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

Environmental Monitoring Data June 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/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
01/06/2025	421	494	372	632	821	433
02/06/2025	384	412	340	648	863	453
03/06/2025	411	445	378	666	854	472
04/06/2025	406	470	372	586	802	498
05/06/2025	402	473	357	591	774	477
06/06/2025	395	429	354	603	760	438
07/06/2025	386	439	331	684	847	551
08/06/2025	410	477	357	649	721	525
09/06/2025	379	412	318	656	753	540
10/06/2025	394	442	333	650	807	551
11/06/2025	396	474	321	649	804	503
12/06/2025	375	394	331	625	785	488
13/06/2025	373	403	334	669	821	530
14/06/2025	366	418	269	609	824	505
15/06/2025	378	418	327	658	842	444
16/06/2025	378	410	311	606	813	409
17/06/2025	367	401	315	580	723	396
18/06/2025	376	408	316	619	864	457
19/06/2025	374	419	299	582	798	373
20/06/2025	412	544	308	599	715	366
21/06/2025	427	523	301	652	832	470
22/06/2025	423	499	337	706	922	376
23/06/2025	423	590	338	789	1066	365
24/06/2025	404	460	324	683	833	558
25/06/2025	416	510	310	711	782	499
26/06/2025	431	473	355	671	784	519
27/06/2025	439	487	363	665	849	549
28/05/2025	438	495	370	687	934	542
29/06/2025	401	446	349	739	923	566
30/06/2025	441	471	360	786	944	595

Unit 2 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 4 - Air emissions monitoring, Boiler 2 stack discharge to air
Unit 2 offline 1 June 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
01/06/2025	-	-	-	-	-	-
02/06/2025	332	376	283	495	557	431
03/06/2025	349	409	308	596	697	558
04/06/2025	359	453	293	502	712	359
05/06/2025	377	422	335	535	650	488
06/06/2025	359	433	300	561	671	518
07/06/2025	333	398	285	583	716	531
08/06/2025	381	439	338	561	655	507
09/06/2025	387	435	328	563	641	519
10/06/2025	417	470	378	575	690	551
11/06/2025	420	546	356	584	688	544
12/06/2025	381	469	306	540	643	468
13/06/2025	415	476	358	583	679	506
14/06/2025	409	471	353	553	664	460
15/06/2025	368	431	302	573	639	513
16/06/2025	370	460	292	560	684	519
17/06/2025	404	481	357	544	621	480
18/06/2025	411	454	382	562	664	522
19/06/2025	386	435	306	540	722	492
20/06/2025	406	472	337	543	648	499
21/06/2025	390	430	337	597	643	542
22/06/2025	369	458	273	717	1028	585
23/06/2025	379	450	340	658	860	598
24/06/2025	370	426	307	577	681	525
25/06/2025	380	464	340	655	879	571
26/06/2025	378	472	311	604	761	542
27/06/2025	397	453	295	610	740	568
28/06/2025	420	486	308	596	713	527
29/06/2025	440	496	355	656	811	619
30/06/2025	426	501	390	674	760	647

Unit 3 Boiler Continuous Emission Monitoring Summary

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

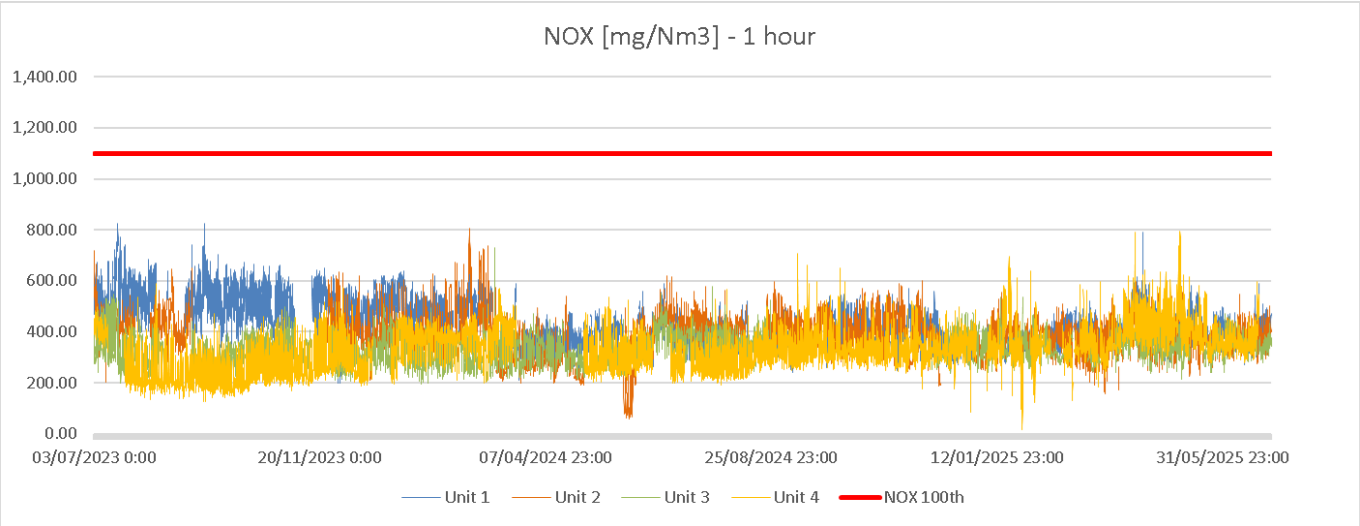
	NOx			SO_2		
	mg/Nm^3 (7% O_2)			mg/Nm^3 (7% O_2)		
	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average	Daily Ave	Daily Max Hourly Average	Daily Min Hourly Average
01/06/2025	285	351	238	724	790	610
02/06/2025	384	470	271	707	743	575
03/06/2025	382	444	294	695	725	562
04/06/2025	398	459	347	670	725	623
05/06/2025	394	437	313	633	692	495
06/06/2025	389	445	336	656	695	560
07/06/2025	341	388	301	688	732	580
08/06/2025	373	442	316	671	716	580
09/06/2025	355	355	355	677	725	611
10/06/2025	393	430	369	669	702	529
11/06/2025	360	403	327	670	705	562
12/06/2025	361	393	328	650	701	550
13/06/2025	382	422	328	670	721	598
14/06/2025	358	401	317	648	715	556
15/06/2025	336	401	303	704	735	564
16/06/2025	324	372	281	667	711	643
17/06/2025	350	384	338	620	710	536
18/06/2025	338	381	287	654	745	569
19/06/2025	359	399	315	642	732	590
20/06/2025	351	400	324	633	774	517
21/06/2025	349	398	310	692	789	597
22/06/2025	310	310	310	675	675	675
23/06/2025	356	381	311	771	906	696
24/06/2025	329	380	289	651	757	592
25/06/2025	315	345	278	718	807	643
26/06/2025	338	370	307	690	763	537
27/06/2025	352	387	318	687	721	536
28/05/2025	350	392	308	697	746	609
29/06/2025	357	432	304	758	790	733
30/06/2025	373	433	344	788	811	743

Unit 4 Boiler Continuous Emission Monitoring Summary -

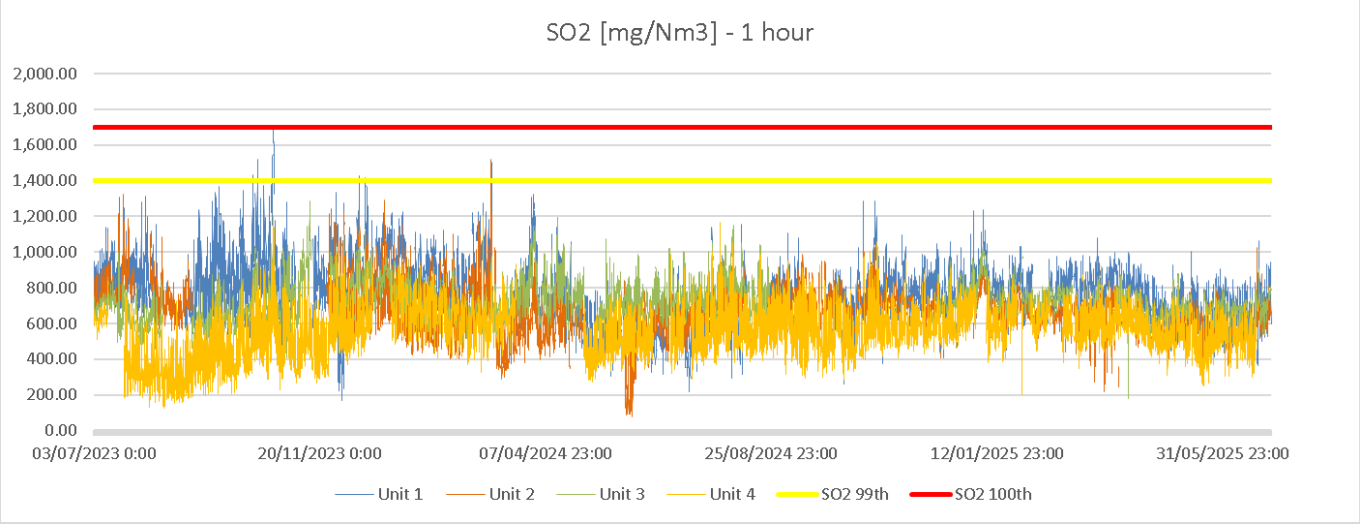
EPA Identification no. 6 - Air emissions monitoring, Boiler 4 stack discharge to air
Unit 4 offline 24-20 June 2025
Unit 4 SO_2 data invalidated 22 June 2025

	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
01/06/2025	346	402	301	569	696	499
02/06/2025	335	411	305	524	653	305
03/06/2025	368	455	316	533	657	455
04/06/2025	343	388	296	437	642	302
05/06/2025	355	448	295	434	578	316
06/06/2025	369	442	317	469	579	353
07/06/2025	384	447	331	558	672	481
08/06/2025	385	433	323	551	659	470
09/06/2025	341	380	294	460	666	346
10/06/2025	360	449	310	506	622	354
11/06/2025	349	427	314	531	654	470
12/06/2025	333	392	288	491	616	401
13/06/2025	340	374	310	481	651	389
14/06/2025	328	374	277	493	714	401
15/06/2025	333	417	289	538	672	407
16/06/2025	333	384	293	466	631	369
17/06/2025	368	460	313	461	599	354
18/06/2025	362	465	310	506	684	342
19/06/2025	350	425	309	429	697	299
20/06/2025	349	444	289	441	608	318
21/06/2025	398	455	324	518	714	394
22/06/2025	445	599	371	-	-	-
23/06/2025	491	547	444	823	1012	670
24/06/2025	-	-	-	-	-	-
25/06/2025	-	-	-	-	-	-
26/06/2025	-	-	-	-	-	-
27/06/2025	-	-	-	-	-	-
28/05/2025	-	-	-	-	-	-
29/06/2025	-	-	-	-	-	-
30/06/2025	-	-	-	-	-	-

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	5.9	mg/m^3	50	29/04/2025
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	<0.00008	mg/m^3	0.03	26/02/2025
Mercury	6 monthly	<0.0003	mg/m^3	0.03	26/02/2025
Type 1 and 2 substances in Aggregate	6 monthly	<0.02	mg/m^3	0.60	26/02/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate	6 monthly	230	m^3/sec	-	29/04/2025
Moisture	6 monthly	5.5	%	-	29/04/2025
Oxygen	6 monthly	9.1	%	-	29/04/2025
Solid Particles	Quarterly	5.1	mg/m^3	-	29/04/2025
Temperature	6 monthly	119	Deg C	-	29/04/2025
Carbon dioxide	6 monthly	11.3	%	-	29/04/2025
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	<0.000076	mg/m^3	-	26/02/2025
Mercury	6 monthly	0.00025	mg/m^3	-	26/02/2025
Type 1 and Type 2 substances in	6 monthly	<0.024	mg/m^3	-	26/02/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate		250	m^3/sec	-	29/04/2025
Moisture		5.3	%	-	29/04/2025
Oxygen		9.2	%	-	29/04/2025
Solid Particles	Quarterly	6.6	mg/m^3	-	29/04/2025
Temperature		115	Deg C	-	29/04/2025
Cadmium	6 monthly	<0.00008	mg/m^3	-	26/02/2025
Mercury	6 monthly	<0.0004	mg/m^3	-	26/02/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.017	mg/m^3	-	26/02/2025

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	13	mg/m^3	50	30/04/2025
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	<0.00007	mg/m^3	0.03	27/02/2025
Mercury	6 monthly	<0.0005	mg/m^3	0.03	27/02/2025
Type 1 and 2 substances in Aggregate	6 monthly	<0.03	mg/m^3	0.60	27/02/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate	6 monthly	240	m^3/sec	-	30/04/2025
Moisture	6 monthly	4.9	%	-	30/04/2025
Oxygen	6 monthly	8.8	%	-	30/04/2025
Solid Particles	Quarterly	4.0	mg/m^3	-	30/04/2025
Temperature	6 monthly	126	Deg C	-	30/04/2025
Carbon dioxide	6 monthly	11.8	%	-	30/04/2025
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	<0.0001	mg/m^3	-	27/02/2025
Mercury	6 monthly	<0.0004	mg/m^3	-	27/02/2025
Type 1 and Type 2 substances in	6 monthly	<0.051	mg/m^3	-	27/02/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate		260	m^3/sec	-	30/04/2025
Moisture		5.4	%	-	30/04/2025
Oxygen		9.2	%	-	30/04/2025
Solid Particles	Quarterly	22	mg/m^3	-	30/04/2025
Temperature		116	Deg C	-	30/04/2025
Cadmium	6 monthly	<0.00005	mg/m^3	-	27/02/2025
Mercury	6 monthly	0.00062	mg/m^3	-	27/02/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.017	mg/m^3	-	27/02/2025

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	7.4	mg/m^3	50	1/05/2025
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	<0.0001	mg/m^3	0.03	25/2/2025
Mercury	6 monthly	<0.00041	mg/m^3	0.03	25/2/2025
Type 1 and 2 substances in Aggregate	6 monthly	<0.02	mg/m^3	0.60	25/2/2025

EPA Identification No 11 – Air Emissions monitoring, Boiler 3 Exhaust Duct A					
Name	**Frequency**	**Reading**	**Units**	**Licence Limit**	**Date**
Flow Rate	6 monthly	280	m^3/sec	-	1/05/2025
Moisture	6 monthly	5.3	%	-	1/05/2025
Oxygen	6 Monthly	8.1	%	-	1/05/2025
Solid Particles	Quarterly	5.2	mg/m^3	-	1/05/2025
Temperature	6 monthly	114	Deg C	-	1/05/2025
Carbon dioxide	6 monthly	12	%	-	1/05/2025
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	<0.00018	mg/m^3	-	25/02/2025
Mercury	6 monthly	<0.00046	mg/m^3	-	25/02/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.015	mg/m^3	-	25/02/2025

EPA Identification No 12 – Air Emissions monitoring, Boiler 3 Exhaust Duct B					
Name	**Frequency**	**Reading**	**Units**	**Licence Limit**	**Date**
Flow Rate		300	m^3/sec	-	1/05/2025
Moisture		5.4	%	-	1/05/2025
Oxygen		6.6	%	-	1/05/2025
Solid Particles	Quarterly	9.4	mg/m^3	-	1/05/2025
Temperature		115	Deg C	-	1/05/2025
Cadmium	6 monthly	<0.0001	mg/m^3	-	25/02/2025
Mercury	6 monthly	0.00035	mg/m^3	-	25/02/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.032	mg/m^3	-	25/02/2025

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	17	mg/m^3	50	2/05/2025
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	<0.00006	mg/m^3	0.03	28/02/2025
Mercury	6 monthly	0.00082	mg/m^3	0.03	28/02/2025
Type 1 and 2 substances in Aggregate	6 monthly	<0.02	mg/m^3	0.60	28/02/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate	6 monthly	290	m^3/sec	-	2/05/2025
Moisture	6 monthly	5.6	%	-	2/05/2025
Oxygen	6 monthly	10.6	%	-	2/05/2025
Solid Particles	Quarterly	11	mg/m^3	-	2/05/2025
Temperature	6 monthly	114	Deg C	-	2/05/2025
Carbon dioxide	6 monthly	9.9	%	-	2/05/2025
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	<0.00005	mg/m^3	-	28/02/2025
Mercury	6 monthly	0.0013	mg/m^3	-	28/02/2025
Type 1 and Type 2 substances in	6 monthly	<0.017	mg/m^3	-	28/02/2025

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

Name	Frequency	Reading	Units	Licence Limit	Date
Flow Rate		300	m^3/sec	-	2/05/2025
Moisture		5.3	%	-	2/05/2025
Oxygen		8.9	%	-	2/05/2025
Solid Particles	Quarterly	23	mg/m^3	-	2/05/2025
Temperature		114	Deg C	-	2/05/2025
Cadmium	6 monthly	<0.00007	mg/m^3	-	28/02/2025
Mercury	6 monthly	0.00032	mg/m^3	-	28/02/2025
Type 1 and Type 2 substances in Aggregate	6 monthly	<0.015	mg/m^3	-	28/02/2025

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
13.89	0.5	15.65	8.08	29.07	92.9	7.75	2.25

	Laboratory Analysis			
Name	**Reading**	**Units**	**Licence Limit**	**Date**
Aluminium	0.05	mg/L	-	17/06/25
Ammonia	<0.005	mg/L	-	17/06/25
Arsenic III	<0.008	mg/L	-	17/06/25
Arsenic V	<0.008	mg/L	-	17/06/25
Cadmium	<0.0002	mg/L	-	17/06/25
Chromium (Trivalent)	<0.001	mg/L	-	17/06/25
Chromium (VI) Compounds	<0.001	mg/L	-	17/06/25
Copper	<0.001	mg/L	-	17/06/25
Iron	0.052	mg/L	-	17/06/25
Lead	<0.0002	mg/L	-	17/06/25
Manganese	0.0054	mg/L	-	17/06/25
Nickel	0.0005	mg/L	-	17/06/25
pH	8.13	pH units	-	17/06/25
Selenium	<0.002	mg/L	-	17/06/25
Total Suspended Solids	9	mg/L	-	17/06/25
Vanadium	0.0021	mg/L	-	17/06/25
Zinc	<0.005	mg/L	-	17/06/25

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
14.91	0.5	16.39	8.09	28.83	94.8	7.76	3.25

Laboratory Analysis				
Name	**Reading**	**Units**	**Licence Limits**	**Date**
Aluminium	0.02	mg/L	-	17/06/25
Ammonia	<0.005	mg/L	-	17/06/25
Arsenic III	<0.008	mg/L	-	17/06/25
Arsenic V	<0.008	mg/L	-	17/06/25
Cadmium	<0.0002	mg/L	-	17/06/25
Chromium (Trivalent)	<0.001	mg/L	-	17/06/25
Chromium (VI) Compounds	<0.001	mg/L	-	17/06/25
Copper	0.001	mg/L	-	17/06/25
Iron	0.012	mg/L	-	17/06/25
Lead	<0.0002	mg/L	-	17/06/25
Manganese	0.0043	mg/L	-	17/06/25
Nickel	0.0006	mg/L	-	17/06/25
pH	8.12	pH units	-	17/06/25
Selenium	<0.002	mg/L	-	17/06/25
Total Suspended Solids	15	mg/L	-	17/06/25
Vanadium	0.0026	mg/L	-	17/06/25
Zinc	<0.005	mg/L	-	17/06/25

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
11.85	0.5	14.78	7.69	29.57	110.4	9.33	3.75

Laboratory Analysis

Name	Reading	Units	Licence Limits	Date
Aluminium	0.024	mg/L	-	17/06/25
Ammonia	<0.005	mg/L	-	17/06/25
Arsenic III	<0.008	mg/L	-	17/06/25
Arsenic V	<0.008	mg/L	-	17/06/25
Cadmium	<0.0002	mg/L	-	17/06/25
Chromium (Trivalent)	<0.001	mg/L	-	17/06/25
Chromium (VI) Compounds	<0.001	mg/L	-	17/06/25
Copper	<0.001	mg/L	-	17/06/25
Iron	0.022	mg/L	-	17/06/25
Lead	<0.0002	mg/L	-	17/06/25
Manganese	0.0038	mg/L	-	17/06/25
Nickel	<0.0005	mg/L	-	17/06/25
pH	8.12	pH units	-	17/06/25
Selenium	<0.002	mg/L	-	17/06/25
Total Suspended Solids	22	mg/L	-	17/06/25
Vanadium	0.002	mg/L	-	17/06/25
Zinc	<0.005	mg/L	-	17/06/25

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
12.96	0.5	18.18	7.94	29.29	104.1	8.26	3.25

Laboratory Analysis

Name	Reading	Units	Licence Limits	Date
Aluminium	0.039	mg/L	-	17/06/25
Ammonia	<0.005	mg/L	-	17/06/25
Arsenic III	<0.008	mg/L	-	17/06/25
Arsenic V	<0.008	mg/L	-	17/06/25
Cadmium	<0.0002	mg/L	-	17/06/25
Chromium (Trivalent)	<0.001	mg/L	-	17/06/25
Chromium (VI) Compounds	<0.001	mg/L	-	17/06/25
Copper	0.001	mg/L	-	17/06/25
Iron	0.044	mg/L	-	17/06/25
Lead	<0.0002	mg/L	-	17/06/25
Manganese	0.0044	mg/L	-	17/06/25
Nickel	0.0006	mg/L	-	17/06/25
pH	8.12	pH units	-	17/06/25
Selenium	<0.002	mg/L	-	17/06/25
Total Suspended Solids	13	mg/L	-	17/06/25
Vanadium	0.0022	mg/L	-	17/06/25
Zinc	<0.005	mg/L	-	17/06/25

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	0.296	mg/L	-	5/06/25
Ammonia	1.5	mg/L	-	5/06/25
Arsenic III	0.0005	mg/L	-	5/06/25
Arsenic V	0.0173	mg/L	-	5/06/25
Cadmium	<0.00005	mg/L	-	5/06/25
Chromium (Trivalent)	<0.001	mg/L	-	5/06/25
Chromium (VI) Compounds	<0.01	mg/L	-	5/06/25
Copper	0.0034	mg/L	-	5/06/25
Iron	0.132	mg/L	-	5/06/25
Lead	0.0003	mg/L	-	5/06/25
Manganese	0.189	mg/L	-	5/06/25
Nickel	0.0029	mg/L	-	5/06/25
Nitrite and Nitrate as N	1.74	mg/L	-	5/06/25
Nitrogen	3.7	mg/L	-	5/06/25
pH	7.76	pH units	-	5/06/25
Phosphorus as P	0.31	mg/L	-	5/06/25
Reactive Phosphorus as P	0.32	mg/L	-	5/06/25
Selenium	0.0287	mg/L	-	5/06/
Total Kjeldahl Nitrogen	2	mg/L	-	5/06/25
Total Suspended Solids	18	mg/L	-	5/06/25
Vanadium	0.0837	mg/L	-	5/06/25
Zinc	0.007	mg/L	-	5/06/25

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	0.053	mg/L	-	5/06/25
Ammonia	0.017	mg/L	-	5/06/25
Arsenic III	<0.008	mg/L	-	5/06/25
Arsenic V	<0.008	mg/L	-	5/06/25
Cadmium	<0.0002	mg/L	-	5/06/25
Chromium (Trivalent)	<0.001	mg/L	-	5/06/25
Chromium (VI) Compounds	<0.01	mg/L	-	5/06/25
Copper	<0.0002	mg/L	-	5/06/25
Iron	0.114	mg/L	-	5/06/25
Lead	<0.0002	mg/L	-	5/06/25
Manganese	0.0095	mg/L	-	5/06/25
Nickel	<0.0005	mg/L	-	5/06/25
pH	7.91	pH units	-	5/06/25
Selenium	0.002	mg/L	-	5/06/25
Total Suspended Solids	21	mg/L	-	5/06/25
Vanadium	0.0015	mg/L	-	5/06/25
Zinc	<0.005	mg/L	-	5/06/25
Dissolved Oxygen	7.06	mg/L	-	5/06/25
Field Temperature	17.2	degC	-	5/06/25
Salinity	29.74	ppt	-	5/06/25
Secchi Disk	1.75	m	-	5/06/25
Temperature – Average	16.57	deg C	-	June 25
Temperature – Minimum	14.60	deg C	-	June 25
Temperature - Maximum	19.78	deg C	-	June 25

Eraring Cooling Water Outlet Canal

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

Name	Reading	Units	Licence Limit	Date
Copper	0.0016	mg/L	0.005	5/06/25
Iron	0.078	mg/L	0.3	5/06/25
Selenium	0.002	mg/L	0.002	5/06/25

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	20.88	deg C	35.5	37.5	38.5	June 25
Temperature – Minimum	19.46	deg C				June 25
Temperature - Maximum	29.48	deg C				June 25

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	5.98	ML	150	June 25
Monthly Discharge from Ash Dam	106.40	ML	-	June 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	0.046	mg/L	-	5/06/25
Ammonia	3.01	mg/L	-	5/06/25
Arsenic III	0.004	mg/L	-	5/06/25
Arsenic V	0.0016	mg/L	-	5/06/25
Cadmium	<0.00005	mg/L	-	5/06/25
Chromium (Trivalent)	<0.001	mg/L	-	5/06/25
Chromium (VI) Compounds	<0.01	mg/L	-	5/06/25
Copper	0.0006	mg/L	-	5/06/25
Iron	5.85	mg/L	-	5/06/25
Lead	<0.0001	mg/L	-	5/06/25
Manganese	0.748	mg/L	-	5/06/25
Nickel	0.0032	mg/L	-	5/06/25
Nitrite and Nitrate as N	0.12	mg/L	-	5/06/25
Nitrogen	3.09	mg/L	-	5/06/25
pH	6.84	pH units	6-9.5	5/06/25
Phosphorus as P	0.4	mg/L	-	5/06/25
Reactive Phosphorus as P	0.018	mg/L	-	5/06/25
Selenium	0.0003	mg/L	-	5/06/25
Total Kjeldahl Nitrogen	2.97	mg/L	-	5/06/25
Total Suspended Solids	35	mg/L	50	5/06/25
Vanadium	0.0007	mg/L	-	5/06/25
Zinc	0.003	mg/L	-	5/06/25

MR217

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

MR217 did not discharge in the month, background sampling only

Name	Reading	Units	Licence Limit	Date
Aluminium	1.69	mg/L	-	5/06/25
Ammonia	0.13	mg/L	-	5/06/25
Arsenic III	<0.0005	mg/L	-	5/06/25
Arsenic V	0.0015	mg/L	-	5/06/25
Cadmium	<0.00005	mg/L	-	5/06/25
Chromium (Trivalent)	<0.001	mg/L	-	5/06/25
Chromium (VI) Compounds	<0.01	mg/L	-	5/06/25
Copper	0.002	mg/L	-	5/06/25
Iron	2.31	mg/L	-	5/06/25
Lead	0.0008	mg/L	-	5/06/25
Manganese	0.151	mg/L	-	5/06/25
Nickel	0.0025	mg/L	-	5/06/25
Nitrite and Nitrate as N	0.589	mg/L	-	5/06/25
Nitrogen	1.11	mg/L	-	5/06/25
pH	6.77	pH units	6-9.5	5/06/25
Phosphorus as P	0.174	mg/L	-	5/06/25
Reactive Phosphorus as P	0.055	mg/L	-	5/06/25
Selenium	0.0019	mg/L	-	5/06/25
Total Kjeldahl Nitrogen	0.52	mg/L	-	5/06/25
Total Suspended Solids	17	mg/L	50	5/06/25
Vanadium	0.0077	mg/L	-	5/06/25
Zinc	0.01	mg/L	-	5/06/25

Groundwater Monitoring
Groundwater Well – MW01

EPA Identification no. 32 – Groundwater Monitoring Well 01

Name	Reading	Units	Licence Limit	Date
Aluminium	0.177	mg/L	-	13/06/25
Ammonia	0.03	mg/L	-	13/06/25
Arsenic (III)	<0.0005	mg/L	-	13/06/25
Arsenic (V)	0.0007	mg/L	-	13/06/25
Cadmium	<0.00005	mg/L	-	13/06/25
Calcium	2	mg/L	-	13/06/25
Chromium (trivalent)	<0.01	mg/L	-	13/06/25
Chromium (VI) compounds	<0.01	mg/L	-	13/06/25
Copper	<0.0005	mg/L	-	13/06/25
Electrical Conductivity	448	uS/cm	-	13/06/25
Iron	0.904	mg/L	-	13/06/25
Lead	0.0008	mg/L	-	13/06/25
Magnesium	5	mg/L	-	13/06/25
Manganese	0.125	mg/L	-	13/06/25
Nickel	0.0053	mg/L	-	13/06/25
pH	5.16	pH units	-	13/06/25
Potassium	4	mg/L	-	13/06/25
Selenium	<0.0002	mg/L	-	13/06/25
Sodium	68	mg/L	-	13/06/25
Standing Water Level	6.09	m	-	13/06/25
Vanadium	0.0005	mg/L	-	13/06/25
Zinc	0.025	mg/L	-	13/06/25

Groundwater Monitoring
Groundwater Well – MW02

EPA Identification no. 33 – Groundwater Monitoring Well 02

Name	Reading	Units	Licence Limit	Date
Aluminium	0.264	mg/L	-	12/06/25
Ammonia	4.86	mg/L	-	12/06/25
Arsenic (III)	0.0006	mg/L	-	12/06/25
Arsenic (V)	0.0009	mg/L	-	12/06/25
Cadmium	0.00012	mg/L	-	12/06/25
Calcium	263	mg/L	-	12/06/25
Chromium (trivalent)	<0.01	mg/L	-	12/06/25
Chromium (VI) compounds	<0.01	mg/L	-	12/06/25
Copper	0.0011	mg/L	-	12/06/25
Electrical Conductivity	17100	uS/cm	-	12/06/25
Iron	8.910	mg/L	-	12/06/25
Lead	0.002	mg/L	-	12/06/25
Magnesium	302	mg/L	-	12/06/25
Manganese	0.649	mg/L	-	12/06/25
Nickel	0.0008	mg/L	-	12/06/25
pH	6.80	pH units	-	12/06/25
Potassium	132	mg/L	-	12/06/25
Selenium	0.0007	mg/L	-	12/06/25
Sodium	3560	mg/L	-	12/06/25
Standing Water Level	5.24	m	-	12/06/25
Vanadium	0.0028	mg/L	-	12/06/25
Zinc	0.039	mg/L	-	12/06/25

Groundwater Monitoring
Groundwater Well – MW06

EPA Identification no. 34 – Groundwater Monitoring Well 06

Name	Reading	Units	Licence Limit	Date
Aluminium	0.014	mg/L	-	10/06/25
Ammonia	3.67	mg/L	-	10/06/25
Arsenic (III)	0.008	mg/L	-	10/06/25
Arsenic (V)	0.008	mg/L	-	10/06/25
Cadmium	<0.00005	mg/L	-	10/06/25
Calcium	459	mg/L	-	10/06/25
Chromium (trivalent)	<0.01	mg/L	-	10/06/25
Chromium (VI) compounds	<0.01	mg/L	-	10/06/25
Copper	<0.0005	mg/L	-	10/06/25
Electrical Conductivity	20100	uS/cm	-	10/06/25
Iron	11.90	mg/L	-	10/06/25
Lead	0.0003	mg/L	-	10/06/25
Magnesium	248	mg/L	-	10/06/25
Manganese	0.405	mg/L	-	10/06/25
Nickel	0.0033	mg/L	-	10/06/25
pH	6.63	pH units	-	10/06/25
Potassium	118	mg/L	-	10/06/25
Selenium	0.0006	mg/L	-	10/06/25
Sodium	3320	mg/L	-	10/06/25
Standing Water Level	1.84	m	-	10/06/25
Vanadium	0.001	mg/L	-	10/06/25
Zinc	0.012	mg/L	-	10/06/25

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	-	
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	-	

Water Quality – Surface Water EBESS

EPA Identification no. 37 – Final discharge point from the water treatment plant

Sample Frequency – Daily during any discharge

Name	Min reading (mg/L)	Average reading (mg/L)	Maximum Reading (mg/L)	Project Criteria	Number of samples
Cadmium	<0.0001	-	<0.0001	-	7
Chromium (hexavalant)	<0.01	-	<0.1	-	7
Chromium (trivalent)	<0.01	-	<0.1	-	7
Copper	<0.001	0.001	0.002	-	7
Manganese	<0.0001	-	<0.001	-	7
Nickel	<0.001	-	<0.001	-	7
PFOS	<0.0003	-	<0.0003	0.13	7
PFOA	<0.0005	-	<0.0005	220	7
pH	8.07	8.29	8.58	6.5-9	7
Selenium	0.0004	0.0005	0.0007	-	7
Total Suspended solids	<5	-	<5	50	7
Vanadium	<0.01	-	<0.1	-	7
Zinc	<0.005	-	<0.005	8	7

Daily Volume Discharged		
Min	Ave	Max
0.1	0.25	0.3

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	
PFOA	Daily during any discharge		220	
pH	Daily during any discharge		6.5-9	
Selenium	Daily during any discharge		-	
Total Suspended solids	Daily during any discharge		50	
Vanadium	Daily during any discharge		-	
Zinc	Daily during any discharge		8	

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	
PFOA		220	
pH		6.5-9	
Selenium		-	
Total Suspended solids		50	
Vanadium		-	
Zinc		8	

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	
PFOA		220	
pH		6.5-9	
Selenium		-	
Total Suspended solids		50	
Vanadium		-	
Zinc		8	