

## Stormwater Monitoring Data – EPL 1967

**Year:** 2022 calendar year

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

**Location:** Point 1 (Berth K2 Outlet)

**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 1 (Google Maps, accessed 2022)

Analyte	Units	January 2022 <sup>#</sup>	February 2022 <sup>1</sup>	March 2022	April 2022	May 2022	June 2022
Date sampled	-	19/01/2022	24/02/2022	1/03/2022	8/04/2022	23/05/2022	20/06/2022
Date results received	-	25/02/2022	07/03/2022	29/03/2022	12/05/2022	15/07/2022	15/07/2022
Date published	-	02/03/2022	09/03/2022	01/04/2022	17/05/2022	18/07/2022	18/07/2022
pH	pH	-	7.11	8.45	7.31	8.35	8.88
Aluminium (dissolved)	mg/L	-	0.01	0.02	0.02	<0.1	0.14
Aluminium (total)	mg/L	-	0.19	0.63	1.2	0.15	6.8
Ammonia	mg/L	-	50.7	90.7	47.6	411	146
Arsenic ** (dissolved)	mg/L	-	<0.001	0.004	<0.001	0.029	0.007
Arsenic ** (total)	mg/L	-	0.003	0.004	0.006	0.032	0.013
Cadmium (dissolved)	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cadmium (total)	mg/L	-	0.0003	0.0008	0.0004	0.0002	0.002
Lead (dissolved)	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Lead (total)	mg/L	-	0.002	0.003	0.005	<0.001	0.049
Mercury (dissolved)	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mercury (total)	mg/L	-	<0.0001	<0.0001	<0.0001	0.0002	0.0002
Nitrate	mg/L	-	0.04	1.49	0.63	0.13	0.66
Nitrite	mg/L	-	<0.01	0.39	0	0.60	1.88
Total Nitrogen	mg/L	-	53.2	168	57.2	379	418
Total Kjeldahl Nitrogen	mg/L	-	53.2	166	56.2	378	416
Phosphate	mg/L	-	176	55.1	146	426	85.1
Phosphorus (dissolved reactive)	mg/L	-	48.1	12.9	46.6	112	12.1
Phosphorus (total)	mg/L	-	57.6	18	47.6	139	27.8
Sulfate	mg/L	-	111	292	8	532	43
Sulfur	mg/L	-	90	180	<10	520	80
Sulfide (dissolved)	mg/L	-	0.4	<0.1	<0.1	<0.1	<0.1
Total Suspended Solids	mg/L	-	41	52	41	107	421
Zinc (dissolved)	mg/L	-	0.031	<0.005	0.041	<0.005	0.013
Zinc (total)	mg/L	-	0.115	0.182	0.138	0.147	0.878

\* insufficient rainfall for sample collection

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

# Sample was unable to be collected due to equipment malfunction.

1. Sample obtained manually (grab sample) as automatic sampler not operational.

Results are continued on next page.

Analyte	Units	July 2022	August 2022	Sept 2022	Oct 2022	Nov 2022	Dec 2022
Date sampled	-	4/07/2022					
Date results received	-	15/07/2022					
Date published	-	18/07/2022					
pH	pH	8.07					
Aluminium (dissolved)	mg/L	0.04					
Aluminium (total)	mg/L	1.39					
Ammonia	mg/L	55.9					
Arsenic ** (dissolved)	mg/L	0.002					
Arsenic ** (total)	mg/L	0.004					
Cadmium (dissolved)	mg/L	<0.0001					
Cadmium (total)	mg/L	0.0003					
Lead (dissolved)	mg/L	<0.001					
Lead (total)	mg/L	0.007					
Mercury (dissolved)	mg/L	<0.0001					
Mercury (total)	mg/L	<0.0001					
Nitrate	mg/L	<0.05					
Nitrite	mg/L	0.65					
Total Nitrogen	mg/L	55.4					
Total Kjeldahl Nitrogen	mg/L	55.3					
Phosphate	mg/L	22.4					
Phosphorus (dissolved reactive)	mg/L	4.33					
Phosphorus (total)	mg/L	7.32					
Sulfate	mg/L	115					
Sulfur	mg/L	120					
Sulfide (dissolved)	mg/L	<0.1					
Total Suspended Solids	mg/L	256					
Zinc (dissolved)	mg/L	0.048					
Zinc (total)	mg/L	0.238					

\* insufficient rainfall for sample collection.

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

# Sample was unable to be collected due to equipment malfunction.

1. Sample obtained manually (grab sample) as automatic sampler not operational.