

## The industrial emissions Directive: further background information

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1. The purpose of the Directive on industrial emissions (integrated pollution prevention and control) (recast) – 2010/75/EU, the “industrial emissions Directive” or simply “the Directive” hereinafter - is `to achieve a high level of protection for the environment taken as a whole’ from harmful effects of industrial activities<sup>1</sup>. It does so for many activities by requiring each of the industrial installations concerned to have a permit from the competent authority (in England and Wales, the Environment Agency or, for smaller installations, the relevant local authority). Permit conditions and pollutant emission limit values (ELVs) therein have to be set on the basis of the application of best available techniques (BAT).
2. It is ultimately for each competent authority to determine what BAT are for each installation. But the competent authority is aided by the European Commission’s publication, over the period 2001 -2007, of 29 European reference documents on BAT – the “BREFs”<sup>2</sup> – each drawing conclusions on what are BAT for the sector in question, ranging from intensive livestock to large combustion plants and from food to speciality organic chemicals.
3. The BREFs are drawn up by a technical author on the basis of information supplied and considered by technical experts from throughout the EU in a technical working group (TWG)<sup>3</sup>. The information they consider can only come from the real-life experience of operators of installations. In a sense, therefore, the basing of regulation upon BAT amounts to a form of self-regulation, albeit in a process which takes several years to work through<sup>4</sup>, because the reference material which is at the heart of that base comes from, and is assessed by, representatives of operators themselves. This consideration alone provides

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<sup>1</sup> A short summary of the Directive, containing a link to the Directive itself, is at [http://europa.eu/legislation\\_summaries/environment/air\\_pollution/ev0027\\_en.htm](http://europa.eu/legislation_summaries/environment/air_pollution/ev0027_en.htm) .

<sup>2</sup> An acronym drawn from “best available techniques reference document”.

<sup>3</sup> The information process takes place under provisions in Article 17 of the current IPPC Directive which are strengthened by Article 13 of the industrial emissions Directive.

<sup>4</sup> In the initial production of BREFs, typically some three years elapsed between the formation of a TWG and the agreement of a final draft BREF. A guidance document on the BREF process, adopted by the European Commission at the end of 2011 (an advanced draft is at [http://circa.europa.eu/Public/irc/env/ied/library?l=/ied\\_art\\_13\\_forum/meeting\\_12-13\\_2011/documents\\_article/bref\\_guidance\\_11pdf/ EN\\_1.0 &a=d](http://circa.europa.eu/Public/irc/env/ied/library?l=/ied_art_13_forum/meeting_12-13_2011/documents_article/bref_guidance_11pdf/ EN_1.0 &a=d) - the finalised version differs only slightly), contains an outline timetable which envisages a similar time period – and up to another year or so is likely to elapse before a BREF’s BAT conclusions are formally adopted and published. A period of up to four years thereafter is allowed for permits to be updated accordingly.

powerful justification for the continuation of BAT-based regulation. Moreover, the definition<sup>5</sup> of BAT requires the techniques identified as such to be technically and economically viable in the sector as a whole, thus providing a balance between what is technically possible and that which is economically sensible.

4. Some of the BREF conclusions on BAT state the levels to which emissions would be constrained by application of a particular technique; these are referred to as BAT-associated emission levels ("BAT-AELs"). There are some 1,500 BAT-AELs in the current range of BREFs. Using this material but pre-eminently also its own judgment, it is for the regulator to determine what ELVs must be set, taking account of the circumstances and nature of each installation.
5. However, the view has been established<sup>6</sup> within the EU that, for certain activities, minimum standards of environmental protection from emissions from certain classes of activity have to be ensured, even though the BAT-based approach retains primacy. So, for industrial activities involving large-scale combustion<sup>7</sup>, the incineration of waste<sup>8</sup>, or the production of titanium dioxide<sup>9</sup>, the Directive also stipulates that ELVs must be at least as stringent as those specified in the Directive's Annexes, and that permits must contain other conditions relating to specific aspects of the conduct of those activities. In other words, whilst the competent authority may find that even more stringent or specific requirements are justified, it is obliged to set at least the minimum requirements of the Directive.
6. Similarly, industrial activities using solvents<sup>10</sup> are required either to be permitted or registered with conditions which set ELVs at least as stringent as those specified in the Directive. However, except in particular cases, there is no requirement for the conditions of

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<sup>5</sup> In Article 3(10) of the industrial emissions Directive:

"best available techniques" means 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 the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:

(a) "techniques" includes 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'.

<sup>6</sup> In Directives which originated in the 1980s.

<sup>7</sup> Chapter III and Annex V of the Directive.

<sup>8</sup> Chapter IV and Annex VI of the Directive.

<sup>9</sup> Chapter VI and Annex VIII of the Directive. Note that only two such installations currently operate in the UK, both in England.

<sup>10</sup> Chapter V and Annex VII of the Directive.

permits or registrations to be based upon the competent authority's assessment of BAT where solvent use is the only Directive activity involved.

7. The Directive also sets out requirements for the monitoring and inspection of permitted activities and for the periodic reconsideration of permits. It contains reporting obligations upon Member States which will contribute to the European Commission's own obligatory triennial reports to the European Parliament and Council on the implementation of the Directive.
8. The preceding paragraphs describe the essence of the industrial emissions Directive as would be encountered at first sight. **But it is vital to understand that the Directive is a Recast<sup>11</sup> of seven existing Directives:** those concerning integrated pollution prevention and control (2008/1/EC<sup>12</sup>), large combustion plants (2001/80/EC), waste incineration (2000/76/EC), solvent emissions (1999/13/EC) and three concerning waste from the titanium dioxide industry<sup>13</sup>. These are referred to as "**component Directives**" hereinafter.
9. Between them, these component Directives apply to some 10,200 industrial installations in England and Wales, ranging from power stations to intensive poultry farms and from waste incinerators to dry cleaners. All this wide range is however united in that all the installations it encompasses present – often individually and certainly in aggregate - a significant risk in various ways to human health and the environment from polluting activities.
10. Besides their immediate significance for the direct protection of human health and the environment, elements of the component Directives, and hence the industrial emissions Directive, relate in various ways to several other policy areas. For example, the energy efficiency requirements which form part of IPPC are significant in respect of climate change mitigation policies, although there are provisions in Article 9 of the Directive to avoid possible "double regulation" of installations subject to the EU emissions trading scheme. The industrial emissions Directive also influences carbon capture and storage, both by requiring<sup>14</sup> certain new large combustion plants to be "capture ready" and also by applying IPPC to carbon capture activities<sup>15</sup>. And the compliance flexibilities provided to existing large combustion plants – particularly those in Articles 32 and 33 – were achieved in order to facilitate the transition to low carbon power generation by the early 2020s.
11. Waste policy is another area upon which the Directive has an impact. The Directive continues IPPC requirements<sup>16</sup> in respect of waste minimisation, although now expressed

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<sup>11</sup> The Recast was made under Inter-institutional Agreement of 28 November 2001 on a more structured use of the recasting technique for legal acts (2002/C 77/01). This states that 'recasting shall consist in the adoption of a new legal act which incorporates in a single text both the substantive amendments which it makes to an earlier act and the unchanged provisions of that act. The new legal act replaces and repeals the earlier act'.

<sup>12</sup> Directive 2008/1/EC is a codified version of the original IPPC Directive, 96/61/EC.

<sup>13</sup> Directives 78/176/EEC, 82/883/EEC and 92/112/EEC.

<sup>14</sup> In Article 36, which originates from Directive 2009/31/EC on the geological storage of carbon dioxide.

<sup>15</sup> Point 6.9 of Annex I to the Directive.

<sup>16</sup> In Article 11(e) of the industrial emissions Directive.

in terms of the new “Waste Hierarchy” set out in Directive 2008/98/EC. In bringing more waste treatment activities into IPPC, the intention of the Directive is to provide a consistent, BAT-based approach to the regulation of waste treatment techniques which can be used both for disposal and for recovery and which have the potential to cause environmental damage if they are not appropriately controlled<sup>17</sup>.

12. As a Recast, the Directive contains large amounts of text either completely unchanged from the component Directives or adapted from them without substantial change. But it also contains some substantively changed material (referred to hereinafter as “the substantively changed requirements”).

13. Of the substantively changed requirements, only the following have been assessed as having impacts that would not have occurred under the implementation in England and Wales of the component Directives:

- changes to minimum requirements in respect of emission limit values applied to large combustion plants, with particular significance for the electricity supply industry;
- placing integrated pollution prevention and control (IPPC) requirements upon:
  - more waste treatment activities;
  - wood preservation activities;
  - independently operated wastewater treatment works serving only industrial activities subject to the Directive<sup>18</sup>; and
- clarification of the application of IPPC to installations producing foodstuffs from a mixture of animal and vegetable materials.

14. For all the substantively changed requirements, whether their impact is significant or not, the immediate policy objective is to transpose the Directive within England and Wales<sup>19</sup> by its deadline of 7 January 2013.

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<sup>17</sup> Recital 34 of the Directive: ‘In order to ensure a high level of environmental and human health protection and to avoid transboundary movements of waste to plants operating at lower environmental standards, it is necessary to set and maintain stringent operating conditions, technical requirements and emission limit values for plants incinerating or co-incinerating waste within the Union’

<sup>18</sup> And thus not subject to the “Urban waste water treatment Directive, 91/271/EEC.

<sup>19</sup> Note that separate transposition arrangements are in progress in Scotland, Northern Ireland and Gibraltar and in respect of UK offshore installations.

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