

# SR2022 No 9: new and existing, low risk, stationary medium combustion plant which is a natural gas boiler

The Environmental Permitting (England & Wales) Regulations 2016

## 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 or existing medium combustion plant (MCP) which is a natural gas boiler producing heat only and which may be in an Air Quality Management Area.

The limits of the permitted activity are that:

- all new natural gas boiler MCP shall operate with a rated thermal input equal to or greater than 1 MWth and less than 20 MWth.
- all existing natural gas boiler MCP shall operate with a rated thermal input equal to or greater than 5 MWth and less than 20 MWth.
- the total capacity of all combustion plant of any size at the permitted location must be less than 50 MWth.
- MCP natural gas boilers under this standard rule are only permitted to burn natural gas, except that dual fuel combustion is permitted where gas oil is used as a back-up fuel for less than 500 hours per year.
- any activities undertaken must not include activities to which Schedule 24 (Energy Efficiency Directive) of the EP Regulations applies.
- all medium combustion plant boilers must meet the minimum distances criteria specified in these standard rules from any MCP to a protected habitat.

Words and expressions used in this introductory note and these standard rules shall have the meanings given in section 4.4, as appropriate.

End of introductory note

## 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 or the permit shall have convenient access to a copy of the permit and the rules.

## 2. Operations

### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in table 2.1 below.

**Table 2.1 activities**

<b>Activity reference</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
<p>New and existing MCP which is a natural gas boiler</p>	<p>The operation of new MCP, which is a natural gas boiler producing heat only, operated with a rated thermal input greater than or equal to 1 MWth and less than 20 MWth.</p> <p>The operation of existing MCP, which is a natural gas boiler producing heat only, operated with a rated thermal input greater than or equal to 5 MWth and less than 20 MWth.</p> <p>The above specified activities may include limited operating hours MCP.</p>	<p>The only fuel that shall be utilised/burned by the MCP boiler shall be natural gas, except that dual fuel combustion using gas oil is permitted for use as a back -up fuel for planned maintenance or emergency for less than 500 hours per year.</p> <p>The total capacity of all combustion plant of any size or type at the permitted location must be less than 50 MWth.</p> <p>The activities shall not include any activities to which Schedule 24 (Energy Efficiency Directive) of the EP Regulations applies.</p>

Activity reference	Description of specified activity	Limits of specified activity
		The MCP natural gas boiler must only be used to produce heat.

## 2.2 The permitted location

2.2.1 No MCP natural gas boiler shall be operated other than at its location as specified by grid reference in Appendix A.

2.2.2 The activities shall be carried out in accordance with the following limits:

(a) all new MCP and new existing MCP natural gas boilers shall be at least the minimum protective distance between the MCP and a protected habitat as specified in table 2.2 below, dependent on the size of the largest individual MCP specified in Appendix A.

(b) all existing MCP natural gas boilers that are not new existing MCP natural gas boilers burning natural gas shall be at least the minimum protective distance between any MCP and a protected habitat as specified in table 2.3 below, dependent on the size of the largest individual existing MCP that is not a new existing MCP specified in Appendix A.

**Table 2.2**

Rated thermal input of MCP natural gas boiler in MWth	Minimum protective distance from new MCP and new existing MCP (above 5MWth) to a protected habitat in metres
≥1 and <5	300
≥5 and <10	400
≥10 and <15	450
≥15 and <20	500

**Table 2.3**

<b>Rated thermal input of MCP natural gas boiler in MWth</b>	<b>Minimum protective distance from existing MCP which are not new existing MCP to a protected habitat in metres</b>
≥5 and <10	600
≥10 and <15	700
≥15 and <20	800

## **2.3 Operating techniques**

2.3.1 The activities shall be operated using the techniques and, in the manner, described below:

- (a) each MCP must be operated in accordance with its manufacturer's instructions and records 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) there must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.
- (d) the stack must be vertical and unimpeded by cowls or caps.
- (e) the operator must keep periods operating dual fuel boilers on back-up gas oil as short as possible.

Limited operating hours MCP must also only be operated in the manner described below:

- (f) for no more than 750 hours operation in any single year.
- (g) in any event for no more than 500 hours operation in a 12- month period as a rolling average over a 3-year period for new MCP and 5-year period for existing MCP and thereafter assessed annually.

## **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 Appendix A.

3.1.2 The point source emissions to air shall not exceed the applicable emission limit value requirements given in tables 3.1, 3.2 and 3.3 below.

**Table 3.1 emission limit value requirements for new MCP or new existing MCP which are natural gas boilers**

Pollutant	Emission limit value in mg/Nm <sup>3</sup>	Monitoring frequency	Monitoring standard or method
Sulphur Dioxide (SO <sub>2</sub> )	Not applicable	Once every 3 years (not applicable when operating on back-up gas oil fuel only)	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> )	100	Once every 3 years (not applicable when operating on back-up gas oil fuel only)	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%.
Carbon Monoxide (CO)	No limit	Once every 3 years (not applicable when operating on back-up gas oil fuel only)	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%.

**Table 3.2 emission limit value requirements for existing MCP which is not new existing MCP which are natural gas boilers**

Pollutant	Emission limit value in mg/Nm <sup>3</sup>	Monitoring frequency	Monitoring standard or method
Sulphur Dioxide (SO <sub>2</sub> )	Not applicable	Once every 3 years (not applicable when operating on back-up gas oil fuel only)	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	Once every 3 years (not applicable when operating on back-up gas oil fuel only)	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%.
Carbon Monoxide (CO)	No limit	Once every 3 years (not applicable when operating on back-up gas oil fuel only)	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%.

**Table 3.3 emission limit value requirements for all limited operating hours MCP which are natural gas boilers**

Pollutant	Emission limit value in mg/Nm <sup>3</sup>	Monitoring frequency	Monitoring standard or method
Sulphur Dioxide (SO <sub>2</sub> )	Not applicable	Once every 1500 hours of operation with a minimum frequency of once every 5 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	Once every 1500 hours of operation with a minimum frequency of once every 5 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%.
Carbon Monoxide (CO)	No limit	Once every 1500 hours of operation with a minimum frequency of once every 5 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%.

## **3.2 Monitoring**

3.2.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake emissions monitoring at each emission point listed in Appendix A for the applicable parameters specified in tables 3.1, 3.2 and 3.3.

3.2.2 For new MCP, the first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later. For existing MCP the first monitoring measurement shall be taken no later than four months after the permit is issued.

3.2.3 Following the first monitoring measurement, monitoring shall be carried out every 3 years except for limited operating hours MCP where the monitoring frequency is once every 1,500 hours of operation with a minimum frequency of once every five years from the date of the first monitoring measurement.

3.2.4 No monitoring is required for dual fuel boilers during operation on back up gas oil fuel only.

3.2.5 The operator shall, if notified in writing by the Environment Agency, undertake additional monitoring of any MCP for the parameters specified in tables 3.1, 3.2 and 3.3 above.

3.2.6 The emissions monitoring shall be carried out in accordance with the guidance 'monitoring stack emissions: low risk MCPs and specified generators' unless otherwise agreed in writing by the Environment Agency.

3.2.7 Monitoring shall not take place during periods of start-up or shutdown.

3.2.8 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, tests 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 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 these rules.

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 the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 Where monitoring is undertaken in accordance with section 3.2 the operator shall submit to the Environment Agency 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 of these standard rules 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 any of these standard rules which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of them until compliance with the rules has been restored.

4.3.2 In the event of a breach of rule 2.3.1, operating technique (f) the operator must notify the Environment Agency and include a summary of compliance with the 3 or 5 year rolling average rule required under rule 2.3.1, operating technique (g).

4.3.3 Where the operator is notified by the Environment Agency under rule 3.2.5, to undertake monitoring at frequencies not otherwise specified in tables 3.1, 3.2 and 3.3, 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 rule 4.3.1 and 4.3.2 shall be confirmed in writing within 24 hours.

4.3.5 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 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 in table 4.1 shall have the meanings given in table 4.1.

**Table 4.1**

<b>Term</b>	<b>Meaning</b>
Accident	An accident that may result in pollution.
Activities	The operation of the MCP specified in Appendix A.
Appendix A	Appendix A as attached to the permit.
EP Regulations	The Environmental Permitting (England and Wales) Regulations 2016 SI No.1154 and words and expressions used in these rules or the permit which are also used in the Regulations have the same meanings as in those Regulations.

<b>Term</b>	<b>Meaning</b>
Existing MCP	MCP with a rated thermal input equal to or greater than 5MWth and less than 20MWth which was put into operation before 20 December 2018.
First put into operation	The date when fuel is first combusted in the MCP. This can be during initial on-site commissioning but does not include conformity testing at the place of manufacture of the plant.
Gas oil	As 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 and HVO.
HVO	Hydro-treated (or hydrogenated) vegetable oil that meets EN15940.
Limited operating hours MCP	A new MCP that meets the requirements of paragraph 8 of part 2 of schedule 25A of the EP regulations or an existing MCP which meets the requirements of paragraph 7 of part 2 of schedule 25A of the EP regulations. This includes operators who have signed a declaration that they will not operate the plant for more than 500 hours per year, as a rolling average over 3 years for new MCP and 5 years for existing MCP.
MCP	Medium combustion plant.
Monitoring stack emissions, low risk MCPs and specified generators	The <a href="#">guidance with that title published on GOV.UK</a> and last updated on 12 July 2022, or any subsequent version which makes only editorial changes.
New existing MCP	An existing MCP specified in Appendix A in respect of which the operator has confirmed that it will comply with the standards applicable to new MCP.
New MCP	A MCP which was put into operation on or after the 20 December 2018.

<b>Term</b>	<b>Meaning</b>
Operating hours	The time, expressed in hours, during which a MCP is operating and discharging emissions into the air, excluding start-up and shut-down periods.
Protected habitat	Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar Sites and Sites of Special Scientific Interest (SSSI).
Year	Calendar year ending 31 December.

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.

End of standard rules

## **Record of changes**

<b>Version</b>	<b>Date</b>	<b>Change</b>
1.0 Draft	October 2022	Published for SRP consultation October 2022.