

Natural Resources Wales
Waste and Industry Regulation Team
Maes Y Ffynnon
Bangor
LL57 2DW

Monday, 23 March 2026

Ask for: Lauren Williams, Michelle Moran
Ref: ECL.10269.R03.011

Dear Sir/Madam,

Ty Mawr Landfill Site – Q1 2026 Monitoring Report

This letter-report accompanies the factual monitoring data that was collated during the Q1 2026 (January - March) review period. The scope of the data reflects the monitoring requirements included within Schedule 4, and reporting requirements in Schedule 5 of the Environmental Permit (reference EPR/BP3330LS) for the site, as well as extra analysis requested by NRW.

1. Schedule 4, Table S4.1 Trigger levels for emissions into groundwater and monitoring requirements:

Monthly spot samples for downgradient groundwater monitoring boreholes (GW2R, GW2AR and GW3R) are included in this report. All boreholes were sampled each month.

2. Schedule 4, Table S4.2 Landfill gas in external monitoring boreholes - limits and monitoring requirements:

Monthly gas monitoring results for perimeter boreholes are included in this report (BH1AR, BH1BR, BH2AR, BH2BR, BH3AR1, BH3BR, BH4AR, BH4BR, BH5AR, BH6AR, BH7AR). All boreholes were able to be monitored each month.

3. Schedule 4, Table S4.3 Landfill gas – other monitoring requirements:

Monthly gas quality data for the in-waste landfill gas monitoring point LMP are included in this report.

4. Schedule 4, Table S4.4 Surface water - other monitoring requirements:

Surface water quality data, monthly and quarterly suites, for locations SW1 and SW2 are included in this report.

5. Schedule 4, S4.5 Particulate matter in ambient air:

Dust monitoring is not included in this report, this will be included in the EMS review.

6. Schedule 4, Table S4.6 Groundwater – Other monitoring requirements:

Groundwater monitoring is required monthly for all groundwater monitoring locations. All ground water boreholes (GW1R, GW2R, GW2AR and GW3R) had a sufficient volume of water to be sampled each month.

7. Waste acceptance criteria (WAC) – Additional requirement:

This was not tested this quarter therefore the results are not included in this report.

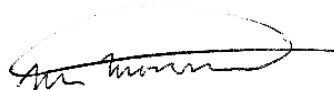
If you wish to discuss the submitted monitoring results, please do not hesitate to contact us.

Yours faithfully,



Lauren Williams
BSc (Hons), MSc
Graduate Environmental Technician

Reviewed by,



Michelle Moran
BSc (Hons) MSc, MCIWM
Associate Environmental Scientist

for Egniol Consulting Ltd.

Enclosed:

Data

Table S4.2 Landfill gas composition in external monitoring boreholes
Table S4.3 Landfill gas – other monitoring requirements
Table S4.4 Surface water – other monitoring requirements
Table S4.6 Groundwater – other monitoring requirements

Drawing

Ty Mawr monitoring point location plan [10269-ECL-XX-XX-DR-C-0016]

SW Monthly												
Q1			Q2			Q3			Q4			
January	February	March	April	May	June	July	August	September	October	November	December	
SW1	X	X	X									
SW2	X	X	X									

SW Quarterly												
Q1			Q2			Q3			Q4			
January	February	March	April	May	June	July	August	September	October	November	December	
SW1	X											
SW2	X											

Date of sample	13.01.2026	10.2.26	11.03.26
All SW monthly suite 5			
pH			
Electrical Conductivity			
Ammoniacal Nitrogen as N			
Chloride			
Dissolved Oxygen			
Biochemical Oxygen Demand (BOD) - 5 day			
Chemical Oxygen Demand (COD)			

Date of sample	13.01.2026	10.02.26
All SW quarterly suite 6		
Sulphate as SO ₄		
Alkalinity (as CaCO ₃)		
Total Organic Carbon (TOC)		
Total Oxidised Nitrogen (TON)		
Sodium (dissolved)		
Potassium (dissolved)		
Calcium (dissolved)		
Magnesium (dissolved)		
Iron (dissolved)		
Manganese (dissolved)		
Cadmium (dissolved)		
Chromium (dissolved)		
Copper (dissolved)		
Nickel (dissolved)		
Lead (dissolved)		
Zinc (dissolved)		
PAH - Speciated (EPA 16) Inc total		

Analytical Report Number: 26-001299
Project / Site name: Ty Mawr Farm Landfill
Your Order No: POP003357

Lab Sample Number	799076			799077
Sample Reference	SW1			SW2
Sample Number	None Supplied			None Supplied
Water Matrix	Surface water			Surface water
Depth (m)	None Supplied			None Supplied
Date Sampled	13/01/2026			13/01/2026
Time Taken	1130			1230
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.7	8.1
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	300	310
Sulphate as SO ₄	mg/l	0.045	ISO 17025	22.8	41.9
Chloride	mg/l	0.15	ISO 17025	79	97
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	19	27
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	5.89	7.14
Alkalinity as CaCO ₃	mgCaCO ₃ /l	3	ISO 17025	83	160
Chemical Oxygen Demand (Total)	mg/l	2	ISO 17025	19	25
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	1.2	2
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	3.32	1.22
Dissolved Oxygen	mg/l	1	NONE	10	11

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16
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Heavy Metals / Metalloids

Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.3	1.3
Copper (dissolved)	µg/l	0.5	ISO 17025	3.9	4.5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	7	16
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.2	1.1
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.1	1.5

Lab Sample Number				799076	799077
Sample Reference				SW1	SW2
Sample Number				None Supplied	None Supplied
Water Matrix				Surface water	Surface water
Depth (m)				None Supplied	None Supplied
Date Sampled				13/01/2026	13/01/2026
Time Taken				1130	1230
Analytical Parameter (Water Analysis)		Units	Test Limit of detection	Test Accreditation Status	

Calcium (dissolved)	mg/l	0.012	ISO 17025	45	72
Iron (dissolved)	mg/l	0.004	ISO 17025	0.06	0.041
Magnesium (dissolved)	mg/l	0.005	ISO 17025	6.5	9.1
Potassium (dissolved)	mg/l	0.025	ISO 17025	3.1	4.1
Sodium (dissolved)	mg/l	0.01	ISO 17025	42	53

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 26-007473
Project / Site name: Ty Mawr Farm Landfill
Your Order No: POP003397

Lab Sample Number				830612	830613
Sample Reference				SW1	SW2
Sample Number				None Supplied	None Supplied
Water Matrix				Surface water	Surface water
Depth (m)				None Supplied	None Supplied
Date Sampled				10/02/2026	10/02/2026
Time Taken				1000	1110
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditati on Status		

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.8	8.2
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	380	690
Chloride	mg/l	0.15	ISO 17025	51	110
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	29
Chemical Oxygen Demand (Total)	mg/l	2	ISO 17025	37	21
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	2	1.5
Dissolved Oxygen	mg/l	1	NONE	9.6	9.9

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 26-012682
Project / Site name: Ty Mawr Farm Landfill
Your Order No: POP003437

Lab Sample Number				856408	856409
Sample Reference				SW1	SW2
Sample Number				None Supplied	None Supplied
Water Matrix				Surface water	Surface water
Depth (m)				None Supplied	None Supplied
Date Sampled				11/03/2026	11/03/2026
Time Taken				1000	1100
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditati on Status		

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.8	8.2
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	430	820
Chloride	mg/l	0.15	ISO 17025	51	120
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	26
Chemical Oxygen Demand (Total)	mg/l	2	ISO 17025	26	42
BOD (Biochemical Oxygen Demand) (Total) - PL (L086B)	mg/l	1	ISO 17025	1.7	1.4
Dissolved Oxygen	mg/l	1	NONE	9.3	11

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Table S4.6 Groundwater Level Monitoring

Date:	13.01.2026	Time at Start:	11:30	Time at End:	13:30
Project:	Ty Mawr	Weather Conditions:	drizzle		
Project Ref:	10269	Surface Conditions:	wet		
Engineer(s):	CD	Equipment:	ATEX 60m Dipmeter		

Dry = No Groundwater

NR = Not Recorded

N/A = Not Applicable

Date	Location Reference	Dip to Groundwater	Dip to base of well	Dip to Groundwater	Dip to Base of Well	Cover Height	Comments	Permit	
		(m below top of cover)	(m below top of cover)	(m below ground level)	(m below ground level)	(m above ground level)		dip	sample
13.01.26	GW1R	0.84	15.89	0.24	15.29	0.60		monthly	monthly
13.01.26	GW2R	10.54	12.92	9.84	12.22	0.70		monthly	monthly
13.01.26	GW2AR	3.31	5.99	2.61	5.29	0.70		monthly	monthly
13.01.26	GW3R	12.37	16.30	11.67	15.60	0.70		monthly	monthly

 Table S4.6 Groundwater Level Monitoring			
Date: 10.02.26		Time at Start: 10:00	Time at End: 12:00
Project: Ty Mawr		Weather Conditions: drizzle	
Project Ref: 10269		Surface Conditions: wet	
Engineer(s): CD		Equipment: ATEX 60m Dipmeter	

Dry = No Groundwater

NR = Not Recorded

N/A = Not Applicable

Date	Location Reference	Dip to Groundwater	Dip to base of well	Dip to Groundwater	Dip to Base of Well	Cover Height	Comments	Permit	
		(m below top of cover)	(m below top of cover)	(m below ground level)	(m below ground level)	(m above ground level)		dip	sample
10.02.26	GW1R	0.88	15.89	0.28	15.29	0.60		monthly	monthly
10.02.26	GW2R	10.74	12.90	10.04	12.20	0.70		monthly	monthly
10.02.26	GW2AR	3.73	5.98	3.03	5.28	0.70		monthly	monthly
10.02.26	GW3R	12.40	16.29	11.70	15.59	0.70		monthly	monthly



Table S4.6 Groundwater Level Monitoring

Date:	11.03.26	Time at Start:	10:00	Time at End:	12:00
Project:	Ty Mawr	Weather Conditions:	dry		
Project Ref:	10269	Surface Conditions:	mix of dr and wet		
Engineer(s):	CD/LW	Equipment:	ATEX 60m Dipmeter		

Dry = No Groundwater

NR = Not Recorded

N/A = Not Applicable

Date	Location Reference	Dip to Groundwater	Dip to base of well	Dip to Groundwater	Dip to Base of Well	Cover Height	Comments	Permit requirement	
		(m below top of cover)	(m below top of cover)	(m below ground level)	(m below ground level)	(m above ground level)		dip	sample
11.03.26	GW1R	1.01	15.89	0.41	15.29	0.60		monthly	monthly
11.03.26	GW2R	11.05	121.91	10.35	121.21	0.70		monthly	monthly
11.03.26	GW2AR	3.94	6.00	3.24	5.30	0.70		monthly	monthly
11.03.26	GW3R	12.70	16.69	12.00	15.99	0.70		monthly	monthly

	Q1			Q2			Q3			Q4		
Dips	January	February	March	April	May	June	July	August	September	October	November	December
GW1R	X	X	X									
GW2R	X	X	X									
GW2AR	X	X	X									
GW3R	X	X	X									

Downgradient GW Monthly												
	Q1			Q2			Q3			Q4		
	January	February	March	April	May	June	July	August	September	October	November	December
GW1R	X	X	X									
GW2R	X	X	X									
GW2AR	X	X	X									
GW3R	X	X	X									

GW Monthly												
	Q1			Q2			Q3			Q4		
	January	February	March	April	May	June	July	August	September	October	November	December
GW1R	X	X	X									
GW2R	X	X	X									
GW2AR	X	X	X									
GW3R	X	X	X									

GW Quarterly												
	Q1			Q2			Q3			Q4		
	January	February	March	April	May	June	July	August	September	October	November	December
GW1R	X											
GW2R	X											
GW2AR	X											
GW3R	X											

GW Annual suite completed January Q1

Date of sample	13.01.2026	10.2.26	11.03.26
Downgradient GW (GW2 GW2a GW3) Monthly (suite 1)			
Ammoniacal Nitrogen as N			
Chloride			

date of sample	13.01.2026	10.2.26	11.03.26
all GW (GW1, GW2, GW2A, GW3) Monthly (suite 2)			
pH			
Electrical Conductivity			
Dissolved Oxygen			

Date	13.01.2026
All GW quarterly suite 3	
Sulphate as SO ₄	
Alkalinity (as CaCO ₃)	
Total Organic Carbon (TOC)	
Total Oxidised Nitrogen (TON)	
Sodium (dissolved)	
Potassium (dissolved)	
Calcium (dissolved)	
Magnesium (dissolved)	
Iron (dissolved)	
Manganese (dissolved)	
Cadmium (dissolved)	
Chromium (dissolved)	
Copper (dissolved)	
Nickel (dissolved)	
Lead (dissolved)	
Zinc (dissolved)	

Date of sample	13.01.2026
GW annual suite 4	
PAH - Speciated (EPA 16) Inc total - (see PAH tab)	

Analytical Report Number: 26-001299
Project / Site name: Ty Mawr Farm Landfill
Your Order No: POP003357

Lab Sample Number	799072	799073	799074	799075
Sample Reference	GW1R	GW2R	GW2AR	GW3R
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	Ground water	Ground water	Ground water	Ground water
Depth (m)	1.00	4.00	11.00	13.00
Date Sampled	13/01/2026	13/01/2026	13/01/2026	13/01/2026
Time Taken	1110	1200	1205	1250
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditati on Status	

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.6	7.3	7.7	7.3
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	540	390	1000	490
Sulphate as SO ₄	mg/l	0.045	ISO 17025	18.9	9.18	220	31.4
Chloride	mg/l	0.15	ISO 17025	-	20	21	36
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	-	< 15	< 15	16
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	18.6	2.16	3.05	1.26
Alkalinity as CaCO ₃	mgCaCO ₃ /l	3	ISO 17025	200	180	410	190
Total Oxidised Nitrogen (TON)	mg/l	0.02	NONE	< 0.020	3.67	< 0.020	3.14
Dissolved Oxygen	mg/l	1	NONE	6.2	9.5	6.4	7.1

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	< 0.02	0.03	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.1	1	1.2	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	6.6	1.5	2.7	1.4
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	75	2.7	4.6	1.9
Nickel (dissolved)	µg/l	0.5	ISO 17025	9.2	2.5	1.4	0.9
Zinc (dissolved)	µg/l	0.5	ISO 17025	7.8	2.7	2.1	2.4

Lab Sample Number				799072	799073	799074	799075
Sample Reference				GW1R	GW2R	GW2AR	GW3R
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				1.00	4.00	11.00	13.00
Date Sampled				13/01/2026	13/01/2026	13/01/2026	13/01/2026
Time Taken				1110	1200	1205	1250
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status				

Calcium (dissolved)	mg/l	0.012	ISO 17025	59	88	110	56
Iron (dissolved)	mg/l	0.004	ISO 17025	0.084	0.025	0.02	0.015
Magnesium (dissolved)	mg/l	0.005	ISO 17025	12	6.5	23	20
Potassium (dissolved)	mg/l	0.025	ISO 17025	22	0.97	2.3	1.9
Sodium (dissolved)	mg/l	0.01	ISO 17025	34	9.2	120	25

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 26-007473
Project / Site name: Ty Mawr Farm Landfill
Your Order No: POP003397

Lab Sample Number				830608	830609	830610	830611
Sample Reference				GW1R	GW2R	GW2AR	GW3R
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				1.00	11.00	4.00	13.00
Date Sampled				10/02/2026	10/02/2026	10/02/2026	10/02/2026
Time Taken				0950	1050	1100	1120
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditati on Status				

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.5	7.2	7.8	7.4
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	690	400	920	490
Chloride	mg/l	0.15	ISO 17025	-	20	20	39
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	-	< 15	< 15	< 15
Dissolved Oxygen	mg/l	1	NONE	3.3	9.1	5.2	5.6

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 26-012682

Project / Site name: Ty Mawr Farm Landfill

Your Order No: POP003437

Lab Sample Number				856404	856405	856406	856407
Sample Reference				GW1R	GW2R	GW2AR	GW3R
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				Ground water	Ground water	Ground water	Ground water
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/03/2026	11/03/2026	11/03/2026	11/03/2026
Time Taken				0955	1105	1050	1120
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditati on Status				

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	7.3	7.2	7.8	7.5
Electrical Conductivity at 20°C	µS/cm	10	ISO 17025	700	420	950	480
Chloride	mg/l	0.15	ISO 17025	-	21	21	35
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	-	< 15	< 15	< 15
Dissolved Oxygen	mg/l	1	NONE	4	9.3	5.9	7.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Table S4.2 & S4.3 Landfill Gas Composition in monitoring boreholes

Date:	13.01.2026	Time at Start: 11:20	Time at End: 13:00
Project:	10269	Weather Conditions: Drizzle	
Project Ref:	Ty Mawr	Surface Conditions: Wet	
Engineer(s):	LW/CD	Equipment: GM Series BLE	

NR = Not Recorded

N/A = Not Applicable

Location Reference	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Balance (%)	Barometric Pressure (mb)	Internal Flow (l/h)	Comments
BH1AR	0.0	0.5	16.4	83.1	985	0	
BH1BR	0.0	2.4	11.8	85.8	984	0	
BH2AR	0.0	0.3	17.5	82.2	986	0	
BH2BR	0.0	0.1	17.7	82.2	984	0	
BH3AR1	0.0	0.3	17.6	82.1	986	0	
BH3BR	0.0	0.3	17.7	82	984	0	
BH4AR	0.0	0.9	16	83.1	987	0	
BH4BR	0.0	0.9	14.6	84.5	985	0	
BH5AR	0.0	3.6	12.2	84.2	987	0	
BH6AR	0.0	1.2	17.4	81.4	987	0	
BH7AR	0.0	0.2	17.8	82	988	0	
LMP	0.0	0.4	17.6	82	984	0	



Table S4.2 & S4.3 Landfill Gas Composition in external monitoring boreholes

Date:	10.02.26	Time at Start: 10:00	Time at End: 12:00
Project:	10269	Weather Conditions: Drizzle	
Project Ref:	Ty Mawr	Surface Conditions: Wet	
Engineer(s):	LW/CD	Equipment: GM Series BLE	

NR = Not Recorded

N/A = Not Applicable

Location Reference	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Balance (%)	Barometric Pressure (mb)	Internal Flow (l/h)	Comments
BH1AR	0.0	0.5	17.5	82	968	0	
BH1BR	0.0	2.3	11.9	85.8	967	0	
BH2AR	0.0	0.2	18	81.8	968	0	
BH2BR	0.0	0.2	18	81.8	967	0	
BH3AR1	0.0	0.4	17.8	81.8	969	0	
BH3BR	0.0	0.3	18	81.7	967	0	
BH4AR	0.0	0.9	16.2	82.9	969	0	
BH4BR	0.0	1.7	9.4	88.9	968	0	
BH5AR	0.0	3.4	12.4	84.2	970	0	
BH6AR	0.0	2.3	16.7	81	970	0	
BH7AR	0.0	0.3	17.8	81.9	971	0	
LMP	69.4	13.7	0.3	16.6	967	0	



Table S4.2 & S4.3 Landfill Gas Composition in external monitoring boreholes

Date:	10.02.26	Time at Start: 10:00	Time at End: 12:00
Project:	10269	Weather Conditions: Drizzle	
Project Ref:	Ty Mawr	Surface Conditions: Wet	
Engineer(s):	LW/CD	Equipment: GM Series BLE	

NR = Not Recorded

N/A = Not Applicable

Location Reference	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Balance (%)	Barometric Pressure (mb)	Internal Flow (l/h)	Comments
BH1AR	0.0	0.7	16.7	82.6	990	0	
BH1BR	0.0	2.4	10.5	87.1	989	0	
BH2AR	0.0	0.6	16.5	82.9	990	0	
BH2BR	0.0	0.2	17.3	82.5	989	0	
BH3AR1	0.0	0.3	17.2	82.5	991	0	
BH3BR	0.0	0.4	17.3	82.3	988	0	
BH4AR	0.0	0.8	15.8	83.4	993	0	
BH4BR	0.0	0.2	17.1	82.7	991	0	
BH5AR	0.0	3.2	12.1	84.7	993	0	
BH6AR	0.0	2.5	15.4	82.1	993	0	
BH7AR	0.0	0.8	16	83.2	993	0	
LMP	6.1	1.9	15.5	76.5	989	0	