

### Definitions and rationale

1. Agricultural waste is waste from farming, forestry, horticulture and similar activities.<sup>1</sup>
2. Manure and slurry are important nutrient resources. They are not classified as waste where they are applied to land as a fertiliser for the benefit of agriculture on clearly identified parcels of land and where storage is limited to the needs of those spreading operations. However, legal controls such as the Nitrate Vulnerable Zone Action Programme<sup>2</sup> and Groundwater Regulations 1998<sup>3</sup> must be complied with. If the material is mixed with controlled waste it will also become waste.
3. Agricultural waste had been excluded from national waste management controls for many years. However, the Waste Management (England and Wales) Regulations 2006 (SI 2006 No. 937) which came into force on 15 May 2006, brought agricultural waste controls into line with waste from all other sectors of industry (collectively classified as 'industrial waste'). Under the transitional provisions farmers and growers had until 15 May 2007 to apply to the Environment Agency for a waste management licence, or to register exemptions from waste management licensing, to continue to recover or dispose of agricultural waste on-farm. Additionally, those wishing to become "professional" agricultural waste carriers or agricultural waste brokers had six months from 15 May 2006 in which to do so. Finally, the Hazardous Waste (England and Wales) Regulations 2005 applied to agricultural waste from 15 May 2007.
4. Since the introduction of the new regulations, all substances or objects from agricultural premises that are discarded by the holder, have become subject to control as waste.
5. Agricultural waste includes many non-organic types of waste coming from both the intensive and less intensive farming sectors. This includes wastes such as plastics (including fertiliser bags and silage wrap), pesticide and oil containers, pesticide washings, asbestos, scrap metal, batteries, veterinary waste, used oil, paper and cardboard.

### Arisings, trends and projections

6. Modelling carried out by the Environment Agency based on the Defra 2003 Agricultural census, estimated non-natural agricultural wastes arising in England to be nearly 265,000 tonnes in 2003. The composition of these wastes is shown in Table C5.1 below.

<sup>1</sup> EPA 90 defines agricultural waste as waste from premises used for agriculture within the meaning of the Agriculture Act 1947. This includes 'horticulture, fruit growing, seed growing, dairy farming and livestock breeding and keeping, the use of land as grazing land, meadow land, osier land, market gardens and nursery grounds, and the use of land for woodlands where that use is ancillary to the farming of land for other agricultural purposes'.

<sup>2</sup> See [www.defra.gov.uk/environment/water/quality/nitrate/nvz.htm](http://www.defra.gov.uk/environment/water/quality/nitrate/nvz.htm) for further information.

<sup>3</sup> See [www.defra.gov.uk/environment/water/ground/pdf/groundwater-guidance.pdf](http://www.defra.gov.uk/environment/water/ground/pdf/groundwater-guidance.pdf) for further information.

**Table C5.1: Estimated agricultural waste arisings, 2003<sup>4</sup>**

<b>Waste stream</b>	<b>(Tonnes)</b>
Plastic packaging	25,200
Paper and card packaging	7,800
Non-packaging plastics	60,600
Animal health products	1,760
Oil	21,401
Sheep dip	45,906
Pesticides	88,697
Milk	13,490
<b>Total agricultural waste</b>	<b>264,854</b>
<b>Total plastics waste</b>	<b>85,800</b>
<b>Total packaging waste</b>	<b>33,000</b>

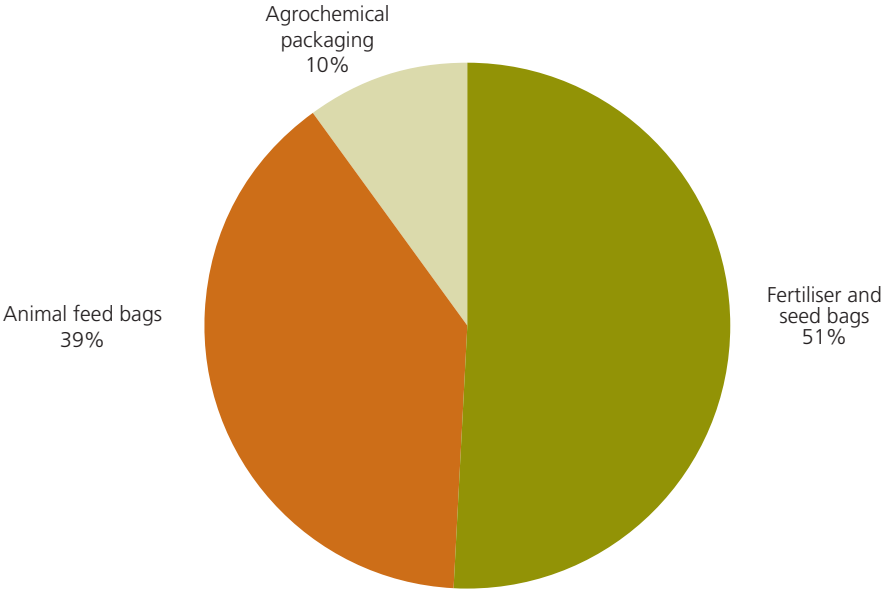
Source: England estimates of agricultural waste arisings based on Environment Agency modelling on the 2003 Defra agricultural census.

7. Charts C5.1 and C5.2 below show the composition of agricultural non-packaging plastic waste and agricultural packaging plastic waste in 2003.

8. Farm plastic waste is estimated to account for 32% of the total non-natural agricultural waste produced on farms in England each year. Of this plastic waste, 76% is non-packaging plastic such as silage wrap, crop covers, tree guards etc.

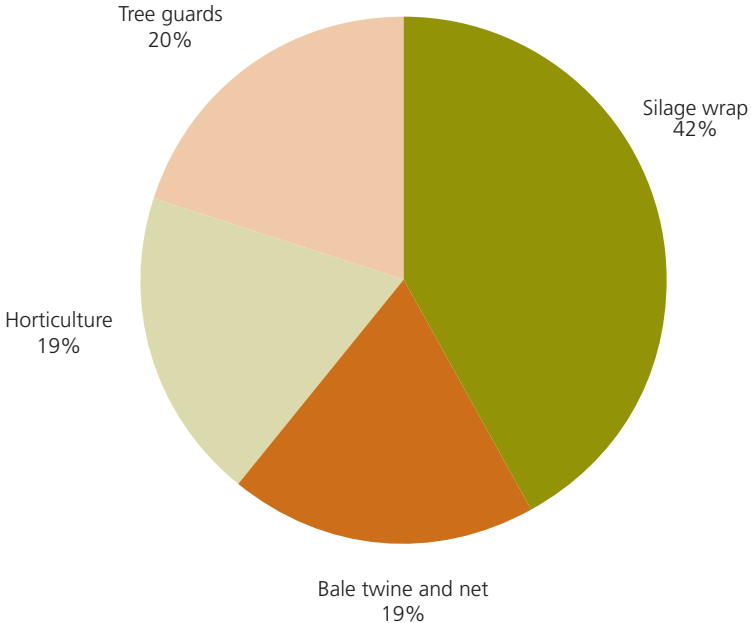
<sup>4</sup> Note that this does not include machinery or building waste due to difficulties in collecting this data. It is estimated that these waste streams equate to under 80,000 tonnes.

**Chart C5.1: Composition of agricultural packaging plastics waste (25,200 tonnes), England (2003)**



Source: England estimates of agricultural waste arisings based on Environment Agency modelling on the 2003 Defra farm survey.

**Chart C5.2: Composition of agricultural non-packaging plastics waste (59,000 tonnes), England (2003)**



Source: England estimates of agricultural waste arisings based on Environment Agency modelling on the 2003 Defra farm survey.

### Management routes

9. Farmers have five options available to them when dealing with their waste:
- store the waste, pending collection, on the site where it is produced for up to twelve months. After this period the waste has to be recovered or disposed of using one of the other options below;
  - take the waste for recovery or disposal at a licensed site;<sup>5</sup>
  - transfer waste to a waste management company or other licensed third party for recovery or disposal off-farm at an appropriately licensed site;
  - register an appropriate licensing exemption with the Environment Agency to recover waste on-farm; or
  - apply to the Environment Agency for a waste management licence or a permit to dispose of waste.
10. The Government aims to incorporate management of agricultural waste with the management systems for other controlled waste streams where possible. Once collected, non-organic wastes may be treated in a similar manner to other waste streams.

### Farm plastics

11. Prior to the introduction of the Waste Management (England and Wales) Regulations 2006, it was estimated that only around 20% of farm plastics were collected for recovery. Until recently there was only a limited number of voluntary collection schemes in operation, many of which were heavily subsidised because of the low economic value of the material and high collection costs. Consequently, there is a history of collection activities collapsing.

12. Plastic waste arising on farms can be bulky and dirty, making management very difficult and costly. For example, contamination levels on waste silage film can be as high as 80%, which can dramatically increase the costs associated with reprocessing and transportation. To exacerbate the issue, farming communities are often located in remote and isolated areas which lack waste management facilities. Consequently, the Business Resource Efficiency and Waste (BREW) programme is funding the Farm Plastics Collection and Recycling programme which is identifying the most cost-effective methods of collecting and recovering this problematic waste stream.

13. In 2008 the Government will be putting in place a statutory producer responsibility scheme for non-packaging farm plastics, which is likely to place obligations on producers to increase collection and recycling of waste farm plastics to target levels. It is intended that any collection systems developed will co-collect packaging and non-packaging farm plastics

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<sup>5</sup> Farmers do not have to register as waste carriers to transport their own waste as an incidental part of their business as a farmer.

### Policies and targets

14. Normal waste controls will apply to agricultural waste under the Waste Management (England and Wales) Regulations 2006 in full from 15 May 2007.

15. Further provisions are to be made for exemptions from waste management licensing for agricultural waste. The Defra/Environment Agency review of exemptions from waste management licensing will include consideration of agricultural waste licensing.

16. The Agricultural Waste Stakeholders' Forum, now under the leadership of the Environment Agency, has re-focused its work and reconstituted its sub-groups to concentrate on the implementation and monitoring of the Waste Management (England and Wales) Regulations 2006 and to assist the agricultural sector to develop sustainably by recommending practical strategies for managing agricultural waste.

17. A dedicated *Waste Module* has been included in Defra's Whole Farm Approach.<sup>6</sup> This module enables farmers and growers to register agricultural waste licensing exemptions online, providing guidance throughout the simple registration process.

18. As part of the Defra-funded Environment Sensitive Farming Programme, ADAS delivers workshops, seminars and on-farm talks to farmers and growers, advising them on how best to comply with the regulations, how to register exemptions and how to minimise waste production.

19. The Environment Agency, together with the Agricultural Waste Stakeholder Forum, produced an online *Waste Directory*<sup>7</sup> to help agricultural and horticultural businesses find ways of managing their waste.

20. Supported by the BREW-funded Farm Plastics Collection and Recycling Programme,<sup>8</sup> the Government is developing producer responsibility (PR) regulations to increase collection and recycling of non-packaging farm plastics throughout the UK. An Advisory Group on Farm Plastics (AGFP) has been set up as a sub-group of the Advisory Committee on Packaging to advise the Government on the development of these regulations.

21. There are no specific targets for agricultural waste. However, the application of normal waste controls to agricultural waste has brought immediate benefits by prohibiting uncontrolled on-farm disposal. As farmers and growers become more familiar with operating under the normal controls it is expected that there will be an increased emphasis on avoidance and recovery of agricultural waste.

22. Targets for the collection and/or recovery of non-packaging farm plastics are currently being developed. The matter is under discussion by the Advisory Group on Farm Plastics. Appropriate targets will be set with the intention that most non-packaging farm plastics arising throughout the UK will be collected for disposal or recovery. Specific targets relating to collection or recovery will be based on the findings of the BREW-funded Farm Plastics Collection and Recycling Programme and an impact assessment taking into account the views of producers, represented through the Advisory Group on Farm Plastics.

<sup>6</sup> See <http://www.defra.gov.uk/farm/wholefarm/index.htm> for further information.

<sup>7</sup> See <http://ea.wastedirectory.org.uk/AboutUs.aspx> for further information.

<sup>8</sup> The BREW-funded Farm Plastics Collection and Recovery Programme aims to investigate the practicalities and economics associated with collecting and recovering all types of farm plastic waste within the framework of producer responsibility. See [http://www.wasterecycling.org.uk/stem.net/\(zs15fe2er00od3ajjoslv55\)/index.aspx?1ang=\\_e](http://www.wasterecycling.org.uk/stem.net/(zs15fe2er00od3ajjoslv55)/index.aspx?1ang=_e) for further information.

## Implementation and timescales

23. The transitional periods under the Waste Management (England and Wales) Regulations 2006 drew to an end on 15 May 2007. The Environment Agency has focused throughout this transitional period on education and awareness. Regulations for further exemptions for agricultural waste are expected to come into force before the end of the transitional period.

24. The development of policy on farm plastics in the Advisory Group on Farm Plastics (AGFP) will be informed by the recommendations that come out of the BREW-funded Farm Plastics Collection and Recovery Programme. This will run until July 2007 to take full account of the seasonal nature of farming and the different demands that the associated shifts in practices will have on collection. Final policy recommendations will be subject to discussions with the AGFP and a wider consultation exercise at the beginning of 2008. It is anticipated that new producer responsibility obligations will be in force by September 2008.

## Roles and responsibilities

**Table C5.2: Roles and responsibilities**

Organisation/ stakeholder	Roles and responsibilities
Agricultural sector, including farmers, growers and landowners	<ul style="list-style-type: none"> <li>• Comply with legislation</li> <li>• Adopt and implement initiatives for waste reduction</li> <li>• Identify and participate in schemes for waste reduction and recovery</li> <li>• Provide accurate data on waste arisings as required</li> </ul>
Waste management industry	<ul style="list-style-type: none"> <li>• Expand and develop infrastructure and facilities for the collection and treatment of agricultural wastes</li> <li>• Provide accurate data on waste collected and recycled, etc. as required</li> </ul>
Central government departments	<ul style="list-style-type: none"> <li>• Leadership, policy formulation, education, regulation and enforcement</li> <li>• Mobilisation of stakeholders</li> </ul>
Local authorities	<ul style="list-style-type: none"> <li>• Where appropriate, develop waste collection systems for agricultural waste producers, e.g. through collection systems</li> </ul>
Producers of non- packaging farm plastics	<ul style="list-style-type: none"> <li>• Comply with new producer responsibility regulations</li> </ul>
Environment Agency	<ul style="list-style-type: none"> <li>• Ensure compliance with the Regulations through inspections and advice</li> </ul>

## Infrastructure and capacity needs

25. All areas, particularly remote rural areas, need sufficient waste collection and treatment infrastructure. New policy developments in conjunction with the extension of controls to include agricultural waste have caused increased activity and investment in both collection and reprocessing infrastructure because of greater certainty in the market. At present there is very limited data available on the amount and types of plastic waste arising on farms in the UK. The BREW-funded Farm Plastics Collection and Recycling Programme is conducting a number of studies and trials intended to fill key information gaps. Anticipated outputs of this programme include a comparison of current waste agricultural plastic arisings and current collection and reprocessing capacity. Preliminary findings suggest that current reprocessing capacity is inadequate and targets for collection and/or recovery must be realistic.

26. The level of investment in collection and reprocessing capacity for farm plastics required to deliver the objectives of the forthcoming regulations will depend on a number of factors. These include what type of targets are set and what level these targets are set at. However, the BREW-funded project is intended to provide a clearer picture of what level of investment is needed.

## References and other information

### **Waste Management (England and Wales) Regulations 2006 (SI 2006 No. 937)**

<http://www.opsi.gov.uk/si/si2006/20060937.htm>

### **Defra, Agricultural Waste**

<http://www.defra.gov.uk/environment/waste/topics/agwaste.htm>

### **Environment Agency**

<http://www.environment-agency.gov.uk/>

### **Netregs – free and confidential advice to business on compliance with environmental legislation**

<http://www.netregs.gov.uk/>

### **Agricultural Waste Plastics Collection and Recovery Programme (supported by BREW funding)**

<http://www.agwasteplastics.org>

### **EA Agricultural Waste Survey 2003**

<http://www.publications.environment-agency.gov.uk/pdf/GEH01003BIEP-e-e.pdf>

### **Improving data on agricultural waste and resources report**

[http://www.environment-agency.gov.uk/commondata/acrobat/ag\\_waste\\_data\\_588584.pdf](http://www.environment-agency.gov.uk/commondata/acrobat/ag_waste_data_588584.pdf)

