

ABSTRACT

The Centre for Best Available Techniques (BAT) is founded by the Flemish Government, and is hosted by Vito. The BAT centre collects, evaluates and distributes information on environment friendly techniques. Moreover, it advises the Flemish authorities on how to translate this information into its environmental policy. Central in this translation is the concept "BAT" (Best Available Techniques). BAT corresponds to the techniques with the best environmental performance that can be introduced at a reasonable cost.

The aim of this BAT report is to identify the BAT for the tank and barrel cleaning industries. Tank and barrels are used to transport a variety of products. The tank and barrel cleaning industries are specialised in cleaning these tanks and barrels between two transports. The cleaning is generally performed by washing and rinsing the tanks and barrels both internally and externally. The cleaning gives rise to relatively heavily contaminated waste waters with a varying and unpredictable composition. The treatment of the waste waters is an important part of the activities performed by the tank and barrel cleaning industries.

A large part of the proposed BAT is aimed at improving the quality of the waste waters discharged by the tank and barrel cleaning industries. Firstly, some prevention measures related to the acceptance policy and to the cleaning process itself are proposed as BAT. Secondly, attention is paid to the waste water treatment. For tank cleaners who clean chemicals, the use of advanced waste water treatment techniques, such as activated carbon filtration, membrane filter bioreactor or addition of powdered activated carbon during biological water treatment, is considered as BAT. The implementation of such techniques will, for a typical company, result in an additional cost of +/- 3 EUR per tank cleaned. This should be compared to a typical price setting of +/- 100 EUR for tank cleaning.

On the basis of the BAT selection, recommendations are formulated with respect to the environmental permit regulation and the eco-investment support policy. This includes a proposal for discharge standards to be used in environmental permits. It is clear that implementation of the BAT will result in an improved effluent quality in the tank cleaning industry, although not to the extent that would be desirable from an environmental quality perspective.

BAT selection was brought about on the basis of, among other things, a literature survey, a technical and socio-economic study, cost calculations, foreign BAT reports, plant visits and discussions with industry experts, representatives of the federation, suppliers and specialists from (semi) public institutes. The formal consultation was organised by means of an advisory committee of which the composition is given in Annex 1.