

## Standard Rules SR2018 No7

### New, Low Risk, Stationary Medium Combustion Plant between 1 and < 20MWth (in operation on or after 20/12/2018)

#### 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 new medium combustion plant (MCP) between 1 and < 20MWth which were put in operation on or after 20/12/2018 at a specified location which may be in an Air Quality Management Area (AQMA). MCP's acting as Generators may only do so where power is used for direct drive applications, or as a back-up generator.

These standard rules only cover the following activities;

Category		Relevant criteria
Activity reference	Description of specified activity	Limits of specified activity
New Medium Combustion Plant	Combustion plant burning the following fuels: <ul style="list-style-type: none"> <li>• Gas oil</li> <li>• Natural gas</li> <li>• Biogas</li> <li>• Gaseous fuels other than natural gas or biogas</li> </ul>	Capacity - $\geq 1$ and < 20MWth MCP  Less than 50MWth aggregated MCPs at the specified location  Single fuel combustion for engines and turbines  Dual fuel combustion on boilers only where gas oil is used as back-up fuel for <500 hours per year  Does not include any activities subject to Schedule 24 (Energy Efficiency Directive) of the EP Regulations.  Minimum distances set from any MCP to SAC, SPA, Ramsar or SSSI depending on type of fuel/technology  The MCP may be located within an AQMA

		The specified activities may include limited operating hours MCPs. The MCP should not generate electricity as a Generator unless as an excluded 'back-up generator'
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**End of introductory note**

### **Record of changes**

<b>Version</b>	<b>Date</b>	<b>Change</b>
1.0	May 2018	Published for SRP consultation May 2018
2.0	October 2018	Final
3.0	November 2019	Published for SRP consultation November 2019

# 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
New Medium Combustion Plant	Combustion plant burning the following fuels, <ul style="list-style-type: none"><li>- Gas oil</li><li>- Natural gas</li><li>- Biogas</li><li>- Gaseous fuels other than natural gas or biogas</li></ul>	Capacity - $\geq 1$ – $< 20$ MWth MCP  Less than 50MW aggregated at the specified location  Single fuel combustion for engines and turbines  Dual fuel combustion on boilers only where gas oil is used as back-up fuel for $< 500$ hours per year  Does not include any activities subject to Schedule 24 (Energy Efficiency Directive) of the EP Regulations.  Minimum distances set from any MCP to SAC, SPA, Ramsar or SSSI for specified fuel and technology  The MCP may be located within an AQMA  The specified activities may include limited operating hours MCPs. The MCP should not generate electricity as a Generator unless as an excluded 'back-up generator'

## 2.2 The site

- 2.2.1 Only the MCPs 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.
- 2.2.2 The activities authorised by the permit shall only be carried out in accordance with the limits given in table 2.2.
- 2.2.3 No MCP shall be located within the minimum distances specified in table 2.2.
- 2.2.4 Where the distance from the MCP emission point to a SAC, SPA, Ramsar or SSSI is between the minimum distance and maximum distance specified in table 2.2, the emission point stack height must be a minimum of 3m above ground level.

Table 2.2			
Technology	Fuel	Distance from any MCP to SAC, SPA, Ramsar or SSSI	
		Minimum (metres)	Maximum (metres)
Boilers	Biogas	3500	10000
	Gas oil	1400	5000
	Natural gas	900	5000
	Other gaseous fuel	2000	10000
Engine or turbine	Biogas	5000	10000
	Gas oil	3500	5000
	Natural gas	2000	5000
	Other gaseous fuel	3500	10000
Engine operating as a back-up generator (50hrs/year limit)	Biogas	200	10000
	Gas oil (ultra -low sulphur diesel 10ppm sulphur)	500	5000
	Natural gas	100	10000
	Other gaseous fuel	100	10000

## 2.3 Operating techniques

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

Table 2.3 Operating techniques	
(a)	Each MCP must be operated in accordance with the manufacturers instruction's and records shall must be made and retained to demonstrate this.
(b)	The operator must keep periods of start-up and shut down of each MCP as short as possible.
(c)	The operator should keep periods of operating dual fuel boilers on more polluting back-up fuel as short as possible
(d)	There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.
(e)	The stack(s) must be vertical and unimpeded by cowls or caps

- (f) A limited operating Hours MCP which is an excluded generator may only be operated for the sole purpose of maintaining power supply to a site during an on-site emergency and it may not participate in any balancing services including Triad Avoidance operations.
- (g) A limited operating Hours MCP which is an excluded generator may only be operated for the sole purpose of testing no more than 50 hours a year.

### 3 Emissions and monitoring

#### 3.1 Emissions to air

3.1.1 There shall be no point source emissions to air except from the applicable sources and emission points listed in tables 3.1, 3.2 and 3.3.

3.1.2 The limits given in the applicable tables 3.1, 3.2 and 3.3 shall not be exceeded.

**Table 3.1 Point source emissions to air – emission limit values and monitoring requirements for MCPs other than engines and gas turbines**

Pollutant	Fuel Gas oil mg/Nm <sup>3</sup>	Fuel Natural Gas mg/Nm <sup>3</sup>	Fuel Biogas mg/Nm <sup>3</sup>	Gaseous fuels other than natural gas mg/Nm <sup>3</sup>	Monitoring frequency	Monitoring standard or method
Sulphur Dioxide (SO <sub>2</sub> )	N/A	N/A	100	35	Once every 3 years	All limits 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%.
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	200	100	200	200	Not applicable for dual fuel boilers during operation on back- up fuel only	
Carbon monoxide (CO)	No limit	No limit	No limit	No limit		

**Table 3.2 Point source emissions to air – emission limit values and monitoring requirements for MCPs which are engines and gas turbines (MCP should not generate electricity as a generator unless as an excluded ‘back-up generator’)**

Pollutant	Type of MCP	Fuel Gas oil mg/Nm3	Fuel Natural Gas mg/Nm3	Fuel Biogas mg/Nm3	Gaseous fuels other than natural gas mg/Nm3	Monitoring frequency	Monitoring standard or method
Sulphur Dioxide (SO <sub>2</sub> )	Engine & gas turbine	N/A	N/A	40	15	Once every 3 years	All limits 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%.
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Engine	190	95	190	190		
	Gas turbine	75	50	75	75		
Carbon monoxide (CO)	Engine & gas turbine	No limit	No limit	No limit	No limit		

**Table 3.3 Point source emissions to air – monitoring requirements for limited operating hours MCPs**

Pollutant	Fuel Gas oil mg/Nm3	Fuel Natural Gas mg/Nm3	Fuel Biogas mg/Nm3	Gaseous fuels other than natural gas mg/Nm3	Monitoring frequency	Monitoring standard or method
Sulphur Dioxide (SO <sub>2</sub> )	N/A	N/A	No limit	No limit	Once every 1,500 hours of operation with a minimum frequency of once every five 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 and gas turbines and 3% all other MCPs
Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	No limit	No limit	No limit	No limit		
Carbon monoxide (CO)	No limit	No limit	No limit	No limit		

3.1.3 Limited operating hours MCPs shall:

- (a) not exceed 500 hours operation in a 12 month period as a rolling average over a 3 year period and thereafter annually.
- (b) No more than 750 hours may be operated by a limited operating hours MCP in any single year.

## **3.2 Monitoring**

- 3.2.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake monitoring at each stack of the MCP for the parameters and at no less than the frequencies specified in the applicable tables 3.1, 3.2 or 3.3 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 specified in tables 3.1, 3.2 and 3.3.
- 3.2.3 The first monitoring measurements shall be carried out within four months of the issue date of this permit or the date of when the MCP is first put into operation, whichever is later.
- 3.2.4 The stack emissions monitoring programme shall be carried out according to the 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 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 MCP.
- 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 within 28 days of undertaking the monitoring, using the form made available for the purpose, the information specified on the form relating to that 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 In the event of a breach of rule 3.1.3 the notification shall include a summary of compliance with the 3 year rolling average rule 3.1.2.
- 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 Any information provided under standard rule 4.3.1 and 4.3.2 shall be confirmed in writing within 24 hours.
- 4.3.5 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:
- (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.
- 4.3.6 The operator shall notify Natural Resources Wales in writing, as soon as is practicable, of any change of new medium combustion plant at the site.

## 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.
Back-up generator	A generator that is operated for the sole purpose of providing power at a site during an onsite emergency from 1 January 2019
Diesel engine	An internal combustion engine which operates according to the Diesel cycle and uses compression ignition to burn fuel
Environment Agency TGN M5	The guidance with that title published on gov.uk in August 2018, or any subsequent version which makes only editorial changes
Engine	A gas engine or diesel engine
EP Regulations	The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.
First put into operation	Is when fuel is first combusted in the MCP
Gas engine	An internal combustion engine which operates according to the Otto cycle and uses spark ignition to burn fuel
Gas oil	Defined in Article 3(19) of the Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants
Limited operating hours MCP	An MCP that meets the requirements of paragraph 8 of Part 2 of Schedule 25A of the EP Regulations
MCPD	Medium Combustion Plant Directive – means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants
MCP	' <i>medium combustion plant</i> ' means a combustion plant with a rated thermal input equal or greater than 1 megawatt but less than 50 megawatts
Operating hours	the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods
SAC, SPA, Ramsar or SSSI	Special Areas of Conservation, Special Protection Areas, Ramsar sites and Sites of Special Scientific Interest
Year	calendar year ending 31 December.

### End of standard rules