

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/prpoepp/>

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 (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	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	0.007	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 sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	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 ³ / 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 Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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 SO4)	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
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 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 25 May 2020
EPA LICENCE NUMBER 6061
<http://www.environment.nsw.gov.au/prpoeocp/>
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 sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	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 ³ / 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 Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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 SO4)	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
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 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 27TH and 28TH AUGUST 2020

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	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	-	less than limit of reporting	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	not tested (note 4)	less than limit of reporting	less than limit of reporting	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	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	not tested (note 4)
Organophosphorus Pesticides (OPP)	milligrams per litre	Yearly	Limit of reporting	less than limit of reporting	less than limit of reporting	not required	not required	not required	less than limit of reporting	less than limit of reporting	less than limit of reporting	not required
Polycyclic Aromatic Hydrocarbons (PAH)	milligrams per litre	Yearly	0.00001	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting	less than limit of reporting
Perfluorooctane sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	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 ³ / 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 Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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	less than limit of reporting	not required	not required	not required	not required	less than limit of reporting	less than limit of reporting	less than limit of reporting	not required
Sodium	milligrams per litre	Yearly	230	95	32	not required	not required	not required	90	55	19	not required
Sulphate (as SO4)	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	less than limit of reporting	not required	not required	not required	less than limit of reporting	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	less than limit of reporting	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
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:

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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).

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/prpoepp/>

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 sulfonate (PFOS)	micrograms per litre ¹	Quarterly	0.13 ³	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 ³ / 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 Perfluorooctane sulfonate and Perfluorohexane sulfonate (PFOS+PFHxS)	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	1460	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
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

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