

# EPA Application Form

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

**Organisation Name: \***

SSE Generation Ireland Limited

**Application I.D.: \***

LA006988

*Authorisation Application Form*

**Amendments to this Application Form Attachment**

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

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

## 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 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.

## 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 <sup>(1)</sup>	Easting <sup>(2)</sup>	Northing <sup>(3)</sup>	Description of source of emission(s)	Emission details <sup>(4)</sup>				Abatement system employed (if relevant)
				Parameter/ Material	mg/Nm <sup>3(5)</sup>	kg/h	kg/year	
A3-1	268912	114563	Auxiliary Boiler stack	NOx	-	-	-	Very intermittent operation using low sulphur fuel.
				CO	-	-	-	
				SO <sub>2</sub>	-	-	-	
				Particulate	-	-	-	
A3-2	268912	114765	Distillate oil fuel tank vent	VOCs	Not significant			Infrequent small releases. Vapour recover system in place.
A3-4	268743	114769	Diesel fired firefighting pump	NOx	Not significant			Infrequent operation and short test periods. Low sulphur diesel used.
				CO				
				SO <sub>2</sub>				
				Particulate				

(1) The following convention should be observed when labelling minor atmospheric emission points:  
A3-1, A3-2, A3-3,...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. 0oC/101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

\* indicates required field

### Authorisation Application Form

Emission Point Code <sup>(1)</sup>	Easting <sup>(2)</sup>	Northing <sup>(3)</sup>	Description of source of emission(s)	Emission details <sup>(4)</sup>			Abatement system employed (if relevant)
				Parameter/ Material	mg/Nm <sup>3(5)</sup>	kg/h	
A3-5	268946	114581	Acid Tank vapour trap vent	Trace Vapour	Not significant		Absorbent media
A3-6	268867	114613	Laboratory Fume hood	Trace VOC	Not significant		Infrequent insignificant release

\*add rows to the table as necessary

The licence and environmental management system employed at the installation has sufficient measures and obligations in place to avoid, minimise and control the occurrence of these minor emissions.

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

For inspection purposes only.  
Consent of copyright owner required for any other use.

## *Authorisation Application Form*

### **A3-1 – Auxiliary Boiler**

The auxiliary boilers provide heat during start-up of the CCGT plant. The frequency of use is limited to start up events and lasts for a short duration while the CCGT start up occurs. The auxiliary boilers have a standalone stack, separate from the main CCGT stack. The boilers use gas oil but its emissions are miniscule in comparison to those of the CCGT. The auxiliary boiler and main CCGT plant do not run simultaneously.

### **A3-2 - Distillate Oil Fuel Tank Vents**

There is potential for very minor emission losses from the distillate oil tanks during connection for refuelling. Storage, transfer and handing techniques comply with EPA guidance and in accordance with the requirements for BAT.

### **A3-3 – Diesel Fired Fire Fighting Pump**

There is a fire fighting pump at the installation which is operated on diesel. The pump is located within the fire pump house. The pump is only be used in an emergency and for short duration testing, for a maximum of 30 minutes once a week. The pump has an electrical output of less than 1 MW.

### **A3-4 – Acid Tank Vapour Vent**

Sulphuric Acid ( $H_2SO_4$ ) and Sodium Hydroxide (NaOH), for use in the water treatment plant, are stored in bunded bulk chemical storage tanks. The Sulphuric Acid tank is fitted with a vapour trap. Gases will vent through the trap media and exit the tank via a vent.

### **A3-5 – Laboratory Fume Hood**

There is a laboratory on site with a fume hood. The associated fume cupboard will vents to atmosphere. The emissions are very minor and in line with standard laboratory vents.

### **A3-6 – Air Conditioning Unit**

There is an air conditioning unit at the Administrative building.

## 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 <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
A4-1	HRSO pressure release valve	Emergency pressure release	Steam	Not significant	Not significant
A4-2	HRSO steam release	Emergency pressure release	Steam	Not significant	Not significant
A4-3	AGI creep relief valve	Excess pressure in the gas network – fault in the Bord Gais system	Natural gas	Not significant	Not significant
A4-4	Distillate Oil tank	Some breathing and working losses associated with oil storage	Diesel	Not significant	Not significant
A4-5	Hydrogen	Leaks in the supply lines	Hydrogen	Not significant	Not significant

\*add rows to the table as necessary

For inspection purposes only  
Consent of copyright owner required for any other use

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

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

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

\* indicates required field