## ANNEX

## CRITERIA AND PROCEDURES FOR THE ACCEPTANCE OF WASTE AT LANDFILLS

## 1. PROCEDURE FOR THE ACCEPTANCE OF WASTE AT LANDFILLS

1.1. Basic characterisation

Basic characterisation is the first step in the acceptance procedure and constitutes a full characterisation of the waste by gathering all the necessary information for a safe disposal of the waste in the long term. Basic characterisation is required for each type of waste.

- 1.1.1. Functions of basic characterisation
- (a) Basic information on the waste (type and origin, composition, consistency, leachability and where necessary and available other characteristic properties)
- (b) Basic information for understanding the behaviour of waste in landfills and options for treatment as laid out in Article 6(a) of the Landfill Directive
- (c) Assessing waste against limit values
- (d) Detection of key variables (critical parameters) for compliance testing and options for simplification of compliance testing (leading to a significant decrease of constituents to be measured, but only after demonstration of relevant information). Characterisation may deliver ratios between basic characterisation and results of simplified test procedures as well as frequency for compliance testing.

If the basic characterisation of waste shows that the waste fulfils the criteria for a landfill class as laid down in section 2 of this Annex, the waste is deemed to be acceptable at this landfill class. If this is not the case, the waste is not acceptable at this landfill class.

The producer of the waste or, in default, the person responsible for its management, is responsible for ensuring that the characterisation information is correct.

The operator shall keep records of the required information for a period to be defined by the Member State.

- 1.1.2. Fundamental requirements for basic characterisation of the waste
- (a) Source and origin of the waste
- (b) Information on the process producing the waste (description and characteristics of raw materials and products)
- (c) Description of the waste treatment applied in compliance with Article 6(a) of the Landfill Directive, or a statement of reasons why such treatment is not considered necessary
- (d) Data on the composition of the waste and the leaching behaviour, where relevant
- (e) Appearance of the waste (smell, colour, physical form)
- (f) Code according to the European waste list (Commission Decision 2001/118/EC)(1)
- (g) For hazardous waste in case of mirror entries: the relevant hazard properties according to Annex III to Council Directive 91/689/EEC of 12 December 1991 on hazardous waste(2)

- (h) Information to prove that the waste does not fall under the exclusions of Article 5(3) of the Landfill Directive
- (i) The landfill class at which the waste may be accepted
- (j) If necessary, additional precautions to be taken at the landfill
- (k) Check if the waste can be recycled or recovered.
- 1.1.3. Testing

As a general rule waste must be tested to obtain the above information. In addition to the leaching behaviour, the composition of the waste must be known or determined by testing. The tests used for basic characterisation must always include those to be used for compliance testing.

The content of the characterisation, the extent of laboratory testing required and the relationship between basic characterisation and compliance checking depends on the type of waste. A differentiation can be made between:

- (a) wastes that are regularly generated in the same process;
- (b) wastes that are not regularly generated.

The characterisations outlined in points (a) and (b) will provide information that can be directly compared with acceptance criteria for the relevant class of landfill and, in addition, descriptive information can be supplied (e.g. the consequences of depositing with municipal waste).

(a) *Wastes regularly generated in the same process* 

These are individual and consistent wastes regularly generated in the same process, where:

- the installation and the process generating the waste are well known and the input materials to the process and the process itself are well defined,
- the operator of the installation provides all necessary information and informs the operator of the landfill of changes to the process (especially changes to the input material).

The process will often be at a single installation. The waste can also be from different installations, if it can be identified as single stream with common characteristics within known boundaries (e.g. bottom ash from the incineration of municipal waste).

For these wastes the basic characterisation will comprise the fundamental requirements listed in section 1.1.2 and especially the following:

- compositional range for the individual wastes,
- range and variability of characteristic properties,
- if required, the leachability of the wastes determined by a batch leaching test and/or a percolation test and/or a pH dependence test,
- key variables to be tested on a regular basis.

If the waste is produced in the same process in different installations, information must be given on the scope of the evaluation. Consequently, a sufficient number of measurements must be taken to show the range and variability of the characteristic properties of the waste. The waste can then be considered characterised and shall subsequently be subject to compliance testing only, unless significant change in the generation processes occur.

For wastes from the same process in the same installation, the results of the measurements may show only minor variations of the properties of the waste in comparison with the appropriate limit values. The waste can then be considered characterised, and shall subsequently be subject to compliance testing only, unless significant changes in the generation process occur.

Waste from facilities for the bulking or mixing of waste, from waste transfer stations or mixed waste streams from waste collectors, can vary considerably in their properties. This must be taken into consideration in the basic characterisation. Such wastes may fall under case (b).

(b) *Wastes that are not regularly generated* 

These wastes are not regularly generated in the same process in the same installation and are not part of a well-characterised waste stream. Each batch produced of such waste will need to be characterised. The basic characterisation shall include the fundamental requirements for basic characterisation. As each batch produced has to be characterised, no compliance testing is needed.

1.1.4. Cases where testing is not required

Testing for basic characterisation can be dispensed with in the following cases:

- (a) the waste is on a list of wastes not requiring testing as laid down in section 2 of this Annex;
- (b) all the necessary information, for the basic characterisation, is known and duly justified to the full satisfaction of the competent authority;
- (c) certain waste types where testing is impractical or where appropriate testing procedures and acceptance criteria are unavailable. This must be justified and documented, including the reasons why the waste is deemed acceptable at this landfill class.
- 1.2. Compliance testing

When waste has been deemed acceptable for a landfill class on the basis of a basic characterisation pursuant to section 1, it shall subsequently be subject to compliance testing to determine if it complies with the results of the basic characterisation and the relevant acceptance criteria as laid down in section 2.

The function of compliance testing is periodically to check regularly arising waste streams.

The relevant parameters to be tested are determined in the basic characterisation. Parameters should be related to basic characterisation information; only a check on critical parameters (key variables), as determined in the basic characterisation, is necessary. The check has to show that the waste meets the limit values for the critical parameters.

The tests used for compliance testing shall be one or more of those used in the basic characterisation. The testing shall consist at least of a batch leaching test. For this purpose the methods listed under section 3 shall be used.

Wastes that are exempted from the testing requirements for basic characterisation in section 1.1.4(a) and section 1.1.4(c) are also exempted from compliance testing. They will, however, need checking for compliance with basic characterisation information other than testing.

Compliance testing shall be carried out at least once a year and the operator must, in any event, ensure that compliance testing is carried out in the scope and frequency determined by basic characterisation.

Records of the test results shall be kept for a period that will be determined by the Member State.

1.3. On-site verification

Each load of waste delivered to a landfill shall be visually inspected before and after unloading. The required documentation shall be checked.

For waste deposited by the waste producer at a landfill in his control, this verification may be made at the point of dispatch.

The waste may be accepted at the landfill, if it is the same as that which has been subjected to basic characterisation and compliance testing and which is described in the accompanying documents. If this is not the case, the waste must not be accepted.

Member States shall determine the testing requirements for on-site verification, including where appropriate rapid test methods.

Upon delivery, samples shall be taken periodically. The samples taken shall be kept after acceptance of the waste for a period that will be determined by the Member State (not less than one month; see Article 11(b) of the Landfill Directive.