

EPA Application Form

7.4.2 - Emissions to Atmosphere - Minor and Potential Emissions - Attachment

Organisation Name: *	Amazon Data Services Ireland Limited			
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Application I.D.: *	LA009979			



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 consistent 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 <u>may</u> 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.

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 main and fugitive emissions to atmosphere, complete the separate '*Emissions to Atmosphere - Main* and *Fugitive Emissions'* attachment.



EMISSIONS TO ATMOSPHERE - Minor Emissions - one row per emission point

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

Complete the table below with summary details for all <u>minor emission</u> points to atmosphere.

Emission Point Code Easting ⁽²⁾	Northing ⁽³⁾	Description of source of emission(s)	Emission details ⁽⁴⁾				Abatement system employed	
(1)			Parameter/ Material	mg/Nm ³⁽⁵⁾	kg/h	kg/year	(if relevant)	
A3-01	702828	730760	Emergency Generator 1 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-02	702828	730759	Emergency Generator 2 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-03	702840	730757	Emergency Generator 3 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-04	702840	730756	Emergency Generator 4 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-05	702852	730754	Emergency Generator 5 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-06	702852	730753	Emergency Generator 6 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A

⁽¹⁾ The following convention should be observed when labelling <u>minor</u> atmospheric emission points:

A-1, A-2, A-3,...etc.

⁽²⁾ Six Digit GPS Irish National Grid Reference.

⁽³⁾ Six Digit GPS Irish National Grid Reference.

⁽⁴⁾ The maximum emission should be stated for each parameter emitted; the concentration should be based on the maximum 30 minute mean and must be the **PRE-ABATEMENT** level.

⁽⁵⁾ Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.



Emission Point Code	F = = t ¹ = = (2)	Northing ⁽³⁾		Emission details ⁽⁴⁾				Abatement system employed
	Easting ⁽²⁾		Description of source of emission(s)	Parameter/ Material	mg/Nm ³⁽⁵⁾	kg/h	kg/year	(if relevant)
A3-07	702865	730751	Emergency Generator 7 - (Building A) - (6.49 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-08	702864	730750	Emergency Generator 8 - (Building A) - (6.49 MWth)	NOx, CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-09	702892	730744	Emergency Generator 9 - (Building A) - (6.49 MWth)	NOx, CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-10	702892	730743	Emergency Generator 10 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-11	702904	730741	Emergency Generator 11 - (Building A) - (6.49 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-12	702904	730740	Emergency Generator 12 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-13	702916	730738	Emergency Generator 13 - (Building A) - (6.49 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-14	702916	730737	Emergency Generator 14 - (Building A) - (6.49 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A
A3-15	702929	730735	Emergency Generator 15 - (Building A) - (6.49 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-16	702928	730734	Emergency Generator 16 - (Building A) - (6.49 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-17	702812	730672	Fire Sprinkler Pump - (Building A) - (0.45 MWth)	NO _x , CO, SO ₂ , PM _{10/2.5}	No ELV	No ELV	No ELV	N/A



Note: Map(s)/drawing(s) uploaded under 'Site Plans' in Tab 3 of the application form should identify the emission and monitoring points.



EMISSIONS TO ATMOSPHERE – <u>Potential</u> Emissions to Atmosphere

Potential emissions are emissions that are not active under normal operation and would include by-passes or pressure relief valves.

Complete the table below with summary details of all <u>potential emissions</u> to atmosphere

Emission Point Code ⁶	Description of source of emission	Malfunction which could cause an emission	Emission details (Potential max. emissions) ⁽⁷⁾							
			Parameter/Material	mg/Nm ³	kg/hour					
	House Generator									
A4-1 to .	A4-16	Belly Fuel Tank Breathing Vent	Storage tank over-pressurisation during emergency event (i.e. fire)	Diesel vapour (trace)	Not monitored	Not monitored				

⁶ The following convention should be observed when labelling potential atmospheric emission points:

A4-1, A4-2, A4-3,...etc.

⁷ Estimate the potential maximum emission for each malfunction identified.

^{*} indicates required field