The changing market for 'waste' soils

The picture around the management of waste contaminated soils has changed drastically over the years. More change is now needed to stimulate market development, says **Ben Williams, Frankis Solutions Limited**.

In years gone by it was clear contaminated soils were a waste. Everybody knew it and the final resting place for most contaminated soils was landfill; often at very cheap prices.

The fundamental problem with landfilling today though is its poor sustainability credentials and the fact that society doesn't like it. Try to get planning permission for a new landfill and that will become very evident.

As a broad consequence, legislation has been put in place both to manage the environmental impact of waste and to create commercial drivers which should reduce waste tonnages going to landfill. For example:

- the landfill directive classifies wastes (including waste soils) as either inert, non-hazardous or hazardous. The permitting requirements and engineering considerations of receiving sites has to be in line with the waste types disposed. This has meant that the types of facilities able to accept hazardous contaminated soils are few in number, resulting in higher gate prices and transport costs for many contaminated soils;
- the exemption from landfill tax, for contaminated soils from development sites, that has been in place for a number of years, is now being removed. After the magic date of 1st April next year, landfill tax exemptions will no longer be valid and many contaminated soils will attract a tax rate of £64 per tonne.

This should drastically reduce the landfill of soils. Coupled with that, the Waste (England and Wales) Regulations 2011 define alternative, and preferred, approaches to the management of wastes through the waste hierarchy. These are decreasingly favoured options of preventing waste, reusing it, recycling it, using other recovery methods (e.g. energy from waste) and disposal (i.e. to landfill). In line with this, **Frankis Solutions Limited** and many other remediation companies, have for some years developed and applied methods of remediation that are not reliant on disposal. These aim to cost-effectively treat and recycle soils reducing their impact and allowing reuse.

Whilst it is true that on-site soil treatment is growing, there remains a significant volume of soil going to landfill each year.

Clients are proving in many cases to be willing to carry the cost of disposal because it is fast and, particularly for smaller sites, the tonnages may not be significant when compared with the pressure to complete sites quickly and maintain cash flow.

The answer may be the advancement of the long awaited national network of treatment centres which take in contaminated soils, treat them and enable their reuse on other sites. The price differential between landfill (with tax) and treatment should make it an attractive option for clients while still retaining the benefit of removing soils from sites. An historic problem here has been when waste soils stops being a waste, and the extent to which a housing development, for example, may need a waste management licence to accept treated soil. In the last few years however, two main approaches have evolved to improve this situation.

Both recover materials as a non-waste and aim to protect the environment from the direct reuse of contaminated material. In the first procedure, developed by the **Waste Recycling Action Programme** (WRAP), this is assured by excluding waste soils and stones from contaminated sites as input material. The second approach, developed by the organisation **Contaminated Land: Applications in the Real Environment** (CL:AIRE), also adopts this approach for some materials (in its direct transfer scenario) by insisting input materials come from clean sites or well characterised, and demonstrably clean, areas of contaminated sites. For other materials the CL:AIRE protocol adopts a risk assessment approach to demonstrate that treated contaminated material is now suitable for use.

So there are evolving approaches that should facilitate the creation of facilities that can accept contaminated soils from one site, treat them and enable their reuse at another. However, the WRAP and CL:AIRE approaches have limitations and often require an arduous process of paperwork and permits as regulators try to set all of this in a framework, which will ensure environmental protection and consistency with other environmental regulations. The total number, and the geographic spread of treatment centres is also very low when compared to the national coverage of landfill. Some market reports from 2006 predicted very large numbers of such centres by 2011 (up to 16% of the total remediation market) and yet there remain just a handful, and potential suppliers are reluctant to invest the time and capital in land and permits in an uncertain market.

Progress is being made but more needs to be done to both incentivise clients to avoid landfill and to stimulate the market and create a significant volume of viable alternatives.

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