

The Landfill Directive, Hazardous Waste & Brownfield Redevelopment: What will you do after 15th July 2004?

The Landfill Directive

The Landfill Directive will have significant implications for the redevelopment of brownfield sites and disposal of hazardous waste. The Directive is aimed at reducing the amount of contaminated soils going to landfill.

What will it mean after 15th July 2004?

(i) There will be less landfill space for hazardous waste

From 16th July, hazardous waste may only be disposed of at a hazardous waste landfill site.

- The number of landfills accepting hazardous waste will reduce from 279 to 37.
- Only 13 will be merchant landfills (i.e. dedicated as opposed to those on industrial sites).
- Five hazardous waste permits had been issued at the start of June.
- There will be no landfills in Wales or Thames Region.

This will have significant cost implications in terms of landfill prices and transport costs.

(ii) Soils classified as hazardous waste will require pre-treatment prior to disposal at landfill

From 16th July hazardous waste cannot be disposed of to landfill unless it has been pre-treated. Treatment must fulfil three criteria (the three point test).

1. It must be a physical/thermal/chemical or biological process;
2. It must change the characteristics of the waste; and
3. It must do reduce the quantity, hazardous nature, facilitate handling, or enhance recovery of the waste.

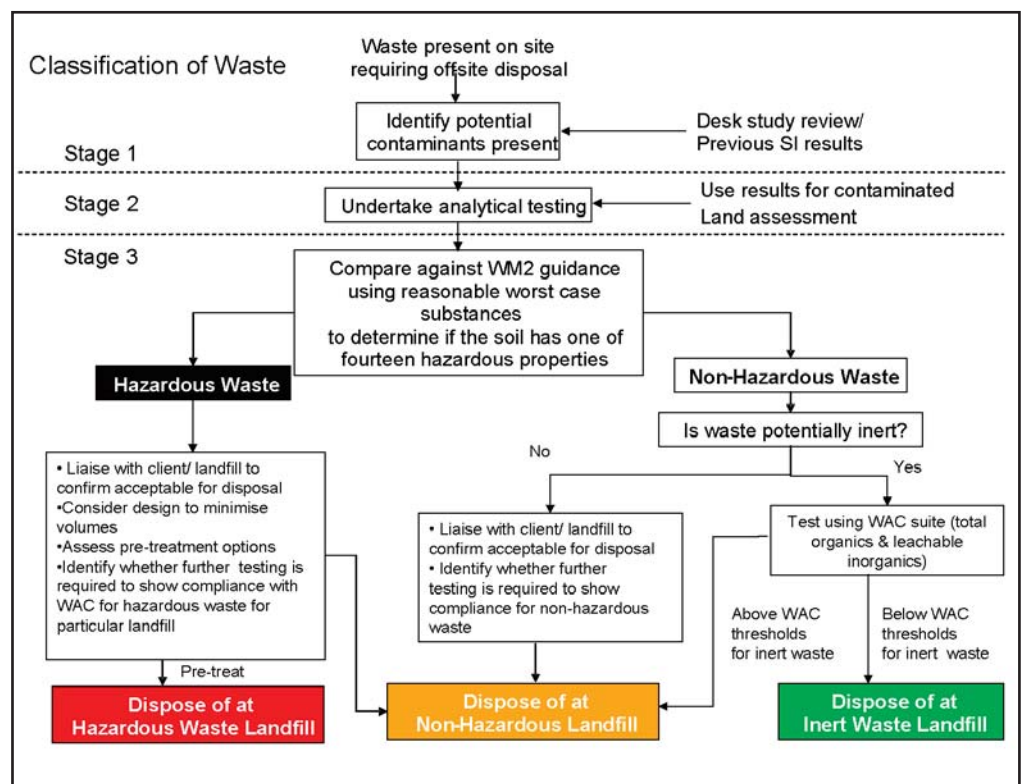
Does the site I am buying or developing contain soil that could be classified as hazardous waste?

Soils and stones from construction sites are "Hazardous Waste" if they contain dangerous substances in concentrations giving the soil one of fourteen hazardous properties.



The waste classification procedure is shown in the flow chart.

Stages 1 and 2 require a good desk study and site investigation. The results must be used to justify the analytical suite. Stage 3 is quite complex. The guidance requires that the mass and hazardous properties of the contaminant must be assessed to determine the classification of the waste and its disposal route.



* WAC- Waste Acceptance Criteria

If the soil on my site is classified as hazardous waste, what can I do with it?

Redesign to minimise waste

First reconsider if the soil must be removed. For instance can layout and design of the site be altered to minimise the removal of hazardous soil? Is capping an option? Can the contaminants in the soil be stabilised and the soil re-used on site?

Pre-treatment

If the hazardous waste material does require removal then pre-treatment must be carried out. Some treatment methods incur long time scales or require a large treatment areas. Other techniques are of short duration. Some may take place off-site (e.g. at a waste treatment centre).

Biological treatment may be used to reduce the concentrations of dangerous substance below the hazardous thresholds. This reduces transport and disposal costs.



Biopiling- Biological treatment of soil for organics

This is usually simpler for organic contaminants such as hydrocarbon fuels.

Volumes of hazardous material may be reduced by methods such as sorting the material, soil washing, etc.



Soil sorting and crushing- a physical treatment

There are a few companies starting to look at setting up treatment facilities for pre-treatment. Currently such facilities are not widely available, but this is expected to change over the next few years.

How can Enviros Help?

Enviros is one of the UK's largest independent environmental consultancies. It was involved in writing the technical guidance on hazardous waste classification. Our consultants have independently reviewed the Hazardous Waste Regulations to derive trigger levels to assess the hazardous waste categorisation of soils. We can therefore quickly and cost effectively assess soils from redevelopment sites. Enviros is also a leading exponent of the use of individual and combined land remediation techniques to enable the successful redevelopment of sites.

Enviros is providing developers and their advisors with in-house briefings on the implications of the Directive. If you would like Enviros to provide you with a briefing, or would prefer an informal discussion about the issues and how they apply to your situation, we would be pleased to hear from you.