### KOOTINGAL LANDFILL - YEARLY SUMMARY FOR 2022/2023

Licence Number - 6013
Kootingal Solid Waste Landfill - New England Highway, Kootingal NSW, 2352 Licencee - Tamworth Regional

Council Public Register

https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers

17th Oct 2023 - 16th Oct 2024 LICENCE PERIOD: PQL = Practical Quantitation Limit LOR = Limit of Reporting

N/A = not applicable

Point 1 - Surface Area
Concentration Limits: Point 1: TSS (Total Suspended Solids) - 50mg/L, 100 percentile concentration limit

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
					Date Data Obtained	Date Data Obtained
Pollutant	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained		
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Special Frequency 1				
Calcium	m g/L	Special Frequency 1				
Chloride	m g/L	Special Frequency 1				
Chromium (Hexavalent)	m g/L	Special Frequency 1				
Conductivity (In situ)	μS/cm	Special Frequency 1				
Dissolved Oxygen (In situ)	m g/L	Special Frequency 1				
Fluoride	m g/L	Special Frequency 1				
ron	m g/L	Special Frequency 1				
Magnesium	m g/L	Special Frequency 1				
Manganese	m g/L	Special Frequency 1				
Nitrate	m g/L	Special Frequency 1				
Nitrite	m g/L	Special Frequency 1				
Nitrogen (ammonia)	m g/L	Special Frequency 1				
oH (In situ)	pH Units	Special Frequency 1				
Potassium	m g/L	Special Frequency 1				
Sodium	m g/L	Special Frequency 1				
Sulfate	m g/L	Special Frequency 1				
Temperature (In situ)	oC	Special Frequency 1				
Total Kjeldahl Nitrogen	m g/L	Special Frequency 1				
Total Organic Carbon	m g/L	Special Frequency 1				
Total Phenolics	μg/L	Special Frequency 1				
Total Suspended Solids	m g/L	Special Frequency 1				
Volumetric Flow Rate	KL/Day	Special Frequency 1				
Zinc	m g/L	Special Frequency 1				
Organochlorine Pesticides	μg/L	Special Frequency 1				
Organophosphate Pesticides	μg/L	Special Frequency 1				

NOTE: Special Frequency 1 - once in each 6-monthly period at a time of stormwater discharge

Point 2 - Leachate Pond

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
Pollutant			18.12.2024			
	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			31.12.2024			
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Quarterly	DRY			
Calcium	m g/L	Quarterly	DRY			
Chloride	m g/L	Quarterly	DRY			
Chromium (Hexavalent)	m g/L	Quarterly	DRY			
Conductivity (In situ)	μS/cm	Quarterly	DRY			
Dissolved Oxygen (In situ)	m g/L	Quarterly	DRY			
Fluoride	m g/L	Quarterly	DRY			
Iron	m g/L	Quarterly	DRY			
Magnesium	m g/L	Quarterly	DRY			
Manganese	m g/L	Quarterly	DRY			
Nitrate	m g/L	Quarterly	DRY			
Nitrite	m g/L	Quarterly	DRY			
Nitrogen (ammonia)	m g/L	Quarterly	DRY			
pH (in situ)	p H Units	Quarterly	DRY			
Potassium	m g/L	Quarterly	DRY			
Sodium	m g/L	Quarterly	DRY			
Sulfate	m g/L	Quarterly	DRY			
Temperature (In situ)	oC	Quarterly	DRY			
Total Kjeldahl Nitrogen	m g/L	Quarterly	DRY			
Total Organic Carbon	m g/L	Quarterly	DRY			
Total Phenolics	μg/L	Quarterly	DRY			

Total Suspended Solids	m g/L	Quarterly	DRY		
Zinc	m g/L	Quarterly	DRY		
Organochlorine Pesticides	μg/L	Quarterly	DRY		
Organophosphate Pesticides	μg/L	Quarterly	DRY		

### Point 3 - Leachate Overflow Point

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
Pollutant	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Special Frequency 2				
Calcium	m g/L	Special Frequency 2				
Chloride	m g/L	Special Frequency 2				
Chromium (Hexavalent)	m g/L	Special Frequency 2				
Conductivity (In Situ)	μS/cm	Special Frequency 2				
Dissolved Oxygen (In Situ)	m g/L	Special Frequency 2				
Fluoride	m g/L	Special Frequency 2				
Iron	m g/L	Special Frequency 2				
Magnesium	m g/L	Special Frequency 2				
Manganese	m g/L	Special Frequency 2				
Nitrate	m g/L	Special Frequency 2				
Nitrite	m g/L	Special Frequency 2				
Nitrogen (ammonia)	m g/L	Special Frequency 2				
pH (In Situ)	p H Units	Special Frequency 2				
Potassium	m g/L	Special Frequency 2				
Sodium	m g/L	Special Frequency 2				
Sulfate	m g/L	Special Frequency 2				
Temperature (In Situ)	•C	Special Frequency 2				
Total Kjeldahl Nitrogen	m g/L	Special Frequency 2				
Total Organic Carbon	m g/L	Special Frequency 2				
Total Phenolics	μg/L	Special Frequency 2				
Total Suspended Solids	m g/L	Special Frequency 2				
Volumetric Flow Rate (estimate)	KL/Day	Special Frequency 2				
Zinc	m g/L	Special Frequency 2				
Organochlorine Pesticides	μg/L	Special Frequency 2				
Organophosphate Pesticides	μg/L	Special Frequency 2				

NOTE: Special Frequency 2 - once in the first 24 hours after detection of the discharge and then weekly whilst the discharge continues

### Point 4 - Groundwater Monitoring Bore - BH1

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
			18.12.2024			
Pollutant	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			31.12.2024			
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Quarterly	76			
Biological Oxygen Demand	m g/L	Quarterly	4			
Calcium	m g/L	Quarterly	18			
Chloride	m g/L	Quarterly	43			
Fluoride	m g/L	Quarterly	<1			
Iron	m g/L	Quarterly	1.12			
Magnesium	m g/L	Quarterly	9			
Manganese	m g/L	Quarterly	0.141			
Nitrate	m g/L	Quarterly	<1			
Nitrogen (ammonia)	m g/L	Quarterly	<0.5			
pH (In Situ)	pH Units	Quarterly	6.5			
Potassium	m g/L	Quarterly	8			
Sodium	m g/L	Quarterly	42			
Sulfate	m g/L	Quarterly	18			
Total Dissolved Solids	m g/L	Quarterly	164			
Total Organic Carbon	m g/L	Quarterly	20			
Total Phenolics	μg/L	Quarterly	<0.050			
Organochlorine Pesticides	μg/L	Yearly	<0.5			
Organophosphate Pesticides	μg/L	Yearly	<0.5			

# Point 5 - Groundwater Bore BH2

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
			18.12.2024			
Pollutant	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained

			31.12.2024			
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Quarterly	664			
Biological Oxygen Demand	m g/L	Quarterly	2			
Calcium	m g/L	Quarterly	136			
Chloride	m g/L	Quarterly	121			
Fluoride	m g/L	Quarterly	4.23			
Iron	m g/L	Quarterly	0.2			
Magnesium	m g/L	Quarterly	92			
Manganese	m g/L	Quarterly	6.2			
Nitrate	m g/L	Quarterly	7.3			
Nitrogen (ammonia)	m g/L	Quarterly	<0.5			
pH (In Situ)	p H Units	Quarterly	6.5			
Potassium	m g/L	Quarterly	15			
Sodium	m g/L	Quarterly	246			
Sulfate	m g/L	Quarterly	227			
Total Dissolved Solids	m g/L	Quarterly	1,244			
Total Organic Carbon	m g/L	Quarterly	6			
Total Phenolics	μg/L	Quarterly	<0.050			
Organochlorine Pesticides	μg/L	Yearly	<0.5			
Organophosphate Pesticides	μg/L	Yearly	<0.5			

#### Point 6 - Groundwater Bore BH3

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
			18.12.2024			
Pollutant	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			31.12.2024			
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Quarterly	472			
Biological Oxygen Demand	m g/L	Quarterly	<2			
Calcium	m g/L	Quarterly	18			
Chloride	m g/L	Quarterly	43			
Fluoride	m g/L	Quarterly	<1			
Iron	m g/L	Quarterly	0.12			
Magnesium	m g/L	Quarterly	47			
Manganese	m g/L	Quarterly	0.12			
Nitrate	m g/L	Quarterly	<1			
Nitrogen (ammonia)	m g/L	Quarterly	<0.5			
pH (In Situ)	pH Units	Quarterly	6.5			
Potassium	m g/L	Quarterly	17			
Sodium	m g/L	Quarterly	138			
Sulfate	m g/L	Quarterly	18			
Total Dissolved Solids	m g/L	Quarterly	608			
Total Organic Carbon	m g/L	Quarterly	7			
Total Phenolics	μg/L	Quarterly	<0.050			
Organochlorine Pesticides	μg/L	Yearly	<0.5			
Organophosphate Pesticides	μg/L	Yearly	<0.5			

## Point 7 - Groundwater Bore BH4

			Date Sampled	Date Sampled	Date Sampled	Date Sampled
			18.12.2024			
Pollutant	Unit of measure	Monitoring Frequency	Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			31.12.2024			
			Value	Value	Value	Value
Alkalinity (as calcium carbonate)	m g/L	Quarterly	DRY			
Biological Oxygen Demand	m g/L	Quarterly	DRY			
Calcium	m g/L	Quarterly	DRY			
Chloride	m g/L	Quarterly	DRY			
Fluoride	m g/L	Quarterly	DRY			
Iron	m g/L	Quarterly	DRY			
Magnesium	m g/L	Quarterly	DRY			
Manganese	m g/L	Quarterly	DRY			
Nitrate	m g/L	Quarterly	DRY			
Nitrogen (ammonia)	m g/L	Quarterly	DRY			
pH (In Situ)	pH Units	Quarterly	DRY			
Potassium	m g/L	Quarterly	DRY			
Sodium	m g/L	Quarterly	DRY			
Sulfate	m g/L	Quarterly	DRY			
Total Dissolved Solids	m g/L	Quarterly	DRY			

Total Organic Carbon	m g/L	Quarterly	DRY		
Total Phenolics	μg/L	Quarterly	DRY		
Organochlorine Pesticides	μg/L	Yearly	DRY		
Organophosphate Pesticides	μg/L	Yearly	DRY		