

Environmental Protection Licence 1967

2023 Stormwater Monitoring Data

Point 3 - Berth K3 Outlet (discharge to biofiltration pit)

Licensee Name and Address: Port of Newcastle Operations Pty Ltd; Newcastle Bulk Terminal, Heron Road Kooragang NSW 2304.

Type of Monitoring: Discharge water quality monitoring.

Frequency required: Monthly during discharge with exceptions noted below table.

Notes: No limits are specified in EPL 1967.

EPL Link: [Link to EPL 1967](#) on EPA POEO Register

Monitoring location:



Figure: Location of EPL 1967 Point 3 (Google Maps, accessed 2022, approximate)

Analyte	Units	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023
Date sampled	-	19/01/2023	22/02/2023	14/03/2023	14/04/2023	17/05/2023	23/06/2023
Date results received	-	03/03/2023	03/03/2023	05/05/2023	05/05/2023	11/7/2023	11/7/2023
Date published	-	16/03/2023	16/03/2023	10/05/2023	10/05/2023	20/07/2023	20/07/2023
Ammonia as N	mg/L	0.06	0.08	0.38	0.22	0.13	0.44
Dissolved Aluminium, Al	mg/L	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1
Dissolved Arsenic, As**	mg/L	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01
Dissolved Cadmium, Cd	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.001	<0.001
Dissolved Lead, Pb	mg/L	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01
Dissolved Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Zinc, Zn	mg/L	<0.050	<0.050	<0.050	<0.050	<0.05	<0.05
Filterable Reactive Phosphorus	mg/L	0.12	0.1	0.48	0.13	0.21	0.3
Nitrate as N	mg/L	0.42	0.19	0.38	0.3	0.36	0.19
Nitrite as N	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
pH	pH unit	7.62	7.62	7.48	7.55	7.67	8.1
Sulfate	mg/L	2340	1790	2380	2840	2890	2500
Total Aluminium	mg/L	1.11	0.92	0.31	3.77	0.92	8.82
Total Arsenic**	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Cadmium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Kjeldahl Nitrogen	mg/L	0.8	19.3	1.0	0.2	0.6	1.5
Total Lead	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Mercury	mg/L	0.0006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Nitrogen (calc)	mg/L	1.2	19.4	1.4	0.5	1.0	1.7
Total Phosphate	mg/L	0.66	1.11	4.06	1.52	2.52	1.68
Total Phosphorus	mg/L	0.22	0.36	1.32	0.5	0.82	0.55
Total Sulphide	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Sulphur, S	mg/L	2490	3440	2820	3010	2900	2590
Total Suspended Solids	mg/L	228	228	405	405	355	51
Total Zinc	mg/L	0.074	<0.052	<0.052	0.081	0.054	0.143

* insufficient rainfall for sample collection

** only required to be monitored following Sulphate of Ammonia operation

Results are continued on next page.

Analyte	Units	July 2023	August 2023	Sept 2023	Oct 2023	Nov 2023*	Dec 2023
Date sampled	-	24/07/2023	7/08/2023	8/09/2023	27/10/2023	-	21/12/2023
Date results received	-	1/09/2023	26/09/2023	26/09/2023	13/11/2023	-	16/01/2024
Date published	-	15/09/2023	29/09/2023	29/09/2023	17/11/2023	-	20/01/2024
Ammonia as N	mg/L	0.47	0.32	0.51	0.13	-	0.18
Dissolved Aluminium, Al	mg/L	<0.1	<0.1	<0.1	<0.1	-	<100
Dissolved Arsenic, As**	mg/L	<0.01	<0.01	<0.01	<0.01	-	<0.01
Dissolved Cadmium, Cd	mg/L	<0.001	<0.001	<0.001	<0.001	-	<0.001
Dissolved Lead, Pb	mg/L	<0.01	<0.01	<0.01	<0.01	-	<0.01
Dissolved Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.001
Dissolved Zinc, Zn	mg/L	<0.05	<0.05	<0.05	<0.05	-	<0.05
Filterable Reactive Phosphorus	mg/L	0.19	0.25	0.41	0.09	-	0.18
Nitrate as N	mg/L	0.29	0.23	0.38	0.33	-	0.3
Nitrite as N	mg/L	<0.05	<0.05	<0.05	<0.05	-	<0.05
pH	pH unit	7.92	7.85	8.13	7.8	-	7.97
Sulfate	mg/L	2480	2570	582	2800	-	2550
Total Aluminium	mg/L	7.13	4.23	5.14	5.83	-	<0.10
Total Arsenic**	mg/L	<0.010	<0.01	<0.01	<0.01	-	<0.01
Total Cadmium	mg/L	<0.0010	<0.001	<0.001	<0.001	-	<0.001
Total Kjeldahl Nitrogen	mg/L	0.6	0.8	1	0.7	-	<0.1
Total Lead	mg/L	0.014	<0.01	<0.01	0.012	-	<0.01
Total Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.001
Total Nitrogen (calc)	mg/L	0.9	1	1.4	1.1	-	0.3
Total Phosphate	mg/L	1.08	1.39	5.15	1.84	-	1.3
Total Phosphorus	mg/L	0.35	0.45	1.68	0.6	-	0.42
Total Sulphide	mg/L	<0.1	<0.1	<0.1	<0.1	-	<0.1
Total Sulphur, S	mg/L	2700	2630	2890	2810	-	2970
Total Suspended Solids	mg/L	28	160	290	247	-	34
Total Zinc	mg/L	0.197	0.064	0.099	0.209	-	<0.052

* insufficient rainfall for sample collection

** only required to be monitored following Sulphate of Ammonia operation