

DIRECTIVE 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)¹

Incorporated and adapted by Ministerial Council Decision 2013/06/MC-EnC of 24 October 2013 on the implementation of Chapter III, Annex V, and Article 72(3)-(4) of Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) and amending Article 16 and Annex II of the Energy Community Treaty and adapted by Ministerial Council Decision 2015/06/MC-EnC of 16 October 2015 on the implementation of Chapter III, Annex V, and Article 72(3)-(4) of Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) for existing combustion plants and amending Annex II of the Energy Community Treaty.

*The adaptations made by Ministerial Council Decision 2013/06/MC-EnC are highlighted in **bold and blue**.*

Whereas:

(1) A number of substantial changes are to be made to Council Directive 78/176/EEC of 20 February 1978 on waste from the titanium dioxide industry, Council Directive 82/883/EEC of 3 December 1982 on procedures for the surveillance and monitoring of environments concerned by waste from the titanium dioxide industry, Council Directive 92/112/EEC of 15 December 1992 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry, Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste, Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants and Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control. In the interests of clarity, those Directives should be recast.

(2) In order to prevent, reduce and as far as possible eliminate pollution arising from industrial activities in compliance with the 'polluter pays' principle and the principle of pollution prevention, it is necessary to establish a general framework for the control of the main industrial activities, giving priority to intervention at source, ensuring prudent management of natural resources and taking into account, when necessary, the economic situation and specific local characteristics of the place in which the industrial activity is taking place.

(3) Different approaches to controlling emissions into air, water or soil separately may encourage the shifting of pollution from one environmental medium to another rather than protecting the environment as a whole. It is, therefore, appropriate to provide for an integrated approach to prevention and control of emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention. Such an approach will also contribute to the achievement of a level playing

¹ Since Ministerial Council Decision 2013/06/MC-EnC incorporated only Chapter III, Annex V, and Article 72(3)-(4) of Directive 2010/75/EU into the Energy Community *acquis communautaire*, only the text of those provisions are displayed here.

field in the Union by aligning environmental performance requirements for industrial installations.

(4) It is appropriate to revise the legislation relating to industrial installations in order to simplify and clarify the existing provisions, reduce unnecessary administrative burden and implement the conclusions of the Commission Communications of 21 September 2005 on the Thematic Strategy on Air Pollution (hereinafter the Thematic Strategy on Air Pollution), of 22 September 2006 on the Thematic Strategy for Soil Protection and of 21 December 2005 on the Thematic Strategy on the Prevention and Recycling of Waste adopted as a follow-up to Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme. Those Communications set objectives to protect human health and the environment which cannot be met without further reductions in emissions arising from industrial activities.

(5) In order to ensure the prevention and control of pollution, each installation should operate only if it holds a permit or, in the case of certain installations and activities using organic solvents, only if it holds a permit or is registered.

(6) It is for Member States to determine the approach for assigning responsibilities to operators of installations provided that compliance with this Directive is ensured. Member States may choose to grant a permit to one responsible operator for each installation or to specify the responsibility amongst several operators of different parts of an installation. Where its current legal system provides for only one responsible operator for each installation, a Member State may decide to retain this system.

(7) In order to facilitate the granting of permits, Member States should be able to set requirements for certain categories of installations in general binding rules.

(8) It is important to prevent accidents and incidents and limit their consequences. Liability regarding the environmental consequences of accidents and incidents is a matter for relevant national law and, where applicable, other relevant Union law.

(9) In order to avoid duplication of regulation, the permit for an installation covered by Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community should not include an emission limit value for direct emissions of the greenhouse gases specified in Annex I to that Directive except where it is necessary to ensure that no significant local pollution is caused or where an installation is excluded from that scheme.

(10) In accordance with Article 193 of the Treaty on the Functioning of the European Union (TFEU), this Directive does not prevent Member States from maintaining or introducing more stringent protective measures, for example greenhouse gas emission requirements, provided that such measures are compatible with the Treaties and the Commission has been notified.

(11) Operators should submit permit applications containing the information necessary for the competent authority to set permit conditions. Operators should be able to use information resulting from the application of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment and of Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances when submitting permit applications.

(12) The permit should include all the measures necessary to achieve a high level of protection of the environment as a whole and to ensure that the installation is operated in accordance with the general principles governing the basic obligations of the operator. The permit should also include emission

limit values for polluting substances, or equivalent parameters or technical measures, appropriate requirements to protect the soil and groundwater and monitoring requirements. Permit conditions should be set on the basis of best available techniques.

(13) In order to determine best available techniques and to limit imbalances in the Union as regards the level of emissions from industrial activities, reference documents for best available techniques (hereinafter BAT reference documents') should be drawn up, reviewed and, where necessary, updated through an exchange of information with stakeholders and the key elements of BAT reference documents (hereinafter BAT conclusions') adopted through committee procedure. In this respect, the Commission should, through committee procedure, establish guidance on the collection of data, on the elaboration of BAT reference documents and on their quality assurance. BAT conclusions should be the reference for setting permit conditions. They can be supplemented by other sources. The Commission should aim to update BAT reference documents not later than 8 years after the publication of the previous version.

(14) In order to ensure an effective and active exchange of information resulting in high-quality BAT reference documents, the Commission should establish a forum that functions in a transparent manner. Practical arrangements for the exchange of information and the accessibility of BAT reference documents should be laid down, in particular to ensure that Member States and stakeholders provide data of sufficient quality and quantity based on established guidance to enable the determination of best available techniques and emerging techniques.

(15) It is important to provide sufficient flexibility to competent authorities to set emission limit values that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques. To this end, the competent authority may set emission limits that differ from the emission levels associated with the best available techniques in terms of the values, periods of time and reference conditions applied, so long as it can be demonstrated, through the results of emission monitoring, that emissions have not exceeded the emission levels associated with the best available techniques. Compliance with the emission limit values that are set in permits results in emissions below those emission limit values.

(16) In order to take into account certain specific circumstances where the application of emission levels associated with the best available techniques would lead to disproportionately high costs compared to the environmental benefits, competent authorities should be able to set emission limit values deviating from those levels. Such deviations should be based on an assessment taking into account well-defined criteria. The emission limit values set out in this Directive should not be exceeded. In any event, no significant pollution should be caused and a high level of protection of the environment taken as a whole should be achieved.

(17) In order to enable operators to test emerging techniques which could provide for a higher general level of environmental protection, or at least the same level of environmental protection and higher cost savings than existing best available techniques, the competent authority should be able to grant temporary derogations from emission levels associated with the best available techniques.

(18) Changes to an installation may give rise to higher levels of pollution. Operators should notify the competent authority of any planned change which might affect the environment. Substantial changes to installations which may have significant negative effects on human health or the environment should not be made without a permit granted in accordance with this Directive.

(19) The spreading of manure contributes significantly to emissions of pollutants into air and water.

With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution and Union law on water protection, it is necessary for the Commission to review the need to establish the most suitable controls of these emissions through the application of best available techniques.

(20) The intensive rearing of poultry and cattle contributes significantly to emissions of pollutants into air and water. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution and in Union law on water protection, it is necessary for the Commission to review the need to establish differentiated capacity thresholds for different poultry species in order to define the scope of this Directive and to review the need to establish the most suitable controls on emissions from cattle rearing installations.

(21) In order to take account of developments in best available techniques or other changes to an installation, permit conditions should be reconsidered regularly and, where necessary, updated, in particular where new or updated BAT conclusions are adopted.

(22) In specific cases where permit reconsideration and updating identifies that a longer period than 4 years after the publication of a decision on BAT conclusions might be needed to introduce new best available techniques, competent authorities may set a longer time period in permit conditions where this is justified on the basis of the criteria laid down in this Directive.

(23) It is necessary to ensure that the operation of an installation does not lead to a deterioration of the quality of soil and groundwater. Permit conditions should, therefore, include appropriate measures to prevent emissions to soil and groundwater and regular surveillance of those measures to avoid leaks, spills, incidents or accidents occurring during the use of equipment and during storage. In order to detect possible soil and groundwater pollution at an early stage and, therefore, to take appropriate corrective measures before the pollution spreads, the monitoring of soil and groundwater for relevant hazardous substances is also necessary. When determining the frequency of monitoring, the type of prevention measures and the extent and occurrence of their surveillance may be considered.

(24) In order to ensure that the operation of an installation does not deteriorate the quality of soil and groundwater, it is necessary to establish, through a baseline report, the state of soil and groundwater contamination. The baseline report should be a practical tool that permits, as far as possible, a quantified comparison between the state of the site described in that report and the state of the site upon definitive cessation of activities, in order to ascertain whether a significant increase in pollution of soil or groundwater has taken place. The baseline report should, therefore, contain information making use of existing data on soil and groundwater measurements and historical data related to past uses of the site.

(25) In accordance with the polluter pays principle, when assessing the level of significance of the pollution of soil and groundwater caused by the operator which would trigger the obligation to return the site to the state described in the baseline report, Member States should take into account the permit conditions that have applied over the lifetime of the activity concerned, the pollution prevention measures adopted for the installation, and the relative increase in pollution compared to the contamination load identified in the baseline report. Liability regarding pollution not caused by the operator is a matter for relevant national law and, where applicable, other relevant Union law.

(26) In order to ensure the effective implementation and enforcement of this Directive, operators should regularly report to the competent authority on compliance with permit conditions. Member States should ensure that the operator and the competent authority each take necessary measures

in the event of non-compliance with this Directive and provide for a system of environmental inspections. Member States should ensure that sufficient staff are available with the skills and qualifications needed to carry out those inspections effectively.

(27) In accordance with the Århus Convention on access to information, public participation in decision-making and access to justice in environmental matters, effective public participation in decision-making is necessary to enable the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken. Members of the public concerned should have access to justice in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.

(28) The combustion of fuel in installations with a total rated thermal input below 50 MW contributes significantly to emissions of pollutants into the air. With a view to meeting the objectives set out in the Thematic Strategy on Air Pollution, it is necessary for the Commission to review the need to establish the most suitable controls on emissions from such installations. That review should take into account the specificities of combustion plants used in healthcare facilities, in particular with regard to their exceptional use in the case of emergencies.

(29) Large combustion plants contribute greatly to emissions of polluting substances into the air resulting in a significant impact on human health and the environment. In order to reduce that impact and to work towards meeting the requirements of Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants and the objectives set out in the Thematic Strategy on Air Pollution, it is necessary to set more stringent emission limit values at Union level for certain categories of combustion plants and pollutants.

(30) The Commission should review the need to establish Union-wide emission limit values and to amend the emission limit values set out in Annex V for certain large combustion plants, taking into account the review and update of the relevant BAT reference documents. In this context, the Commission should consider the specificity of the energy systems of refineries.

(31) Due to the characteristics of certain indigenous solid fuels, it is appropriate to apply minimum desulphurisation rates rather than emission limit values for sulphur dioxide for combustion plants firing such fuels. Moreover, as the specific characteristics of oil shale may not allow the application of the same sulphur abatement techniques or the achievement of the same desulphurisation efficiency as for other fuels, a slightly lower minimum desulphurisation rate for plants using this fuel is appropriate.

(32) In the case of a sudden interruption in the supply of low-sulphur fuel or gas resulting from a serious shortage, the competent authority should be able to grant temporary derogations to allow emissions of the combustion plants concerned to exceed the emission limit values set out in this Directive.

(33) The operator concerned should not operate a combustion plant for more than 24 hours after malfunctioning or breakdown of abatement equipment and unabated operation should not exceed 120 hours in a 12-month period in order to limit the negative effects of pollution on the environment. However, where there is an overriding need for energy supplies or it is necessary to avoid an overall increase of emissions resulting from the operation of another combustion plant, competent authorities should be able to grant a derogation from those time limits.

(34) In order to ensure a high level of environmental and human health protection and to avoid transboundary movements of waste to plants operating at lower environmental standards, it is necessary to set and maintain stringent operating conditions, technical requirements and emission limit values for plants incinerating or co-incinerating waste within the Union.

(35) The use of organic solvents in certain activities and installations gives rise to emissions of organic compounds into the air which contribute to the local and transboundary formation of photochemical oxidants which causes damage to natural resources and has harmful effects on human health. It is, therefore, necessary to take preventive action against the use of organic solvents and to establish a requirement to comply with emission limit values for organic compounds and appropriate operating conditions. Operators should be allowed to comply with the requirements of a reduction scheme instead of complying with the emission limit values set out in this Directive where other measures, such as the use of low-solvent or solvent-free products or techniques, provide alternative means of achieving equivalent emission reduction.

(36) Installations producing titanium dioxide can give rise to significant pollution into air and water. In order to reduce these impacts, it is necessary to set at Union level more stringent emission limit values for certain polluting substances.

(37) With regard to the inclusion in the scope of national laws, regulations and administrative provisions brought into force in order to comply with this Directive of installations for the manufacturing of ceramic products by firings, on the basis of the characteristics of the national industrial sector, and in order to grant clear interpretation of the scope, Member States should decide whether to apply both the criteria, production capacity and kiln capacity, or just one of the two criteria.

(38) In order to simplify reporting and reduce unnecessary administrative burden, the Commission should identify methods to streamline the way in which data are made available pursuant to this Directive with the other requirements of Union law, and in particular Regulation (EC) No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register.

(39) In order to ensure uniform conditions for implementation, implementing powers should be conferred on the Commission to adopt guidance on the collection of data, on the drawing up of BAT reference documents and on their quality assurance, including the suitability of their content and format, to adopt decisions on BAT conclusions, to establish detailed rules on the determination of start-up and shut-down periods and for transitional national plans for large combustion plants, and to establish the type, format and frequency of information that Member States are to make available to the Commission. In accordance with Article 291 TFEU, rules and general principles concerning mechanisms for the control by Member States of the Commission's exercise of implementing powers are to be laid down in advance by a regulation adopted in accordance with the ordinary legislative procedure. Pending the adoption of that new regulation, Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission continues to apply, with the exception of the regulatory procedure with scrutiny, which is not applicable.

(40) The Commission should be empowered to adopt delegated acts in accordance with Article 290 TFEU in respect of the setting of the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out, and the adaptation of certain parts of Annexes V, VI and VII to scientific and technical progress. In the case of waste incineration

plants and waste co-incineration plants, this may include, *inter alia*, the establishment of criteria to allow derogations from continuous monitoring of total dust emissions. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level.

(41) In order to address significant environmental pollution, for example from heavy metals and dioxins and furans, the Commission should, based on an assessment of the implementation of the best available techniques by certain activities or of the impact of those activities on the environment as a whole, present proposals for Union-wide minimum requirements for emission limit values and for rules on monitoring and compliance.

(42) Member States should lay down rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and ensure that they are implemented. Those penalties should be effective, proportionate and dissuasive.

(43) In order to provide existing installations with sufficient time to adapt technically to the new requirements of this Directive, some of the new requirements should apply to those installations after a fixed period from the date of application of this Directive. Combustion plants need sufficient time to install the necessary abatement measures to meet the emission limit values set out in Annex V.

(44) Since the objectives of this Directive, namely to ensure a high level of environmental protection and the improvement of environmental quality, cannot be sufficiently achieved by Member States and can, therefore, by reason of the transboundary nature of pollution from industrial activities, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(45) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union. In particular, this Directive seeks to promote the application of Article 37 of that Charter.

(46) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive change as compared with the earlier Directives. The obligation to transpose the provisions which are unchanged arises under the earlier Directives.

(47) In accordance with paragraph 34 of the Interinstitutional agreement on better law-making, Member States are encouraged to draw up, for themselves and in the interests of the Union, their own tables, which will as far as possible, illustrate the correlation between this Directive and the transposition measures, and to make those tables public.

(48) This Directive should be without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law and application of the Directives set out in Annex IX, Part B.

CHAPTER III

SPECIAL PROVISIONS FOR COMBUSTION PLANTS

Article 28

Scope

This Chapter shall apply to combustion plants, the total rated thermal input of which is equal to or greater than 50 MW, irrespective of the type of fuel used.

This Chapter shall not apply to the following combustion plants:

- (a) plants in which the products of combustion are used for the direct heating, drying, or any other treatment of objects or materials;
- (b) post-combustion plants designed to purify the waste gases by combustion which are not operated as independent combustion plants;
- (c) facilities for the regeneration of catalytic cracking catalysts;
- (d) facilities for the conversion of hydrogen sulphide into sulphur;
- (e) reactors used in the chemical industry;
- (f) coke battery furnaces;
- (g) cowpers;
- (h) any technical apparatus used in the propulsion of a vehicle, ship or aircraft;
- (i) gas turbines and gas engines used on offshore platforms;
- (j) plants which use any solid or liquid waste as a fuel other than waste referred to in point (b) of point 31 of Article 3.

Article 29

Aggregation rules

1. Where the waste gases of two or more separate combustion plants are discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant and their capacities added for the purpose of calculating the total rated thermal input.
2. Where two or more separate combustion plants which have been granted a permit for the first time on or after 1 July 1987, or the operators of which have submitted a complete application for a permit on or after that date, are installed in such a way that, taking technical and economic factors into account, their waste gases could in the judgement of the competent authority, be discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant and their capacities added for the purpose of calculating the total rated thermal input.
3. For the purpose of calculating the total rated thermal input of a combination of combustion plants referred to in paragraphs 1 and 2, individual combustion plants with a rated thermal input below 15 MW shall not be considered.

Article 30

Emission limit values

1. Waste gases from combustion plants shall be discharged in a controlled way by means of a stack, containing one or more flues, the height of which is calculated in such a way as to safeguard human health and the environment.

2. All permits for installations containing combustion plants which have been granted a permit before **1 January 2018**², or the operators of which have submitted a complete application for a permit before that date, provided that such plants are put into operation no later than **1 January 2019**, shall include conditions ensuring that emissions into air from these plants do not exceed the emission limit values set out in Part 1 of Annex V.

All permits for installations containing combustion plants which had been granted an exemption as referred to in Article 4(4) of Directive 2001/80/EC and which are in operation after **1 January 2024**³, shall include conditions ensuring that emissions into the air from these plants do not exceed the emission limit values set out in Part 2 of Annex V.

3. All permits for installations containing combustion plants not covered by paragraph 2 shall include conditions ensuring that emissions into the air from these plants do not exceed the emission limit values set out in Part 2 of Annex V.

4. The emission limit values set out in Parts 1 and 2 of Annex V as well as the minimum rates of desulphurisation set out in Part 5 of that Annex shall apply to the emissions of each common stack in relation to the total rated thermal input of the entire combustion plant. Where Annex V provides that emission limit values may be applied for a part of a combustion plant with a limited number of operating hours, those limit values shall apply to the emissions of that part of the plant, but shall be set in relation to the total rated thermal input of the entire combustion plant.

5. The competent authority may grant a derogation for a maximum of 6 months from the obligation to comply with the emission limit values provided for in paragraphs 2 and 3 for sulphur dioxide in respect of a combustion plant which to this end normally uses low-sulphur fuel, in cases where the operator is unable to comply with those limit values because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

Member States⁴ shall immediately inform the Commission of any derogation granted under the first subparagraph.

6. The competent authority may grant a derogation from the obligation to comply with the emission limit values provided for in paragraphs 2 and 3 in cases where a combustion plant using only gaseous fuel has to resort exceptionally to the use of other fuels because of a sudden interruption in the supply of gas and for this reason would need to be equipped with a waste gas purification facility. The period for which such a derogation is granted shall not exceed 10 days except where there is an overriding need to maintain energy supplies.

The operator shall immediately inform the competent authority of each specific case referred to in the first subparagraph.

² The text displayed here corresponds to Point 5 of Annex II of the Treaty.

³ Article 4(4) of Directive 2001/80/EC as amended by Article 4 of Decision 2013/05/MC-EnC.

⁴ Decision 2013/06/MC-EnC incorporating this Directive is addressed to the Contracting Parties.

Member States shall inform the Commission immediately of any derogation granted under the first subparagraph.

7. Where a combustion plant is extended, the emission limit values set out in Part 2 of Annex V shall apply to the extended part of the plant affected by the change and shall be set in relation to the total rated thermal input of the entire combustion plant. In the case of a change to a combustion plant, which may have consequences for the environment and which affects a part of the plant with a rated thermal input of 50 MW or more, the emission limit values as set out in Part 2 of Annex V shall apply to the part of the plant which has changed in relation to the total rated thermal input of the entire combustion plant.

8. The emission limit values set out in Parts 1 and 2 of Annex V shall not apply to the following combustion plants:

(a) diesel engines;

(b) recovery boilers within installations for the production of pulp.

9. For the following combustion plants, on the basis of the best available techniques, the Commission shall review the need to establish Union-wide emission limit values and to amend the emission limit values set out in Annex V:

(a) the combustion plants referred to in paragraph 8;

(b) combustion plants within refineries firing the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, taking into account the specificity of the energy systems of refineries;

(c) combustion plants firing gases other than natural gas;

(d) combustion plants in chemical installations using liquid production residues as non-commercial fuel for own consumption.

The Commission shall, by 31 December 2013, report the results of this review to the European Parliament and to the Council accompanied, if appropriate, by a legislative proposal.

Article 31

Desulphurisation rate

1. For combustion plants firing indigenous solid fuel, which cannot comply with the emission limit values for sulphur dioxide referred to in Article 30(2) and (3) due to the characteristics of this fuel, Member States may apply instead the minimum rates of desulphurisation set out in Part 5 of Annex V, in accordance with the compliance rules set out in Part 6 of that Annex and with prior validation by the competent authority of the technical report referred to in Article 72(4)(a).

2. For combustion plants firing indigenous solid fuel, which co-incinerate waste, and which cannot comply with the C_{proc} values for sulphur dioxide set out in points 3.1 or 3.2 of Part 4 of Annex VI due to the characteristics of the indigenous solid fuel, Member States may apply instead the minimum rates of desulphurisation set out in Part 5 of Annex V, in accordance with the compliance rules set out in Part 6 of that Annex. If Member States choose to apply this paragraph, C_{waste} as referred to in point 1 of Part 4 of Annex VI shall be equal to 0 mg/Nm³.

3. The Commission shall, by 31 December 2019, review the possibility of applying minimum rates of

desulphurisation set out in Part 5 of Annex V, taking into account, in particular, the best available techniques and benefits obtained from reduced sulphur dioxide emissions.

Article 32

Transitional National Plan

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Article 33

Limited life time derogation

<...>⁶

Article 34

Small isolated systems

1. Until 31 December 2019, combustion plants being, on 6 January 2011, part of a small isolated system may be exempted from compliance with the emission limit values referred to in Article 30(2) and the rates of desulphurisation referred to in Article 31, where applicable. Until 31 December 2019, the emission limit values set out in the permits of these combustion plants, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, shall at least be maintained.
2. Combustion plants with a total rated thermal input of more than 500 MW firing solid fuels, which were granted the first permit after 1 July 1987, shall comply with the emission limit values for nitrogen oxides set out in Part 1 of Annex V.
3. Where there are, on the territory of a Member State combustion plants covered by this Chapter that are part of a small isolated system, that Member State shall report to the Commission before 7 January 2013 a list of those combustion plants, the total annual energy consumption of the small isolated system and the amount of energy obtained through interconnection with other systems.

Article 35

District heating plants

1. Until 31 December 2022, a combustion plant may be exempted from compliance with the emission limit values referred to in Article 30(2) and the rates of desulphurisation referred to in Article 31 provided that the following conditions are fulfilled:
 - (a) the total rated thermal input of the combustion plant does not exceed 200 MW;
 - (b) the plant was granted a first permit before 27 November 2002 or the operator of that plant had

⁵ Article 4(6) of Directive 2001/80/EC as amended by Decision 2013/05/MC-EnC applies.

⁶ Article 4(4) of Directive 2001/80/EC as amended by Decision 2013/05/MC-EnC applies.

submitted a complete application for a permit before that date, provided that it was put into operation no later than 27 November 2003;

(c) at least 50% of the useful heat production of the plant, 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; and

(d) the emission limit values for sulphur dioxide, nitrogen oxides and dust set out in its permit applicable on 31 December 2015, pursuant in particular to the requirements of Directives 2001/80/EC and 2008/1/EC, are at least maintained until 31 December 2022.

2. At the latest on 1 January 2016, each Member State shall communicate to the Commission a list of any combustion plants to which paragraph 1 applies, including their total rated thermal input, the fuel types used and the applicable emission limit values for sulphur dioxide, nitrogen oxides and dust. In addition, Member States shall, for any combustion plants to which paragraph 1 applies and during the period mentioned in that paragraph, inform the Commission annually of the proportion of useful heat production of each plant which was delivered in the form of steam or hot water to a public network for district heating, expressed as a rolling average over the preceding 5 years.

Article 36

Geological storage of carbon dioxide

1. Member States shall ensure that operators of all combustion plants with a rated electrical output of 300 megawatts or more for which the original construction licence or, in the absence of such a procedure, the original operating licence is granted after the entry into force of Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide, have assessed whether the following conditions are met:

(a) suitable storage sites are available,

(b) transport facilities are technically and economically feasible,

(c) it is technically and economically feasible to retrofit for carbon dioxide capture.

2. If the conditions laid down in paragraph 1 are met, the competent authority shall ensure that suitable space on the installation site for the equipment necessary to capture and compress carbon dioxide is set aside. The competent authority shall determine whether the conditions are met on the basis of the assessment referred to in paragraph 1 and other available information, particularly concerning the protection of the environment and human health.

Article 37

Malfunction or breakdown of the abatement equipment

1. Member States shall ensure that provision is made in the permits for procedures relating to malfunction or breakdown of the abatement equipment.

2. In the case of a breakdown, the competent authority shall require the operator to reduce or close down operations if a return to normal operation is not achieved within 24 hours, or to operate the plant using low polluting fuels.

The operator shall notify the competent authority within 48 hours after the malfunction or breakdown of the abatement equipment.

The cumulative duration of unabated operation shall not exceed 120 hours in any 12-month period.

The competent authority may grant a derogation from the time limits set out in the first and third subparagraphs in one of the following cases:

- (a) there is an overriding need to maintain energy supplies;
- (b) the combustion plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.

Article 38

Monitoring of emissions into air

1. Member States shall ensure that the monitoring of air polluting substances is carried out in accordance with Part 3 of Annex V.
2. The installation and functioning of the automated monitoring equipment shall be subject to control and to annual surveillance tests as set out in Part 3 of Annex V.
3. The competent authority shall determine the location of the sampling or measurement points to be used for the monitoring of emissions.
4. All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

Article 39

Compliance with emission limit values

The emission limit values for air shall be regarded as being complied with if the conditions set out in Part 4 of Annex V are fulfilled.

Article 40

Multi-fuel firing combustion plants

1. In the case of a multi-fuel firing combustion plant involving the simultaneous use of two or more fuels, the competent authority shall set the emission limit values in accordance with the following steps:
 - (a) taking the emission limit value relevant for each individual fuel and pollutant corresponding to the total rated thermal input of the entire combustion plant as set out in Parts 1 and 2 of Annex V;
 - (b) determining fuel-weighted emission limit values, which are obtained by multiplying the individual emission limit value referred to in point (a) 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,

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

2. In the case of multi-fuel firing combustion plants covered by Article 30(2), which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, the following emission limit values may be applied instead of the emission limit values set according to paragraph 1:

(a) where, during the operation of the combustion plant, the proportion contributed by the determinative fuel to the sum of the thermal inputs delivered by all fuels is 50% or more, the emission limit value set in Part 1 of Annex V for the determinative fuel;

(b) where the proportion contributed by the determinative fuel to the sum of the thermal inputs delivered by all fuels is less than 50%, the emission limit value determined in accordance with the following steps:

(i) taking the emission limit values set out in Part 1 of Annex V for each of the fuels used, corresponding to the total rated thermal input of the combustion plant;

(ii) calculating the emission limit value of the determinative fuel by multiplying the emission limit value, determined for that fuel according to point (i), by a factor of two, and subtracting from this product the emission limit value of the fuel used with the lowest emission limit value as set out in Part 1 of Annex V, corresponding to the total rated thermal input of the combustion plant;

(iii) determining the fuel-weighted emission limit value for each fuel used by multiplying the emission limit value determined under points (i) and (ii) by the thermal input of the fuel concerned and by dividing the product of this multiplication by the sum of the thermal inputs delivered by all fuels;

(iv) aggregating the fuel-weighted emission limit values determined under point (iii).

3. In the case of multi-fuel firing combustion plants covered by Article 30(2), which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels, the average emission limit values for sulphur dioxide set out in Part 7 of Annex V may be applied instead of the emission limit values set according to paragraphs 1 or 2 of this Article.

Article 41

Implementing rules

Implementing rules shall be established concerning:

(a) the determination of the start-up and shut-down periods referred to in point 27 of Article 3 and in point 1 of Part 4 of Annex V; and

(b) the transitional national plans referred to in Article 32 and, in particular, the setting of emission ceilings and related monitoring and reporting.

Those implementing rules shall be adopted in accordance with the regulatory procedure referred to in Article 75(2). The Commission shall make appropriate proposals not later than 7 July 2011.

Article 72**Reporting by Member States⁷**

<...>

3. For all combustion plants covered by Chapter III of this Directive, Member States shall, from **1 January 2018**,⁸ establish an annual inventory of the sulphur dioxide, nitrogen oxides and dust emissions and energy input.

Taking into account the aggregation rules set out in Article 29, the competent authority shall obtain the following data for each combustion plant:

- (a) the total rated thermal input (MW) of the combustion plant;
- (b) the type of combustion plant: boiler, gas turbine, gas engine, diesel engine, other (specifying the type);
- (c) the date of the start of operation of the combustion plant;
- (d) the total annual emissions (tonnes per year) of sulphur dioxide, nitrogen oxides and dust (as total suspended particles);
- (e) the number of operating hours of the combustion plant;
- (f) the total annual amount of energy input, related to the net calorific value (TJ per year), broken down in terms of the following categories of fuel: coal, lignite, biomass, peat, other solid fuels (specifying the type), liquid fuels, natural gas, other gases (specifying the type).

The annual plant-by-plant data contained in these inventories shall be made available to the Commission upon request.

A summary of the inventories shall be made available to the Commission every 3 years within 12 months from the end of the three-year period considered. This summary shall show separately the data for combustion plants within refineries.

The Commission shall make available to the Member States and to the public a summary of the comparison and evaluation of those inventories in accordance with Directive 2003/4/EC within 24 months from the end of the three-year period considered.

4. Member States shall, from **1 January 2018**,⁹ report the following data annually to the Commission:

- (a) for combustion plants to which Article 31 applies, the sulphur content of the indigenous solid fuel used and the rate of desulphurisation achieved, averaged over each month. For the first year where Article 31 is applied, the technical justification of the non-feasibility of complying with the emission limit values referred to in Article 30(2) and (3) shall also be reported; and
- (b) for combustion plants which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the number of operating hours per year.

<...>

⁷ Decision 2013/06/MC-EnC incorporating this Directive is addressed to the Contracting Parties.

⁸ The text displayed here corresponds to Article 2(1) of Decision 2013/06/MC-EnC.

⁹ The text displayed here corresponds to Article 2(1) of Decision 2013/06/MC-EnC.

Article 80

Transposition¹⁰

1. Each Contracting Party shall bring into force the laws, regulations and administrative provisions necessary to comply with Chapter III, Annex V and Article 72(3)-(4) of Directive 2010/75/EU by 1 January 2018. They shall forthwith inform the Energy Community Secretariat thereof.
2. Contracting Parties shall communicate to the Energy Community Secretariat the text of the main provisions of national law which they adopt in the field covered by the present Decision.

Article 83

Entry into force¹¹

This Decision shall enter into force upon its adoption by the Ministerial Council.

Article 84

Addressees¹²

This Decision is addressed to the Contracting Parties.

¹⁰ The text displayed here corresponds to Article 2 of Decision 2013/06/MC-EnC.

¹¹ The text displayed here corresponds to Article 3 of Decision 2013/06/MC-EnC.

¹² The text displayed here corresponds to Article 4 of Decision 2013/06/MC-EnC.

ANNEX V

TECHNICAL PROVISIONS RELATING TO COMBUSTION PLANTS

PART 1

Emission limit values for combustion plants referred to in Article 30(2)

- All emission limit values shall be calculated 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 and at a standardised O₂ content of 6% for solid fuels, 3% for combustion plants, other than gas turbines and gas engines using liquid and gaseous fuels and 15% for gas turbines and gas engines.
- Emission limit values (mg/Nm³) for SO₂ for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass	Peat	Liquid fuels
50-100	400	200	300	350
100-300	250	200	300	250
> 300	200	200	200	200

Combustion plants, using solid fuels which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO₂ of 800 mg/Nm³.

Combustion plants using liquid fuels, which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for SO₂ of 850 mg/Nm³ in case of plants with a total rated thermal input not exceeding 300 MW and of 400 mg/Nm³ in case of plants with a total rated thermal input greater than 300 MW.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding two paragraphs in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

- Emission limit values (mg/Nm³) for SO₂ for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast furnace	200

Combustion plants, firing low calorific gases from gasification of refinery residues, which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, shall be subject to an emission limit value for SO₂ of 800 mg/Nm³.

4. Emission limit values (mg/Nm³) for NO_x for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels
50-100	300 450 in case of pulverised lignite combustion	300	450
100-300	200	250	200 (1)
> 300	200	200	150 (1)

(1) The emission limit value is 450 mg/Nm³ for the firing of distillation and conversion residues from the refining of crude-oil for own consumption in combustion plants with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

Combustion plants in chemical installations using liquid production residues as non-commercial fuel for own consumption with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, shall be subject to an emission limit value for NO_x of 450 mg/Nm³.

Combustion plants using solid or liquid fuels with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 450 mg/Nm³.

Combustion plants using solid fuels with a total rated thermal input greater than 500 MW, which were granted a permit before 1 July 1987 and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 450 mg/Nm³.

Combustion plants using liquid fuels, with a total rated thermal input greater than 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, shall be subject to an emission limit value for NO_x of 400 mg/Nm³.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding three paragraphs in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

5. Gas turbines (including combined cycle gas turbines (CCGT)) using light and middle distillates as liquid fuels shall be subject to an emission limit value for NO_x of 90 mg/Nm^3 and for CO of 100 mg/Nm^3 . Gas turbines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

6. Emission limit values (mg/Nm^3) for NO_x and CO for gas fired combustion plants

	NO_x	CO
Combustion plants firing natural gas with the exception of gas turbines and gas engines	100	100
Combustion plants firing blast furnace gas, coke oven gas or low calorific gases from gasification of refinery residues, with the exception of gas turbines and gas engines	200 ⁽⁴⁾	—
Combustion plants firing other gases, with the exception of gas turbines and gas engines	200 ⁽⁴⁾	—
Gas turbines (including CCGT), using natural gas ⁽¹⁾ as fuel	50 ⁽²⁾ ⁽³⁾	100
Gas turbines (including CCGT), using other gases as fuel	120	—
Gas engines	100	100

⁽¹⁾ Natural gas is naturally occurring methane with not more than 20% (by volume) of inerts and other constituents.

⁽²⁾ 75 mg/Nm^3 in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:

- (i) gas turbines, used in combined heat and power systems having an overall efficiency greater than 75%;
- (ii) gas turbines used in combined cycle plants having an annual average overall electrical efficiency greater than 55%;
- (iii) gas turbines for mechanical drives.

⁽³⁾ For single cycle gas turbines not falling into any of the categories mentioned under note (2), but having an efficiency greater than 35% – determined at ISO base load conditions – the emission limit value for NO_x shall be $50x/35$ where x is the gas turbine efficiency at ISO base load conditions expressed as a percentage.

⁽⁴⁾ 300 mg/Nm^3 for such combustion plants with a total rated thermal input not exceeding 500 MW which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

For gas turbines (including CCGT), the NO_x and CO emission limit values set out in the table contained in this point apply only above 70% load.

For gas turbines (including CCGT) which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003, and which do not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, the emission limit value for NO_x is 150 mg/Nm^3 when firing natural gas and 200 mg/Nm^3 when firing other gases or liquid fuels.

A part of a combustion plant discharging its waste gases through one or more separate flues within a common stack, and which does not operate more than 1 500 operating hours per year as a rolling average over a period of 5 years, may be subject to the emission limit values set out in the preceding paragraph in relation to the total rated thermal input of the entire combustion plant. In such cases the emissions through each of those flues shall be monitored separately.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall

record the used operating hours.

7. Emission limit values (mg/Nm³) for dust for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels ⁽¹⁾
50-100	30	30	30
100-300	25	20	25
> 300	20	20	20

⁽¹⁾ The emission limit value is 50 mg/Nm³ for the firing of distillation and conversion residues from the refining of crude oil for own consumption in combustion plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003.

8. Emission limit values (mg/Nm³) for dust for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	5
Blast furnace gas	10
Gases produced by the steel industry which can be used elsewhere	30

PART 2

Emission limit values for combustion plants referred to in Article 30(3)

1. All emission limit values shall be calculated 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 and at a standardised O₂ content of 6% for solid fuels, 3% for combustion plants other than gas turbines and gas engines using liquid and gaseous fuels and 15% for gas turbines and gas engines.

In case of combined cycle gas turbines with supplementary firing, the standardised O₂ content may be defined by the competent authority, taking into account the specific characteristics of the installation concerned.

2. Emission limit values (mg/Nm³) for SO₂ for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass	Peat	Liquid fuels
50-100	400	200	300	350
100-300	200	200	300 250 in case of fluidised bed combustion	200
> 300	150 200 in case of circulating or pressurised fluidised bed combustion	150	150 200 in case of fluidised bed combustion	150

3. Emission limit values (mg/Nm³) for SO₂ for combustion plants using gaseous fuels with the excep-

tion of gas turbines and gas engines

In general	35
Liquefied gas	5
Low calorific gases from coke oven	400
Low calorific gases from blast furnace	200

4. Emission limit values (mg/Nm³) for NO_x for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	Coal and lignite and other solid fuels	Biomass and peat	Liquid fuels
50-100	300 400 in case of pulverised lignite combustion	250	300
100-300	200	200	150
> 300	150 200 in case of pulverised lignite combustion	150	100

5. Gas turbines (including CCGT) using light and middle distillates as liquid fuels shall be subject to an emission limit value for NO_x of 50 mg/Nm³ and for CO of 100 mg/Nm³

Gas turbines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

6. Emission limit values (mg/Nm³) for NO_x and CO for gas fired combustion plants

	NO _x	CO
Combustion plants other than gas turbines and gas engines	100	100
Gas turbines (including CCGT)	50 (1)	100
Gas engines	75	100

(1) For single cycle gas turbines having an efficiency greater than 35% – determined at ISO base load conditions – the emission limit value for NO_x shall be 50x/35 where is the gas turbine efficiency at ISO base load conditions expressed as a percentage.

For gas turbines (including CCGT), the NO_x and CO emission limit values set out in this point apply only above 70% load.

Gas turbines and gas engines for emergency use that operate less than 500 operating hours per year are not covered by the emission limit values set out in this point. The operator of such plants shall record the used operating hours.

7. Emission limit values (mg/Nm³) for dust for combustion plants using solid or liquid fuels with the exception of gas turbines and gas engines

Total rated thermal input (MW)	
50-300	20
> 300	10 20 for biomass and peat

8. Emission limit values (mg/Nm³) for dust for combustion plants using gaseous fuels with the exception of gas turbines and gas engines

In general	5
Blast furnace gas	10
Gases produced by the steel industry which can be used elsewhere	30

PART 3

Emission monitoring

1. The concentrations of SO₂, NO_x and dust in waste gases from each combustion plant with a total rated thermal input of 100 MW or more shall be measured continuously.

The concentration of CO in waste gases from each combustion plant firing gaseous fuels with a total rated thermal input of 100 MW or more shall be measured continuously.

2. The competent authority may decide not to require the continuous measurements referred to in point 1 in the following cases:

(a) for combustion plants with a life span of less than 10 000 operational hours;

(b) for SO₂ and dust from combustion plants firing natural gas;

(c) for SO₂ from combustion plants firing oil with known sulphur content in cases where there is no waste gas desulphurisation equipment;

(d) for SO₂ from combustion plants firing biomass if the operator can prove that the SO₂ emissions can under no circumstances be higher than the prescribed emission limit values.

3. Where continuous measurements are not required, measurements of SO₂, NO_x, dust and, for gas fired plants, also of CO shall be required at least once every 6 months.

4. For combustion plants firing coal or lignite, the emissions of total mercury shall be measured at least once per year.

5. As an alternative to the measurements of SO₂ and NO_x referred to in point 3, other procedures, verified and approved by the competent authority, may be used to determine the SO₂ and NO_x emissions. Such procedures shall use relevant CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality.

6. The competent authority shall be informed of significant changes in the type of fuel used or in the mode of operation of the plant. The competent authority shall decide whether the monitoring requirements laid down in points 1 to 4 are still adequate or require adaptation.

7. The continuous measurements carried out in accordance with point 1 shall include the measurement of the oxygen content, temperature, pressure and water vapour content of the waste gases. The continuous measurement of the water vapour content of the waste gases shall not be necessary, provided that the sampled waste gas is dried before the emissions are analysed.

8. Sampling and analysis of relevant polluting substances and measurements of process parameters as well as the quality assurance of automated measuring systems and the reference measurement methods to calibrate those systems shall be carried out in accordance with CEN standards. If CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality shall apply.

The automated measuring systems shall be subject to control by means of parallel measurements with the reference methods at least once per year.

The operator shall inform the competent authority about the results of the checking of the automated measuring systems.

9. At the emission limit value level, the values of the 95% confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide	10%
Sulphur dioxide	20%
Nitrogen oxides	20%
Dust	30%

10. The validated hourly and daily average values shall be determined from the measured valid hourly average values after having subtracted the value of the confidence interval specified in point 9.

Any day in which more than three hourly average values are invalid due to malfunction or maintenance of the automated measuring system shall be invalidated. If more than 10 days over a year are invalidated for such situations the competent authority shall require the operator to take adequate measures to improve the reliability of the automated measuring system.

11. In the case of plants which must comply with the rates of desulphurisation referred to in Article 31, the sulphur content of the fuel which is fired in the combustion plant shall also be regularly monitored. The competent authorities shall be informed of substantial changes in the type of fuel used.

PART 4

Assessment of compliance with emission limit values

1. In the case of continuous measurements, the emission limit values set out in Parts 1 and 2 shall be regarded as having been 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 relevant emission limit values set out in Parts 1 and 2;

(b) no validated daily average value exceeds 110% of the relevant emission limit values set out in Parts 1 and 2;

(c) in cases of combustion plants composed only of boilers using coal with a total rated thermal input below 50 MW, no validated daily average value exceeds 150% of the relevant emission limit values set out in Parts 1 and 2,

(d) 95% of all the validated hourly average values over the year do not exceed 200% of the relevant emission limit values set out in Parts 1 and 2.

The validated average values are determined as set out in point 10 of Part 3.

For the purpose of the calculation of the average emission values, the values measured during the periods referred to in Article 30(5) and (6) and Article 37 as well as during the start-up and shut-down periods shall be disregarded.

2. Where continuous measurements are not required, the emission limit values set out in Parts 1 and 2 shall be regarded as having been complied with if the results of each of the series of measure-

ments or of the other procedures defined and determined according to the rules laid down by the competent authorities do not exceed the emission limit values.

PART 5

Minimum rate of desulphurisation

1. Minimum rate of desulphurisation for combustion plants referred to in Article 30(2)

Total rated thermal input (MW)	Minimum rate of desulphurisation	
	Plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003	Other plants
50-100	80%	92%
100-300	90%	92%
> 300	96% ⁽¹⁾	96%

⁽¹⁾ For combustion plants firing oil shale, the minimum rate of desulphurisation is 95%.

2. Minimum rate of desulphurisation for combustion plants referred to in Article 30(3)

Total rated thermal input (MW)	Minimum rate of desulphurisation
50-100	93%
100-300	93%
> 300	97%

PART 6

Compliance with rate of desulphurisation

The minimum rates of desulphurisation set out in Part 5 of this Annex shall apply as a monthly average limit value.

PART 7

Average emission limit values for multi-fuel firing combustion plants within a refinery

Average emission limit values (mg/Nm³) for SO₂ for multi-fuel firing combustion plants within a refinery, with the exception of gas turbines and gas engines, which use the distillation and conversion residues from the refining of crude-oil for own consumption, alone or with other fuels:

(a) for combustion plants which were granted a permit before 27 November 2002 or the operators of which had submitted a complete application for a permit before that date, provided that the plant was put into operation no later than 27 November 2003: 1 000 mg/Nm³;

(b) for other combustion plants: 600 mg/Nm³.

These emission limit values shall be calculated 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 and at a standardised O₂ content of 6% for solid fuels and 3% for liquid and gaseous fuels.