

**ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD**

**INFORMATION PAPER**

**WASTE AND RESOURCES ACTION PROGRAMME (WRAP): RISK  
ASSESSMENTS ON THE USE OF SOURCE SEGREGATED COMPOSTS  
IN AGRICULTURE**

The attached paper updates Members on the risk assessment work carried out under the WRAP Confidence in Compost Programme, which aims to assess the various risks associated with different compost types and support development of guidance to minimise such risk. WRAP has been funding this programme since spring 2008.

This programme includes three risk assessments, procured by WRAP, that will provide the technical basis for future guidance on the use of composts from different source segregated feedstocks across a range of agricultural sectors. These projects are now reaching completion and, subject to peer review, are expected to be reported by the end of 2009.

Members are requested to note the risk assessment work described in this paper and the FSA's intention to present a discussion paper on the microbiological aspects of WRAP's peer-reviewed risk assessments at a future meeting.

**Secretariat  
September 2009**

## **ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD**

### **WASTE AND RESOURCES ACTION PROGRAMME (WRAP): RISK ASSESSMENTS ON THE USE OF SOURCE SEGREGATED COMPOSTS IN AGRICULTURE**

#### **Issue**

1. To brief the Committee on a suite of related risk assessments conducted under WRAP's Confidence in Compost Programme.

#### **Background**

##### **WRAP 'Confidence in Compost' Programme**

1. WRAP has been funding a programme of work titled 'Confidence in Compost' since spring 2008. The primary objective of this work is to fully assess the physical, microbiological and chemical risks to public, animal and environmental health associated with use of different types of compost in all agricultural sectors to support the development of guidance covering compost use to minimise those risks.

2. This programme includes three risk assessments, procured by WRAP that will provide the technical basis for future guidance on the use of composts from different source segregated feedstocks across a range of agricultural sectors. These projects are now reaching completion and, subject to peer review, are expected to be reported at the end of 2009. Development of sector-specific guidance on use of composts for growing potatoes and combinable crops is underway and it is anticipated that guidance for ready-to-eat crops and livestock production will be developed during 2010.

##### **Agency involvement**

3. The Agency's general position to date has been that, based on the evidence that is currently available, the treatment and recovery of waste materials, including animal by-products (ABP) and catering waste for application on agricultural land should not pose unacceptable risks to food safety providing

such application and the composting or biogas treatment is carried out in accordance with regulatory requirements.

4. WRAP's current risk assessment programme has provided an opportunity to re-assess this issue in light of the most up to date scientific evidence and Agency officials have provided technical and legislative input on relevant food safety matters. As this work has progressed, stakeholders have highlighted a range of concerns relating to the potential risks to food safety and animal health associated with the use of composts. While these concerns relate to the microbiological and chemical risks associated with both composted green and ABP-derived wastes, it is the application of food-derived wastes containing meat that have caused particular concern.

#### **Legislative and policy context**

5. UK targets to recover value from municipal waste, coupled with the legal requirements of the EU Landfill Directive (1999/31/EC) have raised the importance of waste reduction and sustainable methods of waste management such as recycling and composting. With the number of composting and anaerobic digestion plants set to increase as the UK moves away from landfill, and with the costs of fertiliser continuing to rise, the benefits associated with the use of composts made from green and ABP-derived wastes in agriculture are now more widely recognised.

6. In the UK, the production of compost is controlled through the regulation of composting and anaerobic digestion plants (by EA in England and Wales, SEPA in Scotland and the NIEA in Northern Ireland), as well as a British Standards Institution Publicly Available Specification (BSI PAS 100:2005), which sets a standard for compost quality.

7. In addition, there are further legal controls in place for the composting of ABP and catering waste regulated through the EU Animal By-Products Regulation (EC) 1774/2002. This Regulation permits the treatment of low-risk (category 3) ABP in an approved composting or biogas plant according to the required standard (treatment at 70°C for 1 hour, with a maximum particle size of 12mm).

8. Regulation (EC) 1774/2002 also allows Member States to set their own national treatment standards for composting plants treating only ABP derived from catering waste containing meat (but not other animal by-products, except for manure, digestive tract content, milk or colostrum), providing the same level of pathogen reduction can be achieved. In the UK, national standards were developed by DEFRA following an independent risk assessment commissioned in 2002, and a public consultation exercise. Based on the findings of this risk assessment, from 1 January 2007, the UK permitted the use of treatment standards that differed from the EU standard. These require minimum time/temperature and particle size standards for treating catering wastes that are based on the type of system used (e.g. closed reactor, biogas, windrow), with additional barriers for wastes that contain meat.

9. The DEFRA risk assessment underpinning the UK national standard was evaluated by the ACMSF in 2003. Overall, the Committee considered the approach adopted as robust in relation to the scenarios covered. However several issues relating to food safety matters were considered not to have been adequately addressed and the Committee's recommendations were communicated to DEFRA for consideration.

### **Action**

10. To note the risk assessment work described in the attached update from WRAP and the Agency's intention to present a discussion paper on the microbiological aspects of WRAP's peer-reviewed risk assessments at a future ACMSF meeting.