

Manual of European Environmental Policy

The following pages are a section from the Manual of European Environmental Policy written by the Institute for European Environmental Policy.

The Manual was published by Earthscan/Routledge from 2010 to 2012. It was designed as an on-line interactive reference work and annual printed versions were also produced.

This section is the text of the Manual as published in 2012. It is therefore important to note the following:

- The contents have not been updated since 2012 and no guarantee is given of the accuracy of the contents given potential subsequent developments.
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Industrial Emissions

Formal references	
2010/75/EU (OJ L 334 17.12.2010)	Directive on industrial emissions (integrated pollution prevention and control)
Proposed 21.12.07 – COM(2007)844	
Legal base	Article 192 TFEU
Binding dates	
Entry into force	6 January 2011
Formal compliance	7 January 2013
Application to new plants	7 January 2013
Application to most existing installations	6 January 2014
Application to solvent emission plants not in Annex I	6 July 2015
Application to large combustion plants (some exceptions)	1 January 2016
Commission to submit review of the Directive	7 January 2016

Purpose of the Directive

The operating conditions of certain industrial activities are to be established in permits in order to attain ‘a high level of protection for the environment taken as a whole’. This can be achieved by preventing or reducing emissions to air, water and land, including measures concerning waste. The conditions are to include emission limit values and other parameters based on Best Available Techniques. Installations are to be inspected and permits reviewed.

The Directive also establishes a series of conditions specific to the following types of installation: combustion plants; waste incinerators and co-incinerators; solvent emission activities; and titanium dioxide plants. As a result it brings together a wide range of pre-existing EU industrial pollution control law.

Summary of the Directive

Structure of the Directive

The Directive is long, comprising 103 pages. It is structured into seven chapters and ten annexes. Chapter I is the general chapter setting common provisions applying to all industrial activities covered by the Directive. Chapter II sets out provisions for those activities listed in Annex I (i.e. those subject to Integrated Pollution Prevention and Control - IPPC). Chapter III sets out special provisions for combustion plants, Chapter IV special provisions for waste incineration and co-incineration plants, Chapter V special provisions for installations and activities using organic solvents and Chapter VI special provisions for titanium dioxide installations. Chapter VII contains provisions on competent authorities, reporting by Member States, committee procedure and transposition.

It is important to note that the activities listed in Annex I and, therefore, subject to the provisions of Chapter II include activities addressed by Chapters III, IV and VI. However, only some of the processes addressed by Chapter V (users of organic solvents) are included in Annex I and, therefore, many of these processes are not subject to the provisions of Chapter II.

Common provisions (Chapter I)

Initial common provisions

Article 1 sets out the subject matter of the proposal, i.e. that it ‘lays down rules on integrated prevention and control of pollution arising from industrial activities’ and also that it ‘lays down rules designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land and to prevent generation of waste, in order to achieve a high level of protection of the environment taken as a whole’. The Directive applies to the specific industrial activities addressed by Chapters II to VI and not to research, development and new product testing activities (Article 2). Article 3 provides the 47 definitions for the Directive.

Requirement for a permit and general binding rules

Article 4 sets out an obligation that no installation shall operate without a permit, which a competent authority shall issue if it complies with the requirements of the Directive. However, by way of derogation from this, Member States may establish a procedure for the registration of installations covered only by Chapter V on solvent emissions. A permit may cover two or more installations or parts of installations operated by the same operator on the same site as long as it contains provisions specific to each installation. Member States may also opt to issue a single permit to cover parts of an installation operated by different operators as long as each has clear specified responsibilities.

Without prejudice to other EU or national law, Member States shall grant a permit to installations that comply with the Directive (Article 5). Member States shall take measures necessary to ensure co-ordination in the issuing of permits where there is more than one competent authority, to require co-ordination in situations where there is more than one operator or where more than one permit is issued. Where a new or substantially changed installation would require assessment under the [Environmental Impact Assessment Directive 85/337/EEC](#), information gathered for that assessment shall be examined in the granting of the permit.

Member States may include requirements for certain categories of installations, combustion plants, waste incinerators and co-incinerators in general binding rules. Where general binding rules are adopted, the permit may simply include a reference to such rules. Further consideration on general binding rules for Annex I installations is contained in Chapter II.

Incidents and accidents

Where an incident may significantly affect the environment, Member States shall take the necessary measures to ensure the operator immediately informs the competent authority, takes measures to limit the environmental consequences and prevent further incidents and

takes any appropriate complementary measures that the competent authority considers necessary to limit the environmental consequences and prevent further incidents (Article 7).

Non-compliance

Member States shall take the necessary measures to ensure that the conditions of the permit are complied with. Where the requirements have been breached, Member States shall ensure that the operator immediately informs the competent authority and it shall ensure that compliance is restored within the shortest possible time. The competent authority is also required to ensure the operator takes appropriate complementary measures necessary to restore compliance.

If non-compliance poses an immediate risk to health or immediate significant adverse effect on the environment, then the operation of an installation, combustion plant, waste incinerator or co-incinerator shall be suspended.

Emissions of greenhouse gases and emissions trading

Where installations are covered by the [Emissions Trading Directive 2003/87/EC](#), permits shall not include an emission limit value for that greenhouse gas and Member States may choose not to impose requirements relating to energy efficiency for combustion and other carbon dioxide emitting units (Article 9). Existing permits shall be amended as appropriate. If installations are temporarily excluded from the emissions trading scheme under Article 27 of Directive 2003/87/EC, Article 9 of Directive 2010/75/EU shall not apply.

Provisions for Annex I activities (Chapter II)

Installations addressed by Chapter II

Chapter II contains the main provisions previously found within Directive 2008/1 relating to the obligations on operators and regulators concerning IPPC installations. Annex I sets out the categories of installation included in the provisions of Chapter II. These are categorised into six groups:

- Energy industries, including combustion processes above 50 MW, oil and gas refineries and gasification and liquefaction of coal or other fuels.
- Production and processing of metals, including metal ore roasting, pig iron production, processing of certain ferrous and non-ferrous metal activities and certain surface treatment processes.
- Mineral industry, including production of cement, lime and magnesium oxide, asbestos processes, glass manufacture above 20 T/day, mineral melting processes and certain ceramic manufacture processes.
- Chemical industry including a range of inorganic and organic production processes, production of certain fertilisers, biocides and pharmaceuticals and production of explosives.
- Waste management, including most hazardous waste activities, many incinerators and co-incinerators and non-hazardous waste disposal above 50 T/day, landfills and certain temporary and underground hazardous waste storage.

- Other activities including certain processes (mostly above capacity thresholds) for pulp and paper, pre-treatment of textile, tanning, slaughterhouses, animal carcass disposal, intensive rearing of pigs and poultry, surface treatment with organic solvents, production of carbon, carbon dioxide capture, preservation of wood with chemicals and independent waste water treatment plants not covered by the [Urban Waste Water Treatment](#) Directive 91/271/EEC and discharged by an Annex I installation.

Principles governing the basic obligations of the operator

The Directive (Article 11) sets out a series of principles for the operation of installations:

- All appropriate measures are taken against pollution.
- Best Available Techniques (BAT) are applied.
- No significant pollution is caused.
- Waste generation is prevented in accordance with the Directive 2008/98/EC on Waste, or if generated, managed in accordance with the waste hierarchy of the Directive on Waste (see section on [Waste Framework Directive](#)).
- Energy is used efficiently.
- The necessary measures are taken to prevent accidents and limit their consequences.
- On cessation of activities, the necessary measures are taken to return the site to a satisfactory state (defined by Article 22).

Applications for permits

Applications for permits are to describe (Article 12) the installation and its activities; the materials, substances and energy used or generated; site conditions; (where applicable) a baseline report; emissions from the installation and significant environmental effects; techniques to prevent and reduce emissions; measures for the prevention and recovery of waste; further measures to comply with the basic obligations of operators; proposed monitoring measures; and the main alternatives to the proposed technology, techniques and measures. Information generated in respect of any other legislation, including the EIA Directive [85/337/EEC](#), may be included as part of an IPPC application. The Directive also requires a non-technical summary to be included with the permit application.

BAT reference documents and exchange of information

Article 13 requires the Commission to organise exchange of information between Member States, concerned industries and NGOs to draft and revise BAT reference documents. This exchange shall address the performance of installations and techniques regarding emissions, the techniques used, cross media effects, economic and technical viability and BAT and emerging techniques following consideration of these issues. The Commission shall also convene a regular forum of Member States, concerned industries and NGOs to gather opinions on the work programme for the exchange of information, data collection and drawing up and quality assurance of BAT reference documents. The views of the forum shall be publically available. Decisions on BAT conclusions shall be adopted by the regulatory procedure in Article 75 (see below). Commission Decision [2011/517/EU](#) on the establishment of the Article 13 Forum was adopted on 16 May 2011. The first unofficial

meeting of the Article 13 Forum was held on 9 March 2011 and its first official meeting on 12 September 2011 in Brussels.

Permit conditions

The processes for permit determination are set out in Article 14. All permits must include details of the arrangements made for air, water and land. Emission limit values must be defined for pollutants likely to be emitted in significant quantities, in particular for certain pollutants listed in Annex II, and appropriate requirements for protection of soil and groundwater and management of waste.

Permits shall contain emission monitoring requirements and obligations to supply competent authorities with regular (at least annual) information on emissions allowing a comparison with BAT. Conditions should include requirements for regular maintenance and surveillance of measures taken to prevent emissions to soils and groundwater. Conditions relating to start-up, malfunctions, etc., shall be included. Permits must also contain conditions to minimize long-distance and transboundary pollution and to ensure a high level of protection for the environment as a whole.

BAT conclusions shall be the reference for setting the permit conditions and competent authorities may set stricter conditions than described in the BAT conclusions. Where conditions set are not described in the relevant BAT conclusions, these shall be determined according to the criteria for BAT set out in Annex III, including the use of low-waste technology; the use of less hazardous substances; the furthering of recovery and recycling; the consumption of raw materials and water; and energy efficiency. Permits also must contain monitoring requirements and an obligation to provide data to the competent authority, and measures relating to non-normal operations such as accidents.

Permit conditions for installations for intensive animal units shall apply without prejudice to legislation relating to animal welfare.

Emission limit values, equivalent parameters and technical measures

Emission limit values, equivalent parameters and technical measures shall be based on BAT without prescribing the use of any technique or specific technology (Article 15). They shall be set at the point they leave the installation without dilution, but can take into account the effect of relevant waste water treatment. Competent authorities shall ensure that emissions do not exceed the emission levels associated with BAT set out in the BAT conclusions by either setting emission limit values that do not exceed the emission levels associated with BAT, with relevant referencing and time periods, or, if alternative values, periods and reference conditions are set, then the result of monitoring show that the actual emissions do not exceed the emission levels associated with BAT.

As a derogation, competent authorities may set emission limit values which are less strict than the emission levels associated with BAT provided an assessment has shown that applying the stricter conditions would lead to “disproportionately higher costs” due to the geographic location, local environmental conditions or technical characteristics of the installation. All such reasons shall be documented in the permit and, in any case, the permit conditions shall not exceed those set out in the Annexes to the Directive covering specific

types of installation (see below). Any derogations shall be subject to re-assessment during permit reviews.

Derogations may also be granted for the testing and use of emerging techniques for a total time not exceeding nine months.

In any case, the competent authority is required to ensure that no significant pollution is caused and that a high level of protection of the environment as a whole is achieved.

Monitoring requirements

Monitoring requirements shall, where applicable, be based on the conclusions on monitoring as described in the BREFs (Article 16). The frequency of the periodic monitoring shall be determined by the competent authority in a permit for each individual installation or in general binding rules. Specifically, the monitoring of groundwaters and soils shall be carried out at least once every five and ten years respectively unless such monitoring is based on a systematic appraisal of the risk of contamination.

General binding rules

The use of general binding rules shall ensure ‘an integrated approach’ and ‘a high level of environmental protection’ and specifies this as being ‘equivalent to that achievable with individual permit conditions’ (Article 17). General binding rules shall be based on the best available techniques, without prescribing the use of any technique or specific technology in order to ensure compliance with the emission limit values and permit conditions. General binding rules must also be kept up to date with developments in BAT.

Environmental quality standards

If an environmental quality standard requires stricter conditions in a permit that would be achieved by the use of BAT, there shall be included in the permit without prejudice to other measures necessary to meet that environmental quality standard (Article 18). An ‘environmental quality standard’ is defined as ‘the set of requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Union law’. An environmental quality standard is not, therefore, limited to numerical pollutant standards (e.g. an air limit value under the [Air Quality Framework Directive](#)), but also includes other obligations such as Good Ecological Status under the [Water Framework Directive](#).

Developments in BAT

Competent authorities must be informed of developments on BAT and any new or updated BAT conclusions shall be made available to the public (Article 19).

Changes to installations

Operators are to inform competent authorities of planned changes to the nature, functioning or extension (including reaching capacity thresholds set out in Annex I) to an installation

which may have consequences for the environment (Article 20). This may require an update to the permit.

Reconsideration and updating of permits

Competent authorities are periodically to reconsider and, if necessary, update permits (Article 21). Operators are required to submit all necessary data on monitoring of emissions, etc., to the competent authority to enable a comparison with BAT. In particular, reconsideration of permits for relevant installations shall take place within four years of publication of decisions on BAT conclusions. Where there are no new BAT conclusions, review of permits shall occur where developments in BAT allow for a significant reduction in emissions. Permits shall be reviewed and updated at least in the following cases:

- The pollution is so significant that emission limit values need to be revised.
- Operational safety requires the use of other techniques.
- Where changes are needed to ensure compliance with a new or revised environmental quality standard.

Site closure

Without prejudice to EU soil and water law, permit conditions shall include provisions relating to site closure. Where an activity involves the use, production or release of dangerous substances that might contaminate soil or groundwater at the site of the installation the operator shall prepare and submit a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after 7 January 2013. The baseline report shall contain the information necessary to determine the state of soil and groundwater on the site and so enable a quantified comparison with the state when the activity ceases. The baseline report shall at least include information on the present and, where available, past uses of the site and, existing or new information on soil and water having regard to the hazardous substances used, produced or released by the installation. The Commission shall establish criteria on the content of baseline reports.

When an activity ceases, the operator shall assess the state of soil and groundwater contamination and where the installation has caused “significant pollution”, the operator shall take the necessary measures to address that pollution so as to return the site to the state established in the baseline report (taking into account the technical feasibility of such measures). If the contamination poses a significant risk to human health or the environment, the operator shall take the necessary actions to remove, control or contain the relevant hazardous substances, including in cases where the operator is not required to prepare a baseline report.

Environmental inspections

Member States are to set up a system of environment inspections for installations addressing the examination of the full range of relevant environmental effects from those installations (Article 23). ‘[Environmental inspections](#)’ include all actions, including site visits, checking documents, etc., to determine compliance. Note that the obligation on inspection is wider than simply checking permit compliance. All installations are to be covered by an

environmental inspection plan at national, regional or local level and this plan is reviewed regularly. Each plan shall include:

- A general assessment of relevant significant environmental issues.
- The geographical area covered by the inspection plan.
- A register of the installations covered by the plan.
- Procedures for drawing up routine environmental inspections.
- Procedures for non-routine environmental inspections.
- Provisions on the co-operation between different inspection authorities.

The programme for routine environmental inspections shall include the frequency of site visits for different types of installation. This shall be based on “a systematic appraisal of the environmental risks of the installations” and shall not exceed one year for those posing the highest risk and three years for those posing the lowest risk. If inspection identifies an important case of non-compliance with permit conditions, a follow-up visit shall take place within six months. The systematic appraisal of the environmental risks shall be based on the potential and actual impacts of the installation on health and the environment, the record of compliance with permit conditions and participation in the [EMAS Regulation](#) (EC) No 1221/2009. The Commission may adopt guidance on the criteria for the appraisal of the environmental risks. Non-routine inspections shall take place to examine incidents, complaints and, where appropriate, before granted an updated permit.

Following each visit the competent authority shall prepare a report describing the state of compliance. This shall be provided to the operator within two months of the visit and be made available to the public within four months. The competent authority shall ensure the operator takes all necessary actions identified in the report within a reasonable period.

Access to information and justice

Member States are required to ensure that the ‘public concerned’ are given early and effective opportunities to participate in the granting of new, substantial change and updated permits (Article 24). Annex IV provides a procedure to apply such participation.

Where the competent authority has made a decision on a permit, this shall be made available to the public on the internet, including the following information: content of decision; reasons for the decision; results of any prior consultations; title of relevant BREFs; how permit conditions have been determined in relation to BAT; and reasons for any derogations. Information shall also be provided to the public on measures to be taken on the cessation of the operation.

All provisions regarding access to information are subject to the restrictions set out by Directive 2003/4/EC on [access to information](#).

Members of the public concerned shall have access to a review procedure before a court of law or other independent body to challenge the substantive or procedural legality of acts, decisions or omissions regarding the granting of new, substantial change and updated permits (Article 25), provided they have sufficient interest or they maintain the impairment of a right where the Member State procedural law requires this as a precondition. What constitutes sufficient interest shall be determined by the Member State consistent with giving the public wide access to justice. In this regard the interest any non-governmental organisation

promoting environmental protection and meeting any requirements under national law shall be deemed sufficient for this purpose and it shall also be capable of impairment of rights for access to review procedures before a court or other body.

The procedures shall not preclude the possibility of a preliminary review. Procedures shall be fair, equitable, timely and not prohibitively expensive. Practical information on access to justice shall be made available to the public.

Transboundary Effects

If an installation is likely to have significant negative effects on the environment of another Member States (or that Member State so requests), the Member State containing the installation shall forward the permit application to that Member State. It shall also be made available to the public concerned of that Member State (Article 26).

Emerging techniques

Member States shall, where appropriate, encourage the development of emerging techniques, especially those identified in BREFs. The Commission shall establish guidance to assist Member States in this regard (Article 27).

Combustion plants (Chapter III)

Scope and aggregation

The Chapter applies to all existing and new combustion plants with a thermal input of at least 50 MW, irrespective of the fuel used, with the following exceptions (Article 28):

- Combustion used for direct heating or drying or any other treatment of objects or material.
- Post-combustion plants.
- Facilities for the regeneration of catalytic cracking catalysts.
- Facilities for the conversion of hydrogen sulphide into sulphur.
- Reactors used in the chemical industry.
- Coke battery furnaces.
- Cowpers.
- Any technical apparatus to move a ship, vehicle or aircraft.
- Gas turbines on off-shore platforms.
- Plants powered by diesel, petrol and gas engines.

Where two or more separate combustion processes discharge through a common stack, these shall be considered to be a single processes for the calculation of total rated thermal input (excluding plans below 15 MW) (Article 29).

Emission limit values, desulphurisation rate and compliance

Article 30 sets out the requirements for combustion processes (except diesel engines and recovery boilers for pulp production) to meet specified emission limit values. The conditions to be met depend upon the age of the installation:

- All permits granted before 7 January 2013 (or earlier applications that come into operation by 7 January 2014) shall comply with emission limit values set out in Annex V, Part 1.
- Installations that were granted an exemption under Article 4(4) of the [Large Combustion Plants Directive](#) 2001/80/EC and which are in operation after 1 January 2016 shall comply with emission limit values set out in Annex V, Part 2.
- All other installations shall comply with emission limit values set out in Annex V, Part 2.

The emission limit values and minimum desulphurisation rates apply to common stacks and include future extensions of the installation in the overall calculation. Competent authorities may grant a derogation for six months to comply with the emission limit values for plants using low-sulphur fuel, but where the source of the fuel is subject to interruption or for gas-fired plants where the gas supply is interrupted and alternative fuels have to be used.

The Commission shall, by 13 December 2013, review the need for EU-wide emission limit values for diesel engines and recovery boilers for pulp production and selected other liquid and gaseous firing plants.

For combustion plants firing indigenous solid fuel (defined as ‘naturally occurring’ and ‘‘extracted locally’’) and which cannot comply with the emission limit values due the nature of the fuel, Member States may instead apply minimum desulphurisation rates set out in Annex V, Part 5. This also applies to plants which co-incinerate waste with indigenous solid fuel and which cannot comply with the sulphur dioxide emission limit in Annex VI.

For plants using more than one type of fuel – ‘‘multi-fuel firing combustion plants’’ (Article 40) – emission limit values shall be set by developing fuel-weighted emission limit values based on the relative amounts of each fuel burnt and the values in Annex V, Parts 1 and 2. Specific provisions for determining emission limit values are provided for multi-fuel firing combustion plants which use the distillation and conversion residues from crude oil refining for own consumption alone or with other fuels.

Compliance (Article 39) with the emission limit values shall be assumed if the conditions in Annex V, Part 4 are met which indicates the number or level of exceedences of the different emission limit values that are permitted.

Transitional national plan

Member States may draw up and implement transitional national plans (Article 32) which can allow large combustion plants an extension until 30 June 2020 to meet the new requirements, provided that they were granted their first permit, or submitted a complete application, before 27 November 2002 and the plant became operational no later than 27 November 2003. The transitional national plan defines an overall limit on emissions of sulphur dioxide, nitrogen oxides and particulates for each year from 1 January 2016 and 30 June 2020. The 2016 cap will be based on emission limit values specified in the [Large Combustion Plants Directive](#) 2001/80/EC and reduces thereafter. Individual participants in the transitional national plan can then exceed the new ELVs as long as emissions as a whole for the year are not exceeded.

Member states must communicate their draft transitional national plans to the Commission by 31st December 2013.

On 10 February 2012 the Commission adopted Decision [2012/115/EU](#) laying down rules concerning the national transition plans. These prescribe the content, format, etc., of the plans to be produced by the Member States.

Limited life time derogation

The Directive allows for a limited life time derogation (Article 33). The derogation grants combustion plants an exemption from the revised emissions limits in the Directive and from inclusion in transitional national plans provided that the following conditions are satisfied:

- By 1 January 2014 the operator gives a written declaration to the competent authority that it will not operate the plant for more than 17,500 hours between 1 January 2016 and 31 December 2023.
- The operator submits an annual record of operating hours from 1 January 2016 to the competent authority.
- The emission limit values for sulphur dioxide, nitrogen oxides and dust applying to the plant on 31 December 2015 are maintained, and in the case of combustion plants with a thermal input of over 500MW firing solid fuels which were granted a permit after 1 July 1987, the emission limits for nitrogen oxides set out in Part 1 of Annex V to the Directive are complied with.
- The installation has not already been granted an exemption from the former Large Combustion Plant Directive emission limit values or from inclusion in a National Emission Reduction Plan under Article 4(4) of the Large Combustion Plant Directive.

Isolated systems and district heating plants

Combustion plants which, by 6 January 2011, are part of small isolated systems may be exempted from the emission limit values set out in Article 30 and the minimum desulphurisation rate until 31 December 2019, but they are required to meet the requirements of the [Large Combustion Plants Directive](#) 2001/80/EC and the [IPPC Directive](#) 2008/1/EC (Article 34). Plants above 500MW and which were granted a permit after 1 July 1987 shall comply with the nitrogen oxide emission limit values in Annex V, Part 1. Member States shall report the presence of any such combustion plants which are part of small isolated systems to the Commission by 7 January 2013.

A combustion plant where 50 per cent or more of the useful heat production (averaged over five rolling years) is delivered for district heating may be exempt from the emission limit values and minimum desulphurisation rate until 31 December 2022 provided it is not larger than 200MW, that it was issued a permit by 27 November 2002 (and in operation before 27 November 2003) and that by 31 December 2015 (and following) the emission limit values in the permit comply with the requirements of the [Large Combustion Plants Directive](#) 2001/80/EC and the [IPPC Directive](#) 2008/1/EC (Article 35). Member States shall report a list of such plants (with details of heat used, emission, etc.) to the Commission by 1 January 2016.

Geological storage of carbon dioxide

Member States shall ensure that all combustion plants above 300MW and which were granted a construction or, failing that, an operating license before the entry into force of

Directive 2009/31/EC on the [geological storage of carbon dioxide](#) have assessed suitable sites and feasibility for retrofitting carbon capture and storage and that suitable space on the site is available for the necessary equipment to capture and compress the carbon dioxide (Article 36).

Breakdown and monitoring

Permits shall include procedures for malfunction or breakdown of abatement equipment (Article 37). If this is not corrected in 24 hours, operators shall either reduce or close down operation or switch to low polluting fuels. Operators have 40 hours to notify the competent authority of a malfunction or breakdown. The cumulative duration of unabated operation must not exceed 120 hours in any 12 month period. The competent authority may grant a derogation from the obligation to reduce or close down operation or switch to low polluting fuels if there is an ‘overriding need to maintain energy supplies’ or if the combustion plant would be replaced by another plant which would result in an increase in overall emissions.

Monitoring requires automated monitoring equipment (Article 38) and specific conditions for monitoring are provided in Annex V, Part 3. The location of the sampling and measurement points shall be determined by the competent authority. All monitoring results shall be recorded, processed and presented in such a ways as to enable the competent authority to determine compliance.

Waste incineration and waste co-incineration plants (Chapter IV)

Scope

The Chapter sets out special provision for waste incineration and waste co-incineration plants for solid or liquid waste. It does not apply to gasification or pyrolysis plants. The Chapter applies to the range of activities associated with incineration from the reception of waste to the storage of residues, waste water, etc. It does not apply to incineration of vegetable or wood waste, radioactive waste, animal carcasses, waste from off-shore soil or gas exploration or experimental/research plants.

Permit applications, permit conditions and control of emissions

Applications for a permit shall demonstrate how installations will comply with the Directive, that heat is recovered as far as is possible, residues are minimised in their amount and harmfulness and disposal is carried out in conformity with EU law (Article 44).

Permit conditions shall list all types of waste treated at the installation, total waste capacity, limit values (and other conditions) for emissions to air and water, quantities and minimum and maximum flows of hazardous wastes, monitoring requirements and maximum periods for technical disruptions to the operation. Competent authorities are to reconsider permit conditions ‘periodically’ (Article 45).

The emission limit values for emissions to air must not exceed those in Annex VI Parts 3 and 4 (for co-incineration plants where 40 per cent or more of the resulting heat comes from

hazardous waste or it burns unsorted municipal solid waste the values in Annex VI Part 3 apply). This includes nitrogen and sulphur oxides, dust, cadmium, thallium, mercury, antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium, dioxins and furans. The emission limit values for water in Annex VI Part 5 include total suspended solids, mercury, cadmium, thallium, arsenic, lead, chromium, copper, nickel, zinc, dioxins and furans. The values for water apply to waste water treatment on site and to dedicated treatment plants off site. Under no circumstances shall installations operate exceeding the limit values for more than four hours continuously or a total of 60 hours in a year and if there is a breakdown, operations shall reduce or close until normal operation is resumed. Installations (including storage areas) shall also be designed and operated so as to prevent accidental release of pollutants (Articles 46 and 47). Annex VI Part 8 sets out specific criteria for the determination of compliance.

Monitoring

Annex VI Parts 6 and 7 set out detailed obligations regarding monitoring of emissions, including functioning of automated measuring systems. The location of the sampling and measurement points shall be determined by the competent authority. When appropriate techniques are available, the Commission shall adopt a delegated act for the continuous measurement of heavy metals, dioxins and furans.

Operating conditions

Conditions are set out requiring plants to be operated to reduce the organic content of bottom ash, firing temperatures to be at least 850°C for two seconds or 1,100°C for hazardous waste, the need for an auxiliary burner, that infectious clinical waste is incinerated without mixing with other waste and conditions of start-up.

Receiving waste and managing residues

The reception of waste shall be done in a way that prevents or limits pollution to air, water and soil and the mass of each type of waste shall be determined according to the European Waste List (Decision 2000/532/EC) (see section on the [Waste Framework Directive](#)). For hazardous waste the operator shall collect information necessary for determination mixing (or not) and the suitability for incineration. Prior to acceptance of hazardous waste, operators must check documentation to ensure compliance with the [Waste Shipment Regulation](#) (Article 52).

Residues shall be minimised in their amount and harmfulness and recycled if appropriate. Transport must be done in such a way as to reduce dust and dispersal. Prior to determining appropriate disposal, tests on the residues shall be carried out (Article 53).

Reporting and public information

Applications for permits, for public comment, and decisions on those applications shall be made available to the public. Reporting information on plants with a capacity of more than two tonnes per hour shall be made public as shall a list of other plants with capacities below this.

Installations and activities using organic solvents (Chapter V)

Chapter V addresses the control of emissions of volatile organic compounds (VOCs) from processes that use organic solvents. Some of these processes are subject to the requirements of Chapter II of the Directive, while many others are not covered by Chapter II.

Scope

The requirements relating to use of organic solvents apply to the following activities (Annex VII, Part 1):

- Various coating activities (including adhesive coating, coil coating, vehicle coating, winding wire coating and surface coating in relation to metallic, plastic, wooden, textile, fabric, leather, film and paper surfaces).
- Vehicle refinishing.
- Impregnation of wood.
- Wood and plastic lamination.
- Printing.
- Manufacturing of coating preparations, varnishes, inks and adhesives.
- Conversion of natural or synthetic rubber.
- Dry cleaning.
- Footwear manufacturing.
- Manufacturing of pharmaceutical products.
- Surface cleaning.
- Vegetable oil extraction and fat and vegetable oil refining.

Substitution and control of hazardous substances and mixtures

Substances and mixtures classified as carcinogens, mutagens or toxic to reproduction under Regulation (EC) No 1272/2008 (see section on [classification, labelling and packaging of chemical substances and mixtures](#)) (with hazard statements H340, H350, H350i, H360D or H360F) shall be replaced as far as is possible by less harmful substances or mixtures within the shortest possible time (Article 58). The substances or mixtures in question are also subject to a specific emission limit where the discharge exceeds a given level. Another emission limit applies to certain halogenated VOCs (Annex VII, Part 4). Releases of the VOCs which are subject to these special provisions are to be controlled under 'contained conditions' as far as technically and economically feasible (Article 59(5)).

Control of emissions

Installations shall either comply with emission limit values set out in Annex VII, Parts 2 and 3 or the requirements of a reduction scheme set out in Annex VII Part 5 that provides for an equivalent level of emission reduction (Article 59). Member States shall report to the Commission on progress in achieving such an equivalent level of emission reduction. For certain fugitive emissions and certain coating activities, the competent authority may allow a derogation from the emission limit value if achieving it is not technically or economically feasible. Member States shall report to the Commission on such derogations. Where there are

two or more activities within an installation, they can either each meet the requisite emission limit values or collectively.

Monitoring and compliance

Permits are to contain requirements for monitoring of emissions according to Annex VII, Part 6. Compliance (Article 61) is fulfilled if the monitoring results meet the emission limit values according to criteria set out in Annex VII, Part 8. These allow, inter alia, for certain levels of exceedences by different factors for different averaging periods.

Operators shall supply competent authorities 'on request' with data enabling them to assess compliance covering: emission limit values, fugitive and total emissions; requirements of the reduction scheme and any derogations. They may also include a solvent management plan. The details of the contents of a solvent management plan are provided in Annex VII, Part 7.

Substantial change

A change in the use of solvents is considered to be substantial if it results in an increase in emissions of 25 per cent for some categories of installation and 10 per cent for others. Where a substantial change occurs, the installation (or part) shall either be treated as a new installation or an existing installation, although in the latter case the emissions cannot be higher than would be the case with a new installation.

Exchange of information

The Commission shall organize an exchange of information between the Member States on the use of organic substances and possible substitutes with least impact on the environment. The exchange of information shall cover fitness for use, health and environmental effects and economic consequences.

Access to information

Decisions reached by the competent authorities, monitoring data, and any general binding rules and lists of registered or authorized installations, must be made available to the public.

Titanium dioxide installations (Chapter VI)

Installations producing titanium dioxide are prohibited from disposal of solid waste, most mother liquors (containing 0.5 per cent free sulphuric acid), waste from installations using the chloride process (containing 0.5 per cent free hydrochloric acid) and various filtration wastes containing heavy metals, etc., to any water body, sea or ocean (Article 67). Emissions to water and air shall not exceed the emission limit values set out in Annex VIII. Additionally emissions of acid droplets shall be prevented. Emission limit values for water are established for sulphate and chlorides and for air values are set for dust, sulphur oxides and chlorine.

Monitoring must be sufficient to enable determination of compliance with permit conditions and continuous monitoring of air emissions is required for dust, sulphur oxides and chlorine.

Final provisions (Chapter VII)

Competent authority and reporting

Member States shall designate competent authorities responsible for carrying out the obligations in the Directive.

Member States shall report to the Commission on the following representative data on emissions, pollution, emission limit values, the application of BAT and progress made in emerging techniques (Article 72). By 1 January 2016 Member States shall establish an annual inventory of dust, sulphur dioxide and nitrogen dioxide emissions and energy input for combustion plants (covered by Chapter III). Detail is provided for the data to be provided for each combustion plant.

On 21 September 2011 the Commission adopted Implementing Decision [2011/631/EU](#) setting out the questionnaire to be used by Member States in reporting under the Directive.

Review

By 7 January 2016 and every three years after this, the Commission shall submit a review of the implementation of the Directive to the Council and Parliament. This shall include an assessment (with a legislative proposal if needed) of any EU-wide minimum requirements for emission limit values or rules for monitoring and compliance activities based on the impact of activities on the environment and the state of implementation of BAT. Chapter III (with Annex V) shall be considered to be such EU-wide minimum requirements.

By 31 December 2011 the Commission shall report (with a legislative proposal if needed) on the establishment in Annex I of differentiated capacity thresholds for different poultry species, including quail, and capacity thresholds for simultaneous rearing of different animals in the same installation.

By 31 December 2012 the Commission shall review and report on the need to control emissions from combustion installations below 50MW (i.e. below the Annex I threshold), the intensive rearing of cattle and the spreading of manure.

Committee procedure, delegation and amendments of Annexes

The Commission may adopt delegated acts (see section on [EU decision-making processes](#)) covering issues from the continuous measurements of emissions into the air of heavy metals and dioxins and furans, and the adaptation of certain parts of Annexes V, VI and VII to scientific and technical progress on the basis of BAT (Article 74). This power shall be conferred on the Commission for five years from 6 January 2011 and automatically extended unless the Parliament or Council revokes it (Articles 76 and 77). The Parliament or Council have two months to object to delegated acts notified to them.

The Commission shall be assisted by a Committee originally subject to the provisions of Articles 5 and 7 of Decision 1999/468/EC and since replaced by Regulation (EU) No [182/2011](#) (see section on [EU decision-making processes](#)).

Penalties

Member States must provide for penalties for infringements of the Directives which are effective, proportionate and dissuasive and report these to the Commission by 7 January 2013.

Transposition and transitional arrangements

Member States should transpose the Directive by 7 January 2013. The Commission has produced an informal [checklist](#) to aid Member States in transposing the Directive.

New installations must immediately comply with the requirements of the Directive. However, installations already in existence (specified in Article 82) before 6 January 2013 (except large combustion plants) have until 6 January 2014 to implement the provisions, solvent emission plants not subject to IPPC have until 6 July 2015 and large combustion plants to 1 January 2016.

Repeal of earlier legislation

The following Directives (as amended) are repealed with effect from 7 January 2014:

- Integrated Pollution Prevention and Control Directive [2008/1/EC](#).
- Waste Incineration Directive [2000/76/EC](#).
- Solvents Emissions Directive [1999/13/EC](#).
- Three Directives relating to emissions from the titanium dioxide industry ([78/176/EEC](#), [82/883/EEC](#) and [92/112/EEC](#)).

The following Directive is repealed with effect from 1 January 2016:

- Large Combustion Plant Directive [2001/80/EC](#).

Development of the Directive

Introduction

The Industrial Emissions Directive replaces the Integrated Pollution Prevention and Control (IPPC) Directive [2008/1/EC](#), the Large Combustion Plants Directive [2001/80/EC](#), the Waste Incineration Directive [2000/76/EC](#), the Volatile Organic Compounds from Industry Directive [1999/13/EC](#) and the Directives concerned with the titanium dioxide industry ([78/176/EEC](#), [82/883/EEC](#) and [92/112/EEC](#)). Each of these Directives has their own particular technical and political histories in development and implementation which colour the detailed requirements of the Industrial Emissions Directive. The reader is, therefore, referred to the relevant sections of this Manual for these respective histories.

Prior to the publication of the proposal for the Industrial Emissions Directive, a number of activities took place. These included background research and events. Two of the most important, ENAP and a conference in Dresden, are summarised below. Subsequently, the Commission financed a wide range of studies examining the implementation of existing Directives and options for changes to these to help inform the final proposal. Each of these is

summarised below. Finally, before publication of the proposal, a public consultation was held.

ENAP

The Dutch government led the European Dialogue on Exploring New Approaches in regulating industrial installations (ENAP). ENAP undertook studies¹ and workshops to examine future industrial emissions policy in three areas: emissions trading for sulphur and nitrogen oxides, connecting company environmental management schemes with permitting, inspection and enforcement, and the regulation of multi-installation, multi-site facilities.

Dresden

On 20-22 September 2005 the European Commission and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety hosted a major conference on the IPPC Directive². While this conference focused on the need to implement IPPC, it was here that the Commission launched its review of the Directive. It stated that it would be ‘an ambitious review while not altering the fundamental principles, objectives and ambition of the present Directive (high level of environmental protection, integrated approach, BAT, permitting ...)’ and that it would consider technical amendments in the light of experience, such as regarding permitting, information exchange and clarification of scope and definitions. The Commission stated that the review would be concluded in 2007 with a ‘long-term vision on industrial emissions control’.

Analyses to support the proposal

Thirteen studies were financed by the Commission to examine a range of issues related to the implementation of the pre-existing Directives and options for a revised Directive. Each of these is summarised below.

Streamlining study

The study³ focused on the interaction of the IPPC Directive with other instruments (including the potential for emissions trading in sulphur and nitrogen oxides). It found a number of issues concerning the different interactions of IPPC, solvent emissions and waste legislation. The study explored a number of options to address these issues including developing a single Directive which retained sectoral Directive requirements. It concluded ‘Overall, simply combining the sector Directives (principally LCP, WI and SE Directives) into a single legal instrument with the IPPC Directive might not, in itself, appear to have many advantages. However, a number of benefits would be expected to be realised in practice, depending upon the drafting of such a new Directive and its associated information requirements. These include increased certainty on regulatory requirements; removal of any duplicative requirements (with associated reductions in resource requirements); and potential for greater progress towards meeting the BAT-AELs [emission levels associated with Best Available Techniques] in the BREFs’.

Waste Incineration study

The study⁴ examined the implementation of the Waste Incineration Directive, case studies on costs and benefit of the implementation, and options for amendment of the Waste Incineration Directive. In examining possible changes to the Directive, the following options were examined:

- Allowing further exemptions from monitoring/ measurement requirements (beyond current provisions).
- Technical feasibility of adding dioxin-like PCBs to the monitoring of PCDD/F.
- Technical feasibility of continuous PCDD/F monitoring and impacts of continuous PCDD/F monitoring.
- Technical feasibility of continuous heavy metal monitoring and impacts of introducing continuous monitoring of heavy metals.
- Technical feasibility and costs of implementing a NO_x emission limit value of 500 mg/m³ for existing cement kilns and impacts of reducing NO_x emission limit values in existing cement plants.
- Analysis of impacts of specific provisions regarding the use of high calorific waste in blast furnaces.
- Specific provisions for the expanded clay industry.

Multiple boiler units study

The study⁵ analysed the environmental impacts and costs arising from implementation of the Large Combustion Plant and IPPC Directives for combustion installations with multiple boiler units. This arose from the fact there were found to a number of different possible interpretations of the definition of (existing) combustion plant that have led to potential differences in implementation of the Large Combustion Plant Directive between Member States. The study used case studies to conclude that total emissions from those plants were higher than the emission targets calculated for compliance with Large Combustion Plant Directive, BREF BAT-AELs and IPPC permit conditions.

General Binding Rules study

The study⁶ examined the use of General Binding Rules (GBRs) as defined in Article 9(8) of the IPPC Directive. It found that GBRs had been used for ‘reasons of regulatory transparency, administrative efficiency, consistency, sector size and comparability’, although all cases of GBRs identified arose from national regulatory frameworks, rather than being triggered by the IPPC Directive. It was also found that about half of those studied were not ‘based on the BAT conclusions of the BREFs’, that ‘there is considerable delay in updating old GBR systems and adapting existing systems to new information’ and that GBRs ‘provide minimum standards’.

Ammonia and agriculture studies

A first study⁷ aimed to define ‘the most appropriate, integrated and consistent actions to reduce nitrogen (N) emissions from agriculture to atmosphere, groundwater and surface waters’. This included an assessment of the effects of changes in the thresholds values for the number of animals for IPPC farms and of including manure spreading within IPPC permitting. The study concluded that lowering the thresholds for poultry and pig farms and including cattle rearing under the IPPC had the potential to decrease the ammonia emissions by 26 to 113 ktonne per year. It also concluded that ‘low-NH₃-emission-manure-application’

had to be included as a Best Available Technique in IPPC permits to control ammonia emissions.

A second study⁸ modelled different interpretations of implementation of the IPPC Directive with regard to intensive farming. It found that national interpretations of the IPPC Directive compared to 'full' implementation of the Directive 'leads to increase' in all areas of environmental impact studied. The study examined the effect of different options for the extension of the IPPC Directive to cattle and possible modification of existing thresholds for pigs and poultry with regard to impacts on emissions on ammonia, N₂O and methane. The study found that estimated changes in emissions of greenhouse gasses were very small, but that changes for ammonia were larger, although these were 'very sensitive to the assumption on inclusion of BAT on land spreading' and that this had more impact than changing the thresholds for IPPC installations. Thus the study concluded that 'the most cost efficient scenario would be to enforce existing IPPC with extension to land spreading'.

Beyond Regulatory Compliance study

This study⁹ examined tools or instruments that encourage IPPC firms to change their behaviour and to innovate and perform beyond regulatory compliance, such as taxes, incentives, subsidies, etc. The study concluded that the IPPC Directive did not act as a barrier to any of the measures examined. However, it stated that 'Some instruments however appeared to fit better to the main IPPC principles (networking programs [sic] are fitting very well with the integrated approach) than others (energy efficiency, taxes and charge instruments). However, the latter instruments seemed to result in more significant environmental impacts, in many cases beyond regulatory compliance'.

Small combustion plant study

This study¹⁰ assessed the costs and benefits of extending the scope of the IPPC Directive to include combustion installations in the range 20-50 MWth, which are included within the scope of the [Emissions Trading](#) Directive. The study reached a clear conclusion that 'despite low load factors evident for small combustion installations and the large number of small combustion units (<3 MWth); the environmental and health benefits of all the selected reduction measures outweigh the compliance and administrative costs'.

Competitiveness study

This study¹¹ examined the impacts of different approaches to IPPC implementation on the competitiveness of companies in the electric steelmaking and domestic glass production industry sector. For the electric steelmaking sector, the study found a range of results, indicating that factors other than IPPC costs were important, that small companies were not disproportionately affected and that impacts depended upon stages in investment/business cycles. For the domestic glass sector, the study found that IPPC was not a major factor affecting its competitiveness. 'In contrast, the segment of soda-lime glass is very price sensitive, and exposed to fierce inter-national competition. Therefore, any competitiveness impacts arising from IPPC implementation have been found to be more likely'. There was also no evidence that small domestic glass installations suffered disproportionately from IPPC implementation.

Data gathering for technical amendments studies

The first study¹² addressed a range of issues considered for potential “technical” amendments to the IPPC Directive, including the development of methodologies to assess the environmental, economic and social impacts of the different options and to develop substantiated arguments for the various options. Issues included were: specific emission limit values, clarification of “periodically” for reconsidering the permit conditions, clarification of “periodically” for monitoring reports, obligation to perform regular inspections, requirements concerning discharges to water, provision of information by Member States in development of BREFs, lowering of the threshold for combustion installations in energy industries from 50 MWth, extension of IPPC to include aquaculture. A second study¹³ examined further specific options for changes to the definition of certain categories of IPPC Annex I installations and inclusion of further types of industrial activity within the scope of IPPC. A third study¹⁴ examined the coverage of waste issues within IPPC and data to examine a range of possible waste treatment activities that could be included within the scope of the IPPC Directive.

Application of IPPC to large combustion plants

This study¹⁵ undertook a cost-benefit analysis of two scenarios to assess the impact of different emission levels resulting from variation in the interpretation and implementation of BAT on Large Combustion Plants under the IPPC Directive. These were: implementation of the most strict upper end of BAT associated emission levels (AEL) in the BREF and implementation of the least strict BAT-AELs. The main finding from was that the benefits of stricter controls are higher than the costs, even using more conservative valuation estimates.

Public hearing

On 4 May 2007 the Commission held a public hearing on ‘Towards a Future Policy on Industrial Emissions: Review of the IPPC Directive and Related Legislation’. The Commission highlighted ‘shortcomings’ in the implementation of IPPC, including inconsistency in the use of BREFs, lack of transparency in setting permit conditions and problems with compliance and enforcement. This resulted in lower environmental protection, problems in introducing innovating technologies and distortions to competition. It also argued that bringing industrial emissions Directives into a single Directive would contribute towards better regulation and simplification. Thus the Commission stated that it was exploring the following options:

- Giving the BREFs a more prominent - and eventually a more binding – role.
- Ensuring better transparency, in particular when issuing permits which deviate from the BAT and BREFs, with the aim that flexibility should be the exception, not the rule.
- Adopting EU-wide minimum standards for certain sectors if there was insufficient progress towards BAT and BREFs.
- Reinforcing and clarifying enforcement, inspection and permit reviews
- Elaborating a single Directive on industrial emissions.

The proposal and its adoption

The Proposal

The proposal was published on 21 December 2007 ([COM\(2007\)844](#)). It was accompanied by an Impact Assessment ([SEC\(2007\)1679](#)) (summarised in [SEC\(2007\)1682](#)) and by a Communication ‘Towards an improved policy on industrial emissions’ ([COM\(2007\)843](#)). The aim of the proposal was to revise and merge seven separate existing Directives related to industrial emissions into a single Directive. The Commission argued that ‘Given the shortcomings of the legislation in force, the level of application of BAT in the EU is not that set by the IPPC Directive. Furthermore, the levels of compliance with the current legislation and its application vary from one Member State to another and the complexity of the existing legal framework results in unnecessary costs for the industry. These problems must be dealt with in order to maintain equality between industries, while guaranteeing higher levels of protection for the environment and human health’. Also, the results of the studies undertaken to support the review ‘led to a clearer and more coherent definition of the Directive which merges the current IPPC Directive and six sectoral Directives into a new single Directive on industrial emissions’. The proposal:

- Set out down provisions to strengthen and clarify the use of BAT and that possible derogations should be based on well defined criteria and made available to the public.
- Introduced a new requirement periodically to monitor the soil and groundwater on the site of the installations.
- Set down specific provisions to ensure effective implementation and enforcement.
- Introduced a requirement for permit conditions to be reconsidered and, where necessary, updated after the adoption of a new or updated BREF;
- Introduced requirements for a system of environmental inspections.
- Clarified requirements regarding site closure and remediation.
- Set more stringent emission limit values, aligned with BAT, for large combustion and pollutant plants.
- Introduced some further derogations to the minimum requirements for monitoring of emissions generated by waste incineration plants and waste co-incineration plants.
- Introduced some more stringent emission limit values for installations producing titanium dioxide.
- Extended the scope of IPPC to include some additional activities such as combustion installations between 20 and 50MW, the preservation of wood and wood products and the production of wood panels.

European Parliament first reading

The European Parliament Environment Committee produced a draft report ([link](#)) on 2 July 2008. The Committee backed the proposal to update and strengthen existing rules, but inserted new provisions for introducing EU-wide emission limit values, greater flexibility in granting permits, excluding small plants, and better informing the public. The Parliamentary Plenary adopted its [Opinion](#) on 10 March 2009 (COD/2007/0286). The main amendments were:

- The operator of an installation should provide the competent authority with the relevant data on compliance with permit conditions at least every 24 months, which shall be made available on the internet without delay.
- If the activity involves dangerous substances in significant amounts, permit applications shall include a baseline report providing information on those substances.
- The Commission shall organise exchanges of information on BAT between the Member States, representatives of their relevant competent authorities, operators and providers of techniques representing the industry concerned and NGOs.
- Competent authorities shall set emission limit values and monitoring and compliance requirements to ensure that the BAT associated emission levels are not exceeded.
- In exceptional cases BAT associated emission levels may be exceeded and Member States shall ensure that the public concerned is given early and effective opportunities to participate in the decision-making process relating to the grant of the derogation.
- Periodic monitoring should be carried out at least once every five years for groundwater and ten years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.
- Member States shall ensure that a sufficient number of skilled persons are available to carry out inspections. Programmes shall include at least one random site visit every eighteen months, for each installation, to be increased to at least every six months if an inspection has identified a case of non-compliance with the permit conditions.
- The Commission shall, within 12 months of the publication of a BREF, set emission limit values as well as monitoring and compliance requirements as minimum requirements. Such minimum requirements shall be directed to significant environmental impacts of the activities or installations concerned, and shall be based on BAT associated emission levels (BAT-AEL).
- The Parliament agreed with the proposal to bring medium-sized combustion plants (between 20 and 50 MW), within the Directive, but excluded installations (below 50 MW) which operate for no more than 500 hours/year.

Council Common Position

The Council held a public exchange of views on 2 March 2009 on the proposal (COD/2007/0286). Many delegations supported strengthening the role of BREFs in determining permit conditions, while many also stressed that competent authorities should be able to deviate from BREFs when justified due to specific local conditions. Noting the likely view of the European Parliament on introducing further minimum requirements for further activities, some ministers welcomed this, while others said that this could lead to negative effects on the environment. On large combustion plants some delegations supported the Commission's proposals, but others stressed the cost of retrofitting existing installations and expressed concern that the investments involved could impact the security of energy supply. A third group could accept the implementation of BAT by 2016, provided that there is a certain transitional flexibility. On the scope of the Directive a large number of delegations stressed that they did not agree with the Commission's view that the benefits would justify the costs of extending the scope of the Directive to include combustion plants with a rated thermal input of between 20 and 50 MW. There were also reservations on including certain types of waste and industrial farming.

The Council reached a political agreement on 25 June 2009 (COD/2007/0286) and a [Common Position](#) on 15 February 2010 (COD/2007/0286). In the Common Position, the

Council accepted 44 of the European Parliament's 85 adopted amendments to the proposal. Parliamentary amendments included in the Common Position included the following:

- A reference to the Århus Convention in the recitals.
- Clarification of the definition of "emission levels associated with the best available techniques", "the public concerned", "emerging technique" and "environmental inspections".
- Permits applying to more than one installation or more than one operator are an option.
- Instead of making a reference to "exceptional cases" to limit derogations from BAT-AELs as Parliament wanted, the Common Position would require the competent authority to make public the reasons for any derogation.
- Incorporation of the amendment on monitoring of soil and groundwater.
- Simplification of the provisions relating to the use of general binding rules.
- Clarification on the updating of permit conditions.
- Reference to the [Groundwater Directive](#) in the text.
- Clarification of the scope in relation to non-ferrous metal foundries.
- Annex I (scope) broadly consistent with some amendments made by the Parliament.
- Annex V (combustion plants) consistent with the amendment concerning the derogation for plants using liquid fuels.
- Annex VI (waste incineration plants and waste co-incineration plants) partly consistent with Parliament's amendment.

The Council did not accept Parliamentary amendments which would delay annual reporting by operators and the length of time for an inspection report to be made public. The Council did not accept comitology as appropriate to amend the Annexes, including legally binding emission limit values, but stated that this should be through co-decision. It was also concerned that this could lead to excessive reliance on the values so set, rather than the application of BAT.

On the scope of the Directive, the Council rejected the Commission's proposal, in particular for thresholds for combustion plants and for intensive farming and the requirement for manure spreading to be based on BAT. The Council instead inserted a review clause and also included a threshold of 15 MW for the calculation of the total rated thermal input of combustion plants subject to Chapter III. On the adoption of BREFs, the Common Position provided for the adoption of decisions (through the regulatory procedure with scrutiny) on BAT conclusions containing the key elements of BREFs, thus avoiding the costs of translation of whole BREFs into all official languages. Competent authorities would have five years to reconsider permits (instead of four) after publication of a decision on BAT conclusions. The Council also added further requirements to prevent soil and groundwater pollution and greater flexibility regarding baseline reports and site closure. On combustion plants, the Council proposed a number of changes to the proposal:

- The date of application of the standards to new combustion plants would be two years after entry into force rather than 1 January 2016, since new plants should have no problem immediately applying BAT established in 2006.
- To 'take account of certain local conditions, costs in certain specific circumstances, and risks regarding the security of energy supply', derogations were added:
 - When firing indigenous solid fuels, the possibility of applying a desulphurisation rate rather than emission limit values for SO₂.

- To allow implementation of a 'transitional national plan' for certain combustion plants by applying decreasing annual ceilings for total emissions from participating plants between 2016 and 2020 instead of individual emission limit values.
- Until 2023 for plants which will operate for a limited time before closure and for certain district heating plants.
- Until 2019 for plants which are part of small isolated systems.
- Introduction of a review clause regarding certain specific combustion plants and provides for the existing emission limit values under Directive 2001/8/EC to continue to apply pending the possible adoption of new standards.

European Economic and Social Committee

The [opinion](#) of the European Economic and Social Committee was issued on 14 January 2009. It stressed the need to maintain the existing approach based on BAT as a case-by-case assessment. However, regulations must still be applicable across the EU – ‘BATs must also help to reduce distortions of competition’. The role of BREFs also needed to be clarified. On incorporating the sectoral Directives the Committee was concerned that this did ‘not result in a particularly laborious and complex text, which would run counter to the aim of simplification’.

Commission response

The Commission published a Communication ([COM\(2010\)67](#)) on 23 February 2010 responding to the Council Common position. It accepted in full, in part or in principle 47 of the 85 amendments adopted by Parliament in its first reading. 32 of these 47 amendments were reflected, at least in part, in the Council's position at first reading. The Commission accepted amendments which would clarify the context of the proposal and were consistent with the general objective of the proposal, such as changes to improve the provision of information to the public. The Commission rejected amendments which it considered would alter the nature of the proposal, such as amendments that would reduce the scope of the provisions setting minimum requirements for large combustion plants. On a number of issues, such as soil protection, inspection, specific conditions for large combustion plants, and scope of the Directive, the Commission stated that it preferred its original proposal, but could accept the view of the Council.

European Parliament Environment Committee response

In preparation for the second reading, the Environment Committee adopted a recommendation on 4 May 2010 ([COD/2007/0286](#)) which reinstated many of the amendments adopted in the first reading. These included an insistence that installations must be suspended where the breach of the permit conditions poses a significant danger to human health or the environment and until compliance is restored, that the Commission shall assess the need for EU action through the establishment of EU-wide minimum requirements for emission limit values and rules on monitoring and compliance for activities within the scope of the BAT conclusions concerned, that there are strict limitations on allowing emission limit values less strict than those set out in a BREF and that environmental inspections should take place at least every two years if a risk-based approach is followed.

Adoption

Although the Environment Committee began the process of re-tabling amendments, a tripartite meeting of MEPs, Council and Commission took place which saw agreement on a compromise text, thus enabling earlier adoption of the Directive. On 7 July 2010 the Parliament adopted the compromise text in its second reading on the proposal (COD/2007/0286) and this was welcomed by the Commission ([COM\(2010\)596](#)). It was subsequently adopted at the Justice and Home Affairs Council on 8 November 2010.

Implementation of the Directive

Member States have until 7 January 2013 to transpose the Directive. It is, therefore, too early to describe formal or practical implementation.

Further developments

The Commission stated in its review of the IPPC Directive that it would examine whether and how a NO_x/SO_x emissions trading scheme could be applied as a replacement to the BAT-based permitting system of the Directive. As a result it commissioned two studies which demonstrated that such a trading scheme could be more cost-effective¹⁶. However, introducing such a scheme would create uncertainty in implementing the Industrial Emissions Directive and the Commission had concerns over consequences for local air quality. Furthermore a wide number of Member States and stakeholders were opposed to such an instrument. Therefore, the Commission concluded that it would not pursue further action on this issue.

Related legislation

Directive 2010/75/EU interacts with other EU laws in a variety of ways. This section does not include those Directives being repealed by the Directive (see above). The Directive is focused on the determination of emission limits in permits. Other EU legislation also does this, effectively setting minimum values or particular conditions to be addressed within permitting for those installations covered by more than one Directive:

- Dangerous Substances Directive [2006/11/EC](#).
- Landfill Directive [1999/31/EC](#).
- Urban Waste Water Treatment Directive ([91/271/EEC](#)).

One Directive has set conditions for industry which specifically requires that emission limit values are not set in permits. This has a strong interaction with the Directive:

- Emissions Trading Directive [2003/87/EC](#).

Directive 2010/75/EU also requires that emission limits established in permits respect environmental quality standards established in EU law. These include those established in the following Directives:

- Air Framework Directive [2008/50/EC](#).

- Dangerous Substances Directive ([2006/11/EC](#)).
- Environmental Quality Standards for Water Directive [2008/105/EC](#).
- Groundwater Directive [2006/118/EC](#).
- Water Framework Directive [2000/60/EC](#).
- Habitats Directive [92/43/EEC](#).
- Birds Directive [79/409/EEC](#).

The processes established to implement the Directive also interact with other Directives and policies, principally those on impact assessment, accident prevention and management and inspection:

- SEA Directive [2001/42/EC](#).
- EIA Directive [2003/35/EC](#).
- Major Accident Hazards Directive [96/82/EC](#).
- Recommendation [2001/331/EC](#), on minimum criteria for EU environmental inspections (RMCEI).

Operators of installations regulated under the Directive are required to report emissions data according to:

- Regulation (EC) No 166/2006 concerning the establishment of a [European Pollutant Release and Transfer Register](#)

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