

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast) (Text with EEA relevance)

CHAPTER IV

SPECIAL PROVISIONS FOR WASTE INCINERATION PLANTS AND WASTE CO-INCINERATION PLANTS

Article 42

Scope

1 This Chapter shall apply to waste incineration plants and waste co-incineration plants which incinerate or co-incinerate solid or liquid waste.

This Chapter shall not apply to gasification or pyrolysis plants, if the gases resulting from this thermal treatment of waste are purified to such an extent that they are no longer a waste prior to their incineration and they can cause emissions no higher than those resulting from the burning of natural gas.

For the purposes of this Chapter, waste incineration plants and waste co-incineration plants shall include all incineration lines or co-incineration lines, waste reception, storage, on site pretreatment facilities, waste-, fuel- and air-supply systems, boilers, facilities for the treatment of waste gases, on-site facilities for treatment or storage of residues and waste water, stacks, devices and systems for controlling incineration or co-incineration operations, recording and monitoring incineration or co-incineration conditions.

If processes other than oxidation, such as pyrolysis, gasification or plasma process, are applied for the thermal treatment of waste, the waste incineration plant or waste co-incineration plant shall include both the thermal treatment process and the subsequent incineration process.

If waste 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 a waste incineration plant.

2 This Chapter shall not apply to the following plants:

- a plants treating only the following wastes:
 - (i) waste listed in point (b) of point 31 of Article 3;
 - (ii) radioactive waste;
 - (iii) animal carcasses as regulated by Regulation (EC) No 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules concerning animal by-products not intended for human consumption⁽¹⁾;
 - (iv) waste resulting from the exploration for, and the exploitation of, oil and gas resources from off-shore installations and incinerated on board the installations;

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- 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.

Article 43

Definition of residue

For the purposes of this Chapter, ‘residue’ shall mean any liquid or solid waste which is generated by a waste incineration plant or waste co-incineration plant.

Article 44

Applications for permits

An application for a permit for a waste incineration plant or waste co-incineration plant shall include a description of the measures which are envisaged to guarantee that the following requirements are met:

- (a) the plant is designed, equipped and will be maintained and operated in such a manner that the requirements of this Chapter are met taking into account the categories of waste to be incinerated or co-incinerated;
- (b) the heat generated during the incineration and co-incineration process is recovered as far as practicable through the generation of heat, steam or power;
- (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 national and Union law.

Article 45

Permit conditions

- 1 The permit shall include the following:
 - a a list of all types of waste which may be treated using at least the types of waste set out in the European Waste List established by Decision 2000/532/EC, if possible, and containing information on the quantity of each type of waste, where appropriate;
 - b the total waste incinerating or co-incinerating capacity of the plant;
 - c the limit values for emissions into air and water;
 - d the requirements for the pH, temperature and flow of waste water discharges;
 - e the sampling and measurement procedures and frequencies to be used to comply with the conditions set for emission monitoring;
 - f the maximum permissible period of any technically unavoidable stoppages, disturbances, or failures of the purification devices or the measurement devices, during which the emissions into the air and the discharges of waste water may exceed the prescribed emission limit values.
- 2 In addition to the requirements set out in paragraph 1, the permit granted to a waste incineration plant or waste co-incineration plant using hazardous waste shall include the following:

- a a list of the quantities of the different categories of hazardous waste which may be treated;
 - b the minimum and maximum mass flows of those hazardous wastes, their lowest and maximum calorific values and their maximum contents of polychlorinated biphenyls, pentachlorophenol, chlorine, fluorine, sulphur, heavy metals and other polluting substances.
- 3 Member States may list the categories of waste to be included in the permit which can be co-incinerated in certain categories of waste co-incineration plants.
- 4 The competent authority shall periodically reconsider and, where necessary, update permit conditions.

Article 46

Control of emissions

1 Waste gases from waste incineration plants and waste co-incineration plants shall be discharged in a controlled way by means of a stack the height of which is calculated in such a way as to safeguard human health and the environment.

2 Emissions into air from waste incineration plants and waste co-incineration plants shall not exceed the emission limit values set out in parts 3 and 4 of Annex VI or determined in accordance with Part 4 of that Annex.

If in a waste co-incineration plant more than 40 % of the resulting heat release comes from hazardous waste, or the plant co-incinerates untreated mixed municipal waste, the emission limit values set out in Part 3 of Annex VI shall apply.

3 Discharges to the aquatic environment of waste water resulting from the cleaning of waste gases shall be limited as far as practicable and the concentrations of polluting substances shall not exceed the emission limit values set out in Part 5 of Annex VI.

4 The emission limit values shall apply at the point where waste waters from the cleaning of waste gases are discharged from the waste incineration plant or waste co-incineration plant.

When waste waters from the cleaning of waste gases are treated outside the waste incineration plant or waste co-incineration plant at a treatment plant intended only for the treatment of this sort of waste water, the emission limit values set out in Part 5 of Annex VI shall be applied at the point where the waste waters leave the treatment plant. Where the waste water from the cleaning of waste gases is treated collectively with other sources of waste water, either on site or off site, the operator shall make the appropriate mass balance calculations, [^{X1}using the results of the measurements set out in point 3 of Part 6 of Annex VI 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 waste gases.

Under no circumstances shall dilution of waste water take place for the purpose of complying with the emission limit values set out in Part 5 of Annex VI.

5 Waste incineration plant sites and waste co-incineration plant sites, including associated storage areas for waste, shall be designed and operated in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater.

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Storage capacity shall be provided for contaminated rainwater run-off from the waste incineration plant site or waste co-incineration plant site or for contaminated water arising from spillage or fire-fighting operations. The storage capacity shall be adequate to ensure that such waters can be tested and treated before discharge where necessary.

6 Without prejudice to Article 50(4)(c), the waste incineration plant or waste co-incineration plant or individual furnaces being part of a waste incineration plant or waste co-incineration plant shall under no circumstances continue to incinerate waste for a period of more than 4 hours uninterrupted where emission limit values are exceeded.

The cumulative duration of operation in such conditions over 1 year shall not exceed 60 hours.

The time limit set out in the second subparagraph shall apply to those furnaces which are linked to one single waste gas cleaning device.

Editorial Information

- XI** Substituted by [Corrigendum to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions \(integrated pollution prevention and control\) \(Official Journal of the European Union L 334 of 17 December 2010\)](#).

Article 47

Breakdown

In the case of a breakdown, the operator shall reduce or close down operations as soon as practicable until normal operations can be restored.

Article 48

Monitoring of emissions

1 Member States shall ensure that the monitoring of emissions is carried out in accordance with Parts 6 and 7 of Annex VI.

2 The installation and functioning of the automated measuring systems shall be subject to control and to annual surveillance tests as set out in point 1 of Part 6 of Annex VI.

3 The competent authority shall determine the location of the sampling or measurement points to be used for monitoring of emissions.

4 All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

5 As soon as appropriate measurement techniques are available within the Union, the Commission shall, by means of delegated acts in accordance with Article 76 and subject to the conditions laid down in Articles 77 and 78, set the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out.

Article 49

Compliance with emission limit values

The emission limit values for air and water shall be regarded as being complied with if the conditions described in Part 8 of Annex VI are fulfilled.

Article 50

Operating conditions

1 Waste incineration plants shall be operated in such a way as to achieve a level of incineration such that the total organic carbon content of slag and bottom ashes is less than 3 % or their loss on ignition is less than 5 % of the dry weight of the material. If necessary, waste pre-treatment techniques shall be used.

2 Waste incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the incineration of waste 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 at least 850 °C for at least two seconds.

Waste co-incineration plants shall be 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 at least 850 °C for at least two seconds.

If hazardous waste with a content of more than 1 % of halogenated organic substances, expressed as chlorine, is incinerated or co-incinerated, the temperature required to comply with the first and second subparagraphs shall be at least 1 100 °C.

In waste incineration plants, the temperatures set out in the first and third subparagraphs shall be measured near the inner wall of the combustion chamber. The competent authority may authorise the measurements at another representative point of the combustion chamber.

3 Each combustion chamber of a waste incineration plant shall be equipped with at least one auxiliary burner. This burner shall be switched on automatically when the temperature of the combustion gases after the last injection of combustion air falls below the temperatures set out in paragraph 2. It shall also be used during plant start-up and shut-down operations in order to ensure that those temperatures are maintained at all times during these operations and as long as unburned waste is in the combustion chamber.

The auxiliary burner shall not be fed with fuels which can cause higher emissions than those resulting from the burning of gas oil as defined in Article 2(2) of Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels⁽²⁾, liquefied gas or natural gas.

4 Waste incineration plants and waste co-incineration plants shall operate an automatic system to prevent waste feed in the following situations:

- a at start-up, until the temperature set out in paragraph 2 of this Article or the temperature specified in accordance with Article 51(1) has been reached;
- b whenever the temperature set out in paragraph 2 of this Article or the temperature specified in accordance with Article 51(1) is not maintained;

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- c whenever the continuous measurements show that any emission limit value is exceeded due to disturbances or failures of the waste gas cleaning devices.

5 Any heat generated by waste incineration plants or waste co-incineration plants shall be recovered as far as practicable.

6 Infectious clinical waste shall be placed straight in the furnace, without first being mixed with other categories of waste and without direct handling.

7 Member States shall ensure that the waste incineration plant or waste co-incineration plant is operated and controlled by a natural person who is competent to manage the plant.

Article 51

Authorisation to change operating conditions

1 Conditions different from those laid down in Article 50(1), (2) and (3) and, as regards the temperature, paragraph 4 of that Article and specified in the permit for certain categories of waste or for certain thermal processes, may be authorised by the competent authority provided the other requirements of this Chapter are met. Member States may lay down rules governing these authorisations.

2 For waste incineration plants, the change of the operating conditions shall not cause more residues or residues with a higher content of organic polluting substances compared to those residues which could be expected under the conditions laid down in Article 50(1), (2) and (3).

3 Emissions of total organic carbon and carbon monoxide from waste co-incineration plants, authorised to change operating conditions according to paragraph 1 shall also comply with the emission limit values set out in Part 3 of Annex VI.

Emissions of total organic carbon from bark boilers within the pulp and paper industry co-incinerating waste at the place of its production which were in operation and had a permit before 28 December 2002 and which are authorised to change operating conditions according to paragraph 1 shall also comply with the emission limit values set out in Part 3 of Annex VI.

4 Member States shall communicate to the Commission all operating conditions authorised under paragraphs 1, 2 and 3 and the results of verifications made as part of the information provided in accordance with the reporting requirements under Article 72.

Article 52

Delivery and reception of waste

1 The operator of the waste incineration plant or waste 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 the pollution of air, soil, surface water and groundwater as well as other negative effects on the environment, odours and noise, and direct risks to human health.

2 The operator shall determine the mass of each type of waste, if possible according to the European Waste List established by Decision 2000/532/EC, prior to accepting the waste at the waste incineration plant or waste co-incineration plant.

3 Prior to accepting hazardous waste at the waste incineration plant or waste co-incineration plant, the operator shall collect available information about the waste for the purpose of verifying compliance with the permit requirements specified in Article 45(2).

That information shall cover the following:

- a all the administrative information on the generating process contained in the documents mentioned in paragraph 4(a);
- 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 waste incineration plant or waste co-incineration plant, at least the following procedures shall be carried out by the operator:

- a the checking of the documents required by Directive 2008/98/EC and, where applicable, those required by Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste⁽³⁾ and by legislation on transport of dangerous goods;
- b the taking of representative samples, unless inappropriate as far as possible before unloading, to verify conformity with the information provided for in paragraph 3 by carrying out controls and to enable the competent authorities to identify the nature of the wastes treated.

The samples referred to in point (b) shall be kept for at least 1 month after the incineration or co-incineration of the waste concerned.

5 The competent authority may grant exemptions from paragraphs 2, 3 and 4 to waste incineration plants or waste co-incineration plants which are a part of an installation covered by Chapter II and only incinerate or co-incinerate waste generated within that installation.

Article 53

Residues

1 Residues shall be minimised in their amount and harmfulness. Residues shall be recycled, where appropriate, directly in the plant or outside.

2 Transport and intermediate storage of dry residues in the form of dust shall take place in such a way as to prevent dispersal of those residues in the environment.

3 Prior to determining the routes for the disposal or recycling of the residues, appropriate tests shall be carried out to establish the physical and chemical characteristics and the polluting potential of the residues. Those tests shall concern the total soluble fraction and heavy metals soluble fraction.

Article 54

Substantial change

A change of operation of a waste incineration plant or a waste co-incineration plant treating only non-hazardous waste in an installation covered by Chapter II which involves the incineration or co-incineration of hazardous waste shall be regarded as a substantial change.

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Article 55

Reporting and public information on waste incineration plants and waste co-incineration plants

1 Applications for new permits for waste incineration plants and waste co-incineration plants shall be made available to the public at one or more locations for an appropriate period to enable the public to comment on the applications 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.

2 For waste incineration plants or waste co-incineration plants with a nominal capacity of 2 tonnes or more per hour, the report referred to in Article 72 shall include information on the functioning and monitoring of the plant and give account of the running of the incineration or co-incineration process and the level of emissions into air and water in comparison with the emission limit values. That information shall be made available to the public.

3 A list of waste incineration plants or waste co-incineration plants with a nominal capacity of less than 2 tonnes per hour shall be drawn up by the competent authority and shall be made available to the public.

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- (1) OJ L 273, 10.10.2002, p. 1.
- (2) OJ L 121, 11.5.1999, p. 13.
- (3) OJ L 190, 12.7.2006, p. 1.