The Medium Combustion Plant Directive
January 2024

The Medium Combustion Plant Directive (MCPD) regulates pollutant emissions from the combustion of fuels in plants with a rated thermal input of between 1MW-50MW.

Medium combustion plants are used for a wide variety of applications (electricity generation, domestic/residential heating and cooling, providing heat/steam for industrial processes, etc.) and are an important source of emissions of sulphur dioxide (SO2), nitrogen oxides (NOx) and dust.

The emission limit values set in the MCP Directive will have to be applied from 20 December 2018 for new plants and by 2025 or 2030 for existing plants, depending on their size.

Legal Requirements & Deadlines

The legal requirements and deadlines are as follows:

All New Energy Plants

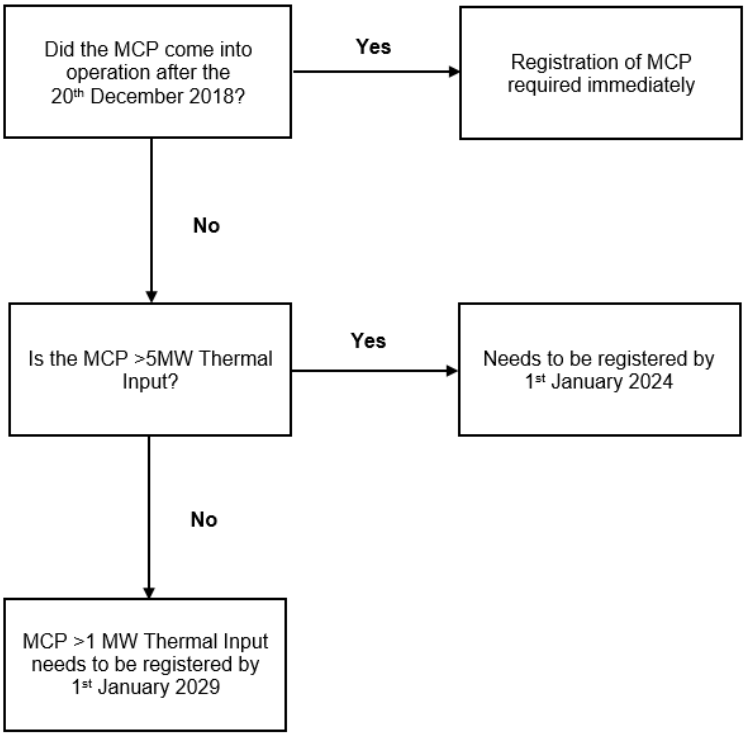
- Must be registered and comply with Emissions Limit Values (ELV).

Existing Plants (rated thermal input above 5MW)

- Must be registered/obtain a permit to operate by 1st January 2024
- Must comply with the proposed ELVs by 1st January 2025

Existing Plants (between 1MW & 5MW)

- Must be registered or obtained a permit to operate by 1st January 2029
- Must comply with the proposed ELV's by 1st January 2030



Note: All disaggregated plant <1MW thermal input is not covered by the directive

Rated Thermal Input

To determine whether your plant meets the requirements for permitting it is necessary to determine the 'rated thermal input' of the plant.

Rated thermal input means the rate at which fuel can be burned at the maximum continuous rating of the appliance multiplied by the net calorific value of the fuel and expressed as megawatts thermal (MWth).

Most plant will have a rating plate that should give the rated thermal input, or at least the thermal output. If not, then it is possible to calculate the approximate rated thermal input using the nett efficiency.

Exemptions & Exclusions

There are a number of exclusions from the scope of MCPD detailed in Article 2. For example: combustion plant used to propel a vehicle, ship or aircraft; turbines and engines used on offshore platforms; some driers; and thermal oxidisers.

There are a number of exemptions listed in Article 6. Plants subject to these exemptions will still need to be registered but are exempt (sometimes on a time-limited basis) from

compliance with ELVs. For example: plant operating under a certain number of hours, use of biomass, plant serving a public District Heating Network.

Existing Medium Combustion Plant - Emission Limit Values (ELV)

From 1st January 2025, emissions into the air of SO2, NOx and dust from an existing medium combustion plant with a rated thermal input >5MW shall not exceed the emission limit values set out in Tables 2 and 3 of Part 1 of Annex II.

From 1st January 2030, emissions into the air of SO2, NOx and dust from an existing medium combustion plant with a rated thermal input of ≤ 5 MW shall not exceed the emission limit values set out in Tables 1 and 3 of Part 1 of Annex II.

Part 1 - Annex II

Table 1

Emission limit values (mg/Nm3) for existing medium combustion plants with a rated thermal input equal to or greater than 1 MW and less than or equal to 5 MW, other than engines and gas turbines:

Pollutant	**Solid Biomass**	**Other Solid Fuels**	**Gas Oil**	**Liquid Fuels (other than gas oil)**	**Natural Gas**	**Gaseous Fuels (other than natural gas)**
SO_2	200	1,100	-	350	-	200
NO_x	650	650	200	650	250	250
Dust	50	50	-	50	-	-

Table 2

Emission limit values (mg/Nm3) for existing medium combustion plants with a rated thermal input greater than 5 MW, other than engines and gas turbines:

Pollutant	**Solid Biomass**	**Other Solid Fuels**	**Gas Oil**	**Liquid Fuels (other than gas oil)**	**Natural Gas**	**Gaseous Fuels (other than natural gas)**
SO_2	200	400	-	350	-	35
NO_x	650	650	200	650	200	250
Dust	30	30	-	30	-	-

Table 3

Emission limit values (mg/Nm3) for existing engines and gas turbines:

Pollutant	**Type of Medium Combustion Plant**	**Gas Oil**	**Liquid Fuels (other than gas oil)**	**Natural Gas**	**Gaseous Fuels (other than natural gas)**
SO_2	Engines and gas turbines	-	120	-	15
NO_x	Engines	190	190	190	190
	Gas Turbines	200	200	150	200
Dust	Engines and gas turbines	-	10	-	-

New Medium Combustion Plant - Emission Limit Values (ELV)

From 20th December 2018, emissions into the air of SO2, NOx and dust from a new medium combustion plant shall not exceed the emission limit values set out in Part 2 of Annex II.

Part 2 - Annex II

Table 1

Emission limit values (mg/Nm3) for new medium combustion plants other than engines and gas turbines:

Pollutant	**Solid Biomass**	**Other Solid Fuels**	**Gas Oil**	**Liquid Fuels (other than gas oil)**	**Natural Gas**	**Gaseous Fuels (other than natural gas)**
SO_2	200	400	-	350	-	35
NO_x	300	300	200	300	100	200
Dust	20	20	-	20	-	-

Table 2

Emission limit values (mg/Nm3) for new engines and gas turbines:

Pollutant	**Type of Medium Combustion Plant**	**Gas Oil**	**Liquid Fuels (other than gas oil)**	**Natural Gas**	**Gaseous Fuels (other than natural gas)**
SO_2	Engines and gas turbines	-	120	-	15
NO_x	Engines	190	190	95	190
	Gas Turbines	75	75	50	75
Dust	Engines and gas turbines	-	10	-	-

Aggregation

We would draw your attention to the guidance on aggregation; in summary:

- You only need to aggregate NEW MCP where they share a common stack.
- You should not aggregate existing MCPs even if they share a common stack.

Back- up/Standby Generators

Backup generators (operated for less than 50 hours per year for testing) which are Medium Combustion Plant *do* require permitting at the relevant date.

Information Required

To prepare for your permit application, you will need to know the following information with regards to your Medium Combustion Plant:

Equipment Type/Manufacturer:	Boiler 1 - Hoval
Model/Type:	Equinox
Serial Number:	1645717/4
Installation Date (MM/YYYY):	Jun-2008
New/Existing:	Existing
Thermal Input (MW):	5.454
Used as a Back-Up:	No
Aggregation Required:	No
Fuel Type:	Natural Gas
Annual Run Hours:	>1,500

For Further information on the MCPD Requirements or to arrange an MCPD Survey, please contact us.