

EPA Application Form

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

Organisation Name: *

Indaver Ireland Ltd.

Application I.D.: *

LA001689

Authorisation Application Form

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

Authorisation Application Form

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.

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 **minor** and **potential** 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.

Authorisation Application Form

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 minor emission points to atmosphere.

Emission Point Code ⁽¹⁾	Easting ⁽²⁾	Northing ⁽³⁾	Description of source of emission(s)	Emission details ⁽⁴⁾				Abatement system employed (if relevant)
				Parameter/ Material	mg/Nm ³⁽⁵⁾	kg/h	kg/year	
A3-1	579062.9445	564274.9261	Boiler Blow Down Tank	Steam	N/A	N/A	N/A	Not Required
A3-2 A3-3	579070.7007 579106.6011	564336.7616 564253.8044	HVAC exhaust no. 1 & 2 (Ash Hall)	Particulates (Minor)	Not monitored	Not monitored	Not monitored	HEPA Filter
A3-2 A3-3	579070.7007 579106.6011	564336.7616 564253.8044	HVAC exhaust no. 1 & 2 (Ash Hall)	CO (Minor)	Not monitored	Not monitored	Not monitored	Not Required
A3-4	579008.8423	564242.7405	Solidification Plant	Particulates (Minor)	Not monitored	Not monitored	Not monitored	Water Bath
A3-4	579008.8423	564242.7405	Solidification Plant	Ammonia (Minor)	Not monitored	Not monitored	Not monitored	Water Bath

(1) The following convention should be observed when labelling minor atmospheric emission points:
A3-1, A3-2, A3-3,...etc.

(2) Irish Transverse Mercator (ITM) Coordinates.

(3) Irish Transverse Mercator (ITM) Coordinates.

(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. 0oC/101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

Authorisation Application Form

Emission Point Code ⁽¹⁾	Easting ⁽²⁾	Northing ⁽³⁾	Description of source of emission(s)	Emission details ⁽⁴⁾				Abatement system employed (if relevant)
				Parameter/ Material	mg/Nm ³⁽⁵⁾	kg/h	kg/year	
A3-5	579081.4057	564317.3286	HVAC exhaust no. 3 (admin building)	Particulates (Trace)	Not monitored	Not monitored	Not monitored	HEPA Filter
A3-6	579125.2716	564284.4183	Process building (Bunker & tipping hall)	Odour	Not Monitored	Not Monitored	Not Monitored	Activated Carbon/Bio Filter (Odour Management)
A3-7	579030.9676	564277.3781	Compressor no. 1 exhaust	Exhaust air	N/A	N/A	N/A	Not Required
A3-8	579035.8587	564279.4186	Compressor no. 2 exhaust	Exhaust air	N/A	N/A	N/A	Not Required
A3-9	579040.8218	564281.5043	Compressor no. 3 exhaust	Exhaust air	N/A	N/A	N/A	Not Required
A3-10	579129.1891	564206.9075	Diesel tank (fire water pump)	Diesel Vapour	Trace	Trace	Trace	Not Required
A3-11	579138.4038	564211.5572	Diesel tank (fire water pump)	Diesel Vapour	Trace	Trace	Trace	Not Required
A3-12	579146.7703	564204.3781	Diesel tank (fire water pump)	Diesel Vapour	Trace	Trace	Trace	Not Required
A3-13	579009.1778	564213.4717	Diesel tank	Diesel Vapour	Trace	Trace	Trace	Not Required
A3-14	579059.9119	564303.4737	Extraction Lab Fume Hoods		Not monitored	Not monitored	Not monitored	
A3-15	579055.1518	564300.1361	Extraction Welding Booth	Welding Vapours	Not monitored	Not monitored	Not monitored	Not required
A3-16	579051.1208	564270.4719	Boiler Start-up Valve	Steam	N/A	N/A	N/A	Not required
A3-17	579056.6455	564252.5618	De-slagger Extraction	Particulates (Trace)	Not Monitored	Not Monitored	Not Monitored	Not required

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

Authorisation Application Form

EMISSIONS TO ATMOSPHERE – Potential 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 potential emissions 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
A4-1	Diesel Generator	Emergency Power Required Note: will operate less than 500 hours per year	NOx	500 (information only)	1.83 (information only)
			See note 1		
			CO	650 (information only)	2.38 (information only)
			See note 1		
			TOC	150 (information only)	0.55 (information only)
			See note 1		
			PM	100 (information only)	0.37 (information only)
			See note 1		
A4-2	Fire Water Pump no. 1	Fire Fighting Water Required Note: will operate less than 500 hours per year	NOx, CO, PM	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

Authorisation Application Form

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
A4-3	Fire Water Pump no. 2	Fire Fighting Water Required Note: will operate less than 500 hours per year	NOx, CO, PM	Not Monitored	Not Monitored
A4-4	Fire Water Pump no. 3	Fire Fighting Water Required Note: will operate less than 500 hours per year	NOx, CO, PM	Not Monitored	Not Monitored
A4-5	Aqueous Waste Storage Tank Safety Valve	Overpressure	Mixed Solvent Vapours	Not monitored	Not monitored
A4-6	Ammonia Storage Tank Safety Valve	Overpressure	NH ₃	Not monitored	Not monitored
A4-8	Air condenser Safety Valve no.1	Overpressure	Steam	N/A	N/A
A4-9	Air condenser Safety Valve no.2	Overpressure	Steam	N/A	N/A
A4-10	Air condenser Rupture Disc no.1	Overpressure	Steam	N/A	N/A
A4-11	Air condenser Rupture Disc no.2	Overpressure	Steam	N/A	N/A
A4-12	Boiler Main Safety Valve	Overpressure	Steam	N/A	N/A
A4-13	Boiler Drum Safety Valve	Overpressure	Steam	N/A	N/A
A4-14	High Pressure Steam Header Valve	Overpressure	Steam	N/A	N/A

Authorisation Application Form

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
A4-15	Boiler Feedwater Safety Valve no.1	Overpressure	Steam	N/A	N/A
A4-16	Boiler Feedwater Safety Valve no.2	Overpressure	Steam	N/A	N/A

Note 1: Specifications for units to provided once purchased.