

Stormwater Monitoring Data – EPL 1967 EPL

Year: 2020 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 2020*	February 2020	March 2020	April 2020*	May 2020*	June 2020*
Date sampled	-	-	7/02/2020	27/03/2020	-	26/05/2020	-
Date results received	-	January 2020	February 2020	April 2020	May 2020	June 2020	July 2020
Date published	-	January 2020	February 2020	April 2020	May 2020	June 2020	July 2020
pH	pH	-	7.55	6.51	-	7.54	-
Aluminium (dissolved)	mg/L	-	<0.01	<0.1	-	<0.10	-
Aluminium (total)	mg/L	-	3.59	10.6	-	0.86	-
Ammonia	mg/L	-	0.23	0.09	-	0.27	-
Arsenic ** (dissolved)	mg/L	-	<0.001	<0.01	-	<0.01	-
Arsenic ** (total)	mg/L	-	<0.001	<0.01	-	<0.01	-
Cadmium (dissolved)	mg/L	-	<0.0001	<0.0001	-	<0.0010	-
Cadmium (total)	mg/L	-	<0.0001	<0.001	-	<0.001	-
Lead (dissolved)	mg/L	-	<0.001	<0.01	-	<0.010	-
Lead (total)	mg/L	-	0.012	0.042	-	<0.010	-
Mercury (dissolved)	mg/L	-	<0.0001	<0.0001	-	<0.0001	-
Mercury (total)	mg/L	-	0.0002	0.0001	-	<0.0001	-
Nitrate	mg/L	-	4.47	23.3	-	10.5	-
Nitrite	mg/L	-	0.1	<0.05	-	0.42	-
Total Nitrogen	mg/L	-	6	26.8	-	14.7	-
Total Kjeldahl Nitrogen	mg/L	-	1.5	3.5	-	3.8	-
Phosphate	mg/L	-	1.74	22.4	-	2.53	-
Phosphorus (dissolved reactive)	mg/L	-	0.4	7.35	-	0.68	-
Phosphorus (total)	mg/L	-	0.57	7.3	-	0.83	-
Sulfate	mg/L	-	2,400	2,380	-	2,260	-
Sulfur	mg/L	-	3,240	2,380	-	3,060	-
Sulfide (dissolved)	mg/L	-	<0.1	<0.1	-	<0.1	-
Total Suspended Solids	mg/L	-	103	396	-	157	-
Zinc (dissolved)	mg/L	-	<0.005	<0.05	-	<0.050	-
Zinc (total)	mg/L	-	0.066	0.207	-	0.076	-

* insufficient rainfall for sample collection

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

Results are continued on next page.

Analyte	Units	July 2020*	August 2020*	Sept 2020*	Oct 2020*	Nov 2020*	Dec 2020*
Date sampled	-	14/07/2020	10/08/2020	-	26/10/2020	-	16/12/2020
Date results received	-	July 2020	August 2020	September 2020	November 2020	December 2020	January 2020
Date published	-	27/01/2022	27/01/2022		27/01/2022		27/01/2022
pH	pH	7.34	6.76	-	7.46	-	7.61
Aluminium (dissolved)	mg/L	<0.01	<0.1	-	<0.1	-	<0.10
Aluminium (total)	mg/L	0.36	0.72	-	3.3	-	8.4
Ammonia	mg/L	0.27	1.02	-	0.06	-	0.09
Arsenic ** (dissolved)	mg/L	<0.01	<0.01	-	<0.01	-	<0.010
Arsenic ** (total)	mg/L	<0.01	<0.01	-	<0.01	-	<0.010
Cadmium (dissolved)	mg/L	<0.001	<0.001	-	<0.001	-	<0.0010
Cadmium (total)	mg/L	<0.001	<0.001	-	<0.001	-	<0.0010
Lead (dissolved)	mg/L	<0.01	<0.01	-	<0.01	-	<0.010
Lead (total)	mg/L	<0.01	<0.01	-	<0.01	-	0.022
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	2.72	10.4	-	1.78	-	3.04
Nitrite	mg/L	<0.05	0.71	-	<0.05	-	<0.05
Total Nitrogen	mg/L	2.9	12	-	2.1	-	3.5
Total Kjeldahl Nitrogen	mg/L	0.2	0.9	-	0.3	-	0.5
Phosphate	mg/L	0.46	0.64	-	0.4	-	1.31
Phosphorus (dissolved reactive)	mg/L	0.11	0.13	-	0.09	-	0.08
Phosphorus (total)	mg/L	0.15	0.21	-	0.13	-	0.43
Sulfate	mg/L	2570	2400	-	2500	-	2720
Sulfur	mg/L	2800	2460	-	3050	-	2800
Sulfide (dissolved)	mg/L	<0.1	<0.1	-	<0.1	-	<0.1
Total Suspended Solids	mg/L	136	40	-	21	-	232
Zinc (dissolved)	mg/L	<0.05	0.204	-	<0.05	-	<0.050
Zinc (total)	mg/L	0.059	0.222	-	<0.052	-	0.313

* insufficient rainfall for sample collection

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