

Muswellbrook Waste & Recycling Centre, 252 Coal Rd Muswellbrook, 2333

Licence Period: 1 December to 30 November

EPA LICENCE NUMBER: 5980

2025 Monitoring Data



Date Sampled	13/02/2025	23/05/2025		
Results Received	27/02/2025	2/06/2025		

Sampling Point	RL	EPA ID number	MEASUREMENT							
MP5 Leachate Well	214.5	1								
Pollutant	Units	Method	Frequency	Feb-25	May-25	Aug-25	Nov-25			
Alkalinity (as calcium carbonate)	mg/l	Grab Sample	Quarterly	2320	1290					
Ammonia	mg/l	Grab Sample	Quarterly	289	169					
Biochemical Oxygen Demand (BOD)	mg/l	Grab Sample	Quarterly	7	118					
Calcium	mg/l	Grab Sample	Quarterly	129	100					
Chemical oxygen demand	mg/l	Grab Sample	Quarterly	603	467					
Chloride	mg/l	Grab Sample	Quarterly	995	577					
Electrical conductivity	µS/cm	Probe	Quarterly	6440	3670					
Fluoride	mg/l	Grab Sample	Quarterly	0.5	0.3					
Magnesium	mg/l	Grab Sample	Quarterly	100	67					
Nitrate	mg/l	Grab Sample	Quarterly	<0.1	0.1					
Nitrite	mg/l	Grab Sample	Quarterly	<0.1	0.16					
Nitrogen (total)	mg/l	Grab Sample	Quarterly	352	158					
pH	pH	Probe	Quarterly	7.06	7.06					
Phosphorus (total)	mg/l	Grab Sample	Quarterly	1.2	0.8					
Potassium	mg/l	Grab Sample	Quarterly	187	151					
Sodium	mg/l	Grab Sample	Quarterly	615	390					
Standing Water Level	metres AHD	in situ	Quarterly	203.17	205.07					
Sulfate	mg/l	Grab Sample	Quarterly	<1	<1					
Total dissolved solids	mg/l	Grab Sample	Quarterly	3230	1930					
Total organic carbon	mg/l	Grab Sample	Quarterly	192	76					
Total suspended solids	mg/l	Grab Sample	Quarterly	37	44					
Aluminium	mg/l	Grab Sample	Yearly							
Arsenic	mg/l	Grab Sample	Yearly							
Barium	mg/l	Grab Sample	Yearly							
Benzene	µg/l	Grab Sample	Yearly							
Cadmium	mg/l	Grab Sample	Yearly							
Chromium	mg/l	Grab Sample	Yearly							
Cobalt	mg/l	Grab Sample	Yearly							
Copper	mg/l	Grab Sample	Yearly							
Ethyl benzene	µg/l	Grab Sample	Yearly							
Iron	mg/l	Grab Sample	Yearly							
Lead	mg/l	Grab Sample	Yearly							
Manganese	mg/l	Grab Sample	Yearly							
Mercury	mg/l	Grab Sample	Yearly							
Nickel	mg/l	Grab Sample	Yearly							
Organochlorine Pesticides	µg/l	Grab Sample	Yearly							
Organophosphate pesticides	µg/l	Grab Sample	Yearly							
Polycyclic aromatic hydrocarbons	µg/l	Grab Sample	Yearly							
Toluene	µg/l	Grab Sample	Yearly							
Total petroleum hydrocarbons	µg/l	Grab Sample	Yearly							
Total Phenolics	mg/l	Grab Sample	Yearly							
Xylene	mg/l	Grab Sample	Yearly							
Zinc	mg/l	Grab Sample	Yearly							

Sampling point	RL	EPA ID number	MEASUREMENT							
MP1 groundwater	225.5	2	Pollutant	Units	Method	Frequency	Feb-25	May-25	Aug-25	Nov-25
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly					7		
Ammonia	milligrams per litre	Grab Sample	Quarterly					0.3		
Calcium	milligrams per litre	Grab Sample	Quarterly					11		
Chloride	milligrams per litre	Grab Sample	Quarterly					115		
Fluoride	milligrams per litre	Grab Sample	Quarterly					0.1		
Magnesium	milligrams per litre	Grab Sample	Quarterly					14		
Nitrate	milligrams per litre	Grab Sample	Quarterly					<0.01		
Nitrite	milligrams per litre	Grab Sample	Quarterly					<0.01		
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly					1.9		
pH	pH	Probe	Quarterly					5.23		
Phosphorus (total)	milligrams per litre	Grab Sample	Quarterly					0.28		
Potassium	milligrams per litre	Grab Sample	Quarterly					1		
Sodium	milligrams per litre	Grab Sample	Quarterly					63		
Standing Water Level	metres AHD	in situ	Quarterly					202.05		
Sulfate	milligrams per litre	Grab Sample	Quarterly					39		
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly					333		
Total organic carbon	milligrams per litre	Grab Sample	Quarterly					14		
Redox potential	millivolts	Probe	Quarterly					73		
Temperature	degrees Celsius	Probe	Quarterly					21		
Aluminium	milligrams per litre	Grab Sample	Yearly							
Arsenic	milligrams per litre	Grab Sample	Yearly							
Barium	milligrams per litre	Grab Sample	Yearly							
Benzene	milligrams per litre	Grab Sample	Yearly							
Cadmium	milligrams per litre	Grab Sample	Yearly							
Chromium	milligrams per litre	Grab Sample	Yearly							
Cobalt	milligrams per litre	Grab Sample	Yearly							
Copper	milligrams per litre	Grab Sample	Yearly							
Ethyl benzene	milligrams per litre	Grab Sample	Yearly							
Lead	milligrams per litre	Grab Sample	Yearly							
Manganese	milligrams per litre	Grab Sample	Yearly							
Mercury	milligrams per litre	Grab Sample	Yearly							
Nickel	milligrams per litre	Grab Sample	Yearly							
Organophosphate pesticides	milligrams per litre	Grab Sample	Yearly							
Organochlorine pesticides	milligrams per litre	Grab Sample	Yearly							
Polycyclic aromatic hydrocarbons	milligrams per litre	Grab Sample	Yearly							
Toluene	milligrams per litre	Grab Sample	Yearly							
Total petroleum hydrocarbons	milligrams per litre	Grab Sample	Yearly							
Total phenolics	milligrams per litre	Grab Sample	Yearly							
Xylene	milligrams per litre	Grab Sample	Yearly							
Zinc	milligrams per litre	Grab Sample	Yearly							

Sampling Point	RL	EPA ID number	MEASUREMENT - MP2				MEASUREMENT - MP2A				
MP2/2A groundwater	213	3									
Pollutant	Units	Method	Frequency	Feb-25	May-25	Aug-25	Nov-25	Feb-25	May-25	Aug-25	Nov-25
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	157	180			271	227		
Ammonia	milligrams per litre	Grab Sample	Quarterly	5.41	6.09			0.01	0.1		
Calcium	milligrams per litre	Grab Sample	Quarterly	97	107			189	190		
Chloride	milligrams per litre	Grab Sample	Quarterly	771	790			738	783		
Fluoride	milligrams per litre	Grab Sample	Quarterly	0.4	0.4			0.1	<0.1		
Magnesium	milligrams per litre	Grab Sample	Quarterly	243	257			58	62		
Nitrate	milligrams per litre	Grab Sample	Quarterly	<0.01	<0.01			0.2	0.23		
Nitrite	milligrams per litre	Grab Sample	Quarterly	<0.01	<0.01			<0.01	<0.01		
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly	8.9	8.4			0.3	0.3		
pH	pH	Probe	Quarterly	6.15	6.26			6.25	6.31		
Phosphorus (total)	milligrams per litre	Grab Sample	Quarterly	0.46	0.15			0.17	0.35		
Potassium	milligrams per litre	Grab Sample	Quarterly	11	9			8	7		
Sodium	milligrams per litre	Grab Sample	Quarterly	679	719			267	279		
Standing Water Level	metres AHD	in situ	Quarterly	195.24	195.42			165.88	165.48		
Sulfate	milligrams per litre	Grab Sample	Quarterly	1720	1740			110	100		
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	3410	3220			2310	1850		
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	23	34			<1	6		
Redox potential	millivolts	Probe	Quarterly	-48	-22			122	31		
Temperature	degrees Celsius	Probe	Quarterly	24.7	23.9			23.4	22.5		
Aluminium	milligrams per litre	Grab Sample	Yearly								
Arsenic	milligrams per litre	Grab Sample	Yearly								
Barium	milligrams per litre	Grab Sample	Yearly								
Benzene	milligrams per litre	Grab Sample	Yearly								
Cadmium	milligrams per litre	Grab Sample	Yearly								
Chromium	milligrams per litre	Grab Sample	Yearly								
Cobalt	milligrams per litre	Grab Sample	Yearly								
Copper	milligrams per litre	Grab Sample	Yearly								
Ethyl benzene	milligrams per litre	Grab Sample	Yearly								
Lead	milligrams per litre	Grab Sample	Yearly								
Manganese	milligrams per litre	Grab Sample	Yearly								
Mercury	milligrams per litre	Grab Sample	Yearly								
Nickel	milligrams per litre	Grab Sample	Yearly								
Organophosphate pesticides	milligrams per litre	Grab Sample	Yearly								
Organochlorine pesticides	milligrams per litre	Grab Sample	Yearly								
Polycyclic aromatic hydrocarbons	milligrams per litre	Grab Sample	Yearly								
Toluene	milligrams per litre	Grab Sample	Yearly								
Total petroleum hydrocarbons	milligrams per litre	Grab Sample	Yearly								
Total phenolics	milligrams per litre	Grab Sample	Yearly								
Xylene	milligrams per litre	Grab Sample	Yearly								
Zinc	milligrams per litre	Grab Sample	Yearly								

Sampling Point	RL	EPA ID number	MEASUREMENT - MP4				MEASUREMENT - MP4A				
MP4/4A groundwater	228	4									
Pollutant	Units	Method	Frequency	Feb-25	May-25	Aug-25	Nov-25	Feb-25	May-25	Aug-25	Nov-25
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	421	213			559	509		
Ammonia	milligrams per litre	Grab Sample	Quarterly	3.07	0.74			0.13	0.33		
Calcium	milligrams per litre	Grab Sample	Quarterly	167	52			96	111		
Chloride	milligrams per litre	Grab Sample	Quarterly	244	72			106	110		
Fluoride	milligrams per litre	Grab Sample	Quarterly	0.4	0.4			0.1	0.1		
Magnesium	milligrams per litre	Grab Sample	Quarterly	30	14			25	25		
Nitrate	milligrams per litre	Grab Sample	Quarterly	<0.01	<0.01			<0.01	0.02		
Nitrite	milligrams per litre	Grab Sample	Quarterly	<0.01	<0.01			<0.01	<0.01		
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly	10.7	4.6			0.3	0.5		
pH	pH	Probe	Quarterly	6.65	6.72			6.95	7.11		
Phosphorus (total)	milligrams per litre	Grab Sample	Quarterly	0.59	0.17			0.24	0.09		
Potassium	milligrams per litre	Grab Sample	Quarterly	4	4			4	3		
Sodium	milligrams per litre	Grab Sample	Quarterly	93	55			162	165		
Standing Water Level	metres AHD	in situ	Quarterly	195.6	195.69			171.83	171.71		
Sulfate	milligrams per litre	Grab Sample	Quarterly	104	15			57	65		
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	996	414			808	774		
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	50	38			1	9		
Redox potential	millivolts	Probe	Quarterly	-76	-57			-3	207		
Temperature	degrees Celsius	Probe	Quarterly	23.5	22.3			24.1	21.6		
Aluminium	milligrams per litre	Grab Sample	Yearly								
Arsenic	milligrams per litre	Grab Sample	Yearly								
Barium	milligrams per litre	Grab Sample	Yearly								
Benzene	milligrams per litre	Grab Sample	Yearly								
Cadmium	milligrams per litre	Grab Sample	Yearly								
Chromium	milligrams per litre	Grab Sample	Yearly								
Cobalt	milligrams per litre	Grab Sample	Yearly								
Copper	milligrams per litre	Grab Sample	Yearly								
Ethyl benzene	milligrams per litre	Grab Sample	Yearly								
Lead	milligrams per litre	Grab Sample	Yearly								
Manganese	milligrams per litre	Grab Sample	Yearly								
Mercury	milligrams per litre	Grab Sample	Yearly								
Nickel	milligrams per litre	Grab Sample	Yearly								
Organochlorine pesticides	milligrams per litre	Grab Sample	Yearly								
Organophosphate pesticides	milligrams per litre	Grab Sample	Yearly								
Polycyclic aromatic hydrocarbons	milligrams per litre	Grab Sample	Yearly								
Toluene	milligrams per litre	Grab Sample	Yearly								
Total petroleum hydrocarbons	milligrams per litre	Grab Sample	Yearly								
Total phenolics	milligrams per litre	Grab Sample	Yearly								
Xylene	milligrams per litre	Grab Sample	Yearly								
Zinc	milligrams per litre	Grab Sample	Yearly								

Sampling Point	RL	EPA ID number	MEASUREMENT			
MP6 groundwater	213	5	Feb-25	May-25	Aug-25	Nov-25
Pollutant	Units	Method	Frequency			
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	Dry	Dry	
Ammonia	milligrams per litre	Grab Sample	Quarterly			
Calcium	milligrams per litre	Grab Sample	Quarterly			
Chloride	milligrams per litre	Grab Sample	Quarterly			
Fluoride	milligrams per litre	Grab Sample	Quarterly			
Magnesium	milligrams per litre	Grab Sample	Quarterly			
Nitrate	milligrams per litre	Grab Sample	Quarterly			
Nitrite	milligrams per litre	Grab Sample	Quarterly			
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly			
pH	pH	Probe	Quarterly			
Phosphorus (total)	milligrams per litre	Grab Sample	Quarterly			
Potassium	milligrams per litre	Grab Sample	Quarterly			
Sodium	milligrams per litre	Grab Sample	Quarterly			
Standing Water Level	metres AHD	in situ	Quarterly			
Sulfate	milligrams per litre	Grab Sample	Quarterly			
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly			
Total organic carbon	milligrams per litre	Grab Sample	Quarterly			
Redox potential	millivolts	Probe	Quarterly			
Temperature	degrees Celsius	Probe	Quarterly			
Aluminium	milligrams per litre	Grab Sample	Yearly			
Arsenic	milligrams per litre	Grab Sample	Yearly			
Barium	milligrams per litre	Grab Sample	Yearly			
Benzene	milligrams per litre	Grab Sample	Yearly			
Cadmium	milligrams per litre	Grab Sample	Yearly			
Chromium	milligrams per litre	Grab Sample	Yearly			
Cobalt	milligrams per litre	Grab Sample	Yearly			
Copper	milligrams per litre	Grab Sample	Yearly			
Ethyl benzene	milligrams per litre	Grab Sample	Yearly			
Lead	milligrams per litre	Grab Sample	Yearly			
Manganese	milligrams per litre	Grab Sample	Yearly			
Mercury	milligrams per litre	Grab Sample	Yearly			
Nickel	milligrams per litre	Grab Sample	Yearly			
Organochlorine pesticides	milligrams per litre	Grab Sample	Yearly			
Organophosphate pesticides	milligrams per litre	Grab Sample	Yearly			
Polycyclic aromatic hydrocarbons	milligrams per litre	Grab Sample	Yearly			
Toluene	milligrams per litre	Grab Sample	Yearly			
Total petroleum hydrocarbons	milligrams per litre	Grab Sample	Yearly			
Total phenolics	milligrams per litre	Grab Sample	Yearly			
Xylene	milligrams per litre	Grab Sample	Yearly			
Zinc	milligrams per litre	Grab Sample	Yearly			

Sampling Point		EPA ID number	MEASUREMENT			
Point 1 surface water		6	Feb-25	May-25	Aug-25	Nov-25
Pollutant	Units	Method	Frequency			
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	Dry	17	
Ammonia	milligrams per litre	Grab Sample	Quarterly		0.32	
BOD	milligrams per litre	Grab Sample	Quarterly		5	
COD	milligrams per litre	Grab Sample	Quarterly		78	
Electrical conductivity	microsiemens per cent	Probe	Quarterly		151	
Nitrate	milligrams per litre	Grab Sample	Quarterly		0.09	
Nitrite	milligrams per litre	Grab Sample	Quarterly		0.01	
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly		1	
pH	pH	Probe	Quarterly		6.67	
Potassium	milligrams per litre	Grab Sample	Quarterly		5	
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly		285	
Total organic carbon	milligrams per litre	Grab Sample	Quarterly		16	
Total suspended solids	milligrams per litre	Grab Sample	Quarterly		20	
Redox potential	millivolts	Probe	Quarterly		32	
Dissolved oxygen	milligrams per litre	Probe	Quarterly		62.10%	

Sampling Point		EPA ID number	MEASUREMENT			
Point 2 surface water		7	Feb-25	May-25	Aug-25	Nov-25
Pollutant	Units	Method	Frequency			
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	209	156	
Ammonia	milligrams per litre	Grab Sample	Quarterly	0.48	0.63	
BOD	milligrams per litre	Grab Sample	Quarterly	11	7	
COD	milligrams per litre	Grab Sample	Quarterly	212	335	
Electrical conductivity	microsiemens per cent	Probe	Quarterly	1070	1480	
Nitrate	milligrams per litre	Grab Sample	Quarterly	0.08	18	
Nitrite	milligrams per litre	Grab Sample	Quarterly	<0.01	0.51	
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly	10.9	31.1	
pH	pH	Probe	Quarterly	7.27	7.17	
Potassium	milligrams per litre	Grab Sample	Quarterly	138	228	
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	1000	1250	
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	83	107	
Total suspended solids	milligrams per litre	Grab Sample	Quarterly	129	91	
Redox potential	millivolts	Probe	Quarterly	45	86	
Dissolved oxygen	milligrams per litre	Probe	Quarterly	84.50%	66.00%	

Sampling Point		EPA ID number	MEASUREMENT			
Point 3 surface water		8	Feb-25	May-25	Aug-25	Nov-25
Pollutant	Units	Method	Frequency			
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	267	114	
Ammonia	milligrams per litre	Grab Sample	Quarterly	0.1	0.38	
BOD	milligrams per litre	Grab Sample	Quarterly	13	8	
COD	milligrams per litre	Grab Sample	Quarterly	255	193	
Electrical conductivity	microsiemens per cent	Probe	Quarterly	1300	1080	
Nitrate	milligrams per litre	Grab Sample	Quarterly	<0.01	16.1	
Nitrite	milligrams per litre	Grab Sample	Quarterly	<0.01	0.27	
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly	10.9	24.3	
pH	pH	Probe	Quarterly	8.84	7.43	
Potassium	milligrams per litre	Grab Sample	Quarterly	209	172	
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	1100	1020	
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	101	67	
Total suspended solids	milligrams per litre	Grab Sample	Quarterly	51	82	
Redox potential	millivolts	Probe	Quarterly	74	66	
Dissolved oxygen	milligrams per litre	Probe	Quarterly	15.45%	68.50%	