

TABLE 2: BLAYNEY WASTE DISPOSAL DEPOT - RESULTS OF LABORATORY ANALYSIS
MARCH 2022

GROUNDWATER



Group	Analyte	LOR	Units	Criteria	Sample ID								
					Sample Date / Time								
					BH1	BH2	BH4	BH4S	BH6	BH6B	BH9	BH10	BH12
					9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00	9/03/2022 00:00
					PS	PS	PS	PS	PS	PS	PS	PS	PS
Physical Parameters	pH (Lab)	0	No unit	6.0 - 8.5	6.8	6.5	6.7	6.6	6.6	6	6.4	5.5	6.5
	Electrical Conductivity (Lab)	2	µS/cm	4478	760	2400	2200	2400	4500	6200	280	3900	2200
	Biochemical Oxygen Demand (BOD5)	5	mg/L	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Alkalinity	Total Alkalinity as CaCO3	5	mg/L	350	330	530	470	300	400	510	88	160	370
Anions	Chloride	1	mg/L	350	78	730	570	730	2200	3500	28	1900	460
	Fluoride	0.1	mg/L	1	0.13	< 0.1	0.11	0.13	< 0.1	< 0.1	< 0.1	< 0.1	0.13
	Sulfate (SO4)	1	mg/L	1000	20	70	260	250	240	180	10	47	300
Cations	Calcium (Ca)	0.1	mg/L	1000	75	250	210	170	640	930	19	440	240
	Magnesium (Mg)	0.1	mg/L	-	45	210	190	220	420	600	17	360	190
	Potassium (K)	0.2	mg/L	-	1	2	3.5	2.4	1.5	1.4	1.5	0.6	2.4
	Sodium (Na)	0.1	mg/L	230	48	95	140	170	130	210	13	77	83
Forms of Carbon	Total Organic Carbon	0.2	mg/L	-	1	3.5	7.1	3.4	2.9	7.4	4.3	2.2	16
Nutrients	Ammonia (NH3) as N	0.01	mg/L	-	< 0.01	0.03	0.01	0.03	0.13	0.06	0.07	-	0.03
	Ammonia (NH3) as N	0.05	mg/L	-	-	-	-	-	-	-	-	< 0.05	-
	Nitrate (NO3) as N	0.005	mg/L	-	2.4	1	4.3	4.7	0.075	-	0.02	-	38
	Nitrate (NO3) as N	0.025	mg/L	-	-	-	-	-	-	-	-	< 0.025	-
Trace Metals	Nitrate (NO3) as N	0.05	mg/L	-	-	-	-	-	-	< 0.05	-	-	-
	Copper (Cu)	0.001	mg/L	0.2	< 0.001	0.003	0.013	0.03	0.005	0.002	0.005	< 0.001	0.008
	Iron (Fe)	0.005	mg/L	0.2	0.009	0.02	0.15	9.9	0.032	0.18	0.5	0.45	1.7
	Manganese (Mn)	0.001	mg/L	0.2	0.002	0.018	0.044	0.15	0.056	1.2	0.24	1.8	0.043
Phenolics	Mercury (Hg)	0.0001	mg/L	0.002	< 0.0001	0.0028	< 0.0001	< 0.0001	0.0002	< 0.0001	< 0.0001	< 0.0001	0.0005
	Total Phenols	0.05	mg/L	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

mg/L milligrams per litre

µg/L micrograms per litre

µS/cm microsiemens per centimetre

LOR limit of reporting

PS primary sample

RB rinsate blank

FD field duplicate

FT field triplicate

Criteria Criteria adopted from *Australian and New Zealand Environment and Conservation Council (ANZECC) Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) Australian and New Zealand Guidelines for Fresh and Marine Water Quality* - 'Primary Industries: Water quality for irrigation and general water use'

within criteria

criteria exceeded

TABLE 3: BLAYNEY WASTE DISPOSAL DEPOT - RESULTS OF LABORATORY ANALYSIS
MARCH 2022 **SURFACE WATER**



	Sample ID				SW1
	Sample Date / Time				9/03/2022 00:00
Group	Analyte	LOR	Units	Criteria	PS
Physical Parameters	pH (Lab)	0	No unit	6.5 - 8.5	7.6
	Electrical Conductivity (Lab)	2	µS/cm	4478	1700
	Biochemical Oxygen Demand (BOD5)	5	mg/L	-	< 5
	Total Suspended Solids	5	mg/L	30	5
Alkalinity	Total Alkalinity as CaCO3	5	mg/L	350	200
Anions	Chloride	1	mg/L	350	520
	Fluoride	0.1	mg/L	1	< 0.1
	Sulfate (SO4)	1	mg/L	1000	20
Cations	Calcium (Ca)	0.1	mg/L	1000	90
	Magnesium (Mg)	0.1	mg/L	-	110
	Potassium (K)	0.2	mg/L	-	10
	Sodium (Na)	0.1	mg/L	230	170
Forms of Carbon	Total Organic Carbon	0.2	mg/L	-	19
Nutrients	Ammonia (NH3) as N	0.01	mg/L	-	0.04
	Nitrate (NO3) as N	0.005	mg/L	-	< 0.005
Trace Metals	Iron (Fe)	0.005	mg/L	0.2	0.017
	Manganese (Mn)	0.001	mg/L	0.2	0.002
Phenolics	Total Phenols	0.05	mg/L	-	< 0.05

mg/L milligrams per litre
µg/L micrograms per litre
µS/cm microsiemens per centimetre
LOR limit of reporting
PS primary sample
RB rinsate blank
FD field duplicate
FT field triplicate

Criteria Criteria adopted from *Australian and New Zealand Environment and Conservation Council (ANZECC) Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) Australian and New Zealand Guidelines for Fresh and Marine Water Quality* - 'Primary Industries: Water quality for irrigation and general water use'
and/or

NSW EPA Environment Protection Licence 6180 'Limit Conditions - L2.4 Water and/or Land Concentration Limits', 2013

within criteria
criteria exceeded