# Warwickshire Waste Partnership

# 18th June 2014

# Co-mingled collections and Technical, Environmental and Economic Practicability (TEEP)

## Recommendations

- a) That the Waste Partnership notes the guidance in this report
- b) Individual Authority Members consider the best way forward for their own Authority in completing this process prior to January 1st 2015.

# 1.0 Key Issues

### 1.1 Background

Councils collecting waste paper, metal, plastic or glass from 1st January 2015 will have a duty that they must do so by separate collection where it is necessary to ensure that waste undergoes recovery operations in accordance with WFD articles and to facilitate or improve recovery and is technically, environmentally and economically practicable.

- 1.2 The key issue local authorities are likely to be concerned with is whether they must collect the four materials separately from one another, or whether they can collect some or all of them co-mingled. Whilst the Regulations express a clear presumption in favour of material being collected in separate streams, there are circumstances under which it may be permissible to collect materials co-mingled. Decisions about whether co-mingled collections are justifiable need to be taken locally, based on the particular circumstances in each area. Authorities can apply the Necessity and Practicality ("TEEP") tests to determine if this is needed in their circumstances.
- 1.3 Authorities will want to ensure that they are compliant with the law. In addition to their normal desire to achieve high standards of compliance, Authorities will also need to be aware of the possibility of judicial review or regulatory enforcement. The Environment Agency is responsible for enforcing compliance with the Regulations in England. They may use compliance, stop and/or restoration notices where they identify non-compliant practice. Local authorities will in any case wish to take steps to examine the compliance of their waste collections with the requirements of the law to underpin and justify any decision they take regarding their future shape (which may in some cases



include retaining their current collection model). In particular, authorities considering a change in their collection method in the lead up to and most particularly after January 2015 will need to be particularly mindful. Where this could lead to paper, metals, plastics or glass being collected co-mingled with one or more other materials when it had previously been collected as a separate stream consideration will need to be given to whether the proposed new system is compliant. However, all local authorities may wish to ensure they have carried out a robust assessment of their collection systems before 1st January 2015, even if they currently separately collect the four materials, in case application of the Necessity and Practicality (TEEP) tests reveals that changes are required. They will also want to ensure that they establish a process for future reviews of compliance, which may need to take place at periodic intervals or when relevant circumstances change – for example, when a collection, treatment or recycling contract ends, if vehicles are to be replaced, or if access to a new recycling facility or technology becomes available.

## 2.0 Proposal

#### 2.1 Compliance

This report provides a practical guide that Warwickshire Authorities can follow to ensure compliance.

In order to comply with the Regulations the following tests must be carried out on the four materials (paper, cans, glass & plastics); however, Authorities can, should they so wish, carry the tests out on all materials collected within their particular scheme.

The guidance provided within this report assumes that the tests are carried out solely on the four materials.

#### 2.2 The Necessity Test

The first part of the process that needs to be carried out is the necessity test. For each material, is separate collection (the default option) 'necessary to ensure that waste undergoes recovery operations in accordance with Articles 4 and 13 of the Waste Framework Directive and to facilitate or improve recovery'? (Regulation 13).

If the Authority is carrying out separate collections then it is already operating a compliant system and will need to go no further unless it wishes to.

If the Authority is not carrying out separate collection then it must carry out the following;

Examine the quantity & quality of Recycling. This process will show if separate collection is necessary to 'facilitate' or 'improve' recovery. Compared with other approaches, what would be the effect of separate collection of each material?



If in answering this question for all four materials it can be proven that separate collection would not lead to an increase in both quality and quantity of each material then there is no need to carry out separate collections. If it can be proven that quantity and quality would not be increased on 2 or 3 of the four materials then it is acceptable to collect those co-mingled.

Proving quantity can be carried out via each Authority recycling collection records, however proving quality would require the assistance of the MRF operator. The MRF Operator would have to provide the necessary proof that in the case of the four materials the process of the MRF is so effective that;

**Paper:** is sold to the re-processor as top quality product such as newsprint. None of the collected material sold on as low quality paper.

**Cans:** properly separated and sold on to both steel and aluminium reprocessors and market prices achieved.

Glass: sold on to the glass industry as re-melt only. Not aggregate.

**Plastics**: sold on as quality mixed plastics achieving market prices for the product.

If it can be proven that the Authority meets one of the criteria through its comingled collection, say quantity but cannot meet the quality criteria then the necessity test is not conclusive but separate collections may be necessary. At this point the Authority must move to the Practicability Test commonly known as the TEEP Test.

### 2.3 The Practicality Test (TEEP)

Is separate collection technically, environmentally and economically practicable? (Regulation 13)

The TEEP test must be applied separately to each of the four materials or any of the materials that required possible separate collection after the Necessity Test.

It is not the purpose of the TEEP test to prove that an Authority's co-mingled collection system is compliant but that separate collections in an Authority area are or are not compliant. If any of the four materials fails any one of the TEEP tests then separate collection of that material is no longer necessary.

The outline details of each test are as follows;

#### 2.4 Technical

Is separate collection technically practicable?

The first question to answer is "Has your Authority ever carried out a separate collection of these materials in the past?" If the answer is yes to all four



materials then put simply there is no technical reason why the Authority could not re-introduce such a collection system.

If the Authority has collected never collected materials separately, then the following question needs answering, "Is separate collection of materials carried out by another Authority with similar characteristics?" If the answer is yes then transpose their system into your own Authority area, are there any technical reasons why such a system will not work? if you cannot prove this to be the case there is no technical reason why the Authority cannot introduce such a collection system.

Another area to consider and question is "Does your Authority area have unusual characteristics that would make separate collections impracticable?" If so then then separate collections fail the TEEP test on technical grounds allowing co-mingled collections to continue.

It is unlikely that Warwickshire WCA's will be able to use Technical as a justifiable reason as all have carried out kerbside separate collections in the past.

#### 2.5 Environmental

Is separate collection environmentally practicable?

There is no easy way to show that separate collections of the four materials is or isn't environmentally practicable. The European Commission guidance on the Waste Framework Directive stated that:

'Environmentally practicable' should be understood such that the added value of ecological benefits justifies possible negative environmental effects of the separate collection (e.g. additional emissions from transport). A system will therefore be environmentally practicable if the benefits from increased or improved recycling outweigh any negative impacts'.

As such the environmental practicability issue becomes subjective and the results open to challenge. It will be necessary to question such areas as;

Would separate collection for recycling achieve a net environmental benefit?

Does a co-mingled collection approach yield a better environmental outcome?

In order to answer such questions each Authority would have to compare such issues as CO2 emissions, air pollution, water pollution and noise between separate kerbside collection systems against that of a co-mingled collection systems. The environmental practicability element of the TEEP test must also be a fair comparison, looking at equivalent parts of different systems under consideration. For example, in addition to the impacts of the collection process, it must take account of the transport emissions related to haulage of materials after they have been collected and the energy used by any MRF that is needed to sort co-mingled materials, as well as taking account of MRF loss rates. Finally, the greenhouse gas savings associated



with the specific uses envisaged for the materials should be accounted for – these are likely to be greater for "high quality" recycling (e.g. remelt glass applications will avoid more greenhouse gas emissions)

#### 2.6 Economic

Is separate collection economically practicable?

The European Commission guidance on the Waste Framework Directive says that:

"Economically practicable" refers to a separate collection which does not cause excessive costs in comparison with the treatment [including recycling] of a non-separated [co-mingled] waste stream, considering the added value of recovery and recycling and the principle of proportionality."

The following questions need to be answered;

Would a separate collection system result in excessive costs when compared to a co-mingled collection system?

Are any additional costs proportionate to the environmental benefits (if any) of a separate collection system?

Factors to consider when answering such questions include;

Capital costs already incurred (Vehicles, bins etc.)

Capital required to start- up new scheme (vehicles, collection boxes etc.)

Revenue costs associated with publicity for new service.

Possible compensation payable to collection and or MRF operators, in case of early contract termination.

#### 2.7 Council Sign Off

It will be necessary to get formal "sign-off" of the full process from the Head of Service as an absolute minimum. It would also be prudent to have the Head of Legal also sign the process off as it will be that department that would have to defend any legal challenge. Many Authorities will also require this process to be signed off at Member level.

### 3 Conclusion

3.1 The requirements of the WFD and the regulations present one of the greatest challenges faced by Authorities recently especially those using co-mingled collections. It is therefore necessary for the Authorities concerned to go through the process set out in the report.



3.2 The process has to be completed by January 1<sup>st</sup> 2015, Authorities will either have to secure the resources to carry out this work internally or employ external consultants.

# **Background Papers**

- 1. The Waste Framework Directive and Co-mingled Collections Report to Warwickshire Waste Partnership Meeting of September 18<sup>th</sup>, 2012.
- DEFRA views on co-mingled collections and Technical, Environmental and Economic Practicability (TEEP) Report to the Warwickshire Waste Partnership Meeting of December 3<sup>rd</sup> 2013.

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