



Kyogle Landfill Facility Environmental Monitoring Data – 2024/25

64-78 Runnymede Road, Kyogle, NSW 2474
Environmental Protection Licence (EPL) number: 12124

Background

Under the *Protection of the Environment Operations Act 1997*, Kyogle Council must publish or make pollution monitoring data for the Kyogle Landfill Facility available to members of the public. This document summarises the pollution monitoring data for the Kyogle Landfill Facility for the 2024 – 2025 reporting period.

The Environment Protection Licence (EPL) for the Kyogle Landfill Facility outlines how and when pollution must be monitored and the pollution limits which should not be exceeded. A copy of the EPL for the Kyogle Landfill Facility is available from the NSW Environmental Protection Agency's Protection of the Environment Operations Public Register at <https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers/about-prpoeo>.

Environmental Monitoring Data

Leachate

MONITORING POINT 1: Western Leachate Dam (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	Quarterly	454	321	294	315	294	346	454	No limit
Ammonia	Milligrams per litre	Quarterly	28.9	1.97	6.94	26.5	1.97	11.08	28.9	No limit
Arsenic	Milligrams per litre	Quarterly	<0.001	0.005	<0.05	<0.05	<0.001	<0.03	<0.05	No limit
Calcium	Milligrams per litre	Quarterly	50.3	26.2	30.0	37.3	26.2	35.95	50.3	No limit
Chloride	Milligrams per litre	Quarterly	<10	200	180	123	<10	128	200	No limit
Dissolved organic carbon	Milligrams per litre	Quarterly	52.5	43.2	39.3	42.4	39.3	44.35	52.5	No limit
Electrical Conductivity	Microsiemens per centimetre	Quarterly	1.59	1.18	1.16	0.958	0.958	1.222	1.59	No limit
Iron	Milligrams per litre	Quarterly	2.57	4.30	0.743	1.53	0.743	2.286	4.30	No limit
Magnesium	Milligrams per litre	Quarterly	27.1	24.5	23.1	13.8	13.8	22.1	27.1	No limit
Manganese	Milligrams per litre	Quarterly	0.350	0.281	0.067	0.465	0.067	0.29	0.465	No limit
Nitrate	Milligrams per litre	Quarterly	4.51	0.160	0.849	<0.005	<0.005	1.39	4.51	No limit
Nitrite	Milligrams per litre	Quarterly	2.22	0.149	1.87	0.077	0.077	1.079	2.22	No limit

MONITORING POINT 1: Western Leachate Dam (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Nitrogen - Total	Milligrams per litre	Quarterly	16.4	10.2	16.5	33.5	10.2	19.15	33.5	No limit
pH	pH	Quarterly	7.62	7.78	7.96	7.29	7.29	7.66	7.96	No limit
Potassium	Milligrams per litre	Quarterly	41.9	44.3	36.2	36.2	36.2	39.65	44.3	No limit
Sodium	Milligrams per litre	Quarterly	173	178	160	117	117	157	178	No limit
Sulphate	Milligrams per litre	Quarterly	<9	<9	74.4	16.6	<9	27.25	74.4	No limit
Total petroleum hydrocarbons	Micrograms per litre	Quarterly	540*	240**	550***	500****	240	593	550	No limit

*Is result for TRHC15-C28. Other results include: TRHC10-C14 = 240 µg/L and TRHC29-C36 = 84.0 µg/L

**Is result for TRHC15-C28. Other results include: TRHC10-C14 = 76 µg/L and TRHC29-C36 = <200 µg/L

***Is result for TRHC15-C28. Other results include: TRHC10-C14 = 150 µg/L and TRHC29-C36 = 120 µg/L

****Is result for TRHC15-C28. Other results include: TRHC10-C14 = 150 µg/L and TRHC29-C36 = 92 µg/L

MONITORING POINT 2: Eastern Leachate Dam (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	Quarterly	489	482	323	670	323	491	670	No limit
Ammonia	Milligrams per litre	Quarterly	4.58	52.2	19.6	79.3	4.58	38.9	79.3	No limit
Arsenic	Milligrams per litre	Quarterly	<0.001	<0.001	<0.05	<0.05	<0.001	<0.026	<0.05	No limit
Calcium	Milligrams per litre	Quarterly	37.6	41.8	38.3	57.7	37.6	43.9	57.7	No limit
Chloride	Milligrams per litre	Quarterly	<10	254	203	230	<10	119.3	254	No limit
Dissolved organic carbon	Milligrams per litre	Quarterly	43.4	54.4	42.3	75.2	42.3	53.8	75.2	No limit
Electrical conductivity	Microsiemens per centimetre	Quarterly	1.59	1.89	1.37	1.84	1.37	1.67	1.89	No limit
Iron	Milligrams per litre	Quarterly	4.33	12.0	1.67	9.19	1.67	6.85	12.0	No limit
Magnesium	Milligrams per litre	Quarterly	24.3	26.4	23.8	22.5	22.5	24.25	26.4	No limit
Manganese	Milligrams per litre	Quarterly	1.11	2.00	0.658	0.937	0.658	0.93	2.00	No limit
Nitrate	Milligrams per litre	Quarterly	0.156	<0.005	1.48	<0.005	<0.005	0.41	1.48	No limit
Nitrite	Milligrams per litre	Quarterly	0.096	1.08	3.79	0.063	0.063	1.26	3.79	No limit
Nitrogen - Total	Milligrams per litre	Quarterly	55.5	55.1	30.6	33.5	30.6	43.67	55.5	No limit
pH	pH	Quarterly	7.60	7.56	7.17	7.36	7.17	7.42	7.60	No limit
Potassium	Milligrams per litre	Quarterly	31.6	52.9	40.4	53.5	31.6	44.6	53.5	No limit
Sodium	Milligrams per litre	Quarterly	157	220	201	214	157	198	220	No limit
Sulphate	Milligrams per litre	Quarterly	<9	13	71.4	24.9	<9	29.6	71.4	No limit

Total petroleum hydrocarbons	Micrograms per litre	Quarterly	500*	420**	530***	640****	420	523	640	No limit
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*Is result for TRHC15-C28. Other results include: TRHC10-C14 = 260 µg/L and TRHC29-C36 = 62.0 µg/L

**Is result for TRHC15-C28. Other results include: TRHC10-C14 = 230 µg/L and TRHC29-C36 = <200 µg/L

***Is result for TRHC15-C28. Other results include: TRHC10-C14 = 170 µg/L and TRHC29-C36 = 130 µg/L

**** Is result for TRHC15-C28. Other results include: TRHC10-C14 = 240 µg/L and TRHC29-C36 = 99 µg/L

Ground water quality

Ground water monitoring is required to be conducted following the first 24 hour rainfall event exceeding 25 millimetres in each quarterly period. Monitoring results will be published below if monitoring was required during the quarter. If no monitoring results are published below it means that a rainfall event exceeding 25mm in 24 hours did not occur during the quarter.

	July 2024	October 2024	January 2025	April 2025
No. of events during quarter	0	1	0	0
Date of first event	N/A	29 September 2024	N/A	N/A

MONITORING POINT 4: GW1A (see map for location)

Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	-	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	-	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	-	-	-	-	-	-	No limit
pH	pH		-	-	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	-	-	-	-	-	-	No limit

MONITORING POINT 5: GW2A (see map for location)

Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	-	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	-	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	-	-	-	-	-	-	No limit
pH	pH		-	-	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	-	-	-	-	-	-	No limit

MONITORING POINT 5: GW2A (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
TRHC15-C28	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	-	-	-	-	-	-	No limit

MONITORING POINT 8: GW3A (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	-	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	-	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	-	-	-	-	-	-	No limit
pH	pH		-	-	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	-	-	-	-	-	-	No limit

MONITORING POINT 10: BH3 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	-	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	-	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	-	-	-	-	-	-	No limit
pH	pH		-	-	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	-	-	-	-	-	-	No limit

MONITORING POINT 11: BH4 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	<1	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	0.106	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	33.9	-	-	-	-	-	No limit
pH	pH		-	4.36	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	<50	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	<100	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	<50	-	-	-	-	-	No limit

MONITORING POINT 12: BH5 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	-	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	-	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	-	-	-	-	-	-	No limit
pH	pH		-	-	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	-	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	-	-	-	-	-	-	No limit

MONITORING POINT 13: BH6 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	<1	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	1.00	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	94.3	-	-	-	-	-	No limit
pH	pH		-	4.23	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	53	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	480	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	110	-	-	-	-	-	No limit

MONITORING POINT 14: BH7 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	430	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	15.4	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	22.4	-	-	-	-	-	No limit
pH	pH		-	6.46	-	-	-	-	-	No limit
TRHC10-C14	Micrograms per litre		-	270	-	-	-	-	-	No limit
TRHC15-C28	Micrograms per litre		-	650	-	-	-	-	-	No limit
TRHC29-C36	Micrograms per litre		-	97	-	-	-	-	-	No limit

Surface water quality

Surface water monitoring is required to be conducted following the first 24hour rainfall event exceeding 25 millimetres in each quarterly period. Monitoring results will be published below if monitoring was required during the quarter. If no monitoring results are published below it means that a rainfall event exceeding 25mm in 24 hours did not occur during the quarter.

	July 2024	October 2024	January 2025	April 2025
No. of events during quarter	0	1	0	0
Date of first event	N/A	29 September 2024	N/A	N/A

MONITORING POINT 15: SW001 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	13	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	0.066	-	-	-	-	-	No limit
Arsenic	Milligrams per litre		-	<0.001	-	-	-	-	-	No limit
Calcium	Milligrams per litre		-	-	-	-	-	-	-	No limit
Chloride	Milligrams per litre		-	6.45	-	-	-	-	-	No limit
Dissolved organic carbon	Milligrams per litre		-	24.1	-	-	-	-	-	No limit
Electrical conductivity	Microsiemens per centimetre		-	0.043	-	-	-	-	-	No limit

MONITORING POINT 15: SW001 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Iron	Milligrams per litre		-	1.46	-	-	-	-	-	No limit
Magnesium	Milligrams per litre		-	-	-	-	-	-	-	No limit
Manganese	Milligrams per litre		-	0.119	-	-	-	-	-	No limit
Nitrate	Milligrams per litre		-	<0.005	-	-	-	-	-	No limit
Nitrite	Milligrams per litre		-	<0.005	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	3.10	-	-	-	-	-	No limit
pH	pH		-	6.30	-	-	-	-	-	No limit
Potassium	Milligrams per litre		-	2.63	-	-	-	-	-	No limit
Sodium	Milligrams per litre		-	3.04	-	-	-	-	-	No limit
Suspended solids	Milligrams per litre		-	127	-	-	-	-	-	No limit
Total petroleum hydrocarbons	Micrograms per litre		-	<100	-	-	-	-	-	No limit

MONITORING POINT 16: SW002 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	177	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	0.066	-	-	-	-	-	No limit
Arsenic	Milligrams per litre		-	0.003	-	-	-	-	-	No limit
Calcium	Milligrams per litre		-	-	-	-	-	-	-	No limit
Chloride	Milligrams per litre		-	124	-	-	-	-	-	No limit
Dissolved organic carbon	Milligrams per litre		-	23.4	-	-	-	-	-	No limit
Electrical conductivity	Microsiemens per centimetre		-	0.727	-	-	-	-	-	No limit
Iron	Milligrams per litre		-	7.00	-	-	-	-	-	No limit
Magnesium	Milligrams per litre		-	-	-	-	-	-	-	No limit
Manganese	Milligrams per litre		-	0.918	-	-	-	-	-	No limit
Nitrate	Milligrams per litre		-	<0.005	-	-	-	-	-	No limit
Nitrite	Milligrams per litre		-	0.007	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	1.88	-	-	-	-	-	No limit
pH	pH		-	6.70	-	-	-	-	-	No limit
Potassium	Milligrams per litre		-	14.3	-	-	-	-	-	No limit
Sodium	Milligrams per litre	-	94.7	-	-	-	-	-	No limit	

MONITORING POINT 16: SW002 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Suspended solids	Milligrams per litre		-	49	-	-	-	-	-	No limit
Total petroleum hydrocarbons	Micrograms per litre		-	120	-	-	-	-	-	No limit

MONITORING POINT 17: SW003 (see map for location)										
Pollutant	Unit of measure	Required monitoring frequency	Quarterly results				Summary results			Pollution limit
			July 2024	October 2024	January 2025	April 2025	Min value	Mean value	Max value	
Alkalinity	Milligrams per litre	When threshold event occurs (see above)	-	34	-	-	-	-	-	No limit
Ammonia	Milligrams per litre		-	0.030	-	-	-	-	-	No limit
Arsenic	Milligrams per litre		-	0.001	-	-	-	-	-	No limit
Calcium	Milligrams per litre		-	-	-	-	-	-	-	No limit
Chloride	Milligrams per litre		-	13.9	-	-	-	-	-	No limit
Dissolved organic carbon	Milligrams per litre		-	18.0	-	-	-	-	-	No limit
Electrical conductivity	Microsiemens per centimetre		-	0.115	-	-	-	-	-	No limit
Iron	Milligrams per litre		-	1.94	-	-	-	-	-	No limit
Magnesium	Milligrams per litre		-	-	-	-	-	-	-	No limit
Manganese	Milligrams per litre		-	0.041	-	-	-	-	-	No limit
Nitrate	Milligrams per litre		-	<0.005	-	-	-	-	-	No limit
Nitrite	Milligrams per litre		-	<0.005	-	-	-	-	-	No limit
Nitrogen	Milligrams per litre		-	1.29	-	-	-	-	-	No limit
pH	pH		-	6.55	-	-	-	-	-	No limit
Potassium	Milligrams per litre		-	4.54	-	-	-	-	-	No limit
Sodium	Milligrams per litre		-	9.60	-	-	-	-	-	No limit
Suspended solids	Milligrams per litre		-	106	-	-	-	-	-	No limit
Total petroleum hydrocarbons	Micrograms per litre	-	<100	-	-	-	-	-	No limit	

Stormwater discharge

Stormwater monitoring is required to be conducted following the first discharge event of each quarter arising from a rainfall event of less than 60 millimetres in total falling over a consecutive 5 day period. Monitoring results will be published below if monitoring was required during the quarter. If no monitoring results are published below it means that a discharge event did not occur after the above described rainfall event during the quarter.

	July 2024	October 2024	January 2025	April 2025
No. of events during quarter	0	0	0	0
Date of first event	N/A	N/A	N/A	N/A

Sampling data

Leachate

Key milestones	Quarterly sample			
	July 2024	October 2024	January 2025	April 2025
Date testing conducted	17 July 2024	23 October 2024	29 January 2025	9 April 2025
Date data obtained	21 August 2024	17 December 2024	14 February 2025	23 April 2025
Date data published	11 September 2024	18 December 2024	18 February 2025	30 April 2025

Ground water

Key milestones	Quarterly sample			
	July 2024	October 2024	January 2025	April 2025
Date testing conducted	N/A	30 September 2024	N/A	N/A
Date data obtained	N/A	14 October 2024	N/A	N/A
Date data published	N/A	20 January 2025	N/A	N/A

Surface water

Key milestones	Quarterly sample			
	July 2024	October 2024	January 2025	April 2025
Date testing conducted	N/A	30 September 2024	N/A	N/A
Date data obtained	N/A	14 October 2024	N/A	N/A
Date data published	N/A	20 January 2025	N/A	N/A

Stormwater

Key milestones	Quarterly sample
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	July 2024	October 2024	January 2025	April 2025
Date testing conducted	N/A	N/A	N/A	N/A
Date data obtained	N/A	N/A	N/A	N/A
Date data published	N/A	N/A	N/A	N/A

Kyogle Landfill Facility Monitoring Points (from Appendix 6 of Kyogle Landfill Environmental Management Plan)

