363	475	277	695	727	660
13/12/2025	361	433	279	720	749	698
14/12/2025	382	454	311	762	782	720
15/12/2025	304	441	-3	702	715	679
16/12/2025	399	464	345	716	739	664
17/12/2025	385	442	295	716	748	653
18/12/2025	415	491	331	720	738	607
19/12/2025	438	492	359	719	754	611
20/12/2025	428	507	307	745	809	657
21/12/2025	434	494	323	774	855	571
22/12/2025	421	490	331	667	784	612
23/12/2025	367	457	274	737	813	618
24/12/2025	356	447	276	726	754	630
25/12/2025	339	424	277	719	741	604
26/12/2025	328	507	241	735	761	603
27/12/2025	339	472	293	741	758	667
28/12/2025	361	414	289	794	831	694
29/12/2025	328	412	280	923	1026	787
30/12/2025	310	372	264	975	1070	816
31/12/2025	355	468	293	810	983	758

Unit 4 Boiler Continuous Emission Monitoring Summary -

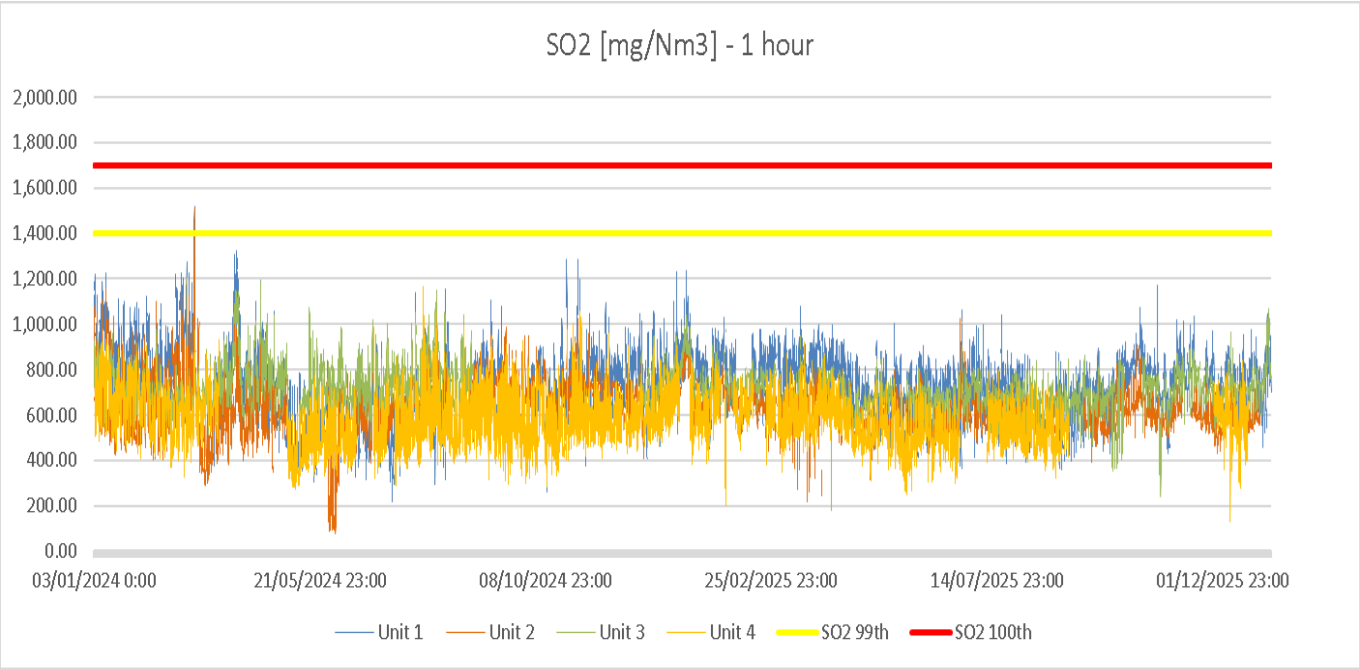
EPA Identification no. 6 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4 offline 19-31 December 2025

	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average
01/12/2025	368	476	249	623	688	525
02/12/2025	481	741	261	549	662	360
03/12/2025	360	463	255	612	747	458
04/12/2025	347	425	261	668	786	541
05/12/2025	316	402	271	626	728	543
06/12/2025	326	401	256	563	727	132
07/12/2025	356	475	290	514	672	353
08/12/2025	360	532	284	590	721	499
09/12/2025	352	445	271	597	738	507
10/12/2025	355	477	244	524	645	439
11/12/2025	385	440	313	528	749	302
12/12/2025	431	475	398	504	684	279
13/12/2025	338	410	221	600	720	489
14/12/2025	384	515	255	691	844	560
15/12/2025	353	399	298	568	747	443
16/12/2025	374	419	327	481	677	382
17/12/2025	462	656	401	583	728	394
18/12/2025	461	461	461	661	661	661
19/12/2025	-	-	-	-	-	-
20/12/2025	-	-	-	-	-	-
21/12/2025	-	-	-	-	-	-
22/12/2025	-	-	-	-	-	-
23/12/2025	-	-	-	-	-	-
24/12/2025	-	-	-	-	-	-
25/12/2025	-	-	-	-	-	-
26/12/2025	-	-	-	-	-	-
27/12/2025	-	-	-	-	-	-
28/12/2025	-	-	-	-	-	-
29/12/2025	-	-	-	-	-	-
30/12/2025	-	-	-	-	-	-
31/12/2025	-	-	-	-	-	-

Continuous Emission Monitoring Summary NOx Data



Continuous Emission Monitoring Summary SO_2 Data



Unit 1 Boiler Emission Test Results

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

Name	Frequency	Reading	Units	Licence Limit	Date
Chlorine	6 monthly	0.05	mg/m^3	4	10/12/2024
Fluorine	6 monthly	8	mg/m^3	30	10/12/2024
Hydrogen chloride	6 monthly	9.6	mg/m^3	50	10/12/2024
Solid Particles	Quarterly	2.2	mg/m^3	50	29/07/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	1	mg/m^3	100	10/12/2024
Volatile organic compounds as n-	6 monthly	<0.07	mg/m^3	8	10/12/2024
Cadmium	6 monthly	0.00048	mg/m^3	0.03	29/07/2025
Mercury	6 monthly	<0.00006	mg/m^3	0.03	29/07/2025
Type 1 and 2 substances in Aggregate	6 monthly	≤0.01	mg/m^3	0.60	29/07/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate	6 monthly	460	m^3/sec	-	29/07/2025
Moisture	6 monthly	5	%	-	29/07/2025
Oxygen	6 monthly	7.2	%	-	29/07/2025
Solid Particles	Quarterly	1.5	mg/m^3	-	29/07/2025
Temperature	6 monthly	124	Deg C	-	29/07/2025
Carbon dioxide	6 monthly	12.9	%	-	29/07/2025
Chlorine	6 monthly	<0.03	mg/m^3	-	29/04/2025
Fluorine	6 monthly	8.5	mg/m^3	-	29/04/2025
Hydrogen chloride	6 monthly	7.2	mg/m^3	-	29/04/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	1.9	mg/m^3	-	29/04/2025
Volatile organic compounds as n-	6 monthly	0.11	mg/m^3	-	29/04/2025
Cadmium	6 monthly	0.0008	mg/m^3	-	29/07/2025
Mercury	6 monthly	<0.00005	mg/m^3	-	29/07/2025
Type 1 and Type 2 substances in	6 monthly	<0.015	mg/m^3	-	29/07/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate		360	m^3/sec	-	29/07/2025
Moisture		4.9	%	-	29/07/2025
Oxygen		6.9	%	-	29/07/2025
Solid Particles	Quarterly	3.1	mg/m^3	-	29/07/2025
Temperature		125	Deg C	-	29/07/2025
Cadmium	6 monthly	0.000065	mg/m^3	-	26/07/2025
Mercury	6 monthly	<0.00007	mg/m^3	-	26/07/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	≤0.014	mg/m^3	-	26/07/2025

Unit 2 Boiler Emission Test Results

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

Name	Frequency	Reading	Units	Licence Limit	Date
Chlorine	6 monthly	<0.02	mg/m^3	4	9/01/2025
Fluorine	6 monthly	8.5	mg/m^3	30	9/01/2025
Hydrogen chloride	6 monthly	6.2	mg/m^3	50	9/01/2025
Solid Particles	Quarterly	20.0	mg/m^3	50	30/07/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	2.7	mg/m^3	100	9/01/2025
Volatile organic compounds as n-	6 monthly	<0.1	mg/m^3	8	9/01/2025
Cadmium	6 monthly	0.00027	mg/m^3	0.03	30/07/2025
Mercury	6 monthly	0.00008	mg/m^3	0.03	30/07/2025
Type 1 and 2 substances in Aggregate	6 monthly	<0.03	mg/m^3	0.60	30/07/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate	6 monthly	390	m^3/sec	-	30/07/2025
Moisture	6 monthly	4.6	%	-	30/07/2025
Oxygen	6 monthly	6.7	%	-	30/07/2025
Solid Particles	Quarterly	21	mg/m^3	-	30/07/2025
Temperature	6 monthly	110	Deg C	-	30/07/2025
Carbon dioxide	6 monthly	13.1	%	-	30/07/2025
Chlorine	6 monthly	<0.01	mg/m^3	-	30/04/2025
Fluorine	6 monthly	10	mg/m^3	-	30/04/2025
Hydrogen chloride	6 monthly	9.2	mg/m^3	-	30/04/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	3.6	mg/m^3	-	30/04/2025
Volatile organic compounds as n-	6 monthly	<0.06	mg/m^3	-	30/04/2025
Cadmium	6 monthly	0.00017	mg/m^3	-	30/07/2025
Mercury	6 monthly	0.00011	mg/m^3	-	30/07/2025
Type 1 and Type 2 substances in	6 monthly	<0.033	mg/m^3	-	30/07/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate		440	m^3/sec	-	30/07/2025
Moisture		6.2	%	-	30/07/2025
Oxygen		5.6	%	-	30/07/2025
Solid Particles	Quarterly	20	mg/m^3	-	30/07/2025
Temperature		119	Deg C	-	30/07/2025
Cadmium	6 monthly	0.00035	mg/m^3	-	30/07/2025
Mercury	6 monthly	0.000045	mg/m^3	-	30/07/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.018	mg/m^3	-	30/07/2025

Unit 3 Boiler Emission Test Results					
EPA Identification No 5 – Air Emissions monitoring, Boiler 3 stack discharge to air					
Name	**Frequency**	**Reading**	**Units**	**Licence Limit**	**Date**
Chlorine	6 monthly	0.046	mg/m^3	4	11/12/2024
Fluorine	6 monthly	9.7	mg/m^3	30	11/12/2024
Hydrogen chloride	6 monthly	15	mg/m^3	50	11/12/2024
Solid Particles	Quarterly	2.0	mg/m^3	50	31/07/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	1.2	mg/m^3	100	11/12/2024
Volatile organic compounds as n-propane equivalent	6 monthly	<0.08	mg/m^3	8	11/12/2024
Cadmium	6 monthly	0.00027	mg/m^3	0.03	31/07/2025
Mercury	6 monthly	<0.00004	mg/m^3	0.03	31/07/2025
Type 1 and 2 substances in Aggregate	6 monthly	≤0.01	mg/m^3	0.60	31/07/2025

EPA Identification No 11 – Air Emissions monitoring, Boiler 3 Exhaust Duct A					
Name	**Frequency**	**Reading**	**Units**	**Licence Limit**	**Date**
Flow Rate	6 monthly	430	m^3/sec	-	31/07/2025
Moisture	6 monthly	6.2	%	-	31/07/2025
Oxygen	6 Monthly	7	%	-	31/07/2025
Solid Particles	Quarterly	2.3	mg/m^3	-	31/07/2025
Temperature	6 monthly	110	Deg C	-	31/07/2025
Carbon dioxide	6 monthly	13	%	-	31//2025
Chlorine	6 monthly	0.18	mg/m^3	-	1/05/2025
Fluorine	6 monthly	16	mg/m^3	-	1/05/2025
Hydrogen chloride	6 monthly	11	mg/m^3	-	1/05/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	2.1	mg/m^3	-	1/05/2025
Volatile organic compounds as n-propane equivalent	6 monthly	<0.06	mg/m^3	-	1/05/2025
Cadmium	6 monthly	0.0004	mg/m^3	-	31/07/2025
Mercury	6 monthly	<0.00004	mg/m^3	-	31/07/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.012	mg/m^3	-	31/07/2025

EPA Identification No 12 – Air Emissions monitoring, Boiler 3 Exhaust Duct B					
Name	**Frequency**	**Reading**	**Units**	**Licence Limit**	**Date**
Flow Rate		350	m^3/sec	-	31/07/2025
Moisture		5.8	%	-	31/07/2025
Oxygen		5.7	%	-	31/07/2025
Solid Particles	Quarterly	1.6	mg/m^3	-	31/07/2025
Temperature		108	Deg C	-	31/07/2025
Cadmium	6 monthly	0.00012	mg/m^3	-	31/07/2025
Mercury	6 monthly	<0.00005	mg/m^3	-	31/07/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	≤0.013	mg/m^3	-	31/07/2025

Unit 4 Boiler Emission Test Results

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

Name	Frequency	Reading	Units	Licence Limit	Date
Chlorine	6 monthly	<0.01	mg/m^3	4	12-13/12/2024
Fluorine	6 monthly	11	mg/m^3	30	12-13/12/2024
Hydrogen chloride	6 monthly	8.5	mg/m^3	50	12-13/12/2024
Solid Particles	Quarterly	6.6	mg/m^3	50	01/08/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	2.1	mg/m^3	100	12-13/12/2024
Volatile organic compounds as n-	6 monthly	0.11	mg/m^3	8	12-13/12/2024
Cadmium	6 monthly	0.00009	mg/m^3	0.03	01/08/2025
Mercury	6 monthly	<0.00006	mg/m^3	0.03	01/08/2025
Type 1 and 2 substances in Aggregate	6 monthly	≤0.02	mg/m^3	0.60	01/08/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate	6 monthly	380	m^3/sec	-	01/08/2025
Moisture	6 monthly	5	%	-	01/08/2025
Oxygen	6 monthly	7.2	%	-	01/08/2025
Solid Particles	Quarterly	6.9	mg/m^3	-	01/08/2025
Temperature	6 monthly	121	Deg C	-	01/08/2025
Carbon dioxide	6 monthly	12.8	%	-	01/08/2025
Chlorine	6 monthly	<0.03	mg/m^3	-	2/05/2025
Fluorine	6 monthly	17	mg/m^3	-	2/05/2025
Hydrogen chloride	6 monthly	14	mg/m^3	-	2/05/2025
Sulfuric acid mist and sulfur trioxide (as SO_3)	6 monthly	6.6	mg/m^3	-	2/05/2025
Volatile organic compounds as n-	6 monthly	<0.08	mg/m^3	-	2/05//2025
Cadmium	6 monthly	0.000087	mg/m^3	-	01/08/2025
Mercury	6 monthly	<0.00007	mg/m^3	-	01/08/2025
Type 1 and Type 2 substances in	6 monthly	<0.019	mg/m^3	-	01/08/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate		450	m^3/sec	-	01/08/2025
Moisture		5	%	-	01/08/2025
Oxygen		6.4	%	-	01/08/2025
Solid Particles	Quarterly	6.3	mg/m^3	-	01/08/2025
Temperature		119	Deg C	-	01/08/2025
Cadmium	6 monthly	0.0001	mg/m^3	-	01/08/2025
Mercury	6 monthly	<0.00005	mg/m^3	-	01/08/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	≤0.019	mg/m^3	-	01/08/2025

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
23.32	0.5	25.01	8.52	35.60	97.55	8.06	2.25

	Laboratory Analysis			
Name	**Reading**	**Units**	**Licence Limit**	**Date**
Aluminium	0.034	mg/L	-	4/12/25
Ammonia	<0.005	mg/L	-	4/12/25
Arsenic III	<0.008	mg/L	-	4/12/25
Arsenic V	<0.008	mg/L	-	4/12/25
Cadmium	<0.0002	mg/L	-	4/12/25
Chromium (Trivalent)	<0.001	mg/L	-	4/12/25
Chromium (VI) Compounds	<0.001	mg/L	-	4/12/25
Copper	0.001	mg/L	-	4/12/25
Iron	0.044	mg/L	-	4/12/25
Lead	<0.0002	mg/L	-	4/12/25
Manganese	0.0066	mg/L	-	4/12/25
Nickel	0.0011	mg/L	-	4/12/25
pH	8.08	pH units	-	4/12/25
Selenium	<0.002	mg/L	-	4/12/25
Total Suspended Solids	<5	mg/L	-	4/12/25
Vanadium	0.0022	mg/L	-	4/12/25
Zinc	<0.005	mg/L	-	4/12/25

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
22.37	0.5	24.61	8.49	35.40	99.85	8.25	4.25

Laboratory Analysis				
Name	Reading	**Units**	**Licence Limits**	**Date**
Aluminium	0.038	mg/L	-	4/12/25
Ammonia	<0.005	mg/L	-	4/12/25
Arsenic III	<0.008	mg/L	-	4/12/25
Arsenic V	<0.008	mg/L	-	4/12/25
Cadmium	<0.0002	mg/L	-	4/12/25
Chromium (Trivalent)	<0.001	mg/L	-	4/12/25
Chromium (VI) Compounds	<0.001	mg/L	-	4/12/25
Copper	0.001	mg/L	-	4/12/25
Iron	0.035	mg/L	-	4/12/25
Lead	<0.0002	mg/L	-	4/12/25
Manganese	0.0075	mg/L	-	4/12/25
Nickel	0.0011	mg/L	-	4/12/25
pH	8.11	pH units	-	4/12/25
Selenium	<0.002	mg/L	-	4/12/25
Total Suspended Solids	<5	mg/L	-	4/12/25
Vanadium	0.0023	mg/L	-	4/12/25
Zinc	<0.005	mg/L	-	4/12/25

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
20.9	0.5	22.68	8.35	37.50	102.9	8.5	5.25

Laboratory Analysis

Name	Reading	Units	Licence Limits	Date
Aluminium	0.016	mg/L	-	4/12/25
Ammonia	<0.010	mg/L	-	4/12/25
Arsenic III	<0.008	mg/L	-	4/12/25
Arsenic V	<0.008	mg/L	-	4/12/25
Cadmium	<0.0002	mg/L	-	4/12/25
Chromium (Trivalent)	<0.001	mg/L	-	4/12/25
Chromium (VI) Compounds	<0.001	mg/L	-	4/12/25
Copper	<0.001	mg/L	-	4/12/25
Iron	0.018	mg/L	-	4/12/25
Lead	<0.0002	mg/L	-	4/12/25
Manganese	0.0040	mg/L	-	4/12/25
Nickel	0.0005	mg/L	-	4/12/25
pH	8.14	pH units	-	4/12/25
Selenium	<0.002	mg/L	-	4/12/25
Total Suspended Solids	<5	mg/L	-	4/12/25
Vanadium	0.0020	mg/L	-	4/12/25
Zinc	<0.005	mg/L	-	4/12/25

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
22.73	0.5	26.17	8.5	33.60	100.33	8.29	2.75

Laboratory Analysis

Name	**Reading**	**Units**	**Licence Limits**	**Date**
Aluminium	0.049	mg/L	-	4/12/25
Ammonia	<0.005	mg/L	-	4/12/25
Arsenic III	<0.008	mg/L	-	4/12/25
Arsenic V	<0.008	mg/L	-	4/12/25
Cadmium	<0.0002	mg/L	-	4/12/25
Chromium (Trivalent)	<0.001	mg/L	-	4/12/25
Chromium (VI) Compounds	<0.001	mg/L	-	4/12/25
Copper	0.001	mg/L	-	4/12/25
Iron	0.06	mg/L	-	4/12/25
Lead	<0.0002	mg/L	-	4/12/25
Manganese	0.0070	mg/L	-	4/12/25
Nickel	0.0011	mg/L	-	4/12/25
pH	8.06	pH units	-	4/12/25
Selenium	<0.002	mg/L	-	4/12/25
Total Suspended Solids	<5	mg/L	-	4/12/25
Vanadium	0.0022	mg/L	-	4/12/25
Zinc	<0.005	mg/L	-	4/12/25

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	0.077	mg/L	-	2/12/25
Ammonia	1.38	mg/L	-	2/12/25
Arsenic III	<0.0005	mg/L	-	2/12/25
Arsenic V	0.0105	mg/L	-	2/12/25
Cadmium	0.00010	mg/L	-	2/12/25
Chromium (Trivalent)	<0.001	mg/L	-	2/12/25
Chromium (VI) Compounds	<0.01	mg/L	-	2/12/25
Copper	0.0068	mg/L	-	2/12/25
Iron	0.059	mg/L	-	2/12/25
Lead	0.0001	mg/L	-	2/12/25
Manganese	0.193	mg/L	-	2/12/25
Nickel	0.0048	mg/L	-	2/12/25
Nitrite and Nitrate as N	8.38	mg/L	-	2/12/25
Nitrogen	10.0	mg/L	-	2/12/25
pH	6.73	pH units	-	2/12/25
Phosphorus as P	1.79	mg/L	-	2/12/25
Reactive Phosphorus as P	1.74	mg/L	-	2/12/25
Selenium	0.0338	mg/L	-	2/12/25
Total Kjeldahl Nitrogen	1.6	mg/L	-	2/12/25
Total Suspended Solids	8	mg/L	-	2/12/25
Vanadium	0.0550	mg/L	-	2/12/25
Zinc	0.037	mg/L	-	2/12/25

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	0.058	mg/L	-	2/12/25
Ammonia	<0.005	mg/L	-	2/12/25
Arsenic III	<0.008	mg/L	-	2/12/25
Arsenic V	<0.008	mg/L	-	2/12/25
Cadmium	<0.0002	mg/L	-	2/12/25
Chromium (Trivalent)	<0.001	mg/L	-	2/12/25
Chromium (VI) Compounds	<0.01	mg/L	-	2/12/25
Copper	0.0004	mg/L	-	2/12/25
Iron	0.101	mg/L	-	2/12/25
Lead	<0.0002	mg/L	-	2/12/25
Manganese	0.0071	mg/L	-	2/12/25
Nickel	<0.0005	mg/L	-	2/12/25
pH	8.02	pH units	-	2/12/25
Selenium	<0.001	mg/L	-	2/12/25
Total Suspended Solids	62	mg/L	-	2/12/25
Vanadium	0.0021	mg/L	-	2/12/25
Zinc	<0.005	mg/L	-	2/12/25
Dissolved Oxygen	6.30	mg/L	-	2/12/25
Field Temperature	18	degC	-	2/12/25
Salinity	35.15	ppt	-	2/12/25
Secchi Disk	2.25	m	-	2/12/25
Temperature – Average	25.60	deg C	-	December 25
Temperature – Minimum	21.48	deg C	-	December 25
Temperature - Maximum	28.41	deg C	-	December 25

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0015	mg/L	0.005	2/12/25
Iron	0.113	mg/L	0.3	2/12/25
Selenium	<0.001	mg/L	0.002	2/12/25

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	31.17	deg C	35.5	37.5	38.5	December 25
Temperature – Minimum	25.55	deg C				December 25
Temperature - Maximum	35.29	deg C				December 25

Eraring Cooling Water Outlet Canal

EPA Identification no. 25 – Discharge from Ash Dam

Name	Reading	Units	Licence Limit	Date
Minimum Daily Discharge from Ash Dam	0.31	ML		December 25
Average Daily Discharge from Ash Dam	3.44	ML		December 25
Maximum Daily Discharge from Ash Dam	8.13	ML	150	December 25
Monthly Discharge from Ash Dam	103.27	ML	-	December 25

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	0.038	mg/L	-	2/12/25
Ammonia	2.97	mg/L	-	2/12/25
Arsenic III	0.0032	mg/L	-	2/12/25
Arsenic V	0.0008	mg/L	-	2/12/25
Cadmium	<0.00005	mg/L	-	2/12/25
Chromium (Trivalent)	<0.001	mg/L	-	2/12/25
Chromium (VI) Compounds	<0.01	mg/L	-	2/12/25
Copper	<0.0005	mg/L	-	2/12/25
Iron	5.68	mg/L	-	2/12/25
Lead	<0.0001	mg/L	-	2/12/25
Manganese	0.963	mg/L	-	2/12/25
Nickel	0.0017	mg/L	-	2/12/25
Nitrite and Nitrate as N	0.119	mg/L	-	2/12/25
Nitrogen	3.13	mg/L	-	2/12/25
pH	7.07	pH units	6-9.5	2/12/25
Phosphorus as P	0.271	mg/L	-	2/12/25
Reactive Phosphorus as P	0.008	mg/L	-	2/12/25
Selenium	0.0004	mg/L	-	2/12/25
Total Kjeldahl Nitrogen	3.01	mg/L	-	2/12/25
Total Suspended Solids	41	mg/L	50	2/12/25
Vanadium	0.0003	mg/L	-	2/12/25
Zinc	<0.001	mg/L	-	2/12/25

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

MR217 did not discharge in the month and no background sample taken due to insufficient water.

Name	Reading	Units	Licence Limit	Date
Aluminium		mg/L	-	2/12/25
Ammonia		mg/L	-	2/12/25
Arsenic III		mg/L	-	2/12/25
Arsenic V		mg/L	-	2/12/25
Cadmium		mg/L	-	2/12/25
Chromium (Trivalent)		mg/L	-	2/12/25
Chromium (VI) Compounds		mg/L	-	2/12/25
Copper		mg/L	-	2/12/25
Iron		mg/L	-	2/12/25
Lead		mg/L	-	2/12/25
Manganese		mg/L	-	2/12/25
Nickel		mg/L	-	2/12/25
Nitrite and Nitrate as N		mg/L	-	2/12/25
Nitrogen		mg/L	-	2/12/25
pH		pH units	6-9.5	2/12/25
Phosphorus as P		mg/L	-	2/12/25
Reactive Phosphorus as P		mg/L	-	2/12/25
Selenium		mg/L	-	2/12/25
Total Kjeldahl Nitrogen		mg/L	-	2/12/25
Total Suspended Solids		mg/L	50	2/12/25
Vanadium		mg/L	-	2/12/25
Zinc		mg/L	-	2/12/25

Groundwater Monitoring
Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Licence Limit	Date
Aluminium	0.135	mg/L	-	2/12/25
Ammonia	0.02	mg/L	-	2/12/25
Arsenic (III)	<0.0005	mg/L	-	2/12/25
Arsenic (V)	<0.0005	mg/L	-	2/12/25
Cadmium	<0.00005	mg/L	-	2/12/25
Calcium	2	mg/L	-	2/12/25
Chromium (trivalent)	<0.01	mg/L	-	2/12/25
Chromium (VI) compounds	<0.01	mg/L	-	2/12/25
Copper	0.0015	mg/L	-	2/12/25
Electrical Conductivity	457	uS/cm	-	2/12/25
Iron	0.679	mg/L	-	2/12/25
Lead	0.0008	mg/L	-	2/12/25
Magnesium	5	mg/L	-	2/12/25
Manganese	0.142	mg/L	-	2/12/25
Nickel	0.005	mg/L	-	2/12/25
pH	5.42	pH units	-	2/12/25
Potassium	4	mg/L	-	2/12/25
Selenium	<0.0002	mg/L	-	2/12/25
Sodium	74	mg/L	-	2/12/25
Standing Water Level	7.02	m	-	2/12/25
Vanadium	0.0003	mg/L	-	2/12/25
Zinc	0.027	mg/L	-	2/12/25

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Licence Limit	Date
Aluminium	1.420	mg/L	-	2/12/25
Ammonia	5.03	mg/L	-	2/12/25
Arsenic (III)	<0.008	mg/L	-	2/12/25
Arsenic (V)	<0.008	mg/L	-	2/12/25
Cadmium	0.00012	mg/L	-	2/12/25
Calcium	253	mg/L	-	2/12/25
Chromium (trivalent)	<0.01	mg/L	-	2/12/25
Chromium (VI) compounds	<0.01	mg/L	-	2/12/25
Copper	0.0029	mg/L	-	2/12/25
Electrical Conductivity	17900	uS/cm	-	2/12/25
Iron	16.000	mg/L	-	2/12/25
Lead	0.0072	mg/L	-	2/12/25
Magnesium	306	mg/L	-	2/12/25
Manganese	0.601	mg/L	-	2/12/25
Nickel	0.0027	mg/L	-	2/12/25
pH	7.36	pH units	-	2/12/25
Potassium	134	mg/L	-	2/12/25
Selenium	0.0012	mg/L	-	2/12/25
Sodium	3520	mg/L	-	2/12/25
Standing Water Level	5.46	m	-	2/12/25
Vanadium	0.0099	mg/L	-	2/12/25
Zinc	0.047	mg/L	-	2/12/25

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Licence Limit	Date
Aluminium	0.022	mg/L	-	1/12/25
Ammonia	3.14	mg/L	-	1/12/25
Arsenic (III)	0.0042	mg/L	-	1/12/25
Arsenic (V)	0.0011	mg/L	-	1/12/25
Cadmium	<0.0002	mg/L	-	1/12/25
Calcium	423	mg/L	-	1/12/25
Chromium (trivalent)	<0.01	mg/L	-	1/12/25
Chromium (VI) compounds	<0.01	mg/L	-	1/12/25
Copper	<0.001	mg/L	-	1/12/25
Electrical Conductivity	18400	uS/cm	-	1/12/25
Iron	9.310	mg/L	-	1/12/25
Lead	0.0005	mg/L	-	1/12/25
Magnesium	240	mg/L	-	1/12/25
Manganese	0.394	mg/L	-	1/12/25
Nickel	0.0012	mg/L	-	1/12/25
pH	6.88	pH units	-	1/12/25
Potassium	115	mg/L	-	1/12/25
Selenium	<0.002	mg/L	-	1/12/25
Sodium	3260	mg/L	-	1/12/25
Standing Water Level	2.51	m	-	1/12/25
Vanadium	0.001	mg/L	-	1/12/25
Zinc	0.010	mg/L	-	1/12/25

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	-	2/12/25
Ammonia		mg/L	-	2/12/25
Arsenic (III)		mg/L	-	2/12/25
Arsenic (V)		mg/L	-	2/12/25
Cadmium		mg/L	-	2/12/25
Calcium		mg/L	-	2/12/25
Chromium (trivalent)		mg/L	-	2/12/25
Chromium (VI) compounds		mg/L	-	2/12/25
Copper		mg/L	-	2/12/25
Electrical Conductivity		uS/cm	-	2/12/25
Iron		mg/L	-	2/12/25
Lead		mg/L	-	2/12/25
Magnesium		mg/L	-	2/12/25
Manganese		mg/L	-	2/12/25
Nickel		mg/L	-	2/12/25
pH		pH units	-	2/12/25
Potassium		mg/L	-	2/12/25
Selenium		mg/L	-	2/12/25
Sodium		mg/L	-	2/12/25
Standing Water Level		m	-	2/12/25
Vanadium		mg/L	-	2/12/25
Zinc		mg/L	-	2/12/25

Water Quality – Surface Water EBESS

EPA Identification no. 37 – Final discharge point from the water treatment plant
Sample Frequency – Daily during any discharge (not discharging, no samples collected).

Name	Min reading (mg/L)	Average reading (mg/L)	Maximum Reading (mg/L)	Project Criteria	Number of samples
Cadmium	-	-	-	-	0
Chromium (hexavalant)	-	-	-	-	0
Chromium (trivalent)	-	-	-	-	0
Copper	-	-	-	-	0
Manganese	-	-	-	-	0
Nickel	-	-	-	-	0
PFOS	-	-	-	0.13 ug/L	0
PFOA	-	-	-	220 ug/L	0
pH	-	-	-	6.5-9	0
Selenium	-	-	-	-	0
Total Suspended solids	-	-	-	50mg/L	0
Vanadium	-	-	-	-	0
Zinc	-	-	-	8 mg/L	0

Daily Volume Discharged		
Min	Ave	Max

EPA Identification no. 38 – Monitoring overflow point from the attenuation pond
Sample Frequency – Daily during any discharge (not discharging, no samples collected).

Name	Frequency	Reading	Project Criteria	Date
Cadmium	Daily during any discharge	-	-	
Chromium (hexavalant)	Daily during any discharge	-	-	
Chromium (trivalent)	Daily during any discharge	-	-	
Copper	Daily during any discharge	-	-	
Manganese	Daily during any discharge	-	-	
Nickel	Daily during any discharge	-	-	
PFOS	Daily during any discharge	-	0.13 ug/L	
PFOA	Daily during any discharge	-	220 ug/L	
pH	Daily during any discharge	-	6.5-9	
Selenium	Daily during any discharge	-	-	
Total Suspended solids	Daily during any discharge	-	50mg/L	
Vanadium	Daily during any discharge	-	-	
Zinc	Daily during any discharge	-	8 mg/L	

EPA Identification no. 39 – Monitoring overflow point from SW01A
Sample Frequency – Daily during any discharge (not discharging, no samples collected).

Name	Reading	Project Criteria	Date
Cadmium	-	-	
Chromium (hexavalant)	-	-	
Chromium (trivalent)	-	-	
Copper	-	-	
Manganese	-	-	
Nickel	-	-	
PFOS	-	0.13 ug/L	
PFOA	-	220 ug/L	
pH	-	6.5-9	
Selenium	-	-	
Total Suspended solids	-	50mg/L	
Vanadium	-	-	
Zinc	-	8 mg/L	

EPA Identification no. 40 – Monitoring overflow point from VAR03
Sample Frequency – Daily during any discharge (not discharging, no samples collected).

Name	Reading	Project Criteria	Date
Cadmium	-	-	
Chromium (hexavalant)	-	-	
Chromium (trivalent)	-	-	
Copper	-	-	
Manganese	-	-	
Nickel	-	-	
PFOS	-	0.13 ug/L	
PFOA	-	220 ug/L	
pH	-	6.5-9	
Selenium	-	-	
Total Suspended solids	-	50mg/L	
Vanadium	-	-	
Zinc	-	8 mg/L	

EPA Identification no. 41 – Monitoring from the attenuation Pond Discharge Pipe
Sample Frequency – Daily during any discharge (not discharging, no samples collected).

Name	Reading	Project Criteria	Date
Cadmium	-	-	
Chromium (hexavalant)	-	-	
Chromium (trivalent)	-	-	
Copper	-	-	
Manganese	-	-	
Nickel	-	-	
PFOS	-	0.13 ug/L	
PFOA	-	220 ug/L	
pH	-	6.5-9	
Selenium	-	-	
Total Suspended solids	-	50mg/L	
Vanadium	-	-	
Zinc	-	8 mg/L	

EPA Identification no. 42 – Monitoring from the Transgrid Outlet Pipe
Sample Frequency – Daily during any discharge (not discharging, no samples collected).

Name	Reading	Project Criteria	Date
Cadmium	-	-	
Chromium (hexavalant)	-	-	
Chromium (trivalent)	-	-	
Copper	-	-	
Manganese	-	-	
Nickel	-	-	
PFOS	-	0.13 ug/L	
PFOA	-	220 ug/L	
pH	-	6.5-9	
Selenium	-	-	
Total Suspended solids	-	50mg/L	
Vanadium	-	-	
Zinc	-	8 mg/L	