

L.N. 336 of 2001

**ENVIRONMENT PROTECTION ACT, 2001
(Act No. XX of 2001)**

Waste Management (Incineration) Regulations, 2001

BY virtue of the powers conferred by articles 9, 11(1)(b) and 28 of the Environment Protection Act, hereinafter referred to as "the Act", the Minister for the Environment has made the following regulations:-

1. (1) The title of these regulations is the Waste Management (Incineration) Regulations, 2001. Citation, commencement and scope.

(2) (a) These regulations shall come into force on such a date as the Minister responsible for the environment may by notice in the Gazette appoint and different dates may be so appointed for the different provisions and different purposes of these regulations.

(b) A notice under paragraph (a) of this sub-regulation may take such transitional provisions as appear to the Minister to be necessary or expedient in connection with the provisions thereby brought into force.

(3) These regulations supplement the Waste Management (Permit and Control) Regulations 2001, in preventing or limiting, as far as practicable, negative effects on the environment, in particular pollution by emissions into air, soil, surface water and groundwater, and the resulting risks to human health, from the incineration and co-incineration of waste.

(4) The aim referred to in sub-regulation (3) hereof shall be met by means of stringent operational conditions and technical requirements, through the setting of emission limit values for waste incineration and co-incineration plants.

2. (1) In these regulations, unless the context otherwise requires: Interpretation.

"authorised undertaking" means an undertaking that holds a valid permit under the Waste Management (Permit and Control) Regulations;

"competent authority" means the Department for Environment Protection under the guidance of the Director for Environment

Protection and such other body or person as the Minister responsible for the environment may by order in the Gazette prescribe and different bodies or persons may be designated as the competent authority for different provisions and different purposes of these regulations;

“co-incineration plant” means any stationary or mobile plant whose main purpose is the generation of energy or production of material products and:

- which uses wastes as a regular or additional fuel; or
- in which waste is thermally treated for the purpose of disposal.

Provided that if co-incineration takes place in such a way that the main purpose of the plant is not the generation of energy or production of material products but rather the thermal treatment of waste, the plant shall be regarded as an incineration plant.

This definition covers the site and the entire plant including all co-incineration lines, waste reception, storage, on site pretreatment facilities, waste, fuel and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack devices and systems for controlling incineration operations, recording and monitoring incineration conditions;

“dioxins and furans” means all polychlorinated dibenzo-p-dioxins and dibenzofurans listed in Schedule 2;

“emission” means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the plant into the air, water or soil;

“emission limit values” means the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time;

“existing incineration or co-incineration plant” means an incineration or co-incineration plant which is in operation before 28 December 2002, or,

Provided that incineration and co-incineration plants not falling under this definition shall be considered as new plants;

“gas oil” means any petroleum product which, by reason of its distillation limits, falls into the category of middle distillates intended for use as fuel and of which at least 85% by volume, including distillation losses, distills at 350° C;

“incineration plant” means any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes with or without recovery of the combustion heat generated. This includes the incineration by oxidation of waste as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes, in so far as the substances resulting from the treatment are subsequently incinerated.

This definition covers the site and the entire incineration plant including all incineration lines, waste reception, storage, on site pretreatment facilities, waste-fuel and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack, devices and systems for controlling incineration operations, recording and monitoring incineration conditions;

“mixed municipal waste” means waste from households as well as commercial, industrial and institutional waste, which because of its nature and composition is similar to waste from households, but excluding the fractions in Schedule I;

“nominal capacity” means the sum of the incineration capacities of the furnaces of which an incineration plant is composed, as specified by the constructor and confirmed by the operator, with due account being taken, in particular, of the calorific value of the waste, expressed as the quantity of waste incinerated per hour;

“operator” means any natural or legal person who operates or controls the plant or, the person to whom decisive economic power over the technical functioning of the plant has been delegated;

“residue” means any liquid or solid material (including bottom ash and slag, fly ash and boiler dust, solid reaction products from gas treatment, sewage sludge from the treatment of waste waters, spent catalysts and spent activated carbon) defined as waste in the Waste Management (Permit and Control) Regulations, which is generated by the incineration or co-incineration process, the exhaust gas or waste water treatment or other processes within the incineration or co-incineration plant;

“waste oils” means any mineral-based lubrication or industrial oils which have become unfit for the use for which they were originally intended, and in particular used combustion engine oils and gearbox oils, and also mineral lubricating oils, oils for turbines and hydraulic oils.

(2) All other terms shall have the same meaning as that assigned to them in the Waste Management (Permit and Control) Regulations.

Scope and
exclusions.

3. (1) The following plants shall be excluded from the scope of these regulations:

(a) plants treating only the following wastes:

(i) vegetable waste from agriculture and forestry,

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

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

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

(v) cork waste,

(vi) radioactive waste,

(vii) animal carcasses,

(viii) waste resulting from the exploration for, and the exploitation of, oil and gas resources from off-shore installations and incinerated on board the installation;

(b) experimental plants used for research, development and testing in order to improve the incineration process and which treat less than 50 tonnes of waste per year.

(2) For the following hazardous wastes, the specific requirements for hazardous waste in these regulations shall not apply:

(a) combustible liquid wastes including waste oils provided that they meet the following criteria:

(i) the mass content of polychlorinated aromatic hydrocarbons, e.g. polychlorinated biphenyls (PCB) or pentachlorinated phenol (PCP) amounts to concentrations not higher than 50 ppm of PCB/PCT;

(ii) these wastes are not rendered hazardous in terms of Schedules 2 and 3 of the Waste Management (Permit and Control) Regulations or contain constituents in quantities or in concentrations which endanger human health, harm the environment, in particular, water, air, soil and plants and animals, cause nuisance through noise or odours, and adversely affect the countryside or places of special interest; and

(iii) the net calorific value amounts to at least 30 MJ per kilogramme,

(b) any combustible liquid wastes which cannot cause, in the flue gas directly resulting from their combustion, emissions other than those from gasoil or a higher concentration of emissions than those resulting from the combustion of gasoil.

4. Without prejudice to the specific transitional provisions provided for in the Schedules in these regulations, the provisions of these regulations shall apply to existing incineration and co-incineration plants as from the 28th December, 2003: Transitional provisions.

Provided that for new plants, the provisions of these regulations shall apply with immediate effect.

5. (1) Without prejudice to the Waste Management (Permit and Control) Regulations, the application for a permit for an incineration or co-incineration plant to the competent authority shall include a description of the measures which are envisaged to guarantee that: Application for permit.

(a) the plant is designed, equipped and will be operated in accordance with these regulations as applicable to the categories of waste to be incinerated;

(b) the heat generated during the incineration and co-incineration process is recovered as far as practicable e.g. through combined heat and power, the generating of process steam or district heating;

(c) the residues will be minimised in their amount and harmfulness and recycled where appropriate;

(d) the disposal of the residues which cannot be prevented, reduced or recycled will be carried out in conformity with relevant regulations.

(2) The competent authority shall grant the permit only if the application shows that the proposed measurement techniques for emissions into the air and water comply with Schedule 4 as applicable.

Measurement techniques for emissions to air and water.

6. (1) Without prejudice to the Waste Management (Permit and Control) Regulations, the permit granted by the competent authority for an incineration or co-incineration plant shall:

(a) list explicitly the categories of waste which may be treated. The list shall refer to Schedule 1 of the Waste Management (Permit and Control) Regulations, and shall contain information on the quantity of waste, where appropriate;

(b) include the total waste incinerating or co-incinerating capacity of the plant;

(c) specify the sampling and measurement procedures used to satisfy the obligations imposed for periodic measurements of each air and water pollutant.

(2) In addition, the competent authority shall ensure that the permit related to plants incinerating hazardous waste, shall :

(a) list the quantities of the different categories of hazardous waste which may be treated;

(b) specify the minimum and maximum mass flows of those hazardous wastes, their lowest and maximum calorific values and their maximum contents of pollutants, e.g. PCB, PCP, chlorine, fluorine, sulphur, heavy metals.

(3) The competent authority may specify in the permit the categories of waste which can be co-incinerated in defined categories of co-incineration plants.

7. Where the operator of an incineration or co-incineration plant for non-hazardous waste is envisaging a substantial change in the operation of the installation, such as the incineration or co-incineration of hazardous waste, he shall need to apply for a new permit with respect to those parts of the installation which are affected by the change.

Substantial change
in operations.

8. (1) The operator of the incineration or co-incineration plant shall take all necessary precautions concerning the delivery and reception of waste in order to prevent or to limit as far as practicable negative effects on the environment, in particular the pollution of air, soil, surface water and groundwater as well as odours and noise, and direct risks to human health.

Delivery and
reception of waste.

(2) The operator shall determine the mass of each category of waste according to Schedule 1 in the Waste Management (Permit and Control) Regulations, prior to accepting the waste at the incineration or co-incineration plant.

(3) Prior to accepting hazardous waste at the incineration or co-incineration plant, the operator shall have available information about the waste for the purpose of verifying, *inter alia*, compliance with the permit requirements specified in regulation 6. This information shall cover:

(a) all the administrative information on the generating process contained in the documents specified in the permit conditions, including those related to the Environment Protection (Control of Transboundary Movement of Toxic and other Substances) Regulations and regulations governing the transportation of dangerous-goods;

(b) the physical, and as far as practicable, chemical composition of the waste and all other information necessary to evaluate its suitability for the intended incineration process;

(c) the hazardous characteristics of the waste, the substances with which it cannot be mixed, and the precautions to be taken in handling the waste.

(4) Prior to accepting hazardous waste at the incineration or co-incineration plant, the following reception procedures shall be carried out by the operator:

(a) the checking of the documents mentioned in subregulation (3) in this regulation;

(b) the taking of representative samples, unless this is considered inappropriate by the competent authority, e.g. for infectious clinical waste, as far as possible before unloading, to verify conformity with the information provided for in subregulation (3) of this regulation by carrying out controls and to enable the Competent authorities to identify the nature of the wastes treated. These samples shall be kept for at least one month after the incineration.

(5) The competent authority may grant exemptions from regulations (2), (3) and (4) of this regulation for industrial plants and undertakings incinerating or co-incinerating only their own waste at the place of generation of the waste.

Operating
conditions.

9. (1) (a) The operator shall ensure a level of incineration such that the slag and bottom ashes Total Organic Carbon (TOC) content is less than 3% or their loss on ignition is less than 5% of the dry weight of the material. If necessary, the operator shall use appropriate techniques of waste pretreatment.

(b) The competent authority shall ensure that :

(i) incineration plants are designed, equipped, built and operated in such a way that the gas resulting from the process is raised, after the last injection of combustion air, in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of 850 °C, as measured near the inner wall or at another representative point of the combustion chamber as specified by the competent authority, for two seconds. If hazardous wastes with a content of more than 1% of halogenated organic substances, expressed as chlorine, are incinerated, the temperature has to be raised to 1,100 °C for at least two seconds.

(ii) Each line of the incineration plant shall be equipped with at least one auxiliary burner. This burner must be switched on automatically when the temperature of the combustion gases after the last injection of combustion air falls below 850 °C or 1,100 °C as the case may be. It shall also be used during plant start-up and shut-down operations in order to ensure that the temperature of 850 °C or 1,100 °C as the case may be is maintained at all times during these operations and as long as unburned waste is in the combustion chamber.

(iii) During start-up and shut-down or when the temperature of the combustion gas falls below 850 °C or 1,100 °C as the case may be, the auxiliary burner shall not be fed with fuels which can cause higher emissions than those resulting from the burning of gas oil, liquefied gas or natural gas.

(2) For co-incineration plants, the competent authority shall ensure that they are designed, equipped, built and operated in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of 850 °C for two seconds. If hazardous wastes with a content of more than 1% of halogenated organic substances, expressed as chlorine, are co-incinerated, the temperature has to be raised to 1,100 °C.

(3) The competent authority shall ensure that incineration and co-incineration plants have and operate an automatic system to prevent waste feed:

(a) at start-up, until the temperature of 850 °C or 1,100 °C as the case may be or the temperature specified according to subregulation (4) has been reached;

(b) whenever the temperature of 850 °C or 1,100 °C as the case may be or the temperature specified according to subregulation (4) is not maintained;

(c) whenever the continuous measurements required by these regulations show that any emission limit value is exceeded due to disturbances or failures of the purification devices.

(4) The competent authority may authorise conditions different from those laid down in subregulation (1) of this regulation and, as regards the temperature, subregulation (3) of this regulation and specified in the permit for certain categories of waste or for certain thermal processes, provided the requirements of these regulations are met. The change of the operational conditions shall not cause more residues or residues with a higher content of organic pollutants compared to those residues which could be expected under the conditions laid down in subregulation (1):

Provided that the competent authority may authorise conditions different from those laid down in subregulation (2) of this regulation and, as regards the temperature, subregulation (3) of this regulation and specified in the permit for certain categories of waste or

for certain thermal processes, provided the requirements of these regulations are met. Such authorisation shall be conditional upon at least the provisions for emission limit values set out in Schedule 6 for total organic carbon and carbon monoxide being complied with:

Provided further that, in the case of co-incineration of their own waste at the place of its production in existing bark boilers within the pulp and paper industry, such authorisation by the competent authority shall be conditional upon at least the provisions for emission limit values set out in Schedule 6 for total organic carbon being complied with.

(5) The competent authority shall ensure that :

(a) Incineration and co-incineration plants shall be designed, equipped, built and operated in such a way as to prevent emissions into the air giving rise to significant ground-level air pollution; in particular, exhaust gases shall be discharged in a controlled fashion and in conformity with relevant regulations by means of a stack the height of which is calculated in such a way as to safeguard human health and the environment.

(b) Any heat generated by the incineration or the co-incineration process shall be recovered as far as practicable.

(c) Waste that is deemed to be infectious by the competent authority shall be placed straight in the furnace, without first being mixed with other categories of waste and without direct handling.

(d) The management of the incineration or the co-incineration plant shall be in the hands of a natural person who is competent to manage the plant.

Air emission limit values.

10. (1) The competent authority shall ensure that incineration plants are designed, equipped, built and operated in such a way that the emission limit values set out in Schedule 6 are not exceeded in the exhaust gas.

(2) The competent authority shall ensure that co-incineration plants are designed, equipped, built and operated in such a way that the emission limit values determined according to or set out in Schedule 3 are not exceeded in the exhaust gas:

Provided that if in a co-incineration plant more than 40% of the resulting heat release comes from hazardous waste, the emission limit values set out in Schedule 6 shall apply.

(3) The competent authority shall ensure that the measurements made to verify compliance with the emission limit values shall be standardised with respect to the conditions laid down in regulation 14.

(4) The competent authority shall ensure that in the case of co-incineration of untreated mixed municipal waste, the limit values will be determined according to Schedule 6, and Schedule 3 will not apply.

(5) The competent authority may set air emission limit values for polycyclic aromatic hydrocarbons or other pollutants.

11. (1) Waste water from the cleaning of exhaust gases discharged from an incineration or co-incineration plant shall be subject to a permit granted in accordance with the relevant regulations.

Water discharges
from the cleaning of
exhaust gases.

(2) The operator shall ensure that discharges to the aquatic environment of waste water resulting from the cleaning of exhaust gases shall be limited as far as practicable, at least in accordance with the emission limit values set in Schedule 5.

(3) The competent authority shall ensure that subject to a specific provision in the permit, the waste water from the cleaning of exhaust gases may be discharged to the aquatic environment after separate treatment on condition that:

(a) the requirements of relevant regulations are complied with in the form of emission limit values; and

(b) the mass concentrations of the polluting substances referred to in Schedule 5 do not exceed the emission limit values laid down therein.

(4) The operator shall ensure that the emission limit values shall apply at the point where waste waters from the cleaning of exhaust gases containing the polluting substances referred to in Schedule 5 are discharged from the incineration or co-incineration plant:

Provided that where the waste water from the cleaning of exhaust gases is treated on site collectively with other on-site sources of waste water, the operator shall take the measurements referred to in regulation 14:

(a) on the waste water stream from the exhaust gas cleaning processes prior to its input into the collective waste water treatment plant;

(b) on the other waste water stream or streams prior to its or their input into the collective waste water treatment plant;

(c) at the point of final waste water discharge, after the treatment, from the incineration plant or co-incineration plant:

Provided that the competent authority shall, in order to determine the emission levels in the final waste water discharge that can be attributed to the waste water arising from the cleaning of exhaust gases in order to check compliance with the emission limit values set out in Schedule 5, shall apply appropriate mass balance calculations.

Provided further that under no circumstances shall the operator dilute waste water for the purpose of complying with the emission limit values set in Schedule 5.

(5) When waste waters from the cleaning of exhaust gases containing the polluting substances referred to in Schedule 5 are treated outside the incineration or co-incineration plant at a treatment plant intended only for the treatment of this sort of waste water, the operator shall ensure that the emission limit values of Schedule 5 are applied at the point where the waste waters leave the treatment plant:

Provided that if this off-site treatment plant is not only dedicated to treat waste water from incineration, the operator shall take the appropriate mass balance calculations, as provided for under paragraphs (a), (b) and (c) of sub-regulation (4), in order to determine the emission levels in the final waste water discharge that can be attributed to the waste water arising from the cleaning of exhaust gases in order to check compliance with the emission limit values set out in Schedule 5 for the waste water stream from the exhaust gas cleaning process.

Provided further that under no circumstances shall the operator dilute waste water for the purpose of complying with the emission limit values set in Schedule 5.

(6) The competent authority shall ensure that the permit:

(a) establishes emission limit values for the polluting substances referred to in Schedule 5, in accordance with regulation

(2) and in order to meet the requirements referred to in paragraph (a) of sub-regulation (3);

(b) sets operational control parameters for waste water at least for pH, temperature and flow.

(7) The competent authority shall ensure that incineration and co-incineration plant sites, including associated storage areas for wastes, are designed in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater in accordance with the provisions provided for in relevant regulations:

Provided that the operator provides storage capacity for contaminated rainwater run-off from the incineration or co-incineration plant site or for contaminated water arising from spillage or fire-fighting operations:

Provided further that this storage capacity be adequate to ensure that such waters can be tested and treated before discharge where necessary.

(8) The competent authority may set emission limit values for discharges of wastewater from the cleaning of exhaust gases for polycyclic aromatic hydrocarbons or other pollutants.

12. The operator shall endeavour to minimise the amount and harmfulness of residues resulting from the operation of the incineration or co-incineration plant: Residues.

Provided that the operator shall, where appropriate, recycle residues directly in the plant or outside in accordance with relevant regulations:

Provided further that the operator shall take all appropriate measures to prevent dispersal in the environment of dry residues in the form of dust, such as boiler dust and dry residues from the treatment of combustion gases, during transport and intermediate storage:

Provided further that the operator, prior to determining the routes for the disposal or recycling of the residues from incineration and co-incineration plants, shall carry out appropriate tests to establish the physical and chemical characteristics and the polluting potential of the different incineration residues. These analysis shall concern the total soluble fraction and heavy metals soluble fraction.

Control and
monitoring.

13. (1) Equipment, location of sampling and measurement points and techniques proposed by the operator in order to monitor the parameters, conditions and mass concentrations relevant to the incineration or co-incineration process shall be subject to approval by the competent authority.

(2) The operator shall ensure that the appropriate installation and the functioning of the automated monitoring equipment for emissions into air and water are subject to an annual surveillance test and certified by an independent expert approved by the competent authority. Moreover, the operator shall calibrate the equipment by means of parallel measurements with the reference methods at least every three years or more often at the request of the competent authority.

(3) The operator shall carry out periodic measurements of the emissions into the air and water in accordance with Schedule 4, points 1 and 2.

Measurement
requirements.

14. (1) The operator shall carry out the following measurements of air pollutants in accordance with Schedule 4 at the incineration and co-incineration plant:

(a) continuous measurements of the following substances: Nitrogen Oxides (NO_x), provided that emission limit values are set, Carbon Monoxide (CO), total dust, Total Organic Carbon (TOC), Hydrogen Chloride (HCl), Hydrogen Fluoride (HF), Sulphur Dioxide (SO₂);

(b) continuous measurements of the following process operation parameters: temperature near the inner wall or at another representative point of the combustion chamber as approved by the competent authority, concentration of oxygen, pressure, temperature and water vapour content of the exhaust gas;

(c) (1) At least two measurements per year of heavy metals, dioxins and furans; one measurement at least every three months shall however be carried out for the first 12 months of operation. The competent authority may fix measurement periods where they have set emission limit values for polycyclic aromatic hydrocarbons or other pollutants.

(2) The operator shall verify the residence time as well as the minimum temperature and the oxygen content of the exhaust gases, at least once when the incineration or co-incineration plant is brought into service and under the most unfavourable operating conditions anticipated to the satisfaction of the competent authority.

(3) If the competent authority is satisfied that the emission limit value for HCl is not being exceeded by the use of treatment stages for HCl, the competent authority may authorise the operator to omit the continuous measurement of HF. In this case the emissions of HF shall be subject to periodic measurements as laid down in paragraph (1)(c).

(4) The operator may not measure continuously the water vapour content if the sampled exhaust gas is dried before the emissions are analysed.

(5) If the operator of an incineration or co-incineration plant can prove to the satisfaction of the competent authority that the emissions of HCl, HF and SO₂ can under no circumstances be higher than the prescribed emission limit values, the competent authority may specify periodic measurements of these parameters instead of continuous measurement.

(6) If the operator proves to the satisfaction of the competent authority that the emissions resulting from co-incineration or incineration are consistently below 50% of the emission limit values determined according to Schedule 3 or Schedule 6, respectively, and provided that criteria for the requirements to be met are available, the competent authority may specify in the permit that the frequency of the periodic measurements for heavy metals shall be once every two years, instead of twice a year, and for dioxins and furans once every year instead of twice a year:

Provided that these criteria shall at least be based on the provisions of the paragraph (1) in this regulation:

Provided further that the competent authority may until 1 January 2005 authorise the reduction of the frequency even if no such criteria are available provided that:

(a) the waste to be co-incinerated or incinerated consists only of certain sorted combustible fractions of non-hazardous waste not suitable for recycling and presenting certain characteristics, and which is further specified on the basis of the assessment referred to in paragraph (6) of this regulation;

(b) national quality criteria are available for these wastes;

(c) co-incineration and incineration of these wastes is in line with the relevant waste management plans;

(d) the operator can prove to the competent authority that the emissions are under all circumstances significantly below the emission limit values set out in Schedule 3 or Schedule 6 for heavy metals, dioxins and furans; this assessment shall be based on information on the quality of the waste concerned and measurements of the emissions of the said pollutants;

(e) the quality criteria and the new period for the periodic measurements are specified in the permit.

(7) The operator shall ensure that the results of the measurements made to verify compliance with the emission limit values be standardised at the following conditions and for oxygen according to the formula as referred to in Schedule 7:

(a) Temperature 273 K, pressure 101,3 kPa, 11% oxygen, dry gas, in exhaust gas of incineration plants;

(b) Temperature 273 K, pressure 101,3 kPa, 3% oxygen, dry gas, in exhaust gas of incineration of waste oil;

(c) when the wastes are incinerated or co-incinerated in an oxygen-enriched atmosphere, the results of the measurements can be standardised at an oxygen content laid down by the competent authority reflecting the special circumstances of the individual case;

(d) in the case of co-incineration, the results of the measurements shall be standardised at a total oxygen content as calculated in Schedule 3.

Provided that when the emissions of pollutants are reduced by exhaust gas treatment in an incineration or co-incineration plant treating hazardous waste, the standardisation with respect to the oxygen contents provided for in sub-paragraph (7)(a) in this regulation shall be done only if the oxygen content measured over the same period as for the pollutant concerned exceeds the relevant standard oxygen content.

(8) The operator shall record, process and present all measurement results in an appropriate fashion in order to enable the competent authority to verify compliance with the permitted operating conditions and emission limit values laid down in these regulations in accordance with procedures to be decided upon by the competent authority.

(9) The competent authority shall regard the emission limit values for air as being complied with if:

(a) (i) none of the daily average values exceeds any of the emission limit values set out in Schedule 6(a) or Schedule 3;

(ii) 97% of the daily average value over the year does not exceed the emission limit value set out in Schedule 6(e) first indent;

(b) either none of the half-hourly average values exceeds any of the emission limit values set out in Schedule 6(b), column A or, where relevant, 97% of the half-hourly average values over the year do not exceed any of the emission limit values set out in Schedule 6(b), column B;

(c) none of the average values over the sample period set out for heavy metals and dioxins and furans exceeds the emission limit values set out in Schedule 6 (c) and (d) or Schedule 3;

(d) the provisions of Schedule 6(e), second indent or Schedule 3 are met.

(10) The operator shall determine the half-hourly average values and the 10-minute averages within the effective operating time (excluding the start-up and shut-off periods if no waste is being incinerated) from the measured values after having subtracted the value of the confidence interval specified in point 3 of Schedule 4. Provided that the daily average values shall be determined from those validated average values:

Provided further that to obtain a valid daily average value the operator shall discard, due to malfunction or maintenance of the continuous measurement system, no more than five half-hourly average values in any day; and that the operator shall discard, due to malfunction or maintenance of the continuous measurement system, no more than ten daily average values per year.

(11) The operator shall determine the average values over the sample period and the average values in the case of periodical measurements of HF, HCl and SO₂ in accordance with the requirements of regulation 13 and Schedule 4.

(12) The operator shall carry out the following measurements at the point of waste water discharge:

(a) continuous measurements of the parameters referred to in regulation 11 paragraph (6)(b);

(b) spot sample daily measurements of total suspended solids; the competent authority may alternatively provide for measurements of a flow proportional representative sample over a period of 24 hours;

(c) at least monthly measurements of a flow proportional representative sample of the discharge over a period of 24 hours of the polluting substances referred to in regulation 11 paragraph (3) with respect to items 2 to 10 in Schedule 5;

(d) at least every six months measurements of dioxins and furans; however one measurement at least every three months shall be carried out for the first 12 months of operation. The competent authority may fix measurement periods where emission limit values for polycyclic aromatic hydrocarbons or other pollutants have been set.

(13) The operator shall monitor the mass of pollutants in the treated waste water at the frequency indicated in the relative regulations and as laid down in the permit.

(14) The competent authority shall regard the emission limit values for water as being complied with if:

(a) for total suspended solids (polluting substance number 1 in Schedule 5), 95% and 100% of the measured values do not exceed the respective emission limit values as set out in Schedule 5;

(b) for heavy metals (polluting substances number 2 to 10 in Schedule 5) no more than one measurement per year exceeds the emission limit values set out in schedule 5; or, if the competent authority provides for more than 20 samples per year, no more than 5% of these samples exceed the emission limit values set out in Schedule 5;

(c) for dioxins and furans (polluting substance 11 in Schedule 5), the twice-yearly measurements do not exceed the emission limit value set out in Schedule 5.

(15) The operator shall inform the competent authority without delay should the measurements taken show that the emission limit values for air or water laid down in these regulations have been exceeded.

15. (1) Without prejudice to the regulations on Access to the Public to Information on the Environment and other relevant regulations, applications for new permits for incineration and co-incineration plants shall be made available at the offices of the competent authority or at any other convenient place for at least 30 days to enable the public to comment on them before the competent authority reaches a decision. That decision, including at least a copy of the permit, and any subsequent updates, shall also be made available to the public.

Access to the public to information on the environment and other regulations.

(2) The operator of an incineration or co-incineration plant with a nominal capacity of two tonnes or more per hour and without prejudice to other regulations, shall submit to the competent authority, an annual report on the functioning and monitoring of the plant. This report shall be made available to the public. This report shall, as a minimum requirement, give an account of the running of the process and the emissions into air and water compared with the emission standards in these regulations. The competent authority shall make available to the public a list of incineration or co-incineration plants with a nominal capacity of less than two tonnes per hour.

16. (1) The competent authority shall lay down in the permit the maximum permissible period of any technically unavoidable stoppages, disturbances, or failures of the purification devices or the measurement devices, during which the concentrations in the discharges into the air and the purified waste water of the regulated substances may exceed the prescribed emission limit values.

Abnormal operating conditions.

(2) The operator, in the case of a breakdown, shall reduce or close down operations as soon as practicable until normal operations can be restored.

(3) Without prejudice to regulation 9 (3)(c) the operator shall under no circumstances continue to incinerate waste for a period of more than four hours uninterrupted where emission limit values from an incineration plant or co-incineration plant or incineration line are exceeded; moreover, the cumulative duration of operation in such conditions over one year shall be less than 60 hours. The 60-hour duration applies to those lines of the entire plant which are linked to one single flue gas cleaning device.

(4) The operator shall ensure that the total dust content of the emissions into the air of an incineration plant shall under no circumstances exceed 150 mg/m³ expressed as a half-hourly average; moreover the air emission limit values for CO and TOC shall not be exceeded. All other conditions referred to in regulation 9 shall be complied with.

Offences under these regulations.

17. Any person shall be guilty of an offence under these Regulations if:

(a) he fails to comply with any provision of these regulations or fails to comply with permit conditions or with any order lawfully given in terms of any provision of these regulations; or

(b) he contravenes any restriction, prohibition or requirement imposed by or under these regulations; or

(c) he acts in contravention of any of the provisions of these regulations; or

(d) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of these regulations or to fail to comply with any such provisions (including any order lawfully given in terms of any of the provision of these regulations) or to contravene any restriction, prohibition or requirement imposed by or under the said regulations.

Penalties.

18. Any person who commits an offence against these regulations shall, on conviction, be liable:

(a) on a first conviction to a fine (*multa*) of not less than five hundred Maltese liri but not exceeding one thousand Maltese liri;

(b) on a second or subsequent convictions, to a fine (*multa*) of not less than one thousand Maltese liri, but not exceeding two thousand Maltese liri or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment:

Provided that the court shall order any person who has been found guilty of committing an offence against these regulations to pay for the expenses incurred by the competent authority as a result of the said offence, the revocation of the permit issued by the competent authority and the confiscation of the corpus delicti, including the vehicle, if applicable.

Applicability of the Criminal Code.
Cap. 9.

19. (1) The provisions of articles 23 and 30 of the Criminal Code shall, *mutatis mutandis*, apply to proceedings in respect of offences against these regulations, so however that the disqualification from holding or obtaining a licence, permit or Authority shall in no case be for less than one year.

(2) Notwithstanding the provisions of article 370 of the Criminal Code, proceedings for an offence against these regulations shall be held before the Court of Magistrates (Malta) or the Court of Magistrates (Gozo), as the case may be, and shall be in accordance with the provisions of the Criminal Code regulating the procedure before the said courts as courts of criminal judicature.

(3) Notwithstanding the provisions of the Criminal Code, the Attorney General shall always have a right of appeal to the Court of Criminal Appeal from any judgement given by the Court of Magistrates (Malta) or the Court of Magistrates (Gozo) in respect of proceedings for any offence against these regulations.

20. The Schedules to these regulations are being published in the English language with the English text of these regulations.

Language of
Schedules.

FRACTIONS EXCLUDED FROM THE DEFINITION OF**"MIXED MUNICIPAL WASTE"****20 01⁽¹⁾ separately collected fractions**

20 01 01 paper and cardboard

20 01 02 glass

20 01 08 biodegradable kitchen and canteen waste

20 01 10 clothes

20 01 11 textiles

20 01 13*(²) solvents

20 01 14* acids

20 01 15* alkalines

20 01 17* photochemicals

20 01 19* pesticides

20 01 21* fluorescent tubes and other mercury-containing waste

20 01 23* discarded equipment containing chlorofluorocarbons

20 01 25 edible oil and fat

20 01 26* oil and fat other than those mentioned in 20 01 25

20 01 27* paint, inks, adhesives and resins containing dangerous substances

20 01 28 paint, inks, adhesives and resins other than those mentioned in 20 01 27

20 01 29* detergents containing dangerous substances

20 01 30 detergents other than those mentioned in 20 01 29

20 01 31* cytotoxic and cytostatic medicines

20 01 32 medicines other than those mentioned in 20 01 31

20 01 33* batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries

20 01 34 batteries and accumulators other than those mentioned in 20 01 33

20 01 35* discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

20 01 36 discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

20 01 37* wood containing dangerous substances

20 01 38 wood other than that mentioned in 20 01 37

20 01 39 plastics

20 01 40 metals

20 01 41 wastes from chimney sweeping

20 01 99 other fractions not otherwise specified

20 02 garden and park wastes (including cemetery waste)

20 02 01 biodegradable waste

20 02 02 soil and stones

20 02 03 other non-biodegradable wastes

¹ Numbers refer to the categories of waste as appear in Schedule 1 of the Waste Management (Permit and Control) Regulations

² * Indicates that the category is hazardous waste

SCHEDULE 2
EQUIVALENCE FACTORS FOR
DIBENZO-P-DIOXINS AND DIBENZOFURANS

For the determination of the total concentration (TE) of dioxins and furans, the mass concentrations of the following dibenzo-p-dioxins and dibenzofurans shall be multiplied by the following equivalence factors before summing:

		Toxic equivalence factor
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

SCHEDULE 3**DETERMINATION OF AIR EMISSION LIMIT VALUES FOR****THE CO-INCINERATION OF WASTE**

The following formula (mixing rule) is to be applied whenever a specific total emission limit value 'C' has not been set out in a table in this Schedule.

The limit value for each relevant pollutant and carbon monoxide in the exhaust gas resulting from the co-incineration of waste shall be calculated as follows:

$$\frac{V_{\text{waste}} \times C_{\text{waste}} + V_{\text{proc}} \times C_{\text{proc}}}{V_{\text{waste}} + V_{\text{proc}}} = C$$

- V_{waste} exhaust gas volume resulting from the incineration of waste only determined from the waste with the lowest calorific value specified in the permit and standardised at the conditions given by these regulations.
If the resulting heat release from the incineration of hazardous waste amounts to less than 10 % of the total heat released in the plant, V_{waste} must be calculated from a (notional) quantity of waste that, being incinerated, would equal 10 % heat release, the total heat release being fixed.
- C_{waste} emission limit values set for incineration plants in Schedule 6 for the relevant pollutants and carbon monoxide.
- V_{proc} exhaust gas volume resulting from the plant process including the combustion of the authorised fuels normally used in the plant (wastes excluded) determined on the basis of oxygen contents at which the emissions must be standardised as laid down in relevant regulations. In the absence of regulations for this kind of plant, the real oxygen content in the exhaust gas without being thinned by addition of air unnecessary for the process must be used.
The standardisation at the other conditions is given in these regulations.
- C_{proc} emission limit values as laid down in the tables of this Schedule for certain industrial sectors or in case of the absence of such a table or such values, emission limit values of the relevant pollutants and carbon monoxide in the flue gas of plants which comply with the national laws, regulations and administrative provisions for such plants while burning the normally authorised fuels (wastes excluded).
In the absence of these measures the emission limit values laid down in the permit are used. In the absence of such permit values the real mass concentrations are used.
- C total emission limit values and oxygen content as laid down in the tables of this Schedule for certain industrial sectors and certain pollutants or in case of the absence of such a table or such values total emission limit values for CO and the relevant pollutants replacing the emission limit values as laid down in specific Schedules in these regulations. The total oxygen content to replace the oxygen content for the standardisation is calculated on the basis of the content above respecting the partial volumes.

II.1. Special provisions for cement kilns co-incinerating waste

Daily average values (for continuous measurements), sample periods and other measurement requirements as in regulation 10. All values in mg/m^3 (Dioxins and furans ng/m^3). Half-hourly average values shall only be needed in view of calculating the daily average values.

The results of the measurements made to verify compliance with the emission limit values shall be standardised at the following conditions: Temperature 273 K, pressure 101,3 kPa, 10 % oxygen, dry gas.

II.1.1. C — total emission limit values

Pollutant	C
Total dust	30
HCl	10
HF	1
NOx, for new plants	500
Cd + Tl	0.05
Hg	0.05
Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V	0.5
Dioxins and furans	0.1

II.1.2. C — total emission limit values for SO₂ and TOC

Pollutant	C
SO ₂	50
TOC	10

Exemptions may be authorised by the Competent Authority in cases where TOC and SO₂ do not result from the incineration of waste.

II.1.3. Emission limit value for CO

Emission limit values for CO can be set by the Competent Authority.

II.2. Special provisions for combustion plants co-incinerating waste

II.2.1. Daily average values

Without prejudice to relevant regulations governing large combustion plants and in the case where, for large combustion plants, more stringent emission limit values are set, the latter shall replace, for the plants and pollutants concerned, the emission limit values as laid down in the following tables (C_{proc}). In that case, the following tables shall be adapted to these more stringent emission limit values.

Half-hourly average values shall only be needed in view of calculating the daily average values.

C_{proc} :

C_{proc} for solid fuels expressed in mg/Nm^3 (O_2 content 6 %):

Pollutants	Less than 50 MWth	50-100 MWth	100 to 300 MWth	Higher than 300 MWth
SO ₂ General case		850	850 to 200 (linear decrease from 100 to 300 MWth)	200
Indigenous fuels		Or rate of desulphurisation greater or equal to 90%	Or rate of desulphurisation greater or equal to 92%	Or rate of desulphurisation greater or equal to 95%
NO _x		400	300	200
Dust	50	50	30	30

Until 1 January 2007 and without prejudice to relevant legislation, the emission limit value for NO_x does not apply to plants only co-incinerating hazardous waste.

Until 1 January 2008, exemptions for NO_x and SO₂ may be authorised by the Competent authorities for existing co-incineration plants between 100 and 300 MWth using fluidised bed technology and burning solid fuels provided that the permit foresees a C_{proc} value of not more than 350 mg/Nm^3 for NO_x and not more than 850 to 400 mg/Nm^3 (linear decrease from 100 to 300 MWth) for SO₂.

C_{proc} for biomass expressed in mg/Nm^3 (O_2 content 6 %):

'Biomass' means: products consisting of any whole or part of a vegetable matter from agriculture or forestry, which can be used for the purpose of recovering its energy content as well as wastes listed in provision 3(1)(a)(i) to (v).

Pollutants	Less than 50 MWth	50-100 MWth	100 to 300 MWth	Higher than 300 MWth
SO ₂		200	200	200
NO _x		350	300	300
Dust	50	50	30	30

Until 1 January 2008, exemptions for NO_x may be authorised by the Competent Authority for existing co-incineration plants between 100 and 300 MWth using fluidised bed technology and burning biomass provided that the permit foresees a C_{proc} value of not more than 350 mg/Nm^3 .

C_{proc} for liquid fuels expressed in mg/Nm^3 (O_2 content 3 %):

Pollutants	Less than 50 MWth	50-100 MWth	100 to 300 MWth	Higher than 300 MWth
SO ₂		850	850 to 200 (linear decrease from 100 to 300 MWth)	200

NO _x		400	300	200
Dust	50	50	30	30

II.2.2. C — total emission limit values

C expressed in mg/Nm³ (O₂ content 6 %). All average values over the sample period of a minimum of 30 minutes and a maximum of 8 hours:

Pollutant	C
Cd + Tl	0.05
Hg	0.05
Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V	0.5

C expressed in ng/Nm³ (O₂ content 6 %). All average values measured over the sample period of a minimum of 6 hours and a maximum of 8 hours:

Pollutant	C
Dioxins and furans	0.1

II.3. Special provisions for industrial sectors not covered under II.1 or II.2 co-incinerating waste

II.3.1. C — total emission limit values:

C expressed in ng/Nm³. All average values measured over the sample period of a minimum of 6 hours and a maximum of 8 hours:

Pollutant	C
Dioxins and furans	0.1

C expressed in mg/Nm³. All average values over the sample period of a minimum of 30 minutes and a maximum of 8 hours:

Pollutant	C
Cd + Tl	0.05
Hg	0.05

SCHEDULE 4**Measurement techniques**

1. Measurements for the determination of concentrations of air and water polluting substances have to be carried out representatively.
2. Sampling and analysis of all pollutants including dioxins and furans as well as reference measurement methods to calibrate automated measurement systems shall be carried out as given by CEN-standards. If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.
3. At the daily emission limit value level, the values of the 95 % confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Carbon monoxide:	10 %	
Sulphur dioxide:	20 %	
Nitrogen dioxide:	20 %	
Total dust:	30 %	
Total organic carbon:		30 %
Hydrogen chloride:	40 %	
Hydrogen fluoride:	40 %	

SCHEDULE 5**Emission limit values for discharges of waste water from
the cleaning of exhaust gases**

Polluting substances	Emission limit values expressed in mass concentrations for unfiltered samples	
	95% ----- 30 mg/l	100% ----- 45 mg/l
1. Total suspended solids		
2. Mercury and its compounds, expressed as mercury (Hg)	0.03 mg/l	
3. Cadmium and its compounds, expressed as cadmium (Cd)	0.05 mg/l	
4. Thallium and its compounds, expressed as thallium (Tl)	0.05 mg/l	
5. Arsenic and its compounds, expressed as arsenic (As)	0.15 mg/l	
6. Lead and its compounds, expressed as lead (Pb)	0.2 mg/l	
7. Chromium and its compounds, expressed as chromium (Cr)	0.5 mg/l	
8. Copper and its compounds, expressed as copper (Cu)	0.5 mg/l	
9. Nickel and its compounds, expressed as nickel (Ni)	0.5 mg/l	
10. Zinc and its compounds, expressed as zinc (Zn)	1.5 mg/l	
11. Dioxins and furans, defined as the sum of the individual dioxins and furans evaluated in accordance with Schedule 2	0.3 mg/l	

Until 1 January 2008, the Competent Authority may authorise exemptions for total suspended solids for existing incineration plants provided the permit foresees that 80% of the measured values do not exceed 30 mg/l and none of them exceed 45mg/l.

SCHEDULE 6**AIR EMISSION LIMIT VALUES****(a) Daily average values**

Total dust	10 mg/m ³
Gaseous and vaporous organic substances, expressed as total organic carbon	10 mg/m ³
Hydrogen chloride (HCl)	10 mg/m ³
Hydrogen fluoride (HF)	1 mg/m ³
Sulphur dioxide (SO ₂)	50 mg/m ³
Nitrogen monoxide (NO) and nitrogen dioxide (NO ₂) expressed as nitrogen dioxide for existing incineration plants with a nominal capacity exceeding 6 tonnes per hour or new incineration plants	200 mg/m ³ (*)
Nitrogen monoxide (NO) and nitrogen dioxide (NO ₂), expressed as nitrogen dioxide for existing Incineration plants with a nominal capacity of 6 tonnes per hour or less	400 mg/m ³ (*)
(*) Until 1 January 2007 and without prejudice to relevant regulations the emission limit value for NO _x does not apply to plants incinerating only hazardous waste.	

The Competent Authority may authorise exemptions for NO_x for existing incineration plants:

- with a nominal capacity of 6 tonnes per hour, provided that the permit foresees the daily average values do not exceed 500 mg/m³ and this until 1 January 2008,
- with a nominal capacity of more than 46 tonnes per hour but equal or less than 16 tonnes per hour, provided the permit foresees the daily average values do not exceed 400 mg/m³ and this until 1 January 2010,
- with a nominal capacity of more than 16 tonnes per hour but less than 25 tonnes per hour and which do not produce water discharges, provided that the permit foresees the daily average values do not exceed 400 mg/m³ and this until 1 January 2008.

Until 1 January 2008, exemptions for dust may be authorised by the Competent Authority for existing incinerating plants, provided that the permit foresees the daily average values do not exceed 20 mg/m³.

(b) Half-hourly average values

	(100 %) A	(97 %) B
Total dust	30 mg/m ³	10 mg/m ³
Gaseous and vaporous organic substances, expressed as total organic carbon	20 mg/m ³	10 mg/m ³
Hydrogen chloride (HCl)	60 mg/m ³	10 mg/m ³
Hydrogen fluoride (HF)	4 mg/m ³	2 mg/m ³
Sulphur dioxide (SO ₂)	200 mg/m ³	50 mg/m ³
Nitrogen monoxide (NO) and nitrogen dioxide (NO ₂), expressed as nitrogen dioxide for existing incineration plants with a nominal capacity exceeding 6 tonnes per hour or new incineration plants	400 mg/m ³ (*)	200 mg/m ³ (*)
(*) Until 1 January 2007 and without prejudice to relevant regulations the emission limit value for NO _x does not apply to plants only incinerating hazardous waste.		

Until 1 January 2010, exemptions for NO_x may be authorised by the Competent Authority for existing incineration plants with a nominal capacity between 6 and 16 tonnes per hour, provided the half-hourly average value does not exceed 600 mg/m³ for column A or 400 mg/m³ for column B.

(c) All average values over the sample period of a minimum of 30 minutes and a maximum of 8 hours

Cadmium and its compounds, expressed as cadmium (Cd)	Total 0.05 mg/m ³	total 0.1 mg/m ³ (*)
Thallium and its compounds, expressed as thallium (Tl)		
Mercury and its compounds, expressed as mercury (Hg)	0.05 mg/m ³	0.1 mg/m ³ (*)
Antimony and its compounds, expressed as antimony (Sb)	total 0.5 mg/m ³	total 1 mg/m ³ (*)
Arsenic and its compounds, expressed as arsenic (As)		
Lead and its compounds, expressed as lead (Pb)		
Chromium and its compounds, expressed as chromium (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)		
(*) Until 1 January 2007 average values for existing plants for which the permit to operate has been granted before 31 December 1996, and which incinerate hazardous waste only.		

These average values cover also gaseous and the vapour forms of the relevant heavy metal emissions as well as their compounds.

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(d) Average values shall be measured over a sample period of a minimum of 6 hours and a maximum of 8 hours. The emission limit value refers to the total concentration of dioxins and furans calculated using the concept of toxic equivalence in accordance with Schedule 2.

Dioxins and furans	0.1 ng/m ³
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(e) The following emission limit values of carbon monoxide (CO) concentrations shall not be exceeded in the combustion gases (excluding the start-up and shut-down phase):

- 50 milligrams/m³ of combustion gas determined as daily average value;
- 150 milligrams/m³ of combustion gas of at least 95 % of all measurements determined as 10-minute average values or 100 mg/m³ of combustion gas of all measurements determined as half-hourly average values taken in any 24-hour period.

Exemptions may be authorised by the Competent Authority for incineration plants using fluidised bed technology, provided that the permit foresees an emission limit value for carbon monoxide (CO) of not more than 100 mg/m³ as an hourly average value.

SCHEDULE 7Formula to calculate the emission concentration at
the standard percentage oxygen concentration

$$E_S = \frac{21 - O_S}{21 - O_M} \times E_M$$

- E_S - calculated emission concentration at the standard percentage oxygen concentration
 E_M - measured emission concentration
 O_S - standard oxygen concentration
 O_M - measured oxygen concentration