

TABLE 1: LITHGOW SOLID WASTE FACILITY - RESULTS OF LABORATORY ANALYSIS  
JULY 2020

SURFACE WATER



Group	Analyte	LOR	Units	Sample ID	SW1	
				Sample Date	31/07/2020	
				Criteria	PS	
Physical Parameters	pH (Lab)	0	No unit	6.5 - 8.5	6.1	
	pH (Field)	0	No unit	6.5 - 8.5	6.71	
	Electrical Conductivity (Lab)	2	µS/cm	4478	250	
	Electrical Conductivity (Field)	5	µS/cm	4478	327	
	Total Suspended Solids	5	mg/L	30	39	
	Chemical Oxygen Demand	10	mg/L	-	< 10	
Alkalinity	Total Alkalinity as CaCO3	5	mg/L	350	39	
Anions	Chloride	1	mg/L	350	35	
	Fluoride	0.1	mg/L	1	< 0.1	
	Sulfate (SO4)	1	mg/L	-	14	
Cations	Calcium (Ca)	0.2	mg/L	1000	24	
	Magnesium (Mg)	0.1	mg/L	-	5.8	
	Potassium (K)	0.1	mg/L	-	6.6	
	Sodium (Na)	0.5	mg/L	230	12	
Forms of Carbon	Total Organic Carbon	0.2	mg/L	-	3.7	
Nutrients	Ammonia (NH3) as N	0.01	mg/L	-	0.08	
	Nitrate (NO3) as N	0.005	mg/L	-	3.8	
	Total Phosphorus	0.02	mg/L	0.05	< 0.02	
Trace Metals	Chromium (Cr)	0.001	mg/L	-	< 0.001	
	Aluminium (Al)	0.005	mg/L	5	< 0.005	
	Iron (Fe)	0.005	mg/L	0.2	< 0.005	
	Manganese (Mn)	0.001	mg/L	0.2	0.019	
	Hexavalent Chromium (Cr-VI)	0.004	mg/L	0.1	< 0.004	
Phenolics	Total Phenols	0.01	mg/L	-	< 0.01	
OC Pesticides	Aldrin	0.1	µg/L	-	< 0.1	
	Alpha BHC	0.1	µg/L	-	< 0.1	
	Alpha Chlordane	0.1	µg/L	-	< 0.1	
	Alpha Endosulfan	0.1	µg/L	-	< 0.1	
	Beta BHC	0.1	µg/L	-	< 0.1	
	Beta Endosulfan	0.1	µg/L	-	< 0.1	
	Delta BHC	0.1	µg/L	-	< 0.1	
	Dieldrin	0.1	µg/L	-	< 0.1	
	Endosulfan sulphate	0.1	µg/L	-	< 0.1	
	Endrin	0.1	µg/L	-	< 0.1	
	Endrin aldehyde	0.1	µg/L	-	< 0.1	
	Endrin ketone	0.1	µg/L	-	< 0.1	
	Heptachlor	0.1	µg/L	-	< 0.1	
	Heptachlor epoxide	0.1	µg/L	-	< 0.1	
	Hexachlorobenzene (HCB)	0.1	µg/L	-	< 0.1	
	Lindane (gamma BHC)	0.1	µg/L	-	< 0.1	
	Methoxychlor	0.1	µg/L	-	< 0.1	
	p,p'-DDD	0.1	µg/L	-	< 0.1	
	p,p'-DDE	0.1	µg/L	-	< 0.1	
	p,p'-DDT	0.1	µg/L	-	< 0.1	
	o,p'-DDD	0.1	µg/L	-	< 0.1	
	o,p'-DDT	0.1	µg/L	-	< 0.1	
	o,p'-DDE	0.1	µg/L	-	< 0.1	
	Gamma Chlordane	0.1	µg/L	-	< 0.1	
	trans-Nonachlor	0.1	µg/L	-	< 0.1	
	isodrin	0.1	µg/L	-	< 0.1	
	Mirex	0.1	µg/L	-	< 0.1	
	OP Pesticides	Azinphos-methyl	0.2	µg/L	-	< 0.2
		Bromophos Ethyl	0.2	µg/L	-	< 0.2
Chlorpyrifos (Chlorpyrifos Ethyl)		0.2	µg/L	-	< 0.2	
Diazinon (Dimpylate)		0.5	µg/L	-	< 0.5	
Dichlorvos		0.5	µg/L	-	< 0.5	
Dimethoate		0.5	µg/L	-	< 0.5	
Ethion		0.2	µg/L	-	< 0.2	
Fenitrothion		0.2	µg/L	-	< 0.2	
Malathion		0.2	µg/L	-	< 0.2	
Parathion-ethyl (Parathion)		0.2	µg/L	-	< 0.2	
Total Petroleum Hydrocarbons	Methodithion	0.5	µg/L	-	< 0.5	
	TRH C6-C9	40	µg/L	-	< 40	
	TRH C10-C14	50	µg/L	-	< 50	
	TRH C15-C28	200	µg/L	-	< 200	
	TRH C29-C36	200	µg/L	-	< 200	
	TRH C37-C40	200	µg/L	-	< 200	
Total Recoverable Hydrocarbons	TRH C6-C10	50	µg/L	-	< 50	
	TRH C6-C10 minus BTEX (F1)	50	µg/L	-	< 50	
	TRH >C10-C16	60	µg/L	-	< 60	
	TRH >C10-C16 minus Naphthalene (F2)	60	µg/L	-	< 60	
	TRH >C16-C34 (F3)	500	µg/L	-	< 500	
	TRH >C34-C40 (F4)	500	µg/L	-	< 500	
BTEXN Analytes	TRH C10-C40	320	µg/L	-	< 320	
	Benzene (F0)	0.5	µg/L	-	< 0.5	

mg/L milligrams per litre  
 µg/L micrograms per litre  
 µS/cm microsiemens per centimetre  
 LOR limit of reporting  
 PS primary sample  
 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', 2000  
 'Concentration Limits' in Section L2.4 of NSW EPA Environment Protection Licence 6004  
 within criteria  
 criteria exceeded