EPA Application Form

7.4.1 - Emissions to Atmosphere - Main and Fugitive Emissions - Attachment

Organisation Name: * Dublin Waste to Energy Limited

Application I.D.: * LA003577

Amendments to this Application Form Attachment

Version No.	Date	Amendment since previous version	Reason
V.1.0	July 2017	N/A	Online application form attachment
As above	Mar 2017	Identification of required fields	Assist correct completion of attachment

EMISSIONS TO ATMOSPHERE

Emissions to air/atmosphere include the following:

Main Emissions

Main emissions include all emissions of environmental significance. Where a mass emission threshold is specified in a BAT document (BAT Conclusions, National BAT note or BREF), emissions which exceed this threshold prior to abatement are regarded as significant, i.e., 'main emissions'. (In some cases emissions below the threshold can still be significant and qualify as Main Emissions).

Minor Emissions

Emissions below the mass emission threshold may be considered minor emissions and therefore do not generally need to be specifically controlled by the conditions or schedules of the licence (i.e., setting of ELVs, abatement control measures, or monitoring requirements). Emissions may also be deemed minor by virtue of their source/nature (e.g., laboratory fume hoods, workspace extractions, passive vents from storage tanks, HVAC exhausts), or composition (e.g., water vapour emissions).
For combustion plant such as boilers, these can be considered minor where the rated thermal input is < 1MW where natural gas is the main fuel, and for liquid and solid fuels where its < 250kW.

In completing the separate 'Emissions to Atmosphere - Minor and Potential' attachment for minor emissions, the applicant should supply sufficient information to justify the determination of the emission as minor. Notwithstanding this guidance, the Agency may consider any emission to be significant (i.e., a main emission) on the basis of environmental impact.

Fugitive Emissions

Fugitive emissions include emissions from non-point sources and diffuse sources.

Potential Emissions

These are emissions which only operate under abnormal process conditions. Typical examples include bursting discs, pressure relief valves, and emergency generators. Bypasses and flares may also fall within this category, depending on how they are operated or designed to operate. Although the Agency does not normally set controls in licences for potential emissions, it may do so for the purposes of environmental protection.

This attachment collects information on main and fugitive emissions to atmosphere. Waste gas means the final gaseous emission from a stack or abatement equipment.

For minor and potential emissions to atmosphere, complete the separate 'Emissions to Atmosphere - Minor and Potential' attachment.

Main Emissions to Atmosphere - Waste Gas Emission Point Details - one row per emission point *

Complete the following table with summary details for all main emission points to atmosphere.

(Guidance on completing the table is included in Note i at the end of this attachment)

The applicant should address in particular any emissions which may contain the principal polluting substances listed in the First Schedule of Environmental Protection Agency (Integrated Pollution Control) (Licensing) Regulations 2013/ (Industrial Emissions)(Licensing) Regulations 2013.

Please note that the determination of any emission limit values and monitoring requirements in a proposed licence if granted will be based on the information supplied hereunder.

Emission Point Code	Emission Point Grid Ref.		Typical Days Usage/ Year	Measures to reduce /minimise / prevent emissions (list techniques) [1] Where EQS considerations require measures stricter than BAT, highlight these measures in bold	Source of Waste Gases [2]	Minimum Discharge Height Above Ground (m)	Reference Conditions			
	Easting [3]	Northing [4]					Pressure [5]	Temp. [6]	% Oxygen [7]	Moisture [8]
A2-1	319918	233741	365	The existing flue gas cleaning process will remain which comprises selective non-catalytic reduction (SNCR), an activated carbon and semi-dry lime scrubbing process followed by particle removal in a fabric filter, and a two-stage wet scrubbing process.	Stack associated with combustion line 1	105	101.3kPA	273 Kelvin	11% O_2 Dry Gas	Dry

[1] Detailed descriptions and schematics of all abatement systems should be included in the Operational Report (Tab 4.8 – 'Reports').

[2] Options: Boiler, Gas Turbine, Incineration, Co-Incineration, CHP, Kiln, Engine, Indirect drying activity (e.g. milk drying), Other Combustion activity (e.g., oven), Distillation/Chemical reaction, Solvent based coating activity, Other coating activity (provide description), Composting Tunnels, General extraction from buildings or Other (provide a description if 'Other' is selected).

[3] Six Digit GPS Irish National Grid Reference.

[4] Six Digit GPS Irish National Grid Reference.

[5] Options: 101.325kPa or No correction.

[6] Options: 273.15K or No correction.

[7] Options: 3%, 6%, 10%, 11%, 15%, 18% or No correction.

[8] Options: Wet or Dry.

Emission Point Code	Emission Point Grid Ref.		Typical Days Usage/ Year	Measures to reduce /minimise / prevent emissions (list techniques) [1] Where EQS considerations require measures stricter than BAT, highlight these measures in bold	Source of Waste Gases [2]	Minimum Discharge Height Above Ground (m)	Reference Conditions			
	Easting [3]	Northing [4]					Pressure [5]	Temp. [6]	% Oxygen [7]	Moisture [8]
A2-2	319877	233641	365	The existing flue gas cleaning process will remain which comprises selective non-catalytic reduction (SNCR), an activated carbon and semi-dry lime scrubbing process followed by particle removal in a fabric filter, and a two-stage wet scrubbing process.	Stack associated with combustion line 2	105	101.3kPA	273 Kelvin	11% O_2 Dry Gas	Dry

*add rows to the table as necessary

Emission Points from Combustion, Incineration or Co-incineration Sources Only

Complete the table below for each emission point to atmosphere from a combustion source, waste incineration or co-incineration plant

Emission Point Code	Primary Fuel Type [9] (where applicable)	Secondary Fuel Type [10] (where applicable)	LCP Plant Reference (where applicable)	Waste incineration or co-incineration plant reference (where applicable)
A2-1	Non hazardous waste	Gas Oil	Not Applicable	Not Applicable
A2-2	Non hazardous waste	Gas Oil	Not Applicable	Not Applicable

*add rows to the table as necessary

[9] Options: Coal, Lignite, Heavy Fuel Oil, Other Fuel Oil, Peat, Natural Gas, Biogas, Solid Biomass, Waste, Gas Oil, Other or None
[10] Options: Coal, Lignite, Heavy Fuel Oil, Other Fuel Oil, Peat, Natural Gas, Biogas, Solid Biomass, Waste, Gas Oil, Other or None

Emission Points with Solvent Emissions Only

Complete the table below for each emission point associated with a solvent activity

Emission Point Code	Are specific Hazardous Substances [11] Emitted?	Mass Flow of Emitted Hazardous Substances (g/hour)	Halogenated VOCs [12] Emitted?	Mass Flow of Emitted Halogenated VOCs (g/hour)
Not Applicable				

*add rows to the table as necessary

11 Emissions of volatile organic compounds referred to in Article 58 (Substances or mixtures which, because of their content of volatile organic compounds classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No. 1272/2008, are assigned or need to carry the hazard statements H340, H350,H350i, H360D or H360F) of the Industrial Emissions Directive.

12 Halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351.

Waste Gas Emission Monitoring Points

Complete the table below for each emission point, by entering the Emission Point Code, the associated Monitoring Point Code and the grid reference of the Monitoring Point. *

Emission Point Code	Monitoring Point Code [13]	Monitoring Point Grid Reference	
		Easting [14]	Northing [15]
A2-1	A2-1M	319918	233741
A2-2	A2-2M	319877	233641

*add rows to the table as necessary

[13] To include monitoring and sampling points
[14] Six Digit GPS Irish National Grid Reference
[15] Six Digit GPS Irish National Grid Reference

Waste Gas - Abatement /Treatment Control

Complete the table below for each emission point with an abatement/treatment system (one table per emission point)

Emission Point Code: A2-1

Control[16] parameter	Monitoring to be carried out [17]	Additional notes (where relevant)
As per existing IE Licence W0232-01		

*add rows to the table as necessary

Emission Point Code: A2-2

Control[18] parameter	Monitoring to be carried out [19]	Additional notes (where relevant)
As per existing IE Licence W0232-01		

*add rows to the table as necessary

[16] List the operating parameters of the treatment/abatement system which control its function.
[17] List the monitoring of the control parameter to be carried out.
[18] List the operating parameters of the treatment/abatement system which control its function.
[19] List the monitoring of the control parameter to be carried out.

Waste Gas Emissions

Complete the table below for all main emission points to atmosphere (include one row for each identified parameter) *

DWtE wish to point out that any BAT AEL associated with the BAT Conclusions set out in COMMISSION IMPLEMENTING DECISION (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste incineration will be complied with by 12 November 2023

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
A2-1	Total Dust	A2-1M	30 mg/Nm^3	5 mg/Nm^3	Not Applicable (n/a)	n/a	Existing IE Licence W0232-01 and for Max Daily Waste	<2-5 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes

[20] For emissions outside the BAT Conclusion, BREF or BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring emissions within the limits set out in the BAT Conclusion(s), BREF(s) or BAT guidance note(s). These notes can be found on the EPA website at www.epa.ie.

[21] Specify the proposed limit and the units.

[22] Specify the proposed limit and the units.

[23] Specify the proposed limit and the units.

[24] Specify the proposed limit and the units.

[25] For continuous monitoring 'EN15267 approved CEMS' is the standard method. For periodic monitoring please refer to the EPA guidance document 'AG2 Index of Preferred Methods'.

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
							Incineration BAT[26]				
A2-1	Gaseous and vaporous organic substances, expressed as total organic carbon (TVOC)	A2-1M	20 mg/Nm^3	10 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01	< 3 -10 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes
A2-1	HCL	A2-1M	60 mg/Nm^3	8 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	2-8 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes
A2-1	HF	A2-1M	4 mg/Nm^3	1 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily	<1 mg/Nm^3 as daily average or average over	Quarterly	As per existing IE Licence	Yes

[26] AELs contained in COMMISSION IMPLEMENTING DECISION (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste incineration will be complied with by November 2023 where they differ from current IE Licence limits

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
							Waste Incineration BAT	the sampling period			
A2-1	SO_2	A2-1M	200 mg/Nm^3	40 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	5 - 40 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes
A2-1	Oxides of Nitrogen (No and NO_2, expressed as NO_2)	A2-1M	400 mg/Nm^3	180 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	50 -180 mg/Nm^3 as a daily average, upper end extended to 180 mg/Nm^3 as SCR not applicable at DWtE	Continuous	As per existing IE Licence	Yes
A2-1	The sum of Cadmium (as Cd) and thallium (as Tl),	A2-1M	n/a	0.05 mg/Nm^3 until November 2023.	n/a	n/a	Existing IE Licence W0232-01 and Waste	0.005 – 0.02 mg/Nm^3 average over the sampling period	Quarterly	As per existing IE Licence	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
	and their compounds			0.02 mg/Nm^3 after November 2023 (average over the sampling period)			Incineration BAT				
A2-1	Mercury {as Hg) and its compounds	A2-1M	n/a	0.05 mg/Nm^3 until November 2023. 0.02 mg/Nm^3 after November 2023 (daily average or average over the samplin	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	<5 - 20 µg/Nm^3 (daily average) 1 - 10 µg/Nm^3 (long term sampling period)	Quarterly	As per existing IE Licence	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
				g period)							
A2-1	The sum of antimony (as Sb), arsenic (as As), lead (as Pb), chromium (as Cr), cobalt (as Co) copper (as Cu), manganese (as Mn), nickel (as Ni), and vanadium (as V)	A2-1M	n/a	0.5 mg/Nm^3 until November 2023 0.3 mg/Nm^3 after November 2023 (average over the sampling period)	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	0.01 – 0.3 mg/Nm^3 average over the sampling period	Once every six months	As per existing IE Licence	Yes
A2-1	Arsenic and its compounds	A2-1M	n/a	0.2 mg/Nm^3 average over the sampling period	n/a	n/a	Existing IE Licence W0232-01	n/a	Quarterly	As per existing IE Licence	Yes
A2-1	Dioxins/furans (TEQ) PCDD/PCDF	A2-1M	n/a	n/a	0.1 ng I-TEQ/Nm^3 until	n/a	Existing IE Licence W0232-01	< 0.01 – 0.08 ng I-TEQ/Nm^3	Once every six months	As per existing IE Licence	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
					November 2023 0.08 ng I-TEQ/Nm^3 after November 2023 (average over the sampling period)		and Waste Incineration BAT	long-term sampling period			
A2-1	Carbon monoxide (CO)	A2-1M	100 mg/Nm^3 also 150 mg/Nm^3 as 10 minute average value (95% compliance)	50 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	10 – 50 mg/Nm^3 as daily average	Continuous	As per existing IE Licence	Yes
A2-1	NH_3	A2-1M	n/a	10 mg/Nm^3 from November 2023	n/a	n/a	Waste Incineration BAT	2 - 10 mg/Nm^3 as a daily average	Continuous	Generic EN standards	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
A2-2	Total Dust	A2-2M	30 mg/Nm^3	5 mg/Nm^3	Not Applicable (n/a)	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT[27]	<2-5 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes
A2-2	Gaseous and vaporous organic substances, expressed as total organic carbon (TVOC)	A2-2M	20 mg/Nm^3	10 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01	< 3 -10 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes
A2-2	HCL	A2-2M	60 mg/Nm^3	8 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	2-8 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes

[27] COMMISSION IMPLEMENTING DECISION (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste incineration

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
A2-2	HF	A2-2M	4 mg/Nm^3	1 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	<1 mg/Nm^3 as daily average or average over the sampling period	Quarterly	As per existing IE Licence	Yes
A2-2	SO_2	A2-2M	200 mg/Nm^3	40 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	5 - 40 mg/Nm^3 as a daily average	Continuous	As per existing IE Licence	Yes
A2-2	Oxides of Nitrogen (No and NO_2, expressed as NO_2)	A2-2M	400 mg/Nm^3	180 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and for Max Daily Waste Incineration BAT	50 -180 mg/Nm^3 as a daily average, upper end extended to 180 mg/Nm^3 as SCR not applicable at DWtE	Continuous	As per existing IE Licence	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
A2-2	The sum of Cadmium (as Cd) and thallium (as Tl), and their compounds	A2-2M	n/a	0.05 mg/Nm^3 until November 2023 0.02 mg/Nm^3 after November 2023 (average over the sampling period)	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	0.005 – 0.02 mg/Nm^3 average over the sampling period	Quarterly	As per existing IE Licence	Yes
A2-2	Mercury {as Hg) and its compounds	A2-2M	n/a	0.05 mg/Nm^3 until November 2023 0.02 mg/Nm^3 after November 2023 (daily average	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	<5 - 20 µg/Nm^3 (daily average) 1 - 10 µg/Nm^3 (long term sampling period)	Quarterly	As per existing IE Licence	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
				or average over the sampling period)							
A2-2	The sum of antimony (as Sb), arsenic (as As), lead (as Pb), chromium (as Cr), cobalt (as Co) copper (as Cu), manganese (as Mn), nickel (as Ni), and vanadium (as V)	A2-2M	n/a	0.5 mg/Nm^3 until November 2023 0.3 mg/Nm^3 after November 2023 (average over the sampling period)	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	0.01 – 0.3 mg/Nm^3 average over the sampling period	Once every six months	As per existing IE Licence	Yes
A2-2	Arsenic and its compounds	A2-2M	n/a	0.2 mg/Nm^3 average over the sampling period	n/a	n/a	Existing IE Licence W0232-01	n/a	Quarterly	As per existing IE Licence	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
A2-2	Dioxins/furans (TEQ) PCDD/PCDF	A2-2M	n/a	n/a	0.1 ng I-TEQ/Nm^3 until November 2023 0.08 ng I-TEQ/Nm^3 after November 2023 (average over the sampling period)	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	< 0.01 – 0.08 ng I-TEQ/Nm^3 long-term sampling period	Once every six months	As per existing IE Licence	Yes
A2-2	Carbon monoxide (CO)	A2-2M	100 mg/Nm^3 also 150 mg/Nm^3 as 10 minute average value (95% compliance)	50 mg/Nm^3	n/a	n/a	Existing IE Licence W0232-01 and Waste Incineration BAT	10 – 50 mg/Nm^3 as daily average	Continuous	As per existing IE Licence	Yes
A2-2	NH_3	A2-2M	n/a	10 mg/Nm^3 from	n/a	n/a	Waste Incineration BAT	2 - 10 mg/Nm^3 as a daily average	Continuous	Generic EN standards	Yes

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits [20]					BAT Associated Emission Range (if applicable)	Sampling / Monitoring EPA Guidance for Monitoring - AG2 Index of Preferred Methods		
			Max. 1/2 Hourly[21]	Max. Daily [22]	Average Month[23]	Average Annual[24]	How was the Proposed Emission Limit Derived?		Proposed Monitoring Frequency	Proposed Monitoring and Analysis Method [25]	Compliant with BAT Monitoring Requirement?
				November 2023							

* For continuous monitoring 'EN15267 approved CEMS' is the standard method. For periodic monitoring please refer to the EPA guidance document 'AG2 Index of Preferred Methods' linked above

*add rows to the table as necessary

Minor and/or Potential Emissions to Atmosphere [28]

Are there any minor or potential emission point(s) to atmosphere at the installation/facility? (Yes/No) *	Yes

If 'Yes' complete and upload the Emissions to Atmosphere – Minor and Potential Emissions template with details of minor and potential emissions (select Document Type: 'Minor - Potential Emissions' in the application form)

Emissions to Atmosphere - Minor - Potential Emissions file name:	No proposed changes to existing IE Licence

[28] Refer to page 3 for guidance on what constitutes a minor or potential emission.

Fugitive Emission to Atmosphere

Fugitive emissions must be controlled by way of appropriate controls and techniques to minimise emissions.
(Additional information on fugitive emission is included in Note ii at the end of this attachment)

Are there any sources of fugitive emissions at the installation/facility?[29] (Yes/No) * No

If 'Yes' provide summary details of the fugitive emissions in the table below:

Type of Fugitive Emission	Emission Type Applicable? (Yes/No)	Description of fugitive emissions source(s)	Maximum Level	Units	Descriptor/Location
Dust	No	Waste is not stockpiled outside the waste bunker. The waste bunker is located inside the building, negative pressure is controlled in that area in order to reduce odour and diffuse dust emissions	N/A	$mg/m^2/day$	Dust deposition
VOC [30]	No	N/A	N/A	%	of solvent input
Ammonia	No	N/A	N/A	ug/m^3	at the nearest European Site
Nitrogen	No	N/A	N/A	kgN/ha/yr	at the nearest European Site
Odour	No	Waste is not stockpiled outside the waste bunker. The waste bunker is located inside the building, negative pressure is controlled in that area in order to reduce odour and diffuse dust emissions	N/A	Odour Units	at boundary of installation

29 For waste activities, dust and odour emissions should be considered and described in the table below where applicable.

30 In relation to activities listed in Chapter V (for installations using Organic Solvents) of the Industrial Emissions Directive (2010/75/EU):
- specify how the requirements in relation to fugitive emissions will be met.

Provide details of the techniques to be used to reduce / minimise / prevent fugitive emissions in text bow below

N/A

Note i Complete the table for each emission point having regard to the guidance hereunder.

The following convention should be observed when labelling emission points:

Boiler Emissions A1-1, A1-2, A1-3,…etc.
Main Emissions A2-1, A2-2, A2-3,…etc.
Minor Emissions A3-1, A3-2, A3-3,...etc. (NOTE: Minor emission points are to be included in the '*Emissions to Atmosphere - Minor and Potential*' attachment)
Potential Emissions A4-1, A4-2, A4-3,…etc. (NOTE: Potential emission points are to be included in the '*Emissions to Atmosphere - Minor and Potential*' attachment)

A National Grid Reference (12 digit, 6E, 6N) must be provided for each emission point.
Measures are usually required to reduce, minimise or prevent emissions from occurring. They may involve the application of a single technique or a combination of techniques including process integrated, recovery, abatement and treatment techniques. List all techniques proposed/employed. Technique(s) employed must comply with BAT. Highlight additional measures required for the purposes of protecting the environment i.e. AQS considerations. The measures or techniques to be taken must be capable of complying with the proposed/known emission level(s).
The measures required shall be informed by the following:
1. BAT techniques with BAT-AEL
2. BAT techniques without BAT-AEL
3. Stricter measures/techniques than BAT (due to AQS)
4. BAT determined by competent authority in consultation with the applicant
5. Measures to minimise pollution over long distances or in the territory of other states.
6. Emerging techniques
7. Less strict measures than BAT (due to derogation)
8. Other measures

Select from the drop down list the source of the emission as it helps explain the nature of the emission.
Particular attention should be paid to ensuring that emissions data (volumetric flow and pollutant concentrations) are presented at the required reference conditions for oxygen, temperature, pressure and moisture.

Note ii Fugitive emissions include the following:

- Dust from area sources such as a quarry.
- Odour from volume sources such as a pig unit, waste water treatment plant, waste handling etc.
- VOCs from processes using solvent not captured in waste gases.
- Ammonia and nitrogen from pig and poultry units.

Processes that can give rise to fugitive emissions include:

o Leaks from valve seals, pump seals and flanges;
o Breathing and working losses from liquid storage facilities;
o Dust emissions from solids stored in the open;
o Loading and unloading operations;
o Cleaning operations; and,
o Emissions from waste water treatment (e.g. volatile organics).

The measures taken to reduce/ prevent fugitive emissions to atmosphere must be addressed, and the facilities and operations required to control emissions must be detailed.