

# Hazardous Waste and the Construction Industry

## What you need to know about major changes in July 2004

### 1. What is covered in this briefing sheet?

- What is changing and why it matters
- Which construction materials may be classified as hazardous waste
- Increases in the costs of hazardous waste treatment and disposal
- Availability and location of hazardous waste landfill post 16 July 2004
- Alternatives to landfill
- Legal & regulatory Issues
- Long term storage of waste on site
- Sources of advice and guidance
- Requirements to pre treat waste prior to landfill
- Waste Acceptance Criteria
- Site specific risk assessment
- New Hazardous Waste Regulations

### 2. What is Changing and Why Does it Matter?

Co-disposal of non-hazardous wastes and hazardous wastes will be banned from 16 July 2004. Hazardous waste will only be accepted at Landfill sites whose operators have successfully applied for the appropriate designation and permits. Furthermore, from July 2004, there will be a legal requirement to treat all hazardous waste prior to its disposal to landfill.

As a result of these changes the Environment Agency currently estimates that **the number of commercially available landfill sites accepting hazardous waste will fall from 240 to 10-14**. Research for the Government's Hazardous Waste Forum issued in December 2003 suggests that this situation could result in **a gap of 1.8-3.8 million tonnes between the annual capacity needed and the amount of void space available at hazardous waste sites**.

There are also serious worries that the UK will not have sufficient pre-treatment facilities available in time for July 2004. Government has set up a task force under DEFRA's Hazardous Waste Forum to monitor the installation of treatment facilities with a specific working group focusing on construction and demolition waste and contaminated soils. Regular updates will appear at <http://www.defra.gov.uk/environment/waste/hazforum/>

These changes arise as part of the implementation of the EU Landfill Directive (1999), implemented through the Landfill (England and Wales) Regulations 2002 and

forthcoming Waste Acceptance Criteria (WAC) for receipt of wastes at landfill sites. For further details of the Landfill Directive see Annex A.

### 3. Which materials commonly found in Construction & Demolition Waste are currently classified as hazardous or will be when the UK adopts the new European Waste Catalogue (EWC)?

In tonnage terms the most significant materials are contaminated soils, which currently account for up to 1 million tonnes of special waste arisings per year in England and Wales.

Leading figures in the brownfield regeneration sector have expressed concern about the likely difficulties in securing treatment and disposal facilities for contaminated soils and that where facilities are available a significant increase in haulage costs and landfill site gate fees.

Excluding soils, the other most commonly occurring hazardous materials found in construction and demolition waste are:

- Adhesives
- Asbestos Materials
- CFC – refrigerants and foam
- Treated timber
- Emulsions
- Solvent-based concrete additives
- Resins
- Some scarp electrical and electronic material
- Bituminous compounds used for roofing
- Some packaging associated with hazardous substances

Detailed information on classification of hazardous wastes is set out in Annex A.

#### **4. What levels of wastes classified as hazardous need to be present on a site before it falls under the hazardous waste regime?**

It is not known whether there will be any de-minimus for hazardous wastes in new draft Hazardous Waste Regulations that will be issued for consultation later in 2004.

#### **5. Are there any reliable estimates of the increase in the cost of hazardous waste treatment and disposal following these changes**

Although costs are expected to rise significantly, there are no reliable estimates at this time.

#### **6. What is the likely number of hazardous waste landfills commercially available after July 2004?**

At February 2004 the Environment Agency estimate that there are likely to be around 10 -14 commercially available hazardous waste landfills after July 2004, based on information from Conditioning Plans submitted to the Environment Agency. This represents a reduction from 240 sites. Updates will be placed on the Agency website every 2 weeks up to and beyond July.

#### **7. Where will these sites be?**

Information from Conditioning Plans submitted to the Agency indicate the following spread: Anglian Region – 2; Midland Region – 2; North East Region – 5; North West Region – 3; Southern Region – 1; South West Region – 1; Thames Region – 0; Wales – 0.

#### **8. What are the available alternatives to Landfill?**

- Prevention and reduction
- Treatment to reduce quantity and/or hazardousness
- Indefinite storage
- Bioremediation
- High Temperature Incineration

#### **9. What legal/regulatory/duty of care issues should I be aware of in relation to these options?**

Check the Environment Agency's Netregs site, which can be found at: <http://www.netregs>

What is the likely availability/national capacity for treatment and disposal routes after July 2004 in the short, medium and long term

As noted above a task force under DEFRA's Hazardous Waste Forum is working on these issues. Detailed information on the situation in December 2003 is available at:

Hazardous Soils:

[www.defra.gov.uk/environment/waste/hazforum/actionplan/3.5i.pdf](http://www.defra.gov.uk/environment/waste/hazforum/actionplan/3.5i.pdf)

Construction and Demolition Waste:

[www.defra.gov.uk/environment/waste/hazforum/actionplan/3.5ii.pdf](http://www.defra.gov.uk/environment/waste/hazforum/actionplan/3.5ii.pdf).

#### **10. If long term storage on a site is opted for will a PPC permit be required? What inspection regimes will this fall under and what are the potential liabilities?**

In brief, storage of waste requires an authorisation: either a waste management licence or PPC permit, unless covered by exemption Para 41 of Waste Management Licensing Regulations 1994 (as amended). If, however, storage of hazardous wastes prior to disposal is for more than one year or storage of hazardous waste prior to recovery is longer than 3 years, then a PPC permit may be required (Pollution Prevention and Control Regulations 2000).

#### **11. If the waste management industry in my area is unable to provide a comprehensive service what support and advice will be available to waste producers?**

Check out Environment Agency website, including Net Regs <http://www.netregs>.

Envirowise will be providing support on hazardous waste, particularly on minimisation: [www.envirowise.co.uk](http://www.envirowise.co.uk). Trade Associations should be able to provide advice on specific waste streams.

#### **12. After July 2004 what are the new legal requirements relating to pre-treatment and disposal of materials classified as hazardous?**

After this date the wastes taken will require treatment unless the treatment does not further the objectives of the Landfill Directive (see Annex A).

Treatment is defined according to "the three point test":

1. A physical/thermal/chemical or biological process including sorting, that
2. Changes the characteristics of the waste; and
3. Does so in order to:
  - (a) reduce its mass, or
  - (b) reduce its hazardous nature, or
  - (c) facilitate its handling, or
  - (d) enhance its recovery.

Further information can be found in Regulatory Guidance Note 2 (version 4.0, November 2002) *Interim Waste Acceptance Criteria and Procedures*:

[www.environment-agency.gov.uk/commondata/105385/02final.pdf](http://www.environment-agency.gov.uk/commondata/105385/02final.pdf)

#### **13. What are "Waste Acceptance Criteria" (WAC) and why are they important?**

WAC will form part of the Landfill regulations and define criteria for acceptance of waste at landfill sites. The WAC are predominantly lists of "limit values" for particular wastes going to landfills.

WAC are set out in the Landfill Directive itself but check the following link *Interim Waste Acceptance Criteria and Procedures*: [www.environment-agency.gov.uk/commodata/105385/02final.pdf](http://www.environment-agency.gov.uk/commodata/105385/02final.pdf)

It is possible that the final implementation of WAC will be put back from July 2004 until July 2005. If this happens government will be obliged to make provision for the interim period. These provisions are likely to include site-specific risk assessments for hazardous sites to control the input of wastes to these sites. The government consultation on proposed waste acceptance criteria ended in December 2003, but details are still available on the Defra website <http://www.defra.gov.uk/corporate/consult/landfill-regs/>

The Environment Agency has published a consultation document *Guidance on Sampling and Testing of Wastes to meet Landfill Waste Acceptance Criteria* which can be read on its website at [http://www.environment-agency.gov.uk/commodata/105385/testsamplev4\\_636181.pdf](http://www.environment-agency.gov.uk/commodata/105385/testsamplev4_636181.pdf)

#### **14. Will/can any of these requirements be relaxed on the basis of site specific risk assessments?**

DEFRA's recent consultation on WAC, sought views on whether the UK should allow the limit values for some parameters to be higher for individual wastes at individual sites, provided that waste producers or landfill operators could demonstrate through risk assessment that there would be no additional risk to the environment. The result of this consultation will not be known until DEFRA issue final regulations at some point before July 2004.

#### **15. Will there be any changes to the existing Hazardous Waste Regulations to complement these other changes?**

Yes. Defra will hold a consultation on new draft regulations in 2004 but the key changes are likely to be:

- Simplification of the definition of hazardous waste
- Producer registration on a site basis
- Consignment notes still required but no pre-notification
- Quarterly returns summarising consignment information
- Return from consignee to waste producer
- No mixing of waste unless authorised

#### **16. Where can I get further advice?**

Local Environment Agency offices: Tel 0845 9333 111 or

[www.envirowise.co.uk](http://www.envirowise.co.uk)  
<http://www.netregs.gov.uk>

## **Annex A**

### **The Landfill Directive**

The main aim of the Landfill Directive is to prevent or reduce as far as possible the negative effects of landfilling waste on the environment and on human health. It bans the landfill of liquids and certain solid wastes, introduces

requirements for the treatment of wastes prior to landfill and provides for the classification of landfills as sites for inert, hazardous or non-hazardous waste.

It sets out procedures for waste acceptance at landfills and the types of waste for each class of landfill as specified by waste acceptance criteria. Annex II of the Directive gives the general principles for waste to be acceptable at landfills.

### **Classification of Hazardous Waste**

Environment Agency Technical Guidance WM2 *Interpretation and Classification of Hazardous Waste* provides assistance in classifying wastes: see link below. Appendix A – *The Consolidated European Waste Catalogue* - shows those wastes that are absolute entries (hazardous waste regardless of their concentration) in red and mirror entries (hazardous waste only if dangerous substances are present above threshold concentrations) in blue.

Chapter 17 of the EWC 'Construction and Demolition wastes (including excavated soil from contaminated sites)' will cover most wastes found on site. There may, however, be other Hazardous wastes from construction and demolition activities, such as batteries, under separate chapter headings.

See web-link to Technical Guidance Note WM2:

[http://www.environment-agency.gov.uk/commodata/105385/1\\_haz\\_waste\\_intro.pdf](http://www.environment-agency.gov.uk/commodata/105385/1_haz_waste_intro.pdf)  
and  
[http://www.environment-agency.gov.uk/commodata/105385/2\\_haz\\_waste\\_app\\_a.pdf](http://www.environment-agency.gov.uk/commodata/105385/2_haz_waste_app_a.pdf)

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