

## Questions & Answers on our Positions on Hazardous Waste

- 1) Mixing Pits
- 2) Total Organic Carbon limits
- 3) Classification and coding guidance
- 4) WM2 and assessment of ecotoxicity
- 5) Problematic Waste Streams (PWS)

### 1) Mixing Pits

#### What does the extension of the deadline mean to the other mixing pits still operating? Will they also be granted an extension?

Yes. All mixing pit operators, including Castle, were required to cease use of their pits by 30 June 2008. Mixing pits are the lowest cost option for mixing or treating hazardous wastes. In the interests of ensuring that other operators are not financially disadvantaged, we will allow the other mixing pits to operate until this date.

#### How many mixing pits were affected by the closure decision?

Originally there were nine but 2 have already closed.

#### Who operates them and where are they?

The sites still in operation are Augean Treatment Ltd, Cannock, Castle Waste Services, Ilkeston, Collier Industrial Waste, Manchester, CSG Lanstar (Cadishead), Manchester, Red Industries Ltd, Burslem, Veolia ES Onyx Ltd, Bootle, Waste Recycling Ltd, Sheffield.

#### Why did we require mixing pits to close?

Mixing of wastes in pits does not meet the requirements of the IPPC Directive as they do not deliver a high level of environmental protection. Further detail on the mixing of waste in pits can be found on our Business web pages at [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk) and click on Business/ Business Sectors/ Waste Management/ Regulations and Guidance/ PPC Waste/ Mixing Pits.

#### What options are now available for the wastes that previously were treated in a mixing pit ?

We commissioned Atkins to produce a report to look at this issue. This can be found on our website on the Mixing of Waste in Pits webpage.

## **What is the result of Castle Waste Services challenge to the need to introduce waste pre-acceptance procedures and closing their mixing pits by 30 June 2008?**

We welcome the Planning Inspectorate's decision to dismiss Castle Waste Services' appeal over Improvement Condition IP4 (the need to introduce waste pre-acceptance procedures to comply with S5.06).

This means that Castle will now have to ensure that they have a detailed knowledge of any wastes that they wish to manage before such wastes arrive at their site. Waste pre-acceptance is an essential first stage in the proper management of wastes and is key to preventing accidents which is a priority goal for this sector.

Castle were also required to cease use of their mixing pit, by 30 June 2008. Although their original appeal challenged the need to close their pit, they abandoned that argument shortly before the appeal hearing, and merely sought an extension to the closure date. The Planning Inspectorate granted them an extension, and their pit must now cease operating by 10 November 2008. In the interests of consistency across the sector we will allow the other mixing pits to operate until this date.

## **2) Total Organic Carbon limits**

### **What are the organic carbon limits for waste to be accepted at landfill?**

	Loss on Ignition (%)	TOC (%)	DOC (mg/kg dry substance)
Hazardous waste	10	6	1000
Stable non-reactive hazardous waste	-	5	800

Note: Either TOC or loss on ignition may be used for waste destined for disposal at landfill for hazardous waste. Only the TOC limit applies to SNRH waste.

### **What will happen to wastes that exceed the landfill TOC limit?**

The waste producer must decide whether landfill is the best option for the management of his waste. If the waste must go to landfill it must be treated. Treatment must ensure that the limits for organic carbon are achieved.

For example, contaminated soil can be 'washed' or subject to thermal treatments to reduce the amount of organic matter content to below the limits

### **Will these wastes now be stockpiled because there are no disposal options available for them?**

We expect all waste to be treated to meet the limits. However, we accept that in exceptional circumstances, treatment will not be able to reduce TOC to below the limits. In such cases the waste will be a problematic waste. We have a procedure in place for assessing whether landfill is the most appropriate route for the management of such wastes. While we follow that process, some waste stockpiling may be necessary.

## **What should a producer of hazardous waste do with their wastes with a higher than 6% TOC content?**

1. Producers should review their existing production processes to identify whether they can be changed such that their waste can be recycled or reused so that it does not need to be sent to landfill.
2. If the producer cannot recycle or reuse their waste, they must consider whether their processes can be changed to reduce the TOC to below the landfill limits.
3. If their waste must be disposed of to landfill and they cannot treat the waste on site, they must discuss treatment and disposal options with their waste contractor to identify the best mechanism for treating their waste to below the landfill limits.

## **3) Classification and coding guidance**

### **Why is this guidance needed?**

This guidance provides clarity on how to classify and code output from specific physico-chemical treatment facilities. It is to be read in conjunction with our technical guidance WM2 which provides guidance on assessing and classifying hazardous wastes.

### **Who will need this guidance?**

Producers of hazardous wastes and hazardous waste management operators.

### **What is the legal basis for this guidance?**

The principles for classifying and coding a hazardous waste are found in the Hazardous Waste Regulations<sup>1</sup> (HWR) and the List of Waste Regulations<sup>2</sup> (LoWR). The List of Waste Regulations implement the latest version of the List of Wastes Decision. We call this 'the List' and it is also known as the European Waste Catalogue (EWC). These regulations are the legal framework for the decisions in the guidance.

### **What will hazardous waste producers and the waste management operators have to do?**

Producers treating their own wastes and operators of waste treatment facilities, will have to ensure that hazardous wastes that have been treated are classified and coded in line with the guidance.

### **What will be the impact of this guidance?**

The provision of clarity given in the document may improve treatment activities and facilitate the development of new treatment technologies. There may be more wastes classified as hazardous. However, wastes will be classified correctly and so decisions about final disposal routes will be suited to the type of wastes providing a better environmental outcome.

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<sup>1</sup> 'Hazardous Waste Regulations' is an abbreviation for both the Hazardous Waste (England and Wales) Regulations 2005 and the Hazardous Waste (Wales) Regulations 2005.

<sup>2</sup> 'List of Waste Regulations' is an abbreviation for both the List of Wastes (England) Regulations 2005 and List of Wastes (Wales) Regulations 2005.

### **An earlier draft of this guidance required all hazards in a waste to be treated to make the waste non-hazardous. Why is this not required in this version?**

We have accepted that when certain treatment activities are carried out, there will be a degree of dilution of some of the dangerous components as part of the treatment process that will result in a non-hazardous residue. The guidance explains where this is acceptable and where we also consider that insufficient treatment of dangerous substances has been carried out such that the residue will remain hazardous.

### **I don't understand why my waste is hazardous when it doesn't contain any hazardous properties. How can this be?**

The List of Waste Regulations identify that some wastes are "absolutely" hazardous regardless of what they contain. They are seen as hazardous because they are almost always going to be hazardous or because they are seen to be dangerous by how the waste was produced. For example, all 11 01 05\* pickling acids and all 19 03 06\* wastes marked as hazardous, solidified are absolutely hazardous. In our technical guidance WM2 we identify these wastes by marking them in red.

### **Why hasn't the guidance included other physico-chemical treatments such as oxidation/reduction?**

We have not been able to cover all treatment methods in the guide. If you have specific treatment methods that produce a residue that requires disposal elsewhere (e.g. further treatment or landfill) you should contact us to see if we can agree a code and classification for the waste.

### **Why isn't there any guidance on coding macerated wastes?**

As stated above we have not been able to cover all treatment methods in the guide. If you have specific treatment methods that produce a residue that requires disposal elsewhere (e.g. further treatment or landfill) you should contact us to see if we can agree a code and classification for the waste.

### **Why can't EWC code 19 03 05 be used to code wastes from stabilisation of hazardous waste?**

EWC Code 19 03 05 is for coding fully stabilised wastes i.e. wastes where all the hazards have been treated. To date, we have not been given an example of a stabilisation process that treats all of the hazardous properties.

### **If I add acid to a waste and then treat the mixture with alkali isn't this process neutralisation?**

No. The neutralisation has to be fundamental to the reason the waste is treated. If for example you add acid to a pesticide to acidify it, and then add alkali to neutralise the acid, the pesticide is not neutralised - the pesticide is simply stabilised or solidified (19 03 04\* or 19 03 06\*) into the resulting treatment sludge.

## **According to your guide, my waste is 19 03 04\* waste marked as hazardous, partly stabilised, but I've analysed it and it hasn't got any hazardous properties - isn't it non-hazardous?**

No. 19 03 04\* is an absolute hazardous waste listing. It is coded as hazardous because the components that caused the original waste to be hazardous are stabilised in the matrix of the output waste. There is no need to analyse the waste to identify it as hazardous. You will need to consign the waste as hazardous if it leaves your site. If it does not have any hazards, you can put "none" in the hazardous properties section of the consignment note.

## **4) WM2 and assessment of ecotoxicity**

### **What is WM2?**

WM2 is technical guidance on the classification and assessment of hazardous wastes. It includes advice on how to assess a waste for each of the fourteen hazardous properties.

### **What does ecotoxic mean?**

If a waste is ecotoxic it has properties that are potentially dangerous for the environment, for example it may be toxic to the aquatic environment or able to cause damage to the ozone layer.

### **Why has we revised our guidance?**

We regularly review our guidance in line with changes in legislation and technical understanding. In this case the review was triggered by a number of factors including revisions to the classification of certain chemicals.

### **What is new? What has changed?**

Two things have changed.

Firstly we have updated the chemical analysis based assessment to align with chemicals legislation. This includes the use of trace impurity and substance specific thresholds.

Secondly we have provided additional clarification on the direct testing of waste to ensure that it is only considered where appropriate, and that the results are correctly interpreted.

### **What businesses will be affected by this new guidance and what will they need to do?**

Businesses producing or using the majority of manufactured products should find that the alignment of our guidance with the legislation on product packaging and labelling makes things simpler.

In most cases where a product is labelled with 'Dangerous for the Environment', or is assigned an Ecotoxic risk phrase on the Material Safety Data Sheet, then these would become a waste with an Ecotoxic hazardous property.

### **Where can I find a copy of the guidance?**

A copy of this guidance is available on our web site. Go to [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk) then click on Waste/ Business/ Dealing with Hazardous Waste

## **5) Problematic Waste Streams (PWS)**

### **What wastes will the Environment Agency class as PWS as a result of these changes?**

Currently industry has not flagged up any wastes to us that will become PWS following the cessation of use of mixing pits. However this situation may change as the closure date approaches and industry possibly becomes more focussed on these matters or attempts to find alternative treatments.

There are two PWS currently identified. They are furnace slag from lead-acid battery recycling and spent-pot linings from the aluminium smelting industry. Although it is likely the lead acid battery problematic waste will be resolved by the end of 2008.

### **Could the PWS route be an easy way to dispose of hazardous wastes?**

No. The PWS procedure is demanding with many hurdles to go through before a PWS status is granted to any waste. Any waste obtaining PWS status has to be reported to the European Commission.