

BAT REVIEW

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The review consist of a report on two Best Available Technology Reference Documents (BREF's) and their applicability in urban waste water treatment plants and drinking water supply plants. 1 CWW BREF regarding emissions to water from industrial installations 2) ROM report regarding the measurement of these emissions. In addition, the report source material include Finnish BAT guides for urban waste water treatment and waste water sludge treatment and reuse processes.

Effluent: Monitoring and measurement of effluent, influent and process operation parameters is an important part of CWW BAT conclusions. CWW BAT associated emission limits are slightly stricter than those set in Finnish legislation for urban waste water treatment plants. Emission limits or monitoring frequency are, however, not stricter than the current practice at industrial plants.

There are several acceptable analytical methods for effluent quality analysis. CWW BREF recommends EN standards, whereas Finnish legislation does not define a standard, but describes the method verbally. Unit processes for the treatment of urban waste water in Finland are similar to the recommended process techniques in CWW BAT and Finnish BAT guides.

Drinking water: Monitoring frequency and accuracy of analytical method for the follow-up of drinking water quality are precisely defined in Finnish legislation. The analytical method is not strictly defined. Standardized analytical methods, which could be applied for drinking water quality measurements, can be found in ROM Report ANNEX 2 and in CWW BREF document background data.

Online monitoring of drinking water quality parameters is not required in Finnish legislation. However, according to preliminary results from a survey (Water-M project), it is quite common to monitor pH and temperature with online instruments at Finnish plants. CWW BREF includes descriptions of water purification unit processes, which are commonly used at drinking water purification plants as well. Thus the recommendations for instrumentation of these processes are applicable at drinking water plants as well.

