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# Environmental Permitting Guidance

## The IPPC Directive

### Part A(1) Installations and Part A(1) Mobile Plant

#### For the Environmental Permitting (England and Wales) Regulations 2010

Updated March 2010

Version 3.0



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government



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## Revision of the Guidance

This publication is updated from time to time with new or amended guidance. The table below is an index to these changes.

<b>date of amendment</b>	<b>chapter/ paragraph where amendment can be found</b>	<b>nature of amendment</b> - what paragraphs have been inserted, deleted, or amended - what subject matter is covered by the amendment
12/03/08	Annex 1	Minor typographical corrections
01/10/09	Throughout	Minor typographical corrections and updates to codified IPPC Directive
01/10/09	1.4	Diagram of guidance relationships inserted
01/10/09	Ch 1 and Ch 2	Restructures of text to meet requirements of the Code of Practice on Guidance on Regulation following the Anderson Review and subsequent changes to the numbering of the rest of the document
01/10/09	Annex 1	Amendments made by SI 2009 No.1799
05/03/10	Throughout	Updated to reflect EP Regulations 2010
05/03/10	Throughout	General typographical corrections

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## **Annex 1 - Schedule 7 to the Environmental Permitting Regulations**

## **Annex 2 – The IPPC Directive**

## **Annex 3 – EC Environmental Quality Standards Relevant to Installations**

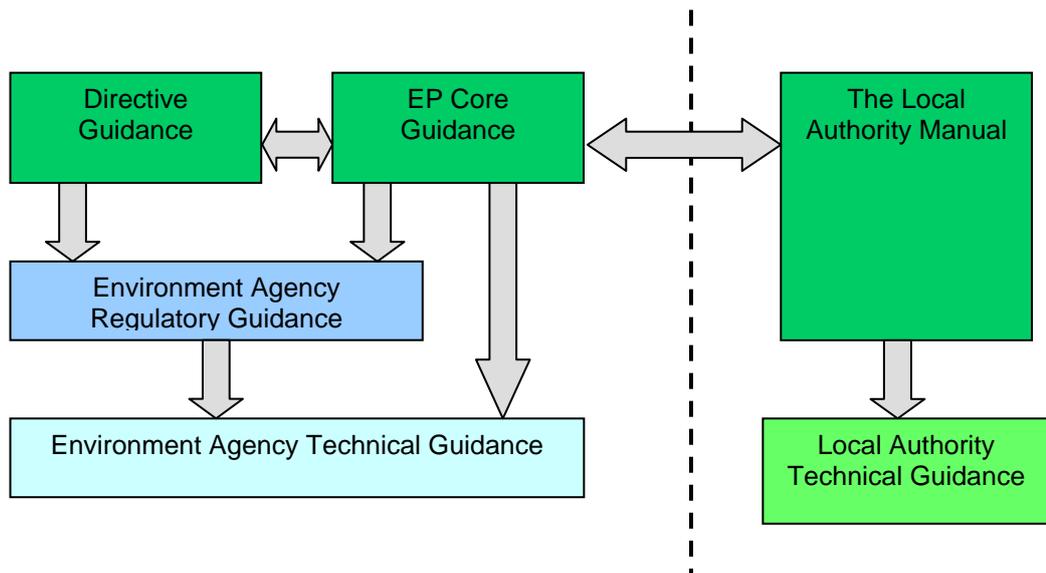
## **Annex 4 – Examples of the Meaning of Installation**

# 1. Summary

## About this guidance

- 1.1. This guidance is aimed at helping readers understand the European Community (EC) Directive 2008/1/EC<sup>1</sup> on Integrated Pollution Prevention and Control (the IPPC Directive), insofar as it relates to installations in England and Wales. Separate Regulations apply the IPPC Directive in Scotland and Northern Ireland and to the offshore oil and gas industries.
- 1.2. This guidance is being published to help those regulating and operating Part A(1) installations and Part A(1) mobile plant, but it will also be of interest to others concerned with these installations and mobile plant. This guidance sets out the views of the Secretary of State for Environment, Food and Rural Affairs (Defra) and the Welsh Assembly Government (WAG) on how the IPPC Directive should be applied and how particular terms should be interpreted. However, only the national or European Courts can give a definitive interpretation of the legislation.

Figure 1. Illustration of guidance relationships.



- 1.3. This guidance is part of a series of documents which accompany the Environmental Permitting (England and Wales) Regulations 2010 SI 2010 No. 675 (the Regulations)<sup>2</sup>.
- 1.4. The series consists of the Environmental Permitting Core Guidance<sup>3</sup>, which describes the general permitting and compliance requirements, and guidance on each of the European Directives implemented through the

<sup>1</sup> Previously known as Directive 96/61/EC. Directive 2008/1/EC is a codified version of Directive 96/61/EC

<sup>2</sup> Available at [www.defra.gov.uk/environment/policy/permits/guidance.htm](http://www.defra.gov.uk/environment/policy/permits/guidance.htm)

<sup>3</sup> *Ibid.*

regime<sup>4</sup>. Separate guidance is available for local authority regulation under the regime<sup>5</sup>. This is illustrated in Figure 1.

- 1.5.** This guide should be read in conjunction with the Environmental Permitting Core Guidance. Where other directives apply, then reference should be made to the relevant guidance<sup>6</sup>. Large Combustion Plants are Part A(1) installations, those landfills to which the IPPC Directive applies are Part A(1) installations and a waste incineration installation can be a Part A(1) installation or a Part A(2) installation. An SED installation can be, or be part of, a Part B, Part A(2) or Part A(1) installation.
- 1.6.** Regulatory and technical guidance prepared by the Environment Agency is also available<sup>7</sup>.
- 1.7.** The scope of this document is limited to Part A(1) installations and Part A(1) mobile plant as defined in the Regulations. Guidance for local authority regulators on the regulation of Part A(2) and B installations and mobile plant is available in the General Guidance Manual on Policy and Procedures for A2 and B Installations (the General Guidance Manual)<sup>8</sup>.
- 1.8.** To ensure this guidance is current and up to date, from time to time this guidance will be updated. Where made, revisions can be found in the 'Revision of Guidance' section at the front of the document.
- 1.9.** This guidance document is compliant with the Code of Practice on Guidance on Regulation<sup>9</sup>. If you feel this guidance breaches the code, or notice any inaccuracies within the guidance, please contact the EPP team at: [eppadministrator@defra.gsi.gov.uk](mailto:eppadministrator@defra.gsi.gov.uk)

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<sup>4</sup> Available at [www.defra.gov.uk/environment/policy/permits/guidance.htm](http://www.defra.gov.uk/environment/policy/permits/guidance.htm)

<sup>5</sup> Available at [www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm](http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm)

<sup>6</sup> See footnote 1.

<sup>7</sup> Available at: [www.environment-agency.gov.uk/epr](http://www.environment-agency.gov.uk/epr)

<sup>8</sup> Available at: [www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm](http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm)

<sup>9</sup> See Environmental Permitting Guidance and Glossary Chapter 3: [www.defra.gov.uk/environment/policy/permits/guidance.htm](http://www.defra.gov.uk/environment/policy/permits/guidance.htm)

## 2. Introduction

### The IPPC Directive

- 2.1. The system of Integrated Pollution Prevention and Control (IPPC) set out in the IPPC Directive applies an integrated environmental approach to the regulation of certain industrial activities. This means that emissions to air, water (including discharges to sewer) and land, plus a range of other environmental effects, must be considered together. It also means that regulators must set permit conditions so as to achieve a high level of protection for the environment as a whole.
- 2.2. These conditions are based on the use of the Best Available Techniques (BAT), which balances the costs to the operator against the benefits to the environment. IPPC aims to prevent emissions and waste production and where that is not practicable, reduce them to acceptable levels. IPPC also takes the integrated approach beyond the initial task of permitting through to the restoration of sites when industrial activities cease.
- 2.3. The website of the European Commission<sup>10</sup> contains general background information on IPPC. Guidance on the interpretation and implementation of the IPPC Directive can also be found on the Commission's website<sup>11</sup>. The Commission's IPPC Bureau website<sup>12</sup> contains links to IPPC conference proceedings as well as to the European guidance documents on best available techniques (see chapter 4).
- 2.4. Schedule 7 to the Regulations (reproduced in this document as Annex 1) sets out the relevant requirements from the IPPC Directive which apply to Part A(1) installations and Part A(1) mobile.
- 2.5. Chapter 3 of this guidance sets out the scope of the IPPC Directive by defining Part A installations and mobile plant. Chapter 4 describes the requirements of the IPPC Directive which will be delivered through environmental permits for Part A(1) installations and Part A(1) mobile plant and sets out how the Regulations transpose the relevant parts of the IPPC Directive. Chapter 5 describes the other IPPC Directive requirements relevant to environmental permitting.
- 2.6. A copy of the IPPC Directive is provided in Annex 2.
- 2.7. A separate glossary of terms is available<sup>13</sup>. The glossary briefly explains the meaning of many words, phrases and acronyms used in the Regulations and directives.

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<sup>10</sup> <http://ec.europa.eu/environment/air/pollutants/stationary/ippc/index.htm>

<sup>11</sup> At [ec.europa.eu/environment/ippc/general\\_guidance.htm](http://ec.europa.eu/environment/ippc/general_guidance.htm)

<sup>12</sup> See footnote 8.

<sup>13</sup> Available at [www.defra.gov.uk/environment/policy/permits/guidance.htm](http://www.defra.gov.uk/environment/policy/permits/guidance.htm)

## Interface with other legislation

- 2.8.** A number of Part A installations are subject to other European Directives. The interface between the IPPC Directive and the activity-specific directive is explained in the relevant directive guidance (see paragraph 1.5).
- 2.9.** Some Part A installations may be subject to the Asbestos, Petrol Vapour or Titanium Dioxide Directives. Due to the low numbers of affected Part A installations in these cases and the technical nature of the requirements, no specific Government guidance is being produced for these Directives. However, guidance on the relevant requirements can be found in the General Guidance Manual for the Asbestos and Petrol Vapour Directives and in technical guidance produced by the Environment Agency for the Titanium Dioxide Directive.
- 2.10.** Some Part A installations may also be subject to EC-derived legislation on the control of major accident hazards. Directive 96/82/EC, as amended by Directive 2003/105/EC, aims to prevent major accidents involving dangerous substances and limit the consequences to people and the environment of any that do occur. The Directives are implemented in Great Britain by the Control of Major Accident Hazards (COMAH) Regulations 1999 (amended in 2005). The Health and Safety Executive and the Environment Agency, who enforce the COMAH Regulations in England and Wales, work closely together to avoid potential conflicts between COMAH and other environmental legislation, such as IPPC. Further information on the environmental aspects of the legislation is available on the Environment Agency website at: [www.environment-agency.gov.uk/epr](http://www.environment-agency.gov.uk/epr).
- 2.11.** A number of other European Directives are relevant to Part A installations. Annex 1 to the Environmental Permitting Core Guidance outlines the connections with other legislation.

## 3. Part A(1) Installations and Part A(1) Mobile Plant

- 3.1.** The Regulations use the term regulated facility to describe the types of operation or activity which require an environmental permit (regulation 8). These include an installation and mobile plant.
- 3.2.** These terms are defined in regulation 2(1) And Schedule 1, Part 1. Each installation is divided into one of the following categories: Part A(1), Part A(2) or Part B. This guidance is only applicable to Part A(1) installations and Part A(1) mobile plant. Part A(2) and B installations and mobile plant are regulated by local authorities and guidance on these is available in the General Guidance Manual (see paragraph 1.7).
- 3.3.** This chapter describes how to determine the Part A(1) installation. This determination involves a consideration of:
- the meaning of installation;
  - the meaning of Part A(1) installation; and
  - the meaning of Part A(1) activity;
- 3.4.** When an activity described in Schedule 1, Part 2, Part A(1) to the Regulations is carried on by means of a mobile plant it will be a Part A(1) mobile plant.

### Installation

- 3.5.** Installation means—
- (i) a stationary technical unit where one or more activities listed in Schedule 1, Part 2 to the Regulations are carried out (listed activities); and
  - (ii) any other location on the same site where any other directly associated activities are carried out which have a technical connection with the activities carried out in the stationary technical unit and which could have an effect on pollution.
- 3.6.** In relation to any SED activity, a directly associated activity is an activity which
- (i) has a technical connection with the SED activity,
  - (ii) is carried on the same site as the SED activity, and
  - (iii) could have an effect on any discharge of volatile organic compounds into the environment.

- 3.7.** The following criteria and examples are provided to assist regulators and operators when applying this definition in individual cases. It should be noted that the Commission has recently published informal guidance on the meaning of installation<sup>14</sup>. The guidance includes useful advice on the meaning of a number of the elements of both limb (i) and limb (ii) of the definition. These include the meaning of: stationary, technical unit, directly associated activity, technical connection, site and 'could have an effect on emissions and pollution'.
- 3.8.** The Commission guidance suggests a slightly different structural approach to the interpretation of the meaning of installation than has so far been adopted in England and Wales. However, it acknowledges that the approach described below may also meet Directive requirements and may be chosen by member states.

#### **Limb (i) of the definition**

- 3.9.** Two criteria are proposed for the purpose of determining whether plant or machinery satisfy the first limb of this definition:

(1A) the plant or machinery must be a technical unit where one or more activities listed in Schedule 1, Part 2 to the Regulations (listed activities) are carried out; and

(1B) the technical unit must be stationary.

- 3.10.** For the purpose of criterion (1A), technical unit can be taken to mean something which is functionally self-contained in the sense that the unit – which may consist of one component or a number of components functioning together – can carry out the Schedule 1 activity or activities on its own.
- 3.11.** Where, however, there are two or more such units on the same site, those units should be regarded as a single technical unit for these purposes if:
- they carry out successive steps in one integrated industrial activity;
  - one of the listed activities is a directly associated activity of the other; or
  - both units are served by the same directly associated activity.

#### **Limb (ii) of the definition**

- 3.12.** An installation consists of the stationary technical unit identified under the first limb of the definition plus any location on the same site where activities that satisfy the second limb are carried out. Three criteria are proposed for the purpose of determining whether an activity satisfies the second limb:

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<sup>14</sup> EU Commission guidance on Guidance on Interpretation of Installation and Operator for the Purposes of the IPPC Directive is available at [http://ec.europa.eu/environment/ippc/pdf/installation\\_guidance.pdf](http://ec.europa.eu/environment/ippc/pdf/installation_guidance.pdf)

(2A) the activity must be directly associated with the stationary technical unit;

(2B) the activity must have a technical connection with the listed activities carried out in or by the stationary technical unit; and

(2C) the activity must be capable of having an effect on emissions.

**3.13.** Criterion (2A) requires that the activity serves the stationary technical unit (i.e. there is an asymmetrical relationship whereby the activity serves the stationary technical unit but not vice versa). If an activity, such as operating a landfill, serves a stationary technical unit carrying out a listed activity and some other industrial unit or units on a different site or carrying out non-listed activities, then the activity will only be directly associated with the stationary technical unit if that unit is the principal user of the activity.

**3.14.** Criterion (2B) gives rise to four types of directly associated activities which may be said to have a technical connection with a stationary technical unit:

- input activities concerned with the storage and treatment of inputs into the stationary technical unit;
- intermediate activities concerned with the storage and treatment of intermediate products during the carrying on of the listed activities – this might apply particularly where the stationary technical unit consists of a number of sub-units with the product of one sub-unit being stored or treated prior to being passed on to the next sub-unit in the production chain;
- output activities concerned with the treatment of waste (or other emissions, like manure) from the stationary technical unit; or
- output activities concerned with the finishing, packaging and storage of the product from the stationary technical unit.

**3.15.** These activities have a technical connection in the sense that they are integral parts of the overall listed industrial activity. Often there will also be a physical connection, such as a conveyor belt or pipeline, but this does not have to be the case. The need for input, intermediate and output activities to be an integral part of a listed activity before it is caught by limb (ii) is presented as part of criterion (2B). Note, however, that the requirement for associated activities to be directly associated in criterion (2A) also emphasises the need for associated activities to be an integral part of a listed activity before they are treated as part of an installation.

**3.16.** Criterion (2C) covers both activities which have an effect on emissions and pollution from the listed activities with which they are associated and activities which have such an effect in their own right.

**3.17.** The examples in Annex 4 illustrate the application of these criteria.

### **Part A(1) Installation**

- 3.18.** A Part A(1) Installation means: any installation where one or more Part A(1) Activities are carried on.
- 3.19.** The consequence of this is that both Part A(1) Activities and Part A(2) or B Activities are carried on at an installation it is a Part A(1) Installation.
- 3.20.** A Part A(2) Installation means an installation where one or more Part A(2) or B Activities, but no Part A(1) Activities are carried on.

### **Part A(1) Activity**

- 3.21.** The existence of an installation is dependent on there being one or more listed activities carried on there<sup>15</sup>.
- 3.22.** There are certain general exclusions from the activity descriptions. These are set out in Schedule 1, Part 1, paragraph 3. An example is an activity carried on at an installation or by means of Part A mobile plant or Part B mobile plant solely used for research, development and testing of new products and processes.
- 3.23.** A Part A(1) Activity means an activity listed under the heading Part A(1) of any section in Schedule 1, Part 2 to the Regulations (Schedule 1, Part 1 paragraph 1).
- 3.24.** Activities may also be listed under the heading Part A(2) or Part B in Schedule 1 to the Regulations. Where an activity appears to fall within more than one activity description and these fall within different categories (i.e. Part A(1), Part A(2) or Part B), rules are provided for deciding which category should be considered to apply. These rules are contained in Schedule 1, Part 1, paragraph 2.

### **Capacity**

- 3.25.** In some cases, the question of whether an activity falls within a particular activity description will depend on its capacity<sup>16</sup>. Schedule 1, Part 1, paragraph 4 to the Regulations contains an aggregation rule for these purposes. It states that where a person carries out several activities falling within the same description in Part A(1) or Part A(2) in different parts of the same stationary technical unit or in different stationary technical units on the same site, the capacities of each part or unit are to be added together. The total capacity is then to be attributed to each part or unit for the purpose of determining whether it is a Part A(1) Activity or a Part A(2) Activity.
- 3.26.** It is for operators to determine the relevant production capacity in each case, in order to establish what regime, if any, they are subject to, and to which regulator they should submit their applications. An operation that exceeds the capacity on which a permit has been based could constitute

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<sup>15</sup> There is European Commission guidance on the interpretation of certain activity descriptions available at [http://ec.europa.eu/environment/ipcc/general\\_guidance.htm](http://ec.europa.eu/environment/ipcc/general_guidance.htm)

<sup>16</sup> European Commission guidance on Interpretation and Determination of Capacity under the IPPC Directive is available at [http://ec.europa.eu/environment/ipcc/pdf/capacity\\_guidance.pdf](http://ec.europa.eu/environment/ipcc/pdf/capacity_guidance.pdf)

an offence. Regulators may be able to offer advice on this issue, and indeed on the interpretation of other aspects of the definitions of activities. Regulators may also assess whether an operator's assessment of capacity as set out in an application is reasonable. This may involve considering if, for example, the installation could be run properly at that rate, or alternatively looking at the design capacity.

- 3.27.** Finished product production capacity, when referring to production of food products as used in Schedule 1, Part 2, Section 6.8, paragraph (d) to the Regulations should always be assessed on the basis of the overall capacity of the installation to produce any material which can be used as food for human or animal consumption without any further treatment or processing. Where an installation produces materials which are supplied from the installation to serve, through further treatment and processing outside the installation, as ingredients in the preparation of food, the maximum production for that purpose must also be taken into account when assessing the installation's overall capacity.

## 4. Permitting Requirements

- 4.1. This chapter describes the Directive requirements that environmental permits must deliver and how the Regulations apply these requirements.
- 4.2. Schedule 7, paragraph 1 to the Regulations applies the requirements of the Schedule to every Part A installation or Part A mobile plant (see chapter 3 of this guidance).
- 4.3. Schedule 7, paragraph 3 to the Regulations requires the regulator to exercise its functions under the Regulations to achieve the basic purpose set out in Article 1 of the IPPC Directive. This purpose is to achieve 'a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land'.
- 4.4. Paragraph 5 of the Schedule requires the regulator to exercise its relevant functions so as to comply with certain provisions of the Directive.
- 4.5. The regulator exercises a relevant function when it determines an application for the grant of a permit when it makes a regulator-initiated variation of permit conditions or when it exercises enforcement powers in relation to a permit (regulation 9 and see chapters 5, 6 and 10 of the Environmental Permitting Core Guidance).
- 4.6. The provisions of the Directive, which are required to be secured by the regulator through environmental permitting and which are described in this chapter, are:
  - general principles governing the basic obligations of the operator - Article 3;
  - conditions of the permit - Article 9(1) to (6);
  - BAT and environmental quality standards - Article 10;
  - changes to installations - Article 12;
  - compliance with permit conditions - Article 14(b); and
  - community emission limit values - Article 18(2)
- 4.7. The obligations in relation to Articles 9 and 12(1) are modified in relation to mobile plant to reflect its mobile nature (Schedule 7, paragraph 5(2)).
- 4.8. The Environment Agency is the regulator for Part A(1) installations and Part A(1) mobile plant (see regulation 32).

## Overview of the requirements of IPPC

### General principles - Article 3

4.9. The general principles of Article 3 are:

- all the appropriate preventive measures are taken against pollution, in particular through application of BAT;
- no significant pollution is caused;
- waste production is avoided in accordance with the Waste Framework Directive (2006/12/EC); where waste is produced, it is recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;
- energy is used efficiently;
- the necessary measures are taken to prevent accidents and limit their consequences;
- the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

4.10. The regulator may impose permit conditions to reflect the general principles set out in Article 3. This means that the permit may include conditions relating to, for example environmental accident prevention.

### Best Available Techniques - Article 9 (4)

4.11. The essence of IPPC is that operators should use the best option available to achieve a high level of protection of the environment taken as a whole. IPPC achieves this by requiring permits to be based on the use of the best available techniques (BAT). This, together with a consideration of the local environmental conditions, the technical characteristics of the installation and its location, provides the basis for setting emission limit values (ELVs) and other permit conditions.

4.12. The BAT approach ensures that the cost of applying techniques is not excessive in relation to the environmental protection they provide. It follows that the more environmental damage BAT can prevent, the more the regulator can justify telling the operator to spend on it before the costs are considered excessive.

### Other conditions of the permit - Article 9

4.13. In addition, Article 9 provides that permits should address the following:

- aim to minimise long distance and transboundary pollution;
- ensure the protection of soil and groundwater and make sure the operator manages waste properly;

- protect the environment when the installation is not operating normally, for example during start-up, malfunction, leaks or temporary stoppages;
- require the operator to take appropriate steps before and after operation which may include site monitoring and remediation;
- set out how the operator should monitor emissions, specifying the methodology, frequency and evaluation procedures, and requiring the operator to submit reports to the regulator, to check compliance with the permit; and
- require the operator to inform the regulator without delay of any incident or accident that may cause pollution.

### **Environmental quality standards (EQS) - Article 10**

**4.14.** Where an EQS made to implement European legislation requires stricter conditions than those achievable by the use of BAT, the regulator must require additional measures in the permit (see paragraph 4.57).

### **Changes to installations - Article 12**

**4.15.** Regulators must ensure that there is a permit condition requiring operators to notify the regulator of any proposed change in operation, unless making an application for the change under regulation 20. If the change could result in a breach of the existing permit conditions, or if the regulator is likely to want to review the conditions in the light of the proposal, the operator should apply for a variation under regulation 20. Guidance on the meaning of change in operation is provided in the following chapter (see paragraph 5.21)

### **Compliance with permit conditions - Article 14**

**4.16.** Regulators must ensure that there is a permit condition requiring operators to notify the regulator without delay of any incident or accident significantly affecting the environment. Permit conditions must also require the operator to provide monitoring information to the regulator (Article 14(b)).

### **Community emission limit values - Article 19(2)**

**4.17.** In some cases the regulator will also need to take account of other legislation given effect through the Regulations when determining permit conditions for an installation. For example, other EC Directives set emission limit values and other requirements for certain activities, such as waste incineration and the operation of large combustion plants. These requirements must be met through environmental permits. However, they do not necessarily reflect what is BAT. In most cases, the requirements of other legislation are minimum obligations and any stricter conditions that may result from IPPC requirements have to be imposed. Annex 3 sets out the EC Environmental Quality Standards relevant to installations.

## **Meaning of best available techniques**

**4.18.** Article 2 of the IPPC Directive defines BAT as ‘the most effective and advanced stage in the development of activities and their methods of

operation which indicates the practical suitability of particular techniques for providing in principle the basis for ELVs designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole’.

- 4.19.** Where there is a choice, the technique that is best overall will be BAT unless it is not an available technique. There are two key aspects to the availability test:
- what is the balance of costs and advantages? This means that a technique may be rejected as BAT if its costs would far outweigh its environmental benefits; and
  - can the operator obtain the technique? This does not mean that the technique has to be in general use. It would only need to have been developed or proven as a pilot, provided that the industry could then confidently introduce it. Nor does there need to be a competitive market for it. It does not matter whether the technique is from outside the UK or even the EU.

#### **General conditions relating to BAT**

- 4.20.** Any condition implied in a PPC permit requiring the operator to use BAT<sup>17</sup> will continue to have effect when that permit becomes an environmental permit (regulation 105(1)).
- 4.21.** The regulator may still include in a permit general conditions requiring the operator to use BAT to prevent or reduce emissions that are not covered by more specific permit conditions. This is intended to cover the most detailed level of plant design where the operator will usually be in the best position to understand what pollution control means for an installation in practice.

#### **Basic principles for determining BAT**

- 4.22.** The basic principles for determining BAT should be the same irrespective of whether BAT are indicated in guidance or assessed uniquely for a single installation. They involve identifying options, assessing environmental effects and considering economics. The principles of precaution and prevention are also relevant factors for BAT determinations.

#### **Identifying BAT options**

- 4.23.** Determining BAT involves comparing the techniques that prevent or reduce emissions and identifying the best in terms of those which will have the lowest overall impact on the environment. For example, determining BAT in the iron and steel industry might involve comparing recently developed methods for reducing iron without using coke and sintered material against traditional blast furnaces. More generally, alternatives

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<sup>17</sup> Regulation 12 (10) of The Pollution Prevention and Control (England and Wales) Regulations 2000 SI No. 1973 which were revoked by the Regulations (Schedule 27 of the Regulations).

should be compared both in terms of the primary techniques used to run the process and the abatement techniques to reduce emissions further.

### **Environmental assessment**

- 4.24.** Once the options have been identified there should be an assessment of their environmental effects. It should focus particularly on the significant environmental effects – both direct and indirect. It should also look at the major advantages and disadvantages of techniques used to deal with them. Account should be taken, in particular, of the various factors listed in Annex IV of the IPPC Directive. This should help to rank techniques according to their overall environmental effects.
- 4.25.** The main focus of the environmental assessment will be the effects of releases. The assessment should identify and quantify possible releases of polluting substances into any media. It should also quantify their effects. Most attention should be paid to large-scale releases and releases of the more hazardous pollutants. These are likely to have the most significant effects. Conversely, any releases at levels so low that they are unlikely to have any significant effects need not be assessed. A list of the main polluting substances is in Annex III of the IPPC Directive. However, as this is just indicative, consideration should be given to other substances capable of causing pollution in the same way.
- 4.26.** A notable omission from Annex III – explicable because it originates from the early 1990s – is carbon dioxide. But it is essential that the environmental assessment must consider direct and indirect emissions of carbon dioxide that result from the industrial activity in question and from the techniques which may be used to deal with emissions of other pollutants, recognising however that trade-offs between carbon dioxide and other pollutant emissions will sometimes have to be made.
- 4.27.** IPPC is also concerned with emissions of heat, vibrations and noise. As with substances, however, a detailed assessment is only needed if a preliminary assessment indicates that significant effects may occur.
- 4.28.** Noise from industrial installations has previously been regulated through Part III of the Environmental Protection Act 1990 (EPA 1990), as well as through planning controls. Part III of the EPA 1990 is concerned with statutory nuisances and defines noise to include vibrations. The defence against proceedings for a statutory nuisance is that the best practicable means (BPM) are being used to prevent the nuisance. Everything else being equal, the measures that an operator should take at an IPPC installation to protect against noise and vibrations will be broadly similar to those for a BPM defence. The aim should be to achieve the underpinning of good practice, the prevention of creeping ambient noise levels, and the prevention of reasonable cause for annoyance to persons in the vicinity. The assessment of reasonable cause for annoyance is dependent on many factors including the type of noise, the time of day or night, the nature of the area, the existing noise climate and the contribution made by the noise source under consideration.

**4.29.** The environmental assessment of options should also take account of the other issues covered by IPPC as listed in Annex IV of the IPPC Directive. These include:

- Consumption and nature of raw materials. Consideration should be given to options that use fewer resources, or those that use materials that are less likely to produce hazards or pollution risks. For example, the use of a purer raw material could lead to lower releases of contaminants. Water is also a raw material, and the assessment should consider how much each option needs where appropriate, and the environmental consequences of any abstraction.
- Energy efficiency. Consideration should be given to the effect different options would have on energy consumption and efficiency. Care should be taken that pollution abatement systems do not use excessive energy compared with the emission reductions they achieve, but as indicated above (paragraph 4.26) there may have to be trade-offs between direct or indirect emissions of carbon dioxide and other pollutants in the interests of overall environmental protection. Installations in a Climate Change Agreement or participating in EU Emissions Trading Schemes have particular incentives in respect of energy efficiency which may be reflected in the assessment of options.
- Waste issues. The assessment of options should cover the amount of waste produced and the possibility of preventing waste, recovering it or disposing of it safely. It may be preferable to permit a slightly higher level of releases if this greatly reduces the volume of waste, especially if the waste is particularly hazardous. However, this should not simply transfer pollution from one medium to another, which is precisely what IPPC is meant to avoid. The main goal should be to identify techniques that minimise all types of waste and releases at source.
- Accidents<sup>18</sup>. Consideration should be given to the environmental hazards posed by possible accidents and their associated risks. This should include the practicality of measures to reduce risks and hazards and to respond to any accidents. In comparing the effectiveness of techniques to prevent emissions, consideration should not be limited to looking at normal operations, but also at the possibility of unintentional releases.
- Site restoration. Consideration should be given to whether options risk polluting the site. This should include planning ahead for decommissioning and restoring the site upon closure. For example, siting pipelines and storage tanks above-ground rather than underground would make leaks easier to detect and removal of pollution risks more straightforward.

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<sup>18</sup> The COMAH Regulations also apply to major accident hazards that could harm the environment.

**4.30.** In some cases where options have been based on environmental assessments, a judgement will need to be made about the relative significance of different environmental effects, sometimes in different media. In comparing these, certain basic parameters may help to reach a conclusion. For example, long-term, irreversible effects are worse than short-term reversible ones, if all other factors such as immediate severity are equal. However, these comparisons will often be inexact. In ranking options, therefore:

- all assumptions, calculations and conclusions must be open to examination;
- using simple numerical analyses to compare or aggregate different types of environmental effects should generally be avoided, except where there are recognised ways of doing this. Individual effects within options should be assessed quantitatively where possible. However, the overall assessment and comparison of options should normally include significant qualitative elements; and
- expert judgement should be used alongside the particular constraints of the appraisal system, so that common sense conclusions are reached.

#### **Economic assessment**

**4.31.** Once the options have been ranked, that which minimises environmental impact from the installation will be BAT unless economic considerations render it unavailable. The cost assessment should include operating costs as well as capital costs. This should include any cost savings. For example, using a purer raw material may be more expensive at first, but may save money overall by improving quality or producing less waste.

**4.32.** An objective approach needs to be taken to balancing costs and advantages when assessing what are BAT. The lack of profitability of a particular business should not affect the assessment. For example, if it has been established that a particular technique is BAT within a certain sector, then the regulator should normally impose conditions that correspond to the use of that technique in all permits for that sector. However, there may be some cases where the regulator should set different standards, for example because the balance of costs and benefits is different in the particular local environmental and/or technical circumstances of a particular installation. But it would not be right to authorise lower standards or to delay the implementation of BAT solely because an operator argued for this narrowly on the basis of its own financial position. Conversely, the regulator should not impose stricter standards than BAT just because an operator can afford to pay more.

## Determining BAT and other permit conditions in practice

- 4.33.** Article 17(2) of the IPPC Directive states that Member States should exchange information on BAT. The Commission has published<sup>19</sup> the results as the BAT Reference documents (BREFs) for each of some 30 sectors. The BREFs do not constitute binding requirements, but competent authorities in the Member States are to take account of them in their own determinations of BAT.
- 4.34.** Domestic guidance is produced by the Environment Agency on the technical requirements and BAT for the individual sectors, drawing on the information contained within BREFs. This guidance contains clear, indicative standards for both new and existing installations. It also contains timetables for upgrading existing installations. Operators should take account of this when preparing their applications, and should justify any proposed departure from the indicative requirements. The guidance notes themselves may identify factors supporting such deviations, for example as a result of the site-specific assessment for the installation.
- 4.35.** The regulator will then decide whether to accept any arguments the operator may have made for not following the indicative requirements. Regulators must be able to explain any cases where they have permitted any deviation so that the permitting process remains open and transparent.
- 4.36.** Domestic guidance notes will be updated from time to time, particularly when BREFs are revised. However, operators and regulators should both take account of any new developments in techniques after a guidance note is published.
- 4.37.** It will not be practical to determine indicative requirements for all aspects of all installations. The more complex or novel an installation is, the more likely it is that indicative standards will not be fully appropriate.
- 4.38.** When there is no domestic guidance available, operators and regulators should refer directly to the relevant BREFs. This is also the case if a BREF has been updated but the domestic guidance has not. Where the BREF contains clear performance standards, an operator should again justify any proposed deviation from them.
- 4.39.** Although BREFs or domestic guidance usually state the emission levels associated with the use of particular techniques, operators are encouraged to achieve better environmental performance wherever possible.
- 4.40.** Schedule 7, paragraph 8 (and Schedule 8, paragraph 7) require the regulator to ensure that it is informed of developments in BAT (Article 11).
- 4.41.** In carrying out a site-specific assessment of BAT, operators should present a systematic, reasoned and balanced assessment of the options

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<sup>19</sup> Both completed and draft revised BREFs are available for download on the European IPPC Bureau web site at <http://eippcb.jrc.es/reference/>.

available and their overall effects on the environment. This should consider the environmental context in which an installation will operate and take account of local factors such as:

- existing land use;
- abundance, quality and regenerative capacity of natural resources;
- sensitivity of environmental receptors; and
- absorption capacity of the natural environment.

**4.42.** Environmental plans, such as local Environment Agency plans and local air quality management plans, may also provide relevant information. Where there is concern or doubt about the sensitivity of the local environment, operators may want to contact the regulator, and possibly public consultees, to find out more about the location and nature of protected areas.

#### **Determining BAT for new and existing installations**

**4.43.** New installations will normally be expected to comply with indicative BAT. However, site-specific factors may justify a different conclusion from the normal understanding of what technique is BAT in particular cases. For example, if a technique selected as BAT in normal circumstances were to require significant water abstraction, then it might not be right to apply it to an installation in a location where water resources are under stress.

**4.44.** The principles for determining BAT will be the same for existing installations as for new ones. However, the outcome may be different. In general terms, regulators should be concerned with establishing timescales for upgrading existing installations to new standards, or as near to new standards as possible.

**4.45.** How far the new plant standards apply will depend on local and plant specific circumstances. A simple example could be an existing installation that operates very close to BAT performance for a new installation, but using different plant or processes. Replacing the old plant with the new techniques may produce only a small decrease in releases, but a disproportionate increase in costs. Therefore the change would not be appropriate. However, if the operator were to carry out a major modification anyway, new plant performance requirements might be applicable.

**4.46.** If an existing installation is scheduled for closure and its effects are not excessive, it might be appropriate for permit conditions to be set accordingly. However, it is important that the installation does in fact close down as scheduled. Therefore, if the operator wants to continue running it, or if it is later reopened, the regulator should treat it as a new installation.

#### **EC requirements for environmental quality standards**

**4.47.** The main basis for setting ELVs under the Regulations will be the application of BAT. However, ELVs must also satisfy Article 10 of the IPPC Directive, among other provisions. Article 10 states that where an

environmental quality standard (EQS) (as set out in EC legislation) requires stricter ELVs than those achievable under BAT, the regulator must impose those stricter limits. Under Article 9 (3) the stricter ELVs may be supplemented or replaced by equivalent parameters or technical measures.

- 4.48.** The term environmental quality standard includes several numerical standards that specify maximum concentrations of named pollutants for air and water. In addition to such numerical EQSs there are also qualitative European Community EQSs which may require stricter ELVs. A summary of EC laws and the pollutants concerned can be found in Annex III. If a Community EQS changes or new ones are introduced, the regulator may need to vary the environmental permit conditions.
- 4.49.** In setting environmental permit conditions, the regulator must first consider whether any Community EQS is being or may be breached. If so, the regulator will have to set ELVs accordingly, based on how far the installation is responsible for the breach and the likelihood of remedial action elsewhere. This may require ELVs which are even tighter than those which the use of BAT can generally meet.
- 4.50.** Regulators are expected to co-operate so that they use their powers in the most effective way. They should aim to improve areas of poor environmental quality so that Community EQSs are met. However, they should not impose a disproportionate burden on installations compared to other pollution sources.
- 4.51.** For a new installation (or a substantial change to an existing installation, where the effect of the change bears significantly on a Community EQS), if environmental quality before the installation begins to operate meets the requirements of a Community EQS, then this must remain so after the installation comes into operation. If the necessary ELVs cannot be met then the permit must be refused. However, there may be ways to reduce emissions from other sources in such a circumstance, thus rendering ELVs and other permit conditions for the installation viably achievable. Where a new installation would only make a minor contribution to a breach of a Community EQS, it will normally be more desirable for regulators to work together to control the other, main sources of pollution, thus ensuring the EQS is met.
- 4.52.** If a Community EQS is already being breached in a particular area, then a permit should not be issued to any new installation that would cause anything beyond a negligible increase in the exceedance. Again, however, if it is clear that a combination of controls on the proposed installation and measures to reduce emissions from other sources will achieve compliance with the EQS, then the installation may be permitted.
- 4.53.** Where an existing installation is the main or only cause of a breach of a Community EQS the regulator must set ELVs accordingly. If those are clearly not viably achievable, the regulator should refuse the permit. If a permit has already been issued when the breach is detected (or arises if a

new EQS is set) the regulator should review or revoke the environmental permit.

- 4.54.** Where an existing installation is a significant contributor to a breach of a Community EQS, but other sources such as traffic also make major contributions, regulators should explore all options for securing compliance with that EQS. It may be right for them to restrict releases from the other sources rather than tighten the permit limits. How far a regulator can do this will depend on its powers to control the other sources. Alternatively, the regulator may find that there are other things it can do to rectify the breach, such as draw up an action plan for an air quality management area (AQMA) under Part IV of the Environment Act 1995. However, if the regulator does not have powers to control the other sources, and does not believe that other means will bring about compliance with the EQS, it must impose stricter permit conditions, but it should involve the operator in that consideration so that the operator has the opportunity to suggest solutions. A combination of controls on all sources must ensure that Community EQSs are met.
- 4.55.** Where an existing installation makes only a minor contribution to a breach of a Community EQS that is caused mainly by other, non-IPPC sources, ELVs for the installation should reflect that and would generally be expected not to differ significantly from those which would apply regardless of the applicability of the Community EQS. It will be much more important for the regulator to use whatever other powers it has to control the main sources of the breach.
- 4.56.** A breach of a Community EQS could result from the combined effects of a number of installations. This could occur in an industrial area with elevated concentrations of air pollutants, or in an estuary where high levels of pollutants have accumulated due to releases up-river. In such cases it may be appropriate to review several permits in the area to set slightly stricter ELVs for each installation, rather than simply imposing the entire burden of compliance on the last applicant.

#### **National requirements for environmental quality standards**

- 4.57.** Many domestic EQSs are the same as EC EQSs, and should be treated in exactly the same way. However, some domestic standards are stricter than or additional to EC EQSs. Examples include the standards and objectives established in connection with the Air Quality Strategy under the Environment Act 1995. Domestic EQSs such as these do not have the same legal status as EC EQSs, since they are not explicitly referred to in the Regulations. Hence there is no absolute legal obligation under the Regulations to impose any stricter conditions beyond BAT where this would be required to comply with a domestic EQS.
- 4.58.** Nevertheless, domestic standards should still be considered as a major factor in determining emission limits and BAT for an installation, following the basic principle of using EQSs as a reference level for harm. Therefore, domestic EQSs should inform a judgment on whether the installation should be permitted, and if so, what control options should be selected based on the balance of costs and advantages. Any significant

contribution to a breach of a domestic EQS should be considered on a case-by-case basis, taking account of the costs and advantages of measures to reduce or prevent the breach.

- 4.59.** Regulators and operators will also need to bear in mind that, in any case, Article 13(2) of the Directive requires permits to be reviewed where the pollution caused by an installation is of such significance that the existing ELVs need to be revised, whether or not BAT have developed.
- 4.60.** Some national EQSs such as operational water quality EQS should always be observed to adequately protect the aquatic environment and prevent a significant deterioration in water quality. These include:
- river quality objectives approved by Government<sup>20</sup>;
  - Environment Agency national standards to protect the quality of water and aquatic life; and
  - Environment Agency local standards to control specific sources of substances that may harm water quality and aquatic life.

The Environment Agency should ensure that environmental permits contain conditions to safeguard these standards.

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<sup>20</sup> In accordance with the Surface Water (River Ecosystem) Regulations 1994 (SI 1994 No. 1057).

## 5. Other Requirements

5.1. This chapter describes the specific IPPC Directive requirements relating to:

- application forms – Article 6(1);
- reviewing permits – Article 13(2); and
- public participation in permit applications – Article 15(1),

which are additional to the requirements applicable to all regulated facilities and described in chapters 5, 9 and 10 of the Environmental Permitting Core Guidance.

5.2. A substantial change will trigger public participation and this chapter sets out the meaning of substantial change.

5.3. This chapter also covers consultation with other Member States.

### Application forms - Article 6(1)

5.4. Regulators must ensure that the application form for an environmental permit for a Part A(1) installation or Part A(1) mobile plant requires the applicant to provide the information specified in Article 6(1) (applications for permits) of the IPPC Directive (see Schedule 7, paragraph 4 to the Regulations).

5.5. Submitted application forms which do not include this information may be regarded by the regulator as not duly made (see chapter 5 of the Environmental Permitting Core Guidance).

5.6. For mobile plant applications, information on the condition of the site is not required.

5.7. Article 6(1) of the IPPC Directive requires applications to contain descriptions of the following:

- the installation and its activities;
- the raw and auxiliary materials, other substances and the energy used in or generated by the installation;
- the sources of emissions from the installation;
- the conditions of the site of the installation;
- the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment;

- the proposed technology and other techniques for preventing or, where this not possible, reducing emissions from the installation;
- where necessary, measures for the prevention and recovery of waste generated by the installation;
- further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 3;
- measures planned to monitor emissions into the environment;
- the main alternatives, if any, studied by the applicant in outline;
- a non-technical summary of the details referred to in the above indents.

**5.8.** Article 3 of the Directive sets out the overall principles of the Directive (see [chapter 4](#)).

**5.9.** Emissions are defined in regulation 2 of the Regulations in relation to Part A installations as ‘the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into the air, water or land’. For mobile plant the releases must be from the plant.

### **Permit reviews - Article 13**

**5.10.** Regulators are required to review permits periodically (see chapter 10 of Environmental Permitting Core Guidance<sup>21</sup>). In addition, Schedule 7, paragraph 7 requires the regulator to review permits in any of the circumstances described in Article 13(2) of the Directive. This means a permit review is required when:

- the installation causes such significant pollution that revised or additional ELVs are needed;
- substantial changes in BAT make it possible to reduce emissions significantly without excessive costs; or
- operators must switch to other techniques for safety reasons.

**5.11.** The first of these circumstances might arise if new evidence emerges that at least one emission from a particular installation, although compliant with the ELV in the permit, is nevertheless causing significant pollution<sup>22</sup>. Or the evidence may relate to an emission which is not subject to an ELV in the permit. This evidence may come from improved scientific understanding, from environmental monitoring or from the regulator’s investigation of complaints by the public, but whatever the source it will be for the regulator to judge whether it is sufficiently significant for the relevant conditions of the permit to be reviewed. The scope of permit

<sup>21</sup> Available at: [www.defra.gov.uk/environment/policy/permits/guidance.htm](http://www.defra.gov.uk/environment/policy/permits/guidance.htm)

<sup>22</sup> Note that pollution is defined in regulation 2(1) of the Regulations.

reviews in these circumstances should be limited to the pollutant(s) of concern and to the features of the installation giving rise to the pollution.

- 5.12.** However, permit review will not be required where revision of ELVs is made necessary solely by changes in environmental quality standards which, in accordance with the provisions of Article 10 of the IPPC Directive, have to be incorporated into the permits of all installations to which they are relevant, or by the implementation of a separate directive. Such changes will be brought about directly by permit variation.

### **Public participation - Article 15(1)**

- 5.13.** The regulator must ensure that public participation in respect of Part A installations meets the requirements of Article 15(1) and Annex V (access to information and public participation in the permit procedure) of the IPPC Directive (see Schedule 7, paragraph 6 to the Regulations).

- 5.14.** The public must be given early and effective opportunities to participate in the permitting process. This applies to:

- permits for new installations;
- any substantial change in the operation of an installation (see paragraph 5.20);
- certain updating of a permit or permit conditions for an installation (see paragraph 5.10 and 4.13 for when this applies).

- 5.15.** The procedure for public participation in decision-making set out in Annex V of the Directive applies for the purposes of such participation.

- 5.16.** The procedure provides that the public shall be informed (by public notices or other appropriate means such as electronic media where available) of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:

- the application for a permit or, as the case may be, the proposal for the updating of a permit or of permit conditions;
- where applicable, the fact that a decision is subject to a national or transboundary environmental impact assessment or to consultations between Member States;
- details of the Agency as the body responsible for taking the decision, and other bodies from whom relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;
- the nature of possible decisions or, where there is one, the draft decision;

- where applicable, the details relating to a proposal for the updating of a permit or of permit conditions;
- an indication of the times and places where, or means by which, the relevant information will be made available;
- details of the arrangements for public participation and consultation made.

**5.17.** The procedure also requires that, within appropriate time-frames, the following is made available to the public concerned:

- the main reports and advice issued to the Agency at the time when the public concerned are first consulted as above;
- in accordance with the Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information, any other information which is relevant for the decision and which only becomes available after the time the public concerned are first consulted.

**5.18.** The Regulations require the Environment Agency to prepare a statement of its policies on Public Participation (regulation 59)<sup>23</sup>. This will describe how the Environment Agency intends to ensure that, for Part A(1) installations, public participation is carried out in accordance with these requirements.

**5.19.** Public participation in general, is dealt with in chapter 9 of the Environmental Permitting Core Guidance.

## **Meaning of Change in operation and Substantial Change**

**5.20.** Applications for changes in operation which are substantial changes must be made subject to public participation under the Regulations. This does not apply to mobile plant.

**5.21.** Substantial change means ‘a change in operation which, in the regulator's opinion, may have significant negative effects on human beings or the environment’ (Schedule 5, paragraph 5(5))<sup>24</sup>. A change in operation means ‘a change in the nature or functioning, or an extension, of an installation, which may have consequences for the environment’. A change in operation therefore could entail either technical alterations or modifications in operational or management practices.

**5.22.** Substantial changes include any change in operation which in itself meets the thresholds, if any, set out in Schedule 1, Part 2, and any change in operation of an incineration or co-incineration plant for non-hazardous waste, which would involve the incineration or co-incineration of hazardous waste.

<sup>23</sup> Available at [www.environment-agency.gov.uk/epr](http://www.environment-agency.gov.uk/epr)

<sup>24</sup> Where an activity is covered by IPPC and SED, see paragraph 3.9 of The Solvent Emissions Guidance [www.defra.gov.uk/environment/policy/permits/guidance.htm](http://www.defra.gov.uk/environment/policy/permits/guidance.htm)

- 5.23.** Whether any particular change proposed by an operator would constitute a substantial change is something that can sometimes only be determined given the facts of the case. This requires consideration of all impacts of any proposed change rather than just the net environmental effect. Therefore, the potential impacts of proposals on all possible receptors should be examined to inform a judgement on whether, either in combination or in any individual case, there may be a significant negative effect. Such judgements should take account of not only releases of polluting substances, but also other pollutants (heat, noise and vibrations) as well as alternative types of potential impacts such as increased waste production, energy consumption or the risk of accidents.
- 5.24.** Some changes bringing about net benefits may have some constituent negative effects. For example, changing a fuel may lead to reductions in some releases but increases in others. If any potential negative effect is identified, the regulator must consider whether it judges this significant. Regulators should make this judgement by considering whether the effect is of such significance that it justifies requiring the operator to submit proposals that will be subject to consultation with the public. This should be assessed having regard to:
- the extent of the potential impact (including geographical area and size of the affected population);
  - any effects on specifically protected areas, species or other assets of particular significance;
  - the transboundary nature of the impact;
  - the magnitude and complexity of the impact;
  - the probability of the impact; and
  - the duration, frequency and reversibility of the impact.

## **Releases of substances**

- 5.25.** IPPC is concerned with a range of environmental impacts, all of which must be considered in determining whether there may be a substantial change. However, changes of releases in polluting substances are the most likely causes of substantial changes. In this regard, regulators should consider changes in the following:
- The substances released. If a new substance were to be released, consideration should be given to whether this would have a significant negative effect. However, if this new release were to be accompanied by a reduction in releases of another substance, then it would be appropriate to consider any similarity of effects between the two substances. If the effect of the new substance would be broadly similar to that now reduced from the old substance, then the change would not be substantial.

- The level of releases of any particular substances. An increase in releases would give rise to a substantial change only if it would significantly increase the negative environmental effect. The test of significance should not be based on the relative increase in releases from the site but on the absolute effect those releases will have on the environment. For example, a small factory might seek to increase its capacity by two or three times, yet this would constitute a substantial change only if the resulting increase in releases may cause a significant negative effect. The absolute increase in substances to be released would not in itself be considered significant.
- The nature of releases of any particular substance. Beyond increases in levels of releases, other changes could include changes in temperature, pressure, viscosity, appearance, phase, size and shape of particle, colour and density. The possibility of such changes having a significant negative effect should be considered. For example, a change in particle size which does not enter a different environmental pathway is unlikely to be a substantial change, unless it becomes so ultra-fine that it starts to have a different uptake.

**5.26.** Finally, it is important to stress that whether or not a change is substantial is a judgement for the regulator to make. Regulators should be able to demonstrate that their decisions are reasonable based on the facts of the case and the standard of common sense.

### **Consultation with other Member States - Article 17**

**5.27.** Other EU Member States whose territory may be adversely affected have to be consulted on the relevant application (see Schedule 5, paragraph 10). This applies for applications to obtain an environmental permit for a Part A installation and applications for a substantial variation of a permit for a Part A installation.

**5.28.** As England and Wales do not share any land borders with other Member States, transboundary consultation is likely to be rare. Should the need for it arise, the Secretary of State for England and Welsh Ministers with regard to Wales will send a copy of the application to the relevant Member State at the same time as the application is advertised, or as soon after as possible. The Secretary of State and Welsh Ministers may act independently, on a regulator's advice or following a request from another Member State.

# Annex 1 - Schedule 7 to the Environmental Permitting Regulations

## SCHEDULE 7

Regulation 35(2)(a)

### Part A installations and Part A mobile plant

#### Application

1. This Schedule applies in relation to every Part A installation or Part A mobile plant.

#### Interpretation

2. When interpreting the IPPC Directive for the purposes of this Schedule—
  - (a) except where otherwise defined in this paragraph, an expression that is defined in Part 1 of these Regulations has the meaning given in that Part;
  - (b) “installation” means “Part A installation or Part A mobile plant”;
  - (c) “permit” means “environmental permit”;
  - (d) the competent authority is the regulator; and
  - (e) “substance” is to be read as including, after the words “its compounds” in Article 2(1) of the IPPC Directive, the words “and any biological entity or micro-organism”.

#### Exercise of regulator’s functions: general

3. The regulator must exercise its functions under these Regulations for the purpose of achieving a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.

#### Applications for the grant of an environmental permit

- 4.—(1) The regulator must ensure that every application for the grant of an environmental permit includes the information specified in Article 6(1) of the IPPC Directive.  
(2) But when interpreting Article 6(1), the regulator must ignore the fourth indent in the case of Part A mobile plant.

#### Exercise of relevant functions

- 5.—(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the IPPC Directive—
  - (a) Article 3, ignoring the words “provide that the competent authorities” contained in the first sentence of Article 3(1);
  - (b) Article 9(1) to (6);
  - (c) Article 10;

- (d) Article 12;
- (e) Article 14 point (b);
- (f) Article 19(2).

(2) But when interpreting the IPPC Directive for the purposes of this paragraph, the regulator must—

- (a) ignore the second and fourth paragraphs of Article 9(3);
- (b) in the case of Part A mobile plant, in Article 9(4), ignore the words “its geographical location and the local environmental conditions”;
- (c) ignore the second paragraph of Article 9(5);
- (d) ignore the second paragraph of Article 9(6); and
- (e) in the case of Part A mobile plant, ignore Article 12.

#### **Public participation**

6. The regulator must exercise its functions under the public participation provisions in relation to Part A installations so as to meet the requirements of Article 15(1) of the IPPC Directive.

#### **Review of environmental permits**

7. The regulator must review an environmental permit if any of the circumstances in Article 13(2) of the IPPC Directive apply in relation to the Part A installation or Part A mobile plant whose operation it authorises.

#### **Developments in best available techniques**

8.—(1) The regulator must ensure that it is informed of developments in best available techniques.

(2) In this paragraph, “best available techniques” has the meaning given in Article 2(12) of the IPPC Directive.

## **Annex 2 – The IPPC Directive**

## DIRECTIVES

## DIRECTIVE 2008/1/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 15 January 2008

concerning integrated pollution prevention and control

(Codified version)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee <sup>(1)</sup>,

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>(2)</sup>,

Whereas:

(1) Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control <sup>(3)</sup> has been substantially amended several times <sup>(4)</sup>. In the interests of clarity and rationality the said Directive should be codified.

(2) The objectives and principles of the Community's environment policy, as set out in Article 174 of the Treaty, consist in particular of preventing, reducing and as far as possible eliminating pollution by giving priority to intervention at source and ensuring prudent management of natural resources, in compliance with the 'polluter pays' principle and the principle of pollution prevention.

<sup>(1)</sup> OJ C 97, 28.4.2007, p. 12.

<sup>(2)</sup> Opinion of the European Parliament of 19 June 2007 (not yet published in the Official Journal) and Council Decision of 17 December 2007.

<sup>(3)</sup> OJ L 257, 10.10.1996, p. 26. Directive as last amended by Regulation (EC) No 166/2006 of the European Parliament and of the Council (OJ L 33, 4.2.2006, p. 1).

<sup>(4)</sup> See Annex VI, Part A.

(3) The Fifth Environmental Action Programme, the broad outline of which was approved by the Council and the Representatives of the Governments of the Member States, meeting within the Council, in the Resolution of 1 February 1993 on a Community programme of policy and action in relation to the environment and sustainable development <sup>(5)</sup>, accorded priority to integrated pollution control as an important part of the move towards a more sustainable balance between human activity and socioeconomic development, on the one hand, and the resources and regenerative capacity of nature, on the other.

(4) The implementation of an integrated approach to reduce pollution requires action at Community level in order to modify and supplement existing Community legislation concerning the prevention and control of pollution from industrial plants.

(5) Council Directive 84/360/EEC of 28 June 1984 on the combating of air pollution from industrial plants <sup>(6)</sup> introduced a general framework requiring authorisation prior to any operation or substantial modification of industrial installations which may cause air pollution.

(6) Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community <sup>(7)</sup> provides for an authorisation requirement for the discharge of those substances.

(7) Although Community legislation exists on the combating of air pollution and the prevention or minimisation of the discharge of dangerous substances into water, there is no comparable Community legislation aimed at preventing or minimising emissions into soil.

<sup>(5)</sup> OJ C 138, 17.5.1993, p. 1.

<sup>(6)</sup> OJ L 188, 16.7.1984, p. 20. Directive as amended by Directive 91/692/EEC (OJ L 377, 31.12.1991, p. 48).

<sup>(7)</sup> OJ L 64, 4.3.2006, p. 52.

- (8) Different approaches to controlling emissions into the air, water or soil separately may encourage the shifting of pollution between the various environmental media rather than protecting the environment as a whole.
- (9) The objective of an integrated approach to pollution control is to prevent emissions into air, water or soil wherever this is practicable, taking into account waste management, and, where it is not, to minimise them in order to achieve a high level of protection for the environment as a whole.
- (10) This Directive should establish a general framework for integrated pollution prevention and control. It should lay down the measures necessary to implement integrated pollution prevention and control in order to achieve a high level of protection for the environment as a whole. Application of the principle of sustainable development should be promoted by an integrated approach to pollution control.
- (11) The provisions of this Directive should apply without prejudice to the provisions of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment <sup>(1)</sup>. When information or conclusions obtained further to the application of that Directive have to be taken into consideration for the granting of authorisation, this Directive should not affect the implementation of Directive 85/337/EEC.
- (12) Member States should take the necessary steps in order to ensure that the operator of the industrial activities referred to in this Directive is complying with the general principles of certain basic obligations. For that purpose it would suffice for the competent authorities to take those general principles into account when laying down the authorisation conditions.
- (13) Some of the provisions adopted pursuant to this Directive must be applied to existing installations after 30 October 2007 and others had to be applied as from 30 October 1999.
- (14) In order to tackle pollution problems more effectively and efficiently, environmental aspects should be taken into consideration by the operator. Those aspects should be communicated to the competent authority or authorities so that they can satisfy themselves, before granting a permit, that all appropriate preventive or pollution-control measures have been laid down. Very different application procedures may give rise to different levels of environmental protection and public awareness. Therefore, applications for permits under this Directive should include minimum data.
- (15) Full coordination of the authorisation procedure and conditions between competent authorities should make it possible to achieve the highest practicable level of protection for the environment as a whole.
- (16) The competent authority or authorities should grant or amend a permit only when integrated environmental protection measures for air, water and land have been laid down.
- (17) The permit should include all necessary measures to fulfil the authorisation conditions in order thus to achieve a high level of protection for the environment as a whole. Without prejudice to the authorisation procedure, those measures may also be the subject of general binding requirements.
- (18) Emission limit values, parameters or equivalent technical measures should be based on the best available techniques, without prescribing the use of one specific technique or technology and taking into consideration the technical characteristics of the installation concerned, its geographical location and local environmental conditions. In all cases the authorisation conditions should lay down provisions on minimising long-distance or transfrontier pollution and ensure a high level of protection for the environment as a whole.
- (19) It is for the Member States to determine how the technical characteristics of the installation concerned, its geographical location and local environmental conditions can, where appropriate, be taken into consideration.
- (20) When an environmental quality standard requires more stringent conditions than those that can be achieved by using the best available techniques, supplementary conditions should in particular be required by the permit, without prejudice to other measures that may be taken to comply with the environmental quality standards.

<sup>(1)</sup> OJ L 175, 5.7.1985, p. 40. Directive as last amended by Directive 2003/35/EC of the European Parliament and of the Council (OJ L 156, 25.6.2003, p. 17).

- (21) Because best available techniques will change with time, particularly in the light of technical advances, the competent authorities should monitor or be informed of such progress.
- (22) Changes to an installation may give rise to pollution. The competent authority or authorities should therefore be notified of any change which might affect the environment. Substantial changes to plant must be subject to the granting of prior authorisation in accordance with this Directive.
- (23) The authorisation conditions should be periodically reviewed and if necessary updated. Under certain conditions, they should in any event be re-examined.
- (24) Effective public participation in the taking of decisions should enable the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken. In particular, the public should have access to information on the operation of installations and their potential effect on the environment, and, before any decision is taken, to information relating to applications for permits for new installations or substantial changes and to the permits themselves, their updating and the relevant monitoring data.
- (25) Participation, including participation by associations, organisations and groups, in particular non-governmental organisations promoting environmental protection, should accordingly be fostered, including by promoting environmental education of the public.
- (26) On 25 June 1998 the Community signed the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Århus Convention). Among the objectives of the Århus Convention is the desire to guarantee rights of public participation in decision-making in environmental matters in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being.
- (27) The development and exchange of information at Community level about best available techniques should help to redress the technological imbalances in the Community, should promote the worldwide dissemination of limit values and techniques used in the Community and should help the Member States in the efficient implementation of this Directive.
- (28) Reports on the implementation and effectiveness of this Directive should be drawn up regularly.
- (29) This Directive is concerned with installations whose potential for pollution, and therefore transfrontier pollution, is significant. Transboundary consultation should be organised where applications relate to the licensing of new installations or substantial changes to installations which are likely to have significant negative environmental effects. The applications relating to such proposals or substantial changes should be available to the public of the Member State likely to be affected.
- (30) The need for action may be identified at Community level to lay down emission limit values for certain categories of installation and pollutant covered by this Directive. The European Parliament and the Council should set such emission limit values in accordance with the provisions of the Treaty.
- (31) The provisions of this Directive should apply without prejudice to Community provisions on health and safety at the workplace.
- (32) This Directive should be without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law of the Directives as set out in Annex VI, Part B,

HAVE ADOPTED THIS DIRECTIVE:

#### *Article 1*

#### **Purpose and scope**

The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.

*Article 2***Definitions**

For the purposes of this Directive the following definitions shall apply:

1. 'substance' means any chemical element and its compounds, with the exception of radioactive substances within the meaning of Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation <sup>(1)</sup> and genetically modified organisms within the meaning of Council Directive 90/219/EEC of 23 April 1990 on the contained use of genetically modified micro-organisms <sup>(2)</sup> and Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms <sup>(3)</sup>;
2. 'pollution' means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into the air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment;
3. 'installation' means a stationary technical unit where one or more activities listed in Annex I are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;
4. 'existing installation' means an installation which on 30 October 1999, in accordance with legislation existing before that date, was in operation or was authorised or, in the view of the competent authority, was the subject of a full request for authorisation, provided that that installation was put into operation no later than 30 October 2000;
5. 'emission' means the direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into the air, water or land;
6. 'emission limit values' means the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time; emission limit values may also be laid down for certain groups, families or categories of substances, in particular for those listed in Annex III. The emission limit values for substances normally apply at the point where the emissions leave the installation, any dilution being disregarded when determining them; with regard to indirect releases into water, the effect of a water treatment plant may be taken into account when determining the emission limit values of the installation involved, provided that an equivalent level is guaranteed for the protection of the environment as a whole and provided this does not lead to higher levels of pollution in the environment, without prejudice to Directive 2006/11/EC or the Directives implementing it;
7. 'environmental quality standard' means the set of requirements which must be fulfilled at a given time by a given environment or particular part thereof, as set out in Community legislation;
8. 'competent authority' means the authority or authorities or bodies responsible under the legal provisions of the Member States for carrying out the obligations arising from this Directive;
9. 'permit' means that part or the whole of a written decision (or several such decisions) granting authorisation to operate all or part of an installation, subject to certain conditions which guarantee that the installation complies with the requirements of this Directive. A permit may cover one or more installations or parts of installations on the same site operated by the same operator;
10. 'change in operation' means a change in the nature or functioning, or an extension, of the installation which may have consequences for the environment;
11. 'substantial change' means a change in operation which, in the opinion of the competent authority, may have significant negative effects on human beings or the environment; for the purposes of this definition, any change to or extension of an operation shall be deemed to be substantial if the change or extension in itself meets the thresholds, if any, set out in Annex I;
12. 'best available techniques' means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole;

<sup>(1)</sup> OJ L 159, 29.6.1996, p. 1.

<sup>(2)</sup> OJ L 117, 8.5.1990, p. 1. Directive as last amended by Commission Decision 2005/174/EC (OJ L 59, 5.3.2005, p. 20).

<sup>(3)</sup> OJ L 106, 17.4.2001, p. 1. Directive as last amended by Regulation (EC) No 1830/2003 (OJ L 268, 18.10.2003, p. 24).

- (a) 'techniques' shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
- (b) 'available techniques' means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;
- (c) 'best' means most effective in achieving a high general level of protection of the environment as a whole.

In determining the best available techniques, special consideration should be given to the items listed in Annex IV;

13. 'operator' means any natural or legal person who operates or controls the installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated;
14. 'the public' means one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups;
15. 'the public concerned' means the public affected or likely to be affected by, or having an interest in, the taking of a decision on the issuing or the updating of a permit or of permit conditions; for the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.

#### Article 3

### General principles governing the basic obligations of the operator

1. Member States shall take the necessary measures to provide that the competent authorities ensure that installations are operated in such a way that:

- (a) all the appropriate preventive measures are taken against pollution, in particular through application of the best available techniques;
- (b) no significant pollution is caused;

- (c) waste production is avoided in accordance with Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste <sup>(1)</sup>; where waste is produced, it is recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;
- (d) energy is used efficiently;
- (e) the necessary measures are taken to prevent accidents and limit their consequences;
- (f) the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

2. For the purposes of compliance with this Article, it shall be sufficient if Member States ensure that the competent authorities take account of the general principles set out in paragraph 1 when they determine the conditions of the permit.

#### Article 4

### Permits for new installations

Member States shall take the necessary measures to ensure that no new installation is operated without a permit issued in accordance with this Directive, without prejudice to the exceptions provided for in Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants <sup>(2)</sup>.

#### Article 5

### Requirements for the granting of permits for existing installations

1. Member States shall take the necessary measures to ensure that the competent authorities see to it, by means of permits in accordance with Articles 6 and 8 or, as appropriate, by reconsidering and, where necessary, by updating the conditions, that existing installations operate in accordance with the requirements of Articles 3, 7, 9, 10 and 13, Article 14(a) and (b) and Article 15(2) not later than 30 October 2007, without prejudice to specific Community legislation.

2. Member States shall take the necessary measures to apply the provisions of Articles 1, 2, 11 and 12, Article 14(c), Article 15(1) and (3), Articles 17, 18 and Article 19(2) to existing installations as from 30 October 1999.

<sup>(1)</sup> OJ L 114, 27.4.2006, p. 9.

<sup>(2)</sup> OJ L 309, 27.11.2001, p. 1. Directive as last amended by Council Directive 2006/105/EC (OJ L 363, 20.12.2006, p. 368).

*Article 6***Applications for permits**

1. Member States shall take the necessary measures to ensure that an application to the competent authority for a permit includes a description of:

- (a) the installation and its activities;
- (b) the raw and auxiliary materials, other substances and the energy used in or generated by the installation;
- (c) the sources of emissions from the installation;
- (d) the conditions of the site of the installation;
- (e) the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment;
- (f) the proposed technology and other techniques for preventing or, where this not possible, reducing emissions from the installation;
- (g) where necessary, measures for the prevention and recovery of waste generated by the installation;
- (h) further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 3;
- (i) measures planned to monitor emissions into the environment;
- (j) the main alternatives, if any, studied by the applicant in outline.

An application for a permit shall also include a non-technical summary of the details referred to in points (a) to (j).

2. Where information supplied in accordance with the requirements provided for in Directive 85/337/EEC or a safety report prepared in accordance with Council Directive 96/82/EC

of 9 December 1996 on the control of major-accident hazards involving dangerous substances<sup>(1)</sup> or other information produced in response to other legislation fulfils any of the requirements of this Article, that information may be included in, or attached to, the application.

*Article 7***Integrated approach to issuing permits**

Member States shall take the measures necessary to ensure that the conditions of, and procedure for the grant of, the permit are fully coordinated where more than one competent authority is involved, in order to guarantee an effective integrated approach by all authorities competent for this procedure.

*Article 8***Decisions**

Without prejudice to other requirements laid down in national or Community legislation, the competent authority shall grant a permit containing conditions guaranteeing that the installation complies with the requirements of this Directive or, if it does not, shall refuse to grant the permit.

All permits granted and modified permits must include details of the arrangements made for air, water and land protection as referred to in this Directive.

*Article 9***Conditions of the permit**

1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 3 and 10 for the granting of permits in order to achieve a high level of protection for the environment as a whole by means of protection of the air, water and land.

2. In the case of a new installation or a substantial change where Article 4 of Directive 85/337/EEC applies, any relevant information obtained or conclusion arrived at pursuant to Articles 5, 6 and 7 of that Directive shall be taken into consideration for the purposes of granting the permit.

3. The permit shall include emission limit values for polluting substances, in particular those listed in Annex III, likely to be emitted from the installation concerned in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another (water, air and land). If necessary, the permit shall include appropriate requirements ensuring protection of the soil and ground water and measures concerning the management of waste generated by the installation. Where appropriate, limit values may be supplemented or replaced by equivalent parameters or technical measures.

<sup>(1)</sup> OJ L 10, 14.1.1997, p. 13. Directive as last amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

For installations under point 6.6 in Annex I, emission limit values laid down in accordance with this paragraph shall take into account practical considerations appropriate to these categories of installation.

Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community <sup>(1)</sup> in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas unless it is necessary to ensure that no significant local pollution is caused.

For activities listed in Annex I to Directive 2003/87/EC, Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site.

Where necessary, the competent authorities shall amend the permit as appropriate.

The third, fourth and fifth subparagraphs shall not apply to installations temporarily excluded from the scheme for greenhouse gas emission allowance trading within the Community in accordance with Article 27 of Directive 2003/87/EC.

4. Without prejudice to Article 10, the emission limit values and the equivalent parameters and technical measures referred to in paragraph 3 shall be based on the best available techniques, without prescribing the use of any technique or specific technology, but taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions. In all circumstances, the conditions of the permit shall contain provisions on the minimisation of long-distance or transboundary pollution and ensure a high level of protection for the environment as a whole.

5. The permit shall contain suitable release monitoring requirements, specifying measurement methodology and frequency, evaluation procedure and an obligation to supply the competent authority with data required for checking compliance with the permit.

For installations under point 6.6 in Annex I, the measures referred to in this paragraph may take account of costs and benefits.

6. The permit shall contain measures relating to conditions other than normal operating conditions. Thus, where there is a risk that the environment may be affected, appropriate provision shall be made for start-up, leaks, malfunctions, momentary stoppages and definitive cessation of operations.

The permit may also contain temporary derogations from the requirements of paragraph 4 if a rehabilitation plan approved by the competent authority ensures that these requirements will be met within six months and if the project leads to a reduction of pollution.

7. The permit may contain such other specific conditions for the purposes of this Directive as the Member State or competent authority may think fit.

8. Without prejudice to the obligation to implement a permit procedure pursuant to this Directive, Member States may prescribe certain requirements for certain categories of installations in general binding rules instead of including them in individual permit conditions, provided that an integrated approach and an equivalent high level of environmental protection as a whole are ensured.

#### Article 10

##### **Best available techniques and environmental quality standards**

Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall in particular be required in the permit, without prejudice to other measures which might be taken to comply with environmental quality standards.

#### Article 11

##### **Developments in best available techniques**

Member States shall ensure that the competent authority follows or is informed of developments in best available techniques.

#### Article 12

##### **Changes by operators to installations**

1. Member States shall take the necessary measures to ensure that the operator informs the competent authorities of any planned change in the operation. Where appropriate, the competent authorities shall update the permit or the conditions.

<sup>(1)</sup> OJ L 275, 25.10.2003, p. 32. Directive as amended by Directive 2004/101/EC (OJ L 338, 13.11.2004, p. 18).

2. Member States shall take the necessary measures to ensure that no substantial change planned by the operator is made without a permit issued in accordance with this Directive. The application for a permit and the decision by the competent authority must cover those parts of the installation and those aspects listed in Article 6 that may be affected by the change. The relevant provisions of Article 3, Articles 6 to 10 and Article 15(1), (2) and (3) shall apply *mutatis mutandis*.

#### Article 13

##### **Reconsideration and updating of permit conditions by the competent authority**

1. Member States shall take the necessary measures to ensure that competent authorities periodically reconsider and, where necessary, update permit conditions.

2. The reconsideration shall be undertaken in any event where:

- (a) the pollution caused by the installation is of such significance that the existing emission limit values of the permit need to be revised or new such values need to be included in the permit;
- (b) substantial changes in the best available techniques make it possible to reduce emissions significantly without imposing excessive costs;
- (c) the operational safety of the process or activity requires other techniques to be used;
- (d) new provisions of Community or national legislation so dictate.

#### Article 14

##### **Compliance with permit conditions**

Member States shall take the necessary measures to ensure that:

- (a) the conditions of the permit are complied with by the operator when operating the installation;
- (b) the operator regularly informs the competent authority of the results of the monitoring of releases and without delay of any incident or accident significantly affecting the environment;

(c) operators of installations afford the representatives of the competent authority all necessary assistance to enable them to carry out any inspections within the installation, to take samples and to gather any information necessary for the performance of their duties for the purposes of this Directive.

#### Article 15

##### **Access to information and public participation in the permit procedure**

1. Member States shall ensure that the public concerned is given early and effective opportunities to participate in the procedure for:

- (a) issuing a permit for new installations;
- (b) issuing a permit for any substantial change;
- (c) updating of a permit or permit conditions for an installation in accordance with Article 13(2)(a).

The procedure set out in Annex V shall apply for the purposes of such participation.

2. The results of monitoring of releases as required under the permit conditions referred to in Article 9 and held by the competent authority shall be made available to the public.

3. Paragraphs 1 and 2 shall apply subject to the restrictions laid down in Article 4(1), (2) and (4) of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information<sup>(1)</sup>.

4. When a decision has been taken, the competent authority shall inform the public in accordance with the appropriate procedures and shall make available to the public the following information:

- (a) the content of the decision, including a copy of the permit and of any conditions and any subsequent updates; and
- (b) having examined the concerns and opinions expressed by the public concerned, the reasons and considerations on which the decision is based, including information on the public participation process.

<sup>(1)</sup> OJ L 41, 14.2.2003, p. 26.

## Article 16

### Access to justice

1. Member States shall ensure that, in accordance with the relevant national legal system, members of the public concerned have access to a review procedure before a court of law or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts or omissions subject to the public participation provisions of this Directive when:

- (a) they have a sufficient interest; or
  - (b) they maintain the impairment of a right, where administrative procedural law of a Member State requires this as a precondition.
2. Member States shall determine at what stage the decisions, acts or omissions may be challenged.
3. What constitutes a sufficient interest and impairment of a right shall be determined by the Member States, consistently with the objective of giving the public concerned wide access to justice. To this end, the interest of any non-governmental organisation promoting environmental protection and meeting any requirements under national law shall be deemed sufficient for the purpose of paragraph 1(a).

Such organisations shall also be deemed to have rights capable of being impaired for the purpose of paragraph 1(b).

4. The provisions of this Article shall not exclude the possibility of a preliminary review procedure before an administrative authority and shall not affect the requirement of exhaustion of administrative review procedures prior to recourse to judicial review procedures, where such a requirement exists under national law.

Any such procedure shall be fair, equitable, timely and not prohibitively expensive.

5. In order to further the effectiveness of the provisions of this Article, Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures.

## Article 17

### Exchange of information

1. With a view to exchanging information, Member States shall take the necessary measures to send the Commission every three years, and for the first time before 30 April 2001, the available representative data on the limit values laid down by specific category of activities in accordance with Annex I and, if appropriate, the best available techniques from which those values are derived in accordance with, in particular, Article 9.

On subsequent occasions the data shall be supplemented in accordance with the procedures laid down in paragraph 3 of this Article.

2. The Commission shall organise an exchange of information between Member States and the industries concerned on best available techniques, associated monitoring, and developments in them.

Every three years the Commission shall publish the results of the exchanges of information.

3. At intervals of three years, and for the first time for the period 30 October 1999 to 30 October 2002 inclusive, Member States shall send information to the Commission on the implementation of this Directive in the form of a report. The report shall be drawn up on the basis of a questionnaire or outline drafted by the Commission in accordance with the procedure laid down in Article 6(2) of Council Directive 91/692/EEC of 23 December 1991 standardising and rationalising reports on the implementation of certain Directives relating to the environment<sup>(1)</sup>. The questionnaire or outline shall be sent to the Member States six months before the start of the period covered by the report. The report shall be submitted to the Commission within nine months of the end of the three-year period covered by it.

The Commission shall publish a Community report on the implementation of the Directive within nine months of receiving the reports from the Member States.

The Commission shall submit the Community report to the European Parliament and to the Council, accompanied by proposals if necessary.

4. Member States shall establish or designate the authority or authorities which are to be responsible for the exchange of information under paragraphs 1, 2 and 3 and shall inform the Commission accordingly.

## Article 18

### Transboundary effects

1. Where a Member State is aware that the operation of an installation is likely to have significant negative effects on the environment of another Member State, or where a Member State likely to be significantly affected so requests, the Member State in whose territory the application for a permit pursuant to Article 4 or Article 12(2) was submitted shall forward to the other Member State any information required to be given or made available pursuant to Annex V at the same time as it makes it available to its own nationals. Such information shall serve as a basis for any consultations necessary in the framework of the bilateral relations between the two Member States on a reciprocal and equivalent basis.

<sup>(1)</sup> OJ L 377, 31.12.1991, p. 48. Directive as amended by Regulation (EC) No 1882/2003.

2. Within the framework of their bilateral relations, Member States shall see to it that in the cases referred to in paragraph 1 the applications are also made available for an appropriate period of time to the public of the Member State likely to be affected so that it will have the right to comment on them before the competent authority reaches its decision.

3. The results of any consultations pursuant to paragraphs 1 and 2 must be taken into consideration when the competent authority reaches a decision on the application.

4. The competent authority shall inform any Member State which has been consulted pursuant to paragraph 1 of the decision reached on the application and shall forward to it the information referred to in Article 15(4). That Member State shall take the measures necessary to ensure that that information is made available in an appropriate manner to the public concerned in its own territory.

#### Article 19

##### Community emission limit values

1. Where the need for Community action has been identified, on the basis, in particular, of the exchange of information provided for in Article 17, the European Parliament and the Council, acting on a proposal from the Commission, shall set emission limit values, in accordance with the procedures laid down in the Treaty, for:

(a) the categories of installations listed in Annex I except for the landfills covered by points 5,1 and 5,4 of that Annex,

and

(b) the polluting substances referred to in Annex III.

2. In the absence of Community emission limit values defined pursuant to this Directive, the relevant emission limit values contained in the Directives listed in Annex II and in other Community legislation shall be applied as minimum emission limit values pursuant to this Directive for the installations listed in Annex I.

3. Without prejudice to the requirements of this Directive, the technical requirements applicable for the landfills covered by

points 5,1 and 5,4 of Annex I, have been fixed in Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste <sup>(1)</sup>.

#### Article 20

##### Transitional provisions

1. The provisions of Directive 84/360/EEC, the provisions of Articles 4, 5 and 6(2) of Directive 2006/11/EC and the relevant provisions concerning authorisation systems in the Directives listed in Annex II shall apply, without prejudice to the exceptions provided for in Directive 2001/80/EC, to existing installations in respect of activities listed in Annex I until the measures required pursuant to Article 5 of this Directive have been taken by the competent authorities.

2. The relevant provisions concerning authorisation systems in the Directives listed in Annex II shall not, in respect of the activities listed in Annex I, apply to installations which are not existing installations within the meaning of point 4 of Article 2.

3. Directive 84/360/EEC shall be repealed on 30 October 2007.

Acting on a proposal from the Commission, the Council or the European Parliament and the Council shall, where necessary, amend the relevant provisions of the Directives listed in Annex II in order to adapt them to the requirements of this Directive before 30 October 2007.

#### Article 21

##### Communication

Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field covered by this Directive.

#### Article 22

##### Repeal

Directive 96/61/EC, as amended by the acts listed in Annex VI, Part A, is repealed, without prejudice to the obligations of the Member States relating to the time-limits for transposition into national law of the Directives as set out in Annex VI, Part B.

<sup>(1)</sup> OJ L 182, 16.7.1999, p. 1. Directive as amended by Regulation (EC) No 1882/2003.

References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex VII.

*Article 23*

**Entry into force**

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

*Article 24*

**Addressees**

This Directive is addressed to the Member States.

Done at Strasbourg, 15 January 2008.

*For the European Parliament*

*The President*

H.-G. PÖTTERING

*For the Council*

*The President*

J. LENARČIČ

## ANNEX I

## CATEGORIES OF INDUSTRIAL ACTIVITIES REFERRED TO IN ARTICLE 1

1. Installations or parts of installations used for research, development and testing of new products and processes are not covered by this Directive.
2. The threshold values given below generally refer to production capacities or outputs. Where one operator carries out several activities falling under the same subheading in the same installation or on the same site, the capacities of such activities are added together.

**1. Energy industries**

- 1.1. Combustion installations with a rated thermal input exceeding 50 MW.
- 1.2. Mineral oil and gas refineries.
- 1.3. Coke ovens.
- 1.4. Coal gasification and liquefaction plants.

**2. Production and processing of metals**

- 2.1. Metal ore (including sulphide ore) roasting or sintering installations.
- 2.2. Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour.
- 2.3. Installations for the processing of ferrous metals:
  - (a) hot-rolling mills with a capacity exceeding 20 tonnes of crude steel per hour;
  - (b) smitheries with hammers the energy of which exceeds 50 kilojoules per hammer, where the calorific power used exceeds 20 MW;
  - (c) application of protective fused metal coats with an input exceeding 2 tonnes of crude steel per hour.
- 2.4. Ferrous metal foundries with a production capacity exceeding 20 tonnes per day.
- 2.5. Installations:
  - (a) for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes;
  - (b) for the smelting, including the alloyage, of non-ferrous metals, including recovered products, (refining, foundry casting, etc.) with a melting capacity exceeding 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals.
- 2.6. Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m<sup>3</sup>.

**3. Mineral industry**

- 3.1. Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or lime in rotary kilns with a production capacity exceeding 50 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day.
- 3.2. Installations for the production of asbestos and the manufacture of asbestos-based products.

- 3.3. Installations for the manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day.
- 3.4. Installations for melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day.
- 3.5. Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day, and/or with a kiln capacity exceeding 4 m<sup>3</sup> and with a setting density per kiln exceeding 300 kg/m<sup>3</sup>.

#### 4. Chemical industry

Production within the meaning of the categories of activities contained in this section means the production on an industrial scale by chemical processing of substances or groups of substances listed in points 4.1 to 4.6.

- 4.1. Chemical installations for the production of basic organic chemicals, such as:
  - (a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
  - (b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins;
  - (c) sulphurous hydrocarbons;
  - (d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates;
  - (e) phosphorus-containing hydrocarbons;
  - (f) halogenic hydrocarbons;
  - (g) organometallic compounds;
  - (h) basic plastic materials (polymers, synthetic fibres and cellulose-based fibres);
  - (i) synthetic rubbers;
  - (j) dyes and pigments;
  - (k) surface-active agents and surfactants.
- 4.2. Chemical installations for the production of basic inorganic chemicals, such as:
  - (a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride;
  - (b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids;
  - (c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;
  - (d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate;
  - (e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide.

- 4.3. Chemical installations for the production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers).
- 4.4. Chemical installations for the production of basic plant health products and of biocides.
- 4.5. Installations using a chemical or biological process for the production of basic pharmaceutical products.
- 4.6. Chemical installations for the production of explosives.

## 5. **Waste management**

Without prejudice to Article 11 of Directive 2006/12/EC or Article 3 of Council Directive 91/689/EEC of 12 December 1991 on hazardous waste <sup>(1)</sup>:

- 5.1. Installations for the disposal or recovery of hazardous waste as defined in the list referred to in Article 1(4) of Directive 91/689/EEC, as defined in Annexes II A and II B (operations R1, R5, R6, R8 and R9) to Directive 2006/12/EC and in Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils <sup>(2)</sup>, with a capacity exceeding 10 tonnes per day.
- 5.2. Installations for the incineration of municipal waste (household waste and similar commercial, industrial and institutional wastes) with a capacity exceeding 3 tonnes per hour.
- 5.3. Installations for the disposal of non-hazardous waste as defined in Annex II A to Directive 2006/12/EC under headings D8 and D9, with a capacity exceeding 50 tonnes per day.
- 5.4. Landfills receiving more than 10 tonnes per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste.

## 6. **Other activities**

- 6.1. Industrial plants for the production of:
  - (a) pulp from timber or other fibrous materials;
  - (b) paper and cardboard with a production capacity exceeding 20 tonnes per day.
- 6.2. Plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres or textiles where the treatment capacity exceeds 10 tonnes per day.
- 6.3. Plants for the tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day.
- 6.4. (a) Slaughterhouses with a carcase production capacity greater than 50 tonnes per day.
  - (b) Treatment and processing intended for the production of food products from:
    - animal raw materials (other than milk) with a finished product production capacity greater than 75 tonnes per day,
    - vegetable raw materials with a finished product production capacity greater than 300 tonnes per day (average value on a quarterly basis).
  - (c) Treatment and processing of milk, the quantity of milk received being greater than 200 tonnes per day (average value on an annual basis).

<sup>(1)</sup> OJ L 377, 31.12.1991, p. 20. Directive as last amended by Regulation (EC) No 166/2006 of the European Parliament and of the Council (OJ L 33, 4.2.2006, p. 1).

<sup>(2)</sup> OJ L 194, 25.7.1975, p. 23. Directive as last amended by Directive 2000/76/EC of the European Parliament and of the Council (OJ L 332, 28.12.2000, p. 91).

- 6.5. Installations for the disposal or recycling of animal carcasses and animal waste with a treatment capacity exceeding 10 tonnes per day.
- 6.6. Installations for the intensive rearing of poultry or pigs with more than:
- (a) 40 000 places for poultry;
  - (b) 2 000 places for production pigs (over 30 kg); or
  - (c) 750 places for sows.
- 6.7. Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.
- 6.8. Installations for the production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation.
-

## ANNEX II

**LIST OF THE DIRECTIVES REFERRED TO IN ARTICLES 19(2), (3) AND 20**

1. Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos.
  2. Council Directive 82/176/EEC of 22 March 1982 on limit values and quality objectives for mercury discharges by the chlor-alkali electrolysis industry.
  3. Council Directive 83/513/EEC of 26 September 1983 on limit values and quality objectives for cadmium discharges.
  4. Council Directive 84/156/EEC of 8 March 1984 on limit values and quality objectives for mercury discharges by sectors other than the chlor-alkali electrolysis industry.
  5. Council Directive 84/491/EEC of 9 October 1984 on limit values and quality objectives for discharges of hexachlorocyclohexane.
  6. Council Directive 86/280/EEC of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC.
  7. Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste.
  8. Council Directive 92/112/EEC of 15 December 1992 on procedures for harmonising the programmes for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry.
  9. Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.
  10. Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.
  11. Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste.
  12. Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils.
  13. Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
  14. Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.
-

## ANNEX III

**INDICATIVE LIST OF THE MAIN POLLUTING SUBSTANCES TO BE TAKEN INTO ACCOUNT IF THEY ARE RELEVANT FOR FIXING EMISSION LIMIT VALUES****Air**

1. Sulphur dioxide and other sulphur compounds.
2. Oxides of nitrogen and other nitrogen compounds.
3. Carbon monoxide.
4. Volatile organic compounds.
5. Metals and their compounds.
6. Dust.
7. Asbestos (suspended particulates, fibres).
8. Chlorine and its compounds.
9. Fluorine and its compounds.
10. Arsenic and its compounds.
11. Cyanides.
12. Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air.
13. Polychlorinated dibenzodioxins and polychlorinated dibenzofurans.

**Water**

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment.
  2. Organophosphorus compounds.
  3. Organotin compounds.
  4. Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment.
  5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances.
  6. Cyanides.
  7. Metals and their compounds.
  8. Arsenic and its compounds.
  9. Biocides and plant health products.
  10. Materials in suspension.
  11. Substances which contribute to eutrophication (in particular, nitrates and phosphates).
  12. Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.).
-

## ANNEX IV

Considerations to be taken into account generally or in specific cases when determining best available techniques, as defined in Article 2(12), bearing in mind the likely costs and benefits of a measure and the principles of precaution and prevention:

1. the use of low-waste technology;
  2. the use of less hazardous substances;
  3. the furthering of recovery and recycling of substances generated and used in the process and of waste, where appropriate;
  4. comparable processes, facilities or methods of operation which have been tried with success on an industrial scale;
  5. technological advances and changes in scientific knowledge and understanding;
  6. the nature, effects and volume of the emissions concerned;
  7. the commissioning dates for new or existing installations;
  8. the length of time needed to introduce the best available technique;
  9. the consumption and nature of raw materials (including water) used in the process and energy efficiency;
  10. the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;
  11. the need to prevent accidents and to minimise the consequences for the environment;
  12. the information published by the Commission pursuant to Article 17(2), second subparagraph, or by international organisations.
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## ANNEX V

**PUBLIC PARTICIPATION IN DECISION-MAKING**

1. The public shall be informed (by public notices or other appropriate means such as electronic media where available) of the following matters early in the procedure for the taking of a decision or, at the latest, as soon as the information can reasonably be provided:
    - (a) the application for a permit or, as the case may be, the proposal for the updating of a permit or of permit conditions in accordance with Article 15(1), including the description of the elements listed in Article 6(1);
    - (b) where applicable, the fact that a decision is subject to a national or transboundary environmental impact assessment or to consultations between Member States in accordance with Article 18;
    - (c) details of the competent authorities responsible for taking the decision, those from which relevant information can be obtained, those to which comments or questions can be submitted, and details of the time schedule for transmitting comments or questions;
    - (d) the nature of possible decisions or, where there is one, the draft decision;
    - (e) where applicable, the details relating to a proposal for the updating of a permit or of permit conditions;
    - (f) an indication of the times and places where, or means by which, the relevant information will be made available;
    - (g) details of the arrangements for public participation and consultation made pursuant to point 5.
  2. Member States shall ensure that, within appropriate time-frames, the following is made available to the public concerned:
    - (a) in accordance with national legislation, the main reports and advice issued to the competent authority or authorities at the time when the public concerned were informed in accordance with point 1;
    - (b) in accordance with the provisions of Directive 2003/4/EC, information other than that referred to in point 1 which is relevant for the decision in accordance with Article 8 and which only becomes available after the time the public concerned was informed in accordance with point 1.
  3. The public concerned shall be entitled to express comments and opinions to the competent authority before a decision is taken.
  4. The results of the consultations held pursuant to this Annex must be taken into due account in the taking of a decision.
  5. The detailed arrangements for informing the public (for example by bill posting within a certain radius or publication in local newspapers) and consulting the public concerned (for example by written submissions or by way of a public inquiry) shall be determined by the Member States. Reasonable time-frames for the different phases shall be provided, allowing sufficient time for informing the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to the provisions of this Annex.
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## ANNEX VI

## PART A

**Repealed Directive with its successive amendments (referred to in Article 22)**

Council Directive 96/61/EC  
(OJ L 257, 10.10.1996, p. 26).

Directive 2003/35/EC of the European Parliament and of the Council  
(OJ L 156, 25.6.2003, p. 17).

only Article 4 and Annex II

Directive 2003/87/EC of the European Parliament and of the Council  
(OJ L 275, 25.10.2003, p. 32).

only Article 26

Regulation (EC) No 1882/2003 of the European Parliament and of the Council  
(OJ L 284, 31.10.2003, p. 1).

only point (61) of Annex III

Regulation (EC) No 166/2006 of the European Parliament and of the Council  
(OJ L 33, 4.2.2006, p. 1).

only Article 21(2)

## PART B

**List of time-limits for transposition into national law (referred to in Article 22)**

Directive	Time-limit for transposition
96/61/EC	30 October 1999
2003/35/EC	25 June 2005
2003/87/EC	31 December 2003

## ANNEX VII

## CORRELATION TABLE

Directive 96/61/EC	This Directive
Article 1	Article 1
Article 2, introductory words	Article 2, introductory words
Article 2(1-9)	Article 2(1-9)
Article 2(10)(a)	Article 2(10)
Article 2(10)(b)	Article 2(11)
Article 2(11), first subparagraph, introductory wording	Article 2(12), first subparagraph, introductory wording
Article 2(11), first subparagraph, first indent	Article 2(12), first subparagraph, (a)
Article 2(11), first subparagraph, second indent	Article 2(12), first subparagraph, (b)
Article 2(11), first subparagraph, third indent	Article 2(12), first subparagraph, (c)
Article 2(11), second subparagraph	Article 2(12), second subparagraph
Article 2(12)	Article 2(13)
Article 2(13)	Article 2(14)
Article 2(14)	Article 2(15)
Article 3, first subparagraph	Article 3(1)
Article 3, second subparagraph	Article 3(2)
Article 4	Article 4
Article 5	Article 5
Article 6(1), first subparagraph, introductory wording	Article 6(1), first subparagraph, introductory wording
Article 6(1), first subparagraph, first to tenth indent	Article 6(1), first subparagraph, (a) to (j)
Article 6(1), second subparagraph	Article 6(1), second subparagraph
Article 6(2)	Article 6(2)
Article 7 to 12	Article 7 to 12
Article 13(1)	Article 13(1)
Article 13(2), introductory wording	Article 13(2), introductory wording
Article 13(2), first to fourth indent	Article 13(2)(a) to (d)
Article 14, introductory wording	Article 14, introductory wording
Article 14, first to third indent	Article 14(a) to (c)
Article 15(1), first subparagraph, introductory wording	Article 15(1), first subparagraph, introductory wording
Article 15(1), first subparagraph, first to third indent	Article 15(1), first subparagraph, (a) to (c)
Article 15(1), second subparagraph	Article 15(1), second subparagraph
Article 15(2)	Article 15(2)
Article 15(4)	Article 15(3)
Article 15(5)	Article 15(4)
Article 15a, first subparagraph, introductory and final words	Article 16(1)
Article 15a, first subparagraph, (a) and (b)	Article 16(1)(a) and (b)

Directive 96/61/EC	This Directive
Article 15a, second subparagraph	Article 16(2)
Article 15a, third subparagraph, first and second sentence	Article 16(3), first subparagraph
Article 15a, third subparagraph, third sentence	Article 16(3), second subparagraph
Article 15a, fourth subparagraph	Article 16(4), first subparagraph
Article 15a, fifth subparagraph	Article 16(4), second subparagraph
Article 15a, sixth subparagraph	Article 16(5)
Article 16	Article 17
Article 17	Article 18
Article 18(1), introductory and final words	Article 19(1)
Article 18(1), first and second indent	Article 19(1)(a) and (b)
Article 18(2), first subparagraph	Article 19(2)
Article 18(2), second subparagraph	Article 19(3)
Article 19	—
Article 20(1)	Article 20(1)
Article 20(2)	Article 20(2)
Article 20(3), first subparagraph	Article 20(3), first subparagraph
Article 20(3), second subparagraph	—
Article 20(3), third subparagraph	Article 20(3), second subparagraph
Article 21(1)	—
Article 21(2)	Article 21
—	Article 22
Article 22	Article 23
Article 23	Article 24
Annex I	Annex I
Annex II	Annex II
Annex III	Annex III
Annex IV	Annex IV
Annex V	Annex V
—	Annex VI
—	Annex VII

## Annex 3 – EC Environmental Quality Standards Relevant to Installations

### EU Directives setting maximum emission levels

Article 19(2) of the IPPC Directive provides that the relevant emission limit values (ELVs) in certain other directives are to be applied as minimum ELVs for IPPC. This means that they set the maximum emission levels of particular substances from particular installations allowed under IPPC. This is without prejudice to the possibility of stricter requirements, for example BAT or an EQS. The table below lists those directives.

Directive	Subject	Notes
75/439/EEC	Waste oils	
2006/11/EEC	Dangerous substances discharged to the aquatic environment	
82/176/EEC	Mercury discharges from the chlor-alkali electrolysis industry	
83/513/EEC	Cadmium	
84/156/EEC	Mercury discharges from <u>other than</u> the chlor-alkali electrolysis industry	
84/491/EEC	Hexachlorocyclohexane	
86/280/EEC	DDT, carbon tetrachloride and pentachlorophenol	Subsequently amended by Directives 88/347 and 90/415
87/217/EEC	Asbestos	
2006/11/EEC	Aldrin, Endrin, Isodrin, Dieldrin	
1986/280/EEC	Chlorinated hydrocarbons	
1999/13/EEC	Organic solvents	
2000/76/EEC	Incineration of waste	
2001/80/EEC	Large combustion plant	

## **Air Quality**

Directive 1999/30/EC (OJ L163, 29.6.99) sets limit values and other thresholds for sulphur dioxide, oxides of nitrogen, benzene, carbon monoxide, particulate matter and lead in air. Values are also set for ozone. This Directive has been adopted as a daughter directive to the Air Quality Framework Directive 96/62/EC. These limit values were phased in over a period of time starting in 2001. Limit and target values for the following additional substances have been adopted through three further daughter directives:

- benzene
- carbon monoxide
- ozone
- poly-aromatic hydrocarbons
- cadmium
- arsenic
- nickel.

Regulations to update the 2007 Air Quality Standards Regulations were consulted on in early 2010 and should come into force on June 2010.

## **Water Quality**

Under Directive 76/464/EEC on pollution caused by dangerous substances discharged into water the following daughter directives set EQSs for List I substances.

- Directive 82/176/EEC which set quality objectives for mercury discharged by the chloralkali electrolysis industry has been replaced by the provisions of Water Framework Directive and its daughter the Priority Substances Directive. Directive 82/176/EEC will be repealed in December 2012.
- Directive 84/156/EEC which set quality objectives for mercury discharged by other industrial sectors has been replaced by the provisions of the Water Framework Directive and its daughter Priority Substance Directive. Directive 84/156/EEC will be repealed in December 2012.
- Directive 83/513/EEC which set quality objectives for cadmium discharges has been replaced by the provisions of the Water Framework Directive and its daughter Priority Substance Directive. Directive 83/513/EEC will be repealed in December 2012.
- Directive 84/491/EEC which set quality objectives for hexachlorocyclohexane discharges has been replaced by the provisions of the Water Framework Directive and its daughter Priority Substance Directive. Directive 84/491/EEC will be repealed in December 2012.
- Directive 86/280/EEC contains quality objectives for DDT, carbon tetrachloride, which are listed as 'Other pollutants' under Annex I of

2008/105/EC, while pentachlorophenol is a priority substance under 2008/105/EC. Directive 86/220/EEC will be repealed in December 2012.

- Directive 88/347/EEC contains quality objectives for aldrin, dieldrin, endrin, isodrin. These are listed as 'Other pollutants' under Annex I of 2008/105/EC, while chloroform is a priority substance and hexachlorobenzene, and hexachlorobutadiene are priority hazardous substances under this Directive. Directive 88/347/EEC will be repealed in December 2012.
- Directive 90/415/EEC contains quality objectives for 1,2-dichloroethane which is listed as a priority substance under Directive 2008/105/EC, trichloroethane for which the existing EQS under Directive 76/464/EEC remains and trichlorobenzene which is listed as a priority substance under Directive 2008/105/EC.

The EQSs set in these Directives are set out as statutory standards in the Surface Waters (Dangerous Substances) (Classification) Regulations 1989 (SI 1989/2286) and the Surface Waters (Dangerous Substances) (Classification) Regulations 1992 (SI 1992/337) in respect of the following substances.

- Aldrin, Dieldrin, Endrin and Isodrin, which are listed as 'Other pollutants' under Annex I of 2008/105/EC.
- Cadmium and its compounds, which are priority hazardous substances under 2008/105/EC.
- Carbon tetrachloride, which are listed as 'Other pollutants' under Annex I of 2008/105/EC.
- Chloroform, which is a priority substance under 2008/105/EC
- DDT (all isomers), which is listed as 'Other pollutant' under Annex I of 2008/105/EC.
- para-para-DDT, which is listed as 'Other pollutant' under Annex I of 2008/105/EC.
- Hexachlorobenzene, which is a priority hazardous substance under 2008/105/EC.
- Hexachlorobutadiene, which is a priority hazardous substance under 2008/105/EC.
- Hexachlorocyclohexane (all isomers), which is a priority hazardous substance under 2008/105/EC.
- Mercury and its compounds, which are priority hazardous substances under 2008/105/EC.
- Pentachlorophenol and its compounds, which are priority substances under 2008/105/EC.
- 1,2-Dichloroethane, which is a priority substance under 2008/105/EC.
- Trichloroethylene, which is listed as 'Other pollutant' under Annex I of 2008/105/EC.

- Perchloroethylene, which is listed as 'Other pollutant' under Annex I of 2008/105/EC.
- Trichlorobenzene, which is a priority substance under 2008/105/EC.

Where candidate List I substances, and List II substances, are concerned, it is for Member States to set statutory standards under the provisions for List II substances. National statutory EQSs are set under the Surface Waters (Dangerous Substances) (Classification) Regulations 1997 (SI 2560) and the Surface Waters (Dangerous Substances) (Classification) Regulations 1998 (SI 389) for the following substances.

- Arsenic, which is a UK Specific Pollutant under 2000/60/EC.
- Atrazine and Simazine, which are priority substances under 2008/105/EC.
- Azinphos-methyl, which remains an existing EQS under 76/464/EEC.
- Dichlorvos, which remains an existing EQS under 76/464/EEC.
- Endosulphan, which is a priority hazardous substance under 2008/105/EC.
- Fenitrothion, which remains an existing EQS under 76/464/EEC.
- Malathion, which remains an existing EQS under 76/464/EEC.
- Trifluralin, which is a priority substance under 2008/105/EC.
- Tributyltin, which is a priority hazardous substance under 2008/105/EC. Triphenyltin and its derivatives, which remains an existing EQS under 76/464/EEC.
- 4-Chloro-3-methylphenol, which remains an existing EQS under 76/464/EEC.
- 2-Chlorophenol, which remains an existing EQS under 76/464/EEC. 2,4-Dichlorophenol, which is a UK Specific Pollutant under 2000/60/EC.
- 2,4-D (ester and non-ester) , which is a UK Specific Pollutant under 2000/60/EC.
- 1,1,1-Trichloroethane, which remains an existing EQS under 76/464/EEC.
- 1,1,2-Trichloroethane, which remains an existing EQS under 76/464/EEC.
- Bentazone, which remains an existing EQS under 76/464/EEC and is a candidate priority substance under Annex III 2008/105/EC.
- Benzene, which is a priority substance under 2008/105/EC. Biphenyl, which remains an existing EQS under 76/464/EEC.
- Chloronitrotoluenes, which remains an existing EQS under 76/464/EEC.
- Demeton, which remains an existing EQS under 76/464/EEC.
- Dimethoate, which is a UK Specific Pollutant under 2000/60/EC.
- Linuron, which is a UK Specific Pollutant under 2000/60/EC.

- Mecoprop, which is a UK Specific Pollutant under 2000/60/EC and is a candidate priority substance under Annex III 2008/105/EC.
- Naphthalene, which is a UK Specific Pollutant under 2000/60/EC.
- Omethoate, which remains an existing EQS under 76/464/EEC.
- Toluene, which is a UK Specific Pollutant under 2000/60/EC.
- Triazaphos, which remains an existing EQS under 76/464/EEC.
- Xylene, which remains an existing EQS under 76/464/EEC.

In addition non-statutory EQSs, pursuant to the List II requirements of the Dangerous Substances Directive, are set in Circular 7/89 for the following substances.

- Lead, which is a priority substance under 2008/105/EC.
- Chromium, which is a UK Specific Pollutant under 2000/60/EC. zinc, which is a UK Specific Pollutant under 2000/60/EC.
- Copper, which is a UK Specific Pollutant under 2000/60/EC.
- Nickel, which is a priority substance under 2008/105/EC.
- Boron, which remains an existing EQS under 76/464/EEC.
- Iron, which is a UK Specific Pollutant under 2000/60/EC.
- pH.
- Vanadium, which remains an existing EQS under 76/464/EEC.
- PCSDs, which remains an existing EQS under 76/464/EEC.
- Cyfluthrin, which remains an existing EQS under 76/464/EEC.
- Sulcofuron, which remains an existing EQS under 76/464/EEC.
- Flucofuron, which remains an existing EQS under 76/464/EEC.
- Permethrin, which is a UK Specific Pollutant under 2000/60/EC.

Directive 78/659/EEC on the quality of fresh water supporting fish life. This Directive sets quality standards for two categories of water: suitable for salmonids (salmon, trout) and suitable for cyprinids (coarse fish). An annex sets out parameters which are either imperative (I) or guide (G) values for each type of water. Member states must set standards no less stringent than the I values and must endeavour to comply with the G values. The values are to be found in the Surface Waters (Fishlife) (Classification) Regulations 1997 (SI 1997/1331). The parameters are as follows:

- temperature
- dissolved oxygen
- pH
- suspended solids

- biochemical oxygen demand
- total phosphorus
- nitrates
- phenolic compounds, which is a UK Specific Pollutant under 2000/60/EC
- petroleum hydrocarbons
- non-ionised ammonia, which is a UK Specific Pollutant under 2000/60/EC
- total ammonium , which is a UK Specific Pollutant under 2000/60/EC
- total residual chlorine, which is a candidate Specific Pollutant but no standard has yet been recommended
- total zinc , which is a UK Specific Pollutant under 2000/60/EC
- dissolved copper, which is a UK Specific Pollutant under 2000/60/EC.

Directive 76/160 on the quality of bathing water. This Directive lists various parameters with imperative (I) or guide (G) values. The values are to be found in the Bathing Water (Classification) Regulations 1991 (SI 1991/1597). The parameters are as follows:

- total coliforms
- faecal coliforms
- faecal streptococci
- salmonella
- enteroviruses
- pH
- colour
- mineral oils
- surface active substances reacting with methylene blue
- phenols, which is a UK Specific Pollutant under 2000/60/EC
- dissolved oxygen
- tarry residues and floating materials such as wood, plastic, bottles, rubber
- ammonia , which is a UK Specific Pollutant under 2000/60/EC
- nitrogen (Kjeldahl)
- pesticides
- heavy metals e.g. the UK Specific Pollutants arsenic and chromium and priority hazardous substances cadmium and mercury
- cyanide, which is a UK Specific Pollutant under 2000/60/EC
- nitrate and phosphate.

Directive 78/659/EEC on quality for shellfish waters. This Directive lists various parameters with imperative (I) or guide (G) values or both. The values are to be found in the Surface Waters (Shellfish) (Classification) Regulations 1997 (SI 1997/1332). The parameters are as follows:

- temperature
- colouration (after filtration)
- suspended solids
- salinity
- dissolved oxygen saturation
- petroleum hydrocarbons
- organohalogenated substances
- metals e.g. the UK Specific Pollutants arsenic, copper and zinc, priority hazardous substances cadmium and mercury, Candidate Specific Pollutant silver, and priority substances nickel and lead.
- faecal coliforms
- substances affecting taste of shellfish
- saxitoxin (produced by dinoflagellates).

Directive 75/440 includes values for 46 parameters indicating the quality of surface water for drinking. Values are listed as imperative (I) or guide (G). Values set by Member States must be no less stringent than (I) values. These values are to be found in the Surface Waters (Abstraction for Drinking Water) (Classification) Regulations 1996 (SI 1996/3001).

Directive 80/68 on the protection of groundwater contains two lists of dangerous substances similar, but not identical, to those contained in the Dangerous Substances Directive. List I substances must not be allowed to enter groundwater, and List II substances must not be allowed to pollute groundwater.

Directive 2000/60/EC the Water Framework Directive will require water to be managed on the basis of river basins.

## Annex 4 – Examples of the Meaning of Installation

Example 1: A chemical plant served by an effluent treatment works on the same site

Limb (i): In this example the chemical plant is the stationary technical unit.

Limb (ii): The effluent treatment works will satisfy limb (ii) of the definition in relation to the stationary technical unit because it is a directly associated activity (under criterion (2A)) with a technical connection with the stationary technical unit (under criterion (2B)).

Example 2: Two chemical plants served by the same effluent treatment works

Limb (i): Each chemical plant is functionally self contained given that they can both produce chemicals without being attached to an effluent treatment works (criterion (1A)). They will therefore generally be treated as two separate stationary technical units. If, however, the two chemical plants and the effluent treatment works are on the same site then the two chemical installations will be treated as one (integrated) stationary technical unit. That unit (plus the treatment works) will form the installation.

Limb (ii): If the effluent treatment works is not on the same site as either of the chemical installations it will not satisfy limb (ii) because of criterion (2A). It will therefore not be part of the installation.

If the effluent treatment works is on the same site as only one of the installations it will satisfy limb (ii) in relation to that installation if that installation is the principal user of the works.

Example 3: A power station (which is above the Schedule 1 threshold) served by its own landfill (which is below the Schedule 1 threshold for landfills) on the same site

Limb (i): The power station is the stationary technical unit.

Limb (ii): The landfill site will satisfy limb (ii).

Example 4: A power station (which is above the IPPC threshold) served by its own landfill (which is also above the Schedule 1 threshold) on the same site

Limb (i): This constitutes one single technical unit.

Limb (ii): Any associated activities, such as stockpiling and recovering coal, handling ash and treating and releasing cooling water, which are directly associated with the stationary technical unit will also be part of the installation.

Example 5: A power station where coal is stored on site

Limb (i): The power station is the stationary technical unit.

Limb (ii): The storage of coal will satisfy limb (ii) and will thus be a directly associated activity and the storage area will therefore be part of the installation along with the stationary technical unit.

Example 6: An integrated oil refinery

Limb (i): If the oil refinery carries out a number of listed activities using plant that carry out successive steps in one integrated industrial activity, limb (i) will dictate that the whole collection is one stationary technical unit.

Example 7: A cement clinker manufacturing plant with an on-site chalk quarry

Limb (i): The cement clinker plant is the stationary technical unit.

Limb (ii): The chalk quarry will not satisfy limb (ii) because it will not have a technical connection with the stationary technical unit. Quarrying the chalk is one step further removed than the input activities that may be directly associated activities.

Example 8: Combined heat and power (CHP) plant (which is above the Schedule 1 threshold) serving a light industrial estate engaged in non-listed activities

Limb (i): The CHP plant is the stationary technical unit.

Limb (ii): None of the units on the industrial estate will be directly associated activities because they do not meet criterion (2A) in that they do not serve the CHP plant; it is the CHP plant which serves them.

Example 9: An installation for the intensive rearing of pigs or poultry where manure from the installation is spread on adjacent fields

Limb (i): The building or buildings in which the animals are housed will be the stationary technical units. The fields are not part of the stationary technical unit.

Note that all animal houses which are on the same site in which Schedule 1 activities are carried out by the same operator count towards the threshold.

Limb (ii): Directly associated activities such as a slurry handling system will be part of the installation.

Note that conditions will be attached to the permit for these installations governing the handling of manure, but these will not apply to third parties who might take the manure.