



Table 2: Walgett Shire Council Waste Depot Groundwater Monitoring Points 1-5

Analyte	Sample ID	Pt 1												Pt 2												Pt 3												Pt 4	Pt 5	Guidelines Aquatic Ecosystems	Guidelines Irrigation	Guidelines Drinking
		WL1												WL 2												WL 3																
		No Sample	140695-27/10-2014	150135-27/01-2015	150417-28/04-2015	150641-30/07-2015	150864-22/10-2015	160172-21/01-2016	160612-14/04-2016	160860-28/07-2016	140695-27/10-2014	150135-27/01-2015	150417-28/04-2015	150641-30/07-2015	150864-22/10-2015	160172-21/01-2016	160612-14/04-2016	160860-28/07-2016	No Sample	No Sample																						
Alkalinity (as CaCO ₃)		NS	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	NS	NS	NS	NS	NS	NS	Na	Na	<200			
Aluminium		NS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NS	NS	NS	NS	NS	NS	Na	Na	<0.1				
Ammonia as N		NS	0.070	0.046	0.046	0.063	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	NS	NS	NS	NS	NS	NS	Na	Na	<0.5				
Arsenic		NS	0.004	0.005	0.004	0.004	0.006	0.004	0.006	0.006	0.007	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	NS	NS	NS	NS	NS	NS	Na	Na	<0.007				
BOD		NS	<5	<5	<5	<5	<5	<5	<5	<5	9	<5	<5	14	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS	Na	Na	Na				
Barium		NS	0.03	0.032	0.030	0.030	0.100	0.079	0.079	0.079	0.079	0.079	0.079	0.032	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	NS	NS	NS	NS	NS	NS	Na	Na	<0.7					
Benzene		NS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NS	NS	NS	NS	NS	NS	Na	Na	<0.001					
Cadmium		NS	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	NS	NS	NS	NS	NS	NS	Na	Na	<0.002					
Calcium		NS	230	210	260	220	220	240	240	240	240	210	220	220	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	NS	NS	NS	NS	NS	NS	Na	Na	Na				
Chloride		NS	4200	4600	4100	4400	4400	4000	4000	4000	4000	4000	4000	3400	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	NS	NS	NS	NS	NS	NS	Na	Na	<250				
Chromium (hexavalent)		NS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NS	NS	NS	NS	NS	NS	Na	Na	<0.05					
Chromium		NS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NS	NS	NS	NS	NS	NS	Na	Na	Na					
Conductivity		NS	15000	15000	15000	14000	13000	15000	15000	15000	15000	14000	14000	14000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	NS	NS	NS	NS	NS	NS	Na	Na	<800				
Copper		NS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NS	NS	NS	NS	NS	NS	Na	Na	<1.0					



Sample ID	Pt 1										Pt 2										Pt 3										Pt 4		Pt 5		Guidelines Aquatic Ecosystems	Guidelines Irrigation	Guidelines Drinking
	WL1										WL 2										WL 3										WL 4	WL 5					
	No Sample	140695-2014	150135-2015	150417-2015	150641-2015	150864-2015	160172-2016	160612-2016	160860-2016	140695-2014	150135-2015	150417-2015	150641-2015	150864-2015	160172-2016	160612-2016	160860-2016	27/01-2015	28/04-2015	30/07-2015	22/10-2015	21/01-2016	14/04-2016	28/07-2016	No Sample	No Sample											
Ethyl Benzene	mg/L	NS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.13	0.17	0.14	0.10	0.10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NS	NS	Na	<0.003				
Fluoride	mg/L	NS	0.13	0.13	0.14	0.10	0.10	0.1	0.10	<0.1	0.2	0.1	0.1	<0.1	0.2	0.1	0.13	0.17	0.14	0.10	0.10	0.2	0.1	0.1	NS	NS	Na	<1.5	<1.5	Na	<1.5						
Iron	mg/L	NS	0.32	0.17	0.17	0.20	0.32	0.61	0.36	0.61	0.61	0.39	0.32	0.32	0.61	0.61	0.39	0.17	0.17	0.20	0.32	0.61	0.61	0.34	NS	NS	Na	<0.2-10.0	<0.3	Na	<0.3						
Lead	mg/L	NS	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	NS	NS	<0.003-0.009	<0.001	<0.001	NS	<0.001						
Magnesium	mg/L	NS	210	210	250	210	210	210	210	230	210	210	210	210	210	210	210	210	250	210	210	210	210	39	NS	NS	Na	<1000	Na	NS	Na						
Manganese	mg/L	NS	0.39	0.33	0.33	0.36	0.36	0.30	0.36	0.44	0.30	0.30	0.30	0.30	0.30	0.30	0.39	0.33	0.33	0.36	0.44	0.30	0.30	0.30	NS	NS	<1.9-3.6	<0.2-10.0	<0.1	NS	<0.1						
Mercury	mg/L	NS	<0.00005	<0.00005	<0.00005	0.00007	0.00015	<0.00005	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00015	<0.00005	<0.00005	<0.00005	<0.00005	NS	NS	<0.0006-0.005	<0.00005	<0.00005	NS	<0.001						
Nitrate as N	mg/L	NS	0.031	0.040	0.030	0.030	0.010	0.050	0.030	0.050	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.040	0.030	0.030	0.058	0.040	0.11	0.02	NS	NS	0.7-17	<5-125	<11-45	NS	<11-45						
Organo-chlorines	mg/L	NS	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	NS	NS	<0.0001	<0.0001	<0.0001	NS	<0.0001						
Phenols Total	mg/L	NS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NS	NS	<0.16	<0.32 NEPM 2010	<0.001	NS	<0.001						
Phosphorus Total	mg/L	NS	0.08	0.07	0.08	0.1	0.1	0.1	0.08	0.1	0.07	0.1	0.1	0.1	0.07	0.1	0.08	0.07	0.08	0.1	0.1	0.4	0.3	0.3	NS	NS	<0.01	0.8-12.0	Na	NS	Na						
Polychlorinated Biphenyls	mg/L	NS	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	<0.0001	<2.0	<0.0006 NEPM	NS	<0.0006 NEPM						
Poly Aromatic Hydrocarbons	mg/L	NS	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	<0.016	Na	<0.00001	NS	<0.00001						
Potassium	mg/L	NS	7.4	7.6	6.3	5.8	7.4	8.2	7.4	8.2	7.5	6.5	7.4	7.4	7.5	6.5	11	11	9.9	10	12	11	10	10	10	NS	NS	Na	Na	Na	NS	Na					
Sodium	mg/L	NS	3500	3500	3800	3700	4200	3700	3700	3700	3800	3800	3800	3800	3800	3800	740	800	830	850	950	920	950	950	950	NS	NS	Na	<240-460	<180	NS	<180					



Sample ID	Pt 1												Pt 2												Pt 3												Pt 4		Pt 5		Guidelines Aquatic Ecosystems	Guidelines Irrigation	Guidelines Drinking
	WL1												WL 2												WL 3												WL 4	WL 5					
	No Sample	140695-3	27/10 2014	150135-3	27/01 2015	150417-3	28/04 2015	150641-3	30/07 2015	150864-3	22/10 2015	160172-3	21/01 2016	160612-3	14/04 2016	160860-3	28/07 2016	140695-2	27/10 2014	150135-2	27/01 2015	150417-2	28/04 2015	150641-2	30/07 2015	150864-2	22/10 2015	160172-2	21/01 2016	160612-2	14/04 2016	160860-2	28/07 2016	No Sample	No Sample								
Standing Water Level	NS	12.9	13.1	13.6	13.2	13.0	13.8	13.1	13.1	13.1	12.1	12.2	12.3	12.0	12.2	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	NS	NS	Na	Na							
Sulfate as S	NS	1200	1000	1100	1200	1300	1100	1200	1100	1200	280	250	290	310	330	290	390	300	300	300	300	290	310	330	330	330	330	330	330	330	330	330	NS	NS	Na	<250							
Toluene	NS	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NS	NS	Na	<0.025									
Total Dissolved Solids	NS	8700	9100	11000	9300	10000	10000	11000	10000	9600	1900	2100	2300	2200	2200	2300	2800	2200	2200	2200	2300	2300	2200	2200	2200	2200	2200	2200	2200	2200	NS	NS	<125-188	<500									
Total Organic Carbon	NS	2	2	1	1	2	3	2	3	3	6	4	3	3	4	5	6	4	4	4	5	3	3	4	4	4	4	4	4	4	NS	NS	Na	Na									
Total Petroleum Hydrocarbons C6-C10	NS	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NS	NS	NS	NS	CE-C10 <1.0									
Total Petroleum Hydrocarbons C10-C40	NS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.34	<0.1	<0.1	<0.1	<0.1	0.34	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NS	NS	NS	NS	Groundwater HSLs for vapour intrusion (mg/L) NEPM 2013 <1.0									
Xylene	NS	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	<0.2-0.34	<0.02										
Zinc	NS	0.002	0.034	0.007	0.010	0.12	0.047	0.061	0.061	0.009	<0.001	0.004	0.002	0.007	0.089	0.038	0.056	0.007	0.007	0.004	0.002	0.002	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	NS	NS	<0.008-0.03	<3.0									
pH Value	NS	7.3	7.2	7.5	7.5	7.4	7.5	7.2	7.2	7.2	7.2	7.2	7.5	7.4	7.5	7.5	7.2	7.2	7.2	7.2	7.2	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.3	7.3	NS	NS	NS	NS	6.0-8.0								

Guidelines: Depending on the beneficial reuse of the groundwater supplies whether it is irrigation, drinking, stock or environmental flows for aquatic ecosystems. For this particular site the irrigation guidelines will be referred to as the most likely reuse option. The highlighted figures are the most recent set of results.

1. ANZECC (2000) Australian & New Zealand Guidelines for Fresh & Marine Waters for Aquatic Ecosystems (95% - 80% protection) for Up-land and Low-land Rivers.
2. ANZECC (2000) Australian & New Zealand Guidelines for Fresh & Marine Waters for Primary Industries. DECCW (2004) Environmental Guidelines: Use of Effluent by Irrigation.
3. ANZECC (2007) Australian & New Zealand Guidelines for Drinking Water.
4. NEPM (2013) Schedule B1 Guideline on Investigation Levels for Soil & Groundwater.

6 NS ~ Sample could not be collected

NT ~ Testing not required

Na ~ Not applicable