

Stormwater Monitoring Data – EPL 1967 EPL

Year: 2021 calendar year

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

Location: Point 3 (Berth K3 Outlet discharge to biofiltration pit)

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



Figure: Location of EPL 1967 Point 3 (Google Maps, accessed 2021, approximate)

Analyte	Units	January 2021	February 2021 *	March 2021	April 2021 *	May 2021 *	June 2021
Date sampled	-	28/01/2021	-	18/03/2021	-	-	30/06/2021
Date results received	-	25/02/2021	30/03/2021	14/05/2021	11/06/2021	9/07/2021	24/08/2021
Date published	-	19/04/2021	19/04/2021	18/05/2021	24/06/2021	13/07/2021	27/08/2021
pH	pH	6.58	-	7.47	-	-	6.95
Aluminium (dissolved)	mg/L	0.08	-	<0.1	-	-	<0.1
Aluminium (total)	mg/L	2.48	-	0.35	-	-	8.47
Ammonia	mg/L	<0.1	-	0.1	-	-	0.08
Arsenic ** (dissolved)	mg/L	0.001	-	<0.01	-	-	<0.01
Arsenic ** (total)	mg/L	0.002	-	<0.01	-	-	<0.01
Cadmium (dissolved)	mg/L	0.0002	-	<0.001	-	-	<0.001
Cadmium (total)	mg/L	<0.002	-	<0.001	-	-	<0.001
Lead (dissolved)	mg/L	<0.001	-	<0.01	-	-	<0.01
Lead (total)	mg/L	0.005	-	<0.01	-	-	0.012
Mercury (dissolved)	mg/L	<0.0001	-	<0.0001	-	-	<0.0001
Mercury (total)	mg/L	<0.0001	-	<0.0001	-	-	0.0001
Nitrate	mg/L	82.6	-	0.61	-	-	1.91
Nitrite	mg/L	1.06	-	<0.05	-	-	<0.05
Total Nitrogen	mg/L	90.8	-	9	-	-	3.6
Total Kjeldahl Nitrogen	mg/L	7	-	8.4	-	-	1
Phosphate	mg/L	7.97	-	0.9	-	-	1.22
Phosphorus (dissolved reactive)	mg/L	1.4	-	0.27	-	-	0.13
Phosphorus (total)	mg/L	2.6	-	0.3	-	-	0.4
Sulfate	mg/L	860	-	2020	-	-	2540
Sulfur	mg/L	920	-	2560	-	-	2640
Sulfide (dissolved)	mg/L	<0.1	-	<0.1	-	-	<0.1
Total Suspended Solids	mg/L	75	-	<5	-	-	170
Zinc (dissolved)	mg/L	0.136	-	<0.05	-	-	<0.05
Zinc (total)	mg/L	0.16	-	0.66	-	-	0.24

* insufficient rainfall for sample collection

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

Results are continued on next page.

Analyte	Units	July 2021 *	August 2021	Sept 2021	Oct 2021	Nov 2021	Dec 2021*
Date sampled	-	-	24/08/2021	14/09/2021	11/10/2021	23/11/2021	-
Date results received	-	17/08/2021	16/09/2021	17/11/2021	26/11/2021	14/01/2021	14/01/2021
Date published	-	27/08/2021	17/09/2021	19/11/2021	30/11/2021	25/01/2021	25/01/2021
pH	pH	-	7.86	7.75	7.82	7.43	-
Aluminium (dissolved)	mg/L	-	<0.1	<0.1	<0.10	<0.10	-
Aluminium (total)	mg/L	-	0.65	4	2.18	0.3	-
Ammonia	mg/L	-	<0.05	<0.05	0.23	0.12	-
Arsenic ** (dissolved)	mg/L	-	<0.01	<0.01	<0.010	<0.010	-
Arsenic ** (total)	mg/L	-	<0.010	<0.01	<0.010	<0.010	-
Cadmium (dissolved)	mg/L	-	<0.001	<0.001	<0.0010	<0.0010	-
Cadmium (total)	mg/L	-	<0.0010	<0.001	<0.0010	<0.0010	-
Lead (dissolved)	mg/L	-	<0.01	<0.01	<0.010	<0.010	-
Lead (total)	mg/L	-	<0.010	<0.01	<0.010	<0.010	-
Mercury (dissolved)	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	-
Mercury (total)	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	-
Nitrate	mg/L	-	0.24	0.27	0.36	1.91	-
Nitrite	mg/L	-	<0.05	<0.05	<0.05	<0.05	-
Total Nitrogen	mg/L	-	1.8	0.6	0.5	2.2	-
Total Kjeldahl Nitrogen	mg/L	-	1.6	0.4	0.1	0.3	-
Phosphate	mg/L	-	0.29	0.82	0.33	1.78	-
Phosphorus (dissolved reactive)	mg/L	-	0.08	0.09	0.06	0.46	-
Phosphorus (total)	mg/L	-	0.1	0.27	0.11	1.78	-
Sulfate	mg/L	-	2660	2600	2860	687	-
Sulfur	mg/L	-	2840	2920	2820	2160	-
Sulfide (dissolved)	mg/L	-	<0.1	<0.1	<0.1	<0.1	-
Total Suspended Solids	mg/L	-	260	168	84	16	-
Zinc (dissolved)	mg/L	-	<0.05	0.052	0.051	0.067	-
Zinc (total)	mg/L	-	<0.052	0.076	<0.052	<0.052	-

* insufficient rainfall for sample collection

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