

# **Standard Rules SR2018 No1**

## **Specified Generator, Tranche B low risk, base load operation between 0 and $\leq 5$ MWth, that may include New Medium Combustion Plant $\geq 1$ and $\leq 5$ MWth**

### **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 which are natural gas or non-waste derived biogas fired engines, turbines or boilers which are CHPs. Individual unit capacity is between 0-5MWth and the total is  $\leq 5$  MWth at the specified location which may be in rural and urban areas where background NO<sub>x</sub> and NO<sub>2</sub> has sufficient headroom. Includes secondary abatement where necessary.

Different monitoring and reporting requirements apply where the Tranche B Generator includes new medium combustion plant between  $\geq 1$  MWth and  $\leq 5$  MWth that is brought into operation on or after 20/12/18 (New Medium Combustion Plant). In particular, see Section 3.1 and 3.2.

These standard rules only cover the following activities;

<b>Activities</b>		
<b>Activity reference</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
Specified Generator Tranche B	Specified generators burning natural gas or non-waste derived biogas	<p>Total rated thermal input of all combustion <math>\leq 5</math> MWth</p> <p>Minimum Stack height of 3m</p> <p>Minimum distance from any point source emission to a sensitive human receptor for specified generator <math>\leq 2</math> MWth is 100m</p> <p>Minimum distance from any point source emission to a sensitive human receptor for specified generator between 2 to <math>\leq 5</math> MWth is 150m</p> <p>Minimum distance from any point source emission to a SAC, SPA, Ramsar or SSSI for a specified generator <math>\leq 2</math> MWth is 400m</p> <p>Minimum distance from any point source emission to a SAC, SPA, Ramsar or SSSI for a specified generator between 2 to <math>\leq 5</math> MWth is 600m</p>

		Annual background NO <sub>2</sub> concentration at sensitive human receptor no greater than 31µg/m <sup>3</sup>  Specified Generators shall not be located in an AQMA declared for NO <sub>2</sub> .
New Medium Combustion Plant (MCP)	New Medium Combustion Plant burning natural gas or non-waste derived biogas as a Tranche B Specified Generator	Rated thermal input of individual new medium combustion plant is ≥1MWth and ≤5MWth (The limits listed above for Specified Generator also apply to MCPs)

## End of introductory note

## Record of changes

Version	Date	Change
1.0	May 2018	Published for SRP consultation May 2018
2.0	October 2018	Final
3.0	November 2019	Amended to incorporate requirements for New Medium Combustion Plant
4.0	April 2020	Revised SRP to incorporate requirements for New Medium Combustion Plant

# 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.

## 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.

Table 2.1 activities		
Activity reference	Description of specified activity	Limits of specified activity
Specified Generator Tranche B	Specified generators burning natural gas or non-waste derived biogas	<p>Total rated thermal input of all combustion plant is <math>\leq 5\text{MWth}</math></p> <p>Minimum Stack height of 3m</p> <p>Minimum distance from any point source emission to a sensitive human receptor for specified generator <math>\leq 2\text{MWth}</math> is 100m</p> <p>Minimum distance from any point source emission to a sensitive human receptor for specified generator between 2 to <math>\leq 5\text{MWth}</math> is 150m</p> <p>Minimum distance from any point source emission to a SAC, SPA, Ramsar or SSSI for a specified generator <math>\leq 2\text{MWth}</math> is 400m</p> <p>Minimum distance from any point source emission to a SAC, SPA, Ramsar or SSSI for a specified generator between 2 to <math>&lt; 5\text{MWth}</math> is 600m</p> <p>Annual background <math>\text{NO}_2</math> concentration at sensitive human receptor no greater than <math>31\mu\text{g}/\text{m}^3</math></p>

		Specified Generators shall not be located in an AQMA declared for NO <sub>2</sub> .
New Medium Combustion Plant (MCP)	New Medium Combustion Plant burning natural gas or non-waste derived biogas as a Tranche B Specified Generator	Rated thermal input of individual new medium combustion plant is greater than or equal to 1MWth and less than or equal to 5MWth (The limits listed above for Specified Generator also apply to MCPs)

## 2.2 The site

- 2.2.1 The Specified Generator activities shall only be carried out at the address in this permit where the plant is located.
- 2.2.2 Where MCP's are operated as part of the Specified Generator, only those MCP's listed in the permit can be operated at the site. No MCP shall be operated beyond the site of the grid reference specified for it in the permit.

## 2.3 Operating techniques

- 2.3.1 The activities shall be operated using the techniques and in the manner described in Table 2.3 below.

**Table 2.3 Operating techniques**

- (a) The combustion 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 combustion plant 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) The stack(s) must be vertical and unimpeded by cowls or caps
- (e) 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 combustion plant commences operation and within 20 minutes when the generator was a Tranche A and is now a Tranche B

## 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 the tables 3.1 and 3.2
- 3.1.2 The limits given in tables 3.1 and 3.2 shall not be exceeded.

**Table 3.1 Point source emissions to air – emission limits and monitoring requirements (applicable to each generator)**

Pollutant	Combustion technology	Emission limit (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> )	Gas engine or gas turbine firing natural gas	95	Every 3 years where abatement is fitted otherwise none 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
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	CHP boiler firing natural gas	100	Every 3 years where abatement is fitted otherwise none 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 3% for CHP boilers
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Gas engine combusting non-waste derived biogas	95	Every 3 years where abatement is fitted otherwise none 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% engines
Sulphur Dioxide	Gas engine combusting non-waste derived biogas	5	Every 3 years where abatement is fitted otherwise none 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% engines

**Table 3.2 Point source emissions to air – emission limits and monitoring requirements (applicable to each generator that is also a new medium combustion plant)**

Pollutant	Combustion technology	Emission limit (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> )	Gas engine or gas turbine firing natural gas	95	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
Carbon Monoxide (CO)	Gas engine or gas turbine firing natural gas	No limit		
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	CHP boiler firing natural gas	100		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 3% for CHP boilers
Carbon Monoxide (CO)	CHP boiler firing natural gas	No limit		
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Gas engine combusting non-waste derived biogas	95		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% engines
Sulphur Dioxide	Gas engine combusting non-waste derived biogas	5		
Carbon Monoxide (CO)	Gas engine combusting non-waste derived biogas	No limit		

## **3.2 Monitoring**

- 3.2.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake monitoring for the parameters, at the locations and at no less than the frequencies specified in table 3.1 and 3.2, from the permit issue date.
- 3.2.2 The operator shall, if notified in writing by Natural Resources Wales, undertake additional monitoring for the parameters and at the locations specified in table 3.1 and 3.2.
- 3.2.3 In the case of New Medium Combustion Plant, the first monitoring measurements shall be carried out within four months of the permit issue date or the date when the combustion plant is first put into operation, whichever is later.
- 3.2.4 The stack emissions monitoring programme shall be carried out according to Environment Agency TGN M5, unless otherwise agreed in writing by Natural Resources Wales.
- 3.2.5 Monitoring shall not include periods of start up or shut down.
- 3.2.6 Where secondary abatement is required to ensure compliance with the NO<sub>x</sub> ELV, monitoring shall start within 10 minutes from when the generator commences operation and within 20 minutes when the generator was a Tranche A and is now a Tranche B.
- 3.2.7 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 Natural Resources Wales, 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 Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

4.2.2 Where monitoring is undertaken in accordance with rule 3.2.1, 3.2.2 and/or 3.2.3, the operator shall submit to Natural Resources Wales, using the form made available for the purpose, the information specified on the form relating to that monitoring within 28 days of undertaking the monitoring.

## 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 Natural Resources Wales, 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 operator is notified by Natural Resources Wales under rule 3.2.2, to undertake monitoring at frequencies not otherwise specified in tables 3.1 and 3.2, the operator shall provide, at least 14 days prior to the monitoring being carried out, details of when the monitoring is to take place.

4.3.4 Natural Resources Wales 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:

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

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) 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.

4.3.5 The operator shall notify Natural Resources Wales in writing, as soon as is practicable, of any changes of new medium combustion plant Annex I information.



## 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
Annex I	Annex I of the EU Directive 2015/2193 on Medium Combustion Plant
Annual background NO <sub>2</sub> Concentration	A representative value for the annual background concentration for NO <sub>2</sub> at your location, calculated 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>
AQMA	Air quality management area – is that defined in the Environment Act 1995, Part VI, 83.(1) as amended.
Combined Heat & Power	Combined Heat & Power (CHP) or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy
Environment Agency TGN M5	Technical Guidance Note (monitoring) M5 – Monitoring of Stack Emissions from medium Combustion Plant and Specified Generators
EP Regulations	The Environmental Permitting (England and Wales) Regulations SI 2016 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.
New Medium Combustion Plant	Any single combustion plant with a rated thermal input equal to or greater than 1MWth and less than 50MWth and brought into operation on or after the 20/12/18
Nearby buildings	Any buildings that are both: <ul style="list-style-type: none"> <li>• Within 5L of the stack, where L is the lowest of either the height of the building or the maximum projected width, and</li> <li>• Have a building height that is more than 40% of the stack height</li> </ul>
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.
Year	calendar year ending 31 December.

### End of standard rules