

Internal Briefing Note – The IED Directive

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:334:0017:0119:EN:PDF>

The Industrial Emissions Directive (IED) came into force on 6 January 2011 and must be implemented by regulation 2 years thereafter i.e. 7 January 2013.

It replaces 7 other EU directives:

78/176/EC Waste from the titanium dioxide industry (plus 2 other related directives)

1999/13/EC Solvent emissions directive

2000/76/EC Incineration of waste

2008/1/EC Integrated pollution prevention and control

These directives are repealed with effect from 7 January 2014

2001/80/EC Large combustion plant directive repealed with effect from 1 January 2016

The purpose of the IED is to provide for an integrated approach to prevention and control of emissions into air, water and soil, to waste management, to energy efficiency and to accident prevention.

It is intended to reduce unnecessary administrative burden and to implement Commission conclusions on the Thematic Strategy on Air Pollution, Thematic Strategy for Soil Protection, and the Thematic Strategy on the Prevention and Recycling of Waste.

Activities the subject of the IED must operate under the conditions of a permit and the permits should reflect the Best Available Techniques (BAT).

Permit conditions are to be reviewed within 4 years of BAT conclusions being published.

Emission limit values specified in the IED should not be exceeded. However it is possible that some values specified in BAT reference documents (BREFs) for certain activities may be more onerous than the IED. There is leeway in the IED to allow in certain specific circumstances including disproportionate costs compared to the environmental benefit to allow competent authorities to set emission limit values that deviate from BREF levels. However the limits in the IED must not be exceeded. Temporary derogations are allowed to test for emerging techniques.

IED requires that the operation does not lead to a deterioration in the quality of soil or groundwater and that permit conditions must include appropriate measures to mitigate these, and also conditions should be included to require monitoring of soil and groundwater

to ensure that the mitigation measures are effective. The frequency of monitoring will be dependent on the type of prevention measures in place. Article 16 specifies that groundwater monitoring should be undertaken at least once every 5 years and soil monitoring at least every 10 years, subject to risk assessment.

Baseline conditions of a site and restoration back to this status are as per the original IPPC directive.

Any wastes produced must be dealt with in accordance with the waste hierarchy as per the WFD.

Permit applications must include a consideration of alternative options

Large combustion plant

Applies to plant $\geq 50\text{MW}$ thermal input

All new plant which are permitted before January 2013 and come into operation prior to January 2014 must comply with the emission limits in the IED.

There are a range of dates for existing large combustion plant which were operational as of November 2003 to meet the revised limits, subject to various exemptions and potential limits on operating hours – for example 17,500 hours maximum in the period 1 January 2016 to 31 December 2023. There are other maximum hourly limits for specific types of plant.

Combustion plant with thermal input $>300\text{MW}$ which were operational post 23 April 2009 must assess the feasibility of carbon capture and geological storage.

Waste incineration plant

Does not apply to gasification or pyrolysis plant if the emissions from these facilities have been treated to be equal to or less than those resulting from the burning of natural gas.

All applications for incineration plant must include energy recovery. Residues produced from the process must be minimised including liquid or solid waste and must be recycled where possible.

Emissions from stacks must be assessed to ensure that human health and the environment are safeguarded – this means detailed air dispersion modelling will be required for every application.

There are minor changes (reductions) to emission limits for plants co-incinerating waste in respect of NO_x , SO_2 and dust when non waste fuels are being used. All new cement kilns co-incinerating waste must achieve an emission limit of $500\text{mg}/\text{m}^3$ for NO_x though for certain types of kilns until 1 January 2016 the competent authority may specify a limit of $800\text{mg}/\text{m}^3$ for NO_x .

Amendments to IPPC activities

The following waste activity has been added to Chapter 5 which means that all the PPC/BAT obligations will also apply to these activities:

5.3 Recovery or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities:

1. Biological treatment

2. Pre-treatment of waste for incineration or co-incineration
3. Treatment of slags and ashes
4. Treatment in shredders of metal waste, including waste electrical and electronic equipment and end of life vehicles and their components

5.5 Temporary storage of hazardous waste not covered under 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4, and 5.6 with a total capacity of 50 tonnes excluding temporary storage pending collection on the site where the waste is generated.

Of particular note is Chapter 5.3 (2) which potentially will bring under the IED Materials Recycling Facilities where segregated materials are then transferred for recovery in waste to energy plant such as gasification and pyrolysis processes together with conventional incineration plant. The impact of this change may require many MRF facilities to be re-permitted and the technical requirements reviewed and updated where necessary to comply with BAT.