

# ENVIRONMENT AGENCY STATEMENT ON SHREDDER RESIDUE (Issued 1 February 2005)

## 1. Summary

The Environment Agency will accept the classification of residues from shredding facilities as non hazardous waste where:

- the residues have arisen exclusively from depolluted End-of-Life Vehicles (ELVs) and other non-hazardous feedstock; and
- this is demonstrated in a waste transfer note.

This position applies only for the purpose of the Landfill Regulations and the Duty of Care.

We will periodically review this Statement in consultation with the relevant trade associations (the BMRA and ESA), Government Departments and Devolved Administrations.

The Environment Agency now expects ELVs to have been fully depolluted prior to shredding. The depollution requirements are set out in the End-of-Life Vehicles Regulations 2003.

The Statement applies only to shredder residues disposed of in England and Wales. Advice in relation to Scotland can be obtained from the Scottish Environment Protection Agency (SEPA).

## 2. Background

The process of metal recycling, no matter how effective, results in a residue from the shredder process (also called fragmentiser waste or automotive shredder residue (ASR)). Shredder residue has traditionally been disposed of to landfill (much of it has been used as 'landfill cover'). Very little (less than 1%) has been consigned as Special Waste.

The Landfill (England and Wales) Regulations 2002 have resulted in landfill operators being required to undertake testing before accepting most waste. Where that waste is hazardous, since 16 July 2004, it may only be disposed of at a landfill permitted to receive that type of hazardous waste.

During 2004, concerns were raised regarding the adequacy of existing testing methods for shredder residues, particularly their capability accurately to identify the mineral oil content of the residues.

In July 2004, the Environment Agency issued an interim Statement setting out the circumstances in which shredder residues could be consigned to landfill as non-hazardous waste and those which would require the residues to be consigned as hazardous waste. The duration of the statement was subsequently extended to 31 January 2005.

The primary purpose of the extension was to allow sufficient time to conclude work to identify a suitable testing methodology for shredder residue. A significant proportion (up to 70%) of shredder residue comes from End-of-Life Vehicles (ELVs). The extension also afforded the vehicle treatment sector an opportunity to develop their treatment capabilities.

The work commissioned by the Environment Agency involved the sampling and analysis of representative samples of shredder residues derived from the processing of depolluted ELVs and non-hazardous metal feed.

The main findings from the study were that:

- all metals present were at concentrations below the threshold for being regarded as hazardous;
- PCBs were present at less than 0.5ppm; also below the threshold for being hazardous and continuing the encouraging downward trend observed over the past decade;
- no conclusive method for the determination of oil content was identified. It appears that there is currently no practical or accredited analytical methodology that can accurately distinguish between materials in mixed plastic and rubber residues and oil residues from vehicle shredding. It is considered to be unlikely that further development of analytical procedures will resolve this issue in the short term;
- the shredding of fully depolluted ELVs should theoretically give rise to levels of mineral oil in shredder residues of approximately 0.03%w/w – significantly below the hazardous waste threshold level of 0.1%w/w.

### **3. Conclusion**

On the basis of the above findings, the Environment Agency will accept the classification of residues from shredding facilities as non hazardous waste where:

- (a) the residues have arisen exclusively from depolluted End-of-Life Vehicles (ELVs) and other non-hazardous feedstock; and
- (b) this is stated on a waste transfer note.

Where the producer of shredder residues verifies that the residue satisfies (a) above and self certifies to that effect on a waste transfer note, the Environment Agency's view is that operators may rely on the transfer note as evidence of the non-hazardous character of the waste for the purposes of the Duty of Care, and Waste Acceptance Criteria under the Landfill (England and Wales) Regulations 2002.

Operators should not rely on certification by the producer of shredder residues without making prior enquiries if they have reasonable grounds to believe that previous certificates have been inaccurate. If concerns arise these should be raised with the shredder operator in the first instance.

The Environment Agency expects ELVs to have been fully depolluted prior to shredding. The depollution requirements are set out in the End-of-Life Vehicles Regulations 2003.

Environment Agency staff seeking further advice should contact their regional hazardous waste co-ordinator in the first instance. Those in industry should contact their trade association, or their local Environment Agency office.

This statement supersedes and replaces Environment Agency Statements on Shredder Residues issued on 21 July 2004 and 3 November 2004