

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			
Results Received	27/02/2025			

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			
Ammonia	mg/l	Grab Sample	Quarterly	289			
Biochemical Oxygen Demand (BOD)	mg/l	Grab Sample	Quarterly	7			
Calcium	mg/l	Grab Sample	Quarterly	129			
Chemical oxygen demand	mg/l	Grab Sample	Quarterly	603			
Chloride	mg/l	Grab Sample	Quarterly	995			
Electrical conductivity	µS/cm	Probe	Quarterly	6440			
Fluoride	mg/l	Grab Sample	Quarterly	0.5			
Magnesium	mg/l	Grab Sample	Quarterly	100			
Nitrate	mg/l	Grab Sample	Quarterly	<0.1			
Nitrite	mg/l	Grab Sample	Quarterly	<0.1			
Nitrogen (total)	mg/l	Grab Sample	Quarterly	352			
pH	pH	Probe	Quarterly	7.06			
Phosphorus (total)	mg/l	Grab Sample	Quarterly	1.2			
Potassium	mg/l	Grab Sample	Quarterly	187			
Sodium	mg/l	Grab Sample	Quarterly	615			
Standing Water Level	metres AHD	in situ	Quarterly	203.17			
Sulfate	mg/l	Grab Sample	Quarterly	<1			
Total dissolved solids	mg/l	Grab Sample	Quarterly	3230			
Total organic carbon	mg/l	Grab Sample	Quarterly	192			
Total suspended solids	mg/l	Grab Sample	Quarterly	37			
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	me/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	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					
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				271			
Ammonia	milligrams per litre	Grab Sample	Quarterly	5.41				0.01			
Calcium	milligrams per litre	Grab Sample	Quarterly	97				189			
Chloride	milligrams per litre	Grab Sample	Quarterly	771				738			
Fluoride	milligrams per litre	Grab Sample	Quarterly	0.4				0.1			
Magnesium	milligrams per litre	Grab Sample	Quarterly	243				58			
Nitrate	milligrams per litre	Grab Sample	Quarterly	<0.01				0.2			
Nitrite	milligrams per litre	Grab Sample	Quarterly	<0.01				<0.01			
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly	8.9				0.3			
pH	pH	Probe	Quarterly	6.15				6.25			
Phosphorus (total)	milligrams per litre	Grab Sample	Quarterly	0.46				0.17			
Potassium	milligrams per litre	Grab Sample	Quarterly	11				8			
Sodium	milligrams per litre	Grab Sample	Quarterly	679				267			
Standing Water Level	metres AHD	in situ	Quarterly	195.24				165.88			
Sulfate	milligrams per litre	Grab Sample	Quarterly	1720				110			
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	3410				2310			
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	23				<1			
Redox potential	millivolts	Probe	Quarterly	-48				122			
Temperature	degrees Celsius	Probe	Quarterly	24.7				23.4			
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				559			
Ammonia	milligrams per litre	Grab Sample	Quarterly	3.07				0.13			
Calcium	milligrams per litre	Grab Sample	Quarterly	167				96			
Chloride	milligrams per litre	Grab Sample	Quarterly	244				106			
Fluoride	milligrams per litre	Grab Sample	Quarterly	0.4				0.1			
Magnesium	milligrams per litre	Grab Sample	Quarterly	30				25			
Nitrate	milligrams per litre	Grab Sample	Quarterly	<0.01				<0.01			
Nitrite	milligrams per litre	Grab Sample	Quarterly	<0.01				<0.01			
Nitrogen (total)	milligrams per litre	Grab Sample	Quarterly	10.7				0.3			
pH	pH	Probe	Quarterly	6.65				6.95			
Phosphorus (total)	milligrams per litre	Grab Sample	Quarterly	0.59				0.24			
Potassium	milligrams per litre	Grab Sample	Quarterly	4				4			
Sodium	milligrams per litre	Grab Sample	Quarterly	93				162			
Standing Water Level	metres AHD	in situ	Quarterly	195.6				171.83			
Sulfate	milligrams per litre	Grab Sample	Quarterly	104				57			
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	996				808			
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	50				1			
Redox potential	millivolts	Probe	Quarterly	-76				-3			
Temperature	degrees Celsius	Probe	Quarterly	23.5				24.1			
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	Frequency	Feb-25	May-25	Aug-25	Nov-25
Pollutant	Units	Method	Frequency				
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	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					
Point 1 surface water		6	MEASUREMENT				
Pollutant	Units	Method	Frequency	Feb-25	May-25	Aug-25	Nov-25
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	Dry			
Ammonia	milligrams per litre	Grab Sample	Quarterly				
BOD	milligrams per litre	Grab Sample	Quarterly				
COD	milligrams per litre	Grab Sample	Quarterly				
Electrical conductivity	microsiemens per cent	Probe	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				
Potassium	milligrams per litre	Grab Sample	Quarterly				
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly				
Total organic carbon	milligrams per litre	Grab Sample	Quarterly				
Total suspended solids	milligrams per litre	Grab Sample	Quarterly				
Redox potential	millivolts	Probe	Quarterly				
Dissolved oxygen	milligrams per litre	Probe	Quarterly				

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

Sampling Point		EPA ID number	MEASUREMENT				
Point 3 surface water		8	Frequency	Feb-25	May-25	Aug-25	Nov-25
Pollutant	Units	Method					
Alkalinity (as calcium carbonate)	milligrams per litre	Grab Sample	Quarterly	267			
Ammonia	milligrams per litre	Grab Sample	Quarterly	0.1			
BOD	milligrams per litre	Grab Sample	Quarterly	13			
COD	milligrams per litre	Grab Sample	Quarterly	255			
Electrical conductivity	microsiemens per centi	Probe	Quarterly	1300			
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	10.9			
pH	pH	Probe	Quarterly	8.84			
Potassium	milligrams per litre	Grab Sample	Quarterly	209			
Total dissolved solids	milligrams per litre	Grab Sample	Quarterly	1100			
Total organic carbon	milligrams per litre	Grab Sample	Quarterly	101			
Total suspended solids	milligrams per litre	Grab Sample	Quarterly	51			
Redox potential	millivolts	Probe	Quarterly	74			
Dissolved oxygen	milliorams per litre	Probe	Quarterly	15.45%			