

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		
Date results received	-	1/09/2023	26/09/2023	26/09/2023	13/11/2023		
Date published	-	15/09/2023	29/09/2023	29/09/2023	17/11/2023		
Ammonia as N	mg/L	0.47	0.32	0.51	0.13		
Dissolved Aluminium, Al	mg/L	<0.1	<0.1	<0.1	<0.1		
Dissolved Arsenic, As**	mg/L	<0.01	<0.01	<0.01	<0.01		
Dissolved Cadmium, Cd	mg/L	<0.001	<0.001	<0.001	<0.001		
Dissolved Lead, Pb	mg/L	<0.01	<0.01	<0.01	<0.01		
Dissolved Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001		
Dissolved Zinc, Zn	mg/L	<0.05	<0.05	<0.05	<0.05		
Filterable Reactive Phosphorus	mg/L	0.19	0.25	0.41	0.09		
Nitrate as N	mg/L	0.29	0.23	0.38	0.33		
Nitrite as N	mg/L	<0.05	<0.05	<0.05	<0.05		
pH	pH unit	7.92	7.85	8.13	7.8		
Sulfate	mg/L	2480	2570	582	2800		
Total Aluminium	mg/L	7.13	4.23	5.14	5.83		
Total Arsenic**	mg/L	<0.010	<0.01	<0.01	<0.01		
Total Cadmium	mg/L	<0.0010	<0.001	<0.001	<0.001		
Total Kjeldahl Nitrogen	mg/L	0.6	0.8	1	0.7		
Total Lead	mg/L	0.014	<0.01	<0.01	0.012		
Total Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001		
Total Nitrogen (calc)	mg/L	0.9	1	1.4	1.1		
Total Phosphate	mg/L	1.08	1.39	5.15	1.84		
Total Phosphorus	mg/L	0.35	0.45	1.68	0.6		
Total Sulphide	mg/L	<0.1	<0.1	<0.1	<0.1		
Total Sulphur, S	mg/L	2700	2630	2890	2810		
Total Suspended Solids	mg/L	28	160	290	247		
Total Zinc	mg/L	0.197	0.064	0.099	0.209		

* insufficient rainfall for sample collection

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