

Review of the Best Available Techniques (BAT) Reference Document (BREF) for Waste Incineration

– Current Status and Trends –

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Industrial and agro-industrial production processes account for a considerable share of the overall pollution in the EU. Emissions (and resource consumption) from these processes are regulated at the EU level under the Industrial Emissions Directive 2010/75/EU (IED), whose aim is to prevent or, where that is not practicable, to reduce pollution through an integrated approach. Approximately 50,000 installations are covered by the IED.

Operators of these installations are required to obtain an integrated permit from the competent authorities. Permit conditions, including emission limit values (ELVs), must be based on the use of Best Available Techniques (BAT).

To assist the permitting authorities and companies to determine BAT and as mandated by the IED, the European Commission organises an exchange of information between EU Member States, the industries concerned, non-governmental organisations promoting environmental protection and the Commission. This work is steered by the European Commission's in-house science service, the Joint Research Centre (JRC), concretely by the JRC's European IPPC Bureau (EIPPCB) in Seville (Spain) and results in the adoption by the Commission and publication of the BAT conclusions and BAT reference documents (BREFs). The IED stipulates that the BAT conclusions shall be the reference for setting permit conditions.

BAT are defined in the IED as established techniques which are the most effective in achieving a high level of protection of the environment as a whole and which are developed on a scale that allows implementation in the relevant sector under economically and technically viable conditions taking into account the costs and advantages.

'BAT conclusions' are Commission implementing acts under the IED legislation, therefore formally adopted by the Commission after a vote of the Member States. *BAT conclusions* are necessary for Member States to update permit conditions and ensure compliance with the IED. Without *BAT conclusions*, there is no legal framework for incorporating environmental performance levels into national legislation. *BAT conclusions* therefore constitute the environmental technical standards that European installations have to meet.

An initial BREF series comprising 33 documents was drawn up under the predecessor of the IED, the Integrated Pollution Prevention and Control (IPPC) Directive (2008/1/EC).

A process to review and update all of these documents taking into account both technical developments in the industries concerned and the new requirements of the IED is currently underway with a view to be completed by 2020.

The process for drawing up and reviewing BREFs is commonly referred to as the *Sevilla process*. For each BREF document, a group of experts representing the main stakeholders concerned (i.e. Member States, industry, environmental NGOs and services of the Commission) also referred to as Technical Working Group (TWG) is set up to exchange techno-economic information, and to reach consensus on what is considered BAT for a given (agro)industrial sector based on their consideration of sound technical and economic data.

The review of the BREF on Waste Incineration (WI, adopted in 2006) started on 12 May 2014 with the reactivation of the TWG. In September 2014, TWG members submitted their views on what should be included in the review. The EIPPCB assessed the documentation received from the TWG members and organised a kick-off meeting (KoM) for the TWG to decide on the scope of the review, on the necessary data and information that should support the review, and to set the general timeline for the review process.

The meeting took place in Seville from 19 to 22 January 2015. In three days of intense discussions, the experts effectively took stock of the environmental priorities of the waste incineration sector in the EU-28. The report of the KoM is publicly available through the EIPPCB website (<http://eippcb.jrc.ec.europa.eu/reference/>). The TWG also decided to create three subgroups to tackle issues of particular importance and complexity. TWG subgroups work according to the *BREF Guidance*, i.e. Commission Implementing Decision 2012/119/EU¹ and based on the mandate agreed in the KoM conclusions for the WI BREF review.

The first TWG subgroup is tasked with data collection and questionnaire development. Its main duty is to develop a questionnaire template for collecting plant-specific, representative data from well-performing waste incineration plants in operation in the EU-28 and worldwide. More in detail, the *data collection and questionnaire development subgroup* worked at:

- Proposing modifications to the draft questionnaire templates provided by the EIPPCB, with a view to improving the scope and quality of the information and data necessary.
- Finding an agreement on the definitions and inter-relationship of key terms including *effective operating time* and *normal operating conditions*.
- Testing the questionnaire template using a small number of volunteer plants.
- Together with Member States and other WI TWG members, ensuring the quality and representativeness of the data collected e.g. by supporting the operators in filling in the questionnaire.

¹ Commission Implementing Decision 2012/119/EU of 10 February 2012 laying down rules concerning guidance on the collection of data and on the drawing up of BAT reference documents and on their quality assurance referred to in Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions

The second subgroup supports the review of the WI BREF with respect to energy issues.

This *energy issues subgroup* worked at:

- Determining the parameters important to the determination of BAT and BAT-associated environmental performance levels (AEPLs) on energy efficiency and energy recovery.
- Advising the data collection and questionnaire development subgroup on the energy-related information to be collected and defining the most appropriate data collection method for the types of plants under the scope of the WI BREF review.
- Proposing draft general and descriptive texts for insertion in the WI BREF related to energy efficiency and energy recovery, in line with the format and content required by the *BREF Guidance*.

The third subgroup supports the review of the WI BREF with respect to issues concerning residues. Its main tasks are to:

- Determine parameters important for the determination of BAT and BAT-AEPLs (where relevant) on issues related to residues.
- Advise the data collection and questionnaire development subgroup on the residue-related information to be collected and define the most appropriate data collection method for the types of plant under the scope of the WI BREF review.
- Propose draft general and descriptive texts for insertion in the WI BREF related to residues in line with the format and content required by the *BREF Guidance* (10-heading structure).

The TWG is also working at defining the plant operating conditions that should be considered *other than normal* for the waste incineration sector. Identifying those conditions is important to ensure that the collected data can be correctly interpreted in the subsequent data analysis.

The data collection is due to start before the end of 2015 and will set the basis for a revised draft of the WI BREF. The data gathered through the questionnaires and other information submitted by the TWG will enable the EIPPCB to draw up a first DRAFT of the revised WI BREF for comments of the TWG. This draft will be made publicly available on the EIPPCB website.

Finally, the TWG will meet again to consider and agree the final document, in particular to discuss and agree on the BAT conclusions. The overall review is expected to take less than four years. Once the BAT conclusions are published on the Official Journal of the European Union, Member States have four years to update the permits and the plants to comply with those updated permit conditions.



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