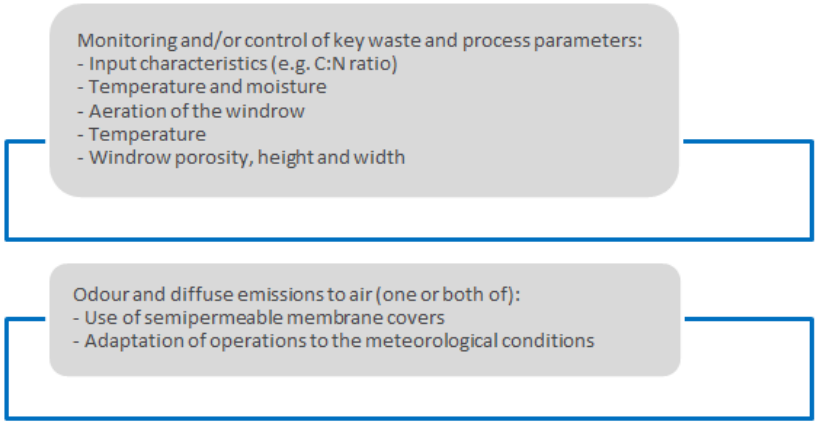
FACTSHEET

State of the Play on the Best Available Techniques for Waste Treatment

The European Commission's Joint Research Centre published its recommendations for introducing Best Available Techniques (BAT) for Waste Treatment in October. The document, which extends to 859 pages, covers a wide range of waste treatment techniques, including biological treatment, and has been developed as part of the Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control).



BAT conclusions for aerobic treatment

The BAT reference document (which is also referred to as a BREF), is one of a number of different documents covering a wide range of industrial sectors. It is a working draft of the European IPPC Bureau (of the Commission's Joint Research Centre) and has been developed in conjunction with a technical working group.

The BREF sets out best practice techniques to reduce emissions from waste treatment installations, permitted under the Industrial Emissions Directive. Once finalised, the BATs listed within the BREF would need to be taken into account in the permitting and operation of relevant facilities:

- Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day; or
- Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day.
- Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day. When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.

The document includes a detailed technical description of biological treatment techniques and emissions to the air and water, including composting, anaerobic digestion and mechanical biological treatment (MBT) plants.
The BREF sets out proposals for 'Best Available Techniques' (BAT) at all waste treatment facilities, which include managing environmental performance, waste characterisation and storage (see inset).

The BREF sets out sector-specific conclusions for each type of waste treatment process. Those covering the biological treatment of waste include:

- **Overall environmental performance** - Selecting the waste input in order to reduce odour emissions and to improve the overall environmental performance;
- **Emissions to air** - Using a biofilter, scrubber or fabric filter in order to reduce channelled emissions to air of dust, organic compounds and odorous compounds, including H_2S and NH_3;
- **Emissions to water and water usage** - Segregating water streams, recirculating water, and minimising the generation of leachate.

BAT conclusions have been suggested for different biological treatment techniques. Those for aerobic treatment are summarised in the diagram above.

A meeting of the IED Article 13 Forum (technical expert working group) took place on the 19-20 December 2017 to agree the text; however, final approval of the BAT conclusions will now need to be made by the IED Article 75 committee during 2018.

A copy of the waste treatment BREF can be downloaded here.

Summary of the general BAT conclusions: Overall Environmental Performance				
Implement an environmental management system	Implement waste characterisation, acceptance, tracking and output quality management system	Establish and maintain an inventory of waste water and waste gas streams	Ensure that all waste is adequately stored	Establish and implement waste handling and transfer procedures