

Study on the definition of waste recovery and disposal operations

Commissioned by:

Directorate General for the Environment of the European Commission

Carried out by:

Oekopol, Institute for Environmental Strategies, Hamburg, Germany

Duration:

October 2002 - October 2003

Background

The Council Directive 75/442/EEC of 15 July 1975 as amended by 91/756/EEC and adapted by 96/350/EC, defines disposal and recovery operations as operations included in two lists, respectively Annex II a and Annex II B of the Directive.

These operations as they are performed in practice have undergone significant technological changes with both modernisation of existing practices and development of new processes. Thus, the Commission might intend to adapt the lists of operations in order to reflect these as they exist in practice.

The main needs for adaptation arise from:

- the lack of clarity of certain entries of the lists giving ground to diverging interpretations as to in which entry a given process is to be included (for example R 11, R12)
- The emergence of certain processes that are difficult to classify in the existing lists (for example sorting of mixing waste for submission to recovery operations, mechanical-biological treatment)
- The unclear distinction between disposal and recovery operations for certain entries (for example R 13 and D 15)
- The uncertainty on at what stage of a recovery chain recovery may be considered completed (for example in the plastic recycling process, the waste will undergo selective collection, sorting, cleaning, shredding, pelletising and transformation)

Objectives

The objectives of the study are to provide the Commission with the following information needed for the preparation of a revision of the lists of disposal and recovery operations:

- An overview of disposal and recovery operations as they occur in practice
- Identification of the operations which are difficult to classify in the existing lists due either to missing entries or to ambiguity of the lists and identification of potential new entries or criteria which could solve the ambiguity
- Description for recovery operations of the resulting materials with reference to any widely used or recognised technical standard that applies



Tasks

- Give an overview of disposal and recovery operations as they occur in practice.
- Identification the operations other than operations R1 and D10 for which there is ambiguity in their classification in a disposal and/or a recovery entry. Identification of criteria which could help differentiating between the competing entries.
- Concerning material recovery of the main waste materials (paper/cardboard, polymers, metals and inert materials and others, but without sludge and the organic fraction of municipal waste) following points shall be described:
 - the recovery chain,
 - the main environmental impact associated with the waste and identify at which step of the recovery chain the impacts are neutralised,
 - the technical requirements or specifications that are applied to input and/or output of the facility and where applicable,
 - widely used or recognised technical requirements or specifications that apply to comparable products,
 - an analysis which additional requirements would be needed to address the environmental issues that remain in comparable wastes.

Interim results will be discussed during an expert workshop in July organised by the Commission services. Experts will be given 15 days to provide Ökopol with written comments. The draft final report will be prepared by Ökopol on the basis of the comments of the experts and of the conclusions of the workshop as drawn by the Commission services.

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