

Loss on Ignition Analysis on Fines for HMRC Requirements

The way landfill tax on waste is calculated has changed from 1st April 2015. HMRC have introduced a 'Loss on Ignition' (LOI) testing regime. The aim of HMRC is to increase compliance; 'helping prevent misdescription of waste fines for landfill tax purposes'.

Analysis for LOI involves taking a sub sample of 1kg from a homogenous waste source. Waste is then dried until at a constant weight is achieved the sample is then coned and quartered to

produce a 200g sub sample. The sub sample is sieved to remove all Group 1 and Group 2 material over 20mm with the weight of any removed material recorded. The remaining sample is ground to <2mm and a minimum of 20g is dried in an oven at 180°C to a constant weight before drying in a muffle furnace at 440°C to a constant weight. The LOI is calculated between 180°C and 440°C as a percentage of the dried material taking into account the mass of removed Group 1 and Group2 material.

Group	Description of material	Conditions	Group comprises only
1	Rocks and soils	Naturally occurring	(a) rock; (b) clay; (c) sand; (d) gravel; (e) sandstone; (f) limestone; (g) crushed stone; (h) china clay; (i) construction stone; (j) stone from the demolition of buildings or structures; (k) slate; (l) sub-soil; (m) silt; (n) dredgings
2	Ceramic or concrete materials		(a) glass, including fritted enamel; (b) ceramics, including bricks, bricks and mortar, tiles, clay ware, pottery, china and refractories; (c) concrete, including reinforced concrete, concrete blocks, breeze blocks and aircrete blocks

For landfill tax purposes, qualifying fines are a mixture that consists of materials listed in the Schedule to the Landfill Tax (Qualifying Material) Order 2011 with no more than an incidental amount of fines that consist of any other (e.g. Group 1 and 2) material.

Landfill site operators must now test all qualifying fines received from each customer disposing at their sites. For existing customers, the first test must be done within the period during which the initial 500 tonnes of waste are delivered to site or within 1 month for new customers after 1st April.

Qualifying fines with an LOI of 10% or below will be eligible for the lower tax rate (£2.65 per tonne) those above will be required to pay the higher tax rate (£82.60 per tonne).

The sampling frequency is dependent on the risk factor of the waste: High (every load), Medium (1 load every 500 tonnes, or every 3 months), Low (1 load every 1000 tonnes, or every 6 months). This means that a LOI result that breaches the prescribed limit could result in a £82,600 tax bill compared to a £2,650 one.

If you have any questions on our LOI analysis or the additional services that we are able to provide to help customers comply with the regulations, including photographs of the sample and storage for up-to 12 months, then please liaise with your Customer Service Co-ordinator or contact us on **02476 42 12 13**.

