

Industrial emissions Directive Draft EPR Guidance on Part A installations

March 2011

For existing IPPC installations, this would completely replace the current guidance (Version 3, March 2010 – at <http://archive.defra.gov.uk/environment/policy/permits/documents/ep2010ippc.pdf>) from 7 January 2014. But it would apply to new installations from 7 January 2013.



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1. About this guidance

[As in current guidance, with consequential modifications]

2. Introduction

- 2.1. Chapter II of the industrial emissions 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. Regulators must set permit conditions so as to achieve a high level of protection for the environment as a whole, based on the use of the best available techniques (BAT), which balances the costs to the operator against the benefits to the environment.
- 2.2. The website of the European Commission contains¹ general background information on the industrial emissions Directive. Guidance from the Commission on the interpretation and implementation of the Directive on integrated pollution prevention and control (IPPC) is also on its website² and remains relevant to Chapter II of the industrial emissions Directive until such time as it is updated. *#[this paragraph will be revised to reflect the structure of the Commission websites at the time of publication].*
- 2.3. Schedule 7 to the Regulations (*#to be reproduced in this document as Annex 1 when finalised*) sets out the requirements of the industrial emissions Directive which apply to Part A(1) installations. It must be noted that those requirements apply also to Part A(2) installations, although they, because they are regulated by local authorities, are the subject of separate, although very similar, guidance .
- 2.4. Chapter 3 of this guidance sets out the scope of the industrial emissions Directive regulation of Part A activities by defining Part A installations. Chapter 4 describes the permitting requirements of the industrial emissions Directive which will be delivered through environmental permits for Part A(1) installations. Chapter 5 describes other industrial emissions Directive requirements relevant to the regulation of installations.
- 2.5. The relevant parts of the industrial emissions Directive (*# will be reproduced in Annex 2. They are Chapters I and II and Annexes I to IV*).
- 2.6. A glossary of various words, phrases and acronyms used in the Directive and Regulations (*# will be included as Annex 5, updated from the glossary in the current guidance*)

¹ At <http://ec.europa.eu/environment/air/pollutants/stationary/ied/implementation.htm> .

² At http://ec.europa.eu/environment/air/pollutants/stationary/ippc/key_impl.htm .

Interface with other legislation

- 2.7.** Part A installations may also be subject to other European Directives or to additional requirements within the industrial emissions Directive. Replacing separate Directives, the industrial emissions Directive includes provisions relating to large combustion plants (Directive Chapter III), waste incineration (Directive Chapter IV), solvent emissions (Directive Chapter V) and titanium dioxide production (Directive Chapter VI).
- 2.8.** With one exception³, all Part A combustion activities – that is to say, with a rated thermal input of 50 MW or more - are subject also to the **requirements in Chapter III** of the industrial emissions Directive. Chapter III requires that ELVs for nitrogen oxides, sulphur dioxide and dusts must be at least as stringent as those set out Annex V of the Directive, although although application of the BAT-based Chapter II (IPPC) requirements may require more stringent ELVs to be set in particular cases.
- 2.9.** All Part A waste incineration or waste co-incineration activities will be subject to the requirements in **Chapter IV** of the industrial emissions Directive, unless they involve the incineration or co-incineration of only the wastes listed in Article 42(2) of the Directive. Chapter IV requires that ELVs for a range substances emitted to air and water must be at least as stringent as those set out Annex VI of the Directive, although although application of the BAT-based Chapter II (IPPC) requirements may require more stringent ELVs to be set in particular cases. Chapter IV also has the effect of requiring certain operating conditions to be set in permits.
- 2.10.** Part A activities may involve the conduct of activities using solvents which are covered by Chapter V of the industrial emissions Directive. Those activities are set out in Part 1 of Annex VII of the Directive and are subject to at least the emission limit values set out in Part 2 of that Annex, although application of the BAT-based Chapter II (IPPC) requirements may require more stringent ELVs to be set. These activity descriptions and ELVs are set out in Schedule 14 to the EPR.
- 2.11.** Chapter VI of the industrial emissions Directive refers to only a very small number of installations which will in any case be subject to Chapter II as chemical production activities and the regulator must see that the minimum requirements set out in Annex VIII of the Directive are applied.
- 2.12.** Some Part A installations may be subject to the asbestos or petrol vapour Directives. Guidance on the relevant requirements can be found in the General Guidance Manual for these Directives since only local authorities are the competent authorities for them Asbestos and Petrol Vapour Directives.

³ The exception may possibly arise if an installation, although above 50 MW rated thermal input when all the combustion units in are aggregated, is less than that figure when individual units of less than 15 MW are discounted, as required by the aggregation rule for Chapter III in Article 29(3).

- 2.13.** Some Part A installations may also be subject to EU-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.
- 2.14.** 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 installation

- 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.
- 3.2.** The existence of an installation is dependent on there being one or more listed activities carried on there. 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 solely used for research, development or testing of new products and processes.
- 3.3.** Each installation is assigned to one of the following categories: Part A(1), Part A(2), Part B or an activity using solvents. This guidance is only applicable to Part A installations and in particular to those regulated by the Environment Agency under Part A(1). Note that Part A(2) and B installations and activities using solvents are regulated by local authorities and guidance on these is available in the General Guidance Manual.
- 3.4.** 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).
- 3.5.** Activities may also be listed under the heading Part A(2) or Part B in Schedule 1 or in Schedule 14 to the Regulations. Where an activity appears to fall within more than one activity description and these fall within different categories rules are provided for deciding which category should be considered to apply. These rules are contained in Schedule 1, Part 1, paragraph 2.
- 3.6. Installation means—**

- a stationary technical unit where one or more activities listed in Schedule 1, Part 2 to the Regulations are carried out (listed activities); and
- 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.

3.7. 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 published informal guidance on the meaning of installation for the purposes of the IPPC Directive which is still relevant⁴. 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. Two criteria are proposed for the purpose of determining whether plant or machinery satisfy **limb (i) of the 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.

3.9. 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. 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.

3.10. 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 of the definition** are carried out. Three criteria are proposed for the purpose of determining whether an activity satisfies the second limb:

- (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

⁴ At http://ec.europa.eu/environment/air/pollutants/stationary/ippc/pdf/installation_guidance.pdf

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

3.11. 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.

3.12. 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.

3.13. 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.

3.14. 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.

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

Capacity

- 3.16.** In some cases, the question of whether an activity falls within a particular activity description will depend on its capacity. 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 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.
- 3.17.** 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 requirements of Chapters I and II of the industrial emissions Directive that must be met through environmental permits and how the Regulations apply these requirements. The requirements of the IPPC Directive, apply to existing installations until 7 January 2014 and so Version 3 of this guidance⁵ remains valid until then. For these purposes, "existing installation" is an installation carrying out an activity listed in Part A of Part 2 of Schedule 1 of the principal Regulations, which is in operation before 7th January 2013 or in respect of which a complete application for a permit is submitted before that date and which is put into operation on or before 7th January 2014.
- 4.2.** Schedule 7 of the Regulations applies to every Part A installation and requires the regulator to exercise its functions under the Regulations to achieve the basic purpose set out in Article 1 of the industrial emissions 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 and preventing the generation of waste'.

⁵ At <http://archive.defra.gov.uk/environment/policy/permits/documents/ep2010ippc.pdf>

- 4.3. Schedule 7 requires the regulator to exercise its relevant functions so as to comply with certain provisions of the Directive. The regulator exercises a relevant function (see regulation 9 and see chapters 5, 6 and 10 of the Environmental Permitting Core Guidance) when it:
- determines an application for the grant of a permit,
 - makes a regulator-initiated variation of permit conditions; or when it
 - exercises enforcement powers in relation to a permit.

Overview of the permitting requirements of the industrial emissions Directive

- 4.4. The **general principles** governing the basic obligations of the operator, set out in Article 11, are that:
- all the appropriate preventive measures are taken against pollution;
 - BAT are applied
 - no significant pollution is caused;
 - the generation of waste is avoided in accordance with the waste Directive (2008/98/EC);
 - where waste is generated, it is, in order of priority and in accordance with the waste Directive, prepared for re-use, recycled, 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 defined in accordance with Article 22.
- 4.5. These general principles are embodied in the Article 14 requirements that **permits should include all measures necessary for compliance with Articles 11 and 18**. In particular, permit conditions must:
- aim to minimise long distance and transboundary pollution (Article 14(1)(g));

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- ensure the protection of soil and groundwater and make sure the operator manages waste properly (Article 14(1)(b) and (e));
 - protect the environment when the installation is not operating normally, for example during start-up, malfunction, leaks or temporary stoppages (Article 14(1)(f));
 - require the operator to take appropriate steps before and after operation which may include site monitoring and remediation (Article 11(h));
 - require reporting, at least annually, of emissions monitoring (Article 14(1)(d));
 - set conditions for assessing compliance with ELVs (Article 14(1)(h));
 - 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 (Articles 14(1)(c) and 16); and
 - require the operator to inform the regulator without delay of any incident or accident that may cause pollution or breach of permit conditions and to take measures to limit the environmental consequences of incidents or accidents (Articles 7 and 8).
- 4.6.** Regulators must ensure that there is a permit condition requiring operators to notify the regulator of any proposed **change in operation**. 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 Chapter 5 of this guidance.
- 4.7.** The regulator must take account, in granting a permit of information obtained or conclusions arrived at under Articles 5, 6, 7 and 9 of the **EIA Directive**, to the extent this information is available at the relevant time.
- 4.8.** Articles 6 and 17 of the industrial emissions Directive allows requirements for certain categories of installation to be made in **general binding rules**, provided an equivalent high level of protection of the environment is secured, and the rules are based on BAT. The EPR provisions (in regulations 26 to 30) regarding the making of standard rules enable the regulator to do this. Paragraph 5(1) of EPR Schedule 5 as amended removes the need for public participation in the consideration of applications for standard rules concerning Part A activities, on the grounds that there will have been full public participation in the making of the standard rules in the first place, as required by regulation 26.

- 4.9. Through being required to exercise its functions so as to ensure compliance with Article 9 of the Directive, the regulator has the option of not applying **energy efficiency requirements** to EU-ETS installations. Ministers will provide separate specific guidance on the exercise of this option. Until that is provided, the regulator should maintain energy efficiency requirements in line with its practice as it was in January 2012.

Determination and use of best available techniques (BAT)

- 4.10. Article 14(3) of the Directive states that BAT Conclusions shall be the reference for setting permit conditions. Permit conditions stricter than BAT may be set but only where this is necessary to ensure that no significant pollution is caused in accordance with the general principle in article 11, or in accordance with article 18 where an environmental quality standard requires this.
- 4.11. Under the industrial emissions Directive, it is expected that BAT conclusions will be adopted for each of the sectors covered by a BAT reference document (BREF) as defined in Article 3(11). The process of adopting BAT conclusions, begun in late 2011, is likely to take several years. Article 13(5) of the Directive states that decisions on BAT Conclusions shall be adopted through the regulatory procedure set out in Article 75(2). That procedure involves the “Article 75” Committee which is convened by the European Commission and comprises representatives of each Member State. When the Committee has adopted a decision that, in effect, BAT Conclusions are soundly based, the Commission is obliged to make the BAT Conclusions publicly available in all the languages of the EU. Until BAT Conclusions are available, relevant conclusions from BREFs apply (except for the purposes of Articles 15(3) and (4) – see below).
- 4.12. The regulator must follow **developments in BAT and the publication of BAT Conclusions**. Moreover, Defra and the Welsh Government expect the Environment Agency to co-ordinate UK input to the information exchange process under Article 13 of the industrial emissions Directive through which BREFs are produced. In particular, the Environment Agency should ensure that there is a UK lead on each of the BREFs. That lead person must in turn endeavour to obtain soundly based technical information from operators in a form which is consistent with the European Commission’s guidance⁶ on the preparation of BREFs.
- 4.13. Article 27 requires Member States, where appropriate, **to encourage the development and application of emerging techniques**, in particular for those emerging techniques identified in BAT reference documents. ‘Emerging technique’ is defined in Article 3(14) as meaning:

⁶ #[link to BREF guidance, when it is published under Article 13(3)]

a novel technique for an industrial activity that, if commercially developed, could provide either a higher general level of protection of the environment or at least the same level of protection of the environment and higher cost savings than existing best available techniques.

- 4.14.** Schedule 7 requires regulators, where appropriate, to exercise their functions so as to encourage the application of emerging techniques. Regulators can do this primarily through their dealings with operators who seek either new or varied permits for an activity in which an emerging technique is to be employed. As with all matters concerning BAT, it is for the regulator, guided but not bound by BREFs, to take a view on whether a technique has emerged to the point where it must be regarded as BAT for a particular installation or class of installation. When that stage is reached, the regulator must have regard to Article 14(5) of the industrial emissions Directive.

Setting emission limit values (ELVs) - introduction

- 4.15.** Emission limit values (ELVs) must be set for polluting substances listed in Annex II of the Directive and for other polluting substances likely to be emitted in significant quantities, having regard to their nature and potential to transfer between environmental media. ELVs may be supplemented or replaced by equivalent parameters or technical measures ensuring an equivalent level of environmental protection.
- 4.16.** Carbon dioxide is a notable omission from Annex II. But it is essential that the environmental assessment must (except in the case of installations subject to the EU ETS, for which, under Article 9(1), no ELV for a greenhouse gas can be set unless necessary to protect the local environment) 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.
- 4.17.** The industrial emissions Directive 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.
- 4.18.** ELVs may be supplemented or replaced by equivalent parameters or technical measures ensuring an equivalent level of environmental protection, ELVs, whether supplemented or replaced in that way, have to be based on the application of BAT without prescribing the use of any technique or specific technology.

- 4.19.** Whilst regulators themselves therefore cannot directly compel the operator to use a specific technique or specific technology, the ELVs and supplementary or replacement permit conditions can of course be written in such a way as to accord with the operator's choice, so long as the resulting environmental performance is sufficient to meet the industrial emissions Directive's requirements. So, for example, if an operator chooses to use a trademarked piece of apparatus, there is no objection to that being named in the permit if the regulator considers that will improve the permit's clarity (and potentially the enforceability).
- 4.20.** Under Article 15(1) of the Directive, ELVs have to apply at the point where the emission leaves the installation. Dilution prior to that point must be disregarded except in the case of indirect releases to water where the effect of water treatment plant may be taken into account provided an equivalent level of protection of the environment is guaranteed and it does not lead to higher levels of pollution.

Setting emission limit values (ELVs) on the basis of BAT

- 4.21.** The availability and status of conclusions reached on BAT in BREFs dictates distinct ways in which ELVs have to be based on BAT.
- 4.22.** Where there is **no BREF relevant** to an activity or a type of production process carried out within an installation, or where a BREF's conclusions on BAT do not address all the potential environmental effects of the activity or process, Article 14(6) of the Directive requires the regulator, after prior consultations with the operator, to set ELVs (and other permit conditions) on the basis of its own determination of BAT which has to give special consideration to the criteria listed in Annex III of the industrial emissions Directive.
- 4.23.** Similarly, where there is a relevant BREF, but the regulator determines – perhaps as an outcome of its duty to encourage emerging techniques (see above) – as **BAT a technique which is not included in the BREF's conclusions on BAT**, Article 14(5) of the industrial emissions Directive requires that the regulator's determination has to give special consideration to the criteria listed in Annex III of the Directive, to comply with the requirements of Article 15, and to result in a level of environmental performance which ensures a level of environmental protection equivalent to the techniques which are described in the BAT conclusions.
- 4.24.** 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.

4.25. In determining BAT, regulators must also give special consideration to the criteria listed in Annex III of the Directive, which include the following.

- 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 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.
- 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 the industrial emissions Directive is meant to avoid. The main goal should be to identify techniques that minimise all types of waste and releases at source.
- Accidents . 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, installing pipelines and storage tanks above-ground rather than underground would make leaks easier to detect and removal of pollution risks more straightforward.

Setting ELVs where Article 15(3) applies

- 4.26. The requirements of Article 15(3) apply **only** where BAT Conclusions have (i) been adopted and published by the European Commission under Articles 13(5) and (6), and (ii) those Conclusions contain BAT-associated emission levels. In such cases, the regulator should then set ELVs such that, under normal operating conditions, emissions do not exceed the relevant BAT-AEL. Where the BAT AELs are expressed as a range, the ELV should be set on the basis of the top of the BAT-AEL range unless exceptional environmental considerations compel a tighter ELV.
- 4.27. If the ELVs set by the regulator apply different values or reference conditions to those set in the BAT Conclusions, the regulator must assess the results of emissions monitoring at least annually to ensure that emissions under normal operating conditions do not exceed the BAT AELs.
- 4.28. Article 15(4) of the Directive provides a **derogation** from Article 15(3) and so may need to be invoked **only** when Article 15(3) itself is applicable as explained above. In all cases, it will be for the operator to identify the need for a derogation to be considered and to propose justification for it.
- 4.29. The justification must start from a clear understanding of the ELV which would be applicable under the terms of Article 15(3), and of the monitoring and compliance assessment conditions which would apply to that ELV. The operator will need to set out the ELV and associated conditions which it considers the installation could meet. The difference between the two will enable the “excess” pollutant load which would result from the derogation to be estimated.
- 4.30. The justification will then need to address the criteria set out in Article 15(4). These are that meeting the BAT AEL would lead to disproportionately higher costs compared to the environmental benefits due to:-
- the geographical location of the installation;
 - the local environmental conditions of the installation; or
 - the technical characteristics of the installation.
- 4.31. The extra costs – both capital and operating – of meeting the Article 15(3) ELVs (that is to say, of preventing the “excess” pollutant emission) must be estimated as accurately as possible in a transparent way which shows how those costs are driven by the technical characteristics, geographical location or local environmental conditions of the plant.
- 4.32. Technical characteristics which may be particularly relevant include:

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- the recent history of pollution control investment in the installation in respect of the pollutant(s) for which the derogation is sought;
- the general investment cycle for a particular type of installation;
- the configuration of the plant on a given site, making it more technically difficult and costly to comply;
- the practicability (particularly bearing in mind Health & Safety and other relevant legal obligations) of interrupting the activity so as to install improved emission control upon the pollutant(s)
- the effect of reducing the excess emission(s) upon other pollutant emissions, energy efficiency, water use or waste arising from the installation as a whole; and
- the intended remaining operational lifetime of the installation as a whole or of the part of it giving rise to the emission of the pollutant(s), where the operator is prepared to commit to a timetable for closure.

4.33. The geographical location of the installation may have a bearing on costs: for example, construction or energy supply costs may be higher than would normally be encountered if the installation is in a remote location. The local environmental conditions may also influence the costs: for example, there may be added costs if the installation is in a built-up location. Conversely a particularly remote location could mean the environmental benefits of meeting the BAT-AEL would be disproportionate to the costs.

4.34. Although operators should attempt to place a monetary value on the environmental benefits which would result from preventing the excess emission, it is recognised that, with the exception of a small range of air pollutants, methodology for doing so is lacking. It will therefore be for operators to assess the effect of the excess emission on the levels of the pollutant already in, or discharged to, air, water and land in the locality. For air pollutants, this will involve consideration of concentrations in ambient air; for water pollutants the effect upon receiving waters – perhaps after passage through a wastewater treatment works – will need to be considered. In all cases, the results of monitoring undertaken at all relevant sites in the locality must be taken into account.

4.35. It is then for the regulator to assess whether a derogation can be applied and, if so, with what conditions. In reaching its decision, the regulator must take account of its duty, under the Directive, to ‘ensure that no significant pollution is caused and that a high level of protection of the environment is achieved’.

- 4.36.** Where a derogation is applied, it will need to include ELVs and associated monitoring and compliance assessment conditions, expressed in the same way as they would be if there were no derogation. They may be complemented by a condition stating the total mass of the pollutant(s) which may not be exceeded within a stated period (for example, the remaining lifetime of the installation). The regulator may attach conditions requiring immediate reduction or cessation of the relevant activity at the installation if environmental monitoring at designated points in the locality shows pollutant levels above stated limits. The derogation may also be conditional upon the completion by the specified date of improvements, or upon closure by a specified date of the installation as a whole or the part of it which gives rise to the need for the derogation.
- 4.37.** The regulator must set out in an annex to the permit the reasons for the derogation, including the results of its assessment and its justification of the resulting permit conditions. The derogation must be re-assessed at the time of any periodic review.
- 4.38.** Regulators may also grant a temporary derogation under article 15(3) in relation to the testing and use of emerging techniques. The derogation must not last longer than 9 months and the BAT AELs must be met after that time if the activity is allowed to continue.

Setting (ELVs) where Article 18 applies

- 4.39.** The main basis for setting ELVs under the Regulations will be the application of BAT. However, ELVs must also satisfy **Article 18** of the industrial emissions Directive, among other provisions. Article 18 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 14 (2) the stricter ELVs may be supplemented or replaced by equivalent parameters or technical measures.
- 4.40.** 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.
- 4.41.** 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.

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- 4.42.** 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.
- 4.43.** 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.
- 4.44.** 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.
- 4.45.** 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.
- 4.46.** 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.

- 4.47.** 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.
- 4.48.** 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.

ELVs and national environmental quality standards

- 4.49.** 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.
- 4.50.** 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.
- 4.51.** Regulators and operators will also need to bear in mind that, in any case, Article 21(5) 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.
- 4.52.** 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:

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- river quality objectives approved by Government ;
- 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.

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

5. Other requirements

5.1. This chapter describes industrial emissions Directive requirements relating to aspects other than permitting 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. These are:

- application forms – Article 12;
- reviewing permits – Article 21;
- public participation in permit applications – Article 24
- site closure – Article 22;
- environmental inspections – Article 23;
- consultation with other member states – Article 26.,

5.2. Regulators must ensure that the **application form** for an environmental permit for a Part A(1) installation requires the applicant to provide the information specified in Article 12 (applications for permits) of the industrial emissions Directive (see Schedule 7, paragraph 4 to the Regulations).

5.3. 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).

5.4. Article 12 of the industrial emissions 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;

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- the sources of emissions from the installation;
- the conditions of the site of the installation;
- where applicable, a baseline report in accordance with Article 22;
- 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;
- measures for the prevention, preparation for re-use, recycling 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 11;
- measures planned to monitor emissions into the environment;
- the main alternatives to the proposed technology, techniques and measures studied by the applicant in outline;
- a non-technical summary of the details referred to in the above indents.

Periodic review of permits

5.5. Regulators are required to **review permits periodically** (see chapter 10 of Environmental Permitting Core Guidance). In addition, Schedule 7, paragraph 7 requires the regulator to review permits in any of the circumstances described in Article 21 (3) to (5) of the Directive. This means a permit review is required when:

- the installation causes such significant pollution that revised or additional ELVs are needed;
- operators must switch to other techniques for safety reasons;
- where necessary to comply with new or revised EQSs under Article 18;
- within four years of publication of BAT Conclusions; or
- where an installation is not covered by BAT Conclusions and developments in BAT allow for the significant reduction of emissions;

- 5.6. 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. 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 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.
- 5.7. The regulator, in conducting a periodic review, must use relevant information from monitoring and inspections and may require the operator to supply additional information to enable the operation of the installation to be compared with BAT as described in the BAT Conclusions.

Baseline reports and permit surrender

- 5.8. Where the activity involves the use, production or release of relevant hazardous substances, and having regard to the possibility of soil and groundwater contamination at the site of the installation, under Article 22(2) the regulator must require the operator to submit a **baseline report**. Hazardous substances are those defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures. 'Relevant' here means relevant to soil or groundwater pollution.
- 5.9. For new installations, meaning those not in operation before 7 January 2013, the report will normally be submitted as part of the permit application. If the permit has already been granted the report should be submitted prior to operation and regulators may issue an information notice for this purpose if necessary. Existing installations already in operation on 7 January 2013 should already have a baseline report which satisfies the requirements. If not, one will be needed at the time of the first periodic review after 7 January 2014.
- 5.10. A baseline report must contain the information necessary to determine the state of soil and groundwater contamination so as to enable a quantified comparison to be made at the time of surrender of the permit. Reports must contain information on the present use and, where available, also the past uses of the site and existing soil and groundwater measurements. Where existing measurements are not available new measurements, having regard to the possibility of soil and groundwater contamination by those hazardous to be used, produced or released by the installation concerned, must be included.

- 5.11. Operators must bear in mind that, since the permit conditions and subsistence charges will remain in place until the regulator is satisfied, by reference to the baseline report, that no determination in site condition has occurred, it is in their interest to have a robust baseline report.
- 5.12. When an operator wishes to surrender a permit, the state of soil and groundwater contamination by relevant hazardous substances used, produced or released by the installation, must be assessed. If it is found that significant pollution has been caused compared to the state established by the baseline report, the operator must demonstrate in the surrender application that the measures necessary to return the site to that state have been taken. The technical feasibility of such measures may be taken into account.
- 5.13. Where a baseline report is not available (for example, in the case of some existing installations in operation before 7 January 2013 or where a report is not required), the operator must take the necessary actions to remove, control, contain or reduce relevant hazardous substances so that the site ceases to pose any significant risk to human health of the environment. The conditions of the site established in the application for a permit under the IPPC Directive and the current or approved future use of the site should be taken into account.

Environmental inspections

- 5.14. The regulator must ensure that all installations are covered by an **environmental inspection plan** at national, regional or local level and the plan must be regularly reviewed.. Each plan must include:
- a general assessment of relevant significant environmental issues;
 - specification of the geographical area covered by the inspection plan;
 - a register of the installations covered by the plan;
 - procedures for drawing up programmes for routine environmental inspections;
 - procedures for non-routine environmental inspections; and
 - where necessary, provisions on the cooperation between different inspection authorities
- 5.15. Based on the plans the regulator must draw up programmes for regular inspections including different frequencies for different types of installation. The period between visits must be determined on the basis of risk and must not be less than annually for higher risk installations or every three years for lower risk ones. Risk must be assessed at least on the basis of:

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- the potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents;
- the record of compliance with permit conditions; and
- the participation of the operator in the EU eco-management and audit scheme (EMAS - Regulation (EC) No 1221/2009).

5.16. If significant non-compliance is identified a further site visit must be carried out within six months. Non routine inspections must also be carried out as appropriate.

5.17. Reports of sites visits must be prepared, notified to the operator within two months of the visit and made publically available within four months. Regulators must ensure all actions identified in reports are carried out by operators within a reasonable period.

Public participation

5.18. The regulator must ensure that **public participation** in respect of Part A installations meets the requirements of Article 24 and Annex IV (access to information and public participation in the permit procedure) of the industrial emissions Directive.

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

- permits for new installations (except where standard rules are applied for);
- any substantial change in the operation of an installation (see paragraph 5.20);
- the granting or updating of a permit for an installation where a derogation under Article 15(4) is proposed;
- the updating of permit conditions for an installation where this is necessary due to significant pollution caused by the installation.

5.20. The procedure for public participation in decision-making set out in Annex IV of the Directive applies for the purposes of such participation. 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;

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- 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; and
- details of the arrangements for public participation and consultation made.

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

- the main reports and advice issued to the regulator 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.

5.22. The Regulations require the Environment Agency to prepare a statement of its policies on Public Participation (regulation 59) . 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.

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

5.24. 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.

- 5.25.** 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

Substantial changes

- 5.26.** Applications for changes in operation which are **substantial changes** must be made subject to public participation under the Regulations. 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)) . 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.
- 5.27.** 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.
- 5.28.** 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.
- 5.29.** 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:

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- 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.

5.30. The industrial emissions Directive 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.

5.31. 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.

Annex 1 – Schedule 7 to the Environmental Permitting Regulations – *as amended - to be added when finalised*

Annex 2 – The industrial emissions Directive – Chapters I and II - *to be added*

Annex 3 – EU Environmental Quality Standards Relevant to Installations – *to be revised – see below*

Annex 4 – Examples of the Meaning of Installation – *to be transferred virtually verbatim from Version 3 of the part A Guidance.*

Annex 5 – Glossary– *to be updated from Version 3 of the part A Guidance*

Annex 3 – EC Environmental Quality Standards Relevant to Installations

Article 18 of the Industrial Emissions Directive provides that where an environmental quality standard (EQS) requires stricter conditions than those achievable by the use of BAT, additional measures shall be included in the permit. Chapter 3 gives guidance on this requirement. The table below lists those directives which contain relevant EQSs.

| Directive | Subject | Notes |
|--------------------|--|---|
| 76/160/EC | (Former) Bathing Water Directive | See also 2006/7/EC |
| 80/68/EEC | (Former) Groundwater Directive | To be repealed under Water Framework Directive 2000/60/EC in December 2013. |
| 87/217/EEC | Asbestos | |
| 2000/60/EC | Water Framework Directive (WFD) | Does not contain EQSs, but provides framework for the management for surface waters and groundwaters. |
| 2006/7/EC | (Revised) Bathing Water Directive | See also 76/160/EC |
| 2006/11/EEC | Dangerous Substances Directive | To be repealed under WFD in December 2013. |
| 2006/44/EC | Freshwater Fish Directive | To be repealed under WFD in December 2013. |
| 2006/113/EC | Shellfish Waters Directive | To be repealed under WFD in December 2013. |
| 2006/118/EC | Groundwater Directive | A WFD Daughter Directive |
| 2008/50/EC | Ambient Air Quality Directive | Consolidates Air Quality Framework Directive & three of its Daughter Directives |
| 2008/105/EC | Priority Substances Directive ⁷ | A WFD Daughter Directive |

Notes - Air Quality

Directive 2008/50/EC sets limit values and other thresholds for sulphur dioxide, oxides of nitrogen, nitrogen dioxide, benzene, carbon monoxide, particulate matter and lead in air. It also sets long term objectives for ozone. This Directive consolidated the Air Quality Framework Directive 96/62/EC and its first three Daughter Directives.

Directive 2004/107/EC sets target values for arsenic, cadmium, nickel and polyaromatic hydrocarbons. All necessary measures not entailing disproportionate costs must be taken to meet the target values by 31 December 2012.

⁷ Also referred to as the Environmental Quality Standards Directive

All the limit values are now in force. The 2010 Air Quality Standards Regulations implement both Directives and came into force in June 2010.

Notes - Water Quality

Environmental Quality Standards for surface waters arise from the Water Framework Directive (WFD) and its daughter Directive, the Priority Substances Directive (PSD). The standards are set out in The River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive) (England and Wales) Directions 2010 (hereafter the '2010 Directions'). These Directions set out *inter alia* EQSs for priority hazardous substances, priority substances and other pollutants, specific pollutants and some other dangerous substances.

[Both the PSD and the Directions are expected to be revised in the first quarter of 2013]

Under the Water Framework Directive a number of existing Directives relating to surface waters are to be repealed by December 2013. These are:

- Directive 2006/11/EEC on dangerous substances discharged to the aquatic environment
- Directive 2006/44/EC on the quality of fresh water supporting fish life.
- Directive 2006/113/EC on the quality required of shellfish waters.

The EQSs in the Dangerous Substances and Freshwater Fish Directives are essentially superseded by the implementation of the Water Framework Directive. Standards for the Shellfish Directive will be in place until this Directive is repealed.

The former Bathing Water Directive (76/160/EC) will be superseded by the revised Bathing Water Directive (2006/7/EC) with the supporting Bathing Water Regulations 2008 (SI 2008/1097). The former Directive will not be repealed until 2014, so between 2012 and 2014 there will be a transition period between Directives where standards from both Directives may be applicable.

The earlier Directive on the protection of groundwater (80/68/EC) has essentially been superseded by the WFD daughter Directive (2006/118/EC) on the protection of groundwater against pollution and deterioration⁴ and will be repealed in December 2013 by WFD. Between January 2009 and 22 December 2013 any authorisation procedure under Directive 80/60/EEC shall take into account the requirements of Article 3 (criteria for assessing groundwater status), Article 4 (procedure for assessing groundwater status) and Article 5 (identification of significant and sustained upward trends in the concentration of pollutants) of 2006/118/EC

⁴ More information on relevant standards is available via JAGDAG (www.wfduk.org/jagdag)