

Appendix 3

Sample preparation and analysis

Analysis of the waste should be carried out to industry standard methods capable of meeting the limits of detection required. Samples must be taken into appropriate containers (including consideration of glass and no headspace where organic and volatile parameter analysis is also being undertaken). Additionally, where compounds have short stability times, efforts should be made to minimise sample degradation by correct storage/ transportation conditions and carrying out analysis as soon as possible after sampling to avoid the sample being classed as unrepresentative.

The person sampling the waste should seek advice from their testing laboratory.

Recommended leaching test

Legislation requires that leaching test report to the L:S 10 l/kg test Method BS EN 12457:2002. We recommend that the test is performed to BS EN 12457-2:2002

"Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 2 One stage batch test at a liquid to solid ratio of 10 l/kg for materials with high solid content and with particle size below 4mm (without or with size reduction)."

However, where a size reduction to 4mm is not possible we will accept the method BS EN 12457-4:2002 for a particle size below 10mm.

The main points to note of this method are:

- Moisture content of the waste is required to determine the amount of water to add in the leaching process.
- 95% of the sample used should have particle size of <4mm. If necessary samples should be ground to achieve this (under no circumstances should the sample be ground finer).
- An end over end or roller bed shaker is the preferred option. A flatbed shaker is unsuitable.
- After leaching the total eluate should be filtered through a 0.45µm membrane filter.

Alternative leaching tests and analytical methods

Laboratories must undertake all leach testing to EN12457-2 or EN12457-4 and results assessed against the L:S 10 l/kg limits. We do not consider it necessary in most circumstances to apply the L:S 2 l/kg batch test (approved methods EN12457-1 and 12457-3) or percolation testing (approved method prEn 14405). While limits are set for these tests in the Council Decision annex, the Environmental Permitting Regulations, schedule 10 state that the L:S 10 l/kg test must be used.

We will amend the above list as CEN standards become available. For tests and analyses for which CEN methods are not yet available, British Standard methods are acceptable or other tests approved by the Environment Agency.

