

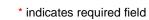
# **EPA Application Form**

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

	For instance
Organisation Name: *	Amazon Data Services Ireland Limited
Application I.D.: *	LA009977

# **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
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#### **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 diffese 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	Emission Point Code Easting <sup>(2)</sup> Northing <sup>(3)</sup>			Emission details <sup>(4)</sup>				Abatement system employed
			Description of source of emission(s)	Parameter/ Material	mg/Nm <sup>3(5)</sup>	kg/h	kg/year	(if relevant)
A3-1	706693	773951	Emergency Generator 1 - (Building A) - (6.82 MWth)	NOx, CO, SO2, PM10/25	No ELV	No ELV	No ELV	N/A
A3-2	706694	773951	Emergency Generator 2 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , COPSO2, PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-3	706708	773954	Emergency Generator 3 - (Building A) - (6.82 MWth)	toNOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-4	706709	773954	Emergency Generator 4 - (Building A)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-5	706718	773955	Emergency Generator 5 - (Building A) - (6.82 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A
A3-6	706719	773955	Emergency Generator 6 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A

<sup>&</sup>lt;sup>(1)</sup> The following convention should be observed when labelling <u>minor</u> atmospheric emission points: A-1, A-2, A-3,...etc.

<sup>&</sup>lt;sup>(2)</sup> Six Digit GPS Irish National Grid Reference.

<sup>&</sup>lt;sup>(3)</sup> Six Digit GPS Irish National Grid Reference.

<sup>&</sup>lt;sup>(4)</sup> 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.

<sup>&</sup>lt;sup>(5)</sup> Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0oC101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.



Emission Point Code Easting <sup>(2)</sup> Nor		Northing <sup>(3)</sup> Description of source of emission(s)		Emission details <sup>(4)</sup>				Abatement system employed
			Description of source of emission(s)	Parameter/ Material	mg/Nm <sup>3(5)</sup>	kg/h	kg/year	(if relevant)
A3-7	706733	773958	Emergency Generator 7 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-8	706734	773958	Emergency Generator 8 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-9	706743	773960	Emergency Generator 9 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-10	706744	773960	Emergency Generator 10 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM36/2.5	No ELV	No ELV	No ELV	N/A
A3-11	706758	773962	Emergency Generator 11 - (Building A) - (6.82 MWth)	NO <sub>x</sub> e <sup>O</sup> <sub>2</sub> SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-12	706759	773962	Emergency Generator 12 - (Building A) - (6.82 MWth)	on of the one of the o	No ELV	No ELV	No ELV	N/A
A3-13	706768	773964	Emergency Generator 13 - (Building A)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-14	706769	773964	Emergency Generator 14 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-15	706783	773966	Emergency Generator 15 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-16	706784	773967	Emergency Generator 16 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-17	706793	773968	Emergency Generator 17 - (Building A) - (6.82 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A



Emission Point Code Easting <sup>(2)</sup>		<sup>2)</sup> Northing <sup>(3)</sup> Description of source of emission(s)		Emission details <sup>(4)</sup>				Abatement system employed
			Description of source of emission(s)	Parameter/ Material	mg/Nm <sup>3(5)</sup>	kg/h	kg/year	(if relevant)
A3-18	706793	773968	Emergency Generator 18 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-19	706808	773971	Emergency Generator 19 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-20	706808	773971	Emergency Generator 20 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-21	706817	773972	Emergency Generator 21 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM36/2.5	No ELV	No ELV	No ELV	N/A
A3-22	706818	773972	Emergency Generator 22 - (Building A) - (6.82 MWth)	NOx (C) 2502, PM 10/2.5	No ELV	No ELV	No ELV	N/A
A3-23	706832	773975	Emergency Generator 23 - (Building A) - (6.82 MWth)	ONO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-24	706833	773975	Emergency Generator 24 - (Building A)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-25	706842	773977	Emergency Generator 25 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-26	706843	773977	Emergency Generator 26 - (Building A) - (6.82 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-27	706843	773977	Emergency Generator 27 - (Building A) - (2.19 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
A3-28	706652	773941	Diesel Powered Fire Pump - (Building A) - (0.52 MWth)	NOx, CO, SO2, PM10/2.5	No ELV	No ELV	No ELV	N/A



Emission		$\frac{3}{2}$	Emission details <sup>(4)</sup>				Abatement system employed
Point Code Easting <sup>(2)</sup> Nor	Northing (*)	Description of source of emission(s)	Parameter/ Material	mg/Nm <sup>3(5)</sup>	kg/h	kg/year	(if relevant)
706653	773940	Diesel Powered Fire Pump - (Building A) - (0.52 MWth)	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM <sub>10/2.5</sub>	No ELV	No ELV	No ELV	N/A
			methe				
N	ote: Map(s)/dra	awing(s) uploaded under 'Site Plans' in Tab 3 c	of the application form sh	ould identify th	e emission a	and monitoring	points.
Specific Phylosophical L							
Consent of copyright							
	Easting <sup>(2)</sup> 706653			Easting (2)       Northing (3)       Description of source of emission(s)       Parameter/ Material         Discel Deward Fire Dump (Duilding A)       Discel Deward Fire Dump (Duilding A)       Discel Deward Fire Dump (Duilding A)	Easting <sup>(2)</sup> Northing <sup>(3)</sup> Description of source of emission(s)         Parameter/ Material       mg/Nm <sup>3(5)</sup>	Easting (2)       Northing (3)       Description of source of emission(s)         Parameter/ Material       mg/Nm <sup>3(5)</sup> kg/h	Easting <sup>(2)</sup> Northing <sup>(3)</sup> Description of source of emission(s)     Parameter/ Material     mg/Nm <sup>3(5)</sup> kg/h     kg/year       706653     773940     Diesel Powered Fire Pump - (Building A) -     NO. CO. SO3 PM agar     No. ELV     No. ELV     No. ELV



## **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 <sup>6</sup>	Description of source of emission	Malfunction which could cause an emission	Emission details (Potential max. emissions) <sup>(7)</sup>								
			Parameter/Material	mg/Nm <sup>3</sup>	kg/hour						
	House Generator										
A4-1	Bulk Fuel Tank Breathing Vent 1 - (Bulk Tank 40 m3)	Storage tank over-pressurisation during emergency event (i.e. fire)	ری <sup>چی:</sup> Diesel vapour (trace)	Not monitored	Not monitored						
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		emergency event (i.e. fire) emergency event (i.e. fire) consent of copyright owner required to any other consent of copyright owner required to any other									

<sup>&</sup>lt;sup>6</sup> The following convention should be observed when labelling potential atmospheric emission points:

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

<sup>&</sup>lt;sup>7</sup> Estimate the potential maximum emission for each malfunction identified.