

EPA Application Form

7.5 - Noise Emissions - Attachment

Organisation Name: *

SSE Generation Ireland Limited

Application I.D.: *

LA006988

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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 2018	Identification of required fields	Assist correct completion of attachment

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Noise Emissions (see **Note i** at the end of this attachment)

Note: An assessment of the impacts of noise, where applicable, should be uploaded in Tab 7 – ‘Emissions Overview’ of the application form.

Provide detail of measures to reduce noise emissions (list techniques)
(See **Note ii** at the end of this attachment)

The following noise control measures are currently in place at the site.

- Detailed Inspection and Maintenance regime including any plant or equipment whose deterioration may give rise to increase in noise.
- Scheduled monitoring to indicate potential failures, reducing potential noise sources.
- The structure of the building’s play an important part in the overall noise attenuation scheme.
- Thermal and acoustic insulation is fitted along the gas ductwork to the base of the stack. Above this level thermal insulation and cladding are applied to the main stack to protect the stack for acid dew point corrosion particularly when firing on distillate oil. The insulation is attached to the external surfaces of the casing and protected by metal cladding, which is virtually maintenance free. In areas of casing where there is a requirement for noise attenuation, there is a thick slab of dense material approximately 300mm, then clad in layer of steel sheeting.
- Heavy weight composite acoustic cladding (double skinned) is present on the gas and steam turbine buildings. The gas turbines are fitted with a double skin acoustic enclosure to reduce noise levels inside the gas turbine building.
- The gas turbine and steam turbine buildings were designed to reduce environmental noise. The perforated metal inner lining of the buildings was designed to expose an absorptive lining to further moderate room noise levels by controlling reverberation within the building.
- Most doors in the power house buildings are fitted with high performance acoustic door sets and are kept closed except for access and egress. All ventilation openings are fitted with high performance attenuators to reduce noise breakout from the buildings.
- Acoustic enclosures are present on louder pumps.
- Suitably trained and experienced staff are employed for plant operations.
- Inspections and Maintenance activities are subject to rigorous planning where all environmental issues are considered and managed appropriately.

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Following the *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012 as amended) complete the table below, inputting summary details of noise monitoring points (see [Note iii](#) at the end of this attachment) and proposed noise limit criteria.

Monitoring point code ¹	Easting ²	Northing ³	Monitoring point type ⁴	Proposed Noise Limit Criteria				Proposed monitoring frequency
				Max. noise level daytime dB L _{Ar,T} (30 mins)	Max. noise level evening dB L _{Ar,T} (30 mins)	Max. noise level night dB L _{eq,T} (15-30 mins)	How was the noise limit derived? ⁵	
NSL1	268550	115080	Noise sensitive location	55	50	45	BAT / NG4	Annual
NSL2	268438	115139	Noise sensitive location	55	50	45	BAT / NG4	Annual

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

These noise sensitive locations are agreed with the Agency and have been monitored on an annual basis in line with licence requirements.

There are no issues from noise at either noise sensitive locations as determined by the annual surveys.

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- 1 The following convention should be observed when labelling noise monitoring points:
N1, N2,.....The monitoring locations should be identified on an accompanying site plan drawing(s) uploaded in Tab 3 – ‘Site’ of the application form.
 - 2 Six Digit GPS Irish National Grid Reference of Monitoring Point
 - 3 Six Digit GPS Irish National Grid Reference of Monitoring Point
 - 4 Monitoring point type options: ‘Boundary’, ‘Noise Sensitive Location’ or ‘Permanent Noise Monitoring’
 - 5 Derived noise limit options: ‘BAT’, ‘EQS’, or ‘Derogation’

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Was an assessment for tonal and impulsive noise carried out? ⁶ (Yes/No)	Yes
If 'Yes' was tonal or impulsive noise identified to be present? (Yes/No)	None

For emissions outside the EPA Noise Guidance Note limit, see the Agency's *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012) (available on www.epa.ie), a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required to be uploaded with this document. This programme should highlight specific goals and a time scale, together with options for modification, upgrading or replacement, as required, to bring the emissions within the limits as set out in the Guidance Note.

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⁶ Refer to section 5 of the Agency's *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012 as amended).

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- Note i** This part of the application form collects data on noise emissions namely measures used to reduce noise and noise levels at a reference distance under normal operation. As noise emissions can arise from different sources on a site, the EPA usually considers the total emission from the site. Please note that emission limit values and monitoring requirements in any proposed licence shall be based on the information supplied hereunder.
- Note ii** 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 housing, insulation and appropriate location of equipment. List all techniques proposed/employed. Technique(s) employed must comply with BAT. Highlight additional measures required for the purposes of protecting the environment. 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
 2. Stricter measures/techniques than BAT
 3. BAT determined by competent authority in consultation with the applicant
 4. Other measures
- Note iii** An individual record (i.e. row) is required for each monitoring point. A National Grid Reference (12 digit, 6E, 6N) must be given for each monitoring point. Noise emissions differ from other emissions in that they are generally limited at a reference distance from the source(s). This reference distance should be, where possible, the boundary of the installation but in certain circumstances it is a noise sensitive location outside the boundary of the installation. Noise levels along a boundary will vary due to the location and positioning of noise sources and the 'worst case' should always be selected. Sufficient points should be identified to fully describe the noise levels from the installation. For waste activities, traffic noise emissions should be taken into account especially if it. The Agency's Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4) (2012) and Guidance Note on Noise assessment of Wind Turbine Operations at EPA licensed Sites (NG3)(as appropriate) should be consulted when setting proposed sound limits.