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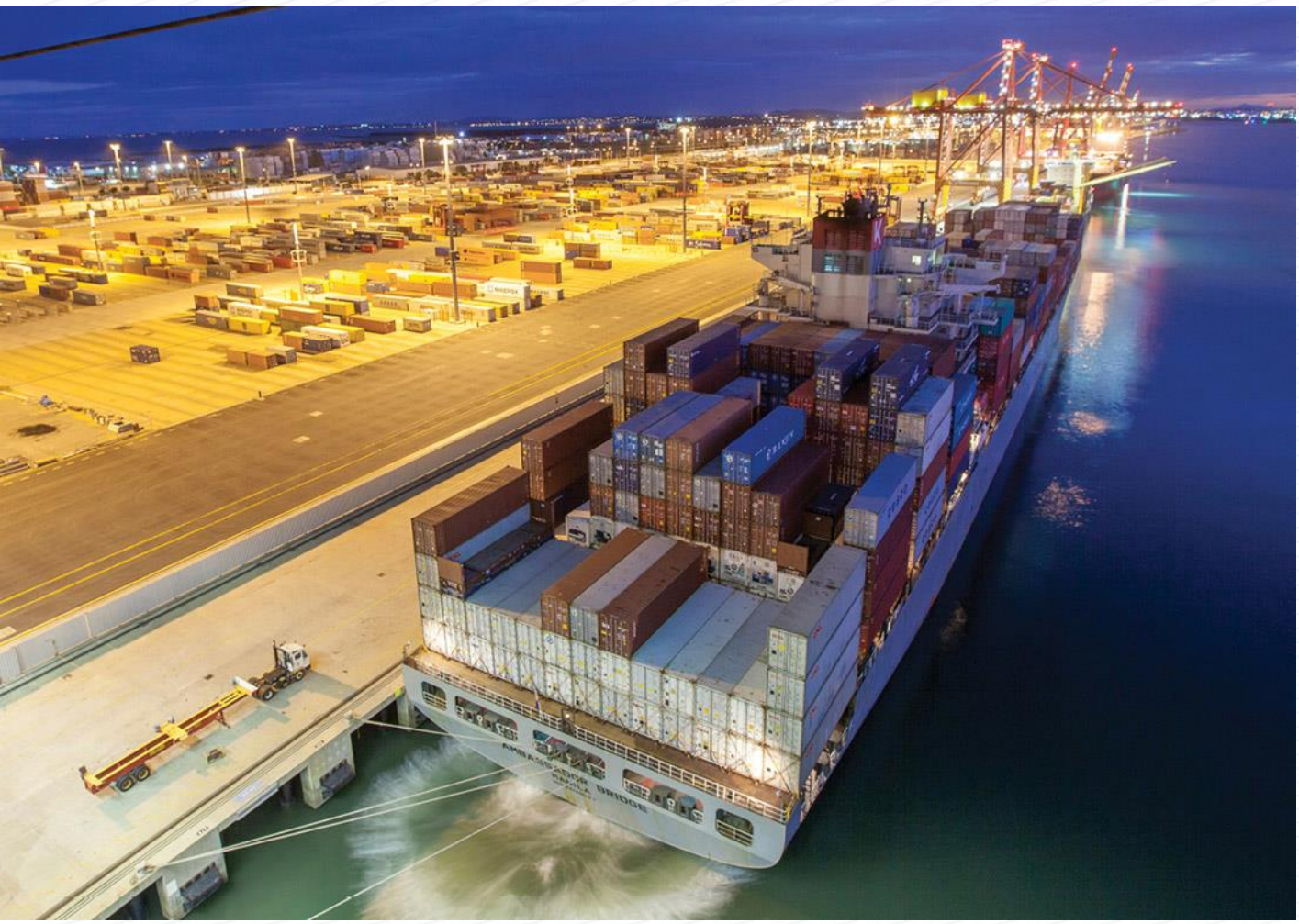
Drinking Water Quality Management Plan

2021-22 Annual Report

11 NOVEMBER 2022



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Introduction

The Port of Brisbane is located at the mouth of the Brisbane River on reclaimed land known as Fisherman Islands. The port is managed by the Port of Brisbane Pty Ltd (PBPL) and processes more than 2,600 ships each year.

PBPL is responsible for the site potable water reticulation network and is committed to ensuring that the water systems are managed so that the supply does not constitute a hazard to employees or the public. PBPL draws its drinking water supply from Queensland Urban Utilities' (UU) reticulated supply through metered supply points. The management of water quality until it is supplied to PBPL is the responsibility of UU. The Australian Drinking Water Guidelines (ADWG) require management of drinking water quality through to the consumer and therefore PBPL is considered a Water Service Provider under Queensland legislation. PBPL is required to have a Drinking Water Quality Management Plan (DWQMP) in place to manage water quality within its reticulation system.

This report is the seventh annual report of the DWQMP and summarises all relevant actions taken in the 2021-22 financial year.

Implementation of the DWQMP

Purpose and objectives of the DWQMP

The PBPL DWQMP contributes to maintaining a safe and reliable drinking water supply for consumers. The plan is based on the principles described in the Framework for Management of Drinking Water Quality contained in the Australian Drinking Water Guidelines 2004 (ADWG).

The purpose of the DWQMP is to provide an overview of PBPL's current management system for achieving/maintaining drinking water quality and plans to develop and continually improve the water quality management systems. The management plan focuses on the section of the drinking water scheme over which PBPL has direct control (reticulation operation, maintenance, monitoring and corrective action). The supply components over which PBPL has no control (catchment management, treatment and storage) are the responsibility of UU and Seqwater and are considered by their respective DWQMP's.

Objectives of the DWQMP

The PBPL DWQMP addresses the 12 elements of the ADWG Framework in order to meet the required levels of service relating to drinking water quality and the legislative requirements of the Queensland *Water Supply (Safety and Reliability) Act 2008* and the *Queensland Public Health Regulation 2005*. The specific objectives of the Drinking Water Quality Management Plan are:

- To demonstrate due diligence and protect public health by implementing a management strategy to ensure a high quality water is supplied to consumers;
- To improve consumer confidence in water quality and the supplier;
- Clearly define current and future management procedures and strategies for maintaining water quality;
- Clearly define strategies for monitoring the quality of water supplied to consumers; and
- To implement a process for continual review, development and improvement of the water quality management system.

DWQMP Review and Audit

DWQMP Review

A review of the DWQMP was undertaken in 2016 with the revised document submitted to the Regulator for approval in November 2016. A number of changes were made to the document. A new monitoring location (Pinkenba kitchen) was added to capture the provision of water on the northern side of the river. The BMT kitchen location was removed. An application for approval of another revision (addressing the requirements of an Information Requirement Notice and a Further Information Request received in response to PBPL's 2016 application for amendment of the plan) was approved by DEWS in January 2018. A further review of the DWQMP was undertaken in October 2020 and approved by DRDMW in June 2021. A new monitoring location was added at the Brisbane International Cruise Terminal in June 2022 to capture the provision of water at the new facility and a minor amendment approved by DRDMW.

DWQMP Audit

An audit of the DWQMP was undertaken in March 2020. There have been no further external audits.

Monitoring and Compliance

Quarterly Monitoring

PBPL undertakes quarterly verification monitoring at five representative sites at the Port of Brisbane. The original DWQMP included only three test sites. A fourth site, Port West Bunnings, was added in September 2013 to capture water quality at the new PBPL Port West estate. A fifth site, reclamation, was added in May 2014 to capture water quality at the Port of Brisbane reclamation site office. An additional site located at the Brisbane International Cruise Terminal was added in June 2022 prior to operations commencing.

Verification sampling was undertaken September 2021, December 2021, March 2022 and June 2022 (additional site added). No exceedances were recorded in FY21-22. Elevated levels of heterotrophic plate count were detected during each sampling period across each site. No action was taken in regards to these levels.

E.coli Monitoring

PBPL undertake weekly monitoring for E.coli at the PBPL Main Office. Initial samples are tested in a desktop E.coli sample kit. Where results indicate possible E.coli, a sample is sent to a laboratory for analysis.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. samples collected	4	4	5	4	4	5	4	4	5	4	4	4
No. samples collected in which E.coli detected	0	0	0	0	0	0	0	0	0	0	0	0
No. detections in previous 12 months	0	0	0	0	0	0	0	0	0	0	0	0
% samples that comply	100	100	100	100	100	100	100	100	100	100	100	100
Compliance with 98% annual value	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Additional Monitoring

Sampling for legionella is now undertaken at all sites. When legionella counts are detected, the water is flushed and retested until nil counts are recorded. No legionella counts of concern were detected.

Complaints Management

There were no complaints in the reporting period.

Appendix

September 2021

Analyte	Unit	Australian Drinking Water Quality Health Guidelines	BMT Kitchen	NPO Ground Floor	Port West	Reclaim	Ops Base Tea Room
pH	pH Unit	6.5-8.5 (aesthetic) No health guideline	7.96	8.13	8.13	8.2	8.16
TDS	mg/L	-	264	248	256	260	258
Colour (True)	PCU	-	2	2	2	2	2
Turbidity	NTU	-	8.3	0.2	0.1	0.1	0.2
Total Hardness as CaCO3	mg/L	-	111	116	127	123	120
Hydroxide Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	mg/L	-	78	82	87	89	87
Total Alkalinity as CaCO3	mg/L	-	78	82	87	89	87
Sulfate as SO4	mg/L	500	28	27	28	27	28
Chloride	mg/L	250 (aesthetic) No health guideline	74	72	78	72	78
Dissolved Major Cations							
Calcium	mg/L	-	23	25	26	28	25
Magnesium	mg/L	-	13	13	15	13	14
Sodium	mg/L	-	43	43	46	43	44
Potassium	mg/L	-	4	4	4	4	4
Dissolved Metals							
Aluminium	mg/L	-	<0.01	0.04	0.04	0.05	0.03
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	2	0.024	0.027	0.029	0.033	0.028
Cadmium	mg/L	0.002	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001

Chromium	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	2	0.27	0.111	0.051	0.024	0.046
Lead	mg/L	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	0.5	0.015	<0.001	0.002	<0.001	0.001
Molybdenum	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	0.02	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.69	0.01	0.013	0.012	<0.005
Boron	mg/L	4	<0.05	0.06	<0.05	<0.05	<0.05
Iron	mg/L	-	<0.05	<0.05	<0.05	<0.05	<0.05
Total Metals							
Aluminium	mg/L	-	0.02	0.03	0.04	0.05	0.04
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	2	0.024	0.027	0.03	0.034	0.03
Cadmium	mg/L	0.002	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Chromium	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	2	0.378	0.114	0.05	0.026	0.054
Lead	mg/L	0.01	0.002	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	0.5	0.015	0.001	0.003	<0.001	0.005
Molybdenum	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	0.02	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.717	0.009	0.013	0.013	<0.005
Boron	mg/L	4	<0.05	<0.05	<0.05	0.05	<0.05
Iron	mg/L	-	0.53	<0.05	<0.05	<0.05	<0.05
Mercury	mg/L		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001

Total Cyanide	mg/L		<0.004	<0.004	<0.004	<0.004	<0.004
Fluoride	mg/L	1.5	0.8	0.8	1	0.8	0.8
Ammonia	mg/L	-	<0.01	0.01	0.07	0.02	0.07
Nitrite	mg/L	3	<0.01	<0.01	0.24	<0.01	0.21
Nitrate	mg/L	50	0.4	0.52	0.27	0.61	0.31
Nitrite and Nitrate as N	mg/L	-	0.4	0.52	0.51	0.61	0.52
Sulfide as S2	mg/L	-	<0.1	<0.1	<0.1	<0.1	<0.1
Monocyclic Aromatic Hydrocarbons							
Benzene	µg/L	1	<1	<1	<1	<1	<1
Toluene	µg/L	800	<2	<2	<2	<2	<2
Ethylbenzene	µg/L	300	<2	<2	<2	<2	<2
meta- & para-Xylene	µg/L	600	<2	<2	<2	<2	<2
Styrene	µg/L	30	<5	<5	<5	<5	<5
ortho-Xylene	µg/L	600	<2	<2	<2	<2	<2
Isopropylbenzene	µg/L	-	<5	<5	<5	<5	<5
n-Propylbenzene	µg/L	-	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5
sec-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5
tert-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
p-Isopropyltoluene	µg/L	-	<5	<5	<5	<5	<5
n-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
Vinyl Acetate	µg/L	-	<50	<50	<50	<50	<50
2-Butanone (MEK)	µg/L	-	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	µg/L	-	<50	<50	<50	<50	<50
2-Hexanone (MBK)	µg/L	-	<50	<50	<50	<50	<50
Carbon disulfide	µg/L	-	<5	<5	<5	<5	<5
2.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
1.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	µg/L	-	<5	<5	<5	<5	<5
Halogenated Aliphatic Compounds							
Dichlorodifluoromethane	µg/L	-	<50	<50	<50	<50	<50
Chloromethane	µg/L	-	<50	<50	<50	<50	<50
Vinyl chloride	µg/L	0.3	<50	<50	<50	<50	<50

Bromomethane	µg/L	-	<50	<50	<50	<50	<50
Chloroethane	µg/L	-	<50	<50	<50	<50	<50
Trichlorofluoromethane	µg/L	-	<50	<50	<50	<50	<50
1.1-Dichloroethene	µg/L	30	<5	<5	<5	<5	<5
Iodomethane	µg/L	-	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	µg/L	60	<5	<5	<5	<5	<5
1.1-Dichloroethane	µg/L	-	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	µg/L	60	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5
1.1-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
Carbon Tetrachloride	µg/L	3	<5	<5	<5	<5	<5
1.2-Dichloroethane	µg/L	3	<5	<5	<5	<5	<5
Trichloroethene	µg/L	-	<5	<5	<5	<5	<5
Dibromomethane	µg/L	-	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5
1.3-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
Tetrachloroethene	µg/L	50	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	µg/L	-	<5	<5	<5	<5	<5
Pentachloroethane	µg/L	-	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	µg/L	-	<5	<5	<5	<5	<5
Hexachlorobutadiene	µg/L	0.7	<5	<5	<5	<5	<5
Halogenated Aromatic Compounds							
Chlorobenzene	µg/L	300	<5	<5	<5	<5	<5
Bromobenzene	µg/L	-	<5	<5	<5	<5	<5
2-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5
4-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	µg/L	-	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	µg/L	40	<5	<5	<5	<5	<5
1.2-Dichlorobenzene	µg/L	1500	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	µg/L	30	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	µg/L	30	<5	<5	<5	<5	<5
Trihalomethanes							
Chloroform	µg/L	250	14	14	12	13	12
Bromodichloromethane	µg/L	250	12	14	18	<5	17
Dibromochloromethane	µg/L	250	14	17	24	<5	23
Bromoform	µg/L	250	<5	6	9	<5	9

*Note: the concentration of trihalomethanes, either individually **or in total**, must not exceed 250 µg/L*							
Naphthalene	µg/L	-	<5	<5	<5	<5	<5
VOC Surrogates							
1.2-Dichloroethane-D4	%	-	98.4	97.5	97	96.2	95.4
Toluene-D8	%	-	103	102	104	104	104
4-Bromofluorobenzene	%	-	104	104	105	105	103
Total Petroleum Hydrocarbons							
C6 - C9 Fraction	µg/L	-	20	30	30	<20	30
C10 - C14 Fraction	µg/L	-	<50	<50	<50	<50	<50
C15 - C28 Fraction	µg/L	-	<100	<100	<100	<100	<100
C29 - C36 Fraction	µg/L	-	<50	<50	<50	<50	<50
C10 - C36 Fraction (sum)	µg/L	-	<50	<50	<50	<50	<50
Heterotrophic Plate Count (22°C)	CFU/mL	-	61	52	~3	40	~7
Heterotrophic Plate Count (36°C)	CFU/mL	-	96	29	<1	25	<1
Faecal Coliforms	CFU/100mL	nil	<1	<1	<1	<1	<1
Escherichia coli	CFU/100mL	nil	<1	<1	<1	<1	<1
Coliforms	CFU/100mL	nil	<1	16	<1	<1	<1

December 2021

Analyte	Unit	Australian Drinking Water Quality Health Guidelines	BMT Kitchen	NPO Ground Floor	Port West	Reclaim	Ops Base Tea Room
pH	pH Unit	6.5-8.5 (aesthetic) No health guideline	7.49	7.72	7.7	7.95	7.79
TDS	mg/L	-	196	309	369	295	396
Colour (True)	PCU	-	2	2	2	2	2
Turbidity	NTU	-	0.7	0.3	0.3	0.3	0.3
Total Hardness as CaCO3	mg/L	-	75	124	137	128	152
Hydroxide Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	mg/L	-	56	82	80	92	81
Total Alkalinity as CaCO3	mg/L	-	56	82	80	92	81
Sulfate as SO4	mg/L	500	26	28	32	27	35
Chloride	mg/L	250 (aesthetic) No health guideline	37	87	115	78	134
Dissolved Major Cations							
Calcium	mg/L	-	17	25	27	28	31
Magnesium	mg/L	-	8	15	17	14	18
Sodium	mg/L	-	28	48	58	47	67
Potassium	mg/L	-	2	4	4	4	4
Dissolved Metals							
Aluminium	mg/L	-	0.02	0.03	0.03	0.09	0.03
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	**2**	0.016	0.032	0.036	0.04	0.038
Cadmium	mg/L	**0.002**	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Chromium	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001

Copper	mg/L	**2**	0.201	0.129	0.049	0.019	0.016
Lead	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.5**	0.003	<0.001	<0.001	<0.001	0.001
Molybdenum	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	**0.02**	<0.001	<0.001	<0.001	0.002	<0.001
Selenium	mg/L	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	**0.1**	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.142	0.012	0.025	0.015	<0.005
Boron	mg/L	**4**	<0.05	<0.05	<0.05	<0.05	<0.05
Iron	mg/L	-	<0.05	<0.05	<0.05	<0.05	<0.05
Total Metals							
Aluminium	mg/L	-	0.01	0.02	0.06	0.08	0.05
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	**2**	0.015	0.031	0.036	0.04	0.038
Cadmium	mg/L	**0.002**	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Chromium	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	**2**	0.208	0.145	0.06	0.021	0.018
Lead	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.5**	0.003	0.002	0.002	0.001	0.002
Molybdenum	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	**0.02**	<0.001	0.001	<0.001	0.003	<0.001
Selenium	mg/L	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	**0.1**	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.143	0.014	0.028	0.019	<0.005
Boron	mg/L	**4**	<0.05	<0.05	<0.05	<0.05	<0.05
Iron	mg/L	-	0.09	<0.05	<0.05	<0.05	<0.05
Mercury	mg/L		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Total Cyanide	mg/L		<0.004	<0.004	<0.004	<0.004	<0.004

Fluoride	mg/L	**1.5**	0.8	0.7	0.9	0.6	0.7
Ammonia	mg/L	-	<0.01	<0.01	<0.01	<0.01	0.01
Nitrite	mg/L	**3**	<0.01	<0.01	<0.01	<0.01	0.02
Nitrate	mg/L	**50**	0.49	0.6	0.65	0.74	0.69
Nitrite and Nitrate as N	mg/L	-	0.49	0.6	0.65	0.74	0.71
Sulfide as S2	mg/L	-	<0.1	<0.1	<0.1	<0.1	<0.1
Monocyclic Aromatic Hydrocarbons							
Benzene	µg/L	**1**	<1	<1	<1	<1	<1
Toluene	µg/L	**800**	<2	<2	<2	<2	<2
Ethylbenzene	µg/L	**300**	<2	<2	<2	<2	<2
meta- & para-Xylene	µg/L	**600**	<2	<2	<2	<2	<2
Styrene	µg/L	**30**	<5	<5	<5	<5	<5
ortho-Xylene	µg/L	**600**	<2	<2	<2	<2	<2
Isopropylbenzene	µg/L	-	<5	<5	<5	<5	<5
n-Propylbenzene	µg/L	-	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5
sec-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5
tert-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
p-Isopropyltoluene	µg/L	-	<5	<5	<5	<5	<5
n-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
Vinyl Acetate	µg/L	-	<50	<50	<50	<50	<50
2-Butanone (MEK)	µg/L	-	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	µg/L	-	<50	<50	<50	<50	<50
2-Hexanone (MBK)	µg/L	-	<50	<50	<50	<50	<50
Carbon disulfide	µg/L	-	<5	<5	<5	<5	<5
2.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
1.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	µg/L	-	<5	<5	<5	<5	<5
Halogenated Aliphatic Compounds							
Dichlorodifluoromethane	µg/L	-	<50	<50	<50	<50	<50
Chloromethane	µg/L	-	<50	<50	<50	<50	<50
Vinyl chloride	µg/L	**0.3**	<50	<50	<50	<50	<50
Bromomethane	µg/L	-	<50	<50	<50	<50	<50
Chloroethane	µg/L	-	<50	<50	<50	<50	<50
Trichlorofluoromethane	µg/L	-	<50	<50	<50	<50	<50

1.1-Dichloroethene	µg/L	**30**	<5	<5	<5	<5	<5
Iodomethane	µg/L	-	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	µg/L	**60**	<5	<5	<5	<5	<5
1.1-Dichloroethane	µg/L	-	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	µg/L	**60**	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5
1.1-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
Carbon Tetrachloride	µg/L	**3**	<5	<5	<5	<5	<5
1.2-Dichloroethane	µg/L	**3**	<5	<5	<5	<5	<5
Trichloroethene	µg/L	-	<5	<5	<5	<5	<5
Dibromomethane	µg/L	-	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5
1.3-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
Tetrachloroethene	µg/L	**50**	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	µg/L	-	<5	<5	<5	<5	<5
Pentachloroethane	µg/L	-	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	µg/L	-	<5	<5	<5	<5	<5
Hexachlorobutadiene	µg/L	**0.7**	<5	<5	<5	<5	<5
Halogenated Aromatic Compounds							
Chlorobenzene	µg/L	**300**	<5	<5	<5	<5	<5
Bromobenzene	µg/L	-	<5	<5	<5	<5	<5
2-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5
4-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	µg/L	-	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	µg/L	**40**	<5	<5	<5	<5	<5
1.2-Dichlorobenzene	µg/L	**1500**	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	µg/L	**30**	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	µg/L	**30**	<5	<5	<5	<5	<5
Trihalomethanes							
Chloroform	µg/L	**250**	27	17	14	15	13
Bromodichloromethane	µg/L	**250**	21	8	24	<5	22
Dibromochloromethane	µg/L	**250**	13	7	35	<5	27
Bromoform	µg/L	**250**	<5	<5	16	<5	15
Note: the concentration of trihalomethanes, either							

*individually **or in total**, must not exceed 250 µg/L*							
Naphthalene	µg/L	-	<5	<5	<5	<5	<5
VOC Surrogates							
1.2-Dichloroethane-D4	%	-	98.1	96.2	98.2	99.6	98.2
Toluene-D8	%	-	102	102	101	101	102
4-Bromofluorobenzene	%	-	101	105	105	102	102
Total Petroleum Hydrocarbons							
C6 - C9 Fraction	µg/L	-	40	<20	40	<20	30
C10 - C14 Fraction	µg/L	-	<50	<50	<50	<50	<50
C15 - C28 Fraction	µg/L	-	<100	<100	<100	<100	<100
C29 - C36 Fraction	µg/L	-	<50	<50	<50	<50	<50
C10 - C36 Fraction (sum)	µg/L	-	<50	<50	<50	<50	<50
Heterotrophic Plate Count (22°C)	CFU/mL	-	1200	97	140	19	170
Heterotrophic Plate Count (36°C)	CFU/mL	-	110	120	160	100	110
Faecal Coliforms	CFU/100 mL	**nil**	<1	<1	<1	<1	<1
Escherichia coli	CFU/100 mL	**nil**	<1	<1	<1	<1	<1
Coliforms	CFU/100 mL	**nil**	<1	<1	<1	<1	42

March 2022

Analyte	Unit	Australian Drinking Water Quality Health Guidelines	BMT Kitchen	NPO Ground Floor	Port West	Reclaim	Ops Base Tea Room
pH	pH Unit	6.5-8.5 (aesthetic) No health guideline	7.4	7.19	7.22	7.83	7.27
TDS	mg/L	-	263	232	204	324	203
Colour (True)	PCU	-	2	2	2	2	2
Turbidity	NTU	-	2.4	0.2	0.2	0.1	0.2
Total Hardness as CaCO3	mg/L	-	99	70	64	125	60
Hydroxide Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	mg/L	-	77	53	49	94	48
Total Alkalinity as CaCO3	mg/L	-	77	53	49	94	48
Sulfate as SO4	mg/L	500	42	73	61	48	61
Chloride	mg/L	250 (aesthetic) No health guideline	73	35	34	93	32
Dissolved Major Cations							
Calcium	mg/L	-	20	15	14	27	14
Magnesium	mg/L	-	12	8	7	14	6
Sodium	mg/L	-	50	52	44	58	44
Potassium	mg/L	-	3	3	3	4	3
Dissolved Metals							
Aluminium	mg/L	-	0.01	0.02	0.03	0.07	0.02
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	**2**	0.026	0.018	0.017	0.037	0.016
Cadmium	mg/L	**0.002**	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Chromium	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001

Copper	mg/L	**2**	0.086	0.174	0.041	0.011	0.064
Lead	mg/L	**0.01**	<0.001	0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.5**	0.005	0.002	0.002	<0.001	0.002
Molybdenum	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	**0.02**	<0.001	<0.001	<0.001	0.004	<0.001
Selenium	mg/L	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	**0.1**	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.223	0.031	0.019	0.013	<0.005
Boron	mg/L	**4**	0.07	0.06	0.07	0.05	0.07
Iron	mg/L	-	<0.05	<0.05	<0.05	<0.05	<0.05
Total Metals							
Aluminium	mg/L	-	0.02	0.03	0.04	0.07	0.03
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	**2**	0.025	0.016	0.016	0.033	0.015
Cadmium	mg/L	**0.002**	<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Chromium	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	**2**	0.107	0.157	0.038	0.01	0.052
Lead	mg/L	**0.01**	0.001	0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.5**	0.007	0.005	0.005	0.003	0.006
Molybdenum	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	**0.02**	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium	mg/L	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	**0.1**	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.224	0.025	0.018	0.007	<0.005
Boron	mg/L	**4**	0.08	<0.05	<0.05	<0.05	<0.05
Iron	mg/L	-	0.19	<0.05	<0.05	<0.05	<0.05
Mercury	mg/L		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001
Total Cyanide	mg/L		<0.004	<0.004	<0.004	<0.004	<0.004

Fluoride	mg/L	**1.5**	0.8	0.6	0.6	0.8	0.6
Ammonia	mg/L	-	<0.01	0.01	<0.01	<0.01	0.04
Nitrite	mg/L	**3**	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate	mg/L	**50**	0.52	0.6	0.69	0.68	0.68
Nitrite and Nitrate as N	mg/L	-	0.52	0.6	0.69	0.68	0.68
Sulfide as S2	mg/L	-	<0.1	<0.1	<0.1	<0.1	<0.1
Monocyclic Aromatic Hydrocarbons							
Benzene	µg/L	**1**	<1	<1	<1	<1	<1
Toluene	µg/L	**800**	<2	<2	<2	<2	<2
Ethylbenzene	µg/L	**300**	<2	<2	<2	<2	<2
meta- & para-Xylene	µg/L	**600**	<2	<2	<2	<2	<2
Styrene	µg/L	**30**	<5	<5	<5	<5	<5
ortho-Xylene	µg/L	**600**	<2	<2	<2	<2	<2
Isopropylbenzene	µg/L	-	<5	<5	<5	<5	<5
n-Propylbenzene	µg/L	-	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5
sec-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5
tert-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
p-Isopropyltoluene	µg/L	-	<5	<5	<5	<5	<5
n-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5
Vinyl Acetate	µg/L	-	<50	<50	<50	<50	<50
2-Butanone (MEK)	µg/L	-	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	µg/L	-	<50	<50	<50	<50	<50
2-Hexanone (MBK)	µg/L	-	<50	<50	<50	<50	<50
Carbon disulfide	µg/L	-	<5	<5	<5	<5	<5
2.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
1.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	µg/L	-	<5	<5	<5	<5	<5
Halogenated Aliphatic Compounds							
Dichlorodifluoromethane	µg/L	-	<50	<50	<50	<50	<50
Chloromethane	µg/L	-	<50	<50	<50	<50	<50
Vinyl chloride	µg/L	**0.3**	<50	<50	<50	<50	<50
Bromomethane	µg/L	-	<50	<50	<50	<50	<50
Chloroethane	µg/L	-	<50	<50	<50	<50	<50
Trichlorofluoromethane	µg/L	-	<50	<50	<50	<50	<50

1.1-Dichloroethene	µg/L	**30**	<5	<5	<5	<5	<5
Iodomethane	µg/L	-	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	µg/L	**60**	<5	<5	<5	<5	<5
1.1-Dichloroethane	µg/L	-	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	µg/L	**60**	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5
1.1-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5
Carbon Tetrachloride	µg/L	**3**	<5	<5	<5	<5	<5
1.2-Dichloroethane	µg/L	**3**	<5	<5	<5	<5	<5
Trichloroethene	µg/L	-	<5	<5	<5	<5	<5
Dibromomethane	µg/L	-	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5
1.3-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5
Tetrachloroethene	µg/L	**50**	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	µg/L	-	<5	<5	<5	<5	<5
Pentachloroethane	µg/L	-	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	µg/L	-	<5	<5	<5	<5	<5
Hexachlorobutadiene	µg/L	**0.7**	<5	<5	<5	<5	<5
Halogenated Aromatic Compounds							
Chlorobenzene	µg/L	**300**	<5	<5	<5	<5	<5
Bromobenzene	µg/L	-	<5	<5	<5	<5	<5
2-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5
4-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	µg/L	-	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	µg/L	**40**	<5	<5	<5	<5	<5
1.2-Dichlorobenzene	µg/L	**1500**	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	µg/L	**30**	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	µg/L	**30**	<5	<5	<5	<5	<5
Trihalomethanes							
Chloroform	µg/L	**250**	26	32	34	27	29
Bromodichloromethane	µg/L	**250**	25	8	20	<5	17
Dibromochloromethane	µg/L	**250**	20	<5	6	<5	<5
Bromoform	µg/L	**250**	<5	<5	<5	<5	<5
Note: the concentration of trihalomethanes, either							

*individually **or in total**, must not exceed 250 µg/L*							
Naphthalene	µg/L	-	<5	<5	<5	<5	<5
VOC Surrogates							
1.2-Dichloroethane-D4	%	-	107	108	105	109	107
Toluene-D8	%	-	104	103	100	103	103
4-Bromofluorobenzene	%	-	98.6	98.1	94.1	97	98.5
Total Petroleum Hydrocarbons							
C6 - C9 Fraction	µg/L	-	40	20	30	<20	30
C10 - C14 Fraction	µg/L	-	<50	<50	<50	<50	<50
C15 - C28 Fraction	µg/L	-	<100	<100	<100	<100	<100
C29 - C36 Fraction	µg/L	-	<50	<50	<50	<50	<50
C10 - C36 Fraction (sum)	µg/L	-	<50	<50	<50	<50	<50
Heterotrophic Plate Count (22°C)	CFU/mL	-	28	11	23	33	~7
Heterotrophic Plate Count (36°C)	CFU/mL	-	~390	50	50	37	19
Faecal Coliforms	CFU/100 mL	**nil**	<1	<1	<1	<1	<1
Escherichia coli	CFU/100 mL	**nil**	<1	<1	<1	<1	<1
Coliforms	CFU/100 mL	**nil**	<1	27	<1	<1	24

June 2022

Analyte	Unit	Australian Drinking Water Quality Health Guidelines	BMT Kitchen	NPO Ground Floor	Port West	Reclaim	Ops Base Tea Room	BICT
pH	pH Unit	6.5-8.5 (aesthetic) No health guideline						
TDS	mg/L	-	7.43	7.48	7.47	7.93	7.61	7.57
Colour (True)	PCU	-	284	296	260	276	251	221
Turbidity	NTU	-	2	2	2	2	2	2
Total Hardness as CaCO3	mg/L	-	118	116	109	128	114	94
Hydroxide Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	mg/L	-	<1	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	mg/L	-	77	87	84	96	88	75
Total Alkalinity as CaCO3	mg/L	-	77	87	84	96	88	75
Sulfate as SO4	mg/L	500	66	64	63	68	63	61
Chloride	mg/L	250 (aesthetic) No health guideline	52	56	53	52	55	42
Dissolved Major Cations								
Calcium	mg/L	-	26	25	24	30	26	21
Magnesium	mg/L	-	13	13	12	13	12	10
Sodium	mg/L	-	47	47	46	48	46	44
Potassium	mg/L	-	3	3	3	3	3	3
Dissolved Metals								
Aluminium	mg/L	-	<0.01	0.01	0.02	0.02	0.02	0.02
Antimony	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	**2**	0.022	0.022	0.020	0.031	0.022	0.020
Cadmium	mg/L	**0.002**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	**2**	0.477	0.154	0.031	0.007	0.041	0.345
Lead	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.5**	0.010	<0.001	0.001	<0.001	<0.001	<0.001

Molybdenum	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	**0.02**	<0.001	<0.001	<0.001	0.002	<0.001	<0.001
Selenium	mg/L	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	**0.1**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.408	0.028	0.007	0.009	<0.005	0.038
Boron	mg/L	**4**	<0.05	<0.05	<0.05	<0.05	0.05	0.05
Iron	mg/L	-	0.07	<0.05	<0.05	<0.05	<0.05	<0.05
Total Metals								
Aluminium	mg/L	-	0.02	0.05	0.02	0.03	0.03	0.03
Antimony	mg/L	-	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	**2**	0.023	0.024	0.023	0.034	0.023	0.020
Cadmium	mg/L	**0.002**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	**0.05**	<0.001	0.006	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	**2**	0.799	0.218	0.038	0.009	0.054	0.403
Lead	mg/L	**0.01**	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.5**	0.010	0.001	0.003	<0.001	0.003	0.002
Molybdenum	mg/L	**0.05**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	**0.02**	0.001	0.001	0.001	0.006	<0.001	0.002
Selenium	mg/L	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	**0.1**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	mg/L	-	0.410	0.036	0.008	0.017	<0.005	0.068
Boron	mg/L	**4**	<0.05	0.05	0.06	<0.05	0.06	<0.05
Iron	mg/L	-	0.24	<0.05	<0.05	<0.05	<0.05	<0.05
Mercury	mg/L		<0.00001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001
Total Cyanide	mg/L		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Fluoride	mg/L	**1.5**	0.7	0.7	0.8	0.7	0.8	0.7
Ammonia	mg/L	-	<0.01	<0.01	0.16	<0.01	<0.01	0.12
Nitrite	mg/L	**3**	<0.01	<0.01	0.14	<0.01	0.01	0.06
Nitrate	mg/L	**50**	0.57	0.92	0.85	1.17	1.07	0.59
Nitrite and Nitrate as N	mg/L	-	0.57	0.92	0.99	1.17	1.08	0.65
Sulfide as S2	mg/L	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Monocyclic Aromatic Hydrocarbons								
Benzene	µg/L	**1**	<1	<1	<1	<1	<1	<1
Toluene	µg/L	**800**	<2	<2	<2	<2	<2	<2
Ethylbenzene	µg/L	**300**	<2	<2	<2	<2	<2	<2
meta- & para-Xylene	µg/L	**600**	<2	<2	<2	<2	<2	<2

Styrene	µg/L	**30**	<5	<5	<5	<5	<5	<5
ortho-Xylene	µg/L	**600**	<2	<2	<2	<2	<2	<2
Isopropylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
n-Propylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
sec-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
tert-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
p-Isopropyltoluene	µg/L	-	<5	<5	<5	<5	<5	<5
n-Butylbenzene	µg/L	-	<5	<5	<5	<5	<5	<5
Vinyl Acetate	µg/L	-	<50	<50	<50	<50	<50	<50
2-Butanone (MEK)	µg/L	-	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	µg/L	-	<50	<50	<50	<50	<50	<50
2-Hexanone (MBK)	µg/L	-	<50	<50	<50	<50	<50	<50
Carbon disulfide	µg/L	-	<5	<5	<5	<5	<5	<5
2.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5	<5
1.2-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	µg/L	-	<5	<5	<5	<5	<5	<5
Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	µg/L	-	<50	<50	<50	<50	<50	<50
Chloromethane	µg/L	-	<50	<50	<50	<50	<50	<50
Vinyl chloride	µg/L	**0.3**	<50	<50	<50	<50	<50	<50
Bromomethane	µg/L	-	<50	<50	<50	<50	<50	<50
Chloroethane	µg/L	-	<50	<50	<50	<50	<50	<50
Trichlorofluoromethane	µg/L	-	<50	<50	<50	<50	<50	<50
1.1-Dichloroethene	µg/L	**30**	<5	<5	<5	<5	<5	<5
Iodomethane	µg/L	-	<5	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	µg/L	**60**	<5	<5	<5	<5	<5	<5
1.1-Dichloroethane	µg/L	-	<5	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	µg/L	**60**	<5	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5	<5
1.1-Dichloropropylene	µg/L	-	<5	<5	<5	<5	<5	<5
Carbon Tetrachloride	µg/L	**3**	<5	<5	<5	<5	<5	<5
1.2-Dichloroethane	µg/L	**3**	<5	<5	<5	<5	<5	<5
Trichloroethene	µg/L	-	<5	<5	<5	<5	<5	<5
Dibromomethane	µg/L	-	<5	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	µg/L	-	<5	<5	<5	<5	<5	<5
1.3-Dichloropropane	µg/L	-	<5	<5	<5	<5	<5	<5

Tetrachloroethene	µg/L	**50**	<5	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	µg/L	-	<5	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	µg/L	-	<5	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	µg/L	-	<5	<5	<5	<5	<5	<5
Pentachloroethane	µg/L	-	<5	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	µg/L	-	<5	<5	<5	<5	<5	<5
Hexachlorobutadiene	µg/L	**0.7**	<5	<5	<5	<5	<5	<5
Halogenated Aromatic Compounds								
Chlorobenzene	µg/L	**300**	<5	<5	<5	<5	<5	<5
Bromobenzene	µg/L	-	<5	<5	<5	<5	<5	<5
2-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5	<5
4-Chlorotoluene	µg/L	-	<5	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	µg/L	-	<5	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	µg/L	**40**	<5	<5	<5	<5	<5	<5
1.2-Dichlorobenzene	µg/L	**1500**	<5	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	µg/L	**30**	<5	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	µg/L	**30**	<5	<5	<5	<5	<5	<5
Trihalomethanes								
Chloroform	µg/L	**250**	19	18	19	20	17	13
Bromodichloromethane	µg/L	**250**	16	12	19	<5	16	8
Dibromochloromethane	µg/L	**250**	12	6	16	<5	11	6
Bromoform	µg/L	**250**	<5	<5	<5	<5	<5	<5
*Note: the concentration of trihalomethanes, either individually **or in total**, must not exceed 250 µg/L*								
Naphthalene	µg/L	-	<5	<5	<5	<5	<5	<5
VOC Surrogates								
1.2-Dichloroethane-D4	%	-	82.4	85.0	80.4	92.2	77.0	92.6
Toluene-D8	%	-	106	106	106	113	104	114
4-Bromofluorobenzene	%	-	113	110	108	118	111	118
Total Petroleum Hydrocarbons								
C6 - C9 Fraction	µg/L	-	20	<20	<20	<20	<20	<20
C10 - C14 Fraction	µg/L	-	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	µg/L	-	<100	<100	<100	<100	<100	<100

C29 - C36 Fraction	µg/L	-	<50	<50	<50	<50	<50	<50
C10 - C36 Fraction (sum)	µg/L	-	<50	<50	<50	<50	<50	<50
Heterotrophic Plate Count (22°C)	CFU/mL	-	21	17	<1	39	~9	66
Heterotrophic Plate Count (36°C)	CFU/mL	-	93	28	<1	64	12	120
Faecal Coliforms	CFU/100 mL	**nil**	<1	<1	<1	<1	<1	<1
Escherichia coli	CFU/100 mL	**nil**	<1	<1	<1	<1	<1	<1
Coliforms	CFU/100 mL	**nil**	<1	<1	<1	<1	<1	~1