

Field monitoring parameters - Water	Standing water level	Q	-	-	-	-	-	Q	Q	-	-	-	-	-	-	-	
	Electrical conductivity	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	-	A	
	pH	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	D	D	
	Toxic potential	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	-	A	
	Dissolved oxygen	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	-	A	
	Heavy metals (Al*, As*, Ba, Cd*, Cr (total)*, Co, Cu*, Pb, Mn, Hg, Zn*) Select Heavy Metals (Al, Cd, Chromium, Cu, Zn) – Quarterly	Y	Y	Y	Y	-	Y	Y	Y	Y	-	-	Y	Y	Y	D	D
Laboratory monitoring parameters - Water	Major Anions (excluding Alkalinity) (as CaCl ₂ , Chloride, Sulfate, as SO ₄) Major Cations (Calcium, Magnesium, Sodium, Potassium)	Y	Y	-	Q	Q	Q	Q	Q	-	-	Q	Q	Q	-	A	
	Total Petroleum Hydrocarbons (TPH)	Y	Y	-	-	-	Y	Y	Y	-	-	-	-	-	-	A	
	Benzene, Ethylbenzene, Toluene and Xylenes (BTEX)	Y	Y	Y	-	-	Y	Y	Y	-	-	-	-	-	-	A	
	Fluoride	Y	Y	-	-	-	Y	Y	Y	-	-	-	-	-	-	A	
	Nitrogen (Nitrate, Nitrite, Total as N) Ammonia (NH ₃ -N)	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	D	D	
	Volatile organic compounds (VOCs - full suite)	Y	Y	-	-	-	Y	Y	Y	-	-	Q	Q	Q	B	B	
	Semi-volatile organic compounds (SVOCs - full suite)	Y	Y	-	-	-	Y	Y	Y	-	-	-	-	-	-	A	
	Total dissolved solids (TDS)	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	Q	-	A
	Total organic carbon (TOC)	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	Q	-	A
	Biochemical oxygen demand (BOD)	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Q	Q	Y	-	A	
	Chemical oxygen demand (COD)	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Q	Q	Y	-	A	
	Total suspended solids (TSS)	-	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	D	D	
	Phosphorus Total as P	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	B	B	
	Per- and poly-fluoro alkyl substances (PFAS) (including PFOS, PFOA, Sum of PFOS+PFOAs)	Q	Q	Q	Q	Q	Q	Q	Q	Q	-	-	Q	Q	Q	-	A
	Field monitoring parameters - Gas	Methane gas (in air %v/v)	-	-	-	-	-	-	M ¹	M ¹	-	-	-	-	-	-	-

Legend	
D	EPL Daily during discharge round/parameter
M	EPL Monthly monitoring round/parameter
Q	EPL Quarterly monitoring round/parameter
Y	EPL Yearly (annual) monitoring round/parameter
A	Non-mandatory additional round/parameter
Q (Blue text)	Non-mandatory additional parameter (quarterly frequency)
	No samples collected (reason specified)
-	Not required

Notes

The EPL requirement to analyse Chlorinated Volatile Compounds, Polycyclic aromatic hydrocarbons (PAHs) and Organochlorine pesticides (OCP) was mandatory by NSW EPA on 6 May 2019. Chlorinated Volatile Compounds were not tested out at

1 selected locations during the August 2019 and/or August 2020 yearly monitoring rounds. This requirement is no longer applicable as of 14 November 2022.

2 The EPL requirement to analyse surface gas emissions and gas accumulation (methane) monitoring on monthly frequency was mandatory by NSW EPA on 6 May 2019. This was put into effect for the February 2020 monitoring rounds onwards.

3 Additional monitoring round carried out in October 2019

4 Additional wet weather monitoring round carried out on 31 August 2021

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 27 FEBRUARY 2018

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prosepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Aluminium	milligrams per litre	Yearly	0.055	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	80	0.044	0.009	0.032	0.023	0.015	0.058	0.069	Dry
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Barium	milligrams per litre	Yearly	2	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	less than 5	5	11	not required	not required	not required	Dry
Cadmium	milligrams per litre	Yearly	0.0002	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Calcium	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	110	80	80	not required	not required	not required	Dry
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Chromium (total)	milligrams per litre	Yearly	0.0033	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Cobalt	milligrams per litre	Yearly	0.0014	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Copper	milligrams per litre	Yearly	0.0014	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Fluoride	milligrams per litre	Yearly	1	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Lead	milligrams per litre	Yearly	0.0034	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Magnesium	milligrams per litre	Yearly	-	not required	not required	not required	not tested	not required	not required	not required	not required	Dry
Manganese	milligrams per litre	Yearly	0.2 / 1.9	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Mercury	milligrams per litre	Yearly	0.00006	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Nitrate (as Nitrogen)	milligrams per litre	Yearly	2.40	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Nitrite (as Nitrogen)	milligrams per litre	Yearly	0.9	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	not tested	not tested	not tested	not tested	not tested	not tested	not tested	not tested	Dry
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	not tested	not tested	not tested	not tested	not tested	not tested	not tested	not tested	Dry
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	not tested	not tested	not tested	not tested	not tested	not tested	not tested	not tested	Dry
Potassium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Sodium	milligrams per litre	Yearly	230	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Toluene	milligrams per litre	Yearly	0.18	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1400	640	84	280	610	1100	830	730	Dry
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Total Kjeldahl Nitrogen	milligrams per litre	Not tested	-	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Dry
Total Nitrogen	milligrams per litre	Not tested	0.25	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Dry

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	95	39	54	41	43	32	28	7	Dry
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Total Phosphorus	milligrams per litre	Yearly	0.02	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	11	less than 10	less than 10	21	not required	not required	not required	Dry
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	not required	not required	not required	not required	not required	not required	Dry
Zinc	milligrams per litre	Yearly	0.008	not required	not required	not tested	not tested	not required	not tested	not required	not required	Dry
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.55	not required	not required	not required	not required	not required	37.61	15.21	Dry
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	735	1097	771	469	893	1838	897	726	Dry
	millivolts	Quarterly	-	-111	-15	52	4	24	70	113	67	Dry
	milligrams per litre	Quarterly	-	0.82	2.79	4.22	3.08	1.08	3.21	0.29	1.73	Dry
PH	PH Units	Quarterly	6.5-8	7.16	8.29	5.89	7.75	7.23	7.39	4.83	5.11	Dry
Temp	Degree C	Quarterly	-	28.4	25.9	20.3	22.4	25.8	21.9	29.4	20.1	Dry

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional monitoring of parameter was analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 16 MAY 2018

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prosepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Aluminium	milligrams per litre	Yearly	0.055	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	87	0.044	Dry	Dry	Dry	Dry	Dry	0.14	Dry
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Barium	milligrams per litre	Yearly	2	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	Dry	Dry	Dry	Dry	Dry	not required	Dry
Cadmium	milligrams per litre	Yearly	0.0002	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Calcium	milligrams per litre	Yearly	1000	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Chromium (total)	milligrams per litre	Yearly	0.0033	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Cobalt	milligrams per litre	Yearly	0.0014	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Copper	milligrams per litre	Yearly	0.0014	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Fluoride	milligrams per litre	Yearly	1	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Lead	milligrams per litre	Yearly	0.0034	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Magnesium	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Manganese	milligrams per litre	Yearly	0.2 / 1.9	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Mercury	milligrams per litre	Yearly	0.00006	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Nitrate (as Nitrogen)	milligrams per litre	Yearly	2.40	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Nitrite (as Nitrogen)	milligrams per litre	Yearly	0.9	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	not tested	not tested	Dry	Dry	Dry	Dry	Dry	not tested	Dry
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	not tested	not tested	Dry	Dry	Dry	Dry	Dry	not tested	Dry
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.02 ²	not tested	not tested	Dry	Dry	Dry	Dry	Dry	not tested	Dry
Potassium	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Sodium	milligrams per litre	Yearly	230	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Toluene	milligrams per litre	Yearly	0.18	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1600	750	Dry	Dry	Dry	Dry	Dry	860	Dry
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Total Kjeldahl Nitrogen	milligrams per litre	Not tested	-	Not tested	Not tested	Dry	Dry	Dry	Dry	Dry	Not tested	Dry
Total Nitrogen	milligrams per litre	Not tested	0.25	Not tested	Not tested	Dry	Dry	Dry	Dry	Dry	Not tested	Dry

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	90	28	Dry	Dry	Dry	Dry	Dry	8	Dry
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Total Phosphorus	milligrams per litre	Yearly	0.02	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	16	Dry	Dry	Dry	Dry	Dry	not required	Dry
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
Zinc	milligrams per litre	Yearly	0.008	not required	not required	Dry	Dry	Dry	Dry	Dry	not required	Dry
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.63	not required	Dry	Dry	Dry	Dry	Dry	17.27	Dry
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	3180	1317	Dry	Dry	Dry	Dry	Dry	1810	Dry
	millivolts	Quarterly	-	-102	188	Dry	Dry	Dry	Dry	Dry	236	Dry
	milligrams per litre	Quarterly	-	0.82	6.24	Dry	Dry	Dry	Dry	Dry	1.8	Dry
PH	PH Units	Quarterly	6.5-8	7.24	7.84	Dry	Dry	Dry	Dry	Dry	4.06	Dry
Temp	Degree C	Quarterly	-	18.5	14.1	Dry	Dry	Dry	Dry	Dry	17	Dry

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 20 AUGUST 2018

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prosepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	1300	190	Dry	Dry	Dry	Dry	24	less than 20	Dry
Aluminium	milligrams per litre	Yearly	0.055	less than 0.05	0.07	Dry	Dry	Dry	Dry	0.08	19	Dry
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	99	0.1	Dry	Dry	Dry	Dry	0.07	0.18	Dry
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	0.02	0.002	Dry	Dry	Dry	Dry	0.021	0.002	Dry
Barium	milligrams per litre	Yearly	2	0.32	0.05	Dry	Dry	Dry	Dry	0.48	0.6	Dry
Benzene	milligrams per litre	Yearly	0.001 / 0.950	less than 0.001	less than 0.001	Dry	Dry	Dry	Dry	less than 0.001	less than 0.001	Dry
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	Dry	Dry	Dry	Dry	not required	not required	Dry
Cadmium	milligrams per litre	Yearly	0.0002	less than 0.0002	less than 0.0002	Dry	Dry	Dry	Dry	less than 0.0002	0.0004	Dry
Calcium	milligrams per litre	Yearly	1000	190	31	Dry	Dry	Dry	Dry	6.2	23	Dry
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Chloride (Cl)	milligrams per litre	Yearly	350	240	130	Dry	Dry	Dry	Dry	328	300	Dry
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	less than limit of reporting	not required	Dry	Dry	Dry	Dry	less than limit of reporting	less than limit of reporting	Dry
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	less than 0.001	less than 0.001	Dry	Dry	Dry	Dry	less than 0.001	0.003	Dry
Chromium (total)	milligrams per litre	Yearly	0.0033	0.006	less than 0.001	Dry	Dry	Dry	Dry	0.006	0.002	Dry
Cobalt	milligrams per litre	Yearly	0.0014	0.002	less than 0.001	Dry	Dry	Dry	Dry	0.08	0.044	Dry
Copper	milligrams per litre	Yearly	0.0014	less than 0.001	less than 0.001	Dry	Dry	Dry	Dry	less than 0.001	0.028	Dry
Ethylbenzene	milligrams per litre	Yearly	0.08	less than 0.001	less than 0.001	Dry	Dry	Dry	Dry	less than 0.001	less than 0.001	Dry
Fluoride	milligrams per litre	Yearly	1	less than 0.5	less than 0.5	Dry	Dry	Dry	Dry	less than 0.5	less than 0.5	Dry
Lead	milligrams per litre	Yearly	0.0034	less than 0.001	less than 0.001	Dry	Dry	Dry	Dry	0.006	0.15	Dry
Magnesium	milligrams per litre	Yearly	-	63	59	Dry	Dry	Dry	Dry	58	31	Dry
Manganese	milligrams per litre	Yearly	0.2 / 1.9	0.29	0.02	Dry	Dry	Dry	Dry	2.7	3.8	Dry
Mercury	milligrams per litre	Yearly	0.00006	less than 0.0001	less than 0.0001	Dry	Dry	Dry	Dry	less than 0.0001	less than 0.0001	Dry
Nitrate (as Nitrogen)	milligrams per litre	Yearly	2.40	less than 0.02	not required	Dry	Dry	Dry	Dry	0.03	14	Dry
Nitrite (as Nitrogen)	milligrams per litre	Yearly	0.9	less than 0.02	not required	Dry	Dry	Dry	Dry	less than 0.02	less than 0.02	Dry
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	Dry	Dry	Dry	Dry	<LOR	<LOR	Dry
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	Dry	Dry	Dry	Dry	<LOR	<LOR	Dry
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	<LOR	not required	Dry	Dry	Dry	Dry	<LOR	<LOR	Dry
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	not tested	not tested	Dry	Dry	Dry	Dry	not tested	not tested	Dry
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	not tested	not tested	Dry	Dry	Dry	Dry	not tested	not tested	Dry
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	not tested	not tested	Dry	Dry	Dry	Dry	not tested	not tested	Dry
Potassium	milligrams per litre	Yearly	-	79	31	Dry	Dry	Dry	Dry	2.7	4.5	Dry
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	<LOR	not required	Dry	Dry	Dry	Dry	<LOR	<LOR	Dry
Sodium	milligrams per litre	Yearly	230	190	140	Dry	Dry	Dry	Dry	210	220	Dry
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	14	240	Dry	Dry	Dry	Dry	10	11	Dry
Toluene	milligrams per litre	Yearly	0.18	less than 0.001	less than 0.001	Dry	Dry	Dry	Dry	less than 0.001	less than 0.001	Dry
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1700	830	Dry	Dry	Dry	Dry	1000	750	Dry
Total Iron	milligrams per litre	Yearly	0.2	not required	not tested (note 4)	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Kjeldahl Nitrogen	milligrams per litre	Not tested	-	Not tested	Not tested	Dry	Dry	Dry	Dry	Not tested	Not tested	Dry
Total Nitrogen	milligrams per litre	Not tested	0.25	Not tested	Not tested	Dry	Dry	Dry	Dry	Not tested	Not tested	Dry

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	55	41	Dry	Dry	Dry	Dry	14	14	Dry
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	less than limit of reporting	less than limit of reporting	Dry	Dry	Dry	Dry	less than limit of reporting	less than limit of reporting	Dry
Total Phenolics	milligrams per litre	Yearly	0.32	0.08	0.06	Dry	Dry	Dry	Dry	0.06	0.06	Dry
Total Phosphorus	milligrams per litre	Yearly	0.02	not required	less than 0.05	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	4.1	Dry	Dry	Dry	Dry	not required	not required	Dry
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	0.009	not required	Dry	Dry	Dry	Dry	less than limit of reporting	less than limit of reporting	Dry
Xylenes	milligrams per litre	Yearly	0.075	less than 0.003	less than 0.003	Dry	Dry	Dry	Dry	less than 0.003	less than 0.003	Dry
Zinc	milligrams per litre	Yearly	0.008	0.01	less than 0.005	Dry	Dry	Dry	Dry	0.31	0.32	Dry
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.05	not required	Dry	Dry	Dry	Dry	38.5	17.1	Dry
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2560	972	Dry	Dry	Dry	Dry	1471	1190	Dry
	millivolts	Quarterly	-	-136.4	-81.4	Dry	Dry	Dry	Dry	82.3	202.4	Dry
	milligrams per litre	Quarterly	-	0.83	9.7					0.64	1.03	Dry
PH	PH Units	Quarterly	6.5-8	7.17	8.89	Dry	Dry	Dry	Dry	5.54	3.88	Dry
Temp	Degree C	Quarterly	-	15	10.6	Dry	Dry	Dry	Dry	17.1	17	Dry

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 Total iron was not sampled and analysed at EPA2

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 20 NOVEMBER 2018

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prosepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Aluminium	milligrams per litre	Yearly	0.055	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	54	0.14	Dry	Dry	Dry	Dry	0.08	not sampled (blocked well)	Dry
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Barium	milligrams per litre	Yearly	2	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	Dry	Dry	Dry	Dry	not required	not required	Dry
Cadmium	milligrams per litre	Yearly	0.0002	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Calcium	milligrams per litre	Yearly	1000	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Chromium (total)	milligrams per litre	Yearly	0.0033	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Cobalt	milligrams per litre	Yearly	0.0014	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Copper	milligrams per litre	Yearly	0.0014	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Fluoride	milligrams per litre	Yearly	1	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Lead	milligrams per litre	Yearly	0.0034	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Magnesium	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Manganese	milligrams per litre	Yearly	0.2 / 1.9	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Mercury	milligrams per litre	Yearly	0.00006	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Nitrate (as Nitrogen)	milligrams per litre	Yearly	2.40	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Nitrite (as Nitrogen)	milligrams per litre	Yearly	0.9	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.75	0.13	Dry	Dry	Dry	Dry	less than 0.01	not sampled (blocked well)	Dry
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.97	0.52	Dry	Dry	Dry	Dry	less than 0.01	not sampled (blocked well)	Dry
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	3.45	1.06	Dry	Dry	Dry	Dry	less than 0.01	not sampled (blocked well)	Dry
Potassium	milligrams per litre	Yearly	-	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Sodium	milligrams per litre	Yearly	230	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Toluene	milligrams per litre	Yearly	0.18	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1600	930	Dry	Dry	Dry	Dry	950 (note 4)	not sampled (blocked well)	Dry
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Kjeldahl Nitrogen	milligrams per litre	Not tested	-	Not tested	Not tested	Dry	Dry	Dry	Dry	Not tested	Not tested	Dry
Total Nitrogen	milligrams per litre	Not tested	0.25	Not tested	Not tested	Dry	Dry	Dry	Dry	Not tested	Not tested	Dry

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	87	47	Dry	Dry	Dry	Dry	23	not sampled (blocked well)	Dry
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Phosphorus	milligrams per litre	Yearly	0.02	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	7.9	Dry	Dry	Dry	Dry	not required	not sampled (blocked well)	Dry
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
Zinc	milligrams per litre	Yearly	0.008	not required	not required	Dry	Dry	Dry	Dry	not required	not required	Dry
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.13	N/A	Dry	Dry	Dry	Dry	38.7	not sampled (blocked well)	Dry
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	3112	1468	Dry	Dry	Dry	Dry	1722	not sampled (blocked well)	Dry
	millivolts	Quarterly	-	-127.4	34	Dry	Dry	Dry	Dry	44.5	not sampled (blocked well)	Dry
	milligrams per litre	Quarterly	-	0.98	7.66	Dry	Dry	Dry	Dry	1.30	not sampled (blocked well)	Dry
PH	PH Units	Quarterly	6.5-8	7.04	8.99	Dry	Dry	Dry	Dry	5.65	not sampled (blocked well)	Dry
Temp	Degree C	Quarterly	-	18.3	23.8	Dry	Dry	Dry	Dry	17.4	not sampled (blocked well)	Dry

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems)

4 Value taken from duplicate or triplicate result

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 20 FEBRUARY 2019

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprocopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not required	not required	0.09	less than 0.05	not required	0.83	not required	not required	less than 0.05
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	54	0.15	0.07	0.07	0.96	0.02	0.06	0.13	0.06
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	not required	not required	less than 0.001	less than 0.001	not required	0.007	not required	not required	less than 0.001
Barium	milligrams per litre	Yearly / Quarterly	2	not required	not required	less than 0.02	0.08	not required	0.12	not required	not required	0.13
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	not required	not required	not required	not required	not required	not required	not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	less than 5	less than 5	less than 5	less than 5	not required	not required	less than 5
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not required	not required	less than 0.0002	less than 0.0002	not required	0.0005	not required	not required	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	less than 25	less than 25	110	not required	not required	not required	34
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	not required	not required	less than 0.01	less than 0.005	not required	less than 0.005	not required	not required	less than 0.005
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not required	not required	less than 0.001	less than 0.001	not required	0.007	not required	not required	less than 0.001
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	less than 0.001	less than 0.001	not required	0.001	not required	not required	less than 0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	0.002	0.002	not required	0.018	not required	not required	0.002
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	not required	not required	not required	not required	not required	not required	not required
Fluoride	milligrams per litre	Yearly	1	not required	not required	not required	not required	not required	not required	not required	not required	not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	not required	not required	less than 0.001	less than 0.001	not required	0.009	not required	not required	less than 0.001
Magnesium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	not required	not required	0.032	0.018	not required	0.160	not required	not required	0.077
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	not required	not required	less than 0.0001	less than 0.0001	not required	less than 0.0001	not required	not required	less than 0.0001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not required	not required	less than 0.02	0.07	not required	1.60	not required	not required	0.21
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not required	not required	less than 0.02	less than 0.02	not required	less than 0.02	not required	not required	less than 0.02
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	not required	not required	not required	not required	not required	not required	not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.52	0.07	less than 0.01	0.05	0.21	0.28	less than 0.01	less than 0.01	0.01
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.92	0.37	less than 0.01	0.16	0.51	0.64	less than 0.01	less than 0.01	less than 0.01
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	2.72	0.56	less than 0.01	0.28	0.39	0.57	less than 0.01	less than 0.01	0.02
Potassium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sodium	milligrams per litre	Yearly	230	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Toluene	milligrams per litre	Yearly	0.18	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1200	380	93	840	620	1200	250	64	1200
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not tested	Not tested	1.8	1.5	Not tested	1.6	Not tested	Not tested	1.6
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not tested	Not tested	1.8	1.6	Not tested	3.2	Not tested	Not tested	1.8

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	66	25	10	17	45	26	21	11	23
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	not required	less than 0.02	less than 0.02	not required	less than 0.02	not required	not required	less than 0.02
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	3.8	1.7	less than 1	75	7.3	not required	not required	1.6
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	not required	not required	not required	not required	not required	not required	not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not required	not required	0.005	less than 0.005	not required	0.025	not required	not required	0.007
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	0.985	-	-	-	-	-	37.64	12.895	-
Electrical Conductivity	milligrams per litre	Quarterly	30-350	2817	1119	154	912	901	1894	574	166	1563
	microsiemens per centimetre	Quarterly	-	-127.3	-33.5	83.6	78.3	-33.8	20.2	45.9	45.2	54.7
	milligrams per litre	Quarterly	-	0.62	5.76	2.83	4.75	2.22	6.82	1.44	3.41	3.98
PH	PH Units	Quarterly	6.5-8	7.05	7.93	6.41	8.04	6.72	7.58	6.02	6.61	7.62
Temp	Degree C	Quarterly	-	21.2	25.3	21.2	19.6	20.8	21.2	18.2	17.5	19.9

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 13 MAY 2019
EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/prosepp/>
WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not required	not required	Dry creek	less than 0.05	not required	less than 0.05	not required	not required	less than 0.05
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	42	0.40	Dry creek	0.07	Dry pond	less than 0.01	0.16	0.12	0.05
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	not required	not required	Dry creek	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Barium	milligrams per litre	Yearly / Quarterly	2	not required	not required	Dry creek	0.08	not required	0.10	not required	not required	0.11
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	not required	not required	not required	not required	not required	not required	not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	Dry creek	less than 5	Dry pond	not required	not required	not required	less than 5
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not required	not required	Dry creek	less than 0.0002	not required	less than 0.0002	not required	not required	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	Dry creek	50	Dry pond	not required	not required	not required	38
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	not required	not required	Dry creek	less than 0.005	not required	less than 0.005	not required	not required	less than 0.005
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not required	not required	Dry creek	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	Dry creek	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	Dry creek	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	not required	not required	not required	not required	not required	not required	not required
Fluoride	milligrams per litre	Yearly	1	not required	not required	not required	not required	not required	not required	not required	not required	not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	not required	not required	Dry creek	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Magnesium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	not required	not required	Dry creek	0.009	not required	0.800	not required	not required	0.029
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	not required	not required	Dry creek	less than 0.00001	not required	less than 0.00001	not required	not required	less than 0.00001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not required	not required	Dry creek	0.03	not required	4.00	not required	not required	0.29
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not required	not required	Dry creek	less than 0.02	not required	less than 0.02	not required	not required	less than 0.02
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	not required	not required	not required	not required	not required	not required	not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.28	0.05	Dry creek	0.05	Dry pond	0.22	not tested	less than 0.01	0.12
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.71	0.29	Dry creek	0.17	Dry pond	0.35	not tested	less than 0.01	0.31
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	1.78	0.38	Dry creek	0.27	Dry pond	0.48	not tested	less than 0.01	0.35
Potassium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sodium	milligrams per litre	Yearly	230	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Toluene	milligrams per litre	Yearly	0.18	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1500	690	Dry creek	660	Dry pond	1100	330	120	1000
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not tested	Not tested	Dry creek	1.6	Not tested	2.0	Not tested	Not tested	1.7
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not tested	Not tested	Dry creek	1.6	Not tested	6.0	Not tested	Not tested	2.0

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	94	28	Dry creek	18	Dry pond	42	30	11	32
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	not required	Dry creek	0.02	not required	0.02	not required	not required	not required
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	6.6	Dry creek	less than 1	Dry pond	not required	not required	not required	2.3
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	not required	not required	not required	not required	not required	not required	not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not required	not required	Dry creek	less than 0.005	not required	8.12	not required	not required	less than 0.005
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.05	not required	Dry creek	not required	Dry pond	not required	37.99	14.085	not required
Electrical Conductivity	milligrams per litre	Quarterly	30-350	2616	868	Dry creek	809	Dry pond	1490	581	207	1200
	microsiemens per centimetre	Quarterly	-	-115.1	-21.6	Dry creek	71.5	Dry pond	93.0	48.4	96.2	96.3
	milligrams per litre	Quarterly	-	1.32	10.19	Dry creek	5.15	Dry pond	6.42	1.20	2.26	6.24
PH	PH Units	Quarterly	6.5-8	6.88	8.59	Dry creek	8.27	Dry pond	7.87	5.71	5.52	7.90
Temp	Degree C	Quarterly	-	18.3	12.8	Dry creek	10.7	Dry pond	16.7	17.3	17.6	10.8

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 30th AUGUST 2019

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prosepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	1500	130	not required	not required	not required	380	less than 20	less than 20	Dry creek
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	1.2	0.23	0.33	0.23	not required	0.50	less than 0.05	20	Dry creek
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	88	0.03	less than 0.01	0.06	0.04	0.10	0.14	0.09	Dry creek
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	0.005	0.002	less than 0.001	less than 0.001	not required	0.001	0.007	less than 0.005	Dry creek
Barium	milligrams per litre	Yearly / Quarterly	2	0.55	less than 0.02	less than 0.02	0.02	not required	0.09	0.52	0.54	Dry creek
Benzene	milligrams per litre	Yearly	0.001 / 0.950	less than 0.001	less than 0.001	not required	not required	not required	less than 0.001	less than 0.001	less than 0.001	Dry creek
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	less than 5	8.1	less than 5	not required	not required	not required	Dry creek
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	0.0003	less than 0.0002	less than 0.0002	less than 0.0002	not required	less than 0.0002	less than 0.0002	less than 0.0001	Dry creek
Calcium	milligrams per litre	Yearly	1000	210	22	not required	not required	not required	160	5.1	12	Dry creek
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	69	74	120	not required	not required	not required	Dry creek
Chloride (Cl)	milligrams per litre	Yearly	350	280	130	not required	not required	not required	190	370	540	Dry creek
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	Dry creek
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	less than 0.005	less than 0.005	less than 0.005	less than 0.005	not required	less than 0.005	less than 0.005	less than 0.005	Dry creek
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	0.009	0.001	less than 0.001	0.001	not required	0.002	less than 0.001	less than 0.005	Dry creek
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	0.003	less than 0.001	less than 0.001	less than 0.001	not required	less than 0.001	0.098	0.066	Dry creek
Copper	milligrams per litre	Yearly / Quarterly	0.0014	0.013	less than 0.001	0.001	0.002	not required	0.003	0.012	0.017	Dry creek
Ethylbenzene	milligrams per litre	Yearly	0.08	less than 0.001	less than 0.001	not required	not required	not required	less than 0.001	less than 0.001	less than 0.001	Dry creek
Fluoride	milligrams per litre	Yearly	1	less than 0.5	less than 0.5	not required	not required	not required	less than 0.5	less than 0.5	less than 0.5	Dry creek
Lead	milligrams per litre	Yearly / Quarterly	0.0034	0.013	0.001	less than 0.001	less than 0.001	not required	0.002	less than 0.001	0.140	Dry creek
Magnesium	milligrams per litre	Yearly	-	69	47	not required	not required	not required	40	34	28	Dry creek
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	0.410	0.031	0.029	0.030	not required	0.120	3.10	5.60	Dry creek
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	less than 0.0001	less than 0.0001	less than 0.0001	less than 0.0001	not required	less than 0.0001	less than 0.0001	less than 0.0005	Dry creek
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	0.07	not required	0.03	0.44	not required	1.80	less than 0.02	14	Dry creek
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	0.03	not required	less than 0.02	less than 0.02	not required	less than 0.02	less than 0.02	less than 0.02	Dry creek
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not tested (note 4)	<LOR	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	Dry creek
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	not required	not required	not required	<LOR	<LOR	<LOR	Dry creek
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	<LOR	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	<LOR	<LOR	<LOR	Dry creek
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.50	0.08	less than 0.01	0.06	0.09	0.55	less than 0.01	less than 0.01	Dry creek
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.81	0.28	less than 0.01	0.08	0.03	0.45	less than 0.01	less than 0.01	Dry creek
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.02 ²	2.30	0.53	less than 0.01	0.15	0.11	0.97	less than 0.01	less than 0.01	Dry creek
Potassium	milligrams per litre	Yearly	-	98	33	not required	not required	not required	49	2.9	4.0	Dry creek
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	<LOR	not required	not required	not required	not required	<LOR	<LOR	<LOR	Dry creek
Sodium	milligrams per litre	Yearly	230	210	110	not required	not required	not required	120	140	200	Dry creek
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	less than 5	210	not required	not required	not required	210	less than 5	17	Dry creek
Toluene	milligrams per litre	Yearly	0.18	less than 0.001	less than 0.001	not required	not required	not required	less than 0.001	less than 0.001	less than 0.001	Dry creek
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1700	690	48	260	300	1100	760	1000	Dry creek
Total Iron	milligrams per litre	Yearly	0.2	not required	0.23	not required	not required	not required	not required	not required	not required	Dry creek
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not tested	Not tested	0.7	0.7	Not tested	0.9	Not tested	Not tested	Dry creek
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not tested	Not tested	0.7	1.2	Not tested	2.7	Not tested	Not tested	Dry creek

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	200	33	24	26	14	26	160	15	Dry creek
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	0.2	<LOR	not required	not required	not required	0.1	0.2	0.4	Dry creek
Total Phenolics	milligrams per litre	Yearly	0.32	less than 0.05	less than 0.05	not required	not required	not required	less than 0.05	less than 0.05	less than 0.05	Dry creek
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	not tested (note 5)	0.03	0.04	not required	0.02	not required	not required	Dry creek
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	27	5.9	11	200	not required	not required	not required	Dry creek
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	0.026	not required	not required	not required	not required	0.019	0.020	0.020	Dry creek
Xylenes	milligrams per litre	Yearly	0.075	less than 0.003	less than 0.003	not required	not required	not required	less than 0.003	less than 0.003	less than 0.003	Dry creek
Zinc	milligrams per litre	Yearly / Quarterly	0.008	0.730	0.007	0.009	0.024	not required	0.072	0.550	0.190	Dry creek
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.04	-	-	-	-	-	39.45	16.92	Dry creek
Electrical Conductivity	milligrams per litre	Quarterly	30-350	2614	835	53	244	248	1236	1191	1597	Dry creek
	microsiemens per centimetre	Quarterly	-	-119.8	103.2	39.8	-4.5	128.0	182.0	142.2	212.7	Dry creek
	milligrams per litre	Quarterly	-	1.99	10.21	9.35	7.90	4.59	6.81	1.40	1.57	Dry creek
PH	PH Units	Quarterly	6.5-8	7.06	8.94	6.43	8.16	7.61	6.29	4.77	4.02	Dry creek
Temp	Degree C	Quarterly	-	15.5	11.8	11.0	9.7	10.5	10.7	17.2	17.1	Dry creek

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 The EPL requirement to analyse Chlorinated Volatile Compounds, Polycyclic aromatic hydrocarbons (PAHs) and Organochlorine pesticides (OCP) was mandatory by NSW EPA on 6 May 2019. This was not carried out at selected locations during the August 2019 and 2020 yearly monitoring rounds

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 25 NOVEMBER 2019

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prosepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not required	not required	Dry creek	Dry creek	not required	0.33	not required	not required	0.10
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	75	0.09	Dry creek	Dry creek	Dry pond	0.07	0.12	0.10	0.09
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	not required	not required	Dry creek	Dry creek	not required	0.001	not required	not required	0.002
Barium	milligrams per litre	Yearly / Quarterly	2	not required	not required	Dry creek	Dry creek	not required	0.10	not required	not required	0.13
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	not required	not required	not required	not required	not required	not required	not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	not tested (missed by laboratory)	Dry creek	Dry creek	Dry pond	not required	not required	not required	5.6
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not required	not required	Dry creek	Dry creek	not required	less than 0.0002	not required	not required	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	Dry creek	Dry creek	Dry pond	not required	not required	not required	120
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	not required	not required	Dry creek	Dry creek	not required	less than 0.005	not required	not required	less than 0.005
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not required	not required	Dry creek	Dry creek	not required	0.002	not required	not required	less than 0.001
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	Dry creek	Dry creek	not required	less than 0.001	not required	not required	less than 0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	Dry creek	Dry creek	not required	0.002	not required	not required	less than 0.001
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	not required	not required	not required	not required	not required	not required	not required
Fluoride	milligrams per litre	Yearly	1	not required	not required	not required	not required	not required	not required	not required	not required	not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	not required	not required	Dry creek	Dry creek	not required	less than 0.001	not required	not required	less than 0.001
Magnesium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	not required	not required	Dry creek	Dry creek	not required	0.12	not required	not required	0.490
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	not required	not required	Dry creek	Dry creek	not required	less than 0.0001	not required	not required	less than 0.0001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not required	not required	Dry creek	Dry creek	not required	0.03	not required	not required	less than 0.02
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not required	not required	Dry creek	Dry creek	not required	less than 0.02	not required	not required	less than 0.02
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	not required	not required	not required	not required	not required	not required	not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.56	0.10	Dry creek	Dry creek	Dry pond	0.36	less than 0.01	less than 0.01	0.26
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	1.10	0.46	Dry creek	Dry creek	Dry pond	0.51	less than 0.01	less than 0.01	0.58
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	2.56	0.60	Dry creek	Dry creek	Dry pond	0.85	less than 0.01	less than 0.01	0.74
Potassium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sodium	milligrams per litre	Yearly	230	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Toluene	milligrams per litre	Yearly	0.18	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1600	730	Dry creek	Dry creek	Dry pond	970	710	870	1000
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not tested	Not tested	Dry creek	Dry creek	Not tested	1.0	Not tested	Not tested	1.7
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not tested	Not tested	Dry creek	Dry creek	Not tested	1.0	Not tested	Not tested	1.7

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	47	32	Dry creek	Dry creek	Dry pond	18	15	14	32
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	not required	Dry creek	Dry creek	not required	0.02	not required	not required	not required
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	19	Dry creek	Dry creek	Dry pond	not required	not required	not required	12
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	not required	not required	not required	not required	not required	not required	not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not required	not required	Dry creek	Dry creek	not required	0.029	not required	not required	0.008
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	1.11	-	Dry creek	Dry creek	Dry pond	-	38.40	17.59	-
Electrical Conductivity	milligrams per litre	Quarterly	30-350	2762	1140	Dry creek	Dry creek	Dry pond	1448	1369	1623	1554
	microsiemens per centimetre	Quarterly	-	-126.3	-75.6	Dry creek	Dry creek	Dry pond	67.6	74.7	458.2	78.3
	milligrams per litre	Quarterly	-	0.98	6.16	Dry creek	Dry creek	Dry pond	3.70	4.32	3.83	2.97
PH	PH Units	Quarterly	6.5-8	6.94	8.82	Dry creek	Dry creek	Dry pond	7.63	5.65	4.00	7.78
Temp	Degree C	Quarterly	-	18.3	22.4	Dry creek	Dry creek	Dry pond	19.0	21.4	18.2	19.0

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 17 OCTOBER 2019 - Non-mandatory additional monitoring round (NOTE 4)

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/bropsepp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 4A	EPA Point 4B	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream to EPA Point 4	Additional Surface Water Downstream to EPA Point 4	Additional Surface Water Downstream to EPA Point 4A	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	Not tested	Not tested	less than 20	140	68	37	310	410	Not tested	Not tested	360
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	Not tested	Not tested	0.03	0.08	0.08	0.24	less than 0.01	0.07	Not tested	Not tested	0.05
Arsenic	milligrams per litre	Yearly / Quarterly	0.01	Not tested	Not tested	0.001	0.001	0.001	0.001	0.004	less than 0.001	Not tested	Not tested	0.001
Barium	milligrams per litre	Yearly / Quarterly	2	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Benzene	milligrams per litre	Yearly	0.001	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	less than 0.001	Not tested	Not tested	Not tested
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	Not tested	Not tested	less than 0.0002	less than 0.0002	less than 0.0002	less than 0.0002	less than 0.0002	less than 0.0002	Not tested	Not tested	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	Not tested	Not tested	3.1	41	27	7.5	140	150	Not tested	Not tested	120
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Chloride (Cl)	milligrams per litre	Yearly	350	Not tested	Not tested	57	120	51	54	89	200	Not tested	Not tested	240
Chlorinated Volatile Compounds (CVOCs)	milligrams per litre	Yearly	-	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	Not tested	Not tested	0.001	less than 0.001	less than 0.001	less than 0.001	less than 0.001	0.002	Not tested	Not tested	less than 0.001
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Copper	milligrams per litre	Yearly / Quarterly	0.0014	Not tested	Not tested	0.004	less than 0.001	less than 0.001	0.001	0.005	0.002	Not tested	Not tested	0.001
Ethylbenzene	milligrams per litre	Yearly	0.08	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	less than 0.001	Not tested	Not tested	Not tested
Fluoride	milligrams per litre	Yearly	1	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Lead	milligrams per litre	Yearly / Quarterly	0.0034	Not tested	Not tested	0.001	less than 0.001	less than 0.001	0.001	0.002	less than 0.001	Not tested	Not tested	less than 0.001
Magnesium	milligrams per litre	Yearly	-	Not tested	Not tested	2.5	14	12	6.7	16	40	Not tested	Not tested	42
Manganese	milligrams per litre	Yearly / Quarterly	0.2	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	Not tested	Not tested	less than 0.0001	less than 0.0001	less than 0.0001	less than 0.0001	less than 0.0001	less than 0.0001	Not tested	Not tested	less than 0.0001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.16	Not tested	Not tested	0.09	0.03	less than 0.02	less than 0.02	0.07	0.35	Not tested	Not tested	less than 0.02
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	less than 0.001	Not tested	Not tested	Not tested
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ^a	Quarterly	0.13 ^a	Not tested	Not tested	less than 0.01	0.06	0.07	less than 0.01	0.1	0.32	Not tested	Not tested	0.23
Perfluorooctanoic acid (PFOA)	micrograms per litre ^a	Quarterly	0.56 ^a / 220 ^a	Not tested	Not tested	less than 0.01	0.07	0.07	less than 0.01	0.1	0.39	Not tested	Not tested	0.41
Sum of PFHxS and PFOS	micrograms per litre ^a	Quarterly	0.07 ^a	Not tested	Not tested	less than 0.01	0.14	0.16	less than 0.01	0.15	0.65	Not tested	Not tested	0.57
Potassium	milligrams per litre	Yearly	-	Not tested	Not tested	6.8	18	15	6.5	20	47	Not tested	Not tested	44
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Sodium	milligrams per litre	Yearly	230	Not tested	Not tested	8.3	26	27	27	28	110	Not tested	Not tested	110
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	Not tested	Not tested	less than 5	45	63	8.7	130	170	Not tested	Not tested	200
Toluene	milligrams per litre	Yearly	0.18	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	less than 0.001	Not tested	Not tested	Not tested
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	Not tested	Not tested	71	270	300	160	590	1100	Not tested	Not tested	1100
Total Iron	milligrams per litre	Yearly	0.2	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not tested	Not tested	2.3	0.9	0.5	1.2	1.2	0.8	Not tested	Not tested	1.1
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not tested	Not tested	2.4	0.9	0.5	1.2	1.27	1.2	Not tested	Not tested	1.1

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	less than 0.1	Not tested	Not tested	Not tested
Total Phenolics	milligrams per litre	Yearly	0.32	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not tested	Not tested	14	3.3	6.1	17	95	9.0	Not tested	Not tested	3.4
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Xylenes	milligrams per litre	Yearly	0.075	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	less than 0.003	Not tested	Not tested	Not tested
Zinc	milligrams per litre	Yearly / Quarterly	0.008	Not tested	Not tested	0.020	0.011	0.013	0.012	0.022	0.045	Not tested	Not tested	0.009
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing	Quarterly	-	Not tested	Not tested	-	-	-	-	-	-	Not tested	Not tested	-
Electrical Conductivity	milligrams per litre	Quarterly	30-350	Not tested	Not tested	116	393	362	217	967	1394	Not tested	Not tested	1304
	microsiemens per centimetre	Quarterly	-	Not tested	Not tested	102.2	64.6	97.1	72.3	116.6	123.7	Not tested	Not tested	114.5
	milligrams per litre	Quarterly	-	Not tested	Not tested	9.16	2.67	3.02	2.71	5.87	7.27	Not tested	Not tested	4.73
PH	PH Units	Quarterly	6.5-8	Not tested	Not tested	8.24	8.03	7.61	7.49	7.43	7.40	Not tested	Not tested	7.47
Temp	Degree C	Quarterly	-	Not tested	Not tested	19.9	13.6	15.0	13.7	25.6	16.0	Not tested	Not tested	14.6

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)

	Reported concentration exceeds adopted trigger value
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 Additional non-mandatory monitoring round carried out in October 2019 has been excluded from graphical presentations in Appendix D.

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 18 and 19 FEBRUARY 2020
EPA LICENCE NUMBER 6061<http://www.environment.nsw.gov.au/epc/epcpgp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not required	not required	0.10	0.09	not required	0.08	not required	not required	0.11
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	21	1.9	1.3	0.05	3.1	0.03	0.05	0.13	0.06
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Barium	milligrams per litre	Yearly / Quarterly	2	not required	not required	0.03	0.04	not required	0.13	not required	not required	0.03
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	not required	not required	not required	not required	not required	not required	not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	less than 5	less than 5	8.2	not required	not required	not required	less than 5
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not required	not required	less than 0.0002	less than 0.0002	not required	0.0014	not required	not required	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	less than 25	35	120	not required	not required	not required	less than 25
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chlorinated Volatile Compounds (CVOCs)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	not required	not required	0.023	less than 0.005	not required	0.006	not required	not required	less than 0.005
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not required	not required	0.001	0.002	not required	0.001	not required	not required	0.002
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	0.002	0.002	not required	0.002	not required	not required	0.002
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	not required	not required	not required	not required	not required	not required	not required
Fluoride	milligrams per litre	Yearly	1	not required	not required	not required	not required	not required	not required	not required	not required	not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Magnesium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	not required	not required	0.007	less than 0.005	not required	0.22	not required	not required	0.006
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	not required	not required	less than 0.0001	less than 0.0001	not required	less than 0.0001	not required	not required	less than 0.0001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not required	not required	less than 0.05	2.80	not required	7.80	not required	not required	0.64
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not required	not required	less than 0.05	0.03	not required	2.4	not required	not required	less than 0.02
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	not required	not required	not required	not required	not required	not required	not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.53	0.03	0.01	0.07	0.18	0.48	less than 0.01	less than 0.01	0.04
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.62	0.08	less than 0.01	0.08	0.36	0.58	less than 0.01	less than 0.01	0.04
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	2.03	0.16	0.02	0.23	0.36	0.98	less than 0.01	less than 0.01	0.08
Potassium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sodium	milligrams per litre	Yearly	230	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Toluene	milligrams per litre	Yearly	0.18	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1100	400	130	290	880	1500	390	130	210
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	not required	not required	0.7	0.9	not required	2	not required	not required	0.8
Total Nitrogen	milligrams per litre	Quarterly	0.25	not required	not required	0.7	3.7	not required	12	not required	not required	1.4

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	32	23	12	less than 5	39	less than 5	less than 5	less than 5	11
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	not required	0.02	0.03	not required	0.03	not required	not required	0.05
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	7.1	2.5	1.2	34	not required	not required	not required	4.9
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	not required	not required	not required	not required	not required	not required	not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not required	not required	less than 0.005	less than 0.005	not required	0.97	not required	not required	less than 0.005
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	0.50	-	-	-	-	-	37.56	12.89	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	1756	595	174	436	1430	1956	849	241	302
	millivolts	Quarterly	-	-116	-23.8	99.7	79.2	-130	123	167	67.8	115
	milligrams per litre	Quarterly	-	1.09	1.8	4.22	5.21	1.92	3.2	0.8	2.72	5.67
PH	PH Units	Quarterly	6.5-8	6.70	7.24	6.80	7.16	6.92	7.26	4.85	5.67	8.09
Temp	Degree C	Quarterly	-	23.1	23.9	23.3	23.1	24.7	22.6	19.6	18.3	21.7

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 25 May 2020
EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/ipococpp/>
WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not required	not required	0.09	0.10	not required	less than 0.05	not required	not required	0.15
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	88	2.0	0.02	less than 0.01	0.06	less than 0.01	0.02	0.12	0.02
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Barium	milligrams per litre	Yearly / Quarterly	2	not required	not required	less than 0.02	0.03	not required	0.11	not required	not required	0.03
Benzene	milligrams per litre	Yearly	0.001 / 0.950	not required	not required	not required	not required	not required	not required	not required	not required	not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	less than 5	less than 5	less than 5	not required	not required	not required	less than 5
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not required	not required	less than 0.0002	less than 0.0002	not required	0.0002	not required	not required	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	less than 25	less than 25	32	not required	not required	not required	less than 25
Chloride (Cl)	milligrams per litre	Yearly	350	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	not required	not required	less than 0.005	less than 0.005	not required	less than 0.005	not required	not required	less than 0.005
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not required	not required	less than 0.001	less than 0.001	not required	0.006	not required	not required	0.001
Ethylbenzene	milligrams per litre	Yearly	0.08	not required	not required	not required	not required	not required	not required	not required	not required	not required
Fluoride	milligrams per litre	Yearly	1	not required	not required	not required	not required	not required	not required	not required	not required	not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	not required	not required	less than 0.001	less than 0.001	not required	less than 0.001	not required	not required	less than 0.001
Magnesium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	not required	not required	less than 0.005	less than 0.005	not required	less than 0.005	not required	not required	0.008
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	not required	not required	less than 0.0001	less than 0.0001	not required	less than 0.0001	not required	not required	less than 0.0001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not required	not required	0.03	2.80	not required	7.00	not required	not required	0.60
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not required	not required	less than 0.02	less than 0.02	not required	less than 0.02	not required	not required	less than 0.02
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	not required	not required	not required	not required	not required	not required	not required	not required	not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.34	0.04	less than 0.01	0.35	0.04	0.27	less than 0.01	less than 0.01	0.05
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.66	0.11	less than 0.01	0.14	0.03	0.27	less than 0.01	less than 0.01	0.04
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	1.54	0.20	less than 0.01	0.58	0.05	0.61	less than 0.01	less than 0.01	0.09
Potassium	milligrams per litre	Yearly	-	not required	not required	not required	not required	not required	not required	not required	not required	not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sodium	milligrams per litre	Yearly	230	not required	not required	not required	not required	not required	not required	not required	not required	not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	not required	not required	not required	not required	not required	not required	not required	not required	not required
Toluene	milligrams per litre	Yearly	0.18	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1400	560	79	350	360	1000	380	120	210
Total Iron	milligrams per litre	Yearly	0.2	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	not required	not required	less than 0.2	0.6	not required	2.1	not required	not required	0.7
Total Nitrogen	milligrams per litre	Quarterly	0.25	not required	not required	less than 0.2	3.4	not required	9.1	not required	not required	1.3

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	100	6.1	less than 5	less than 5	less than 5	31	59	less than 5	less than 5
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phenolics	milligrams per litre	Yearly	0.32	not required	not required	not required	not required	not required	not required	not required	not required	not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	not required	less than 0.01	0.01	not required	0.01	not required	not required	0.01
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	11	1.7	4.0	54	not required	not required	not required	8.8
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	not required	not required	not required	not required	not required	not required	not required	not required	not required
Xylenes	milligrams per litre	Yearly	0.075	not required	not required	not required	not required	not required	not required	not required	not required	not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not required	not required	less than 0.005	0.006	not required	0.18	not required	not required	less than 0.005
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	0.87	-	-	-	-	-	37.65	12.56	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2525	666	127	409	375	1320	546	180	293
	millivolts	Quarterly	-	-110.8	-4.2	59.7	69.3	81.5	-13.3	145.2	25.1	26.7
	milligrams per litre	Quarterly	-	1.63	6.86	9.21	9.58	5.52	8.08	1.01	3.28	7.91
PH	pH Units	Quarterly	6.5-8	6.93	7.84	7.60	7.90	7.89	6.23	4.80	5.99	7.36
Temp	Degree C	Quarterly	-	18.3	12.8	12.8	11.9	12.0	14.0	15.0	17.3	12.1

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 27TH and 28TH AUGUST 2020
EPA LICENCE NUMBER 6061<http://www.environment.nsw.gov.au/ipococopy/>WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	820	100	not required	not required	not required	410	less than 20	less than 20	not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	1.1	0.28	0.09	0.10	not required	less than 0.05	0.17	0.48	0.15
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	41	0.62	less than 0.01	less than 0.01	0.06	less than 0.05	0.03	0.13	0.03
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	0.006	less than 0.001	less than 0.001	less than 0.001	not required	less than 0.001	0.11	0.003	less than 0.001
Barium	milligrams per litre	Yearly / Quarterly	2	0.38	0.04	less than 0.02	0.04	not required	0.12	0.27	0.09	0.03
Benzene	milligrams per litre	Yearly	0.001 / 0.950	less than 0.001	less than 0.001	not required	not required	not required	less than 0.001	less than 0.001	less than 0.001	not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	not required	less than 5	less than 5	less than 5	13	not required	not required	not required	less than 5
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	less than 0.0002	less than 0.0002	less than 0.0002	less than 0.0002	not required	0.0003	less than 0.0002	less than 0.0002	less than 0.0002
Calcium	milligrams per litre	Yearly	1000	130	57	not required	not required	not required	130	17	1.5	not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	not required	not required	less than 25	30	130	not required	not required	not required	28
Chloride (Cl)	milligrams per litre	Yearly	350	160	52	not required	not required	not required	170	130	35	not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	<LOR	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	<LOR	<LOR	not tested (note 4)
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	less than 0.0005	less than 0.0005	less than 0.0005	less than 0.0005	not required	less than 0.0005	less than 0.0005	less than 0.0005	less than 0.0005
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	0.005	less than 0.001	less than 0.001	less than 0.001	not required	less than 0.001	0.003	0.002	less than 0.001
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	0.002	less than 0.001	less than 0.001	less than 0.001	not required	less than 0.001	0.037	0.011	less than 0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	0.003	0.003	less than 0.001	0.001	not required	0.006	less than 0.001	less than 0.001	less than 0.001
Ethylbenzene	milligrams per litre	Yearly	0.08	less than 0.001	less than 0.001	not required	not required	not required	less than 0.001	less than 0.001	less than 0.001	not required
Fluoride	milligrams per litre	Yearly	1	less than 0.5	less than 0.5	not required	not required	not required	less than 0.5	less than 0.5	less than 0.5	not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	0.013	less than 0.001	less than 0.001	less than 0.001	not required	less than 0.001	0.014	0.007	less than 0.001
Magnesium	milligrams per litre	Yearly	-	38	20	not required	not required	not required	36	13	4.3	not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	0.52	0.057	less than 0.005	0.009	not required	less than 0.005	1.0	0.66	less than 0.005
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	0.00002	less than 0.00001	less than 0.00001	less than 0.00001	not required	less than 0.00001	0.00003	less than 0.00001	less than 0.00001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	less than 0.02	not required	less than 0.02	3.3	not required	8.8	less than 0.02	less than 0.02	1.4
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	less than 0.02	not required	less than 0.02	less than 0.02	not required	less than 0.02	less than 0.02	less than 0.02	less than 0.02
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	not tested (note 4)
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	not required	not required	not required	<LOR	<LOR	<LOR	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.56	0.03	less than 0.01	0.23	0.06	0.26	less than 0.01	less than 0.01	0.09
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.53	0.08	less than 0.01	0.12	0.08	0.35	less than 0.01	less than 0.01	0.07
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	1.53	0.12	less than 0.01	0.39	0.10	0.54	less than 0.01	less than 0.01	0.14
Potassium	milligrams per litre	Yearly	-	44	8.6	not required	not required	not required	36	2.1	2.2	not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	<LOR	not required	not required	not required	not required	<LOR	<LOR	<LOR	not required
Sodium	milligrams per litre	Yearly	230	95	32	not required	not required	not required	90	55	19	not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	71	150	not required	not required	not required	170	7.0	8.7	not required
Toluene	milligrams per litre	Yearly	0.18	less than 0.001	less than 0.001	not required	not required	not required	less than 0.001	less than 0.001	less than 0.001	not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1100	410	91	280	1000	970	220	87	400
Total Iron	milligrams per litre	Yearly	0.2	not required	0.26	not required	not required	not required	not required	not required	not required	not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	43	not required	less than 0.2	0.5	not required	1.0	0.9	0.4	0.6
Total Nitrogen	milligrams per litre	Quarterly	0.25	43	not required	less than 0.2	3.8	not required	9.8	0.9	0.4	2.0

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	110	26	8.1	17	51	49	40	16	16
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	0.53	<LOR	not required	not required	not required	<LOR	less than 0.1	less than 0.1	not required
Total Phenolics	milligrams per litre	Yearly	0.32	less than 0.05	less than 0.05	not required	not required	not required	less than 0.05	less than 0.05	less than 0.05	not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not required	0.02	less than 0.01	less than 0.01	not required	less than 0.01	not required	not required	less than 0.01
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	not required	7.2	1.5	4.2	39	not required	not required	not required	2.4
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	0.014	not required	not required	not required	not required	<LOR	0.015	0.001	not required
Xylenes	milligrams per litre	Yearly	0.075	less than 0.003	less than 0.003	not required	not required	not required	less than 0.003	less than 0.003	less than 0.003	not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	0.41	0.011	0.014	0.013	not required	0.22	0.17	0.032	0.030
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing	Quarterly	-	0.74	-	-	-	-	-	37.4	12.56	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	1921	569	127	367	922	1287	445	177	347
	millivolts	Quarterly	-	126.0	135.9	103.7	120.5	130.0	22.5	42.9	6.0	56.3
	milligrams per litre	Quarterly	-	2.00	9.38	11.72	11.59	13.78	9.19	1.14	2.28	11.92
PH	PH Units	Quarterly	6.5-8	6.92	7.50	8.18	7.63	7.04	6.25	5.79	6.05	7.24
Temp	Degree C	Quarterly	-	15.2	13.0	10.8	9.2	9.4	12.7	16.8	16.7	8.6

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

¹ Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

² NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

³ NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

⁴ The EPL requirement to analyse Chlorinated Volatile Compounds, Polycyclic aromatic hydrocarbons (PAHs) and Organochlorine pesticides (OCP) was mandatory by NSW EPA on 6 May 2019. This was not carried out at selected locations during the August 2019 and 2020 yearly monitoring rounds

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 11TH NOVEMBER 2020

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprocopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Trigger value	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	70.7	0.07	less than 0.01	less than 0.01	0.03	less than 0.01	0.23	0.06	less than 0.01
Arsenic	milligrams per litre	Yearly / Quarterly	0.010 / 0.024	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Barium	milligrams per litre	Yearly / Quarterly	2	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Benzene	milligrams per litre	Yearly	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not required	less than 2	less than 2	less than 2	less than 2	Not required	Not required	Not required	less than 2
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Calcium	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not required	Not required	18	28	52	Not required	Not required	Not required	24
Chloride (Cl)	milligrams per litre	Yearly	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Yearly / Quarterly	0.001	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Cobalt	milligrams per litre	Yearly / Quarterly	0.0014	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Copper	milligrams per litre	Yearly / Quarterly	0.0014	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Ethylbenzene	milligrams per litre	Yearly	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligrams per litre	Yearly	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligrams per litre	Yearly / Quarterly	0.0034	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Magnesium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Manganese	milligrams per litre	Yearly / Quarterly	0.2 / 1.9	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Mercury	milligrams per litre	Yearly / Quarterly	0.00006	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.40	0.02	less than 0.01	0.07	0.10	0.25	less than 0.01	less than 0.01	0.06
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.54	0.08	less than 0.01	0.08	0.13	0.32	less than 0.01	less than 0.01	0.08
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	1.52	0.10	less than 0.01	0.19	0.15	0.50	less than 0.01	less than 0.01	0.14
Potassium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligrams per litre	Yearly	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Toluene	milligrams per litre	Yearly	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1480	407	75	293	526	1060	298	128	313
Total Iron	milligrams per litre	Yearly	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	66	14	7	11	22	22	34	8	10
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Yearly	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not required	3	5	2	15	Not required	Not required	Not required	4
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Yearly	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	Not required	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing (TOC)	Quarterly	-	1.38	-	-	-	-	-	37.2	12.350	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2525	715	212	520	970	1794	486	205	574
	millivolts	Quarterly	-	-127.5	95.3	52.6	89.6	74.7	43.2	9.5	-23.3	54.6
	% Saturation (see note 4)	Quarterly	-	8.5%	41.3%	60.4%	43.2%	67.6%	72.0%	17.1%	22.5%	55.2%
PH	PH Units	Quarterly	6.5-8	7.08	7.91	8.10	7.87	7.76	8.01	6.02	6.29	8.09
Temp	Degree C	Quarterly	-	23.5	20.3	24.8	15.7	27.2	21.4	23.0	22.5	15.7

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems)

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 11TH FEBRUARY 2021

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprocopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	84.6	0.40	0.01	0.04	0.12	0.04	<0.01	0.09	0.05
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Barium	milligrams per litre	Yearly	2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Benzene	milligrams per litre	Yearly	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not required	<2	<2	<2	<2	not tested	Not required	Not required	<2
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Calcium	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not required	not tested	18	34	54	not tested	Not required	Not required	32
Chloride (Cl)	milligrams per litre	Yearly	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Cobalt	milligrams per litre	Yearly	0.0014	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Ethylbenzene	milligrams per litre	Yearly	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligrams per litre	Yearly	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligrams per litre	Yearly	0.0034	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Magnesium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Manganese	milligrams per litre	Yearly	0.2 / 1.9	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Mercury	milligrams per litre	Yearly	0.00006	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.44	0.03	0.01	0.17	0.09	0.3	<0.01	<0.01	0.19
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.68	0.1	<0.01	0.17	0.16	0.41	<0.01	<0.01	0.22
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.02 ²	1.77	0.13	0.01	0.43	0.15	0.66	<0.01	<0.01	0.38
Potassium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligrams per litre	Yearly	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Toluene	milligrams per litre	Yearly	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1580	358	100	460	624	1060	335	102	514
Total Iron	milligrams per litre	Yearly	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Total Nitrogen	milligrams per litre	Quarterly	0.25	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	57	11	6	14	19	23	45	8	14
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Yearly	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not required	25	8	25	23	Not required	Not required	Not required	5
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Yearly	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing (TOC)	Quarterly	-	2.47	-	-	-	-	-	37.2	12.540	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	3617	829	341	1443	1195	2454	796	231	1434
PH	PH Units	Quarterly	6.5-8	7.07	7.31	6.98	7.33	6.96	7.76	6.01	5.91	8.01
Temp	Degree C	Quarterly	-	21.0	22.8	22.0	19.0	25.1	23.0	19.5	18.5	21.0

Table notes:

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Red text	EPL requirements not met
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	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 12TH MAY 2021

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprocopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	93.8	3.53	<0.01	0.03	0.11	0.18	0.33	0.08	<0.01
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Barium	milligrams per litre	Yearly	2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Benzene	milligrams per litre	Yearly	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not required	<2	<2	<2	2	not tested	Not required	Not required	<2
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Calcium	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not required	not tested	70	76	153	not tested	Not required	Not required	25
Chloride (Cl)	milligrams per litre	Yearly	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Cobalt	milligrams per litre	Yearly	0.0014	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Copper	milligrams per litre	Yearly / Quarterly	0.0014	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Ethylbenzene	milligrams per litre	Yearly	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligrams per litre	Yearly	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligrams per litre	Yearly	0.0034	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Magnesium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Manganese	milligrams per litre	Yearly	0.2 / 1.9	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Mercury	milligrams per litre	Yearly	0.00006	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.85	0.1	<0.01	0.06	0.17	0.37	<0.01	0.01	0.02
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	1.96	0.16	<0.01	0.08	0.2	0.61	<0.01	<0.01	0.02
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	4.52	0.26	<0.01	0.15	0.24	0.92	<0.01	0.01	0.04
Potassium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligrams per litre	Yearly	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Toluene	milligrams per litre	Yearly	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1930	531	101	216	412	1420	420	106	152
Total Iron	milligrams per litre	Yearly	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	not tested	Not required	not tested	Not required	Not required	not tested	Not required	Not required	not tested
Total Nitrogen	milligrams per litre	Quarterly	0.25	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	1	20	7	7	12	8	17	6	8
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Yearly	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not required	3	<1	1	18	Not required	Not required	Not required	2
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Yearly	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	not tested	Not required	not tested	not tested	Not required	not tested	Not required	Not required	not tested
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing (TOC)	Quarterly	-	1.19	-	-	-	-	-	37.8	12.330	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	3297	821	175	389	634.4	1952	619	221.1	269
PH	PH Units	Quarterly	6.5-8	7.03	6.85	6.04	6.31	6.52	6.61	5.61	5.77	6.72
Temp	Degree C	Quarterly	-	19.2	16.9	18.3	16.5	17.8	19.7	17.6	17.6	16.2

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
1	Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
2	NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
3	NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).
4	Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS (DRY ROUND)

SAMPLING ON 19TH AUGUST 2021

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprocopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	1350	121	Not required	Not required	Dry	453	454	21	340
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	0.02	0.05	0.16	0.09	Not required	<0.01	1.54	1.06	0.83
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	93.4	0.05	0.03	0.01	Dry	0.02	0.05	0.13	0.01
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	<0.001	<0.001	<0.001	0.004	Not required	<0.001	0.208	0.005	0.001
Barium	milligrams per litre	Yearly	2	0.068	0.043	0.019	0.069	Not required	0.086	0.313	0.094	0.066
Benzene	milligrams per litre	Yearly	0.001 / 0.950	<0.001	<0.001	Not required	Not required	Not required	<0.001	<0.001	<0.001	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not required	2	2	2	Dry	Not required	not tested	Not required	<2
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	Not required	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	milligrams per litre	Yearly	1000	232	83.9	Not required	Not required	Not required	141	2.8	1.4	115
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	268	49	21	55	Dry	55	not tested	Not required	58
Chloride (Cl)	milligrams per litre	Yearly	350	220	60	Not required	Not required	Not required	215	185	39	182
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	<LOR	<LOR	<LOR	<LOR	Not required	<LOR	<LOR	<LOR	<LOR
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	<0.01	<0.01	<0.01	Not required	Not required	<0.01	<0.01	<0.01	<0.01
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	0.001	<0.001	<0.001	0.001	Not required	<0.001	0.006	0.003	0.002
Cobalt	milligrams per litre	Yearly	0.0014	<0.001	<0.001	<0.001	<0.001	Not required	<0.001	0.044	0.01	<0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	<0.001	<0.001	<0.001	<0.001	Not required	0.004	0.004	0.002	0.004
Ethylbenzene	milligrams per litre	Yearly	0.08	<0.002	<0.002	Not required	Not required	Not required	<0.002	<0.002	<0.002	Not required
Fluoride	milligrams per litre	Yearly	1	0.2	0.1	Not required	Not required	Not required	0.2	0.2	<0.1	Not required
Lead	milligrams per litre	Yearly	0.0034	<0.001	<0.001	<0.001	<0.001	Not required	<0.001	0.119	0.019	0.002
Magnesium	milligrams per litre	Yearly	-	64.7	29.5	Not required	Not required	Not required	45.8	17.1	4.7	38.5
Manganese	milligrams per litre	Yearly	0.2 / 1.9	0.002	0.010	0.089	0.008	Not required	0.003	1.28	0.666	0.044
Mercury	milligrams per litre	Yearly	0.00006	<0.0001	<0.0001	<0.0001	<0.0001	Not required	<0.0001	<0.0001	<0.0001	<0.0001
Nitrate (as Nitrogen) (Note 5)	milligrams per litre	Yearly / Quarterly	2.40	0.6	Not required	0.12	15.9	Not required	11.2	<0.05	0.01	8.51
Nitrite (as Nitrogen) (Note 5)	milligrams per litre	Yearly / Quarterly	0.9	<0.01	Not required	Not tested (note 5)	Not tested (note 5)	Not required	<0.01	<0.01	<0.01	Not tested (note 5)
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	<LOR	<LOR	Dry (note 4)	<LOR	<LOR	<LOR	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	<LOR	<LOR	Not required	Not required	Dry (note 4)	<LOR	<LOR	<LOR	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	<0.002 (<0.00005)	<0.0005	<0.0005	<0.0005	Dry (note 4)	<0.002 (<0.00005)	<0.002	<0.002	Not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.45	0.07	<0.01	0.21	Dry	0.55	<0.01	<0.01	0.27
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.68	0.18	<0.01	0.3	Dry	0.52	<0.01	<0.01	0.4
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	2.17	0.29	<0.01	0.81	Dry	1.31	<0.01	<0.01	0.82
Potassium	milligrams per litre	Yearly	-	80.6	12.3	Not required	Not required	Not required	52.4	2.6	2.4	46.1
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	<LOR	Not required	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required
Sodium	milligrams per litre	Yearly	230	170	47.4	Not required	Not required	Not required	136	76.5	20.4	116
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	<10	239	Not required	Not required	Not required	138	6	5	130
Toluene	milligrams per litre	Yearly	0.18	<0.002	<0.002	Not required	Not required	Not required	<0.002	<0.002	<0.002	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1540	536	109	706	Dry	1150	345	126	828
Total Iron	milligrams per litre	Yearly	0.2	Not required	0.07	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Nitrogen	milligrams per litre	Quarterly	0.25	104	Not required	0.7	17.9	Not required	12.9	Not required	Not required	10.7

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	69	20	4	17	Dry	19	17	6	17
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	0.63	<0.050	Not required	Not required	Not required	<0.050	<0.050	<0.050	Not required
Total Phenolics	milligrams per litre	Yearly	0.32	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	0.61	<0.01	0.03	0.04	Not required	0.02	Not required	Not required	0.07
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not required	1	2	8	Dry	Not required	Not required	Not required	25
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	<LOR	Not required	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required
Xylenes	milligrams per litre	Yearly	0.075	<0.002	<0.002	Not required	Not required	Not required	<0.002	<0.002	<0.002	Not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	<0.005	<0.005	<0.005	<0.005	Not required	0.044	0.26	0.054	0.043
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing (TOC)	Quarterly	-	1.65	-	-	-	-	-	38.1	12.78	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2820	800	214	1150	Dry	1590	640	215	1350
PH	PH Units	Quarterly	6.5-8	7.15	8.55	7.81	7.83	Dry	7.51	5.99	6.19	7.69
Temp	Degree C	Quarterly	-	16.4	16.2	10.8	8.6	Dry	13.7	16.2	16.5	14.4

1 Measured as Nitrate + Nitrite as N (Nox) for EPA3, EPA4, DTC, EPA4A and EPA4B only due to limited available sample containers.

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
1	Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
2	NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
3	NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

EPA5 (Sedimentation Pond 8) was observed dry during the August quarterly/annual monitoring and samples could not be collected or analysed. As a result, the EPL requirement to analyse Chlorinated Volatile Compounds, Polycyclic aromatic hydrocarbons (PAHs) and Organochlorine pesticides (OCP) was not carried out during 2021.

5 Measured as Nitrate + Nitrite as N (Nox) for EPA3, EPA4, DTC, EPA4A and EPA4B only due to limited available sample containers.

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 18TH NOVEMBER 2021

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprocopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	<0.01	Not required	0.22	1.3	Not required	<0.01	Not required	Not required	0.23
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	33.6	0.07	0.05	<0.01	0.01	<0.01	0.01	0.06	<0.01
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	0.002	Not required	<0.001	<0.001	Not required	0.001	Not required	Not required	<0.001
Barium	milligrams per litre	Yearly	2	0.239	Not required	0.017	0.047	Not required	0.144	Not required	Not required	0.033
Benzene	milligrams per litre	Yearly	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	11	2	2	<2	<2	<2	Not required	Not required	<2
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	<0.0001	Not required	<0.0001	<0.0001	Not required	0.0007	Not required	Not required	<0.0001
Calcium	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	117	51	32	40	47	56	Not required	Not required	30
Chloride (Cl)	milligrams per litre	Yearly	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	<0.001	Not required	<0.001	<0.001	Not required	<0.001	<0.001	0.006	<0.001
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	0.003	Not required	<0.001	0.002	Not required	0.001	Not required	Not required	<0.001
Cobalt	milligrams per litre	Yearly	0.0014	<0.001	Not required	<0.001	0.002	Not required	<0.001	Not required	Not required	<0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	<0.001	Not required	<0.001	0.002	Not required	0.008	Not required	Not required	0.007
Ethylbenzene	milligrams per litre	Yearly	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligrams per litre	Yearly	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligrams per litre	Yearly	0.0034	<0.001	Not required	<0.001	0.002	Not required	<0.001	Not required	Not required	<0.001
Magnesium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Manganese	milligrams per litre	Yearly	0.2 / 1.9	0.216	Not required	0.013	0.045	Not required	0.006	Not required	Not required	0.015
Mercury	milligrams per litre	Yearly	0.00006	<0.0001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	0.01	Not required	0.09	6.08	Not required	8.46	Not required	Not required	2.14
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	0.01	Not required	<0.01	0.01	Not required	0.01	Not required	Not required	0.01
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	0.43	0.03	0.02	0.1	0.08	0.37	<0.01	<0.01	0.08
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	0.4	0.07	<0.01	0.11	0.09	0.38	<0.01	<0.01	0.05
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	1.2	0.11	0.02	0.26	0.12	0.82	<0.01	<0.01	0.15
Potassium	milligrams per litre	Yearly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligrams per litre	Yearly	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Toluene	milligrams per litre	Yearly	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1020	304	105	304	392	1420	440	141	266
Total Iron	milligrams per litre	Yearly	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	38.8	Not required	0.7	1.1	Not required	1.3	Not required	Not required	0.6
Total Nitrogen	milligrams per litre	Quarterly	0.25	38.8	Not required	0.8	7.2	Not required	9.8	Not required	Not required	2.8

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	37	17	7	10	15	17	11	8	8
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Yearly	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	1.41	Not required	0.04	0.03	Not required	0.01	Not required	Not required	<0.01
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not required	<5	<5	6	11	Not required	Not required	Not required	<5
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Yearly	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	0.013	Not required	<0.005	0.024	Not required	0.329	Not required	Not required	0.005
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing (TOC)	Quarterly	-	1.39	-	-	-	-	-	38.72	12.4	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	1808	463	179	438	585	841	318	176	444
PH	PH Units	Quarterly	6.5-8	7.03	6.69	8.00	8.35	7.74	7.01	5.96	5.73	8.42
Temp	Degree C	Quarterly	-	17.6	22.2	27.1	18	17.4	19.6	20.7	18.3	16.8

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
1	Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
2	NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
3	NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS (ADDITIONAL - 'WET WEATHER' ROUND)

SAMPLING ON 31TH AUGUST 2021

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/epc2006061>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	DTC
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Ground Water Bore BA1 NE Corner	Surface Water Pond NE Corner BA3	Dog Trap Creek Upstream BA4	Dog Trap Creek Downstream BA5	Surface Water Pond SE Corner BA8	Drainage Line BA9	Ground Water Up Gradient Bore BA6 SW Corner	Ground Water Down Gradient Bore BA7 SE Corner	Dog Trap Creek below landfill drainage line BA10
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	-	Not Required	98	29	116	72	453	Not Required	Not Required	386
Aluminium	milligrams per litre	Yearly / Quarterly	0.055	Not Required	0.42	0.15	0.15	0.60	0.03	Not Required	Not Required	0.34
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9	Not Required	0.07	<0.01	<0.01	<0.01	0.02	Not Required	Not Required	<0.01
Arsenic	milligrams per litre	Yearly	0.010 / 0.024	Not Required	<0.001	<0.001	<0.001	0.001	<0.001	Not Required	Not Required	<0.001
Barium	milligrams per litre	Yearly	2	Not Required	0.036	0.024	0.028	0.043	0.103	Not Required	Not Required	0.075
Benzene	milligrams per litre	Yearly	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Cadmium	milligrams per litre	Yearly / Quarterly	0.0002	Not Required	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	Not Required	Not Required	<0.0001
Calcium	milligrams per litre	Yearly	1000	Not Required	61.8	4.5	31.9	67.8	139	Not Required	Not Required	123
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Chloride (Cl)	milligrams per litre	Yearly	350	Not Required	52	30	68	24	194	Not Required	Not Required	187
Chlorinated Volatile Compounds (CVOCs)	milligrams per litre	Yearly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Chromium (hexavalent)	milligrams per litre	Yearly	0.001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Chromium (total)	milligrams per litre	Yearly / Quarterly	0.0033	Not Required	<0.001	<0.001	<0.001	0.001	<0.001	Not Required	Not Required	0.001
Cobalt	milligrams per litre	Yearly	0.0014	Not Required	<0.001	<0.001	<0.001	<0.001	<0.001	Not Required	Not Required	<0.001
Copper	milligrams per litre	Yearly / Quarterly	0.0014	Not Required	0.002	<0.001	0.051	0.005	0.006	Not Required	Not Required	0.003
Ethylbenzene	milligrams per litre	Yearly	0.08	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Fluoride	milligrams per litre	Yearly	1	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required
Lead	milligrams per litre	Yearly	0.0034	Not Required	<0.001	<0.001	<0.001	0.002	<0.001	Not Required	Not Required	<0.001
Magnesium	milligrams per litre	Yearly	-	Not Required	22.9	4.1	13.4	9.3	42.8	Not Required	Not Required	42.1
Manganese	milligrams per litre	Yearly	0.2 / 1.9	Not Required	0.025	0.006	0.002	0.02	0.116	Not Required	Not Required	0.009
Mercury	milligrams per litre	Yearly	0.00006	Not Required	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	Not Required	Not Required	<0.0001
Nitrate (as Nitrogen)	milligrams per litre	Yearly / Quarterly	2.40	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Nitrite (as Nitrogen)	milligrams per litre	Yearly / Quarterly	0.9	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Organochlorine Pesticides (OCP)	milligrams per litre	Yearly	Limit of reporting	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Perfluorooctane sulfonic acid (PFOS)	micrograms per litre ¹	Quarterly	0.13 ²	Not Required	0.03	<0.01	0.09	0.07	0.33	Not Required	Not Required	0.25
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ² / 220 ³	Not Required	0.11	<0.01	0.12	0.09	0.47	Not Required	Not Required	0.4
Sum of PFHxS and PFOS	micrograms per litre ¹	Quarterly	0.07 ²	Not Required	0.17	<0.01	0.09	0.11	0.93	Not Required	Not Required	0.79
Potassium	milligrams per litre	Yearly	-	Not Required	10.7	4.1	16.5	11.2	48.9	Not Required	Not Required	49.5
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Yearly	Limit of reporting	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Sodium	milligrams per litre	Yearly	230	Not Required	36.7	18	41.5	16.1	119	Not Required	Not Required	114
Sulphate (as SO ₄)	milligrams per litre	Yearly	1000	Not Required	190	9	45	147	157	Not Required	Not Required	168
Toluene	milligrams per litre	Yearly	0.18	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	Not Required	472	95	310	362	1020	Not Required	Not Required	1030
Total Iron	milligrams per litre	Yearly	0.2	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Total Nitrogen	milligrams per litre	Quarterly	0.25	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	Not Required	18	4	9	10	20	Not Required	Not Required	20
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Yearly	Limit of reporting	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Total Phenolics	milligrams per litre	Yearly	0.32	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Total Phosphorus	milligrams per litre	Yearly / Quarterly	0.02	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50	Not Required	9	<5	<5	21	6	Not Required	Not Required	76
Volatile Organic Compounds (VOCs)	milligrams per litre	Yearly	Limit of reporting	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Xylenes	milligrams per litre	Yearly	0.075	Not Required	Not required	Not required	Not required	Not required	Not required	Not Required	Not Required	Not required
Zinc	milligrams per litre	Yearly / Quarterly	0.008	Not Required	<0.005	<0.005	<0.005	0.038	0.207	Not Required	Not Required	0.025
FIELD MEASUREMENTS												
Standing Water Level	metres below top of casing (TOC)	Quarterly	-	Not Required	-	-	-	-	-	Not Required	Not Required	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	Not Required	687	177	532	531	1711	Not Required	Not Required	1572
PH	PH Units	Quarterly	6.5-8	Not Required	9.42	6.85	7.78	7.27	7.71	Not Required	Not Required	8.13
Temp	Degree C	Quarterly	-	Not Required	11.4	8.7	9.3	8.3	12.3	Not Required	Not Required	10.0

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 17TH FEBRUARY 2022

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/iprpoecpp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	EPA11	EPA12	EPA13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill	Dog Trap Creek downstream of landfill	Additional surface water location -directly in creek downstream of leachate flow
Alkalinity (as calcium carbonate)	milligram s per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Aluminium	milligram s per litre	Annual / Quarterly	0.055	<0.01	Not required	0.18	0.04	Not required	0.01	Not required	Not required	0.04	0.12	0.02
Ammonia (as nitrogen)	milligram s per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5 only	111	0.12	0.02	0.02	Unable to sample (dry)	0.74	0.66	0.08	0.01	0.01	<0.01
Arsenic	milligram s per litre	Annual / Quarterly	0.010 / 0.024	0.001	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Barium	milligram s per litre	Annual / Quarterly	2	0.37	Not required	0.036	0.063	Not required	0.248	Not required	Not required	0.078	0.031	0.094
Benzene	milligram s per litre	Annual	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligram s per litre	Quarterly	-	4	<2	<2	<2	Unable to sample (dry)	<2	Not required	Not required	<2	<2	<2
Cadmium	milligram s per litre	Annual / Quarterly	0.0002	<0.0001	Not required	<0.0001	<0.0001	Not required	0.0015	Not required	Not required	<0.0001	<0.0001	<0.0001
Calcium	milligram s per litre	Annual	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligram s per litre	Quarterly	-	343	37	10	35	Unable to sample (dry)	55	Not required	Not required	33	25	46
Chloride (Cl)	milligram s per litre	Annual	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	milligram s per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligram s per litre	Annual / Quarterly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligram s per litre	Annual / Quarterly	0.0033	0.005	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Cobalt	milligram s per litre	Annual / Quarterly	0.0014	0.002	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Copper	milligram s per litre	Annual / Quarterly	0.0014	<0.001	Not required	<0.001	<0.001	Not required	0.015	Not required	Not required	0.011	<0.001	0.004
Ethylbenzene	milligram s per litre	Annual	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligram s per litre	Annual	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligram s per litre	Annual / Quarterly	0.0034	<0.001	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Magnesium	milligram s per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Manganese	milligram s per litre	Annual / Quarterly	0.2 / 1.9	0.345	Not required	0.026	0.01	Not required	0.677	Not required	Not required	0.013	0.028	0.01
Mercury	milligram s per litre	Annual / Quarterly	0.00006	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	<0.0001	<0.0001	Not required
Nitrate (as Nitrogen)	milligram s per litre	Annual / Quarterly	2.40	0.05	Not required	0.04	5.3	N/A	10.2	Not required	Not required	Not required	Not required	7.71
Nitrite (as Nitrogen)	milligram s per litre	Annual / Quarterly	0.9	<0.01	Not required	<0.01	0.01	N/A	0.17	Not required	Not required	Not required	Not required	<0.01
Organochlorine Pesticides (OCP)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligram s per litre	Annual	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	milligram s per litre	Quarterly	0.13 ^a	0.66	0.02	<0.01	0.34	Unable to sample (dry)	0.29	<0.01	<0.01	0.17	0.02	0.39
Perfluorooctanoic acid (PFOA)	milligram s per litre	Quarterly	0.56 ^a / 220 ^a	1.14	0.07	<0.01	0.39	Unable to sample (dry)	0.53	<0.01	<0.01	0.29	0.05	0.55
Sum of PFHxS and PFOS	milligram s per litre	Quarterly	0.07 ^a	2.48	0.1	0.02	0.89	Unable to sample (dry)	0.82	<0.01	0.01	0.63	0.09	0.93
Potassium	milligram s per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligram s per litre	Annual	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	milligram s per litre	Annual	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Toluene	milligram s per litre	Annual	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligram s per litre	Quarterly	2000	1,560	302	131	607	Unable to sample (dry)	995	355	158	520	234	1,070
Total Iron	milligram s per litre	Annual	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligram s per litre	Quarterly	-	100	Not required	0.3	0.9	Not required	2.9	Not required	Not required	Not required	Not required	1.5
Total Nitrogen	milligram s per litre	Quarterly	0.25	100	Not required	0.3	6.2	Not required	13.3	Not required	Not required	Not required	Not required	9.2

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	63	16	7	15	Unable to sample (dry)	16	5	8	14	11	19
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Annual	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	0.73	Not required	<0.01	<0.01	Not required	0.01	Not required	Not required	Not required	Not required	<0.01
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	8	<5	<5	Unable to sample (dry)	Not required	Not required	Not required	<5	6	6
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Annual	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Annual / Quarterly	0.008	<0.005	Not required	<0.005	0.006	Not required	0.883	Not required	Not required	0.015	0.005	0.03
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.34	Not required	Not required	Not required	Not required	Not required	37.5	12.45	Not required	Not required	Not required
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2862	452	236	967	N/A	1811	638	228	821.0	383.1	1523
PH	PH Units	Quarterly	6.5-8	6.98	7.74	6.8	7.85	N/A	7.22	5.95	6.26	7.76	7.65	7.8
Temp	Degree C	Quarterly	-	21.6	29.6	25.9	25.2	N/A	22.6	17.3	19	25.4	27.3	21.2

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
Light green	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
Yellow	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
Orange	Limit of reporting exceed adopted trigger value
1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)	
2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia	
3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems)	
4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)	
5 Sample RL01 not tested for selected parameters due to insufficient sample volume during February 2022 monitoring rounds.	

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 17TH MAY 2022

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/popecopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	EPA Point 11	EPA Point 12	EPA Point 13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill	Dog Trap Creek downstream of landfill	Additional surface water location -directly in creek downstream of leachate flow
Alkalinity (as calcium carbonate)	milligram s per litre	Annual	-	1,270	Not required	Not required	Not required	Not required	603	Not required	Not required	77	73	Not required
Aluminium	milligram s per litre	Annual / Quarterly	0.055	<0.01	Not required	0.12	0.17	Not required	<0.01	Not required	Not required	0.26	0.19	0.12
Ammonia (as nitrogen)	milligram s per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5 only	84.4	5.5	<0.01	0.09	1.36	10.8	0.1	0.07	0.04	0.03	0.05
Arsenic	milligram s per litre	Annual / Quarterly	0.010 / 0.024	0.002	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Barium	milligram s per litre	Annual / Quarterly	2	0.44	Not required	0.021	0.029	Not required	0.148	Not required	Not required	0.025	0.025	0.068
Benzene	milligram s per litre	Annual	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligram s per litre	Quarterly	-	4	<2	<2	<2	2	2	Not required	Not required	Not required	Not required	<2
Cadmium	milligram s per litre	Annual / Quarterly	0.0002	0.0002	Not required	<0.0001	<0.0001	Not required	0.0022	Not required	Not required	<0.0001	<0.0001	0.0004
Calcium	milligram s per litre	Annual	1000	266	Not required	Not required	Not required	Not required	204	Not required	Not required	19.9	19	Not required
Chemical Oxygen Demand (COD)	milligram s per litre	Quarterly	-	332	180	<10	15	83	88	Not required	Not required	Not required	Not required	45
Chloride (Cl)	milligram s per litre	Annual	350	168	Not required	Not required	Not required	Not required	193	Not required	Not required	31	31	Not required
Chlorinated Volatile Compounds (CVCs)	milligram s per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligram s per litre	Annual / Quarterly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligram s per litre	Annual / Quarterly	0.0033	0.008	Not required	<0.001	<0.001	Not required	0.001	Not required	Not required	<0.001	<0.001	<0.001
Cobalt	milligram s per litre	Annual / Quarterly	0.0014	0.004	Not required	<0.001	<0.001	Not required	0.004	Not required	Not required	<0.001	<0.001	<0.001
Copper	milligram s per litre	Annual / Quarterly	0.0014	<0.001	Not required	<0.001	<0.001	Not required	0.028	Not required	Not required	0.003	<0.001	0.008
Ethylbenzene	milligram s per litre	Annual	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligram s per litre	Annual	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligram s per litre	Annual / Quarterly	0.0034	<0.001	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Magnesium	milligram s per litre	Annual	-	67.5	Not required	Not required	Not required	Not required	59.5	Not required	Not required	9.2	8.8	Not required
Manganese	milligram s per litre	Annual / Quarterly	0.2 / 1.9	1.41	Not required	0.034	0.013	Not required	1.6	Not required	Not required	0.009	0.006	0.312
Mercury	milligram s per litre	Annual / Quarterly	0.00006	<0.0001	Not required	Not required	Not required	Not required	<0.0001	Not required	Not required	<0.0001	<0.0001	Not required
Nitrate (as Nitrogen)	milligram s per litre	Annual / Quarterly	2.40	0.01	Not required	0.14	2.34	N/A	11.8	Not required	Not required	Not required	Not required	8.77
Nitrite (as Nitrogen)	milligram s per litre	Annual / Quarterly	0.9	0.03	Not required	<0.01	0.03	N/A	0.39	Not required	Not required	Not required	Not required	0.35
Organochlorine Pesticides (OCP)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligram s per litre	Annual	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	milligram s per litre	Quarterly	0.13 ^a	0.64	0.37	<0.01	0.04	0.12	0.42	<0.01	<0.01	0.04	0.04	0.06
Perfluorooctanoic acid (PFOA)	milligram s per litre	Quarterly	0.56 ^a / 220 ^a	0.92	0.66	<0.01	0.06	0.21	0.64	<0.01	<0.01	0.06	0.06	0.09
Sum of PFHxS and PFOS	milligram s per litre	Quarterly	0.07 ^a	2.1	0.8	<0.01	0.12	0.27	1.03	<0.01	<0.01	0.12	0.11	0.15
Potassium	milligram s per litre	Annual	-	73.5	Not required	Not required	Not required	Not required	62.3	Not required	Not required	8.6	8.2	Not required
Semi-volatile Organic Compounds (SVOCs)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligram s per litre	Annual	230	147	Not required	Not required	Not required	Not required	129	Not required	Not required	24.1	23.1	Not required
Sulphate (as SO ₄)	milligram s per litre	Annual	1000	129	Not required	Not required	Not required	Not required	223	Not required	Not required	25	25	Not required
Toluene	milligram s per litre	Annual	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligram s per litre	Quarterly	2000	1,640	1,070	118	228	776	1,410	360	116	217	216	600
Total Iron	milligram s per litre	Annual	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligram s per litre	Quarterly	-	136	Not required	0.4	0.6	Not required	12.9	Not required	Not required	Not required	Not required	2.2
Total Nitrogen	milligram s per litre	Quarterly	0.25	136	Not required	0.5	3	Not required	25.1	Not required	Not required	Not required	Not required	11.3

Total Organic Carbon (TOC)	milligram s per litre	Quarterly	-	69	36	8	10	32	37	12	8	10	11	21
Total Petroleum Hydrocarbons (TPH)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligram s per litre	Annual	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligram s per litre	Annual / Quarterly	0.02	0.84	Not required	0.25	0.01	Not required	0.02	Not required	Not required	Not required	Not required	0.03
Total Suspended Solids (TSS)	milligram s per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	7	<5	<5	11	Not required	Not required	Not required	<5	<5	8
Volatile Organic Compounds (VOCs)	milligram s per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligram s per litre	Annual	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligram s per litre	Annual / Quarterly	0.008	0.008	Not required	<0.005	0.012	Not required	1.02	Not required	Not required	0.008	0.01	0.183
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.17	Not required	Not required	Not required	Not required	Not required	37.57	12.36	Not required	Not required	Not required
Electrical Conductivity	microsie mens per centimetr e	Quarterly	30-350	2896	1408	321.6	414.8	1024	2036	641	235.8	323.7	348.5	842
PH	PH Units	Quarterly	6.5-8	5.26	6.8	6.79	5.28	5.99	6.43	5.61	5.84	5.14	5.04	6.39
Temp	Degree C	Quarterly	-	20.4	17.1	16.5	15.2	16.1	18.9	16.5	17.3	14.2	14.6	16.2

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 18TH AUGUST 2022

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prpoeopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	EPA Point 11	EPA Point 12	EPA Point 13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill	Dog Trap Creek downstream of landfill	Additional surface water location -directly in creek downstream of leachate flow
Alkalinity (as calcium carbonate)	milligrams per litre	Annual	-	1160	383	Not required	Not required	616	501	14	16	144	170	Not required
Aluminium	milligrams per litre	Annual / Quarterly	0.055	<0.01	0.08	0.07	0.09	0.55	<0.01	<0.01	0.02	0.05	0.15	0.04
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5 only	68.50	4.34	<0.01	0.06	3.06	0.02	0.08	0.06	<0.01	<0.01	0.21
Arsenic	milligrams per litre	Annual / Quarterly	0.010 / 0.024	0.001	0.001	<0.001	<0.001	0.007	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Barium	milligrams per litre	Annual / Quarterly	2	0.278	0.106	0.014	0.048	0.162	0.133	0.183	0.059	0.045	0.046	0.08
Benzene	milligrams per litre	Annual	0.001 / 0.950	<0.001	<0.001	Not required	Not required	Not required	<0.001	<0.001	<0.001	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	3	<2	<2	<2	2	<2	Not required	Not required	Not required	Not required	<2
Cadmium	milligrams per litre	Annual / Quarterly	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	milligrams per litre	Annual	1000	228	150	Not required	Not required	Not required	160	2.6	1.8	49.1	47.9	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	250	95	15	36	208	77	Not required	Not required	Not required	Not required	64
Chloride (Cl)	milligrams per litre	Annual	350	139	70	Not required	Not required	Not required	191	127	25	63	65	Not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Annual	-	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	Not required	Not required	<LOR
Chromium (hexavalent)	milligrams per litre	Annual / Quarterly	0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (total)	milligrams per litre	Annual / Quarterly	0.0033	0.006	0.002	<0.001	0.001	0.014	0.001	<0.001	<0.001	<0.001	<0.001	0.001
Cobalt	milligrams per litre	Annual / Quarterly	0.0014	0.004	0.001	<0.001	<0.001	0.004	0.001	0.029	0.006	<0.001	<0.001	<0.001
Copper	milligrams per litre	Annual / Quarterly	0.0014	<0.001	0.004	<0.001	0.001	0.003	0.024	<0.001	<0.001	0.001	0.001	0.01
Ethylbenzene	milligrams per litre	Annual	0.08	<0.002	<0.002	Not required	Not required	Not required	<0.002	<0.002	<0.002	Not required	Not required	Not required
Fluoride	milligrams per litre	Annual	1	0.2	0.2	Not required	Not required	Not required	0.2	0.1	<0.1	Not required	Not required	Not required
Lead	milligrams per litre	Annual / Quarterly	0.0034	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	milligrams per litre	Annual	-	60	48.5	Not required	Not required	Not required	59.4	11.8	3.3	20	18.6	Not required
Manganese	milligrams per litre	Annual / Quarterly	0.2 / 1.9	2.26	0.064	0.016	0.005	0.818	0.418	0.947	0.417	0.003	0.003	0.028
Mercury	milligrams per litre	Annual / Quarterly	0.00006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nitrate (as Nitrogen)	milligrams per litre	Annual / Quarterly	2.40	<0.01	Not required	0.09	10.8	Not required	22.8	0.02	0.04	8.67	8.64	17.5
Nitrite (as Nitrogen)	milligrams per litre	Annual / Quarterly	0.9	0.06	Not required	<0.01	0.06	Not required	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
Organochlorine Pesticides (OCP)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	Not required	Not required	<LOR
Organophosphorus Pesticides (OPP)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Annual	0.00001	0.0001	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	Not required	Not required	<LOR
Perfluorooctane sulfonic acid (PFOS)	milligrams per litre	Quarterly	0.13 ^a	0.48	0.09	<0.01	0.1	0.19	0.42	<0.01	<0.01	0.08	0.09	0.3
Perfluorooctanoic acid (PFOA)	milligrams per litre	Quarterly	0.56 ^a / 220 ^b	0.83	0.39	<0.01	0.25	0.76	0.72	<0.01	<0.01	0.2	0.21	0.53
Sum of PFHxS and PFOS	milligrams per litre	Quarterly	0.07 ^a	1.7	0.44	<0.01	0.44	0.5	1.04	<0.01	<0.01	0.38	0.42	0.83
Potassium	milligrams per litre	Annual	-	60.2	22.4	Not required	Not required	Not required	64.4	2.4	2.3	18	18	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Annual	Limit of reporting	<LOR	Not required	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required
Sodium	milligrams per litre	Annual	230	126	73.1	Not required	Not required	Not required	139	57.4	17	49.9	48	Not required
Sulphate (as SO ₄)	milligrams per litre	Annual	1000	76	278	Not required	Not required	Not required	210	5	5	61	61	Not required
Toluene	milligrams per litre	Annual	0.18	<0.002	<0.002	Not required	Not required	Not required	<0.002	<0.002	<0.002	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1,370	1,010	79	491	1,640	1,420	236	89	413	399	1,080
Total Iron	milligrams per litre	Annual	0.2	Not required	0.14	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	72	8	0.2	2.2	Not required	4.2	Not required	Not required	2.1	1.5	3.8
Total Nitrogen	milligrams per litre	Quarterly	0.25	73	11.1	0.3	13.1	Not required	27	Not required	Not required	10.8	10.1	21.3

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	63	33	4	15	75	35	2	5	12	12	27
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	0.32	0.14	Not required	Not required	Not required	0.19	<LOR	<LOR	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Annual	0.32	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	1	0.02	<0.01	0.05	Not required	0.02	Not required	Not required	0.02	0.01	0.01
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	<5	<5	<5	30	<5	Not required	Not required	<5	<5	<5
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	Not required	Not required	<LOR
Xylenes	milligrams per litre	Annual	0.075	<0.002	<0.002	Not required	Not required	Not required	<0.002	<0.002	<0.002	Not required	Not required	Not required
Zinc	milligrams per litre	Annual / Quarterly	0.008	0.124	<0.005	<0.005	0.007	0.019	0.565	0.119	0.044	0.01	0.012	0.029
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.1	-	-	-	-	-	37.4	12.62	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2731	1756	265.1	790	2229	2231	837	572.1	647.2	640.1	1424
PH	PH Units	Quarterly	6.5-8	6.94	7.07	8.12	6.84	7.7	7.3	5.65	5.63	6.84	6.83	7.66
Temp	Degree C	Quarterly	-	16.3	12.3	12.2	9.4	14.7	17.1	16	15.2	9.9	9.5	14.7

Table notes:

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Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 8TH NOVEMBER 2022

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prpoeop/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA Point 1	EPA Point 2	EPA Point 3	EPA Point 4	EPA Point 5	EPA Point 6	EPA Point 7	EPA Point 8	EPA Point 11	EPA Point 12	EPA Point 13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill	Dog Trap Creek downstream of landfill	-Additional surface water location -directly in creek downstream of leachate flow
Alkalinity (as calcium carbonate)	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	186.00	156.00	Not required
Aluminium	milligrams per litre	Annual / Quarterly	0.055	<0.01	Not required	0.08	0.07	Not required	<0.01	Not required	Not required	0.05	0.05	0.04
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.03 milligrams per litre for Points 2 & 5	77.6	0.58	<0.01	0.1	2.1	11.4	0.44	0.03	0.04	0.03	0.08
Arsenic	milligrams per litre	Annual / Quarterly	0.010 / 0.024	0.001	Not required	<0.001	<0.001	Not required	Not required	Not required	Not required	<0.001	<0.01	<0.001
Barium	milligrams per litre	Annual / Quarterly	2	0.366	Not required	0.015	0.058	Not required	0.17	Not required	Not required	0.07	0.05	0.104
Benzene	milligrams per litre	Annual	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	7	9	8	<2	11	6	Not required	Not required	<2	8.00	12
Cadmium	milligrams per litre	Annual / Quarterly	0.0002	<0.0001	Not required	<0.0001	<0.0001	Not required	0.0019	Not required	Not required	<0.0001	<0.0001	<0.0001
Calcium	milligrams per litre	Annual	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	57.80	46.50	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	178	54	14	34	80	74	Not required	Not required	34.00	29.00	70
Chloride (Cl)	milligrams per litre	Annual	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	55.00	49.00	Not required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Annual / Quarterly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligrams per litre	Annual / Quarterly	0.0033	0.006	Not required	<0.001	<0.001	Not required	0.001	Not required	Not required	<0.001	<0.001	0.001
Cobalt	milligrams per litre	Annual / Quarterly	0.0014	0.003	Not required	<0.001	<0.001	Not required	0.002	Not required	Not required	<0.001	<0.001	<0.001
Copper	milligrams per litre	Annual / Quarterly	0.0014	<0.001	Not required	<0.001	0.001	Not required	0.031	Not required	Not required	<0.001	<0.001	0.013
Ethylbenzene	milligrams per litre	Annual	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligrams per litre	Annual	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligrams per litre	Annual / Quarterly	0.0034	<0.001	Not required	<0.001	<0.001	Not required	<0.001	Not required	Not required	<0.001	<0.001	<0.001
Magnesium	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	21.30	17.90	Not required
Manganese	milligrams per litre	Annual / Quarterly	0.2 / 1.9	1.24	Not required	0.025	0.006	Not required	0.967	Not required	Not required	0.01	0.01	0.102
Mercury	milligrams per litre	Annual / Quarterly	0.00006	Not required	Not required	Not required	Not required	Not required	<0.0001	Not required	Not required	<0.0001	<0.0001	Not required
Nitrate (as Nitrogen)	milligrams per litre	Annual / Quarterly	2.40	0.01	Not required	0.02	8.8	Not required	14.3	Not required	Not required	Not required	Not required	16.5
Nitrite (as Nitrogen)	milligrams per litre	Annual / Quarterly	0.9	0.01	Not required	0.02	0.1	Not required	0.58	Not required	Not required	Not required	Not required	2.48
Organochlorine Pesticides (OCP)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Annual	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	milligrams per litre	Quarterly	0.13 ^a	0.62	0.09	0.02	0.25	0.1	0.64	<0.01	<0.01	0.20	0.16	0.5
Perfluorooctanoic acid (PFOA)	milligrams per litre	Quarterly	0.56 ^a / 220 ^a	1.02	0.29	<0.01	0.36	0.21	0.94	<0.01	<0.01	0.34	0.28	0.71
Sum of PFHxS and PFOS	milligrams per litre	Quarterly	0.07 ^a	2.11	0.39	0.03	0.7	0.26	1.48	<0.01	<0.01	0.62	0.51	1.2
Potassium	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	23.20	18.90	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligrams per litre	Annual	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	51.90	44.10	Not required
Sulphate (as SO ₄)	milligrams per litre	Annual	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	71.00	54.00	Not required
Toluene	milligrams per litre	Annual	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1,410	629	84	456	759	1,270	247	86	453.00	374.00	1,000
Total Iron	milligrams per litre	Annual	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	0.12	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	70	Not required	0.3	6	Not required	18.1	Not required	Not required	Not required	Not required	8.2
Total Nitrogen	milligrams per litre	Quarterly	0.25	70	Not required	0.3	14.9	Not required	33	Not required	Not required	Not required	Not required	27.2

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	66	32	6	15	31	35	13	6	15.00	12.00	29
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Annual	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	0	Not required	0.04	0.04	Not required	0.08	Not required	Not required	Not required	Not required	0.04
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	6	<5	<5	9	Not required	Not required	Not required	<5	<5	6
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Annual	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Annual / Quarterly	0.008	0.048	Not required	<0.005	0.005	Not required	0.954	Not required	Not required	<0.005	<0.005	0.053
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.1	-	-	-	-	-	10.56	15.56	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2501	997	181.3	755	1323	1995	521.7	217.4	716.00	637.00	1460
PH	PH Units	Quarterly	6.5-8	6.94	8.1	7.3	7.5	7.16	7.34	5.9	5.53	7.40	7.05	7.79
Temp	Degree C	Quarterly	-	18.4	25.4	25.5	18.1	20.4	26.9	18.8	19	17.30	20.80	24.4

Table notes:

- Black text EPL requires quarterly or yearly monitoring of this mandatory parameter
 - Red text EPL requirements not met
 - Blue text Additional parameter/location analysed beyond EPL requirements (non-mandatory)
 - Yellow Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
 - Orange Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
 - Light grey Limit of reporting exceed adopted trigger value
- 1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
- 2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
- 3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).
- 4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 16TH FEBRUARY 2023

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prpoeopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)
Alkalinity (as calcium carbonate)	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Aluminium	milligrams per litre	Annual / Quarterly	0.055	<0.01	Not required	0.58	0.08	Not required	0.03	Not required	Not required	0.2	0.12	0.36
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5	78.1	<0.01	0.04	0.04	<0.01	0.74	0.04	0.18	0.04	0.03	0.04
Arsenic	milligrams per litre	Annual / Quarterly	0.010 / 0.024	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Barium	milligrams per litre	Annual / Quarterly	2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Benzene	milligrams per litre	Annual	0.001 / 0.950	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Cadmium	milligrams per litre	Annual / Quarterly	0.0002	<0.0001	Not required	<0.0001	<0.0001	Not required	0.0011	Not required	Not required	<0.0001	<0.0001	<0.0001
Calcium	milligrams per litre	Annual	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chloride (Cl)	milligrams per litre	Annual	350	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVOCs)	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Annual / Quarterly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligrams per litre	Annual / Quarterly	0.0033	0.006	Not required	<0.001	<0.001	Not required	0.001	Not required	Not required	0.002	<0.001	<0.001
Cobalt	milligrams per litre	Annual / Quarterly	0.0014	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Copper	milligrams per litre	Annual / Quarterly	0.0014	<0.001	Not required	<0.001	<0.001	Not required	0.023	Not required	Not required	<0.001	<0.001	<0.001
Ethylbenzene	milligrams per litre	Annual	0.08	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Fluoride	milligrams per litre	Annual	1	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Lead	milligrams per litre	Annual / Quarterly	0.0034	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Magnesium	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Manganese	milligrams per litre	Annual / Quarterly	0.2 / 1.9	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Mercury	milligrams per litre	Annual / Quarterly	0.00006	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	<0.0001	<0.0001	Not required
Nitrate (as Nitrogen)	milligrams per litre	Annual / Quarterly	2.40	0.01	Not required	0.05	3.17	Not required	13.6	Not required	Not required	0.2	0.71	0.05
Nitrite (as Nitrogen)	milligrams per litre	Annual / Quarterly	0.9	<0.01	Not required	<0.01	0.04	Not required	0.24	Not required	Not required	<0.01	<0.01	<0.01
Organochlorine Pesticides (OCP)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Annual	0.00001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	milligrams per litre	Quarterly	0.13 ^a	0.65	0.12	<0.01	0.85	0.1	0.4	<0.01	<0.01	0.19	0.04	0.02
Perfluorooctanoic acid (PFOA)	milligrams per litre	Quarterly	0.56 ^b / 220 ^a	1.04	0.32	<0.01	0.43	0.1	0.68	<0.01	<0.01	0.26	0.06	0.02
Sum of PFHxS and PFOS	milligrams per litre	Quarterly	0.07 ^a	2.04	0.38	<0.01	0.85	0.16	0.98	<0.01	<0.01	0.56	0.12	0.04
Potassium	milligrams per litre	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sodium	milligrams per litre	Annual	230	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	milligrams per litre	Annual	1000	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Toluene	milligrams per litre	Annual	0.18	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1,560	546	105	530	516	1,130	279	116	Not required	Not required	132
Total Iron	milligrams per litre	Annual	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	85.9	Not required	0.7	1.9	Not required	6.3	Not required	Not required	1	0.9	0.7
Total Nitrogen	milligrams per litre	Quarterly	0.25	85.9	Not required	0.8	5.1	Not required	20.1	Not required	Not required	1.2	1.6	0.8

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	60	27	6	19	19	31	9	6	15	9	7
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phenolics	milligrams per litre	Annual	0.32	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	0.25	Not required	0.02	<0.01	Not required	0.01	Not required	Not required	0.02	0.02	0.32
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	9	6	<5	6	<5	Not required	Not required	14	11	29
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Xylenes	milligrams per litre	Annual	0.075	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Zinc	milligrams per litre	Annual / Quarterly	0.008	0.006	Not required	<0.005	<0.005	Not required	0.596	Not required	Not required	<0.005	<0.005	<0.005
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.13	-	-	-	-	-	Unable to measure*	12.87	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2612	886	188.3	898	745	-	698	238.2	638	307.8	232.8
PH	PH Units	Quarterly	6.5-8	6.96	8.12	6.93	7.69	7.07	-	5.85	6.96	7.13	6.47	6.82
Temp	Degree C	Quarterly	-	19.9	26.3	23.5	19.9	23.4	-	18.5	18.8	22.7	21.2	26.6

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 23RD MAY 2023

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/proteopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (OTC)
Alkalinity (as calcium carbonate)	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Aluminium	milligrams per litre	Annual / Quarterly	0.055	Not Required	Not Required	0.21	0.04	-	<0.01	Not Required	Not Required	0.06	0.14	0.07
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5	65.8	0.05	0.02	0.02	-	<0.01	0.11	0.1	0.02	0.03	0.08
Arsenic	milligrams per litre	Annual / Quarterly	0.010 / 0.024	0.001	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Barium	milligrams per litre	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Benzene	milligrams per litre	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Cadmium	milligrams per litre	Annual / Quarterly	0.0002	<0.0001	Not Required	<0.0001	<0.0001	-	0.0004	Not Required	Not Required	<0.0001	<0.0001	<0.0001
Calcium	milligrams per litre	Annual	1000	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Chloride (Cl)	milligrams per litre	Annual	350	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Chlorinated Volatile Compounds (CVOCs)	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Chromium (hexavalent)	milligrams per litre	Annual / Quarterly	0.001	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Chromium (total)	milligrams per litre	Annual / Quarterly	0.0033	0.005	Not Required	<0.001	0.001	-	0.001	Not Required	Not Required	<0.001	<0.001	<0.001
Cobalt	milligrams per litre	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Copper	milligrams per litre	Annual / Quarterly	0.0014	<0.001	Not Required	<0.001	<0.001	-	0.013	Not Required	Not Required	<0.001	<0.001	<0.001
Ethylbenzene	milligrams per litre	Annual	0.08	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Fluoride	milligrams per litre	Annual	1	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Lead	milligrams per litre	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Magnesium	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Manganese	milligrams per litre	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Mercury	milligrams per litre	Annual / Quarterly	0.00006	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Nitrate (as Nitrogen)	milligrams per litre	Annual / Quarterly	2.40	2.05	Not Required	0.03	3.52	-	12.1	Not Required	Not Required	0.24	0.04	<0.01
Nitrite (as Nitrogen)	milligrams per litre	Annual / Quarterly	0.9	0.04	Not Required	<0.01	0.01	-	<0.01	Not Required	Not Required	<0.01	<0.01	<0.01
Organochlorine Pesticides (OCP)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Organophosphorus Pesticides (OPP)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Perfluorooctane sulfonic acid (PFOS)	milligrams per litre	Quarterly	0.13 ^a	0.52	0.1	<0.01	0.18	-	0.26	<0.01	<0.01	0.09	0.02	<0.01
Perfluorooctanoic acid (PFOA)	milligrams per litre	Quarterly	0.56 ^b / 220 ^a	0.84	0.23	<0.01	0.32	-	0.53	<0.01	<0.01	0.14	0.02	<0.01
Sum of PFHxS and PFOS	milligrams per litre	Quarterly	0.07 ^a	1.59	0.29	<0.01	0.62	-	0.71	<0.01	<0.01	0.3	0.07	<0.01
Potassium	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Sodium	milligrams per litre	Annual	230	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Sulphate (as SO ₄)	milligrams per litre	Annual	1000	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Toluene	milligrams per litre	Annual	0.18	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1,370	464	104	470	-	1,000	250	127	Not Required	Not Required	157
Total Iron	milligrams per litre	Annual	0.2	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	66.4	Not Required	0.5	1.2	-	2.4	Not Required	Not Required	0.6	0.3	0.4
Total Nitrogen	milligrams per litre	Quarterly	0.25	68.5	Not Required	0.5	4.7	-	14.5	Not Required	Not Required	0.8	0.3	0.4

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	56	23	5	14	-	24	7	5	10	5	4
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Total Phenolics	milligrams per litre	Annual	0.32	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	0.4	Not Required	0.02	0.02	-	0.03	Not Required	Not Required	0.06	0.01	0.03
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	<5	<5	<5	-	<5	Not Required	Not Required	<5	<5	22
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Xylenes	milligrams per litre	Annual	0.075	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required
Zinc	milligrams per litre	Annual / Quarterly	0.008	0.068	Not Required	0.018	<0.005	-	0.211	Not Required	Not Required	<0.005	<0.005	<0.005
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.45	-	-	-	-	-	37.51	12.45	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2456	711	156	803	-	1220	518.5	345.5	528.6	238.9	189
PH	PH Units	Quarterly	6.5-8	6.8	8.09	5.56	7.65	-	6.91	5.51	6.84	7.71	7.36	5.72
Temp	Degrees Celsius	Quarterly	-	16.9	12.3	8.3	8.9	-	14.3	15.7	15.4	10.5	11	11

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)
	5 EPAS unable to be collected due to the locations being dry at the time of sampling

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 01ST AUGUST 2023
EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/prpoeopp/>
WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (OTC)
Alkalinity (as calcium carbonate)	milligrams per litre	Annual	-	1,300	185	-	Not required	-	443	29	10	Not required	Not required	Not required
Aluminium	milligrams per litre	Annual / Quarterly	0.055	<0.01	0.1	-	0.04	-	<0.01	<0.01	0.16	0.04	0.06	0.59
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5	75.7	0.13	-	0.03	-	0.04	0.06	0.63	0.02	0.05	0.02
Arsenic	milligrams per litre	Annual / Quarterly	0.010 / 0.024	0.002	0.001	-	<0.001	-	<0.001	0.005	0.001	Not required	Not required	<0.001
Barium	milligrams per litre	Annual / Quarterly	2	0.512	Not required	-	Not required	-	-	0.287	0.211	Not required	Not required	0.088
Benzene	milligrams per litre	Annual	0.001 / 0.950	<1	<1	-	Not required	-	<1	<1	<1	Not required	Not required	Not required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	8	3	-	2	-	2	Not required	Not required	Not required	Not required	2
Cadmium	milligrams per litre	Annual / Quarterly	0.0002	<0.0001	<0.0001	-	<0.0001	-	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	0.0002
Calcium	milligrams per litre	Annual	1000	277	59	-	Not required	-	128	3	3	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	225	58	-	42	-	57	Not required	Not required	Not required	Not required	36
Chloride (Cl)	milligrams per litre	Annual	350	195	65	-	Not required	-	216	218	164	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVOCs)	milligrams per litre	Annual	-	Not required	Not required	-	Not required	-	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	milligrams per litre	Annual / Quarterly	0.001	Not required	Not required	-	Not required	-	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	milligrams per litre	Annual / Quarterly	0.0033	0.006	<0.001	-	0.002	-	<0.001	<0.001	<0.001	0.001	<0.001	0.001
Cobalt	milligrams per litre	Annual / Quarterly	0.0014	0.002	<0.001	-	<0.001	-	<0.001	0.049	0.025	Not required	Not required	<0.001
Copper	milligrams per litre	Annual / Quarterly	0.0014	0.005	<0.001	-	<0.001	-	0.011	0.002	0.004	0.002	<0.001	0.006
Ethylbenzene	milligrams per litre	Annual	0.08	<1	<1	-	Not required	-	<1	<1	<1	Not required	Not required	Not required
Fluoride	milligrams per litre	Annual	1	0.2	0.2	-	Not required	-	0.2	0.1	<0.1	Not required	Not required	Not required
Lead	milligrams per litre	Annual / Quarterly	0.0034	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	Not required	Not required	0.002
Magnesium	milligrams per litre	Annual	-	72	36	-	Not required	-	43	20	13	Not required	Not required	Not required
Manganese	milligrams per litre	Annual / Quarterly	0.2 / 1.9	0.608	0.066	-	0.006	-	0.004	1.61	1.93	Not required	Not required	0.069
Mercury	milligrams per litre	Annual / Quarterly	0.00006	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0001	<0.0001	Not required	Not required	<0.0001
Nitrate (as Nitrogen)	milligrams per litre	Annual / Quarterly	2.40	0.1	0.03	-	2.28	-	9.38	0.1	0.38	0.02	0.02	5.28
Nitrite (as Nitrogen)	milligrams per litre	Annual / Quarterly	0.9	0.01	<0.01	-	0.02	-	<0.01	<0.01	0.15	<0.01	<0.01	0.03
Organochlorine Pesticides (OCP)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	-	Not required	-	<LOR	<LOR	<LOR	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	-	Not required	-	<LOR	<LOR	<LOR	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Annual	0.00001	<LOR	<LOR	-	Not required	-	<LOR	<LOR	<LOR	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	milligrams per litre	Quarterly	0.13 ^a	0.5	0.12	-	0.14	-	0.33	<0.01	<0.01	0.08	0.02	0.34
Perfluorooctanoic acid (PFOA)	milligrams per litre	Quarterly	0.56 ^b / 220 ^a	0.76	0.25	-	0.32	-	0.52	<0.01	<0.01	0.14	0.02	0.53
Sum of PFHxS and PFOS	milligrams per litre	Quarterly	0.07 ^a	1.57	0.33	-	0.65	-	0.86	<0.01	<0.01	0.34	0.08	0.92
Potassium	milligrams per litre	Annual	-	72	18	-	Not required	-	46	3	3	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	-	Not required	-	<LOR	<LOR	<LOR	Not required	Not required	Not required
Sodium	milligrams per litre	Annual	230	157	63	-	Not required	-	130	78	62	Not required	Not required	Not required
Sulphate (as SO ₄)	milligrams per litre	Annual	1000	<10	178	-	Not required	-	76	9	8	Not required	Not required	Not required
Toluene	milligrams per litre	Annual	0.18	<1	<1	-	Not required	-	<1	<1	<1	Not required	Not required	Not required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1,500	527	-	598	-	958	378	273	Not required	Not required	888
Total Iron	milligrams per litre	Annual	0.2	Not required	-	-	Not required	-	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	72	1.8	-	1.3	-	1.8	Not required	Not required	0.6	0.4	2.7
Total Nitrogen	milligrams per litre	Quarterly	0.25	72.1	1.8	-	3.6	-	11.2	Not required	Not required	0.6	0.4	8

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	65	27	-	20	-	25	3	23	12	8	25
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	410	<LOR	-	Not required	-	<LOR	<LOR	<LOR			
Total Phenolics	milligrams per litre	Annual	0.32	<LOR	<LOR	-	Not required	-	<LOR	<LOR	<LOR	Not required	Not required	Not required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	0.76	Not required	-	0.03	-	0.03	Not required	Not required	0.04	0.05	0.05
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	17	-	<5	-	<5	Not required	Not required	<5	14	1,110
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	<LOR	<LOR	-	Not required	-	<LOR	<LOR	<LOR	Not required	Not required	Not required
Xylenes	milligrams per litre	Annual	0.075	<1	<1	-	Not required	-	<1	<1	<1	Not required	Not required	Not required
Zinc	milligrams per litre	Annual / Quarterly	0.008	0.007	<0.005	-	<0.005	-	0.204	0.068	0.074	0.006	<0.005	0.122
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.72	-	-	-	-	-	-	14.73	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2749	315.8	-	1000	-	2231	815	362.8	66.1	330.5	1424
PH	PH Units	Quarterly	6.5-8	7.06	8.16	-	7.94	-	7.3	5.9	5.47	7.46	6.83	7.66
Temp	Degrees Celsius	Quarterly	-	16	12.4	-	10.6	-	17.1	16.5	19.1	9.9	12.2	14.7

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection - slightly to moderately disturbed systems).
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)
	5 EPA3 and EPA5 unable to be collected due to the locations being dry at the time of sampling
	6 EPA7 standing water level unable to be gauged due to equipment issues

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 17 NOVEMBER 2023

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/epoecopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (OTC)
Alkalinity (as calcium carbonate)	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Aluminium	milligrams per litre	Annual / Quarterly	0.055	<0.01	Not Required	0.83	0.19	-	<0.01	Not Required	Not Required	0.42	-	0.23
Ammonia (as nitrogen)	milligrams per litre	Quarterly	0.9 milligrams per litre for Points 2 & 5	56.7	0.02	0.03	0.42	-	0.06	0.1	0.18	0.05	-	0.21
Arsenic	milligrams per litre	Annual / Quarterly	0.010 / 0.024	0.001	Not Required	0.002	0.002	-	Not Required	Not Required	Not Required	<0.01	-	0.001
Barium	milligrams per litre	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Benzene	milligrams per litre	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Biological Oxygen Demand (BOD)	milligrams per litre	Quarterly	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Cadmium	milligrams per litre	Annual / Quarterly	0.0002	<0.0001	Not Required	<0.0001	<0.0001	-	Not Required	Not Required	Not Required	<0.0001	-	<0.0001
Calcium	milligrams per litre	Annual	1000	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chemical Oxygen Demand (COD)	milligrams per litre	Quarterly	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chloride (Cl)	milligrams per litre	Annual	350	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chlorinated Volatile Compounds (CVCs)	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chromium (hexavalent)	milligrams per litre	Annual / Quarterly	0.001	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chromium (total)	milligrams per litre	Annual / Quarterly	0.0033	0.007	Not Required	0.001	<0.001	-	0.001	Not Required	Not Required	<0.001	-	0.001
Cobalt	milligrams per litre	Annual / Quarterly	0.0014	0.002	Not Required	<0.001	<0.001	-	Not Required	Not Required	Not Required	<0.001	-	<0.001
Copper	milligrams per litre	Annual / Quarterly	0.0014	0.004	Not Required	0.002	<0.001	-	<0.001	Not Required	Not Required	<0.001	-	<0.001
Ethylbenzene	milligrams per litre	Annual	0.08	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Fluoride	milligrams per litre	Annual	1	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Lead	milligrams per litre	Annual / Quarterly	0.0034	<0.001	Not Required	0.002	<0.001	-	Not Required	Not Required	Not Required	<0.001	-	<0.001
Magnesium	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Manganese	milligrams per litre	Annual / Quarterly	0.2 / 1.9	0.464	Not Required	0.206	0.506	-	Not Required	Not Required	Not Required	0.082	-	0.299
Mercury	milligrams per litre	Annual / Quarterly	0.00006	<0.0001	Not Required	<0.0001	<0.0001	-	Not Required	Not Required	Not Required	<0.0001	-	<0.0001
Nitrate (as Nitrogen)	milligrams per litre	Annual / Quarterly	2.40	0.58	Not Required	0.01	3.82	-	3.34	Not Required	Not Required	0.06	-	0.08
Nitrite (as Nitrogen)	milligrams per litre	Annual / Quarterly	0.9	0.02	Not Required	<0.01	<0.01	-	0.02	Not Required	Not Required	<0.01	-	<0.01
Organochlorine Pesticides (OCP)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Organophosphorus Pesticides (OPP)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Perfluorooctane sulfonic acid (PFOS)	milligrams per litre	Quarterly	0.13*	0.48	0.09	<0.01	0.14	-	0.36	<0.01	<0.01	<0.01	-	0.31
Perfluorooctanoic acid (PFOA)	milligrams per litre	Quarterly	0.56* / 220*	0.73	0.25	<0.01	0.16	-	0.49	<0.01	<0.01	<0.01	-	0.45
Sum of PFHxS and PFOS	milligrams per litre	Quarterly	0.07*	1.63	0.32	<0.01	0.36	-	0.85	<0.01	<0.01	<0.01	-	0.8
Potassium	milligrams per litre	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Semi-volatile Organic Compounds (SVOCs)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Sodium	milligrams per litre	Annual	230	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Sulphate (as SO ₄)	milligrams per litre	Annual	1000	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Toluene	milligrams per litre	Annual	0.18	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Dissolved Solids (TDS)	milligrams per litre	Quarterly	2000	1,660	606	162	406	-	952	714	343	146	-	738
Total Iron	milligrams per litre	Annual	0.2	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	-	59.8	Not Required	1.9	2.3	-	1.6	Not Required	Not Required	1	-	1.5
Total Nitrogen	milligrams per litre	Quarterly	0.25	60.4	Not Required	1.9	5.9	-	5	Not Required	Not Required	1.1	-	1.6

Total Organic Carbon (TOC)	milligrams per litre	Quarterly	-	66	30	30	25	-	25	5	5	13	-	26
Total Petroleum Hydrocarbons (TPH)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Phenolics	milligrams per litre	Annual	0.32	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Phosphorus	milligrams per litre	Annual / Quarterly	0.02	0.28	Not Required	0.09	0.06	-	0.03	Not Required	Not Required	0.07	-	0.04
Total Suspended Solids (TSS)	milligrams per litre	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	<5	31	<5	-	222	Not Required	Not Required	11	-	8
Volatile Organic Compounds (VOCs)	milligrams per litre	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Xylenes	milligrams per litre	Annual	0.075	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Zinc	milligrams per litre	Annual / Quarterly	0.008	0.012	Not Required	0.008	0.008	-	0.211	Not Required	Not Required	0.011	-	<0.005
FIELD MEASUREMENTS														
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	2.19	-	-	-	-	-	38.34	16.22	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2424	782	171.1	530.9	-	1685	1130	485.7	159.2	-	1118
PH	PH Units	Quarterly	6.5-8	6.97	8.41	7.74	7.45	-	8.03	5.63	5.6	8.02	-	7.65
Temp	Degrees Celsius	Quarterly	-	17.6	24.9	23.9	19.1	-	26.9	18.8	19.4	20.3	-	20.6

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	3 NEPM 2020, Table 5: Aquatic ecosystems: freshwater and marine water guideline values (exposure scenario: freshwater 95% species protection – slightly to moderately disturbed systems).
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)
	5 EPAS unable to be collected due to the locations being dry at the time of sampling

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 7TH FEB 2024

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/proceopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (OTC)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Aluminium	mg/L	Annual / Quarterly	0.055	<0.01	Not Required	0.2	0.28	-	<0.01	Not Required	Not Required	0.23	-	0.21
Ammonia (as nitrogen)	mg/L	Quarterly	0.9 milligrams per litre for Points 2 & 5	66	0.08	0.18	0.06	-	0.04	0.62	0.1	0.06	-	0.04
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	<0.01	-	Not Required
Barium	mg/L	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Benzene	mg/L	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Biological Oxygen Demand (BOD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Cadmium	mg/L	Annual / Quarterly	0.0002	<0.0001	Not Required	<0.0001	<0.0001	-	Not Required	Not Required	Not Required	<0.0001	-	<0.0001
Calcium	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chloride (Cl)	mg/L	Annual	350	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chromium (hexavalent)	mg/L	Annual / Quarterly	0.001	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.005	Not Required	<0.001	<0.001	-	<0.001	Not Required	Not Required	0.001	-	0.001
Cobalt	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	<0.001	<0.001	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Copper	mg/L	Annual / Quarterly	0.0014	0.003	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	<0.001	-	<0.001
Ethylbenzene	mg/L	Annual	0.08	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Fluoride	mg/L	Annual	1	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Lead	mg/L	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Magnesium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Mercury	mg/L	Annual / Quarterly	0.00006	<0.0001	Not Required	<0.0001	<0.0001	-	Not Required	Not Required	Not Required	<0.0001	-	<0.0001
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	<0.01	Not Required	<0.01	0.2	-	4.58	Not Required	Not Required	0.26	-	0.06
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	<0.01	Not Required	<0.01	<0.01	-	0.01	Not Required	Not Required	<0.01	-	<0.01
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13 ^a	0.32	0.05	<0.01	0.03	-	0.29	<0.01	<0.01	0.03	-	<0.01
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56 ^b / 220 ^a	0.59	0.13	<0.01	0.02	-	0.48	<0.01	<0.01	0.02	-	<0.01
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07 ^a	1.49	0.19	<0.01	0.07	-	0.83	<0.01	<0.01	0.07	-	<0.01
Potassium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Sodium	mg/L	Annual	230	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Sulphate (as SO ₄)	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Toluene	mg/L	Annual	0.18	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	1,510	341	112	156	-	1130	406	171	160	-	135
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	59.8	Not Required	0.9	0.8	-	1.8	Not Required	Not Required	1.2	-	1.1
Total Nitrogen	mg/L	Quarterly	0.25	60.4	Not Required	0.9	1	-	6.4	Not Required	Not Required	1.5	-	1.2

Total Organic Carbon (TOC)	mg/L	Quarterly	-	53	16	10	11	-	25	7	11	12	-	11
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Phenolics	mg/L	Annual	0.32	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Total Phosphorus	mg/L	Annual / Quarterly	0.02	0.86	Not Required	0.04	0.05	-	0.02	Not Required	Not Required	0.06	-	0.05
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	<5	11	<5	-	7	Not Required	Not Required	<5	-	<5
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Xylenes	mg/L	Annual	0.075	Not Required	Not Required	Not Required	Not Required	-	Not Required	Not Required	Not Required	Not Required	-	Not Required
Zinc	mg/L	Annual / Quarterly	0.008	0.009	Not Required	<0.005	<0.005	-	0.31	Not Required	Not Required	0.011	-	<0.005

FIELD MEASUREMENTS

Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.69	-	-	-	-	-	37.02	12.52	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2110	532	161.1	232.6	-	1799	730	262	234.9	-	221.4
PH	PH Units	Quarterly	6.5-8	6.99	6.83	7.14	7.12	-	7.53	5.46	5.47	7.47	-	6.51
Temp	Degrees Celcius	Quarterly	-	19.9	25.5	21.2	20.2	-	24.7	17.9	16.9	20.7	-	22.1

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	NEPM 2020
	3 Table 5: Aquatic ecosystems

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

5 EPAS unable to be collected due to the locations being dry at the time of sampling

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 7 May 2024
EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/proposals/>
WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	<0.01	0.07	0.48	0.1	80.7	<0.01	Not Required	Not Required	0.06	0.13	Not required	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	67	0.04	0.02	0.06	0.38	0.02	<0.01	0.16	0.03	0.03	0.03	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Barium	mg/L	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.002	0.0003	Not Required	Not Required	<0.0001	<0.0001	Not required	Not required	Not required
Calcium	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (hexavalent)	mg/L	Annual / Quarterly	0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Not Required	Not Required	<0.01	<0.01	<0.01	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.004	<0.001	<0.001	<0.001	0.103	<0.001	Not Required	Not Required	<0.001	<0.001	Not required	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	0.265	Not Required	Not Required	Not Required	<0.001	<0.001	Not required	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Magnesium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	0.3	Not Required	0.02	2.6	Not Required	9.88	Not Required	Not Required	0.36	0.22	0.05	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	0.02	-	<0.01	0.02	Not Required	0.02	Not Required	Not Required	<0.01	<0.01	<0.01	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13*	0.48	0.06	<0.01	0.12	0.06	0.31	<0.01	0.01	0.07	0.04	<0.01	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56* / 220*	0.76	0.19	<0.01	0.17	0.05	0.54	<0.01	<0.01	0.1	0.07	<0.01	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07*	1.55	0.21	<0.01	0.31	0.08	0.78	<0.01	0.02	0.19	0.12	<0.01	Not required	Not required
Potassium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	1,520	634	74	285	538	1,160	834	111	219	160	84	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	76.6	Not Required	0.4	1.2	Not Required	2.4	Not Required	Not Required	0.6	0.6	0.5	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	76.9	Not Required	0.4	3.8	Not Required	12.3	Not Required	Not Required	1	0.8	0.6	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	67	24	5	10	19	25	<1	13	8	7	5	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phosphorus	mg/L	Annual / Quarterly	0.02	0.22	Not Required	Not Required	0.02	Not Required	0.03	Not Required	Not Required	0.02	0.01	0.03	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	17	20	<5	604	<5	Not Required	Not Required	<5	<5	<5	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Xylenes	mg/L	Annual	0.075	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Zinc	mg/L	Annual / Quarterly	0.008	0.01	<0.005	<0.005	0.008	Not Required	0.209	Not Required	Not Required	<0.005	<0.005	Not required	Not required	Not required

FIELD MEASUREMENTS

Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.7	-	-	-	-	-	45.18	13.74	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2770	913	144	678	698	1720	1566	340.5	405.3	311.3	185.2	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.8	7.58	6.94	7.4	6.89	5.47	5.18	5.22	6.91	6.67	5.29	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	18.3	23.6	22.7	22.4	19.2	25	18.1	18.7	25.6	24.1	22.2	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	NEPM 2020,
	3 Table 5: Aquatic invertebrates

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 01ST AUGUST 2024

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/prpoeopp/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	1,290	186	Not required	Not required	141	496	36	27	Not required	Not required	Not required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	<0.01	0.06	0.26	0.40	0.79	0.17	<0.01	0.04	0.14	0.29	0.35	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	68.8	0.03	0.11	0.02	1.08	0.02	0.20	0.11	0.01	0.04	<0.01	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	0.001	<0.001	<0.001	<0.001	Not required	<0.001	0.002	0.002	Not required	Not required	<0.001	Not required	Not required
Barium	mg/L	Quarterly	2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	<1	<1	Not required	Not required	Not required	<1	<1	<1	Not required	Not required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	14	3	4	2	8	2	Not required	Not required	Not required	Not required	3	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	Not required	Not required
Calcium	mg/L	Annual	1000	211	107	Not required	Not required	Not required	115	2	1	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	159	26	22	19	70	74	Not required	Not required	Not required	Not required	<10	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	200	44	Not required	Not required	64	205	163	36	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Chromium (hexavalent)	mg/L	Annual / Quarterly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.007	<0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	0.002	<0.001	<0.001	<0.001	Not required	<0.001	0.035	0.009	Not required	Not required	<0.001	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	<0.001	0.001	<0.001	<0.001	Not required	0.015	<0.001	<0.001	Not required	Not required	<0.001	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	<2	<2	Not required	Not required	Not required	<2	<2	<2	Not required	Not required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	0.2	0.2	Not required	Not required	Not required	0.2	0.1	<0.1	Not required	Not required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	<0.001	<0.001	<0.001	<0.001	Not required	0.001	<0.001	<0.001	Not required	Not required	<0.001	Not required	Not required
Magnesium	mg/L	Annual	-	67	34	Not required	Not required	Not required	51	13	4	Not required	Not required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	0.516	0.011	0.009	0.004	Not required	0.080	1.13	0.556	Not required	Not required	0.006	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	<0.0001	<0.0001	<0.0001	<0.0001	Not required	<0.0001	<0.0001	<0.0001	Not required	Not required	<0.0001	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	<0.01	1.05	0.02	0.73	3.37	16.8	<0.01	<0.01	0.31	0.63	0.03	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	<0.01	0.02	<0.01	0.01	0.21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13 ^a	0.54	0.04	<0.01	0.03	0.07	0.28	0.03	0.05	0.07	0.06	0.02	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56 ^a / 220 ^a	0.74	0.16	<0.01	0.02	0.11	0.50	<0.01	<0.01	<0.01	0.02	<0.01	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07 ^a	1.72	0.17	<0.01	0.07	0.12	0.82	0.03	0.05	0.08	0.10	0.04	Not required	Not required
Potassium	mg/L	Annual	-	75	17	Not required	Not required	Not required	57	2	3	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	140	47	Not required	Not required	Not required	126	62	22	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	2	306	Not required	Not required	302	92	7	6	Not required	Not required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	16	<1	<1	Not required	Not required	Not required	<1	<1	<1	Not required	Not required	-	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	1,500	638	114	142	635	994	324	92	Not required	Not required	122	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	85.4	1.5	0.6	0.6	4.6	2.4	Not required	Not required	0.3	0.6	0.5	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	85.4	2.6	0.6	1.3	8.2	19.2	Not required	Not required	0.6	1.2	0.5	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	68	23	9	10	28	29	3	5	6	9	8	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	560	<LOR	Not required	Not required	Not required	<LOR	<LOR	340	Not required	Not required	Not required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	<2	<2	Not required	Not required	Not required	<2	<2	<2	Not required	Not required	Not required	Not required	Not required
Total Phosphorus	mg/L	Annual / Quarterly	0.02	0.47	Not required	0.04	0.06	Not required	0.04	Not required	Not required	0.01	0.03	0.02	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	9	11	8	340	14	Not required	Not required	<5	<5	<5	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Xylenes	mg/L	Annual	0.075	32	<2	<2	Not required	Not required	Not required	<2	<2	<2	Not required	Not required	-	Not required
Zinc	mg/L	Annual / Quarterly	0.008	<0.005	<0.005	0.007	0.009	0.063	0.252	0.083	0.019	<0.005	<0.005	<0.005	Not required	Not required
FIELD MEASUREMENTS																
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.7	-	-	-	-	-	45.18	13.74	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2796	971	198.2	258.5	258.5	956	319.9	526.7	194.6	250.2	202.2	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.9	8.18	7.15	7.19	7.19	6.82	5.63	5.16	6.82	7.22	7.21	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	16.4	15.5	12.4	12.1	12.1	13.1	19.1	18.7	11.3	11.8	12.4	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	NEPM 2020.
	3 Table 5: Aquatic invertebrates
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 6 November 2024

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/proposals/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	<0.01	0.07	0.48	0.1	80.7	<0.01	Not Required	Not Required	0.06	0.13	Not required	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	67	0.04	0.02	0.06	0.38	0.02	<0.01	0.16	0.03	0.03	0.03	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Barium	mg/L	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	0.002	0.0003	Not Required	Not Required	<0.0001	<0.0001	Not required	Not required	Not required
Calcium	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (hexavalent)	mg/L	Annual / Quarterly	0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Not Required	Not Required	<0.01	<0.01	<0.01	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.004	<0.001	<0.001	<0.001	0.103	<0.001	Not Required	Not Required	<0.001	<0.001	Not required	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	0.265	Not Required	Not Required	Not Required	<0.001	<0.001	Not required	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Magnesium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	0.3	Not Required	0.02	2.6	Not Required	9.88	Not Required	Not Required	0.36	0.22	0.05	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	0.02	-	<0.01	0.02	Not Required	0.02	Not Required	Not Required	<0.01	<0.01	<0.01	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13*	0.48	0.06	<0.01	0.12	0.06	0.31	<0.01	0.01	0.07	0.04	<0.01	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56* / 220*	0.76	0.19	<0.01	0.17	0.05	0.54	<0.01	<0.01	0.1	0.07	<0.01	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07*	1.55	0.21	<0.01	0.31	0.08	0.78	<0.01	0.02	0.19	0.12	<0.01	Not required	Not required
Potassium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	1,520	634	74	285	538	1,160	834	111	219	160	84	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	76.6	Not Required	0.4	1.2	Not Required	2.4	Not Required	Not Required	0.6	0.6	0.5	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	76.9	Not Required	0.4	3.8	Not Required	12.3	Not Required	Not Required	1	0.8	0.6	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	67	24	5	10	19	25	<1	13	8	7	5	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phosphorus	mg/L	Annual / Quarterly	0.02	0.22	Not Required	Not Required	0.02	Not Required	0.03	Not Required	Not Required	0.02	0.01	0.03	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	17	20	<5	604	<5	Not Required	Not Required	<5	<5	<5	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Xylenes	mg/L	Annual	0.075	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Zinc	mg/L	Annual / Quarterly	0.008	0.01	<0.005	<0.005	0.008	Not Required	0.209	Not Required	Not Required	<0.005	<0.005	Not required	Not required	Not required

FIELD MEASUREMENTS

Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.7	-	-	-	-	-	45.18	13.74	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2770	913	144	678	698	1720	1566	340.5	405.3	311.3	185.2	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.8	7.58	6.94	7.4	6.89	5.47	5.18	5.22	6.91	6.67	5.29	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	18.3	23.6	22.7	22.4	19.2	25	18.1	18.7	25.6	24.1	22.2	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	NEPM 2020,
	3 Table 5: Aquatic invertebrates
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 6 February 2025

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/proposals/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	<0.05	Not Required	<0.05	0.06	Not Required	<0.05	Not Required	Not Required	<0.05	0.06	Not required	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	87	0.05	0.07	0.04	0.13	0.04	0.03	0.1	0.02	0.09	0.03	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Barium	mg/L	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	<0.0002	Not Required	<0.0002	<0.0002	Not Required	0.0012	Not Required	Not Required	<0.0002	<0.0002	<0.0002	Not required	Not required
Calcium	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (Hexavalent)	mg/L	Annual / Quarterly	0.001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.005	Not Required	<0.001	<0.001	Not Required	<0.001	Not Required	Not Required	<0.001	<0.001	<0.001	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	<0.001	Not Required	0.009	0.001	Not Required	0.016	Not Required	Not Required	0.001	0.001	0.005	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Magnesium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	0.04	Not Required	0.06	1.7	Not Required	9.4	Not Required	Not Required	0.47	0.41	5.1	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	<0.02	Not Required	<0.02	<0.02	Not Required	<0.02	Not Required	Not Required	<0.02	<0.02	<0.02	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13 ^a	0.58	0.04	<0.01	0.16	0.03	0.26	<0.01	<0.01	0.11	0.08	0.04	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56 ^a / 220 ^a	0.85	0.11	<0.01	0.22	0.02	0.39	<0.01	<0.01	0.12	0.08	0.39	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07 ^a	1.98	0.15	<0.01	0.04	0.04	0.61	<0.01	<0.01	0.30	0.18	0.79	Not required	Not required
Potassium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	1,400	510	84	280	220	910	820	120	Not Required	Not Required	610	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	110.0	Not Required	0.9	0.8	Not Required	2.3	Not Required	Not Required	0.7	0.8	1.6	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	110.0	Not Required	1.0	2.5	Not Required	12	Not Required	Not Required	1.2	1.2	6.7	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	13	9.4	7.1	9.9	5.8	8.6	<5	<5	8.1	9.3	10.0	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phosphorus	mg/L	Annual / Quarterly	0.02	<0.01	Not Required	0.07	0.03	Not Required	<0.01	Not Required	Not Required	0.01	0.01	0.02	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	13	<5	5.2	750	<5	Not Required	Not Required	<5	<5	<5	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Xylenes	mg/L	Annual	0.075	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Zinc	mg/L	Annual / Quarterly	0.008	0.035	Not Required	0.017	0.017	Not Required	0.84	Not Required	Not Required	0.015	0.010	Not required	Not required	Not required
FIELD MEASUREMENTS																
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.48	-	-	-	-	-	45.78	12.74	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	2407	1132	126.6	258.5	360.3	1411	1312	202.8	194.6	250.2	900	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.56	6.83	6.55	7.19	6.6	6.52	6.42	6.71	6.82	7.22	6.55	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	21.1	26.4	20.2	12.1	23	21.1	19.1	18.7	11.3	11.8	19.7	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	NEPM 2020,
	3 Table 5: Aquatic invertebrates

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 27 May 2025
EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/proposals/>
WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	0.88	Not Required	0.77	0.58	Not Required	<0.05	Not Required	Not Required	0.62	0.42	0.9	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	43	0.11	0.63	<0.01	0.19	<0.01	<0.01	0.19	0.03	0.05	0.05	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Barium	mg/L	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	0.0004	Not Required	<0.0002	<0.0002	Not Required	0.0008	Not Required	Not Required	<0.0002	<0.0002	<0.0002	Not required	Not required
Calcium	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (Hexavalent)	mg/L	Annual / Quarterly	0.001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.006	Not Required	<0.001	<0.001	Not Required	<0.001	Not Required	Not Required	<0.001	<0.001	0.001	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	0.008	Not Required	0.002	0.002	Not Required	0.016	Not Required	Not Required	0.003	0.002	0.002	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Magnesium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	0.03	Not Required	0.1	0.39	Not Required	12	Not Required	Not Required	0.46	0.59	0.17	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	<0.02	Not Required	<0.02	<0.02	Not Required	<0.02	Not Required	Not Required	<0.02	0.02	<0.02	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13*	0.26	0.03	<0.01	0.02	0.03	0.36	<0.01	0.02	0.01	<0.01	<0.01	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56* / 220*	0.36	0.1	<0.01	0.01	0.02	0.49	<0.01	<0.01	0.01	<0.01	<0.01	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07*	0.86	0.11	<0.01	0.04	0.03	0.74	<0.01	0.04	0.03	<0.01	<0.01	Not required	Not required
Potassium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	910	430	140	190	310	1300	860	110	Not Required	Not Required	170	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	44	Not Required	1.5	1.6	Not Required	3.6	Not Required	Not Required	< 0.2	0.4	0.6	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	44	Not Required	1.6	2	Not Required	16	Not Required	Not Required	0.5	1	0.8	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	38	<20	<25	<25	<20	<20	<25	38	<25	<25	<25	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phosphorus	mg/L	Quarterly	0.02	0.28	Not Required	0.07	0.05		0.02	Not Required	Not Required	0.05	0.06	0.07	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	18	5.2	5.2	41	<5	Not Required	Not Required	7	<5	<5	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Xylenes	mg/L	Annual	0.075	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Zinc	mg/L	Annual / Quarterly	0.008	0.98	Not Required	0.005	< 0.005	Not Required	0.47	Not Required	Not Required	< 0.005	< 0.005	Not Required	Not required	Not required
FIELD MEASUREMENTS																
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.26	-	-	-	-	-	45.05	12.5	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	1557	547	157.7	191	317.8	1778	1472	192.3	194.6	178.3	160.3	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.96	7.76	6.91	7.54	6.89	7.6	5.8	5.9	-	7.63	7.48	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	16.8	14.5	12.9	13.1	11.5	18.1	14.9	14.4	11.3	13.3	13	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
	Limit of reporting exceed adopted trigger value
	1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)
	2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia
	NEPM 2020,
	3 Table 5: Aquatic invertebrates
	4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 27 August 2025

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/proposals/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	750	170	Not required	Not required	310	520	60	< 20	Not required	Not required	Not required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	< 0.05	0.21	0.23	0.3	Not required	0.41	< 0.05	< 0.05	Not required	Not required	0.32	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	39	0.04	< 0.01	0.01	3.5	< 0.01	0.02	0.04	< 0.01	< 0.01	< 0.01	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	< 0.001	< 0.001	< 0.001	< 0.001	Not required	0.001	< 0.001	< 0.001	Not required	Not required	< 0.001	Not required	Not required
Barium	mg/L	Annual / Quarterly	2	0.28	0.05	< 0.02	0.03	Not required	0.27	0.12	0.07	Not required	Not required	0.02	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	< 0.001	< 0.001	Not required	Not required	Not required	< 0.001	< 0.001	< 0.001	Not required	Not required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	82	< 5	< 5	< 5	< 5	< 5	Not required	Not required	Not required	Not required	< 5	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	Not required	0.0008	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	Not required	Not required
Calcium	mg/L	Annual	1000	150	79	Not required	Not required	Not required	200	18	3.6	Not required	Not required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	57	25	< 25	< 25	81	69	Not required	Not required	Not required	Not required	< 25	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	120	30	Not required	Not required	44	210	540	40	Not required	Not required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (Hexavalent)	mg/L	Annual / Quarterly	0.001	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.003	< 0.001	< 0.001	0.001	Not required	0.002	< 0.001	< 0.001	0.001	0.001	< 0.001	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	< 0.001	< 0.001	< 0.001	< 0.001	Not required	< 0.001	0.011	0.002	Not required	Not required	< 0.001	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	0.001	0.002	0.001	0.002	Not required	0.018	< 0.001	< 0.001	0.001	0.002	0.001	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	< 0.001	< 0.001	Not required	Not required	Not required	< 0.001	< 0.001	< 0.001	Not required	Not required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	< 0.2	< 0.1	Not required	Not required	Not required	0.3	< 0.2	< 0.1	Not required	Not required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	< 0.001	< 0.001	< 0.001	< 0.001	Not required	0.003	< 0.001	< 0.001	Not required	Not required	< 0.001	Not required	Not required
Magnesium	mg/L	Annual	-	41	25	Not required	Not required	Not required	57	46	5	Not required	Not required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	0.33	< 0.005	0.013	0.007	Not required	0.11	1.3	0.32	Not required	Not required	0.008	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	< 0.0001	< 0.0001	< 0.0001	< 0.0001	Not required	< 0.0001	< 0.0001	< 0.0001	Not required	Not required	< 0.0001	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	0.4	0.63	0.03	1.4	Not required	19	Not required	Not required	0.98	0.2	0.74	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	0.02	< 0.02	< 0.02	< 0.02	Not required	< 0.02	Not required	Not required	< 0.02	< 0.02	< 0.02	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	< 0.001	< 0.001	Not required	Not required	Not required	< 0.001	< 0.001	< 0.001	Not required	Not required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13 ^a	0.34	0.05	< 0.01	0.04	0.13	0.66	< 0.01	0.03	0.04	< 0.01	0.01	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56 ^a / 220 ^a	< 1	0.15	< 0.01	0.05	0.28	0.86	< 0.01	< 0.01	0.06	< 0.01	0.02	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07 ^a	1.02	0.2	< 0.01	0.1	0.25	1.34	< 0.01	0.05	0.11	< 0.01	0.03	Not required	Not required
Potassium	mg/L	Annual	-	39	10	Not required	Not required	Not required	62	4.3	2.9	Not required	Not required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	<LOR	<LOR	Not required	Not required	Not required	<LOR	<LOR	<LOR	Not required	Not required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	82	35	Not required	Not required	Not required	130	190	22	Not required	Not required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	110	160	Not required	Not required	360	350	24	7.7	Not required	Not required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	< 0.001	< 0.001	Not required	Not required	Not required	< 0.001	< 0.001	< 0.001	Not required	Not required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	860	470	74	160	890	1300	840	120	Not required	Not required	150	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	48	1.4	0.7	0.7	Not required	3.1	Not required	Not required	0.5	0.4	0.3	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	48	2.1	0.7	2.1	Not required	22	Not required	Not required	1.5	0.6	1.1	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	27	16	8.3	9.3	33	36	< 5	5.7	8.4	8.8	7.6	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	< 0.1	0.2	Not required	Not required	Not required	0.36	< 0.1	< 0.1	Not Required	Not Required	Not Required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	-	-	Not Required	Not Required	Not Required	-	-	-	Not Required	Not Required	Not Required	Not required	Not required
Total Phosphorus	mg/L	Annual / Quarterly	0.02	0.04	Not required	0.03	0.03	Not required	0.07	Not required	Not required	< 0.01	0.01	0.22	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not required	5.9	< 5	< 5	6.3	76	Not required	Not required	< 5	< 5	< 5	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	< LOD	< LOD	Not Required	Not Required	Not Required	< LOD	< LOD	< LOD	Not Required	Not Required	Not Required	Not required	Not required
Xylenes	mg/L	Annual	0.075	< 0.003	< 0.003	Not required	Not required	Not required	< 0.003	< 0.003	< 0.003	Not Required	Not Required	Not Required	Not required	Not required
Zinc	mg/L	Annual / Quarterly	0.008	0.014	< 0.005	0.01	0.008	Not required	0.46	0.15	0.28	0.007	0.006	< 0.005	Not required	Not required
FIELD MEASUREMENTS																
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.00	-	-	-	-	-	44.58	12.58	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	206.5	757	152.4	279	1431	2090	1895	240.4	276	1173.1	152.4	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.62	7.89	6.51	7.01	7.06	7.5	5.66	5.37	6.98	6.62	6.51	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	14.4	14.6	13.2	13.1	17.2	17.2	16.2	15.2	13.0	13.0	13.2	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
Light green	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
Yellow	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
Orange	Limit of reporting exceed adopted trigger value
1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)	
2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia	
NEPM 2020,	
3 Table 5: Aquatic invertebrates	
4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)	

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 19 November 2025

EPA LICENCE NUMBER 6061

<http://www.environment.nsw.gov.au/proposals/>

WOLLONDILLY SHIRE COUNCIL

62-64 Menangle Street PICTON NSW 2571

SAMPLING LOCATIONS				EPA1	EPA2	EPA3	EPA4	EPA5	EPA6	EPA7	EPA8	EPA11	EPA12	EPA13	EPA14	EPA15
Pollutant	Unit of Measure	Monitoring Frequency	Concentration Limits for Sampling Point	Well located south of pond	Sediment pond	Near Bargo site entrance, directly in creek upstream of landfill.	Directly in creek downstream of landfill.	Sediment pond	Leachate discharge	Well located next to road outside the Bargo site	Well located south eastern corner	Dog Trap Creek downstream of landfill (EPA4a)	Dog Trap Creek downstream of landfill (EPA4b)	Directly in creek downstream of leachate flow (DTC)	Discharge point (Sediment Pond A)	Discharge point (Sediment Pond B)
Alkalinity (as calcium carbonate)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Aluminium	mg/L	Annual / Quarterly	0.055	<0.05	Not Required	<0.05	<0.05	Not Required	<0.05	Not Required	Not Required	<0.05	<0.05	<0.05	Not required	Not required
Ammonia (as nitrogen)	mg/L	Quarterly	0.37 milligrams per litre for Points 2 & 5	73	0.02	0.03	0.07	-	1.4	0.01	0.01	<0.01	0.05	0.01	Not required	Not required
Arsenic	mg/L	Annual / Quarterly	0.010 / 0.024	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Barium	mg/L	Annual / Quarterly	2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Benzene	mg/L	Annual	0.001 / 0.950	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Biochemical Oxygen Demand (BOD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Cadmium	mg/L	Annual / Quarterly	0.0002	<0.0002	Not Required	<0.0002	<0.0002	Not Required	0.0009	Not Required	Not Required	<0.0002	<0.0002	<0.0002	Not required	Not required
Calcium	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chemical Oxygen Demand (COD)	mg/L	Quarterly	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chloride (Cl)	mg/L	Annual	350	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chlorinated Volatile Compounds (CVCs)	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (Hexavalent)	mg/L	Annual / Quarterly	0.001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Chromium (total)	mg/L	Annual / Quarterly	0.0033	0.006	Not Required	<0.001	0.001	Not Required	<0.001	Not Required	Not Required	<0.001	<0.001	<0.001	Not required	Not required
Cobalt	mg/L	Annual / Quarterly	0.0014	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Copper	mg/L	Annual / Quarterly	0.0014	<0.001	Not Required	<0.001	0.002	Not Required	0.02	Not Required	Not Required	0.003	0.002	0.011	Not required	Not required
Ethylbenzene	mg/L	Annual	0.08	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Fluoride	mg/L	Annual	1	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Lead	mg/L	Annual / Quarterly	0.0034	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Magnesium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Manganese	mg/L	Annual / Quarterly	0.2 / 1.9	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Mercury	mg/L	Annual / Quarterly	0.00006	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Nitrate (as Nitrogen)	mg/L	Annual / Quarterly	2.40	0.11	Not Required	<0.02	20	Not Required	18	Not Required	Not Required	9.2	9.8	14	Not required	Not required
Nitrite (as Nitrogen)	mg/L	Annual / Quarterly	0.9	0.06	Not Required	<0.02	0.07	Not Required	0.97	Not Required	Not Required	0.06	0.05	<0.02	Not required	Not required
Organochlorine Pesticides (OCP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Organophosphorus Pesticides (OPP)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Polycyclic Aromatic Hydrocarbons (PAH)	mg/L	Annual	0.00001	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Perfluorooctane sulfonic acid (PFOS)	µg/L	Quarterly	0.13 ^a	0.66	0.05	<0.01	0.48	-	0.55	0.01	<0.01	0.19	0.28	0.45	Not required	Not required
Perfluorooctanoic acid (PFOA)	µg/L	Quarterly	0.56 ^a / 220 ^a	0.77	0.21	<0.01	0.62	-	0.56	<0.01	<0.01	0.51	0.65	0.47	Not required	Not required
Sum of PFHxS and PFOS	µg/L	Quarterly	0.07 ^a	1.96	0.2	<0.01	1.4	-	1.19	<0.01	<0.01	0.91	0.96	1.07	Not required	Not required
Potassium	mg/L	Annual	-	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Semi-volatile Organic Compounds (SVOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sodium	mg/L	Annual	230	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Sulphate (as SO ₄)	mg/L	Annual	1000	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Toluene	mg/L	Annual	0.18	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Dissolved Solids (TDS)	mg/L	Quarterly	2000	-	520	110	890	-	1100	800	98	Not Required	Not Required	850	Not required	Not required
Total Iron	mg/L	Annual	0.2	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required	Not required
Total Kjeldahl Nitrogen	mg/L	Quarterly	-	79	Not Required	0.5	4.1	Not Required	6.9	Not Required	Not Required	3	3.9	4.1	Not required	Not required
Total Nitrogen	mg/L	Quarterly	0.25	79	Not Required	0.5	24	Not Required	26	Not Required	Not Required	12	14	18	Not required	Not required

Total Organic Carbon (TOC)	mg/L	Quarterly	-	190	26	8	57	-	86	<5	21	43	46	55	Not required	Not required
Total Petroleum Hydrocarbons (TPH)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phenolics	mg/L	Annual	0.32	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Total Phosphorus	mg/L	Quarterly	0.02	0.02	Not Required	<0.01	<0.01	-	0.01	Not Required	Not Required	<0.01	<0.01	<0.01	Not required	Not required
Total Suspended Solids (TSS)	mg/L	Quarterly	50 milligrams per litre for Points 2 & 5 only	Not Required	11	<5	8.3	-	<5	Not Required	Not Required	6.1	6.4	11	Not required	Not required
Volatile Organic Compounds (VOCs)	mg/L	Annual	Limit of reporting	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Xylenes	mg/L	Annual	0.075	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not required	Not required
Zinc	mg/L	Annual / Quarterly	0.008	0.11	Not Required	< 0.005	0.007	Not Required	0.54	Not Required	Not Required	0.008	0.009	Not required	Not required	Not required
FIELD MEASUREMENTS																
Standing Water Level	metres below top of casing (TOC)	Quarterly	Not required	1.3	-	-	-	-	-	44.65	13.42	-	-	-	-	-
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	809.4	806	209.5	463	-	1849	736	201.4	389	1160	978.3	Not required	Not required
PH	PH Units	Quarterly	6.5-8	6.62	8.2	7.21	7.02	-	7.5	5.89	6.75	7.07	7.38	7.81	Not required	Not required
Temp	Degrees Celcius	Quarterly	-	19.6	20.9	23.4	18.5	-	18.7	17.1	19.5	20.1	21.3	15.5	Not required	Not required

Table notes:

Black text	EPL requires quarterly or yearly monitoring of this mandatory parameter
Red text	EPL requirements not met
Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
Light green	Reported concentration exceeds adopted trigger value - trigger 1 (Written Trigger 1 / Trigger 2) where applicable
Yellow	Reported concentration exceeds adopted trigger value - trigger 2 (Written Trigger 1 / Trigger 2) where applicable
Orange	Limit of reporting exceed adopted trigger value

1 Micrograms per litre (µg/L) is 0.001 milligrams per litre (mg/L)

2 NEPM 2020, Table 1: Health-based guidance values for use in site investigations in Australia

NEPM 2020.

3 Table 5: Aquatic

microsiemens

4 Dissolved oxygen readings recorded as percentage of saturation (%Sat)

FIELD MEASUREMENTS																														
Standing Water Level (SWL)	m bgl	Quarterly	-	Not required	Not required	Not required	Not required	Not required	Not required	Not tested	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
Electrical Conductivity	microsiemens per centimetre	Quarterly	30-350	1007	716.6	1091	Not Measured	Not Measured	1334	Not tested	Not tested	2259	Not tested	907.1	991	Not tested	2098	Not Measured	2332	2361	Not measured*	2575	3938	2310	2575	2972	Not Measured	1218	532.4	
PH	PH Units	Quarterly	6.5-8	7.65	7.7	5.98	Not Measured	Not Measured	6.66	Not tested	Not tested	8.11	Not tested	8.03	7.21	Not tested	6.92	Not Measured	6.21	7.09	Not measured*	7.27	6.88	6.27	7.27	7.36	Not Measured	6.94	7.82	
Temp	Degree C	Quarterly	-	14.5	22.1	19.2	Not Measured	Not Measured	16.4	Not tested	Not tested	13.4	Not tested	21.3	19.1	Not tested	18.3	Not Measured	198.7	12	Not measured*	13.2	12.8	16.1	13.2	19.2	Not Measured	16.1	22.9	

1 Measured as Nitrate + Nitrite as N (Nox) for EPA3, EPA4, DTC, EPA4A and EPA4B only due to limited available sample containers (19/08/21 round)
2 Seepage monitoring observed only little to no moisture on rock surface, thus no samples were collected during the December 2021 round (21/12/21 round)
3 Electrical conductivity, pH and temperature not measured during the July 2022 round due to no water quality meter
4 Sample not tested for selected parameters due to insufficient sample volume during February 2022 monitoring rounds.

[illegible]

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Table C5 - Gas accumulation monitoring results - Historical

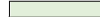
BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS
Historical and Current Gas Accumulation Monitoring for EPA Point 10 EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/ppoeopp/>
WOLLONDILLY SHIRE COUNCIL
62-64 Menangle Street PICTON NSW 2571

Sampling ID	Building	Unit of Measure	Trigger value	27-02-18	16-05-18	20-08-18	26-11-18	20-02-19	13-05-19	30-08-19	25-11-19	18-02-20	24-03-20	23-04-20	25-05-20	23-06-20	29-07-20	27-08-20	28-09-20	28-10-20	11-Nov-20	15-Dec-20	12-Jan-21
				Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (GHD)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)
1	Male amenities	% v/v	1	-	-	< 0.0003	0.00026	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00027	0.00023	0.0000
2	Female amenities	% v/v	1	-	-	< 0.0003	0.00026	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00027	0.00023	0.0000
3	Office	% v/v	1	0.00024	0.00018	< 0.0003	0.00026	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00027	0.00024	0.0000
4	Outside Office	% v/v	1	-	-	< 0.0003	0.00027	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00027	0.00023	0.0000
5	Shed	% v/v	1	0.00028	0.00019	< 0.0003	0.00026	< 0.0002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00027	0.00024	0.0000
6	Container 1	% v/v	1	0.00024	0.00020	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	-	0.0000
7	Weighbridge Office	% v/v	1	-	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	0.00024	0.0000
8*	External Office	% v/v	1	-	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-

Sampling ID	Building	Unit of	Trigger	11-Feb-21	26-Mar-21	23-Apr-21	12-May-21	08-Jun-21	27-Jul-21	19-Aug-21	21-Oct-21	18-Nov-21	16-Dec-21	13-Jan-22	10-Feb-22	18-Mar-22	12-Apr-22	17-May-22	14-Jun-22	12-Jul-22	18-Aug-22	13-Sep-22	12-Oct-22
				Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	
1	Male amenities	% v/v	1	0.0002	0.00025	0.00018	0.00023	0.00040	0.00024	0.00023	0.00013	0.00019	0.00022	0.0002	0.00028	0.0002	0.00021	0.00022	0.00023	0.00028	0.00021	0.00026	0.00025
2	Female amenities	% v/v	1	0.0002	0.00026	0.00016	0.00023	0.00038	0.00024	0.00024	0.00016	0.00017	0.00022	0.00023	0.00028	0.0002	0.00021	0.00022	0.00023	0.00028	0.00022	0.00026	0.00024
3	Office	% v/v	1	0.0002	0.00026	0.00018	0.00022	0.00039	0.00023	0.00023	0.00016	0.00018	0.00023	0.00024	0.00028	0.0002	0.00021	0.00022	0.00023	0.00028	0.00022	0.00026	0.00025
4	Outside Office	% v/v	1	0.0002	0.00026	0.00008	0.00020	0.00042	0.00024	0.00024	0.00015	0.00021	0.00022	0.00023	0.00028	0.00021	0.00021	0.00022	0.00023	0.00028	0.00022	0.00026	0.00025
5	Shed	% v/v	1	0.0002	0.00026	0.00017	0.00023	0.00044	0.00023	0.00024	0.00015	0.00019	0.00022	0.00023	0.00027	0.00021	0.00021	0.00022	0.00023	0.00028	0.00021	0.00026	0.00025
6	Container 1	% v/v	1	0.0002	0.00026	0.00018	0.00025	0.00040	0.00024	0.00023	0.00015	0.00015	0.00021	0.00022	0.00023	0.00024	0.00021	0.00022	0.00025	0.00032	0.00022	0.00025	0.00024
7	Weighbridge Office	% v/v	1	0.0002	0.00026	0.00016	0.00025	0.00041	0.00023	0.00024	0.00015	0.00017	0.00023	0.00022	0.00028	0.00021	0.00021	0.00023	0.00024	0.00033	0.00022	0.00025	0.00025
8*	External Office	% v/v	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sampling ID	Building	Unit of Measure	Trigger value	08-Nov-22	20-Dec-23	17-Jan-23	16-Feb-23	29-Mar-23	27-Apr-23	23-May-23	06-Jun-23	01-Aug-23	01-Aug-23	08-Sep-23	04-Oct-23	16-Nov-23	08-Dec-23	09-Jan-24	29-Feb-24	05-Mar-24	04-Apr-24	07-May-24	11-Jun-24
				Current monitoring round (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	
1	Male amenities	% v/v	1	0.00022	0.00023	0.00038	0.00021	0.00027	0.00014	0.00014	0.00028	0.00024	0.00013	0.00022	0.00029	0.00010	0.00008	0.00021	0.00009	0.00026	0.00008	0.00010	0.00024
2	Female amenities	% v/v	1	0.00022	0.00023	0.00036	0.00020	0.00027	0.00014	0.00012	0.00028	0.00025	0.00009	0.00022	0.00029	0.00029	0.00010	0.00020	0.00010	0.00026	0.00007	0.00009	0.00026
3	Office	% v/v	1	0.00021	0.00023	0.00036	0.00021	0.00027	0.00010	0.00009	0.00028	0.00023	0.00009	0.00022	0.00029	0.00009	0.00011	0.00021	0.00010	0.00026	0.00010	0.00011	0.00025
4	Outside Office	% v/v	1	0.00022	0.00024	0.00034	0.00020	0.00028	0.00014	0.00013	0.00028	0.00024	0.00014	0.00022	0.00030	0.00008	0.00011	0.00020	0.00006	0.00026	0.00008	0.00011	0.00025
5	Shed	% v/v	1	0.00022	0.00026	0.00034	0.00020	0.00029	0.00014	0.00012	0.00028	0.00024	0.00009	0.00022	0.00029	0.00011	0.00009	0.00019	0.00007	0.00026	0.00008	0.00012	0.00024
6	Container 1	% v/v	1	0.00024	0.00023	0.00031	0.00020	0.00041	0.00012	0.00011	0.00029	0.00023	0.00010	0.00022	0.00025	0.00009	0.00013	0.00022	0.00004	0.00026	0.00011	0.00011	0.00025
7	Weighbridge Office	% v/v	1	0.00025	0.00023	0.00032	0.00019	0.00035	0.00011	0.00013	0.00028	0.00024	-	0.00022	0.00029	0.00010	0.00015	0.00021	0.00006	0.00025	0.00009	0.00009	0.00023
8*	External Office	% v/v	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sampling ID	Building	Unit of Measure	Trigger value	09-Jul-24	15-Aug-24	03-Sep-24	01-Oct-24	06-Nov-24	02-Dec-24	08-Jan-25	24-Feb-25	19-Mar-25	24-Apr-25	27-May-25	26-Jun-25	22-Jul-25	27-Aug-25	25-Sep-25	30-Oct-25	19-Nov-25	11-Dec-25
				Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Historic data (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)	Current monitoring round (SMEC)
1	Male amenities	% v/v	1	0.00037	0.00023	0.00024	0.00015	0.00026	0.00015	0.00013	0.00013	0.00009	0.00017	0.00023	0.00009	-	-	-	-	-	-
2	Female amenities	% v/v	1	0.0003	0.00024	0.00025	0.00014	0.00027	0.00014	0.00014	0.00014	0.00009	0.00016	0.00023	0.00010	-	-	-	-	-	-
3	Office	% v/v	1	0.00033	0.00023	0.00024	0.00024	0.00027	0.00015	0.00015	0.00015	0.00010	0.00016	0.00024	0.00010	-	-	-	-	-	-
4	Outside Office	% v/v	1	0.00047	0.00023	0.00025	0.00015	0.00026	0.00015	0.00015	0.00015	0.00010	0.00016	0.00023	0.00009	-	-	-	-	-	-
5	Shed	% v/v	1	0.00045	0.00045	0.00025	0.00015	0.00027	0.00015	0.00016	0.00016	0.00009	0.00017	0.00023	0.00010	-	-	-	-	-	-
6	Container 1	% v/v	1	0.00052	0.00023	0.00025	0.00014	0.00026	0.00014	0.00015	0.00015	0.00010	0.00016	0.00024	0.00009	-	-	-	-	-	-
7	Weighbridge Office	% v/v	1	0.00055	0.00023	0.00024	0.00014	0.00026	0.00014	0.00014	0.00014	0.00009	0.00017	0.00021	0.00010	0.00012	0.00025	0.00011	0.00016	0.00018	0.00018
8*	External Office	% v/v	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
 Current monitoring round
 Value exceeds adopted trigger values.
 * Building removed
 - No value recorded for monitoring location