

# Standard rules SR2018 No 4

## The Environmental Permitting (England & Wales) Regulations 2016

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### SR2018 No 4 standard rules Specified Generator, Tranche B low risk, 1 – 20 MW of abated diesel or gas engines operated less than 500 hours a year

#### Introductory note

This introductory note does not form a part of these standard rules.

When referred to in an environmental permit these rules will allow the operator to operate one or more Tranche B Specified Generators operated for < 500 hours a year which are abated diesel or gas engines which may be providing a balancing service in the peaking market to the National Grid. Individual unit capacity is between <1-20MW and the total is < 20.0 MW at the specified location which is in rural and urban areas where the NO<sub>2</sub> background has sufficient headroom, provided that the permitted activities meet the following criteria:

Category	Relevant criteria
Tranche B Specified Generator	A Specified Generator that is not a Tranche A or an excluded Generator
Low risk Specified Generator	<p>Have a total rated thermal input of less than 20.0 Mega Watts thermal, including all generators less than 20 MWth.</p> <p>Natural gas or Ultra-low sulphur diesel (10 ppm sulphur) fuel</p> <p>Limited hours criteria – less than 500 hours a year</p> <p>Dispersion criteria – minimum stack height 3 m</p> <p>Secondary abatement on diesel engines or where necessary</p>
Stationary Specified Generator	Stationary Specified Generators are installed at a specified location, they are not mobile generators.

Emissions to air and location	<p>The Specified Generator not located within an AQMA.</p> <p>The minimum distance to a sensitive human receptor is 150 m.</p> <p>Background NO<sub>2</sub> concentration is no greater than 31 µg/m<sup>3</sup> at any human sensitive receptor.</p>
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These rules will permit the:

Category	Relevant criteria (or N/A)
Activity and scale	No more than an aggregated total rated thermal input of less than 20 MW Generators at the specified location – different key restrictions apply.
Key restrictions	These rules set limit values on total capacity, operational hours, stack height, releases to air of NO <sub>x</sub> and background concentration and a minimum distance from sensitive receptors only
Emissions	The principal release is NO <sub>x</sub>

**End of introductory note**

Record of changes

Version	Date	Change
1.0	April 2018	Published for SRP consultation May 2018
2.0		

# Rules

## 1 Management

### 1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with rule 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in these standard rules shall have convenient access to a copy of the permit and rules.

## 2 Operations

### 2.1 Permitted activities

2.1.1 The only activities authorised by the permit are the activities specified in table 2.1 below.

<b>Activity reference</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
Specified Generator Tranche B	Combustion plant burning the following fuels,	Natural gas or ultra-low sulphur diesel (10 ppm sulphur) only
	Capacity total rated thermal input MW of all engines	≤ 20.0 MW
	Limited hours – maximum annual hourly operation	500 hours
	Minimum distance to sensitive human receptor	150 m
	Minimum distance to SAC, SPA, Ramsar or SSSI	600 m
	Stack height - minimum	3 m
	Background NO <sub>2</sub> concentration at sensitive human receptor	Less than 31 µg/m <sup>3</sup>
	As detailed in Schedule 1 of this Permit	As detailed in Schedule 1 of this Permit

### 2.2 The site

2.2.1 The activities shall only be carried out at the address in this permit where the plant is located.

## 2.3 Operating techniques

2.3.1 The activities shall be operated using the techniques and in the manner described in Table 2.4 below.

<b>Table 2.4 Operating techniques</b>	
(a)	The plant must be operated in accordance with the manufacturers instruction's and records must be made and retained to demonstrate this.
(b)	The operator must keep periods of start-up and shut down of the generators as short as possible
(c)	There is no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993
(d)	Where secondary abatement is required to ensure compliance with the NO <sub>x</sub> ELV it must be met within 10 minutes from when the generator commences operation and 20 minutes when the generator was a Tranche A and is now a Tranche B
(e)	The stack must shall be vertical and unimpeded by cowls or caps

## 3 Emissions and monitoring

### 3.1 Emissions to air,

3.1.1 There shall be no point source emissions to air except from the sources and emission points listed in table 3.1.

3.1.2 The limits given in table 3.1 shall not be exceeded

<b>Table 3.1 Point source emissions to air – emission limits and monitoring requirements</b>				
Pollutant	Combustion Technology	Fuel Natural Gas mg/Nm <sup>3</sup>	Monitoring frequency	Monitoring standard or method
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Diesel engine	190	Every 3 years	Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O <sub>2</sub> content of 15% for engines
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Gas engine	190	Non specified	Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O <sub>2</sub> content of 15% for engines

## **3.2 Monitoring**

- 3.2.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake monitoring for the parameters, at the locations and at not less than the frequencies specified in table 3.1
- 3.2.2 The monitoring measurements shall be carried out when agreed in writing with the Environment Agency.
- 3.2.3 The stack emissions monitoring programme shall be carried out according to EA TGN M5, unless otherwise agreed in writing.
- 3.2.4 Monitoring and compliance shall not include periods of start up or shut down.
- 3.2.5 Where secondary abatement is required to ensure compliance with the NO<sub>x</sub> ELV monitoring shall start 10 minutes from when the generator commences operation and 20 minutes when the generator was a Tranche A and is now a Tranche B.
- 3.2.6 The operator shall maintain records of all monitoring required by these standard rules including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.

## **4 Information**

### **4.1 Records**

- 4.1.1 All records required to be made by these standard rules shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made,
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.
- 4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation for each Generator.
- 4.1.4 The operator shall maintain a record of any events of non-compliance and the measures taken to ensure compliance is restored in the shortest possible time

### **4.2 Reporting**

- 4.2.1 The operator shall send all reports and notifications required by these standard rules to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 As agreed with the Environment Agency in writing as detailed in 3.2.2 the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the emission limits and monitoring set out in table 3.1.

### **4.3 Notifications**

- 4.3.1 In the event:

- (a) of a breach of any permit rule or Emission Limit Value the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (b) of a breach of a permit rule or Emission Limit Value which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit rules has been restored.

4.3.2 Any information provided under standard rule 4.3.1 shall be confirmed in writing within 24 hours.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

## 4.4 Interpretation

4.4.1 In these standard rules the expressions listed below shall have the meaning given in that table.

4.4.2 In these standard rules references to reports and notifications mean written reports and notifications, except where reference is made to notification being made immediately, in which case it may be provided by telephone.

Term	Means
"accident"	an accident that may result in pollution
AQMA	Air quality management area – is that defined in the Environment Act 1995, Part VI, 83.(1) as amended.
"authorised officer"	any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

Back-up generator	Is an excluded generator and operated for the sole purpose of maintaining power supply at a site during an emergency, tested no more 50 hours a year. A back-up generator may not participate in Demand Side Response or Triad operation
Background NO2 concentration	You must work out a representative value for the background concentration for NO2 at your location. This information may be obtained from Local Authority ambient monitoring or background maps produced by Defra: <a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html">https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html</a>
Balancing service	Balancing service means any service procured by the transmission system operator in order to balance supply and demand, and to ensure security and quality of electricity supply, across the national transmission system for Great Britain.
Combined Heat & Power	Combined Heat & Power (CHP) or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy
“EP Regulations”	The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.
Excluded generator	Is one not subject to the Industrial Emissions Directive, a nuclear safety generator, back-up generator or one off shore - See SI 2018 No.110 Schedule 25B
Mobile Specified Generator	Mobile Specified Generator means one that is designed to move or be moved whether on roads or on land.
“pollution”	Emissions as a result of human activity which may – (b) be harmful to human health or the quality of the environment (c) cause offence to a human sense (d) result in damage to material property, or (e) impair or interfere with amenities and other legitimate uses of the environment.
“quarter”	means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.
SAC, SPA, Ramsar or SSSI	Special Areas of Conservation, Special Protection Areas, Ramsar Sites and Sites of Special Scientific Interest are Habitats sites
Sensitive human receptors	Locations where there is relevant public exposure. Relevant public exposure is where members of the public have access, are regularly present and can be exposed for a significant portion of the averaging time of the standard. The standards do not apply where health and safety at work provisions exist and where members of the public do not have access.
Specified Generator	A Specified Generator is a Generator which is used to generate electricity and is not an excluded Generator – see Schedule 25B(2) of SI 2018 No. 110
Tranche A Generator	See SI 2018 No.110 Schedule 25B
“year”	calendar year ending 31 December.



**End of standard rules**