SCHEDULE Regulation 13

Schedule 1B inserted into the Principal Regulations

"SCHEDULE 1B Regulation 20B

Medium Combustion Plant Directive

PART 1

Permit conditions

Existing medium combustion plants

1.—(1) The emissions into air from an existing medium combustion plant with a rated thermal input greater than 5 megawatts must not exceed the emission limit values set out in—

(a) Table 2, if the plant is not an engine or gas turbine,

(b) Table 3, if the plant is an engine or gas turbine.

(2) The emissions into air from an existing medium combustion plant with a rated thermal input less than or equal to 5 megawatts must not exceed the emission limit values set out in—

(a) Table 1, if the plant is not an engine or gas turbine,

(b) Table 3, if the plant is an engine or gas turbine.

(3) An existing medium combustion plant is exempted from the requirements in sub-paragraphs (1) and (2) if either—

(a) the plant does not operate more than 500 hours per year (calculated as a rolling average over a period of 5 years), or

(b) the plant does not operate more than 1000 hours per year (calculated as a rolling average over a period of 5 years) and the plant is operated in case of emergency or extraordinary circumstances for—

(i) backup power production in connected islands in the event of an interruption of the main power supply to an island, or

(ii) heat production in cases of exceptionally cold weather events.

(4) A permit for a medium combustion plant which—

(a) is exempted by sub-paragraph (3) from the requirements in sub-paragraphs (1) and (2), and

(b) is firing solid fuels,

must contain an emission limit value for dust of 200 mg/Nm^3.

(5) An existing medium combustion plant with a rated thermal input greater than 5 megawatts is exempted from the requirement in sub-paragraph (1) until 1st January 2030 where at least 50% of the useful heat production of the plant (calculated as a rolling average over a period of 5 years) is delivered in the form of steam or hot water to a public network for district heating.

(6) A permit for a medium combustion plant which is exempted by sub-paragraph (5) from the requirement in sub-paragraph (1) must contain—

(a) emission limit values which do not exceed—

(i) 1100 mg/Nm^3 for SO_2, and

(ii) 150 mg/Nm^3 for dust,

(b) conditions that are necessary to ensure that—

(i) no significant pollution is caused; and

(ii) a high level of protection for the environment as a whole is achieved.

(7) An existing medium combustion plant is exempted until 1st January 2030 from the requirements in sub-paragraphs (1) and (2) to comply with an emission limit value for dust in Table 1, 2 or 3 where—

(a) the plant fires solid biomass as its main fuel, and

(b) the plant is situated in a zone which conforms with the limit values set out in Directive 2008/50/EC of the European Parliament and of the Council on ambient air quality and cleaner air for Europe(**1**).

(8) A permit for a medium combustion plant which is exempted by sub-paragraph (7) from the requirements in sub-paragraphs (1) and (2) must contain—

(a) emission limit values which do not exceed 150 mg/Nm^3 for dust, and

(b) conditions that are necessary to ensure that—

(i) no significant pollution is caused; and

(ii) a high level of protection of the environment as a whole is achieved.

(10) An existing medium combustion plant is exempted until 1st January 2030 from the requirement in sub-paragraph (1) to comply with the emission limit values for NO_x in Table 3 where the plant is used to drive gas compressor stations required to ensure the safety and security of a national gas transmission system.

New medium combustion plants

2.—(1) The emissions into air from a new medium combustion plant must not exceed the emission limit values set out in—

(a) Table 4, if the plant is not an engine or gas turbine,

(b) Table 5, if the plant is an engine or gas turbine.

(2) A new medium combustion plant is exempted from the requirements in sub-paragraph (1) where the plant does not operate more than 500 hours per year (calculated as a rolling average over a period of 3 years).

(3) A permit for a new medium combustion plant which—

(a) is exempted by sub-paragraph (2) from the requirements in sub-paragraph (1), and

(b) is firing solid fuels,

must contain an emission limit value for dust of 100 mg/Nm^3.

Temporary exemptions

3.—(1) A medium combustion plant may be exempted for a maximum period of 6 months from the requirements in paragraphs 1(1) and (2) and 2(1) to comply with an emission limit value for SO_2 where the plant—

(a) normally uses low-sulphur fuel, and

(b) the operator is unable to comply with an emission limit value due to an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

(**1**) OJ L152, 11.6.2008, p.1, last amended by Commission Directive (EU) 2015/1480 (OJ L 226, 29.8.2015, p.4).

(2) A medium combustion plant may be exempted for a maximum period of 10 days from the requirements in paragraphs 1(1) and (2) and 2(1) where the plant—

(a) uses only gaseous fuel,

(b) has to resort exceptionally to the use of non-gaseous fuel due to a sudden interruption on the supply of gas, and

(c) requires to be fitted with secondary abatement equipment due to the interruption.

(3) The period referred to in sub-paragraph (2) may be extended where SEPA considers, following representations from the operator, that a longer period is justified.

4. SEPA must inform the Scottish Ministers within 14 days if it grants an exemption from the requirements in paragraphs 1(1) and (2) and 2(1) on the grounds set out in paragraph 3(1) or (2).

Plants firing more than one fuel

5. Where a medium combustion plant simultaneously fires two or more fuels, the emission limit value for each pollutant is calculated by—

(a) taking the emission limit value in Table 1, 2, 3, 4 or 5 for each fuel,

(b) determining the fuel-weighted emission limit value, which is obtained by multiplying the individual emission limit value by the thermal input delivered by each fuel, and dividing the product of multiplication by the sum of the thermal inputs delivered by all fuels, and

(c) aggregating the fuel-weighted emission limit values.

Monitoring

6.—(1) The operator of a medium combustion plant must—

(a) where the plant is using more than one fuel type, monitor emissions—

(i) while the fuel or fuel mix likely to result in the highest level of emissions is being fired, and

(ii) during a period which is representative of normal operating conditions,

(b) keep a record of, and process, all monitoring results in such a way as to enable verification of compliance with the applicable emission limit values,

(c) keep a record of, or information proving, the effective continuous operation of secondary abatement equipment in use at the plant,

(d) keep the following:—

(i) the permit and, if relevant, variations and related information,

(ii) the monitoring results and information referred to in sub-paragraphs (b) and (c),

(iii) a record of the plant's operating hours if applicable for the purposes of paragraph 1(3) or 2(2),

(iii) a record of the type and quantities of fuel used in the plant,

(iv) a record of any breakdown or malfunction of secondary abatement equipment,

(v) a record of a breach of an emission limit value, and the measures taken by the operator to restore compliance,

(e) keep the information referred to in head (d)(ii) to (v) for a period of at least 6 years.

(2) The operator of a medium combustion plant must either—

(a) measure emissions at least every three years; or

(b) measure emissions continuously.

(3) But where sub-paragraph (4) applies, the operator must measure emissions at the most frequent of—

(a) after the elapse of three times the maximum permitted average annual operating hours,

(b) every five years.

(4) This paragraph applies to a medium combustion plant which is—

(a) exempted from the requirements of paragraph 1(1) and (2) by paragraph 1(3), or

(b) exempted from the requirements of paragraph 2(1) by paragraph 2(2).

(5) The operator of a medium combustion plant is only required to measure emissions of—

(a) pollutants for which an emission limit value is included in the operator's permit by virtue of this schedule, and

(b) carbon monoxide.

(6) The operator of a medium combustion plant must take the first measurement of emissions by the later of the date falling 4 months after—

(a) the grant of the permit,

(b) the date of the start of operation of the plant.

(7) As an alternative to the requirements of sub-paragraphs (2), (3) and (5)(a), the operator of a medium combustion plant may use other procedures which have been verified and approved by SEPA to determine SO_2 emissions from the plant.

(8) Where an operator is required to measure emissions continuously—

(a) the measuring systems must be subject to checking by means of parallel measurements with the reference methods at least annually, and

(b) the operator must provide the results of the check to SEPA.

(9) Measurements must be taken when—

(a) the plant is operating under stable conditions at a representative even load, and

(b) the plant is not starting-up or shutting down.

Compliance

7. Where an operator of a medium combustion plant fails to comply with an emission limit value—

(a) the operator must immediately take such measures as are needed to ensure compliance with the permit as soon as reasonably practicable,

(b) the operator must provide SEPA within the shortest possible time with details (in writing) of the non-compliance and the measures taken to restore compliance,

(c) the operator must suspend operation of the plant until compliance is restored if the non-compliance causes a significant degradation of local air quality.

Assessment of Compliance

8.—(1) In the case of periodic measurements, an emission limit value is to be treated as being complied with if each of the series of measurements (or other procedures) do not exceed the emission limit value.

(2) In the case of continuous measurements, an emission limit value is to be treated as being complied with if the evaluation of the measurement results indicates, for operating hours within a calendar year, that all of the following conditions have been met:—

(a) no validated monthly average value exceeds the emission limit value,

(b) no validated daily average value exceeds 110% of the emission limit value,

(c) in the case of plant composed only of boilers using coal, no validated daily average value exceeds 150 % of the emission limit value,

(d) 95% of all the validated hourly average values over the year do not exceed 20 % of the emission limit value.

(3) At the emission limit value level, the values of the 95% confidence intervals of a single measured result must not exceed the following percentages of the emission limit values:—

(a) 10% for emissions of carbon monoxide,

(b) 20% for emissions of sulphur dioxide,

(c) 20% for emissions of nitrogen oxides,

(d) 30% for dust.

(4) The validated hourly and daily average values are determined from the measured valid hourly average values after having subtracted the value of the confidence interval specified in sub-paragraph (3).

(5) A day is invalidated if more than three hourly average values are invalid due to malfunction or maintenance of the automated measuring system.

(6) For the purpose of calculating average emission limit values—

(a) periods of start-up and shut-down, and

(b) the periods referred to in paragraph 3,

are to be disregarded.

Start-up and shut-down

9. The operator of a medium combustion plant must keep periods of start-up and shut-down of the plant as short as possible.

Interpretation

10. In this schedule—

(a) "biomass" means—

(i) products consisting of any vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content,

(ii) vegetable waste from agriculture and forestry,

(iii) vegetable waste from the food processing industry, if the heat generated is recovered,

(iv) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered,

(v) cork waste,

(vi) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating and which includes, in particular, such wood waste originating from construction and demolition waste,

(b) "micro isolated system" means a micro isolated system as defined in point 27 of Article 2 of Directive 2009/72/EC of the European Parliament and of the Council of 13th July 2009 concerning common rules for the internal market in electricity(**2**),

(c) "small isolated system" means a small isolated system as defined in point 26 of Article 2 of Directive 2009/72/EC of the European Parliament and of the Council of 13th July 2009 concerning common rules for the internal market in electricity,

(d) "Table 1", "Table 2", "Table 3", "Table 4" and "Table 5" mean the tables with those numbers in Part 2 as read with the notes to the table,

(e) a reference to any other term defined in the Medium Combustion Plant Directive has the same meaning in as in that Directive.

PART 2

Tables

11. All emission limit values set out in this Part are defined—

(a) at a temperature of 273.15 K,

(b) at a pressure of 101.3 kPa,

(c) after correction for the water vapour content of the waste gases,

(d) at a standardised O_2 content of—

(i) 6 % for medium combustion plants using solid fuels,

(ii) 3 % for medium combustion plants, other than engines and gas turbines, using liquid and gaseous fuels,

(iii) 15 % for engines and gas turbines.

Table 1

Emission Limit values for existing medium combustion plant with a rated thermal input less than or equal to 5 megawatts (other than engines or gas turbines)

Pollutant	*Solid Biomass*	*Other solid fuels*	*Gas oil*	*Liquid fuels other than gas oil*	*Natural gas*	*Gaseous fuels other than gas oil*
SO_2 (mg/ Nm^3)	*200*[(1)(2)]	*1100*	_	*350*	_	*200*[(3)]
NO_x (mg/ Nm^3)	*650*	*650*	*200*	*650*	*250*	*250*
Dust (mg/ Nm^3)	*50*	*50*	_	*50*	_	_

(1) This value does not apply in the case of plant firing exclusively woody solid biomass.

(2) 300 mg/Nm^3 in the case of plants firing straw.

(3) 400 mg/Nm^3 in the case of low calorific gases from coke ovens in the iron and steel industry.

(**2**) OJ L 211, 14.8.2009, p.55.

Table 2

Emission Limit values for existing medium combustion plant with a rated thermal greater than or equal to 5 megawatts (other than engines or gas turbines)

Pollutant	*Solid Biomass*	*Other solid fuels*	*Gas oil*	*Liquid fuels other than gas oil*	*Natural gas*	*Gaseous fuels other than gas oil*
SO_2 (mg/ Nm^3)	*200*[(1)(2)]	*400*[(3)]	_	*350*[(4)]	_	*35*[(5)(6)]
NO_x (mg/ Nm^3)	*650*	*650*	*200*	*650*	*200*	*250*
Dust (mg/ Nm^3)	*30*[(7)]	*30*[(7)]	_	*30*	_	_

(1) This value does not apply in the case of plant firing exclusively woody solid biomass.

(2) 300 mg/Nm^3 in the case of plants firing straw.

(3) 1100 mg/Nm^3 in the case of plants with a rated thermal input greater than 5 megawatts and less than or equal to 20 megawatts.

(4) Until 1st January 2030, 850 mg/Nm^3 in the case of plants with a rated thermal input greater than 5 megawatts and less than or equal to 20 megawatts firing heavy fuel oil.

(5) 400 mg/Nm^3 in the case of low calorific gases from coke ovens, 200 mg/Nm^3 in the case of low calorific gases from blast furnaces in the iron and steel industry.

(6) 170 mg/Nm^3 in the case of biogas.

(7) 50 mg/Nm^3 in the case of plants with a rated thermal input greater than 5 megawatts and less than or equal to 20 megawatts.

Table 3

Emission limit values 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 (mg/ Nm^3)	*Engines and gas turbines*	_	*120*	_	*15*[(1)(2)]
NO_x (mg/ Nm^3)	*Engines*	*190*[(3)(4)]	*190*[(3)(5)]	*190*[(6)]	*190*[(6)]
	Gas turbines[(7)]	*200*	*200*	*150*	*200*
Dust (mg/ Nm^3)	*Engines and gas turbines*	_	*10*[(8)]	_	_

(1) 60 mg/Nm^3 in the case of biogas.

(2) 130 mg/Nm^3 in the case of low calorific gases from coke ovens and 65 mg/Nm^3 in the case of low calorific gases from blast furnaces in the iron and steel industry.

(3) 1850 mg/Nm^3 for (i) diesel engines the construction of which commenced before 18th May 2006 and (ii) dual fuel engines in liquid mode.

(4) 250 mg/Nm^3 in the case of engines with a rated thermal input equal to or greater than 1 megawatt and less than or equal to 5 megawatts.

(5) 250 mg/Nm^3 in the case of engines with a rated thermal input equal to or greater than 1 megawatt and less than or equal to 5 megawatts; 225 mg/Nm^3 in the case of engines with a rated thermal input greater than 5 megawatts and less than or equal to 20 megawatts.

(6) 380 mg/Nm^3 for dual fuel engines in gas mode.

(7) Emission limit values are only applicable above 70% load.

(8) 20 mg/Nm^3 in the case of plants with a rated thermal input greater than 1 megawatt and less than or equal to 20 megawatts.

Table 4

Emission limit values for new medium combustion plant, 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 gas oil*
SO_2 (mg/ Nm^3)	*200*[(1)]	*400*	_	*350*[(2)]	_	*35*[(3)(4)]
NO_x (mg/ Nm^3)	*300*[(5)]	*300*[(5)]	*200*	*300*[(6)]	*100*	*200*
Dust (mg/ Nm^3)	*20*[(7)]	*20*[(7)]	_	*20*[(8)]	_	_

(1) The value does not apply in the case of plants firing exclusively woody solid biomass.

(2) Until 1st January 2025, 1700 mg/Nm^3 in the case of plants which are part of a small isolated system or a micro isolated system.

(3) 400 mg/Nm^3 in the case of low calorific gases from coke ovens, and 200 mg/Nm^3 in the case of low calorific gases from blast furnaces in the iron and steel industry.

(4) 100 mg/Nm^3 in the case of biogas.

(5) 500 mg/Nm^3 in the case of plants with a total rated thermal input equal to or greater than 1 megawatt and less than or equal to 5 megawatts.

(6) Until 1st January 2025, 450 mg/Nm^3 when firing heavy fuel oil containing between 0.2 % and 0.3 % N and 360 mg/Nm^3 when firing heavy fuel oil containing less than 0.2 % N in the case of plants which are part of a small isolated system or a micro isolated system.

(7) 50 mg/Nm^3 in the case of plants with a total rated thermal input equal to or greater than 1 megawatt and less than or equal to 5 megawatts; 30 mg/Nm^3 in the case of plants with a total rated thermal input greater than 5 megawatts and less than or equal to 20 megawatts.

(8) 50 mg/Nm^3 in the case of plants with a total rated thermal input equal to or greater than 1 megawatt and less than or equal to 5 megawatts

Table 5

Emission limit values for new medium combustion plant which are engines or 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 (mg/Nm^3)	*Engines and gas turbines*	_	*120*[(1)]	_	*15*[(2)]
NO_x (mg/Nm^3)	*Engines*[(3)(4)]	*190*[(5)]	*190*[(5)(6)]	*95*[(7)]	*190*
	Gas turbines[(8)]	*75*	*75*[(9)]	*50*	*75*
Dust (mg/Nm^3)	*Engines and gas turbines*	_	*10*[(10)(11)]	_	_"

(1) Until 1st January 2025, 590 mg/Nm^3 for diesel engines which are part of a small isolated system or a micro isolated system.

(2) 40 mg/Nm^3 in the case of biogas.

(3) Engines running between 500 and 1500 hours per year may be exempted from compliance with those emission limit values if they are applying primary measures to limit NO_x emissions and meet the emission limit values set out in footnote (4).

(4) Until 1st January 2025 in a small isolated system and a micro isolated system, 1850 mg/Nm^3 for dual fuel engines in liquid mode and 380 mg/Nm^3 in gas mode; 1300 mg/Nm^3 for diesel engines with ≤ 1200 rpm with a total rated thermal input less than or equal to 20 megawatts and 1850 mg/Nm^3 for diesel engines with a total rated thermal input greater than 20 megawatts; 750 mg/Nm^3 for diesel engines with > 1200 rpm.

(5) 225 mg/Nm^3 for dual fuel engines in liquid mode.

(6) 225 mg/Nm^3 for diesel engines with a total rated thermal input less than or equal to 20 megawatts with ≤ 1 200 rpm.

(7) 190 mg/Nm^3 for dual fuel engines in gas mode.

(8) These emission limit values are only applicable above 70 % load.

(9) Until 1st January 2025, 550 mg/Nm^3 for plants which are part of a small isolated system or a micro isolated system.

(10) Until 1st January 2025, 75 mg/Nm^3 for diesel engines which are part of a small isolated system or a micro isolated system.

(11) 20 mg/Nm^3 in the case of plants with a total rated thermal input equal to or greater than 1 megawatt and less than or equal to 5 megawatts.