ABSTRACT

The Centre for Best Available Techniques is founded by the Flemish Government and is hosted by the Flemish Institute for Technological Research (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). The Best Available Techniques correspond to the techniques with the best environmental performance that can be introduced at a reasonable cost.

The BAT-study on scrap handling, treatment and dismantling studies the environmental impact of scrap (metal) dealers, handlers, treatment installations and dismantlers and identifies the Best Available Techniques to reduce, even better to prevent, this environmental impact. The study gives recommendations with respect to the environmental permit legislation and the eco-investment support policy.

The BAT-study only determines how the environmental impact of existing installations can be reduced. It is not the aim of the study to evaluate several processing techniques and to compare the environmental impact of different processing scenarios.

In the BAT-study specific attention is given to the dismantling of ships. It is however not the aim of the study to determine the permitting framework for a large scale dismantling yard as the realization of such an installation is not planned at this moment. The results of the study can however be used as a basis for the Flemish contribution during international discussions.

The scrap dealers and handlers concentrate on the collection and the handling of scrap. The handling of scrap includes sorting, separation and size reduction (e.g. shredding).

The dismantlers separate waste containing hazardous components, into a hazardous and a non-hazardous fraction. The companies remove e.g. the cooling and blowing agent from refrigerators and freezers, the cathode ray tube from computer and television screens. The BAT-study only focuses on the dismantling of wrecked vehicles, waste electric and electronic equipment and wrecked ships. The study also goes more deeply into the processing of television tube glass (this is a rest fraction of televisions and monitors).

The pollution of ground and groundwater, surface water and air (mainly by dust) and, albeit to a lesser degree, energy consumption and noise and vibration nuisance (pollution) are points of particular interest for scrap dealers and handlers. For dismantlers, the pollution of ground and groundwater, surface water and air are points of particular interest.

Besides techniques for the reduction of ground and groundwater pollution, surface water pollution and air pollution, techniques are described for the following impacts: energy saving, the reduction noise and vibration, the reduction of waste, the saving of raw (base) and auxiliary materials (including water) and the reduction of visual and light nuisance and fire and explosion risk.

To reduce the environmental impact, 72 environment-friendly techniques are listed. 56 techniques were, after evaluation, selected as Best Available Techniques. 3 techniques were not selected as Best Available Techniques. 13 Techniques are Best Available Techniques only under certain conditions.

The selection of the Best Available Techniques and the recommendations with respect to the environmental permit legislation and the eco-investment support policy are the result of and intensive literature survey, company visits, discussions with producers, suppliers, industry experts, representatives of the federations and authorities. The formal consultation was organized by means of and advisory committee, the composition of which is given in annex I.