

Management of municipal bio-waste

ABSTRACT

The thesis submitted is a part of solution of the research pilot project PPA03/CZ/7/8 called „Management of bio-waste from municipal solid waste and composting in the Czech Republic”. The project was supported by the Czech Ministry of Environment and it was designed and sponsored by the Dutch company Tebodin. The project was realized in Uherske Hradiste. The project’s aim was to provide information for creation of the national strategy for biowaste to be diverted from the landfill. The obligation to create this strategy is a consequence of the European Landfill Directive 1999/31.

The thesis evaluates results of the project aimed primarily at sorting, collection and the composition analysis of biowaste and mixed waste in selected areas of Uherske Hradiste. The thesis shows values of selected waste parameters – weight, volume, specific weight and composition. Public awareness campaign stimulating biowaste separation behaviour was a part of the project as well. The campaign comprised questionnaire surveys whose results are included in this thesis.

In cooperation with the Research Institute of Agricultural Technology and Institute of Macromolecular Chemistry in Prague the dissolubility of biodegradable plastics d₂w produced by the company Symphony Environmental in compost and external environments was tested. Modification of their mechanical characteristics was evaluated subsequently.

The project’s results compiled in this thesis should help with creation and establishment of the complex BRMW (biologically resolvable municipal waste) collecting and processing systems in particular municipalities and regions in the Czech Republic.