
ABSTRACT

The Centre for Best Available Techniques (BAT) was founded by the Flemish Government, and is hosted by VITO. The BAT centre collects, evaluates and distributes information on environmental 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 report is to determine the BAT for car body workshops and car body construction plants.

This study is a review of the study 'Beste Beschikbare Technieken voor koetswerkherstelbedrijven' published in 1996.

The original study only focussed on car body workshops in Flanders. This new study also takes car body construction into account.

Car body workshops are plants in which damaged vehicles are brought back in their original shape. The main activities are: parts removal, beating out dents, filler and sanding application, degreasing and primer coating, spray-painting, ...

Car body construction plants are plants in which customized constructions for a.o. trucks, commercial vehicles, trailers, tankers, etc. are constructed on a chassis.

The materials used for the construction are wood, aluminium and polyester. The construction or adaptation of a chassis involves metalworking and welding.

Most of the car body construction plants also carry out repairs.

Emissions of dust and volatile organic compounds (VOC) are a key environmental issue for car body working and car body construction. Therefore, this study pays much attention to measures that can be taken in these sector to reduce emissions of VOC and dust. The BAT for reduction of emissions to air are a.o.: the use of alternative degreasers and low-solvent paints, the equipment of the area for preliminary treatment, the use of paint-spraying techniques with a high application efficiency, spot repair, cleaning of the equipment with thinner in a closed machine.

Besides these measures for reduction of emissions to air, the BAT-report also determines the BAT for reduction of energy consumption, reduction of residues, protection of soil and groundwater, reduction of emissions to water and reduction of odour nuisance and noise.

Based on the BAT, recommendations have been made for the existing legislation of Vlarem II for this sector and suggestions have been made on the granting of investment subsidies to specific environment friendly techniques.

The BAT selection in this study was based on plant visits, a literature survey, a technical and socio-economic study, cost calculations, and discussions with industry experts and authorities. The formal consultation was organised by means of an advisory committee.