

The Regulation No. 473/2000

of the Government of the Slovak Republic

of 20 December 2000

amending the Regulation No. 92/1996 Coll. of the Government of the Slovak Republic implementing the Act No. 309/1991 Coll. on air protection against pollutants (Act on Air) as amended

The Government of the Slovak Republic, according pursuant to Article 4, paragraph 2 and Article 5, paragraph 4 of the Act No. 309/1991 on air protection against pollutants (Act on Air) in the wording of the Act. No. 218/1992 Coll., the Act No. 148/1994 Coll. of the National Council of the Slovak Republic, the Act No. 256/1995 Coll. of the National Council of the Slovak Republic and the Act No. 459/2000 Coll. shall order has enacted the following:

Section I

The Regulation No. 92/1996 Coll. amending the Act No. 309/1991 Coll. on air protection against pollutants (Act on Air) as the wording of later regulations shall be amended as follows:

1. Paragraph 7 shall be inserted into Article 4 as follows, reading:

”(7) Emission limit determined for new source of pollution, expressed as mass concentration, mass flow or emission level is valid also for each point of release of waste gases from parts, technological units or equipment of existing source of pollution (hereinafter only referred to as ”part of the source”), if the air protection authority in the case of modernization^{1a} or reconstruction of the source will grant a permit^{1b} for change of existing source of pollution after 1 January 2001 and conducted waste gases from these parts are not connected to common cleaning device equipment with other parts of the source. In the case when 70% and more of waste gases connected to cleaning device equipment come from parts of the source authorized by air protection authority after 1 January 2001, the emission limits for new sources of pollution are valid shall apply for waste gases from cleaning device equipment. If specially defined emission limits valid for new sources of pollution are appointed set for the source of pollution in Annex 4, for which the administration procedure on granting permit for construction will start after 31 December 2001, then these limits are valid shall apply under defined conditions also for parts of the source permitted after 31 December 2001.”.

Footnotes 1a and 1b shall be read:

”^{1a}) Article 6, paragraph 5 of the Act 309/1991 Coll.

^{1b}) Article 11, paragraph 1, point letters a), g) and k) and Article 11a, paragraph 8 of the Act No. 309/1991 Coll.”.

2. Articles 5 to 8 including the heading shall be deleted.

3. The point Letter c) of Article 9, paragraph 4 shall be read:

”c) breakdown time of the device equipment for emission reduction of sulphur dioxide listed in Annex 4, part I, points 1.5.3.3 and 1.6.3.3;”.

4. Article 9a shall be inserted after Article 9 as follows, reading:

”Article 9a

(1) Emission limits listed in Annex 4, part V, points 4.2 and 5.3 are considered as observed, if

a) none of daily average values exceeds any emission limit value according to Annex 4, part V, points 4.2.1 or 5.3 and 97% of daily averages over the year do not exceed emission limit of CO as daily average value according to Annex 4, part V, point 4.2.5 of the first indent;

b) none of half-hourly average values exceeds any emission limit value according to Annex 4, part V, point 4.2.2 of the column A or 97% of half-hourly averages over the year do not exceed emission limit according to Annex 4, part V, point 4.2.2 of column B;

c) none average of the concentration values over sampling period (sampling time) set out for heavy metals, dioxins and furans (sampling time) exceeds emission limit value set out in Annex 4, part V, points 4.2.3, 4.2.4, and 5.3;

d) short-time concentration values of CO set out in Annex 4, part V, point 4.2.5 of second indent and point 5.3 shall be met.

(2) Half-hourly averages and 10-minute averages shall be determined within the effective operation time except the start-up and shut-off, when no waste is being incinerated, after having subtracted taking into account the values of the confidence reliability interval according pursuant to Annex 4, part V, point 9. Daily averages shall be determined from those validated average values.

(3) To obtain a valid daily average no more than five half-hourly averages in any day shall be discarded due to malfunction or maintenance of continuous measurement system. No more than ten daily averages per year shall be discarded due to malfunction or maintenance of the continuous measurement system.

(4) Conditions for compliance with emission limits according pursuant to paragraphs 1 to 3 are valid shall apply for waste incineration plants and waste co-incineration plants^{5a}, for which administrative procedure granting the permit for construction or its change, change of technological device equipments or change of their use^{5b} will start after 31 December 2001; for other waste incineration plants and waste co-incineration plants are valid shall apply from 1st January 2007.”.

Footnotes 5a and 5b shall be read as follows:

^{5a}) Article 4, points g) to i) of the Act No. 309/1991 Coll. in the wording of the Act No. 459/2000 Coll.

^{5b}) Article 11a of the Act No. 309/1991 Coll.”.

5. Paragraph 4 shall be deleted from Article 13.

Previous paragraph 5 shall be marked as paragraph 4.

6. Article 13a shall be inserted after Article 13 as follows, reading:

”Article 13a

(1) The changes in classification of the sources of pollution defined by Annex 2 are valid shall apply from 1 January 2001. The competent air protection authority⁶ shall decide for the change of classification of pollution source after stated term if, in doubts, prove the reasons have been proven. The validity of the change of classification of pollution source shall be appointed always to 1st January of the year following the year of decision issuing.

(2) If, due to the changes in classification of pollution sources according pursuant to paragraph 1, changes of input limits of the plant sources of fuel-power industry defined in Annex 4, part I, or by extension of the list of pollutants in Annex 1 are applied limits in the point of release, which were have not been applied until before application of mentioned changes, or there when are applied narrower emission limits are applied, these limits shall be valid from 1 January 2005, for plants intended for combustion of fuels from 1 January 2010, if unless Annex 4 does not provides for otherwise.

(3) If, due to the changes in classification of pollution sources according pursuant to paragraph 1, the medium source of pollution or small source of pollution is classified among large sources of pollution, their operators shall prepare and present the files of technical and operational parameters and technical and organizational measures⁷ to the competent air protection authority⁸ till by 31 December 2001; in the cases, when the competent air protection authority decides on this change of classification, the operators shall submit the files until the end of first year of classification validity.

(4) If due to the changes in classification of pollution sources according pursuant to paragraph 1 or the change of input limits of the plant sources of fuel-power industry defined in Annex 4, part I the source of pollution is classified among sources of pollution or device equipments, for which emission limit is not defined and emitted pollutants from them are classified to the group B⁹, the classification to the group B shall be cancelled on 1st January 2001; if, in doubts, this change of classification is decided after stated term in the doubts, the classification to the group B shall be cancelled on the day when change of classification enters into force.

(5) General operational conditions of the sources of pollution for new sources of pollution defined in Annex 4, part I, points 3.1 and 4.5 and in part V, point 6.2 are valid shall apply for new sources permitted till by 31st December 2000 from 1st January 2005.

(6) Provisions of this Regulation on new sources of pollution are valid shall apply for existing sources of pollution except Annex 7 from 1 January 2005, if Annex 4 does not provide for otherwise.”.

Footnotes 6 to 9 shall be read:

⁶) Article 5, paragraph 2, point g) of the Act No. 134/1992 Coll. of the Slovak National Council on state administration of air protection in the wording of the Act No. 148/1994 Coll. of the National Council of the Slovak Republic.

⁷) Article 7, paragraph 2 of the Act No. 309/1991 Coll.

Article 4, paragraph 2 of the Order Decree No. 200/1999 Coll. of the Ministry of the Environment of the Slovak Republic on requirement for keeping sources of pollution operating records and on the extent of other data, which operators of sources of pollution are obliged to submit to air protection authority.

⁸) Article 5 of the Act No. 134/1992 Coll. as amended.

9) Article 20, paragraph 5 of the Act No. 309/1991 Coll. in the wording of the Act No. 393/1998 Coll.”.

7. In Annex 1, part A, point I the words ”and selected pollutants” shall be added after the words ”Basic pollutants” and at the end of the text shall be added the words ”dibenzodioxins” and ”dibenzofurans listed in Annex 4, part V, point 8” shall be added.

8. In Annex 1, part A, point II, group 4, subgroup 3 the word ”cyclic alcohols” shall be inserted after the words ”alkylalcohols”, the words ”cyclic olefins” shall be inserted after the word ”olefins except 1,3-butadien (carcinogen)” and at the end the word ”cyclic paraffins” shall be added.

9. Annex 2 shall be read:

”Annex 2

to the Regulation No. 92/1996 Coll. of the Government of the Slovak Republic

CLASSIFICATION OF LARGE AND MEDIUM SOURCES OF POLLUTION

1. FUEL-POWER INDUSTRY

1.1 Large sources of pollution

1.1.1 Technological units containing stationary deviceequipments for fuel combustion with total nominal thermal input 50 MW and more (power plants, heating plants, heating stations).

1.1.2 Separation and treatment of coal, briquetteries.

1.1.3 Production of coke.

1.1.4 Production of energy gases (generator gas, coal-gas) and synthesis gases.

1.1.5 Gas-turbines with total nominal thermal input 50 MW and more.

1.2 Medium sources of pollution

1.2.1 Technological units containing stationary deviceequipments for fuel combustion with total nominal thermal input 0.3 MW and more up to 50 MW.

1.2.2 Stationary piston internal combustion engines with thermal input 0.3 MW and more (except backup and emergency aggregates).

1.2.3 Gas-turbines with total thermal input to 50 MW.

2. INDUSTRIAL PRODUCTION AND TREATMENT OF METALS

2.1 Large sources of pollution

2.1.1 Treatment of iron and manganese ores and handling with these materials in powder form.

2.1.2 Production of raw iron, blast-furnaces.

2.1.3 Production of steel (e.g. converters, Siemens-Martin furnaces, dual-hearth tandem furnaces, electric furnaces, März-Böhler furnaces).

2.1.4 Production of cast iron and cast-iron products.

2.1.5 Treatment of ores of non-ferrous metals.

2.1.6 Production of light metals and their alloys (e.g. magnesium, aluminum, beryllium).

2.1.7 Production of other non-ferrous metals and their alloys.

2.1.8 Production of ferroalloys.

2.2 Medium sources of pollution

2.2.1 Metallurgical secondary production (e.g. mills, smithies, production of wires, quenching plant and other operations of thermal treatment).

2.2.2 Other special metallurgical productions.

2.2.3 Processing including refusion of metals with low fusion point and their alloys (e.g. zinc, cadmium, tin, antimony, lead, mercury, bismuth).

2.2.4 Processing including refusion of metals with medium fusion point and their alloys (e.g. manganese, copper, aluminum, cobalt, nickel).

2.2.5 Processing including refusion of metals with high fusion point and their alloys (e.g. titanium, chromium, columbiobium, molybdenum, tungsten).

2.2.6 Processing including refusion of precious metals and their alloys (e.g. gold, silver, platinum, palladium, iridium).

2.2.7 Processing including refusion of other non-ferrous metals and their alloys (e.g. silicon, selenium, germanium, sodium, calcium, potassium, rubidium, cesium, barium).

2.2.8 Surface treatment of metals (e.g. bating, electroplating, phosphatizing, enameling, blasting, thermal cleaning and corresponding procedures).

3. PRODUCTION OF NON-METALLIC MINERAL PRODUCTS

3.1 Large sources of pollution

3.1.1 Processing of asbestos and production of products containing asbestos.

3.1.2 Production of cement.

3.1.3 Production of lime.

3.1.4 Coating installations of bituminous compounds and bitumen blending plants.

3.1.5 Production of glass and glass products and glass fibres.

3.1.6 Production of magnesite and production of alkaline heatproof materials.

3.1.7 Production of mineral fibres with organic connectors.

3.2 Medium sources of pollution

- 3.2.1 Production and processing of organosilicon materials.
- 3.2.2 Quarries and processing of stone.
- 3.2.3 Extraction, modification and processing of silicate raw materials.
- 3.2.4 Production of light-weight non-metallic mineral products.
- 3.2.5 Production of raw walling materials and prefabricates.
- 3.2.6 Production of bricks.
- 3.2.7 Production of heatproof materials (fire-clay plants).
- 3.2.8 Treatment of materials for production of ceramics and for kaolin yards.
- 3.2.9 Production of ceramics, porcelain and molten basalt.
- 3.2.10 Extraction and processing of diatomaceous earth.
- 3.2.11 Glass grinding and production of jewelry.
- 3.2.12 Production of glazes, frits, and silicate abrasive materials.
- 3.2.13 Industrial production of concrete, mortar or other construction materials with projected performance higher than $10 \text{ m}^3 \cdot \text{h}^{-1}$.

4. CHEMICAL INDUSTRY

4.1 Large sources of pollution

- 4.1.1 Extraction of petroleum and natural gas and corresponding transport and storage.
- 4.1.2 Petroleum refinery.
- 4.1.3 Petrochemical processing of petroleum.
- 4.1.4 Distribution stocks and transferring device equipment for fuel, grease, petrochemical products and other organic liquids with installed total volume of storage $1\,000 \text{ m}^3$ and more or yearly turnover $10\,000 \text{ m}^3$ and more.
- 4.1.5 Production of synthetic alcohols, ketones, aldehydes, ethers, organic acids and their salts.
- 4.1.6 Production of organic coloring semi-products and organic solvent coatings.
- 4.1.7 Production of industrial explosives.
- 4.1.8 Production of pharmaceuticals and pharmaceutical materials.
- 4.1.9 Production of organic halogenated compounds.
- 4.1.10 Productions of polymers except synthetic rubber.
- 4.1.11 Production of cellulose and its derivatives including waste processing of products from this production.

- 4.1.12 Production and processing of viscose.
- 4.1.13 Production of preparations for protection of plants.
- 4.1.14 Production of rubber additional preparations.
- 4.1.15 Production and processing of chlorine, fluorine and bromine.
- 4.1.16 Production of hydrochloric acid.
- 4.1.17 Production of sulfur (Claus' procedure)
- 4.1.18 Production and processing of vitriol acid.
- 4.1.19 Production of ammonia and urea.
- 4.1.20 Production of nitrogen acid and its salts.
- 4.1.21 Production of phosphoric acid and its salts.
- 4.1.22 Production of inorganic pigments, refining and whitening preparations.
- 4.1.23 Production of industrial fertilizers.
- 4.1.24 Production of hydrocyanic acid, cyanides, thiocyanohydrogens and thiocyanates.
- 4.1.25 Production of soda and ammonium chloride.
- 4.1.26 Production of calcium carbide and other electrochemical productions.
- 4.1.27 Production of synthetic rubber.
- 4.1.28 Production of acrylic acid and its derivatives.
- 4.1.29 Production and processing of carbon materials (e.g. charcoal, carbon black, baking of carbon materials).

4.2 Medium sources of pollution

- 4.2.1 Production and processing of rubber.
- 4.2.2 Production of soaps, detergents and cosmetics.
- 4.2.3 Production and processing of greases and oils of vegetal and animal origin.
- 4.2.4 Production of glues and adhesives.
- 4.2.5 Production and refinement of paper.
- 4.2.6 Production of waterproof materials and carpeting.
- 4.2.7 Industrial processing of plastics.
- 4.2.8 Production, regeneration and disposal of accumulators and monocells.
- 4.2.9 Filling stations of fuels (without capacity limitation).

4.2.10 Distribution stocks and transferring deviceequipments for fuel, grease, petrochemical products and other organic liquids with installed total volume of storage to 1 000 m³ or annual turnover to 10 000 m³.

4.2.11 Other organic and inorganic chemical productions.

5. WASTE TREATMENT

5.1 Large sources of pollution

5.1.1 Waste incineration plants (without capacity limitation).

5.1.2 Veterinary sanitation installations (without capacity limitation).

5.2 Medium sources of pollution

5.2.1 Waste water treatment plants (urban waste water treatment plants with capacity 2 000 equivalent citizens and more and central treatment plants of industrial establishments).

5.2.2 Compost plants with capacity 0.75 t and more of treated waste per hour.

5.2.3 Crematories.

6. OTHER INDUSTRY AND FACILITIES

6.1 Large sources of pollution

6.1.1 Large livestock breeding projected for capacity 500 places for cattle and more, 5 000 places for pigs and more and 50 000 places for poultry and more.

6.1.2 Industrial production and treatment of leather.

6.1.3 Paint shops with projected consumption 10 t and more of coatings per year.

6.1.4 Abattoirs and other slaughter-houses (projected for capacity from 250 t of live weight of poultry per year or 2 000 t and more of live weight of other animals per year).

6.1.5 Other productions and technological processes, which are not namely mentioned in points 1 to 6 and which produce pollutants in quantity higher than 10-multiplefold of the mass flow value according to Annex 3 of this Regulation, or if component of technology is an deviceequipment for fuel combustion with nominal thermal input 50 MW and more. Mass flows are detected before separator.

6.2 Medium sources of pollution

6.2.1 Industrial processing of the wood (projected for capacity 20 m³ and more of processed wood per day, e.g. saw-mills, production of furniture, production of plywood, production of fiberboards and chipboards and other sintered material).

6.2.2 Production of felt.

6.2.3 Printing (printing to flat and band material).

6.2.4 Paint shops with projected consumption of coating material from 1 t to 10 t and more per year.

6.2.5 Industrial degreasing of metals and electro-components by organic solvents.

6.2.6 Cleaning of textile by organic solvents (without capacity limitation).

6.2.7 Livestock breeding projected for capacity from 100 places for to 499 places for cattle, from 500 to 4 999 places for pigs, from 5 000 places for to 49 999 places for poultry, 2 000 and more of sheep, 300 places for horses and 1 500 places and more for fur animals.

6.2.8 Abattoirs and other slaughter-houses (projected for capacity from 25 t to 250 t of live weight of poultry or from 200 t to 2 000 t of live weight of other animals per year).

6.2.9 Sugar factories.

6.2.10 Canning factories and distilleries.

6.2.11. Food mills (with projected capacity 5 t and more per hour).

6.2.12 Production of industrial feeds and organic fertilizers with projected capacity 1 t and more per hour.

6.2.13 Drying-plants of agricultural and food products with projected capacity 1 t of product and more per hour.

6.2.14 Other productions and technological processes, which are not mentioned in points 1 to 6 a which produce pollutants in quantity higher than it is the value of mass flow, up to 10-multiplefold of mass flow inclusive according to Annex 3, parts I, II, points 1, 2, 3 or 0.2-multiplefold of mass flow to 10-multiplefold of mass flow inclusive according to Annex 3, part II, point 4, or if component of technology is an deviceequipment for fuel combustion with nominal thermal input from 0.3 to 50 MW. Mass flows are detected before separator.

If sources of pollution, corresponding to by their method of technology to any technology mentioned in this Annex in the category of the sources of pollution, for which is not production capacity is defined production capacity, are appear in form of small-scale production, then they are shall be classified as small sources of pollution. This is valid shall apply only for in case, if when it will be is proved, that the mass flows of individual pollutants produced for nominal output are lower than down the bottom limit of mass flows set for medium sources of pollution in point 6.2.14. This principle refers to existing sources of pollution from 1 January 1997 and for new sources of pollution from their putting into operation; in the case of decision of air protection authority according to Article 3, paragraph 3 of the Act on Air always from 1 January of the year following the year of decision issuing. In this case, are applied mass flows set for new sources of pollution listed in Annex 3 shall be applied.”.

10. In Annex 3, part II, point 1.1 shall be read:

”1.1 Emission limits for 1st sSubgroup 1 of carcinogen substances

At mass flow higher than 0.5 g.h⁻¹ the sum of substance concentration of 1st sSubgroup 1 in exhaust gas may not exceed the value 0.1 mg.m⁻³.”.

11. In Annex 4, part I, points 1 to 4 including the titles shall be read:

”1. TECHNOLOGICAL UNITS CONTAINING STATIONARY PLANTS FOR FUEL COMBUSTION (HEATING PLANTS, POWER PLANTS, HEATING STATIONS AND

DEVICEEQUIPMENTS FOR COMBUSTION IN PROCESS) WITH TOTAL THERMAL INPUT POWER 0.3 MW AND MORE

1.1 DeviceEquipment for new sources of pollution

DeviceEquipment for new sources of pollution is considered a boiler or group of boilers (respective processing heating), which release or may release waste gases through common stack of waste gases. Input powers of boilers burning fuel of the same type (solid, liquid, gaseous) are summarized for assignment of emission limit according to input power. For double fuel system, if the share of transferred heat by second fuel does not exceed 30%, the boiler is considered, with regard to setting the emission limit, as a boiler burning only fuel conducting prevailing thermal input is taken into account to assign emission limit. If the boiler burns additional fuel in higher share than 30% of transferred heat, the input power of this boiler is not added to the input powers of boilers burning only one fuel (or considered as such) and for assignment of emission limit is calculated the input power of each such boiler independently. Input powers of boilers with circulating fluid or pressure layer are independently calculated and input powers of boilers with fusion hearth are independently calculated.

1.2 DeviceEquipment for existing sources of pollution valid tilluntil 31 December 2009

DeviceEquipment for existing sources of pollution valid tilluntil 31 December 2009 is considered the boiler or group of boilers (respective processing heating), which release waste gases through common stack of waste gases and of which individual thermal input powers are lower than 62 MW or individual boilers and deviceequipments for combustion in process with nominal thermal input 62 MW and more. Input powers of boilers burning fuel of the same type (solid, liquid, gaseous) are summarized for assignment of emission limit according to. For double fuel system, if the share of transferred heat by second fuel does not exceed 30%, the boiler burning only fuel conducting prevailing thermal input power is taken in order to assign emission limit. If the boiler burns additional fuel in higher share than 30% of transferred heat, the input power of this boiler is not added to the input powers of boilers burning only one fuel (or considered as such) and the input power of each such boiler is calculated independently for assignment of emission limit. Input powers of boilers with circulating fluid or pressure layer are independently calculated and input powers of boilers with fusion hearth are independently calculated.

The point 1.1 is valid for existing sources of pollution from 1 January 2010.

1.3 DeviceEquipment for combustion in process

DeviceEquipment for combustion in process is considered other technological deviceequipment burning fuels as power plants, heating plants and heating stations, for which the quantity and structure of emissions is depending only from the quantity and structure of fuel, while the waste gases flow is from other technology separated by heat-exchange surface.

1.4 Fuels

In deviceequipments for fuel burning may be burned only fossil fuels and fuels produced from them (brown and black fuel coal, lignite, turf, coke, briquettes, oil, heating oils and heavy petroleum fractions of standardized quality burned in refineries as own production), biomass, waste oils (until 31 December 2006), if do not contain chlorine in quantity more than 0.5% of weight and PCB and PCT in quantity more than 10 mg.kg⁻¹, petroleum natural gas, liquified hydrocarbon gases, bio-gas, eventually industrial gases specially mentioned in points 1.7.2.3, 1.7.3a and 1.7.3b.

Bio-mass is every vegetal mass or part of vegetal mass, which may be used for production of power. Wooden waste and vegetal waste are the bio-mass as well, if they are mentioned in point 1.2, letter b) and points 1 to 5 of part V of this Annex.

1.5 Emission limits for solid fuels combustion

1.5.1 Conditions for determination of emission limits

All emission limits mentioned in point 1.5 are valid for concentrations converted to dry gas at standard conditions 101.325 kPa and 0 °C and for the oxygen content in waste gases in amount 6% vol. Concentration are converted to the content of the oxide in waste gases in amount 11% vol. otherwise differently from this determination for combustion of wood and other mass of vegetal origin.

1.5.2 Emission limit for dust

1.5.2.1 Emission limit for new sources of pollution

- a) For combustion plants for solid fuels with nominal thermal input power 500 MW and more the concentration of dust particulates in waste gases shall not exceed the value 50 mg.m^{-3} .
- b) For combustion plants for solid fuels with nominal thermal input power 50 MW and more up to 500 MW the concentration of dust particulates in waste gases shall not exceed the value 100 mg.m^{-3} .
- c) For combustion plants for solid fuels with nominal thermal input power higher 2.5 MW up to 50 MW the concentration of dust particulates in waste gases shall not exceed the value 150 mg.m^{-3} .
- d) Otherwise from Unlike the determination in point c) for fluid combustion plants for solid fuels with circulating or pressure fluid layer with nominal thermal input power higher 2.5 MW up to 500 MW the concentration of dust particulates in waste gases shall not exceed the value 100 mg.m^{-3} .
- e) For combustion plants for solid fuels with nominal thermal input power 0.3 MW and more up to 2.5 MW inclusive the concentration of dust particulates in waste gases shall not exceed the value 250 mg.m^{-3} .

1.5.2.2 Emission limit for new sources of pollution, for which will start the administrative procedure granting permit for construction after 31 December 2001

For device equipments burning solid fuels with nominal thermal input power 50 MW and more up to 500 MW inclusive the concentration of dust particulates in waste gases cannot exceed the value 50 mg.m^{-3} . This emission limit is valid from 1st January 2010 for all plants of stated input powers for existing and new sources of pollution.

1.5.2.3 The Emission limit for existing sources of pollution valid till until 31st December 2009

- a) For combustion plants for solid fuels with nominal thermal input power 62 MW and more the concentration of dust particulates in waste gases shall not exceed the value 100 mg.m^{-3} .
- b) For combustion plants for solid fuels with nominal thermal input power higher than 2.5 MW up to 62 MW the concentration of dust particulates in waste gases shall not exceed the value 150 mg.m^{-3} .

c) For combustion plants for solid fuels with nominal thermal input power 0.3 MW and more up to 2.5 MW inclusive the emission limit for solid fuels shall not be defined and either the generally valid emission limits there are not applied either generally valid emission limit.

d) Otherwise from Unlike the determination in point b) for fluid combustion plants for solid fuels with circulating or pressure fluid layer with nominal thermal input power higher 2.5 MW the concentration of dust particulates in waste gases shall not exceed the value 100 mg.m^{-3} .

1.5.3 Emission limit for sulfur oxides (except combustion of bio-mass)

1.5.3.1 Emission limit for new sources of pollution

a) For combustion plants for solid fuels with nominal thermal input power 500 MW and more the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 400 mg.m^{-3} . If for high content of the sulfur in indigenous fuel this value cannot be achieved, the emission level of sulfur oxides cannot be more than 10%.

b) For combustion plants for solid fuels with nominal thermal input power 175 MW and more up to 500 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value calculated based on following formula

where

EL is the emission limit [mg.m^{-3}],

NTI is the nominal thermal input [MW].

If for high content of sulfur in indigenous fuel this value cannot be achieved, for plants with nominal thermal input 175 MW and more up to 500 MW, the emission level cannot be higher than the value calculated based on following formula

where ELv is the emission level [%].

If the emission level is applied, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases cannot exceed the value $2,500 \text{ mg.m}^{-3}$.

c) For combustion plants for solid fuels with nominal thermal input power 50 MW and more up to 175 MW the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $1,700 \text{ mg.m}^{-3}$.

If for high content of sulfur in indigenous fuel the value mentioned under point c) cannot be achieved, for plants with nominal thermal input 50 MW and more up to 167 MW, the emission level shall not be higher than 60%. For combustion plants for solid fuels with nominal thermal input power 167 MW and more up to 175 MW, the emission level shall not be higher than value calculated according the equation for emission level under point b). If emission level is applied, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $2,500 \text{ mg.m}^{-3}$ at the same time.

d) For combustion plants for solid fuels with nominal thermal input power 0.3 MW and more up to 50 MW at mass flow higher than 10 kg.h^{-1} , the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $2,500 \text{ mg.m}^{-3}$.

e) Otherwise from Unlike the determination in points a) to d) for fluid combustion plants for solid fuels with circulating fluid layer or pressure fluid layer with nominal thermal input higher 2.5 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 400 mg.m^{-3} or emission level shall not be higher than 15%.

1.5.3.2 Emission limit for existing sources of pollution valid until 31 December 2009

a) For combustion plants for solid fuels with nominal thermal input power higher than 375 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 500 mg.m^{-3} . If this value cannot be achieved without desulfurization of waste gases, the emission level of sulfur oxides shall not be higher than 15%.

b) For combustion plants for solid fuels with nominal thermal input power 62 MW and more up to 375 MW inclusive, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $1,700 \text{ mg.m}^{-3}$. If for high content of sulfur in indigenous fuel this value cannot be achieved without desulfurization of waste gases, the emission level of sulfur oxides shall not be higher than 60 %. In such case the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $2\,500 \text{ mg.m}^{-3}$ at the same time.

c) For combustion plants for solid fuels with nominal thermal input power higher than 7 MW up to 62 MW inclusive, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $2\,500 \text{ mg.m}^{-3}$.

d) For combustion plants for solid fuels with nominal thermal input power 0.3 MW and more up to 7 MW inclusive at mass flow of sulfur dioxide higher than 20 kg.h^{-1} , the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value $2\,500 \text{ mg.m}^{-3}$.

e) Otherwise from Unlike the determination in points a) to d) for fluid combustion plants for solid fuels with circulating fluid layer or pressure fluid layer with nominal thermal input higher 2.5 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 400 mg.m^{-3} or emission level shall not be higher than 15%.

1.5.3.3 Conditions for compliance with emission limit

Combustion plant may be operated besides also during the malfunction of plant for emission reduction of sulfur dioxide, if the time of malfunction does not exceed 96 consecutive hours and during a calendar year totally 360 hours.

1.5.4 Emission limit for nitrogen oxides

a) For combustion plants for solid fuels with nominal thermal input power higher than 62 MW, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value 550 mg.m^{-3} .

b) For combustion plants for solid fuels with nominal thermal input power 0.3 MW and more up to 62 MW inclusive, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value 650 mg.m^{-3} .

c) Otherwise from Unlike the determination in points a) and b) for combustion of solid fuels in fusion boilers, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value $1\ 100\ \text{mg.m}^{-3}$.

d) Otherwise from Unlike the determination in points a) and b) for fluid combustion plants for solid fuels with circulating fluid layer or pressure fluid layer with nominal thermal input higher 2.5 MW, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value $400\ \text{mg.m}^{-3}$.

1.5.5 Emission limit for carbon oxide

1.5.5.1 Emission limit for new sources of pollution

a) For combustion plants for solid fuels with nominal thermal input power higher than 7 MW, the concentration of carbon oxide in waste gases shall not exceed the value $250\ \text{mg.m}^{-3}$.

b) For combustion plants for solid fuels with nominal thermal input power 0.3 MW and more up to 7 MW inclusive at mass flow of carbon oxide higher than $5\ \text{kg.h}^{-1}$, the concentration of carbon oxide in waste gases shall not exceed the value $850\ \text{mg.m}^{-3}$.

1.5.5.2 Emission limit for existing sources of pollution valid until 31 December 2009

a) For combustion plants for solid fuels with rack heart of all types with nominal thermal input power 0.3 MW and more up to 2.5 MW inclusive, the emission limit for carbon oxide is not set.

b) For combustion plants for solid fuels with rack heart and juggler with nominal thermal input power higher than 2.5 MW, the concentration of carbon oxide in waste gases shall not exceed the value $1,100\ \text{mg.m}^{-3}$.

c) In other combustion plants for solid fuels not mentioned under points a) and b) with nominal thermal input power 0.3 MW and more up to 7 MW inclusive at mass flow of carbon oxide higher than $5\ \text{kg.h}^{-1}$ and more, the concentration of carbon oxide in waste gases shall not exceed the value $850\ \text{mg.m}^{-3}$.

c) In other combustion plants for solid fuels not mentioned under point b) with nominal thermal input power higher than 7 MW, the concentration of carbon oxide in waste gases shall not exceed the value $250\ \text{mg.m}^{-3}$.

1.5.6 Emission limit for organic substances

1.5.6.1 Emission limit for new sources of pollution

For combustion of wood, bark, wooden waste and other mass of vegetal origin (bio-mass) in device equipments with nominal thermal input power 0.3 MW and more, the concentration of organic substances expressed as total organic carbon in waste gases shall not exceed the value

a) $100\ \text{mg.m}^{-3}$ for plants with nominal thermal input power 0.3 MW and more up to 1 MW inclusive;

b) $50\ \text{mg.m}^{-3}$ for plants with nominal thermal input power over 1 MW.

1.5.6.2 Emission limit for existing sources of pollution

For combustion of wood, bark, wooden waste and other mass of vegetal origin (bio-mass) in device equipments with nominal thermal input over 7 MW, the concentration of organic substances expressed as total organic carbon in waste gases shall not exceed the value 50 mg.m⁻³.

1.5.7 Emission limits for other existing sources of pollution listed in Annex No. 1

Emission limits for other existing sources of pollution shall not be set and generally valid emission limits shall not be applied as well. However it is necessary to use available measures with regard to adequacy of charges for reduction of their emissions (e.g. technique of burning, option of fuel quality).

1.6 Emission limits for combustion of liquid fuels

1.6.1 Conditions of validity for emission limits

All emission limits mentioned under point 1.6 are valid for concentrations converted to dry gas at standard conditions 101.325 kPa and 0 °C for oxygen content in waste gases in amount 3% vol.

1.6.2 Emission limit for dust particulates

- a) For combustion plants for fuels with nominal thermal input power 50 MW and more, the concentration of dust particulates in waste gases shall not exceed the value 50 mg.m⁻³.
- b) For combustion plants for liquid fuels with nominal thermal input power 0.3 MW and more up to 50 MW, the concentration of dust particulates in waste gases shall not exceed the value 100 mg.m⁻³.
- c) If emission limits for dust particulates mentioned under points a) and b) are achieved without separation, generally valid emission limits for second group of pollutants (Annex 3, part II, point 2) shall not be applied.

1.6.3 Emission limit for sulfur oxides

1.6.3.1 Emission limit for new sources of pollution

- a) For combustion plants for liquid fuels with nominal thermal input power 500 MW and more, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 400 mg.m⁻³. If for high content of sulfur in indigenous fuel this value cannot be achieved, the emission level of sulfur oxides shall not exceed 10 %.
- b) For combustion plants for liquid fuels with nominal thermal input power 300 MW and more up to 500 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value calculated based on following formula

where

EL is emission limit [mg.m⁻³],

NTI nominal thermal input [MW].

If for high content of sulfur in indigenous fuel this value cannot be achieved without desulfurization, the emission level of sulfur oxides shall not exceed 10 %.

c) For combustion plants for liquid fuels with nominal thermal input power over 7 MW up to 300 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 1 700 mg.m⁻³.

1.6.3.2 Emission limit for existing sources of pollution valid until 31 December 2009

a) For combustion plants for liquid fuels with nominal thermal input power over 350 MW, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 500 mg.m⁻³. If this value cannot be achieved without desulfurization, the emission level of sulfur oxides shall not exceed 15 %.

b) For combustion plants for liquid fuels with nominal thermal input power over 7 MW up to 350 MW inclusive, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed the value 1 700 mg.m⁻³.

1.6.3.3 Conditions for compliance with emission limit

Combustion plant may be operated besides the breakdown of device equipment for emission reduction of sulfur dioxide, if the time of breakdown does not exceed 96 consecutive hours and during the year totally 360 hours.

1.6.3.4 General operational conditions – reduction of sulfur in fuel

For combustion plants for liquid fuels with nominal thermal input power 0.3 MW and more up to 7 MW inclusive is forbidden to burn the fuel with sulfur content over 1% of weight. This restriction is not valid shall not apply for combustion of own technological oils, however the concentration of sulfur oxides in waste gases shall not exceed the value 1,700 mg.m⁻³.

1.6.4 Emission limit for nitrogen oxides

a) For combustion plants for liquid fuels with nominal thermal input power over 7 MW, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value 450 mg.m⁻³.

b) For combustion plants for liquid fuels with nominal thermal input power over 0.3 MW up to 7 MW inclusive, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value 500 mg.m⁻³.

1.6.5 Emission limit for carbon oxide

For combustion plants for liquid fuels with nominal thermal input power over 0.3 MW, the concentration of carbon oxide in waste gases shall not exceed the value 175 mg.m⁻³.

1.6.6 Emission limits for waste oil combustion

1.6.6.1 Emission limits for plants, for which administrative procedure granting the permit for construction, its change, change of technological device equipments or change of their use will start after 31st December 2001

Emission limits and general operational conditions as for co-incineration of waste according to the part V are valid for combustion of waste oils.

1.6.6.2 Emission limits for other plants like under point 1.6.6.1 valid till until 31 December 2006

Emission limits for basic pollutants according to points 1.6.1 to 1.6.5 except point 1.6.2, letter c), which is does not applied for combustion of waste oils, are valid for combustion of waste oils. Air protection authority shall determine other conditions for burning of waste oils.

Emission limits according to point 1.6.6.1 are valid shall apply from 1st January 2007.

1.7 Emission limits for combustion of gaseous fuels

1.7.1.1 Conditions for validity of emission limits

All emission limits under point 1.7 are valid for concentrations converted to dry gas at standard conditions 101.325 kPa and 0 °C for oxygen content in waste gases in amount 3% vol.

1.7.2 Emission limit for dust particulates

1.7.2.1 Emission limit for dust particulates valid till until 31 December 2004

For combustion plants for gaseous fuels with nominal thermal input power 0.3 MW and more, the concentration of dust particulates in waste gases shall not exceed the value 10 mg.m⁻³.

1.7.2.2 Emission limit for new sources of pollution, for which administrative procedure granting the permit for construction shall start after 31 December 2001

For combustion plants for gaseous fuels with nominal thermal input power 0.3 MW and more, the concentration of dust particulates in waste gases shall not exceed the value 5 mg.m⁻³. This emission limit is valid from 1 January 2005 for all device equipments mentioned under point 1.7.2.1.

1.7.2.3 Emission limit for combustion of gases from steel production

Otherwise like provisions 1.7.2.1 and 1.7.2.2 set for combustion of gases from steel production, the concentration of dust particulates in waste gases shall not exceed the value 50 mg.m⁻³.

1.7.3 Emission limit for sulfur oxides

For combustion plants for gaseous fuels with nominal thermal input power 0.3 MW and more, the concentration of sulfur oxides expressed as sulfur dioxide in waste gases shall not exceed

a) at for combustion of industrial gases from refineries the value 100 mg.m⁻³;

b) at for combustion of low-caloric industrial gases (e.g. blast-furnace gas, coke gas, sewer-gas) and their mixtures the value 800 mg.m⁻³;

c) at for combustion of liquefied gas the value 5 mg.m⁻³;

d) at for combustion of other gases the value 35 mg.m⁻³.

1.7.4 Emission limit for nitrogen oxides

a) For combustion plants for gaseous fuels with nominal thermal input power 0.3 MW and more, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value 200 mg.m^{-3} .

b) Otherwise Unlike the provision under letter a), sets for combustion of liquefied hydrocarbon gases, the concentration of nitrogen oxides expressed as nitrogen dioxide in waste gases shall not exceed the value 300 mg.m^{-3} .

1.7.5 Emission limit for carbon oxide

For device equipments burning gaseous fuels with nominal thermal input power 0.3 MW and more, the concentration of carbon oxide in waste gases shall not exceed the value 100 mg.m^{-3} .

1.8 Combustion of more types of fuels

1.8.1 Combustion of more types of fuels in one plant gradually

For combustion of more types of fuels in one combustion plant in the way, that always is burned only one type of fuel, than is valid emission limit for burned type of fuel.

1.8.2 Combustion of more types of fuels in one device equipment at the same time

1.8.2.1 Emission limit for new sources of pollution

a) For combustion of more types of fuels in one device equipment at the same time, the emission limit shall be determined as modified weighted mean of emission limits of used fuels according to the following formula

where

Q_i is the thermal input for i^{th} fuel i ;

Q_{total} is the total thermal input;

EL_i is the emission limit for given fuel and reference oxygen;

$EL_{\text{mix}, O_{\text{ref}}}$ is the total emission limit;

O_{ref} is the reference oxygen for prevailing fuel according to input in vol. %

$O_{r,i}$ is the reference oxygen for the i^{th} fuel i in vol. %;

b) if the share of thermal input of one fuel is 70 % and more, than the emission limit is valid according to this fuel.

1.8.2.2 Emission limit for existing sources of pollution valid until 31 December 2009

For combustion of more types of fuels in one plant the emission limit is determined by the type of fuel, of which share on thermal input is the highest; in this case, the plant is considered each individual boiler shall be considered as an equipment.

1.8.3 Common combustion of several types of fuels in different types of stationary plants for fuel combustion

If, within the scope of one source of pollution, the waste gases from various plants or groups of plants are conducted by common stack of waste gases and different emission limits are defined for individual plants or groups according pursuant to this Regulation, it may be used the formula mentioned under point 1.8.2.1, letter a) in order to present conditions of compliance with emission limits (Article 9) may be used.

2. GAS-TURBINES

2.1 Conditions for determination of emission limit

Emission limits mentioned under points 2.3 to 2.6 are valid for concentration converted to dry gas at standard conditions 101.325 kPa and 0 °C for and at oxygen content in waste gases in amount of 15 % vol.

2.2 Emission limit for dust particulates

Operation of gas-turbine must be carried out in a manner, that production of dust particulates (carbon black) cannot be

a) higher than third grade of Bacharach's scale for the startup for the volume of waste gases 60,000 m³.h⁻¹ and more (nominal thermal input power 20 MW and more) and higher than second grade of Bacharach's scale for permanent operation.

b) higher than fourth grade of Bacharach's scale for the volume of waste gases till up to 60,000 m³.h⁻¹ (nominal thermal input power 20 MW and more) for all phases of operation.

2.3 Emission limit for sulfur dioxide

Emission limit for new sources of pollution

When using liquid fuel with sulfur content, the concentration of sulfur dioxide in waste gases shall not exceed the value 600 mg.m⁻³.

2.3.2 Emission limit for existing sources of pollution

When using liquid fuel with sulfur content, the concentration of sulfur dioxide in waste gases shall not exceed the value 1 700 mg.m⁻³.

2.4 Emission limit for nitrogen oxide

The concentration of nitrogen oxides in waste gases expressed as nitrogen dioxide shall not exceed the value

a) 300 mg.m⁻³ at waste gas volume 60,000 m³.h⁻¹ and more (nominal thermal input 20 MW and more);

b) 350 mg.m⁻³ at waste gas volume to 60,000 m³.h⁻¹ (nominal thermal input 20 MW and more);

c) emission limits according to letters a) and b) are valid for individual gas-turbine with mechanical efficiency up to 30 % inclusive. For gas-turbine with efficiency over 30 % the emission limit shall

be corrected by multiplication of the proportion value $\eta / 30$, where η is real the actual efficiency in %.

2.5 Emission limit for carbon oxide

The concentration of carbon oxide in waste gases during permanent operation shall not exceed the value 100 mg.m^{-3} .

2.6 Integration of boiler with gas-turbine

2.6.1 Emission limit for new sources of pollution

Emission limits and conditions of their validity as for gas-turbines are valid in the case of classification of flue boiler for gas-turbines. In the case of additional firing of flue boiler with input power over 30 % of input power of the gas-turbine, the Emission limit shall be calculated as weighted mean of emission limit for gas-turbine and flue boiler according to the formula mentioned under point 1.8.2.1, letter a) shall be calculated in the case of additional firing of flue boiler with input power over 30 % of input power of the gas-turbine.

2.6.2 Emission limit for existing sources of pollution

Emission limits and conditions of their validity like for gas-turbines are valid iIn the case of classification of flue boiler foras gas-turbines, the emission limits and conditions of their validity like for gas-turbines shall apply.

3. DEVICES/EQUIPMENTS FOR DRYING OR OTHER THERMAL TREATMENTS, WHERE OCCURS IT COMES TO DIRECT CONTACT OF WASTE GAS OR FLAME WITH HEATED MEDIUM

3.1 General operational conditions for new sources of pollution

In device/equipments for drying or other thermal treatments is possible to burn only gaseous fuels, liquefied hydrocarbon fuels, liquid fuels with sulfur content at most maximum 0.2 % of weight or solid fuels with specific sulfur content at most maximum 0.5 g.MJ^{-1} .

3.2 Emission limits

In device/equipments for drying or other thermal treatments, are valid such emission limits for pollutants, of which emission depends only on the fuel and incineration fashion/practice, which are valid for other fuel combustion plants according to the type of combusted fuel at reference oxygen content 17%, shall apply.

4. STATIONARY PISTON INTERNAL COMBUSTION ENGINES – NEW SOURCES OF POLLUTION

4.1 Conditions for determination of emission limit

Emission limits are valid at standard conditions 101.32 kPa, temperature 0°C and oxygen content 5 % vol. Emission limits are not valid for aggregates used for backup operation only.

4.2 Emission limit for dust/particulates

The concentration of dust particulates in waste gases from diesel internal combustion engines at combustion of liquid fuels shall not exceed the value 130 mg.m^{-3} .

4.3 Emission limit for nitrogen oxide

The concentration of nitrogen oxides expressed as nitrogen dioxide shall not exceed the value

a) for diesel engines with nominal thermal input

0.3 MW and more to 3 MW $4\,000 \text{ mg.m}^{-3}$;

3 MW and more $2\,000 \text{ mg.m}^{-3}$;

b) for other engines

four-stroke 500 mg.m^{-3} ;

two-stroke 800 mg.m^{-3} .

4.4 Emission limit for carbon oxide

The concentration of carbon oxide in waste gases shall not exceed the value 650 mg.m^{-3} .

4.5. General operational conditions – reduction of sulfur in fuel

In stationary internal combustion engines it is possible to burn only gaseous fuels and liquid fuels with sulfur content at most maximum 0.2 % of weight.”.

12. The point 5 of Annex 4, part I shall be deleted and present the existing point 6 shall be denoted as point 5

13. The point 2.3 including the heading shall be inserted to Annex 4, part II, point 2 as follows, reading:

”2.3 Heaters of wind

2.3.1 General operational conditions for new sources of pollution

Emissions of dust particulates from all device equipments and point of their origin must be according to technical possibilities with regard to adequacy of charges reduced (e.g. by exhaustion, dust removal, pressurization of device equipment).

2.3.2 Emission limit for particular particulate pollutants

a) Concentration of dust particulates in exhaust gas shall not exceed the value 100 mg.m^{-3} .

b) Concentration of carbon oxide in exhaust gas shall not exceed the value $6\,000 \text{ mg.m}^{-3}$.

2.3.3 Conditions of validity of the emission limit

Emission limits are valid for oxygen content in waste gases 7 % vol in waste gases.”.

14. The point 3.1.2.3 shall be inserted to Annex 4, part II, point 3.1 as follows, reading:

”3.1.2.3 Condition of validity of emission limit for new sources of pollution

Emission limits for dust particulates before burning are valid shall apply, if cleaned waste gases are transferred for final combustion.”.

15. The point 3.2.3.3 shall be inserted to Annex 4, part II, point 3.2 as follows, reading:

”3.2.3.3 Condition of validity of emission limit for new sources of pollution

Emission limits for dust particulates before burning are valid shall apply, if cleaned waste gases are transferred for final combustion.”.

16. The pPoint 5.3.3 shall be inserted to Annex 4, part II, point 5.3 as follows, reading:

”5.3.3 Condition of validity of emission limit for new sources of pollution

Emission limits for dust particulates before burning are valid shall apply, if cleaned waste gases are transferred for final combustion.”.

17. The pPoint 3.3 of Annex 4, part III shall be deleted and the previous point 3.4 shall be marked as point 3.3.

18. The pPoint 4.2.2 of Annex 4, part III shall be read:

”4.2.2 Emission limit for existing sources of pollution

The concentration of nitrogen oxides expressed as nitrogen dioxide shallould not exceed the value

a) for rotary furnaces 1 800 mg.m⁻³;

b) for other furnaces 1 500 mg.m⁻³.”.

19. In Annex 4, part III, point 5.5, Tthe words ”fluorine compounds” shall be replaced by the words ”gaseous fluorine compounds” in Annex 4, part III, point 5.5.

20. The words ”chlorine compounds” shall be replaced by the words ”gaseous chlorine compounds” in Annex 4, part III, point 5.6.

21. The pPoint 7.1 including heading of Annex 4, part IV shall be read:

”7.1 **General operational conditions for new sources of pollution**

Waste gases from production and processing of viscose is necessary to conduct for disposal or regeneration according to technical possibilities and adequacy of charges.”.

22. The following sentence shall be added to the end of Annex 4, part IV, point 9.1.4:

”Field burner shall be constructed and adjusted in order to ensure burning without waste gas.”.

23. The pPoint 9.3.1 of Annex 4, part IV shall be deleted.

Previous points 9.3.2 and 9.3.3 shall be marked as points 9.3.1 and 9.3.2.

24. The pPoint 10.1.1 of Annex 4, part IV shall be read:

”10.1.1 Determination of validity of operational conditions

General operational conditions mentioned under point 10.1.3 are valid shall apply for filling stations with projected year annual turnover of petrol filling 1 000 m³ and more.”.

25. Part V including title of Annex 4 shall be read:

”V. INCINERATION AND CO- INCINERATION OF WASTE

1. SCOPE OF VALIDITY

1.1 Provisions of part V of this Annex are valid shall apply for incineration plants and waste co-incineration plants.^{5a)}

1.2 Provisions of part V of this Annex are not valid for

- a) experimental equipment used for research , development and testing of burning processes not burning over 50 t/year of waste;
 - b) incineration plants where only following waste is treated:
 1. vegetable waste from agriculture and forestry;
 2. vegetable waste from food processing industry, if the heat from incineration is used for production of the power;
 3. fibrous wooden waste from primary production of cellulose and production of paper from cellulose, if it is co-incinerated on the place of origin and the heat from incineration is used for production of the power;
 4. wooden waste except the waste containing halogenated organic compounds and heavy metals and treated wooden waste from constructions and demolitions;
 5. cork waste;
 6. gaseous waste emitted into the air;
 7. radioactive waste;
 8. waste resulting from prospecting, extraction, treatment and storage of mineral sources and from extraction and processing of stone;
 9. dead animal bodies and other agricultural waste like septic tank and other natural substances used in agriculture, which are not hazardous;
 10. waste waters except liquid waste;
 11. decommissioned explosives;
 12. waste originating from exploration of petrol and gas fields and their extraction, if the extraction is ensured from mining islands, where the waste is incinerated.
- 1.3 The provisions of part V, points 2.2.3 and 3.3, letter e) of this Annex defined for hazardous waste are not valid for following hazardous waste:

a) combustible liquid waste including waste oils defined in special regulation¹), if they comply with following requirements:

aa) total content of polychlorinated aromatic hydrocarbons, for example polychlorinated biphenyl (PCB) or pentachloropheneol (PCP) are not higher than 50 ppm;

ab) these wastes are not hazardous by virtue of because they do not containing other constituents mentioned under point 10 in such quantity or such concentration, which should during their burning give rise to

- threat to the quality of water, air and earth, vegetables and animals;

- threat to the environment, for example by noise or odour;

- adversely affecting the countryside places of special interest²);

ac) their calorific value is minimally 30 MJ/kg;

b) any liquid waste, which cannot cause the emission resulting from their combustion higher than those from gas oil according to special provision³)

2. GENERAL OPERATIONAL CONDITIONS

2.1 General operational conditions for municipal waste incineration plants – new sources authorized till until 31 December 2001 and valid till until 31 December 2006

2.1.1 For all municipal waste incineration plants, The waste container of waste shall be designed for all municipal waste incineration plants of in order to permanently maintain the vacuum in it and to conduct evacuated air to fireplace. If the incineration plant is not operational, the air from the waste container of the waste shall be transferred to the shaft appointed determined by air protection authority.

2.1.2 All municipal waste incineration plants shall ensure to maintain the temperature 850 °C in combustion chamber behind last injection of air for at least two seconds at oxygen content in waste gases at least 6 % vol. Competent air protection authorities shall individually appoint specify the conditions of incineration for special incineration plants, for example the type of pyrolysis furnaces or others.

2.1.3 Any Mmunicipal waste incineration plant for shall be designed in order to sufficiently retain the incinerated waste in the combustion chamber for perfect complete burn-out.

2.1.4 The waste is possible to insert to fireplace gradually at that time and in such a quantity that ensures permanent compliance with conditions according to the point 2.1.2.

2.1.5 General operational conditions for new and existing sources - municipal waste incineration plants according pursuant to point 2.3 are valid shall be effective from 1 January 2007.

2.2 General operational conditions for incineration plants of special and hazardous waste – new sources authorized till by 31 December 2001 and valid till until 31 December 2006

2.2.1 The container of for nonliquid waste shall be designed for all incineration plants for special and hazardous waste in order to permanently maintain the vacuum in it and to conduct evacuated air to fireplace. Evacuated air from the point of evacuation and from the venting of containers shall be

transferred to combustion chamber for liquid waste. If incineration plant is out of operation, evacuated air shall be diffused in amount defined by air protection authority.

2.2.2 All incineration plants for special and hazardous waste shall be equipped with additional incineration. The combustion chamber behind last injection of the air shall maintain, behind the last injection of the air, the temperature ensuring thermal and oxidation destruction of all outgoing hazardous substances, which is at least minimum 900 °C for at least two seconds at oxygen content at least minimum 6 % vol.; for incineration of liquid waste at least 3 % vol. Competent air protection authorities shall individually define specific conditions of incineration for special incineration plants, for example e.g. for the type of pyrolysis furnaces or others.

2.2.3 For incineration of special or hazardous waste containing high stable organic substances, for example type of polychlorinated biphenyl (PCB), combustion gases in combustion chamber after the last injection of the air shall have the temperature at least 1 100 °C at least two seconds at oxygen content at least 6 % vol., for incineration of liquid waste at least 3 % vol.

2.2.4 The general operational conditions for new and existing sources - incineration plants of special and hazardous waste according pursuant to point 2.3 are valid shall be effective from 1 January 2007.

2.3 General operational conditions for incineration plants and waste co-incineration plants, for which administrative procedure granting the permit for construction, change of technological device equipments or change of their use shall start after 31 December 2001

2.3.1 All precautionary measures shall be carried out for operation of incineration plants and waste co-incineration plants in order to avoid the loading of environment during delivery, reception and temporal storage of waste, and, if it is not practicable, in maximum, to reduce as much as possible especially air pollution, odour nuisance as well as direct endanger of public health.

2.3.2 Incineration plants shall be operated with such incineration efficiency, that content of total organically bound carbon (TOC) in residual cinder and ash was lower than 3 % or burning loss was lower than 5 % of dry weight of incinerated waste. If this value is not achieved, the waste shall be properly treated before incineration.

2.3.3 All waste incineration plants shall be designed, equipped, constructed and operated in such a way raised to ensure, that the temperature of waste gases after last injection of combustion air in controlled and homogenous fashion process and even under the most unfavorable conditions achieves the value 850 °C for minimally two seconds at oxygen content in waste gases at least 6 % vol.; the temperature shall be measured near close to the inner wall of combustion chamber or at another representative point of combustion chamber as authorized by in accordance with the permit of the air protection authority. If hazardous waste with the content of more than 1 % of organic compounds of chlorine expressed as chlorine is incinerated, the temperature has to be increased to 1 100 °C.

2.3.4 Each incineration line of waste incineration plant shall be equipped with at least one auxiliary burner. These burners must be switched on automatically, when the temperature of waste gases behind last injection of combustion air falls below 850 °C, or resp. 1 100 °C. Auxiliary burners shall also be used during startup and shutdown in order to maintain temperature over 850 °C, or resp. 1 100 °C in each interval of incineration as long as unburned waste is still present in the combustion chamber.

During startup and shutdown, when the temperature of waste gases does not achieve 850 °C, or resp. 1 100 °C, auxiliary burns shall be fed only with liquid fuels, which cannot cause higher emissions than those resulting from the incineration³ of gas oil with sulfur content max. 0.2 % volume, liquefied gases or natural gas.

2.3.5 Waste co-incineration plants shall be designed, equipped, constructed and operated in such a way, that waste gases resulting from the waste incineration are raised, after the last injection of combustion air, in a controlled and homogenous fashion process and even under most unfavorable conditions, to the temperature 850 °C for at least two seconds. If hazardous waste with the content of more than 1 % of organic compounds of chlorine expressed as chlorine is co-incinerated, the temperature has to be increased to 1 100 °C.

2.3.6 Incineration plants and waste co-incineration plants shall be equipped with an automatic system to prevent waste feeding

a) at startup, until the temperature of 850 °C, or 1 100 °C or temperature specified by air protection authority according pursuant to points 2.3.7 and 2.3.8 has been reached;

b) for each drop of temperature under 850 °C, or 1 100 °C or temperature specified by air protection authority according pursuant to points 2.3.7 and 2.3.8;

c) in every case, when the continual measuring built-in according to conditions of special regulation⁴) shows, that the emission limits has been exceeded due to malfunction of equipment for cleaning of waste gases.

2.3.7 A The air protection authority may authorize permit also other operational conditions as stated under point 2.3.3 for certain categories of waste or certain thermal processes, which have to be specified in the permit. However different operational conditions shall not cause higher production of residues from burning or higher content of organic carbon in residues as it is stated under point 2.3.2.

2.3.8 A The air protection authority may authorize permit also other operational conditions as stated under point 2.3.5 for certain categories of waste or certain thermal processes, which have to be specified in permit, providing that emission limits for organic carbon and CO in waste gases shall will not be exceeded.

In case of incineration of their own waste at the place of its production in bark boilers within the cellulose and paper industry, issue of such permit shall be conditional for emission limit for gaseous organic substances expressed as total organic carbon according pursuant to the point 4.2

2.3.9 Incineration plants and waste co-incineration plants shall be designed, equipped, constructed and operated in such a way order to prevent, that emissions emitted to the air shall not from causing significant ground level air pollution; especially in particular, it is necessary to discharge waste gases by controlled way through a chimney providing to maintain air quality according pursuant to Annex 6. The C chimney elevation shall be selected choiced in order to ensure protection of public health and the environment in compliance with Annex 7.

2.3.10 The heat generated by the incineration or co-incineration of waste shall be recovered as far as practicable.

2.3.11 Infectious clinical waste shall be supplied into incineration device equipment without preparatory mixing with other categories of waste and without direct contact of the service.

3. CONDITIONS FOR VALIDITY OF THE EMISSION LIMITS

3.1 Conditions for validity of emission limits for municipal waste incineration plants permitted by 31 December 2001 valid by until 31 December 2006

3.1.1 Emission limits for municipal waste incineration plants are valid shall apply for concentrations converted to dry gas at standard conditions 101.32 kPa and 0 °C and oxygen content in waste gases for device equipments with capacity 1 tone and lower per hour 17 % vol. and for device equipments with capacity over 1 tone per hour 11 % vol.

3.1.2 Conditions for validity of emission limits for municipal waste incineration plants according pursuant to the point 3.3 are valid shall apply from 1st January 2007.

3.2 Conditions for validity of emission limits for incineration plants of special and hazardous waste permitted by 31 December 2001 valid by 31 December 2006

3.2.1 Emission limits for incineration plants of special and hazardous waste are valid shall apply for concentrations converted to dry gas at standard conditions 101.32 kPa and 0 °C and oxygen content in waste gases 11 % vol.

3.2.2 From 1 January 2007 onwards, the C conditions for validity of emission limits for incineration plants of special and hazardous waste shall apply according to the point 3.3 are valid from 1 January 2007.

3.3 Conditions for validity of emission limits for waste incineration plants and waste co-incineration plants, for which the administrative procedure for granting the permit for construction, change of technological device equipments or change of their use will start after 31 December 2001

Conditions for validity of emission limits are:

- a) temperature 273 K, pressure 101.3 kPa, oxygen content 11 %, dry gas;
- b) temperature 273 K, pressure 101.3 kPa, oxygen content 3 %, dry gas, if there are burned waste oils according to special regulation¹);
- c) if the waste is incinerated or co-incinerated in atmosphere enriched with oxygen, air protection authority may determine other content of reference oxygen corresponding to those conditions;
- d) with regard to co-incineration of waste, the emission limits correspond shall relate to total oxygen content determined according to in point 5.3.1 for co-incineration of waste.
- e) if hazardous waste is burned in waste incineration plant or waste co-incineration plant and waste gas cleaning device equipment is installed and operated oin this plant, the result of measurement of emission values shall be converted to reference oxygen only in the case, if realthe actual concentration of oxygen measured during the same interval (period), as corresponding polluting substance is burned, is higher than the value of defined reference oxygen.

4. EMISSION LIMITS FOR INCINERATION PLANTS

4.1 Emission limits for incineration plants permitted by 31 December 2001 valid by until 31 December 2006

4.1.1 Emission limits for municipal waste incineration plants

Pollutant – capacity	1 t.h⁻¹ and less	1 to 3 t.h⁻¹ including	more than 3 t.h⁻¹
Emission limit [mg.m⁻³]			
Total dust particulates	50	30	20
Organic pollutants in form of gases and vapours expressed as organic carbon	20	20	20
Heavy metals Pb, Cu, Mn, As, Ni, Cr, Co Hg, Tl, Cd	*	total 5 total 1 total 0.2	total 5 total 1 total 0.2
Gaseous compounds of chlorine expressed as HCl	30	30	15
Gaseous compounds of fluorine expressed as HF	*	2	1
Carbon oxide (CO)	100	100	100
Sulfur dioxide (SO ₂)	*	300	100
Nitrogen dioxide (NO ₂)	*	400	400

* Generally valid emission limits according to Annex 3 are valid shall apply.

Notes:

1. Emission limit 2 mg.m⁻³ is valid shall apply for existing sources for As, Ni, Cr and Co till until 31st December 2004.
2. Reference oxygen for device equipments with a capacity 1 t.h⁻¹ and less is 17 %.
3. Emission limit for nitrogen oxides is shall apply also valid for incineration plants with a capacity less than 6 t.h⁻¹ even after 31 December 2006.

4.1.2 Emission limits for incineration plants of special and hazardous waste

Pollutant – capacity	3 t.h⁻¹ and less	more than 3 t.h⁻¹
Emission limit [mg.m⁻³]		
Total dust particulates	30	20
Organic pollutant in form of gases and vapours expressed as total organic carbon	20	20
Heavy metals	total 5	total 5
Pb, Cu, Mn,	total 1	total 1
As, Ni, Cr, Co	total 0.2	total 0.2
Hg, Tl, Cd		
Gaseous compounds of chlorine expressed as HCl	30	15
Gaseous compounds of fluorine expressed as HF	2	1
Carbon oxide (CO)	100	100
Sulfur dioxide (SO ₂)	300	100
Nitrogen dioxide (NO ₂)	500	500

Notes:

1. Emission limit 2 mg.m⁻¹ is valid for existing sources for As, Ni, Cr and Co by 31 December 2004.
2. If the above mentioned emission limit for SO₂ cannot be achieved without desulfurization (e.g. incineration of special waste with high sulfur content), the emission level of sulfur oxides cannot exceed the value 10 %.
3. Emission limit 400 mg.m⁻³ for nitrogen oxides is valid shall apply for incineration plants with capacity less than 6 t.h⁻¹ after 31 December 2006.

4.1.3 Validity of emission limits from 1 January 2007

Emission limits according pursuant to point 4.2 except emission limits for nitrogen oxides for waste incineration plants with nominal capacity less than 6 t.h⁻¹ are valid shall apply from 1 January 2007.

4.2 Emission limits for waste incineration plants, for which administrative procedure granting the permit for construction, its change, change of technological deviceequipments or change of their use will start after 31 December 2001

4.2.1 Emission limits defined as daily averages

Pollutant	Emission limit [mg.m⁻³]
Total dust particulates	10
Organic pollutants in form of gases and vapours expressed as total organic carbon	10
Gaseous compounds of chlorine expressed as HCl	10
Gaseous compounds of fluorine expressed as HF	1
Sulfur dioxide (SO ₂)	50
Nitrogen oxide (NO) and nitrogen dioxide (NO ₂)	200*

* Emission limits according pursuant to points 4.1.1 and 4.1.2 are valid shall apply even after 1 January 2007 for waste incineration plants with capacity till up to 6 t.h⁻¹ including, for which administrative procedure granting the permit for construction or its change has started before 31 December 2001.

4.2.2 Emission limits defines as half-hour averages

Pollutant	(100 %) A	(97 %) B
Emission limit [mg.m⁻³]		
Total dust particulates	30	10
Organic pollutant in form of gases and vapours expressed as total organic carbon	20	10
Gaseous compounds of chlorine expressed as HCl	60	10

Gaseous compounds of fluorine expressed as HF	4	2
Sulfur dioxide (SO ₂)	200	50
Nitrogen oxide (NO) and nitrogen dioxide (NO ₂) expressed as nitrogen dioxide	400*	200*

* Emission limits according pursuant to points 4.1.1 and 4.1.2 and Article 9 are valid shall apply even after 1 January 2007 for waste incineration plants with capacity till up to 6 t.h⁻¹ including, for which administrative procedure granting the permit for construction or its change started before 31 December 2001.

Conditions for compliance with emission limit:

A – none of half-hour average value shall may exceed the listed values in the year.

B – 97 % of half-hour averages shall may not exceed the listed values in the year.

4.2.3 Emission limits for heavy metals

Pollutants	Emission limit [mg.m⁻³]
Thallium and its compounds expressed as thallium (Tl)	Total 0.05
Cadmium and its compounds expressed as cadmium (Cd)	
Mercury and its compounds expressed as mercury (Hg)	0.05
Antimony and its compounds expressed as antimony (Sb)	Total 0.5
Arsenic and its compounds expressed as arsenic (As)	
Lead and its compounds expressed as lead (Pb)	
Chrome and its compounds expressed as chrome (Cr)	
Cobalt and its compounds expressed as cobalt (Co)	
Copper and its compounds expressed as copper (Cu)	

Manganese and its compounds expressed as manganese (Mn)	
Nickel and its compounds expressed as nickel (Ni)	
Vanadium and its compounds expressed as vanadium (V)	

Emission limits are determined as average means of measurement for duration of sample taking minimally 30 min. and maximally 8 hours.

Average values are valid also for gaseous forms of emissions of heavy metals and their compounds.

4.2.4 Emission limits for dioxins and furans

Dioxins and furans	0.1 ng.m ⁻³
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Emission limits are determined as average values for duration of sample period of a minimum 6 hours and of maximum 8 hours. The emission limit value relates to total concentration of dioxins and furans calculated using the concept of toxic equivalent according pursuant to the point 8.

4.2.5. Emission limit for carbon oxide

The following limiting concentration in waste gases except startup and breakdown phases are valid shall apply for carbon oxide:

- 50 mg.m⁻³ as daily average,
- 150 mg.m⁻³ at 95 % of all measurements as 10-minute average or 100 mg.m⁻³ for all measurements as half-hour average during 24 hours.

The Air protection authority may define for waste incineration plants on principle of fluid bearing the other emission values CO, however, not higher than 100 mg.m⁻³ as hourly average.

5. EMISSION LIMITS FOR WASTE CO-INCINERATION PLANTS

5.1 Emission limits for waste co-incineration plants valid by until 31 December 2006

Emission limits defined in Annex 4 are valid shall apply for selected pollutants of particular technology or device equipment for incineration of waste in other plants as incineration plants.

Emission limits for incineration plants according to the type and quantity of waste (including reference oxygen) are valid shall apply for pollutants, which occur in waste gases only due to incineration of waste.

Emission limits for incineration plants (including reference oxygen) for pollutants, which are brought together with fuel or raw material and incinerated waste or they are produced at particular technological process even without waste incineration, are valid shall apply, if the share of producing pollutant brought by waste or during waste incineration from total mass flow of particular pollutant transferred by waste gases is higher than 30 %. Mass flow of particular pollutant

transferred by waste gases is determined as difference of mass flow during waste incineration and without waste incineration. If weight share is 30 % and less, generally valid emission limits are valid shall apply (without conversion to reference oxygen), if unless Annex 4 does not set stipulates otherwise for particular technology and pollutant.

For other pollutants, the Ggenerally valid emission limits are valid shall apply for other pollutants. Emission limits are valid for concentrations converted to dry gas at standard conditions. Emission limits for selected pollutants and selected technologies or facilities are valid for referential oxygen content, which is defined in Annex 4. Increase of mass flow of particular pollutants conducted by waste gases (except dust particulates, NO_x , SO_2 and CO) determined as the difference of mass flows with and without incineration of waste cannot be higher than 1.2-multiplefold of mass flow of pollutants conducted by waste gases from technologically and power corresponding waste incineration plant (mass flows relating to corresponding concentration limits for incineration plants).

For cement kilns is possible to consider as fuel also waste petroleum oils, if they do not contain chlorine in higher quantity higher than 0.5 % and PCB and PCT in higher quantity higher than 50 mg.kg^{-1} .

The Aair protection authority shall define the conditions for waste incineration from the viewpoint of air protection in other plants other than incineration plants. General operational conditions (points 2.1 and 2.2) shall be adequately applied depending on nature, quantity and incineration time.

5.2 Validity of emission limits for waste co-incineration plants from 1 January 2007

From 1 January 2007, the Eemission limits for waste co-incineration plants according to point 5.3 are valid from 1 January 2007 shall apply.

5.3 Emission limits for new waste co-incineration plants, for which administrative procedure granting the permit for construction, its change, change of technological device equipments or change of their use will start after 31 December 2001

5.3.1 General conditions for determination of emission limits for co-incineration of waste

The mixing formula for calculation of particular pollutant is to be applied, whenever the total emission limit value "C" has not been set out in the listed tables.

Emission limit for each relevant pollutant and CO in waste gases resulting from plants, where the waste is co-incinerated, shall be calculated by the following formula:

V_{waste} : waste gas volume resulting from the incineration of waste only determined exclusively from the waste with the lowest caloric value stated in permit and standardized at conditions of this Regulation.

If resulting heat release from the incineration of waste is lower than 10 % of the total heat release, the value V_{waste} is calculated from notional quantity of waste, that, being incinerated, would produce 10 % of total heat release.

C_{waste} : Emission limits for the relevant pollutants and CO valid for waste incineration plants according pursuant to point 4.2.

V_{process} : Waste gases volume resulting from facility of used (corresponding) process including combustion of authorized fuels normally used in the process (waste excluded) taking into account reference oxygen specified for particular process, respectively facility. In the case, when for particular process or device/equipment the reference oxygen is not specified reference oxygen, it is necessary to take into account as base the real actual oxygen content in the waste gases without being thinned by addition of air, which is unnecessary for the process. Other conditions for determination of emission limits (pressure, temperature, dry gas) are defined in points 5.3.2 to 5.3.4.

C_{process} : Emission limits for selected technological processes, mentioned in point 5.3.3, or emission limits for other technological processes of combustion of standard, authorized fuels (waste excluded). In the absence a legal act stipulating the emission limits. The emission limits laid down in the permit are used in the absence of emission limits in legal act shall apply. The real actual emission concentrations shall be used, if the emission limits are not laid down in the permit.

C: Total emission limit value and reference oxygen specified for selected technologies or calculated by mentioned formula, which shall replace set emission limits.

If in a waste co-incineration plant there is generated more than 40 % of power is generated from incineration of hazardous waste or if in a waste co-incineration plant or untreated mixed municipal waste it is burned untreated mixed municipal waste in waste co-incineration plant, the emission limits are valid shall apply as for incineration plants according pursuant to point 4.2 and provisions for determination of emission limit for waste co-incineration plants shall not be applied.

5.3.2 Special conditions for cement kilns

Daily averages for continual measurement: sampling periods and other measurement requirements shall be applied according pursuant to provisions of this Regulation and special provision⁴). All values are in $\text{mg}\cdot\text{m}^{-3}$, and for dioxins in $\text{ng}\cdot\text{m}^{-3}$. Half-hour average concentrations are necessary only for calculation of daily average. The results of the measurement shall be standardized at the following conditions: 273 K, pressure 101.32 kPa at oxygen content 10 % in dry gas.

5.3.2.1 C – total emission limits

Pollutants	C [$\text{mg}\cdot\text{m}^{-3}$]
Total dust	30
Gaseous compounds of chlorine expressed as HCl	10
Gaseous compounds of fluorine expressed as HF	1
NO_x as NO_2	800

Cd + Tl	0.05
Hg	0.05
Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V	0.5
Dioxins and furans	0.1 ng.m ⁻³

Until 1 January 2008, exemption for NO_x may be authorized by the air protection authority for wet processing cement kilns, which burn less than 3t.h⁻¹ of waste, provided that the permit foresees the concentration of NO_x in the permit will not more than exceed 1 200 mg.m⁻³.

Until 1 January 2008, exemption for dust particulates may be authorized by the air protection authority for cement kilns, which burn less than 3t.h⁻¹ of waste, provided that the permit foresees the concentration of dust particulates in the permit will not more than exceed 50 mg.m⁻³.

5.3.2.2 C – total emission limits for SO₂ and total organic carbon

Pollutants	C [mg.m⁻³]
SO ₂	50
Total organic carbon (TOC)	10

Air protection authority may authorize an exception, if SO₂ and TOC do not result from waste incineration.

5.3.2.3 Emission limits for CO

Air protection authority may set emission limits for CO.

5.3.3 Special conditions for combustion plants co-incinerating waste

Emission limits are valid as daily averages at standard conditions: 273 K, pressure 101.32 kPa, dry gas. Half-hour averages are necessary only for calculation of daily averages. Emission limits are classified according to thermal input power in MW.

5.3.3.1 C_{process} for solid fuels in mg.m⁻³ at oxygen content 6 %

Pollutant	< 50 MW	50 – 100 MW	100 – 300 MW	> 300 MW

[mg.m⁻³]				
SO ₂		850	850 to 200	200
General case			linear decrease	
			from 100 to 300 MW	
Indigenous fuel		or efficiency of desulfurization ≥ 90 %	or efficiency of desulfurization ≥ 92 %	or efficiency of desulfurization ≥ 95 %
NO _x expressed as NO ₂		400	300	200
DustParticulates	50	50	30	30

Emission limit for NO_x does not apply until 1 January 2007 for plants only is co-incinerating only hazardous waste.

The Air protection authority may authorize permit until 1st January 2008 an exception of NO_x and SO₂ for existing plants combusting solid fuel using fluidized technology of combustion with input power 100 to 300 MW, if the permit foresees specifies the a concentration C_{process} for NO_x not more than 350 mg.m⁻³ and for SO₂ not more than 850 mg.m⁻³ to 400 mg.m⁻³ in linear dependence to input power 100 to 300 MW.

5.3.3.2 C_{process} for bio-mass in mg.m⁻³ at oxygen content 6 %.

Pollutant	< 50 MW	50 – 100 MW	100 – 300 MW	> 300 MW
[mg.m⁻³]				
SO ₂		200	200	200
NO _x expressed as NO ₂		350	300	300
Dust	50	50	30	30

Air protection authority may authorize until 1 January 2008 an exception of NO_x for existing plants combusting solid fuel using fluidized technology of combustion with input power 100 to 300 MW, if the permit foresees the concentration C_{process} for NO_x not more than 350 mg.m⁻³.

5.3.3.3 C_{process} for liquid fuels in mg.m⁻³ at oxygen content 3 %.

Pollutant	< 50 MW	50 – 100 MW	100 – 300 MW	> 300 MW
[mg.m⁻³]				
SO ₂		850	850 to 200 linear droopingdecrease from 100 to 300 MW	200
NO _x expressed as NO ₂		400	300	200
Dust	50	50	30	30

Emission limit for NO_x does not apply until 1st January 2007 for plants only co-incinerating hazardous waste.

5.3.3.4 C – total emission limit for heavy metals, dioxins and furans

C in mg.m⁻³ at oxygen content 6 %. All average values over sampling period minimally 30 min. and maximally 8 hours.

Pollutants	C [mg.m⁻³]
Cd + Tl	0.05
Hg	0.05
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	0.5

C in ng.m⁻³ at oxygen content 6 %. All average values over sampling period minimally 6 hours and maximally 8 hours.

Pollutants	C [ng.m⁻³]
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Dioxins and furans	0.1
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5.3.4 Special conditions for other not mentioned technological processes

C – total emission limit for heavy metals, dioxins and furans

C in ng.m^{-3} . All average values over sampling period minimally 6 hours and maximally 8 hours.

Pollutants	C [ng.m^{-3}]
Dioxins and furans	0.1

C in mg.m^{-3} . All average values over sampling period minimally 30 min. and maximally 8 hours.

Pollutants	C [mg.m^{-3}]
Cd + Tl	0.05
Hg	0.05

6. Residues

Residue means only all liquid and solid substances (including bottom ash and slag, boiler dust and filtration fly ash, solid reaction products from gas treatment, sewage sludge from treatment of waste waters, spent catalysts and activated carbon), which are generated by the incineration process, waste gases or waste water treatment or other processes in within the waste incineration.

During operation of waste incineration plant or waste co-incineration plant is necessary to precede the production of residues or reduce their production to minimum according to quantity and harmfulness. The residues shall be recovered (recycled), where appropriate, directly in waste incineration plant or outside in compliance with special regulations⁵). Transport and intermediary storage of dry residues in the form of dust, for example boiler dust and dry residues from waste gases treatment, take place have to be transported in such a way which as to prevents the dispersal into the environment, for example in closed containers. The rResidues from incineration or co-incineration of waste shall be disposed or re-used according to special provisions⁵).

7. Emergency operational phases

In the case of breakdown, the operator shall reduce or shutdown operation as soon as practicable, until normal operation can be restored.

If emission limit is exceeded, the waste shall not be further incinerated without interruption in waste incineration plant or waste co-incineration plant or incineration lines continuously operated for more than 4 hours; total time of such conditions over one year shall be less than may not exceed 60 hours.

Half-hour average concentration of dust particulates in emissions shall under circumstances exceed the value 150 mg.m^{-3} ; the air emission limit for CO and organic substances expressed as total organic carbon shall not be exceeded. All other operational conditions and requirements according pursuant to point 2 and requirements relating to emissions for CO shall be complied with.

8. Equivalent factors for dibenzodioxins and dibenzofurans

For determination of the cumulative value of dioxin and furan emissions the mass concentrations of the following dioxins and furans shall be multiplied by following factors before their summing:

Name	Toxic equivalent
2,3,7,8 tetrachlorodibenzodioxin (TCDD)	1
1,2,3,7,8 pentachlorodibenzodioxin (PeCDD)	0.5
1,2,3,4,7,8 hexachlorodibenzodioxin (HxCDD)	0.1
1,2,3,6,7,8 hexachlorodibenzodioxin (HxCDD)	0.1
1,2,3,7,8,9 hexachlorodibenzodioxin (HxCDD)	0.1
1,2,3,4,6,7,8 heptachlorodibenzodioxin (HpCDD)	0.01
octachlorodibenzodioxin (OCDD)	0.001
2,3,7,8 tetrachlorodibenzofuran (TCDF)	0.1
2,3,4,7,8 pentachlorodibenzofuran (PeCDF)	0.5
1,2,3,7,8 pentachlorodibenzofuran (PeCDF)	0.05
1,2,3,4,7,8 hexachlorodibenzofuran (HxCDF)	0.1

1,2,3,6,7,8 hexachlorodibenzofuran (HxCDF)	0.1
1,2,3,7,8,9 hexachlorodibenzofuran (HxCDF)	0.1
2,3,4,6,7,8 hexachlorodibenzofuran (HxCDF)	0.1
1,2,3,4,6,7,8 heptachlorodibenzofuran (HpCDF)	0.01
1,2,3,4,7,8,9 heptachlorodibenzofuran (HpCDF)	0.01
octachlorodibenzofuran (OCDF)	0.001

9. Confidence Reliability interval for measurement of emission values

The values of the 95 % of confidence intervals of measurement of a particular emission value shall not exceed the following percentile share of the values of set emission limit at the of emission limit value level defined as daily average:

carbon monoxide - 10 %;

sulfur dioxide - 20 %;

nitrogen oxides - 20 %;

dust/particulates - 30 %;

hydrogen chloride - 40 %;

hydrogen fluoride - 40 %;

total organic carbon - 30 %.

10. Components of waste, which make it hazardous

1. beryllium, compounds of beryllium;
2. compounds of vanadium;
3. compound of hexavalent chromium;
4. compounds of cobalt;
5. compounds of nickel;
6. compounds of copper;
7. compounds of zinc;

8. arsenic, compounds of arsenic;
9. selenium, compounds of selenium;
10. compound of silver;
11. cadmium, compounds of cadmium;
12. compounds of tin;
13. antimony, compounds of antimony;
14. tellurium, compounds of tellurium;
15. compounds of barium, except barium bisulfate;
16. mercury, compounds of mercury;
17. thallium, compounds of thallium;
18. lead, compounds of lead;
19. inorganic sulfates (sulfides);
20. inorganic compounds of fluorine, including calcium difluoride;
21. inorganic cyanides;
22. alkaline metals and alkaline earth metals: lithium, sodium, calcium, magnesium is not in chemically bound form;
23. acid solutions or acids in solid form;
24. basic solutions or bases in solid form;
25. asbestos (dust and fibres);
26. phosphor: compounds of phosphor including mineral phosphates;
27. carbonyls of metals;
28. peroxides;
29. chlorates;
30. peroxochlorides;
31. azides;
32. PCB and/or PCT;
33. pharmaceuticals and veterinary preparations;
34. biocides and preparation for plant protection (e.g. pesticides);
35. infectious substances;

36. creosotes;
37. isocyanates, thiocyanates;
38. organic cyanides (e.g. nitriles);
39. phenol, compound of phenol;
40. halogenated solvents;
41. organic solvents except halogenated;
42. chlorinated organic compounds except inert polymerized materials and other compounds mentioned in this point;
43. aromatic compounds, polycyclic and heterocyclic organic compounds;
44. aliphatic amines;
45. aromatic amines;
46. ethers;
47. substances of explosive character;
48. organic compounds of sulfur;
49. all congeners of polychlorinated dibenzo-furans;
50. all congeners of polychlorinated dibenzo-p-dioxins;
51. hydrocarbons and their compounds containing oxygen, nitrogen or sulfur.”.

Notes to references 1 to 5 shall be read:

¹) The OrderDecree No. 19/1996 Coll. of the Ministry of the Environment of the Slovak Republic establishing waste classification and issuing the Catalogue of waste.

²) Article 2 of the OrderDecree No. 112/1993 Coll. of the Ministry of the Environment of the Slovak Republic on definition of areas requiring special air protection and on operation of smog, warning and controlling systems.

³) The OrderDecree No. 144/2000 Coll. of the Ministry of the Environment of the Slovak Republic on requirements on regarding fuel quality, scope and method of data presentation to air protection authority.

⁴) The OrderDecree No. 474/2000 Coll. of the Ministry of the Environment of the Slovak Republic on detection of quantity of emitted pollutants, on method and conditions of detection, monitoring and data presentation on compliance with defined emission limits and general operational conditions and on requirements for technical equipment for monitoring of emissions and polluting substances.

⁵) For example the Act No. 238/1991 Coll. on waste in the wording of the Act No. 255/1993 Coll. of the National Council of the Slovak Republic.”.

26. The word ”Mechanical” shall be deleted from Annex 4, part VI, heading of the point 1.1.

27. The following sentence shall be attached at the end of Annex 4, part VI, point 2.2.2.1:

"During powdered varnishing, the concentration of dust particulates shall not exceed the value 15 mg.m^{-3} ."

28. The point 2.2.5 shall be added to Annex 4, part VI as follows, reading:

"2.2.5 At using non-solvent (powdered) or low-solvent varnishing systems the limits of organic substances and operational conditions shall be defined taking into account mass flow of discharged volatile organic substances."

29. The point 6.2 of Annex 4, part VI shall be read, including the heading:

"6.2 General operational conditions – limitation of fuel type for new sources of pollution

Drying device equipment can incinerate only petroleum natural gas, liquid fuels with maximum sulfur content 0.2 % of weight and solid fuels with maximum specific sulfur content 0.5 g S.MJ^{-1} ."

30. The point 2 of Annex 7 shall be read:

"2. The height of the chimney (exhaust) shall be at least 5 m over terrain. The elevation of chimney over roof rack of a building shall be at least 0.5 m for device equipments combusting fuels with thermal input power to 50 kW, 1 m for device equipments burning fuels with thermal input power from 50 kW to 1 MW, and at least 3 m for device equipments combusting fuels with thermal input power over 1 MW. The elevation of exhaust over roof rack for small, medium and large technological sources is necessary to choose accordingly to the elevations of chimneys intended for device equipments combusting fuels in relation to the quantity and harmfulness of emitted pollutants. The elevation of chimney for a roof inclination less than 20% and flat roof is necessary to choose accordingly to the highest level of the roof, while it is necessary to choose the same elevation as is defined for inclined roof according to thermal input power of device equipments combusting fuels or intensity of source of pollution, elevated by 0.5 m. The said is shall not validly apply for device equipments combusting gaseous fuels with thermal input to 35 kW, which may have output to exterior wall of the building according pursuant to special conditions published in the Journal of the Ministry.

If other parts of construction, for example superstructures, elevator machine rooms are installed on the flat roof, for example superstructures, elevator machine rooms, it is necessary to consider individually consider the elevation of chimney from the viewpoint of ensuring optimal dispersion in relation to the height of these objects and their distance from the chimney individually. Also it is also necessary individually to consider the cases individually, if there are when not chimneys or smoke or other waste gas exhaust connections are in question, but other technical solution corresponding to the state of the art of pollutant outlet."

Article II

Entry into force

This Order Regulation shall enter into force on 1 January 2001.

Mikuláš Dzurinda, sign. Manual.

