

SCOTTISH ENVIRONMENT PROTECTION AGENCY	Document Number: WML-G-DEF-02
SUPPLEMENTARY GUIDANCE TO “IS IT WASTE?” DETERMINING WHEN WASTE OIL HAS BEEN FULLY RECOVERED.	Issue No: 1
	Issue date: 06 August 2007
	Originator: Katie Willis
	Issued by: Quality Manager
	Approved by: Waste Regulatory Policy Support Group

Introduction

SEPA’s guidance document entitled “Is It Waste: Understanding the definition of waste” sets out a framework of factors to be considered in establishing whether a particular substance or object is likely to fall within the scope of the definition of waste given in the Waste Framework Directive (2006/12/EC) and adopted in the UK.

This supplementary guidance expands on Appendix 4 of “Is It Waste” and provides a example methodology for demonstrating that a waste has been fully recovered to the extent that it has ceased to be waste for a particular proposed use. It should be read in conjunction with SEPA’s “Is It Waste” guidance. If there is any conflict between the guidance and supplementary guidance, the “Is It Waste” guidance document takes precedence over this supplementary guidance. This guidance may be used by waste holders, although its principal purpose is to assist SEPA staff in assessing a waste holder’s claim that a waste has been fully recovered and is no longer waste. The outline method set out in this guidance is an example methodology and is not intended to be definitive: operators are entitled to make a case to SEPA using a different approach should they wish. Decisions must be made on a case-by-case basis.

It is the responsibility of the person making a claim that a waste has been fully recovered to provide evidence that the substance or object no longer needs to be subject to waste management controls for each proposed use. To avoid possible enforcement action, it is in the interests of the person making the claim to seek a decision from SEPA before using the substance or object as if it were no longer a waste.

This guidance may be updated from time to time to reflect new case law or different approaches to demonstrating that a waste has ceased to be waste.

Methodology

Demonstrating that a waste has been fully recovered can be considered in three main steps as set out below. The purpose must be to demonstrate that the end of waste criteria set out in SEPA’s “Is It Waste” guidance have been met for each proposed use. Progression from one step to the following step is only advisable in agreement with the appropriate SEPA office.

In accordance with agreed procedures, support and advice can be sought by SEPA officers from Waste Policy in complex cases. Waste Policy will facilitate support from other parts of SEPA as necessary. Waste Policy can be contacted through the Waste Definition mailbox. However, external enquiries should always come via the local SEPA officer.

Step 1 – Initial description and identification of a suitable non-waste comparator

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A justification must be provided for the selection of an appropriate non-waste material for comparison, i.e. a comparator, with the potentially recovered waste. This is necessary for each specified use of the recovered material where the comparator may be different. A number of different analyses will therefore be required wherever there is more than one proposed use of the waste in question.

Where a number of non-waste materials could be chosen, the operator must make a full justification for their choice of comparator for each of the proposed uses of the waste in question, e.g. where the recovered waste is proposed to replace a fuel it must be demonstrated that the equipment in question is capable of burning the comparable fuel without further modification.

The information required includes the following:

A. A description of:

- (i) the waste(s) to be considered;
- (ii) the treatment/recovery process undertaken on the waste;
- (iii) the material(s) that the recovered waste is intended to replace and each proposed use of it;
- (iv) any potential differences in composition between the recovered waste and the non-waste comparator(s) for each proposed use.

B. Evidence that:

- (i) the proposed treatment process is sufficient to recover the waste to a particular and consistent specification;
- (ii) there is certainty of use of the recovered waste for the specified purpose(s) and for each proposed use; and that
- (iii) the recovered waste is capable of being used under the same conditions of environmental protection and with no modification to the process, as the selected comparator in respect of each proposed use of the waste, without any greater danger of harm to human health or the environment.

SEPA should be consulted before embarking on the next step to ensure that the comparator is appropriate.

Step 2 - Comparative Analysis

The recovered waste and each comparator which it is proposed to replace in respect of each proposed use of the waste must undergo a rigorous analytical comparison. The analysis must be supported by an assessment of the contaminants/pollutants likely to be found in the waste as a consequence of its inherent nature, its previous uses, and the processing to which it has been subjected.

A. Sampling

- (i) Representative samples of both the recovered waste and each of the comparators must be obtained. For solid materials this may require

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composite samples to be taken. If the composition of either the recovered waste or virgin materials is particularly variable in their composition, additional batches may require analysis such that the variability can be adequately described.

- (ii) A statistically robust number of samples of the recovered waste and the non-waste comparator(s) for each proposed use shall be taken to ensure that sampling is representative. Where the recovered waste comprises wastes from different or unknown sources, or there is a range of comparators, a sampling protocol shall be developed and submitted to SEPA for approval.

B. Choice of Analyses

Analysis for a range of chemical, physical and biological parameters is required to determine whether the recovered waste is equivalent to the non-waste comparator(s), whether it contains additional contaminants, and is likely to be suitable for use under the same conditions of environmental protection for each proposed use. It will be necessary for a quality-assured laboratory to undertake the analyses required.

The range of analytical parameters depends partly on the characteristics of the comparator(s), possibly defined by a product standard. However, product standards are normally drafted for uncontaminated "virgin" materials and may well not address substances or contaminants that may be present in a treated waste. Strict comparison against a product standard is therefore very unlikely to be sufficient to justify a waste ceasing to be waste as it does not fully address the end of waste criteria set out in the "Is It Waste" guidance. In such cases additional analyses for contaminants that may be present in the recovered waste, but not in the comparator(s), will be required.

In order to decide what additional contaminants may be present, and therefore which additional analyses must be undertaken, consideration must be given to:

- (i) Previous uses of the recovered waste material which could result in a physical, chemical or biological change; and,
- (ii) Any potential changes in its composition which could have taken place as a result of its use (e.g. addition of a chemical) or the treatment process leading to its recovery.
- (iii) the circumstances of each of the proposed uses.

C. Assessment of Results

The samples taken shall be subject to the same suite of analysis and the results submitted to SEPA. The analytical data should include

- (i) sampling and analytical margins of error;
- (i) details of the analyses undertaken;
- (i) any observations on the analytical process;
- (i) the limit of detection (LOD)/limit of quantitation (LOQ) of the analytical technique used

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If the analytical results indicate that the recovered waste is chemically, physically and biologically identical to the non-waste material in respect of each of the proposed uses, then it may be possible to agree that the recovered waste is suitable for a proposed use, and has ceased to be a waste for that particular use only, so long as all of the end of waste criteria set out in “Is It Waste” have been met. An assurance should be sought that the specification can be routinely achieved and that no other substances are present. This may be done by implementing an agreed Quality Assurance Scheme and/or through licence/permit conditions for treatment process.

Normally, if the analytical results indicate that some substances are present in higher concentrations in the recovered waste than in the non-waste comparator in respect of each proposed use, or that contaminants are also present, then the waste will remain a waste. However, in some cases for a proposed use it may be possible to aggregate certain analytical results for certain substances which have a similar overall environmental impact. This approach can only be considered individually on a case-by-case basis for each proposed use and a full scientific justification for the proposed approach must be provided that meets all the end of waste criteria set out in “Is It Waste”.

SEPA should be consulted before embarking on the next step.

Step 3 - Conditions of Use and Environmental Emissions

The analytical results for any of the chemical/physical/biological parameters may indicate how any differences in composition between the recovered waste and the comparator in respect of each proposed use could affect the conditions of use and associated emissions to the environment. For example, if any modification of the intended process is required in order to use a recovered fuel oil, e.g. changes to oxygen levels, combustion temperatures, fuel mix, then this indicates that full recovery has not taken place and that the recovered material remains waste. If further processing is required before use the substance or object is still waste. A requirement for further processing before use indicates that not all the relevant parameters were considered in the comparative analysis step.

If the composition of the recovered waste differs from the raw material it may still be possible to demonstrate that full recovery has taken place, if all of the end of waste criteria are met and it can be used for each proposed use under the same conditions of environmental protection as the non-waste comparator and without any greater risk of harm to human health or the environment. An assessment may be made of the environmental impact expected from each of the proposed final uses of the recovered waste, based on the analytical results.

Trials

It may be necessary to undertake emissions testing where the analytical data does not clearly demonstrate that the recovered waste can be used under the same conditions of environmental protection as the non-waste comparator for each proposed use. All proposals for trials must be undertaken in accordance with

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relevant legislation, any existing environmental licences and in accordance with a trial protocol submitted to and approved by SEPA. A licence/permit may have to be applied for, or varied to permit a trial.

A full report detailing the outcome of the trials must be submitted to SEPA on completion of the trial. The report shall include the information required in the agreed protocol. Any modifications to the protocol must be notified to, and agreed with, SEPA prior to implementing the change.

If, after undertaking these steps all of the end of waste criteria have been met and it has been demonstrated that the recovered waste can be used under the same conditions of environmental protection for each proposed use as the non-waste material, then the material may be considered to be fully recovered and therefore no longer subject to waste regulatory controls for that particular proposed use.

Any decision that SEPA makes regarding whether a waste has been fully recovered, and has therefore ceased to be a waste, will be based on the information provided by the person making the claim, and will specifically relate only to the specific uses identified. SEPA reserves the right to request additional analysis as required. Where the recovery of the waste or its use is in a process regulated by SEPA, conditions may be placed in the environmental permit/licence specifying the analyses (including frequency of testing) to be done in order for SEPA to remain satisfied that the material ceases to be waste.

Note that even if waste has economic value, or can be processed with no danger to environment or human health, or has undergone a complete recovery operation – the substance or object will still be waste if the holder discards or is required or intends to discard the substance or object.

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