

BARGO WASTE MANAGEMENT CENTRE ANTHONY ROAD BARGO - SAMPLING RESULTS

SAMPLING ON 27 FEBRUARY 2018

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	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 sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	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 ³ / 220 ³	not tested	not tested	not tested	not tested	not tested	not tested	not tested	not tested	Dry
Sum of Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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 SO4)	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
7	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 where applicable
	Reported concentration exceeds adopted trigger value - 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 2018, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2018, 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/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	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 sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	not tested	not tested	Dry	Dry	Dry	Dry	Dry	not tested	Dry
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ³ / 220 ³	not tested	not tested	Dry	Dry	Dry	Dry	Dry	not tested	Dry
Sum of Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	micrograms per litre ¹	Quarterly	0.07 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 SO4)	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
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:

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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 where applicable
	Reported concentration exceeds adopted trigger value - 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 2018, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2018, 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/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	DTC
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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	528	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	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
Organophosphorus Pesticides (OPP)	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
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	less than limit of reporting	not required	Dry	Dry	Dry	Dry	less than limit of reporting	less than limit of reporting	Dry
Perfluorooctane sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	not tested	not tested	Dry	Dry	Dry	Dry	not tested	not tested	Dry
Perfluorooctanoic acid (PFOA)	micrograms per litre ¹	Quarterly	0.56 ³ / 220 ³	not tested	not tested	Dry	Dry	Dry	Dry	not tested	not tested	Dry
Sum of Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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	less than limit of reporting	not required	Dry	Dry	Dry	Dry	less than limit of reporting	less than limit of reporting	Dry
Sodium	milligrams per litre	Yearly	230	190	140	Dry	Dry	Dry	Dry	210	220	Dry
Sulphate (as SO4)	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
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:

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Blue text	Additional parameter/location analysed beyond EPL requirements (non-mandatory)
	Reported concentration exceeds adopted trigger value - trigger 1 where applicable
	Reported concentration exceeds adopted trigger value - 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 2018, Table 1: Health-based guidance values for use in site investigations in Australia

3 NEPM 2018, 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/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	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 sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	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 ³ / 220 ³	0.97	0.52	Dry	Dry	Dry	Dry	less than 0.01	not sampled (blocked well)	Dry
Sum of Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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 SO4)	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
PH	PH Units	Quarterly	6.5-8	7.04	8.59	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

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4 Value taken from duplicate or triplicate result