

# LOI Testing of Trommel Fines for HMRC Compliance

In order to qualify for the lower rate of landfill tax, samples must be taken and the organic content of the material determined. The prescribed test is Loss On Ignition (LOI) and the waste must have a value of less than 10%. A value of 15% is in place until April 2016.

## Description of Waste

For landfill tax purposes, fines are particles produced by a waste treatment process that involves an element of mechanical treatment, such as passing through a Trommel.

An example would be a waste stream input of mixed construction and demolition waste where the output may include bricks, wood, plastics, metals and fines, comprising predominantly of small particles of soil, stones and bricks. The presence of asbestos is not acceptable.

## Sampling & Analysis

The sample of fines sent for testing must be representative of the whole quantity, this can be achieved by taking at least 6 sub-samples, selected at random. The sub-samples must be thoroughly mixed to ensure that a representative 1kg composite mix is sent for analysis.

It is mandatory for laboratories to use the methodology prescribed by HMRC and it is not acceptable to use routine LOI methods such as that given in BS 1377, geotechnical testing of soils.

The whole 1kg sample is air dried and cone and quartered to produce a 100g sub-sample. This sub-sample is then ground to achieve a particle size of 2mm or less, from which a 20g sample is heated to 440°C for 5 hours.

The % LOI is then calculated from the loss in mass on heating.

**DETS are now UKAS accredited for this method – as per HMRC guidance.**





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