

Requirements from Waste Treatment BREF, draft 1

Monitoring – BAT AELs

Emissions to Air

BAT is to monitor channelled emissions to air as below (BAT 4). Associated emission levels are as below:

Parameter	Standard	Monitoring associated with	Minimum monitoring frequency	BAT Associated Emission Level (AEL)
Dust	EN 13284-1	BAT37 (for MBT of waste)	Once every 3 months	<2-5 mg/Nm ³ (BAT 25 & 37)
TVOC	EN 12619	BAT37 (for MBT of waste)	Once every 3 months	5-15mg/Nm ³ (BAT 37)
NH ₃	No EN standard	BAT 32	Once every 3 months	0.1-10 mg/Nm ³ (BAT 32)
H ₂ S	No EN standard	BAT 32	Once every 3 months	0.1-1mg/Nm ³ (BAT32)

If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Monitoring frequency may be adapted if the data series clearly demonstrate a sufficient stability.

Emissions to Water

BAT is to monitor emissions to water as detailed below (BAT 3). The BAT-associated emission levels (BAT-AELs) are also given below (BAT 15):

Substance /parameter	Standard (s)	Minimum monitoring frequency	BAT-AEL for direct discharge to receiving water body (monthly average)
Total organic carbon (TOC) ¹ or Chemical oxygen demand (COD)	EN 1484 No EN standard	Once every week	10-40 mg/l 30-120 mg/l
Total suspended solids (TSS)	EN 872	Once every week	5-35mg/l
Total nitrogen (TN)	EN12260	Once every week	5-30mg/l ³
Total phosphorous	Various EN standards available (e.g. EN ISO 15681-1 and -2, EN ISO 6878, EN ISO 11885)	Once every week	0.3-3mg/l
Heavy metals ² : Arsenic (As), Cadmium (Cd), Chromium (Cr), Copper (Cu), Nickel (Ni), Lead (Pb), Zinc (Zn), Mercury (Hg)	Various EN standards available (e.g. EN ISO 11885, EN ISO 17294-2, EN ISO 15585)	Once every week. (Only applicable to MBT).	As – 0.01-0.05mg/l Cd – 0.01-0.05mg/l Cr – 0.01-0.05mg/l Cu – 0.05-0.2mg/l Ni – 0.05-0.5mg/l Pb – 0.05-0.1mg/l Hg– 0.001-0.01mg/l Zn – 0.1-0.5mg/l

1 - Either TOC or COD is monitored. TOC is preferred option because monitoring doesn't use very toxic compounds.

2 – Monitoring and associated BAT-AEL may not apply when the substance concerned is not present in the waste to be treated.

3 – The upper end of the range may be up to 40mg/l for total N if the abatement efficiency is > 70% as a monthly average (considering all of the water treatment steps carried out).

Note that monitoring frequencies may be adapted if the data series clearly demonstrate a sufficient stability of emissions over time. The sampling point should be located where the emission leaves the installation.

Odour emissions

In cases where odour nuisance can be expected or has been substantiated, BAT is to periodically monitor odour emissions from relevant sources in accordance with EN standards (BAT 6). Emissions can be monitored by dynamic olfactometry according to EN 13725.