Windsor
waste management ltd

KNOWLEDGE GUIDE SERIES

UNDERSTANDING WASTE ACCEPTANCE CRITERIA (WAC)

August 2022 | Version 1

This guide has been produced to help provide information and guidance on Waste Acceptance Criteria (WAC) for disposing of soils and other materials subject to WAC criteria

5 minute read

Information in this document includes:

- Understanding WAC and waste characterisation
- Types of WAC
- Treatment options for contaminated materials

Contents

Background

The Waste Acceptance Criteria (WAC) became mandatory in 2005 following the introduction of the Landfill Regulations, with the purpose of helping the government reduce the reliance on landfilling and minimise the impact of landfill on the environment.

Landfills are classified according to whether they can accept **hazardous, non-hazardous**, or **inert wastes**. Wastes can only be accepted at a landfill if they meet the **Waste Acceptance Criteria (WAC)** for that class of landfill.

A common misconception by waste producers is that WAC is used to classify the waste that is being disposed of, when in fact it is the second stage of the waste disposal and treatment process and is used to determine what type of disposal site is appropriate for the different types of hazardous, non-hazardous, and inert waste.

Waste producers have a duty of care to ensure that they meet the requirements of the legislation.

Understanding WAC and Waste Characterisation

WAC testing is used to determine how waste will behave once it's buried in a landfill. This is carried out primarily through the analysis of leachate (water that has passed through the waste over time and is contaminated) derived from that waste during laboratory analysis. It cannot be used to determine whether a waste is hazardous or not, as highlighted above.

Before obtaining a WAC test the waste must first be classified in line with the Environment Agency's technical guidance WM3 Waste Classification, and this needs to be done under laboratory analysis by undergoing a **Characterisation, Solids + Spectrum test**. The result of this test will determine the source of the material and whether it is non-hazardous or hazardous.

Once you have determined whether the waste is non-hazardous or hazardous you can then assess treatment and disposal options for managing the waste and that's when the requirement for WAC testing becomes appropriate. Even if the waste is determined as non-hazardous it still may advisable to proceed with WAC testing as this will determine whether the soil can be disposed of at an inert landfill or a non-hazardous waste landfill and there is a considerable difference in the cost of these two disposal options.

Soil analysis report

Types of WAC

There are three types of WAC testing: inert, hazardous, and stable non-reactive hazardous. A full WAC suite covers the testing required for all three types of WAC suite. While inert and hazardous landfills are fairly common, stable non-reactive hazardous landfills (or cells within a landfill) are much rarer; these landfills typically accept material that is non-hazardous chemically but contains hazardous levels of asbestos.

How does asbestos affect waste classification?

Asbestos can affect the waste classification of soil in two ways. Firstly, if the concentration of asbestos fibres is greater than 0.1%, the soil will automatically be classified as hazardous waste.

Secondly, if one or more pieces of Asbestos Containing Material (ACM) are present, this will also render the soil as hazardous waste.

However, it is important to note that regardless of whether asbestos is determined to be contained within a soil sample, full characterisation is required as outlined above to understand any other contaminants that may be contained within the waste stream.

Testing requirements

In order to efficiently find a disposal route for contaminated soil, we require all three tests as outlined above; a full WAC, Characterisation, Solids and Spectrum test and an Asbestos ID and Quantification. This will allow us to provide the most cost-effective solution for your requirements.

Treatment options

Non-hazardous materials

If the material is determined to be non-hazardous, there are two potential disposal routes depending on the outcome of the WAC testing. If the material passes inert WAC testing, it may be disposed of at an inert landfill, which is considerably cheaper than disposing of the waste at a non-hazardous waste landfill as this option is subject to the full higher rate of landfill tax.

If the non-hazardous waste material fails the inert WAC testing or a WAC test is not carried out, the material will need to be disposed of at a non-hazardous landfill and will be subject to the full rate of landfill tax.

Hazardous waste materials

Material classified as hazardous will need to be disposed of at a hazardous waste landfill site and the final route of disposal will be determined by the levels of the contaminants within the materials and the acceptance criteria of the varying disposal sites. If the soil exceeds hazardous WAC criteria it will need to be treated to get it to ‘pass’ the WAC criteria and enable it to be disposed of at a hazardous waste landfill.

Treatment options

There are options available, where materials are washed or treated to remove or stabilise contaminants and render the soil suitable for reuse in construction applications. Treatment types include Bioremediation, Chemical Oxidation, Soil Stabilisation, and Soil Washing and the feasibility of treatment will depend on the type and levels of contaminants contained within the materials.

Planning your waste disposal requirements

Windsor Waste Management is experienced and knowledgeable in all aspects of contaminated land and remediation whether contaminated from historical use, accidentally, or through fly-tipping.

If the full testing outlined under 'Testing requirements' has been conducted, we will be able to utilise the report to determine the most appropriate disposal or treatment option for your waste materials.

On receipt of this information, we will determine the most suitable disposal route, work with our network of treatment and disposal sites, and provide a solution for containment and transportation of the waste materials within 24-48 hours of receiving the information.

If the relevant testing has not been carried out, we can arrange for the test to be carried out by an independant UCAS laboratory who will send a courier to the site with the appropriate equipment and instructions, in order for you to obtain a sample and return it for full analysis.

Testing and processing of the sample typically take around 7-10 working days and on receipt of the final report, we can assess the information to determine the most appropriate solution for managing the waste.

You can rely on Windsor Waste Management

With our knowledge and expertise in dealing with asbestos and hazardous waste streams, Windsor Waste Management can support you through the process and provide you with the service you need so you can rest assured your waste is being handled safely and compliantly.

We can support you through some or all the following phases of service working with our extensive network of partners, providing a professional and efficient service across the UK:

- Desk Study
- Intrusive Investigation
- Remediation Strategy
- Remediation Verification
- Full Contaminated Land Remediation

We will manage all hazardous paperwork in line with legislative requirements so you can rest assured your land remediation requirements are in safe hands.

If you need further advice, information or assistance in this area, please call us on 01708 55 99 66 and a member of our professional and knowledgeable team will be happy to assist.

Contact & Information

Contact a member of our team today for advice on managing your waste!

Call: **01708 55 99 66**
Email: **enquiries@winwaste.com**

About Windsor Waste Management

Windsor Waste Management is a market leader in the hazardous waste management industry and significant providers of wider waste management services. We have a wealth of experience and an unrivalled reputation in providing environmentally responsible and fully compliant waste management solutions to the asbestos removal, construction and demolition industries.

A fully licensed and highly accredited recycling and waste management company, our certifications include international standards for environmental management ISO 14001, quality management ISO 9001 and health & safety ISO 45001.

Our other guides in the series

Compliant handling and disposal of Asbestos Cement (AC) sheets
Dealing with a Problematic Waste Stream (PWS)

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