

EPA Application Form

7.2 - Emissions to Surface Water - Attachment

Organisation Name: *

SSE Generation Ireland Limited

Application I.D.: *

LO006988

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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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Emissions to Surface Water

This part of the application form collects data on waste water emissions to surface water.

Please note that the emission limit values and monitoring requirements specified in a licence, if granted, shall be based on the information supplied hereunder. (Details of discharges to **storm water** are **NOT** to be entered here but should be included in tab 7.7 of the application form (Discharges to Storm Water).

Waste Water to Surface Water - Emission Point Details - one row per emission point * (see **Note i** at end of this attachment)

(Details for discharges to **storm water** are **NOT** to be entered here)

Emission Point Code ¹	What is the Emission Source?	Easting ² (6 digit)	Northing ³ (6 digit)	Typical Days Usage/ Year	Measures to reduce /minimise / prevent emissions (list techniques) <i>Where EQS considerations require measures stricter than BAT, highlight these measures in bold</i>	Type of Receiving Water ⁴	Receiving Water Code <i>(or name where no code is available)</i>
SW2	Condenser Cooling Water	269035	114636	365	Continuous Temperature and Flow Monitoring	Estuary	14
SW3a	Foul water treatment system	268905	114524	365	Wastewater treatment plant	Estuary	14
SW8	Cooling water screen wash water	268621	114560	365	None	Estuary	14
SW13	Water treatment neutralisation tank	268951	114600	365	pH Adjustment, flow, conductivity and temperature monitoring	Estuary	14

* add rows to the table as necessary

¹ The following convention should be observed when labelling emission points to surface water:

SW1, SW2, etc.

² Six Digit GPS Irish National Grid Reference

³ Six Digit GPS Irish National Grid Reference

⁴ Type of Receiving Water options: '**River**', '**Ditch**', '**Estuary**', '**Lake**', '**Land Drain**' or '**Other**' (where '**Other**' is selected please enter a description)

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Waste Water to Surface Water - Emission Monitoring Points (See Note ii at end of this attachment)

Complete the table below for each emission point, by entering the Emission Point Code, the associated Monitoring Point Code and the grid reference of the Monitoring Point(s) *.

Emission Point Code *	Monitoring Point Code *	Monitoring Point Grid Reference	
		Easting * ⁵	Northing * ⁶
SW2	SW2	268918	114618
SW3a	SW3a	268905	114524
SW8	SW8	268621	114560
SW13	SW13	268951	114600

* add rows to the table as necessary

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

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⁵ Six Digit GPS Irish National Grid Reference

⁶ Six Digit GPS Irish National Grid Reference

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Waste Water to Surface Water – Emissions (See Note iii at the end of this attachment)

Complete the table below for each emission point (include one row for each identified parameter) *

Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits				How was the Emission Limit Derived?	BAT Associated Emission Range (if applicable)	Proposed Monitoring Frequency	Sampling / Monitoring		
			Max Hourly	Max Daily	Average Month	Average Annual				Sample Method	Analysis Method and Technique	Compliant with BAT Monitoring Requirement?
SW2	Temperature	SW2	-	12°C above estuarine water ^{Note 1}	-	-	Current IE Licence held by the company	-	Continuous	Data logger	Thermocouple	-
	Chlorine		-	0.3	-	-		0.3	Weekly	Grab Sample	Standard Method	Yes
	Flow		-	792,000	-	-		-	Continuous	Calculation from pump usage	Calculation	-

* add rows to the table as necessary

NOTE 1: 12°C above estuarine water, 10°C (98%ile of hourly values over a year)

No effluent shall be discharged which results in a temperature increase at the edge of the mixing zone of greater than 1.5°C in the receiving system. The mixing zone shall not exceed 25% of the estuarine cross sectional area at any point.

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Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits				How was the Emission Limit Derived?	BAT Associated Emission Range (if applicable)	Sampling / Monitoring			
			Max Hourly	Max Daily	Average Month	Average Annual			Proposed Monitoring Frequency	Sample Method	Analysis Method and Technique	Compliant with BAT Monitoring Requirement?
SW3a	pH	SW3a	-	6 – 10	-	-	Current IE Licence held by the company	6 – 9	Bi-annual	Grab sample	Std Method	No (9)
	BOD		-	25	-	-		91 – 99% reduction	Bi-annual	Grab sample	Std Method	-
	Suspended Solids		-	35	-	-		10 – 35	Bi-annual	Grab sample	Std Method	Yes
	Ammonia		-	5	-	-		10	Bi-annual	Grab sample	Std Method	Yes
	Total Phosphorous		-	2	-	-		2 or >80% reduction	Bi-annual	Grab sample	Std Method	Yes
	Flow Rate		-	9.5	-	-		-	-	-	-	-

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Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits				How was the Emission Limit Derived?	BAT Associated Emission Range (if applicable)	Proposed Monitoring Frequency	Sampling / Monitoring		
			Max Hourly	Max Daily	Average Month	Average Annual				Sample Method	Analysis Method and Technique	Compliant with BAT Monitoring Requirement?
SW8	Chlorine	SW8	-	0.3	-	-	Current IE Licence held by the company and ELV applied to SW2	0.3	Weekly	Grab Sample	Standard Method	Yes

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Emission Point Code	Parameter	Monitoring Point Code	Proposed Emission Limits				How was the Emission Limit Derived?	BAT Associated Emission Range (if applicable)	Sampling / Monitoring			
			Max Hourly	Max Daily	Average Month	Average Annual			Proposed Monitoring Frequency	Sample Method	Analysis Method and Technique	Compliant with BAT Monitoring Requirement?
SW13	pH	SW13	-	6 – 9	-	-	Current IE Licence held by the company and ELV applied to SW13	N/a	Monthly	Grab Sample	Standard Method	Yes
	BOD		-	20	-	-		N/a	Monthly	Grab Sample	Standard Method	Yes
	Suspended Solids		-	30	-	-		10 - 30	Monthly	Grab Sample	Standard Method	Yes
	Total Dissolved Solids		-	5,000	-	-		N/a	Monthly	Grab Sample	Standard Method	Yes
	Mineral Oil		-	20	-	-		N/a	Monthly	Grab Sample	Standard Method	Yes
	Ammonia (as N)		-	5	-	-		N/a	Monthly	Grab Sample	Standard Method	Yes
	Phosphorous (as P)		-	5	-	-		N/a	Monthly	Grab Sample	Standard Method	Yes

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Note i Complete the following table for each emission point having regard to the guidance hereunder. The following convention should be observed when labelling emission points: Surface water SW1, SW2, etc., A National Grid Reference (12 digit, 6E, 6N) must be given for each emission point. Describing the source of the emission helps explain the nature of the emission such as process or contaminated run-off etc. 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 process integrated, recovery, abatement and treatment techniques. List all techniques proposed/employed. Technique(s) employed must comply with BAT. Highlight additional measures required for the purposes of protecting the environment, i.e., EQS considerations. 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 with BAT-AEL
2. BAT techniques without BAT-AEL
3. Stricter measures/techniques than BAT (due to EQS)
4. BAT determined by competent authority in consultation with the applicant
5. Measures to minimise pollution over long distances or in the territory of other states
6. Emerging techniques
7. Less strict measures than BAT (due to derogation)
8. Other measures

Note ii An individual record (i.e., row) is required for each monitoring and sampling point. A National Grid Reference (12 digit, 6 Easting, 6 Northing) must be given for each monitoring point.

Note iii Complete the following table for each emission point having regard to the guidance hereunder. Characterise the emissions (identify the parameters) under normal operation. The parameters also cover volumes and rates of emission. Those substances which are likely to be emitted in significant quantities, having regard to their potential to transfer pollution from one medium to another must be identified and the applicant must determine emission levels having considered the following:

To identify the chemical parameters:

1. substances listed in the Schedule of EPA (Industrial Emissions)(Licensing) Regulations 2013, S.I. No. 137 of 2013,
2. IED chapters III, IV, V VI where relevant
3. The fate of materials/substances, intermediates, products and by products used or produced through the process particularly substances of very high concern, substances carrying the Hazard statement H400 to 413 (hazardous to the aquatic environment) and hazardous substances with damaging effects on sensitive plants and ecosystems.
4. Any reaction substances likely to appear as a result of treatment or natural breakdown processes with damaging effects on sensitive plants and ecosystems.
5. any substances with the potential to cause odour nuisance off site.
6. List I and List II substances listed in the Annex to EU Directive 2006/11/EC (as amended).

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To determine the emission levels:

The applicant must consider the following:

1. Decision(s) on BAT conclusions /conclusions on Bat (BREF)/ EPA BAT guidance notes
 2. Other BAT determined in consultation
 3. Environmental quality standards and objectives
 4. Measures or controls identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the EC Environmental Objectives (Surface Waters) Regulations 2009 for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.
 5. If relevant, the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) as amended by the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004) or any further amendment thereof
- The applicant is wholly responsible for a true and accurate description of the emission. Any person who gives to the Agency information which is false or misleading in a material respect is guilty of an offence.

The applicant must provide the basis upon which the emission level was determined. There are five categories as follows:

- a. Emission levels based on BAT
- b. Emission levels that are stricter than BAT due to the EQS
- c. Temporary Emissions levels associated with an emerging technique (less strict than BAT)
- d. Emission levels based on a derogation (less strict than BAT)
- e. Emission levels for other substances based on EQS

Monitoring requirements must be in line with any conclusion on monitoring as described in the decision on BAT conclusion/ BAT conclusion/ BAT guidance.

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