EXPLANATORY MEMORANDUM TO

THE WASTE MANAGEMENT (ENGLAND AND WALES) REGULATIONS 2006

2006 SI No.937

1. This explanatory memorandum has been prepared by the Department for Environment, Food and Rural Affairs and is laid before Parliament by Command of Her Majesty.

2. Description

- 2.1. The effect of section 75(7)(c) of the Environmental Protection Act 1990 ("the 1990 Act") is to exclude waste from premises used for agriculture and waste from mines and quarries from the waste management controls that apply to "controlled waste". The main purpose of the Waste Management (England and Wales) Regulations 2006 ("the Regulations") is to repeal that exclusion and to apply to "agricultural waste" and to "mines or quarries waste", the national controls that are already in place to comply with the Waste Framework Directive (75/442/EEC as amended) and the Landfill Directive (1991/31/EC) in England and Wales. The Regulations also amend section 33(2) of the 1990 Act to preclude persons from disposing of household waste within the curtilage of domestic property in a manner likely to cause environmental pollution or harm to human health.
- 2.2. The exclusion in section 75(7)(c) of the 1990 Act ("the exclusion"), and the current terms of section 33(2) of the 1990 Act, have been the subject of infraction proceedings against the United Kingdom ("the UK") by the European Commission on the Waste Framework Directive. The European Court of Justice ("ECJ") issued an adverse judgment on this infraction on 16 December 2004 (Case C-62/03). The exclusion in section 75(7)(c) of the 1990 Act also applies to the legislation transposing the Landfill Directive in England and Wales.
- 2.3. The Regulations also make some amendments to existing Regulations. The main such amendments are (a) to ensure continuing compliance with the Waste Framework Directive following the repeal of the Animal Waste Directive (90/667/EEC) and the introduction of the EU Animal By-Products Regulation ((EC) No. 1774/2002) which lays down health rules concerning animal by-products not intended for human consumption; and (b) to repeal regulation 15 of the Waste Management Licensing Regulations 1994 (S.I. 1994 No. 1056 (as amended)) ("the 1994 Regulations") and to amend the Groundwater Regulations 1998 (S.I. 1998 No. 2746 (as amended)) to bring waste management licensing into line with other types of "authorisations" for the purposes of complying with the Groundwater Directive (80/68/EEC).

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1. None.

4. Legislative Background

4.1. The Regulations are made under section 2(2) of the European Communities Act 1972 and in exercise of the Secretary of State's powers under section 1(3)(a) of the Control of Pollution (Amendment) Act 1989 and sections 33(3), 75(8) and 156 of the 1990 Act.

- 4.2. The main purpose of the Regulations is to amend existing national legislation to apply to agricultural waste, and to mines and quarries waste, the controls currently in place to fulfill the requirements of the Waste Framework Directive and the Landfill Directive.
- 4.3. The Waste Framework Directive was originally adopted in 1975 and was substantially amended in 1991. The Directive's objective is to ensure that waste is recovered or disposed of in ways which protect the environment and human health. To fulfil this objective the Directive applies, or requires Member States to apply, a range of controls to the "management" of waste defined in the Directive as "the collection, transport, recovery and disposal of waste, including the supervision of such operations and after-care of disposal sites". The main requirements of the Directive were transposed in the 1994 Regulations.
- 4.4. During the infraction proceedings referred to in paragraph 2.2 above, the Government accepted that the exclusion contravened the Directive and gave a commitment to the European Commission to repeal it and to introduce the Regulations necessary:-
 - to apply the existing waste management controls which the UK has in place to transpose the requirements of the Waste Framework Directive:-
 - to the waste which is currently excluded from the definition of "controlled waste" by virtue of section 75(7)(c) of the 1990 Act and:-
 - which is not excluded from the scope of the Directive's controls by virtue of Article 2(1)(b).
- 4.5. The effect of Article 2(1)(b) of the WFD is to exclude from the Directive's scope:-
 - "...where they are already covered by other legislation:
 - (ii) waste resulting from prospecting, extraction, treatment and storage of mineral resources and the working of quarries;"
- 4.6. The meaning of the term "already covered by other legislation" was the subject of a judgment by the ECJ in Case C-114/01 *AvestaPolarit Chrome Oy* in which the Court ruled in part that:-

"2. In so far as it does not constitute a measure of application of Directive 75/442, as amended by Directive 91/156, and in particular Article 11 of that directive, national legislation must be regarded as other legislation within the meaning of Article 2(1)(b) of that directive covering a category of waste mentioned in that provision, if it relates to the management of that waste as such within the meaning of Article 1(d) of Directive 75/442, and if it results in a level of protection of the environment at least equivalent to that aimed at by that directive, whatever the date of its entry into force."

4.7. In the Government's view, the Town and Country Planning Acts and related legislation meet the test set by the ECJ for national legislation in the *AvestaPolarit* case; and that legislation is "other legislation" for the purposes of the management of **mineral** mines and quarries waste. In the Government's view, therefore, the effect of the Regulations is to apply the Waste Framework Directive's controls to **non-mineral** mines and quarries waste.

- 4.8. The Landfill Directive sets stringent operational and technical requirements for landfills, to prevent or to reduce as far as possible negative effects on the environment, in particular the pollution of surface water and groundwater, as well as any resulting risk to human health. The main technical and regulatory requirements of the Landfill Directive were transposed in the Landfill (England and Wales) Regulations 2002 (S.I. 2002 No. 1559) ("the 2002 Regulations").
- 4.9. <u>Regulation 2</u> amends sections 33, 33B, 33C, 63 and 75 of the 1990 Act.
- 4.10. **Regulation 2(2)**: The amendments to section 33 concern household waste from a domestic property treated, kept or disposed of within the curtilage of that property. The amendments address another aspect of the ECJ's adverse judgment on the Waste Framework Directive infraction referred to in paragraph 2.2 above. The Court found that, because of the current terms of section 33(2) of the 1990 Act, the UK had failed to fulfil its obligations under Article 4 of the Directive (i.e. the requirement to "take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste.")
- 4.11. Regulation 2(2) amends section 33(2) of the 1990 Act to provide that section 33(1)(c) applies to household waste from a domestic property; and so to prohibit the disposal etc. of such waste by private individuals, within the curtilage of the property, in a manner likely to cause pollution of the environment or harm to human health. The prohibition already applies to any mineral or synthetic oil or grease, asbestos and clinical waste by virtue of regulation 3(1) of the Controlled Waste Regulations 1992 (S.I. 1992 No. 588).
- 4.12. The amendments to section 33 mean that, in relation to household waste, "establishments and undertakings" must comply with all the requirements of section 33(1) of the 1990 Act, but that persons who are not establishments or undertakings must only comply with the requirements of section 33(1)(c). Failure to comply with these requirements is an offence punishable (in the case of establishments and undertakings) in accordance with section 33(8) of the 1990 Act, or (if the person is not an establishment or undertaking) in accordance with section 33(9). Section 33(9) provides for the following penalties; on summary conviction, a fine not exceeding the statutory maximum (£5,000 at the date of these Regulations), and on conviction on indictment a fine.
- 4.13. **Regulation 2(3)**: Sections 33B and 33C of the 1990 Act contain provisions which apply where a person is convicted of certain specified offences under section 33. Section 33B of the 1990 Act is amended so that a person who is not an establishment or undertaking and who commits a relevant offence shall not be ordered by a magistrates' court to pay more than £5,000 in clean-up costs. **Regulation 2(4)**: Section 33C of the 1990 Act is disapplied where a person who is not an establishment or undertaking is convicted of a relevant offence. "Relevant offence" for these purposes is defined in section 33(10) of the 1990 Act.
- 4.14. **<u>Regulation 2(5)</u>**: Sections 63(1) and (4) of the 1990 Act (which no longer have practical application following the amendments to section 75 of that Act) are repealed.
- 4.15. **<u>Regulation 2(6)</u>**: The amendments to section 75 of the 1990 Act bring agricultural waste and mines and quarries waste within the scope of "controlled waste" and confirm the classification of these wastes as "industrial waste" for the purposes of Part II of the 1990 Act (The effect of section 63(4) of the 1990 Act is currently to classify, for waste collection purposes, waste excluded under section 75(7)(c) as industrial waste.)

- 4.16. <u>Regulation 3</u> amends the Environment Act 1995 ("the 1995 Act") so that, in respect of agricultural waste, no charges may be imposed under a charging scheme in relation to a relevant environmental licence. "Relevant environmental licence" is defined for these purposes in section 41(10) of the 1995 Act (see regulation 3(3)).
- 4.17. **<u>Regulation 4</u>** amends the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 so that the registration requirements of the Control of Pollution (Amendment) Act 1989 do not apply to those who only transport animal by-products waste, mines or quarries waste, or agricultural waste on a professional basis. Instead the registration requirements of paragraph 12 of Schedule 4 to the 1994 Regulations will apply in these circumstances (see regulation 6(10)(d)).
- 4.18. **<u>Regulation 5</u>** amends the Controlled Waste Regulations 1992. The amendments in regulations 5(2) and 5(3) are consequential on the amendments to section 75 of the 1990 Act. The amendment in regulation 5(4) provides that section 34 of the 1990 Act (duty of care etc. as respects waste) does not apply to waste which comprises animal by-products collected and transported in accordance with the Community Regulation (as defined in Regulation 5(4)). The amendment in regulation 5(5) provides that any Directive waste is to be classified as industrial waste if it is not otherwise classified as household or commercial waste.
- 4.19. **<u>Regulation 6</u>** amends the 1994 Regulations in a number of respects. These include: (a) inserting the definitions of "agricultural waste" and "mines or quarries waste" into the Regulations (regulation 6(2)(b)); (b) revoking regulation 15 of the 1994 Regulations, which makes provision in relation to the issue of a waste management licence for activities affecting groundwater (regulation 6(3)); (c) inserting a new regulation 18A which sets out certain record-keeping requirements in relation to activities which are exempt from waste management licensing (regulation 6(6)); and (d) inserting new paragraphs into Schedule 3 of the 1994 Regulations to provide for exemptions from waste management licensing for activities involving— the recovery of animal by-products (regulation 6(9)(b)), the treatment of land with liquid milk (regulation 6(9)(e)), and the deposit of plant tissue (regulation 6(9)(e)). In addition, regulation 6(11) inserts into Schedule 4 of the 1994 Regulations the lists of waste disposal and waste recovery operations in the Waste Framework Directive which are current at the date of these Regulations.
- 4.20. **<u>Regulation 7</u>** corrects a minor error in the Waste Management Regulations 1996.
- 4.21. <u>Regulation 8</u> amends the Groundwater Regulations 1998 to provide that a waste management licence is an authorisation for the purposes of those Regulations. This amendment is consequential on the revocation of regulation 15 of the 1994 Regulations.
- 4.22. <u>**Regulation 9**</u> amends the 2002 Regulations so that the Landfill Directive is implemented in relation to agricultural waste and mines and quarries waste.
- 4.23. **<u>Regulations 10 and 11</u>** change the dates from which the Hazardous Waste (England and Wales) Regulations 2005 and the Hazardous Waste (Wales) Regulations 2005 apply to agricultural waste and mines and quarries waste to coincide with the end of the 12-month transitional period provided in regulation 13.
- 4.24. <u>Regulation 12</u> amends the Waste Management Licensing (England and Wales) (Amendment and Related Provisions) (No. 3) Regulations 2005 so that transitional charges

are not payable on the notification of a notifiable exempt activity (as defined in the 1994 Regulations) where the waste which is recovered or disposed of in the course of the activity comprises agricultural waste only.

- 4.25. <u>Regulation 13</u> contains transitional provisions which apply to the deposit, disposal or recovery of agricultural waste, or mines or quarries waste, for a period of 12 months after the Regulations come into force.
- 4.26. A Transposition Note is attached at Annex 1 to this Memorandum.

5. Extent

5.1. The Regulations extend to England and Wales.

6. European Convention on Human Rights

6.1. The Minister for Local Environment, Marine and Animal Welfare has made the following statement regarding Human Rights:-

In my view the provisions of the Waste Management (England and Wales) Regulations 2006 are compatible with the European Convention on Human Rights.

7. Policy Background

- 7.1. As indicated in paragraphs 4.2-4.8 above, the Government accepts that the exclusion in section 75(7)(c) of the 1990 Act contravenes the Waste Framework Directive, and the Landfill Directive, and has given a commitment to the European Commission to repeal it and to introduce the Regulations necessary:-
 - to apply the existing waste management controls which the UK has in place to transpose the requirements of the Waste Framework Directive and the Landfill Directive:-
 - to the waste which is currently excluded from the definition of "controlled waste" by virtue of section 75(7)(c) of the 1990 Act and:-
 - which is not excluded from the scope of the Directives' controls by virtue of Article 2(1)(b) of the Waste Framework Directive.
- 7.2. The Government set up the *Agricultural Waste Stakeholders' Forum* to advise on the development of the Regulations. The Forum's membership and terms of reference are available on the Department's website at http://www.defra.gov.uk/environment/waste/agforum/index.htm
- 7.3. <u>Wider Policy Background</u>: The Department is currently engaged in the Environmental Permitting Programme. This will help to deliver a commitment in the Department's Five Year Strategy (Delivering the Essentials of Life) to create "a modernised permitting system, in line with EU requirements and sound environmental policy as well as the Government's principles of good regulation". The Programme is also a constituent element of the Department's initial regulatory Simplification Plan (Lifting the Burden), which sets out how the Department is cutting red tape and simplifying Regulations.

7.4. The Environmental Permitting Programme would establish a common permitting and compliance platform for the future. It is intended to consolidate the existing Pollution Prevention Control (PPC) permitting system and the waste management licensing system to provide a single, streamlined environmental permit for operations currently subject to PPC and waste management licensing control in England and Wales. The Programme is currently the subject of a consultation exercise – available on the Department's website at http://www.defra.gov.uk/corporate/consult/envpermitprog/index.htm Given the range of options being considered for consolidation, it would be premature to have a view on the programme's possible impacts on consolidation.

8. Consultation and Impact

- 8.1. A draft of the Regulations was the subject of a public consultation exercise between 9 December 2004 and 18 March 2005. The main consultation paper was sent to 495 organisations and a summary, with a pull-out questionnaire, was sent to 162,000 farmers and growers in England and Wales. There were 103 responses to the main consultation and 2,485 responses to the summary questionnaire. A consultation report has been prepared in compliance with the Cabinet Office *Code of Practice on Consultation* and is available on the Department's website at http://www.defra.gov.uk/environment/waste/topics/agwaste.htm
- 8.2. The final Regulatory Impact Assessment for the Regulations is attached at Annex 2 to this Memorandum.

9. Contact

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Transposition of (a) the Waste Framework Directive (75/442/EEC as amended); (b) the Landfill Directive (99/31/EC); and (c) the Groundwater Directive (80/68/EEC) by the Waste Management (England and Wales) Regulations 2006

1. This Transposition Note addresses only matters of relevance to the Waste Management (England and Wales) Regulations 2006 and only transposition in England and Wales.

WASTE FRAMEWORK DIRECTIVE

- 2. <u>Agricultural waste and mines and quarries waste</u>: The Waste Framework Directive was originally adopted in 1975 and was substantially amended in 1991. The Directive's objective is to ensure that waste is recovered or disposed of in ways which protect the environment and human health. To fulfil this objective the Directive applies, or requires Member States to apply, a range of controls to the "management" of waste – defined in the Directive as "the collection, transport, recovery and disposal of waste, including the supervision of such operations and after-care of disposal sites". The main requirements of the Directive were transposed in the Waste Management Licensing Regulations 1994 (S.I. 1991 No. 1056 (as amended)) ("the 1994 Regulations").
- **3.** However, the effect of section 75(7)(c) of the Environmental Protection Act 1990 ("the 1990 Act") is to exclude waste from premises used for agriculture and waste from mines and quarries from the waste management controls that apply to "controlled waste". As indicated in paragraphs 2.2Error! Reference source not found. and 4.4-4.7 above, this exclusion has been the subject of infraction proceedings against the UK and an adverse judgment by the European Court of Justice ("ECJ"). The Waste Management (England and Wales) Regulations 2006 ("the Regulations") repeal the exclusion and apply to "agricultural waste" and to non-mineral "mines or quarries waste", the national controls that are already in place to comply with the Waste Framework Directive; and so apply the requirements the Waste Framework Directive set out in paragraph 4(a)-(n) below.
- **4.** The "competent authorities" responsible for the implementation of the Waste Framework Directive are designated in paragraph 3 of Schedule 4 to the 1994 Regulations. The Environment Agency is the main competent authority in England and Wales. The main provisions of the Directive which will apply to agricultural waste and to non-mineral mines and quarries waste are as follows:-
 - (a) Waste: Article 1(a) of the Waste Framework Directive provides that:-

"waste' shall mean any substance or object.....which the holder discards or intends or is required to discard."

(b) The Directive's definition of waste is transposed by the amendments to the 1990 Act which are contained in paragraphs 88 and 95 of Schedule 22 to the Environment Act 1995.

(c) **Objectives**: The Waste Framework Directive's key objectives are set out in Article 4 and are:-

"to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and in particular:

> without risk to water, air, soil and plants and animals, without causing a nuisance through noise or odours, without adversely affecting the countryside or places of special interest."

(d) The Directive's objectives are transposed in paragraphs 2-4 of Schedule 3 to the 1994 Regulations.

(e) **Permits**: Articles 9 and 10 of the Waste Framework Directive require establishments or undertakings carrying out the waste disposal or recovery operations listed in the Annexes to the Directive to obtain a permit from the competent authority.

(f) The Directive's requirements for permits are transposed by means of the waste management licensing provisions of Part II of the 1990 Act as modified by Schedule 4 to the 1994 Regulations.

(g) **Permit Exemptions**: Article 11 of the Waste Framework Directive gives Member States discretion to adopt general rules providing exemptions from the permit requirements of Articles 9 and 10 for establishments or undertakings (a) carrying out their own disposal of non-hazardous waste at the place of its production and (b) those carrying out waste recovery operations.

(h) The Secretary of State has exercised the UK's discretion under Article 11 of the Directive by means of regulation 17 of and Schedule 3 to the 1994 Regulations.

(i) **Registration**: (i) Article 11 of the Waste Framework Directive requires any establishment or undertaking operating under a permit exemption to be registered with the competent authority. And (ii) Article 12 requires anyone who collects or transports waste on a professional basis, or who arranges the disposal or recovery of waste on behalf of others (dealers or brokers), to be registered with the competent authority.

(j) The registration requirements of Article 11 of the Directive are transposed in regulation 18 of the 1994 Regulations; and the registration requirements of Article 12 are transposed in paragraph 12 of Schedule 4 to the 1994 Regulations.

(k) **Inspections**: Article 13 of the Waste Framework Directive requires any establishment or undertaking carrying out waste disposal or recovery operations – under a permit or a permit exemption – and any establishment or undertaking which collects or transports waste on a professional basis, or acts

as a dealer or broker, to be subject to "appropriate periodic inspections" by the competent authority.

(1) The inspection requirements of Article 13 of the Directive are transposed in paragraph 13 of Schedule 4 to the 1994 Regulations.

(m) **The Duty Of Care**: Article 8 of the Waste Framework Directive imposes what is known in England and Wales as "the duty of care". It requires anyone holding waste either (i) to have it handled by someone authorised under the Directive or (ii) to recover or dispose of it himself in accordance with the Directive.

(n) Article 8 of the Directive is transposed by means of section 34 of the 1990 Act.

- 5. <u>Household Waste</u>: Article 4 of the Waste Framework Directive requires Member States to "take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste." As indicated in paragraph 2.2 above, the UK has been the subject of infraction proceedings on the Waste Framework Directive and an adverse judgment by the ECJ. The Court found in its judgment that, because of the current terms of section 33(2) of the 1990 Act, the UK had failed to fulfil its obligations under Article 4 of the Directive.
- 6. Regulation 2(2) of the Regulations therefore amends section 33(2) of the 1990 Act to provide that section 33(1)(c) applies to household waste from a domestic property; and so to prohibit the disposal etc. of such waste by private individuals, within the curtilage of the property, in a manner likely to cause pollution of the environment or harm to human health. The prohibition already applies to any mineral or synthetic oil or grease, asbestos and clinical waste by virtue of regulation 3(1) of the Controlled Waste Regulations 1992 (S.I. 1992 No. 588).
- 7. The amendments to section 33 mean that, in relation to household waste, "establishments and undertakings" must comply with all the requirements of section 33(1) of the 1990 Act, but that persons who are not establishments or undertakings must comply only with the requirements of section 33(1)(c). Failure to comply with these requirements is an offence punishable (in the case of establishments and undertakings) in accordance with section 33(8) of the 1990 Act, or (if the person is not an establishment or undertaking) in accordance with section 33(9). Section 33(9) provides for the following penalties; on summary conviction, a fine not exceeding the statutory maximum (£5,000 at the date of these Regulations), and a fine on conviction on indictment.

THE LANDFILL DIRECTIVE

- 8. The Landfill Directive has been transposed by means of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I. 2000 No. 1973) and the Landfill (England and Wales) Regulations 2002 (S.I. 2002 No. 1559). The key provisions of the Landfill Directive are:
 - a) The separation of landfills into three types: for hazardous, non-hazardous or inert waste;
 - b) The requirement to treat most wastes before landfilling;

- c) Bans on the disposal of certain wastes to landfill including liquid wastes, certain hazardous wastes and tyres; and
- d) The introduction of waste acceptance criteria setting out the types of waste that can be accepted at each of the three types of landfill.
- **9.** However, waste which is subject to exclusion under section 75(7)(c) of the 1990 Act is not subject to control under the Landfill (England and Wales) Regulations 2002. Regulation 9 of the Regulations therefore amends the 2002 Regulations to ensure that the Landfill Directive is transposed in relation to agricultural waste and non-mineral mines and quarries waste.

THE GROUNDWATER DIRECTIVE

10. Regulation 15 of the 1994 Regulations transposes those parts of the Groundwater Directive which deal with disposal or tipping for the purposes of disposal which might lead to discharges to groundwater of substances in Lists I and II. Regulation 6(3) of the Regulations repeals regulation 15 of the 1994 Regulations. Regulation 8 of the Regulations then brings waste management licensing into line with other types of authorisations for the purposes of complying with the Groundwater Directive. It does this by (a) amending regulation 1(3) of the Groundwater Regulations 1998 (S.I. 1998 No. 2746) to provide that a waste management licence issued under Part II of the 1990 Act is an "authorisation" for the purposes of those Regulations; (b) amending regulation 2(1) of the Groundwater Regulations; and (c) amending regulation 3 of the Groundwater Regulations to require the Environment Agency and the Secretary of State to discharge their licensing functions in accordance with the provisions of those Regulations.

ANNEX 2

Final Regulatory Impact Assessment

The Waste Framework Directive (The Landfill Directive)

The Waste Management (England and Wales) Regulations 2006



Llywodraeth Cynulliad Cymru Welsh Assembly Government



(March 2006)

The Waste Framework Directive (The Landfill Directive) The Waste Management (England and Wales) Regulations 2006

Purpose and intended effect (i) The objective

1.1 The main controls on the management of waste in England and Wales are set out in Part II of the Environmental Protection Act 1990¹ ("the 1990 Act") and apply to "controlled waste". However, section 75(7)(c) of the 1990 Act excludes from the definition of controlled waste:-

"....waste from any mine or quarry and waste from premises used for agriculture within the meaning of the Agriculture Act 1947 ..."²

- 1.2 The main purpose of the proposed Regulations and the associated Commencement Order – is to repeal section 75(7)(c) of the 1990 Act. The effect of doing so will be to extend to agricultural waste, and to non-mineral waste from mines and quarries, the national controls already in place to fulfil the requirements of the Waste Framework Directive³ ("the WFD") and the Landfill Directive⁴. These controls have applied to all other sectors of industry and types of waste since May 1994 in the case of the WFD; and since June 2002 in the case of the Landfill Directive.
- 1.3 The controls will apply to all types of agricultural waste other than animal carcasses and to non-mineral waste from mines and quarries see paragraphs 1.5 1.13 below. In view of the existing national controls applying to mineral waste, the impact on the mining/quarrying industry will be significantly less than that on the agricultural industry and this is reflected in the remainder of this Regulatory Impact Assessment ("RIA").
- 1.4 **Devolution**: The Regulations will apply in England and Wales. Similar Regulations will shortly be made in Northern Ireland. Regulations⁵ were made in Scotland in 2003 to transpose the Landfill Directive including its application to agricultural waste and non-mineral waste from mines and quarries; and in 2005 Regulations⁶ were made applying the WFD.

(ii) The Background

1.5 **The WFD** was originally adopted in 1975 and was subject to substantial amendment in 1991. Member States were required to transpose and

¹ And related Regulations.

² The definition of "agriculture" is re-produced at Annex 1 to this RIA.

^{3 75/442/}EEC as amended by 91/156/EEC and Commission Decision 96/350/EC.

^{4 1999/31/}EC.

⁵ The Landfill (Scotland) Regulations 2003 SSI 2003 No. 235.

⁶ The Waste (Scotland) Regulations 2005 SSI 2005 No. 22.

implement the [amended] WFD by April 1993. The amendments to national legislation necessary to comply with the WFD were made in the Waste Management Licensing Regulations 1994^7 ("the 1994 Regulations"). These controls have applied to all sectors of industry and types of waste – other than those excluded under section 75(7)(c) of the 1990 Act - since 1 May 1994⁸.

1.6 Infraction Proceedings: The United Kingdom ("the UK") is subject to infraction proceedings by the European Commission under Article 226 of the Treaty of Rome ("the Treaty") in relation to the transposition of the WFD. On 14 February 2003 the Commission lodged an application with the European Court of Justice ("ECJ") requesting a declaration from the Court that the UK is in contravention of Articles 1(a), 1(e), 1(f), 2(1)(b), 3, 4, 5, 7, 8, 12, 13 and 14 of the WFD⁹. The exclusion of mines and quarries waste and agricultural waste in section 75(7)(c) of the 1990 Act is the subject of infraction in relation to Articles 1(a) and 2(1)(b). The ECJ issued an adverse judgment on the Article 226 infraction on 16 December 2004¹⁰. In summary, the Court declared that the UK had failed to fulfil its obligations under the WFD by:-

"...failing to take the measures necessary to comply with obligations under Articles 1(a), (e) and (f), 2(1)(b), 3, 4, 5, 7(1), 8, 12, 13 and 14..."

- 1.7 However, the UK relies Article 2(1)(b) of the WFD to exclude some animal carcasses and mineral waste from the scope of the national controls transposing the Directive. The effect of Article 2(1)(b) is to exclude from the WFD's scope:-
- "...where they are already covered by other legislation:
 - (ii) waste resulting from prospecting, extraction, treatment and storage of mineral resources and the working of quarries;
 - (iii) animal carcases and the following agricultural waste : faecal matter and other natural, non-dangerous substances used in farming."
- 1.8 The meaning of the term "covered by other legislation" was the subject of a judgment by the ECJ in Case C-114/01 AvestaPolarit Chrome Oy. The ECJ delivered its judgment on this case on 11 September 2003 and, in doing so, held that:-

"2. In so far as it does not constitute a measure of application of Directive 75/442, as amended by Directive 91/156, and in particular Article 11 of that directive, national legislation must be regarded as other legislation within the meaning of Article 2(1)(b) of that directive

⁷ S.I. 1994 No. 1056.

⁸ The controls were applied to the recovery of scrap metal and the dismantling of end-of-life vehicles with effect from 1 April 1995.

⁹ Case C-62/03. The application was published in the Official Journal of the European Union on 26 April 2003 (C 101/19).

¹⁰ Case C-62/03 available on the ECJ website at <u>http://curia.eu.int/jurisp/cgi-bin/form.pl?lang=en&Submit=Submit&docj=docj&numaff=C-</u>62%2F03&datefs=&datefe=&nomusuel=&domaine=&mots=&resmax=100

covering a category of waste mentioned in that provision, if it relates to the management of that waste as such within the meaning of Article 1(d) of Directive 75/442, and if it results in a level of protection of the environment at least equivalent to that aimed at by that directive, whatever the date of its entry into force."

- 1.9 In the Government's view, the Town and Country Planning Acts and related legislation meet the test set by the ECJ for national legislation in the AvestaPolarit case; and that legislation is "other legislation" for the purposes of the management of **mineral** waste from mines and quarries. It follows from this that the effect of the 2005 Regulations is to apply waste management controls to **non-mineral waste** from mines and quarries in England and Wales.
- 1.10 The European Commission has published a "Guidance Note On The Application To Animal By-Products Of Community Legislation Regarding Animal And Public Health And Waste". The note was produced by the Directorate General for Health and Consumer Protection (DG SANCO) and the Directorate General for the Environment (DG Environment) in consultation with Member States in the context of the Standing Committee on the Food Chain and Animal Health referred to in the EU Animal By-Products Regulation¹¹ and the Technical Adaptation Committee ("TAC") set up under Article 18 of the WFD. The guidance note is available on the Commission's website at http://europa.eu.int/comm/food/food/biosafety/animalbyproducts/index_en.htm among other matters, it addresses Article 2(1)(b) of the WFD and the relationship between the Directive and the EU Animal By-Products Regulation.
- 1.11 The Commission's views as set out in this guidance note are that:-

(a) The term "animal carcases" in Article 2(1)(b)(iii) of the WFD "....refers only to whole discarded bodies of dead animals arising from within the context of agricultural or farming operations and which are excluded from the feed and food chain, and which are not further processed as 'by-products' for further uses such as pet food"; and

(b) "Animals slaughtered (i.e. killed in a slaughterhouse for consumption) and parts thereof...are not excluded [under Article 2(1)(b) of the WFD] and therefore covered by waste legislation."

1.12 In summary, the guidance note confirms the Commission's view that the EU Animal By-Products Regulation and the WFD apply concurrently to animal by-products that are discarded as waste - except for whole discarded carcasses of animals arising from the context of agricultural or farming operations.

¹¹ Regulation (EC) No. 1774/2002.

- 1.13 The exclusion in section 75(7)(c) of the 1990 Act is also the subject of infraction proceedings in relation to the Hazardous Waste Directive and the Landfill Directive see paragraph 1.15 below.
- 1.14 **Requirements Of The WFD:** The objectives and main requirements of the WFD are:-

(a) Objectives: The WFD's objectives are set out in Article 4 and are:-

"to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and in particular:

without risk to water, air, soil and plants and animals, without causing a nuisance through noise or odours, without adversely affecting the countryside or places of special interest."

(b) Waste: Article 1(a) of the WFD provides that:-

" 'waste' shall mean any substance or object.....which the holder discards or intends or is required to discard."

(c) **Permits**: Articles 9 and 10 require anyone carrying out the waste disposal or recovery operations listed in the Annexes to the WFD to obtain a permit from the competent authority – the Environment Agency in England and Wales¹².

(d) **Permit Exemptions**: Article 11 gives Member States some discretion to provide exemptions from the permit requirements of Articles 9 and 10 for those (a) carrying out their own disposal of non-hazardous waste at the place of its production and (b) those carrying out waste recovery operations.

(e) **Registration**: (i) Article 11 requires anyone operating under a permit exemption to be registered with the competent authority. And (ii) Article 12 requires anyone who collects or transports waste on a professional basis, or who arranges the disposal or recovery of waste on behalf of others (dealers or brokers), to be registered with the competent authority.

(f) **Inspections**: Article 13 requires anyone who is carrying out waste disposal or recovery operations – under a permit or a permit exemption – and anyone who collects or transports waste, or acts as a broker, to be subject to "appropriate periodic inspections" by the competent authority.

¹² The lists of waste disposal and recovery operations which require a permit are reproduced in Annex 2 to this RIA.

(g) **The Duty Of Care**: Article 8 imposes what is known in England and Wales as "the duty of care"¹³. It requires anyone holding waste either (**i**) to have it handled by someone authorised under the WFD or (**ii**) to recover or dispose of it himself in accordance with the WFD.

(h) **The "Polluter Pays" Principle**: Article 15 applies the "polluter pays" principle and requires that:-

"...the cost of disposing of waste **<u>must</u>** be borne by:

- the holder who has waste handled by a waste collector

or by an undertaking as referred to in Article 9,

and/or

- the previous holders or the producer of the product from
- which the waste came.
- 1.15 **Other EU Legislation**: The definition of controlled waste in section 75 of the 1990 Act has also been used in the transposition of:-

(a) **The Hazardous Waste Directive**¹⁴: Transposed in the Hazardous Waste (England and Wales) Regulations 2005¹⁵; and

(b) **The Landfill Directive**: Transposed in the Pollution Prevention and Control (England and Wales) Regulations 2000¹⁶ and The Landfill (England and Wales) Regulations 2002¹⁷.

1.16 The Department's working assumption is that none of the "farm dumps or tips" which are currently used to dispose of agricultural waste will be able to meet the standards required by the Landfill Directive¹⁸. The Hazardous Waste (England and Wales) Regulations 2005¹⁹ have been made to ensure that the Hazardous Waste Directive is fully and correctly transposed in England and Wales. The cost assessments in this RIA refer to hazardous/special waste. However, the main purpose of this RIA is to assess the impact of extending²⁰ to agricultural waste and to non-mineral waste from mines and quarries the controls which are already in place to fulfil the requirements of the WFD; and which have applied to all other sectors of industry and types of waste since May 1994.

¹³ Section 34 of the 1990 Act.

^{14 91/689/}EEC.

¹⁵ S.I. 2005 No. 894.

¹⁶ S.I. 2000 No.1973.

¹⁷ S.I. 2002 No.1559.

¹⁸ For example, the requirement that, "Protection of soil, groundwater and surface water is to be achieved by the combination of a geological barrier and a bottom liner during the operational/active phase; and the requirement for measures to be taken "to control the accumulation and migration of landfill gas".

¹⁹ S.I.2005 No. 894.

²⁰ In England and Wales.

- 1.17 Other RIAs: In line with the then Government's policy, the transposition of

 (a) the WFD in the 1990 Act and the 1994 Regulations and (b) the Hazardous Waste Directive in the Special Waste Regulations 1996 was the subject of compliance cost assessments ("CCAs").
- 1.18 The Landfill Directive's transposition was the subject of an RIA in the consultation paper published by the Department in October 2000. One of the purposes of "Waste Strategy 2000"²¹ is to help to fulfil the requirements of (a) the Landfill Directive and (b) the Hazardous Waste Directive. The Hazardous Waste (England and Wales) Regulations 2005 and The impact of Waste Strategy 2000 were also the subject of two separate RIA.
- 1.19 Copies of these CCAs and RIAs are available on request from the **General Enquiries** contact point in paragraph 13.1 below.

(iii) Risk assessment

- 1.20 The UK is subject to infraction proceedings under Article 226 of the Treaty; an adverse judgment by the ECJ on that infraction; and in order to comply with that judgement it is essential to make the Regulations necessary to repeal section 75(7)(c) of the 1990 Act and to apply to those types of agricultural waste, and mines and quarries waste, which are not excluded from the scope of the Directive by Article 2 – see paragraphs 1.6 -1.9 above – the national controls in place to fulfil the requirements of the WFD and the Landfill Directive.
- 1.21 In the event of non-compliance with the ECJ's adverse judgment, consequential action by the European Commission against the UK under Article 228 of the Treaty for continuing failure to comply with the WFD and Landfill Directive would result in the imposition of fines by the Court. Failure by Greece to comply with the WFD resulted in the imposition of fines of €20,000 (£12,500) a day. However, in a judgment issued on 12 July 2005, the ECJ for the first time ordered a Member State to pay both a periodic penalty payment and a lump sum fine for a serious and persistent failure to comply with Community law. In that case, the Court ordered France to pay a lump sum fine of €20m for having failed to fulfil its Community fishery obligations and a penalty payment of €7.8m for each additional period of six months at the end of which it has not complied with those obligations. In December 2005 the Commission published a revised Communication on the imposition of financial sanctions – available at http://europa.eu.int/comm/secretariat_general/sgb/droit_com/pdf/sec_2005_16

http://europa.eu.int/comm/secretariat_general/sgb/droit_com/pdf/sec_2005_ 58_en.pdf

1.22 At present, most agricultural waste is disposed of in unregulated "farm dumps" or by open burning – with consequential risks to the environment and human health. The extension to agricultural waste of the waste management controls which already apply to other sectors of industry will ensure that (a) these risks are significantly reduced and (b) the objectives of Article 4 of the

²¹ Cm 4693-2.

WFD are fulfilled. The objectives of Article 4 are to ensure that waste is recovered or disposed of without endangering human health or harming the environment – see paragraph 1.14(a) above.

1.23 Data shortage precludes the ascertainment of the exact scale of the risks to the environment and human health from the disposal of agricultural waste. However, the estimates²² below are derived for the impact of the agricultural sector as a whole - of which waste is a contributory factor:-

Ammonia's contribution to atmospheric emissions – $\pounds 43m$ for the UK as a whole (source Pretty et al 2000²³);

Loss of fishery value – $\pm 28m$ for England and Wales (source WRc (2001²⁴), WRc (2001a²⁵) and Environment Agency (2001²⁶));

Bathing waters pollution - $\pounds 69m$ for the UK as a whole (source Environment Agency 2002^{27});

Direct impact of faecal pathogens to soil\water - £20m for the UK as a whole (source Environment Agency 2002);

Disease pollution (faecal pathogens) – not available;

Health effects – it has not been possible to quantify these effects; and Methane is emitted from the landfilling of biodegradable agricultural waste but it is not possible to quantify these emissions²⁸.

2 Options

2.1 The UK is subject to an adverse an ECJ judgment on infraction proceedings on the WFD and related infraction proceedings on section 75(7)(c) of the 1990 Act. It is the Government's policy to fulfil its legal obligations to transpose and implement EU Directives – in a manner proportionate to the risk and without "gold plating". In response to the infractions, therefore, the Government has given commitments to the European Commission to repeal the exclusions in section 75(7)(c) of the 1990 Act and to make the Regulations necessary to extend to agricultural waste, and to non-mineral waste from mines and quarries, the national waste management controls in place to comply with the WFD and the Landfill Directive [and the Hazardous Waste Directive]. (These controls have applied to all other sectors of industry and types of waste since May 1994 in the case of the WFD; and since June 2002 in the case of the Landfill Directive.) There is, therefore, no option other than to apply to agricultural waste, and to non-mineral waste from mines and quarries. the waste management controls required by those Directives.

²² At 2000 prices.

^{23 &#}x27;An Assessment of the Total External Costs of UK Agriculture' Pretty et al (2000).

^{24 &#}x27;Economic Evaluation of Inland Fisheries: Module A: Economic Evaluation of Fishing Rights' WRc (2001).

^{25 &#}x27;Indirect Economic Values Associated with Fisheries' of the Environment Agency's 'Economic Evaluation of Inland Fisheries' WRc (2001).

^{26 &#}x27;Best Farming Practices: Profiting from a Good Environment' Environment Agency (2001). 27 'Agriculture and Natural Resources: Benefits, Costs and Potential Solutions (2002).

²⁸ Waste management contributes 32% to UK emissions of methane – the majority of which comes from landfill.

- 2.2 The following costs and benefits are assessed against the base case of the current practice continuing. In the case of agricultural waste, this means the waste's being buried or burned in an uncontrolled manner. But for the reasons set out in the preceding paragraph, "do nothing" cannot be presented as an actual option.
- 2.3 However, EU Member States have discretion under Article 11 of the WFD to provide exemptions from the permit requirements of Articles 9 and 10 of the Directive see paragraph 1.14(b) and (c) above. One option available, therefore, is the nature and scope of any permit/licence exemptions provided by the Secretary of State under Article 11.
- 2.4 The main purpose of Article 11 exemptions is to encourage the recovery of waste. In this context, Article 11(1)(b) enables Member States to provide exemptions from the permit requirements of Article 10 for "establishments or undertakings" carrying out the recovery of non-hazardous waste. An exemption may apply only:-

"...if the competent authorities have adopted general rules for each type of activity laying down the types of and quantities of waste and the conditions under which the activity in question may be exempted from the permit requirements, and

if the types of waste and methods of...recovery are such that the conditions imposed by Article 4 are complied with."

- 2.5 Article 11(2) of the WFD requires establishments or undertakings operating under the general rules of an exemption to be registered with the competent authority the Environment Agency in England and Wales. And Article 11(3) requires the general rules under which exemptions are provided to be notified to the European Commission.
- 2.6 **Option One**: Is to apply to agricultural waste the existing permit/licence exemptions which have been provided under Article 11 of the WFD. The general rules of the existing 46 exemptions provided by the UK under Article 11 are set out in regulation 17 of and Schedule 3 to the 1994 Regulations. Not all of the existing exemptions are directly relevant to the farming industry. However, those which it may be appropriate to extend to agricultural waste include:-
 - Landspreading of waste for agricultural benefit;
 - Use of waste as fuel;
 - Open burning of untreated wood and plant matter;
 - Composting;
 - Waste used for construction purposes; and
 - Exemptions to avoid unnecessary dual control with other regulatory systems.

- 2.7 **Option 2**: Is to amend the 1994 Regulations to provide additional permit/licence exemptions for agricultural waste. The Agricultural Waste Stakeholders' Forum see paragraph 5.1 below provides a means by which the agricultural and related industries may propose the provision of additional permit/licence exemptions within the discretion provided by, and subject to the requirements of, Article 11 of the WFD.
- 2.8 **Option 3**: Is to use both of the above options. By using this third option, not only will this encourage the recovery of agricultural waste but also it is a deregulatory option as farmers and growers will be able to register exemptions for a number of activities rather than have to apply for a full waste management licence/permit, which would be costly and burdensome.

3 Benefits

- 3.1 The extension of waste management controls to agricultural waste will result in the benefits outlined below. It has not proved possible to quantify all of these benefits due to data shortages. Some of the benefits that have been quantified relate to the UK and to the agricultural sector as a whole - of which waste is a contributory factor. All impacts quantified in this section are given in 2000 prices.
- 3.2 **Environmental Benefits**: At present, agricultural waste is excluded from the definition of controlled waste. This means that it may be disposed of on-farm in an uncontrolled manner. In practice, most agricultural waste is disposed of by open burning or in farm dumps or tips.
- 3.3 The open burning of waste can produce dark smoke and toxic pollution and may be in contravention of the Clean Air Act 1993 or the statutory nuisance provisions of Part III of the 1990 Act. The Environment Agency (2002) states that agriculture's contribution to local air pollution through airborne particulate matter is £11m for the UK as a whole (source Hartridge and Pearce 2001).
- 3.4 Agricultural waste also contributes to atmospheric emissions. These emissions have been summarised by the Environment Agency (2002) as:-
 - Methane (livestock digestive processes and manure²⁹) Contributing 40% of total UK emissions estimated at £94m for the UK as a whole (source Hartridge and Pearce 2001); and
 - Ammonia (livestock wastes and some fertilisers) Contributing 90% of total UK emissions estimated at £43m for the UK as a whole (source Pretty et al 2000).
- 3.5 The Environment Agency (2002) also estimates the soil and water impacts of agriculture, to which waste contributes, as:-

²⁹ These estimates pre-date an ECJ judgment on the classification of manure/slurry as waste in the context of infraction proceedings against Spain – Case C-416/02.

- Loss of fishery value (nutrients, pesticide, soil, organic wastes and faecal pathogens) £28m for England and Wales (source WRc (2001), WRc (2001a) and Environment Agency (2001));
- Bathing waters pollution (faecal pathogens) £69m for the UK as a whole (source Environment Agency (2002));
- Direct impact of faecal pathogens to soil\water £20m for the UK as a whole (source Environment Agency (2002)); and
- Disease pollution (faecal pathogens) not available.
- 3.6 Where they are discarded as waste, substances such as silage effluent, milk, treated blood and vegetable washings may have value as fertilisers. However, when they are spread incorrectly (e.g. mistimed or misplaced) they can contribute to groundwater or surface water pollution causing eutrophication, toxicity of waters, heavy metal contamination, faecal pathogen presence and phosphorous or nitrate pollution. A benefit of applying the WFD's controls to agricultural waste will be to ensure that, where such substances are landspread³⁰ as waste, their use results in benefit to agricultural or ecological improvement without adverse environmental or human health implications.
- 3.7 **Health Benefits**: The uncontrolled disposal of waste on-farm poses a risk to the health of the farmer, grower, farm workers and the public. For example, the open burning of certain wastes (e.g. used agrochemical containers) leads to airborne emissions of substances such as dioxins, some of which have been classed as carcinogenic. Prohibiting practices such as the burning of non-natural agricultural waste will mean not only that the risks to farmers', growers' and farm workers' health are reduced but also that the public will not be exposed to the substances released into the air. However, it has not proved possible to identify and to quantify these health benefits.
- 3.8 **Encouraging Re-use And Waste Minimisation**: Article 3 of the WFD provides that:-

"Member States shall take appropriate measures to encourage:-...the prevention or reduction of waste production and its harmfulness."

- 3.9 Whilst the agricultural industry produces large quantities of waste, its current exclusion from waste management controls provides no financial incentive for farmers or growers to reduce its production. The effect of extending waste management controls to agricultural waste will be to introduce an incentive for farmers and growers to do so. For example, the cost of disposal will provide an incentive for farmers and growers to use refillable/reusable multipacks when using agrochemicals.
- 3.10 The extension of waste management controls will also provide an incentive for farmers and growers to buy agricultural products from suppliers who offer

³⁰ Referred to as "land treatment" in the latest list of waste recovery operations – see Annex 2 to this RIA.

to take back waste arising from the use of their products – so avoiding the costs of extracting, processing and transporting primary raw materials. In the longer term, this will also create incentives for producers to modify their products to meet market demands.

Business Sectors Affected

- 3.11 The effect of the proposed Regulations and associated Commencement Order will be to repeal section 75(7)(c) of the 1990 Act and to extend waste management controls to agricultural waste and mines and quarries waste which are not excluded from the scope of the WFD by virtue of Article 2. However, the extension of controls will have a more significant impact on the agricultural industry because there are existing controls applying to mineral waste from mines and quarries see paragraphs 1.6 -1.9 above.
- 3.12 **Agricultural Industry**: There are around 137,000 agricultural holdings in England and about 25,000 in Wales giving a total of 162,000 for England and Wales³¹. The activities covered include: horticulture; fruit and seed growing; livestock breeding and keeping; grazing land; market gardens and nursery grounds see definition at Annex 1.
- 3.13 **Mining/Quarrying Industry**: There are approximately 1,175 quarries operating in England and Wales. However, in view of the existing controls on the disposal of mineral waste, the impact on the mining/quarrying industry will be significantly less than that on the agricultural industry.
- 3.14 In relation to non-mineral waste, the available data indicates that most hazardous liquid waste, and both hazardous and non-hazardous solid waste, is currently disposed of off-site through contractual arrangements with the waste management industry in compliance with existing waste management controls. And that most non-hazardous liquid waste is discharged to controlled waters under appropriate consents.
- 3.15 The implications for the mining and quarrying industry are discussed further in paragraphs 4.37 4.46 below.

Equity and fairness

3.16 The Regulations will correct a current inequality. That is to say, waste management controls have applied to all other sectors of industry and types of waste since May 1994 in the case of the WFD; and since June 2002 in the case of the Landfill Directive. But most agricultural waste is currently disposed of in unregulated farm dumps/tips or by open burning. The controls will apply equally to all producers of agricultural waste and non-mineral waste from mines and quarries; and to those who recover or dispose of it³².

³¹ Source: June 2004 Agricultural Census, Defra. This figure excludes holdings with no economic output.

³² Also to establishments or undertakings which transport such waste on a professional basis

4 Costs

Part A: Agricultural Waste (i) Compliance Costs

4.1 On the repeal of section 75(7)(c) of the 1990 Act, the three main costs to farmers and growers will be:-

(a) **On-farm Hazardous Waste Storage**: Where necessary, the cost associated with the storage of hazardous waste pending its disposal/recovery under (b) or (c) below;

(b) **On-farm Disposal/Recovery**: The cost associated with a farmer or grower obtaining and complying with the conditions of a permit/licence to operate his own waste disposal facility; and

(c) **Off-farm Disposal/Recovery**: The cost of consigning agricultural waste to a registered waste carrier for disposal at, say, a licensed landfill site or recovery at a licensed recycling site (e.g. for waste oil).

- 4.2 The costs associated with each of these options are discussed in more detail below. The additional costs faced by farmers and growers as a result of extending waste management controls to agricultural waste will vary depending on the amount and type of waste produced, the method of compliance chosen by the farmer or grower and how this compares with current practice.
- 4.3 The estimated total cost to farmers and growers of complying with waste management controls is £28.7m-£69.8m per annum the mid-point of the range being £49.25m pa. (The unrounded figures are shown in Table 5 below.) On the basis of 162,000 farms in England and Wales, the range per farm is £177-£430pa the mid-point of the range being £304 pa. [NOTE: See Note in paragraph 4.25 below.] These estimates are based on the working assumption that all farmers and growers will adopt option (c) in paragraph 4.1 above and consign their waste for disposal off-farm; and that all such waste is consigned for disposal at a licensed landfill site.

(a) On-Farm Hazardous Waste Storage

4.4 The 1994 Regulations exempt the temporary storage of waste, pending its collection, on the site where it is produced³³. Hazardous waste may be stored for up to twelve months – subject to certain conditions. These conditions include quantity limits and the need for hazardous waste to be stored "securely":-

or arrange for its disposal or recovery as dealers or brokers.

³³ Regulation 17 and paragraph 41 of Schedule 3 to the 1994 Regulations.

(a) **Liquid Hazardous Waste**: The conditions of the exemption require that it is stored in a secure container and the total volume does not at any time exceed 23,000 litres; and

(b) In Any Other Case: Either:-

(i) It is stored in a secure container and the total volume does not at any time exceed 80 cubic metres; or

(ii) It is stored in a secure place and the total volume does not at any time exceed 50 cubic metres.

4.5 "<u>Secure</u>": The 1994 Regulations³⁴ provide that:-

"....a container, lagoon or place is secure in relation to waste kept in it if all reasonable precautions are taken to ensure that the waste cannot escape from it and members of the public are unable to gain access to the waste, and any reference to secure storage means storage in a secure container, lagoon or place."

- 4.6 *Hazardous waste streams to which this permit/licence exemption may apply are:-*
 - Unused crop pesticide concentrate (out of date or authorisation withdrawn), used or degraded containers and materials that have been used to mop up spillages;
 - Dilute crop pesticides;
 - Animal medicines including sheep dip and antibiotics concentrate or dilute; and
 - Veterinary and clinical waste including sharps.
- 4.7 Farmers and growers using pesticides should already be complying with the 'Green Code Code of Practice for the Safe Use of Pesticides on Farms and Holdings' (PB3528). It is assumed, therefore, that suitable pesticide storage is already in place (capable of dealing with brought-in concentrate and for storing waste prior to collection for off-site disposal) and that no additional cost will be incurred for this waste stream.
- 4.8 It is assumed that farmers and growers will not wish to store dilute pesticide and will dispose of such waste either by spreading it to crop (within label recommendation) or by disposing of it to land under a Groundwater Authorisation issued by the Environment Agency. It is assumed, therefore, that no additional cost will be incurred for this waste stream.
- 4.9 Some additional costs may be incurred in storing securely waste animal medicines and veterinary and clinical waste. This may involve the construction of secure facilities, modifications/alterations to existing facilities or the purchase of secure containers. Suitable stores should be dry, frost free,

³⁴ Regulation 17(5) of the 1994 Regulations.

resistant to fire and retain leakages. Such stores may be purpose designed on arable land, in converted buildings, a store within an existing building, an old lorry body, a cabinet, a bin or chest freezer. It has not proved possible to estimate the potential cost of these measures.

4.10 However, the Farm Practice Survey (2001) indicates that a significant proportion of farmers and growers return needles to veterinary surgeons and to a lesser extent also return other veterinary products. Any cost, in addition to farmers' and growers' existing practices for the safe return or storage of these wastes, is expected therefore to be minimal.

(b) On-farm Disposal/Recovery

- 4.11 Farmers and growers will continue to be able to dispose of or recover their waste on-farm. However, the extension of waste management controls to agricultural waste will mean that it will be necessary for farmers and growers to do so either under the general rules of a permit/licence exemption registered with or a permit/licence issued by the Environment Agency. In most cases, a "permit/licence" is likely to mean a waste management licence issued by the Agency under Part II of the 1990 Act. The Environment Agency's working assumption is that only 1-2% of farmers and growers will apply for a waste management licence to dispose of or recover their waste on-farm. (See paragraph 1.16 above for the working assumption on farm dumps/tips and landfill sites.)
- 4.12 **Risk Based Inspection**: All licensed sites are subject to inspection as required by Article 13 of the WFD – see paragraph 1.14(f) above. In June 2000 the Secretary of State issued revised statutory guidance to enable the Environment Agency to implement a risk based site inspection system ("OPRA") which targets inspections where they are most needed – on high risk/poorly managed sites.
- 4.13 **Charges**: In line with the "polluter pays" principle see paragraph 1.14(h) above charges are payable by licence applicants and annually by licence holders. The charges recover the cost to the Agency of considering applications and inspecting licensed sites. An example of the current charges for the keeping of waste is provided below. However, the Environment Agency has separately consulted on proposals to reflect OPRA in their annual subsistence charges; and has issued a discussion paper on how it proposes to use outputs from the OPRA methodologies in its waste management licensing charging scheme ³⁵.
- 4.14 The Environment Agency estimates that most farmers and growers who apply for a licence will do so to operate a waste transfer station³⁶ for storage prior to recycling assuming that the storage is prior to recycling at a site other than

³⁵ The discussion paper is available on the Environment Agency's website at <u>www.environment-agency.gov.uk/yourenv/consultations/</u> 36 Or, to a lesser extent, composting operations.

where it is produced and that the waste being stored falls into either the nonhazardous waste category or the following hazardous waste streams:-

- contents of motor vehicle batteries;
- hazardous waste which forms part of, or is contained in, a waste motor vehicle and was necessary for the normal operation of that vehicle; or
- bonded asbestos.
- 4.15 The charges in 2005/06 for the operation of such a licensed site are shown below. Assuming that most on-farm operations will involve less than 5,000 tonnes pa of waste, the charges for a transfer station are a one-off application charge of £2,548 and an annual subsistence charge of £873. Other types of licence (e.g. large-scale composting) may be sought by a minority of farmers and growers and these are also shown below.

2005/06

| Keeping waste at a transfer station | Application Charge | Annual Subsistence Charge |
|-------------------------------------|-----------------------|---------------------------------|
| <5,000 tonnes | £2,548 | £873 |
| ≥5,000 tonnes <25,000 tonnes | £3,571 | £1,240 |
| ≥25,000 tonnes <75,000 tonnes | £4,472 | £1,601 |
| ≥75,000 tonnes | £5,676 | £2,155 |

TABLE 1 : Licensing ChargesWaste Transfer Stations

Composting Operations

| Treatment of waste for purpose of recycling | Application Charge | Annual Subsistence Charge |
|---------------------------------------------------|-----------------------|---------------------------------|
| <5,000 tonnes | £2,864 | £995 |
| ≥5,000 tonnes <25,000 tonnes | £3,656 | £1,215 |
| ≥25,000 tonnes <75,000 tonnes | £4,703 | £1,589 |
| ≥75,000 tonnes | £6,075 | £2,114 |

4.16 The 1990 Act provides that the Environment Agency may issue a waste management licence only if it is satisfied that the applicant is a "fit and proper person" to hold a licence. There are three parts to the "fit and proper person" test:-

(a) Absence of convictions for environmental offences;(b) Technically competent management; and(c) Financial provision adequate to discharge the obligations of the licence.

- 4.17 It may be that some farmers and growers proposing to operate licensed sites will have to undertake training to demonstrate "technically competent management". The $costs^{37}$ of such training are likely to be in the range of £2,500 £3,500 depending on the individual and level of training they require. The costs of training are comprised of:-
 - Certificate of Technical Competence ("COTC") first certificate £300;
 - COTC second certificate £150;
 - NVQ registration £80;
 - NVQ additional units £50;
 - Assessment (typically 40 hours required) $\pounds 20 \pounds 40$ per hour; and
 - Verifier £40 £45
- 4.18 The financial provision necessary to discharge the obligations of the licence will depend on the activities to be authorised by the licence, the types and quantities to be disposed of or recovered and the risk to the environment and human health. The Secretary of State has issued "statutory guidance" in Waste Management Paper No.4³⁸ on ways in which adequate financial provision may be demonstrated³⁹. The Environment Agency conducted a consultation exercise between 7 February -2 May 2003 on proposed changes of approach in assessing adequate financial provision for non-landfill sites. The proposed changes were adopted on 1 July 2003 and mean that operators of low risk facilities such as recycling sites will be subject to a "financial health check" to ensure that they have sufficient funds to operate safely and responsibly. The effect is to reduce significantly the impact of the financial provision requirement on the waste industry generally. Further information is available on the Environment Agency's website at www.environmentagency.gov.uk.

(c) Off-farm Disposal/Recovery

38 "Licensing of Waste Management Facilities" HMSO ISBN 0-11-752727-0.

³⁷ These costs have been provided by the Waste Management Industry Training and Advisory Board (WAMITAB). WAMITAB have regional centres across the UK and details can be found on their website at <u>www.wamitab.org.uk</u>.

³⁹ Between 7 March - 6 June 2003 Defra conducted a consultation exercise on the proposed revision of Waste Management Paper No.4. The consultation paper is available on the Defra website at www.defra.gov.uk/corporate/consult/wasteman/index.htm

- 4.19 Because it is currently excluded from waste management controls, there is no systematic collection of waste arisings data in the agricultural sector. This shortage of data has led to the development of the Environment Agency commissioned report "Improving Data on Agricultural Waste and Resources" in which an "Agricultural Waste And Resource System (AWARE)" is proposed to compile a consistent and regularly updated data set. However, this is still a proposal and no time scale has been set for its implementation.
- 4.20 There have been a number of one-off studies designed to provide estimates of agriculture waste arisings. The then Department for Environment, Transport and the Regions ("DETR") commissioned a report in 1999 entitled "Quantification of Agricultural Waste Arisings". This study has been superseded to a certain extent by two related Biffaward studies: (a) "Towards Sustainable Agricultural Waste Management" (2001) and (b) "Agricultural Waste Mass Balance: Opportunities for Recycling and Producing Energy from Waste Technologies" (2002). Due to the one-off nature of these studies, it is not possible to observe trends in agriculture waste arisings.
- 4.21 The proposed Regulations will confirm the classification of agricultural waste as "industrial waste"⁴⁰. The 1990 Act provides that local authorities as waste collection authorities may arrange on request for the collection of industrial waste on payment of charges but they are not under an obligation to collect it⁴¹. Most industrial waste in England and Wales is, therefore, collected and disposed of by appropriately registered or licensed private sector companies.
- 4.22 Waste disposal authorities also have discretion to make the "civic amenity sites" which they provide for household waste available for the deposit of industrial waste on such terms as to payment (if any) as the authority determines⁴².
- 4.23 However, it is envisaged that most farmers and growers will comply with the extension of waste management controls to agricultural waste by consigning their waste to an appropriately registered or licensed private sector waste management company. The costs charged will depend on the quantity and type of waste and the location of the farm. A higher charge will be placed on the disposal of hazardous wastes such as batteries and waste oils.
- 4.24 Prices charged for this service will vary nationally and between companies. Costs vary nationally due to the differing costs of landfill sites in different parts of the country. For example, gate fees per tonne of industrial waste are typically around £8 in East Anglia, £9 in Wales, £10 in the Midlands, £14 in

⁴⁰ The effect of section 63(4) of the 1990 Act is currently to classify – for waste collection purposes – waste excluded under section 75(7)(c) as industrial waste. The Regulations will continue this classification on the repeal of section 75(7)(c).

⁴¹ Section 45(2) of the 1990 Act which provides that waste collection authorities may exercise their power to collect industrial waste with the consent of the waste disposal authority.

⁴² Section 51(3) of the 1990 Act.

the South West, and £15 in Southern England. Hazardous waste costs more to dispose of as it often requires pre-treatment before disposal; and gate fees are over £20 per tonne⁴³. [NOTE: See Note in paragraph 4.29 below.]

- 4.25 The amount of waste produced on a per farm basis is not known. Therefore, this has been estimated using cropping areas and livestock numbers from the Farm Business Survey 2000/01 and unit arisings from the Agricultural Waste Mass Balance report⁴⁴. Estimated unit costs of disposal for all calculated waste arisings by waste stream give the illustrative per farm costs in the Table 2 below. As there is a wide range in the unit costs supplied by industry, a range of costs is given. These represent the minimum and maximum costs on the average farm of each type.
- 4.26 The cost for the 10% of farms (within each category) with the highest cost is also shown to illustrate the upper range of costs observed in this analysis. Larger farms tend to have higher absolute costs. These farms also tend to have higher absolute incomes and so the costs represent a similar proportion of their net income. Some key characteristics of these farms are also shown.
- 4.27 Clearly, the actual costs for the individual farm will vary depending on their waste arisings, the actual disposal costs applicable in their region and the extent to which they are able to recycle. It also does not reflect the disposal of any waste stockpiled on farms.

⁴³ Typical gate fees are from BIFFA "*Great Britain Plc: The Environmental Balance Sheet*" and reflect the cost in 1997, excluding the landfill tax. The Landfill Tax in 2005/06 is £2 per tonne for inactive waste and £18 per tonne for active waste. Budget 2003 stated that, after consultation, the landfill tax will increase by at least £3 per tonne in subsequent years, on the way to a medium to long-term rate of £35 per tonne.

⁴⁴ Agricultural waste mass balance: Opportunities for recycling and producing energy from waste technologies a Biffaward publication by C-Tech Innovation Ltd 2002.

| | Da | iry | Hill Cat | tle & Sheep | | Cattle & eep | Ce | reals | Mi | xed | | es (excl rt). |
|--------------------------|---------|------------|-------------|----------------|---------|-----------------|---------|-----------|---------|--------------|---------|------------------|
| | Average | Тор 10% | Averag e | Top 10% | Average | тор 10% | Average | Top 10% | Average | Тор 10% | Average | Тор 10% |
| Cost (£) | 230-610 | 580-1250 | 200- 510 | 510-1310 | 160-420 | 450-1190 | 300-720 | 1000-2360 | 360-890 | 940- 2380 | 260-650 | 850- 2080 |
| Cost % income | 1% - 3% | 1%-4% | 2%-5% | 2% - 5% | 5%-12% | 13%- 34% | 3%-7% | 3%-7% | 3%-7% | 4%-9% | 2%-5% | 2%-5% |
| Dairy cows | 100 | 200 | 2 | 1 | 4 | 30 | 0 | 3 | 30 | 140 | 50 | 50 |
| Other Cattle | 90 | 210 | 100 | 250 | 100 | 250 | 20 | 45 | 120 | 210 | 70 | 110 |
| Sheep | 50 | 130 | 600 | 1500 | 240 | 500 | 50 | 180 | 220 | 140 | 140 | 190 |
| Croppe d Area (ha) | 16 | 67 | 2 | 8 | 8 | 41 | 120 | 400 | 75 | 240 | 60 | 280 |

TABLE 2 : Summary of illustrative costs per farm business⁴⁵, England

1. Annual average numbers

Source: Based on 2000/01 Farm Business Survey Data and Biffaward mass balance report. Unit costs supplied by industry.

⁴⁵ The Farm Business Survey sample covers farm businesses greater than 8 Economic Size Units.

4.28 The waste arisings in Table 3 are taken from Biffaward $(2001)^{46}$:

| | | England | Wales | England and Wales |
|-----------------------------------------|--------------------------------------------|---------|--------|----------------------|
| Packaging | Plastic | 20,734 | 2,794 | 23,528 |
| | Cardboard and Paper | 6,340 | 832 | 7,172 |
| | Metal, Wood, Glass and Rubber | 1,339 | 190 | 1,529 |
| | Total | 28,413 | 3,816 | 32,229 |
| Non-Packaging Plastics | Films | 16,405 | 5,050 | 21,455 |
| | Contaminated Films | 27,377 | 5,134 | 32,511 |
| | Other Non- Packaging Plastics | 20,948 | 1,806 | 22,754 |
| | Total | 64,730 | 11,990 | 76,720 |
| Non-Packaging Cardboard | Non-Packaging Cardboard | 542 | 122 | 664 |
| Agrochemicals | Pesticide Washings | 72,070 | 4,784 | 76,854 |
| Animal Health Products | Animal Health Products | 56,568 | 23,603 | 80,171 |
| Machinery Waste | Oils | 20,272 | 1,893 | 22,165 |
| | Batteries | 2,228 | 222 | 2,450 |
| | Tyres | 20,680 | 1,981 | 22,661 |
| | Redundant Vehicles | 18,573 | 1,637 | 20,210 |
| | Equipment containing CFCs | 10 | 2 | 12 |
| | Total | 61,763 | 5,735 | 67,498 |
| Construction and Demolition Waste | Asbestos Cement Bonded Roof Sheeting | 18,243 | 2,925 | 21,168 |
| Total | | 302,329 | 52,975 | 355,304 |

Table 3: Agricultural Waste Arisings 1998 (tonnes per year)

4.29 The estimated disposal costs for the waste arisings (Table 4) have been calculated by the Environmental Services Association ("ESA") on the basis that farmers and growers will comply with the extension of waste management controls by consigning all their waste to an appropriately registered or licensed waste management company, as it is envisaged that this is what most farmers and growers will do⁴⁷; and that all waste is disposed to

^{46 &#}x27;Towards sustainable agriculture waste management' Biffaward (2001).

⁴⁷ Under the Hazardous Waste (England and Wales) Regulations 2005 a fee ranging from £5 to £19 must be paid to the Environment Agency for each consignment, including those consisting entirely of lead acid batteries.

landfill⁴⁸. Unit costs were calculated using the £18 per tonne landfill tax for active waste, reached under the landfill tax escalator in 2005-06 when the extension of controls is due to come into force. [**NOTE**: These figures and those in paragraph 4.24 above relate to different years.]

| Waste | Unit Cost of | Unit Cost of | Landfill | Total Cost |
|-------------|-----------------------|----------------|----------|-----------------|
| Stream | Collection and | Disposal | Tax | |
| | Transport | | | |
| Industrial | £22 - £110 p\t | £5 - £30 p\t | £18 p\t | £45 - £158 p\t |
| waste | | | | |
| Mixed waste | £22 - £110 p\t | £5 - £30 p\t | £18 p\t | £45 - £158 p\t |
| Hazardous | £44 - £110 p\t | £38 - £100 p\t | £18 p\t | £100 - £228 p\t |
| waste | | | | |
| Asbestos | £44 - £110 p\t | £50 - £100 p\t | £18 p\t | £112 - £228 p\t |
| Tyres | £33 - £55 p\t | £40 - £60 p\t | £18 p\t | £91 - £133 p\t |
| Batteries* | £220 p\t* | N/A | £18 p\t | £238 p\t |

TABLE 4 : Unit Cost Of Disposal

*All batteries are classified as hazardous waste and have to be treated accordingly. Assuming that most waste batteries arising on agricultural premises are car/vehicle batteries, collection would be around £220 per tonne. Batteries are generally sent for recovery, lead being the main constituent recovered. The residue is then landfilled, although this cost is not borne by the producer. Some types of battery pose particular hazards and collection costs may be higher. In extreme cases, industrial batteries may cost up to £800 per tonne to collect. However, this would be unlikely to apply to agricultural premises.

- 4.30 The definitions of mixed, industrial and hazardous waste do not match exactly with the legal definitions. The definitions are a broad method of differentiating the waste streams as far as possible into comparably broad categories. Mixed waste is defined by the ESA as being broadly similar to municipal waste.
- 4.31 Table 5 combines the unit cost definitions in Table 4 with the waste arisings data in Table 3 to show the estimated total disposal costs to farmers and growers of complying with the extension of controls.

⁴⁸ The Governments 'Waste Strategy 2000: England and Wales (Part 1)' states that in 1998/99 47% of industrial (excluding construction and demolition), 66% of commercial and 83% of municipal waste was disposed of to landfill. In their estimations the ESA assumed that all agricultural waste would be disposed of to landfill due to data restrictions.

| | | | | Disposal Costs | | |
|-----------------------------------------|-----------------------|----------------------------------|----------------------------|----------------|-------------|--|
| | Unit cost Category | Waste Arisings England and Wales | Minimum | Maximum | Average | |
| Plastic | Industrial | 23,528 | £1,058,760 | £3,717,424 | £2,388,092 | |
| Cardboard and Paper | Mixed | 7,172 | £322,740 | £1,133,176 | £727,958 | |
| Metal, Wood, Glass and Rubber | Industrial | 1,529 | £68,805 | £241,582 | £155,194 | |
| Sub Total | | 32,229 | £1, 450, 305 | £5,092,182 | £3,271,244 | |
| Films | Industrial | 21,455 | £965,475 | £3,389,890 | £2,177,683 | |
| Contaminated Films | Industrial | 32,511 | £1,462,995 | £5,136,738 | £3,299,867 | |
| Other Non-Packaging Plastics | Industrial | 22,754 | £1,023,930 | £3,595,132 | £2,309,531 | |
| Sub Total | | 76,720 | £3,452,400 | £12,121,760 | £7,787,080 | |
| Non-Packaging Cardboard | Mixed | 664 | £29,880 | £104,912 | £67,396 | |
| Pesticide Washings | Hazardous | 76,854 | £7,685,400 | £17,522,712 | £12,604,056 | |
| Animal Health Products | Hazardous | 80,171 | £8,017,100 | £18,278,988 | £13,148,044 | |
| Sub Total | | 157,689 | £15,732,380 | £35,906,612 | £25,819,496 | |
| Oils | Hazardous | 22,165 | £2,216,500 | £5,053,620 | £3,635,060 | |
| Batteries | Batteries | 2,450 | £583,100 | £583,100 | £583,100 | |
| Tyres | Tyres | 22,661 | £2,062,151 | £3,013,913 | £2,538,032 | |
| Redundant Vehicles | Industrial | 20,210 | £909,450 | £3,193,180 | £2,051,315 | |
| Equipment Containing CFCs | Hazardous | 12 | £1,170 | £2,668 | £1,919 | |
| Sub Total | | 67,498 | £5,772,371 | £11,846,481 | £8,809,426 | |
| Asbestos Cement Bonded Roof Sheeting | Asbestos | 21,168 | £2,370,816 | £4,826,304 | £3,598,560 | |
| Total | | 355,304 | £28,778,272 | £69,793,339 | £49,285,805 | |

 Table 5: Estimated compliance cost in England and Wales of extending waste management controls to agricultural waste

- 4.32 Table 5 shows the estimated total disposal cost to farmers and growers of complying with the extension of controls to be £28.7m-£69.8m per annum the mid-point of the range being £49.25m. The average cost of meeting the extension of controls in this way represents 3.0% of farm incomes in 2004^{49} . [NOTE: These costs include £6.4m for landfill tax (at £18 p/t). This is a transfer payment between agriculture and the Government and does not represent an additional cost to the UK as a whole.]
- 4.33 These costs are for disposing of all controlled agricultural waste. They do not take into account the fact that some farmers and growers are already disposing of some waste off-farm and so the costs of complying with the extension of controls may be less than is indicated.

(ii) Other costs

- 4.34 Costs will also be incurred in preparing and implementing the proposed Regulations. The Environment Agency will also face additional costs in terms of extra administration, monitoring and enforcement, although the administration costs resulting from the issuing of licences and the inspection of licensed sites will be covered by charges. Enforcement costs are funded by a Grant In Aid ("GIA") from central Government.
- 4.35 Higher costs faced by farmers and growers may result in some of these additional costs being passed onto the consumer in higher prices. It is not possible to quantify this change in prices.

(iii) Costs for a typical business

4.36 It is difficult to define what a typical business is in a sector as diverse as the agricultural industry. It is expected that costs incurred will vary between different types of farms and the different types of waste generated by the different activities on those farms. The additional costs farmers and growers will face as a result of waste management controls being extended will vary depending on the amount and type of waste produced, how farmers and growers choose to comply with the legislation (e.g. on-farm or off-farm disposal) and how this compares with current practice.

(iv) Costs to the Court system

4.37 It is expected that this measure will have a small impact on the Courts. Based on the number of other waste prosecutions against businesses from other sectors brought to the Courts between 2000 and 2005, it is estimated that there will be 11 court prosecutions involving the agricultural sector, see Table 6 below:

Table 6: Estimated costs to the Court system

⁴⁹ Defra figures suggest total farm income for England and Wales were £2.3bn in 2004.

| | | Cost of court time (per case | 3% estimated agricultural waste | court cost for agricultural | Total cost of court time, including estimated agricultural waste costs |
|------|-----|------------------------------------|------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------|
| 2000 | 293 | 96104 | 8.79 | 2883.12 | 98987.12 |
| 2001 | 361 | 118408 | 10.83 | 3552.24 | 121960.2 |
| 2002 | 371 | 121688 | 11.13 | 3650.64 | 125338.6 |
| 2003 | 326 | 106928 | 9.78 | 3207.84 | 110135.8 |
| 2004 | 316 | 103648 | 9.48 | 3109.44 | 106757.4 |
| 2005 | 345 | 113160 | 10.35 | 3394.8 | 116554.8 |

Within the first year there are likely to be no costs to the Court, as

farmers and growers have a 12 month transitional period once the Regulations are made and brought into force. The Environment Agency, the regulatory body, will also be treating the first year as an "education and awareness" year for farmers and growers. Following the first year the cost to the Court is estimated to be an average of £3,300 per year for prosecutions on agricultural waste.

Part B: Mines and quarries waste

4.38 The minerals industry in England and Wales is usually divided into four sectors:

- Coal;
- Construction materials;
- Industrial minerals; and
- Metals.
- 4.39 However, there is currently no mineral raised in the UK for the extraction of metal as the chief product. Oil and gas extraction are not included in the definition of "mine or quarry".
- 4.40 A study produced for the Environment Agency by Atkins (2002⁵⁰) sent a number of questionnaires to measure the impact of extending the requirements of the WFD to nonmineral wastes arising from the UK mine and quarry industries^{51.} A total of 5 questionnaires were returned⁵². Atkins (2002) identified the following wastes in the mines and quarries sector pre-questionnaire:

⁵⁰ WS Atkins Consultants Ltd (2002) "Mines and Quarry Wastes Survey Report".

⁵¹ Atkins (2002) used the definitions of 'mine' and 'quarry' used in section 180 of the Mines and Quarries Act 1954 as amended.

⁵² Atkins (2002) found that, from discussions with the industry, that the poor response rate was probably due to the number of information requests the industry receives and concern regarding a hidden agenda.

| Hazardous Liquid Waste | Solvents |
|---------------------------|----------------------------------------------------|
| Trazardous Elquid Waste | Acids |
| | |
| | Oils |
| | Waste fuel |
| | Alkalis |
| | Other |
| Non-hazardous Liquid | Site run-off |
| Waste | |
| | Wash waters |
| | Other |
| Hazardous Solid Waste | Oil contaminated materials (e.g. cleaning rags) |
| | Solvent contaminated material |
| | Filter cakes |
| | Other |
| Non-hazardous Solid Waste | Redundant plant and equipment (including vehicles) |
| | Office waste |
| | Catering wastes |
| | Construction and demolition waste |
| | Tyres |
| | Vegetation |
| | Packaging waste (including pallets) |
| | Other |

Table 7: Waste Survey Table (source Atkins 2002)

- 4.41 The data indicated that the majority of hazardous liquid wastes and both hazardous and non-hazardous solid wastes, as defined Table 7, are dealt with through contract arrangements with the waste management industry, whilst the majority of non-hazardous liquid wastes are discharged to controlled waters under some form of consent.
- 4.42 The survey also found that the following waste streams were identified by respondents themselves: -
 - Sewage;
 - Sewage, sludge and aqueous liquor arising from biological treatment of sewage;
 - Effluent from quarry de-watering; and
 - Resin sticks (this is the name in the quarrying sector given to epoxy resin adhesive used to fix rock bolts).
- 4.43 Atkins (2002) found that some non-mineral wastes are likely to be classified as hazardous waste and that this was likely to increase the cost of managing this fraction of the non-mineral waste stream but not the method of the management.
- 4.44 Atkins (2002) found some evidence that those non-mineral wastes which could be easily segregated and which are suitable for recycling, such as tyres and waste oil, are dealt with via a recovery route. But that the majority are dealt with via a disposal route this reflects the general waste management practice within the UK.
- 4.45 Other specific management methods mentioned include the composting of waste vegetation. There is also evidence that redundant plant and equipment in mines is left in-

situ rather than returned to the surface for disposal as scrap, which tends to be the preferred method in quarries. The potential complexity (and cost) of retrieving redundant plant and equipment from deep workings explains the difference in approach between mining companies and quarry operators.

- 4.46 Atkins (2002) concluded that, on the basis of their study, the impact of extending the requirements of the WFD to non-mineral wastes arising from the UK minerals industry could not be quantified. However, the empirical evidence suggested that the majority of non-mineral wastes were dealt with off-site via contract arrangements with the waste management industry and that the effluents produced tended to be re-circulated in order to reduce the amounts requiring disposal. The empirical evidence also suggested that disposal to controlled waters and sewer is already regulated.
- 4.47 Therefore, extending the requirements of the WFD and bringing non-mineral wastes into waste management controls will have little impact on the UK mineral industry. From the evidence available, Atkins (2002) found that the most significant impact may be on the mining sector with regard to the practice of leaving redundant plant and equipment underground and on those mines and quarries producing hazardous waste.

5 The Small Firms' Impact Test

5.1 The Agricultural Waste Stakeholders' Forum has been consulted on the proposed Regulations and the partial RIA issued with the public consultation paper; and issues raised are appropriately reflected in the assessments made in the RIA. The main factors determining the impact on businesses of the Regulations are the types and quantities of waste which they produce, recover or dispose of – not the size of the business as such. The Forum's membership and terms of reference are set out on the Department's website at:-

www.defra.gov.uk/environment/waste/agforum/index.htm

5.2 In relation to mines and quarries waste, the British Aggregates Association and the CBI Minerals Committee have been consulted. The Committee concluded that, "the findings of the draft (partial) Regulatory Impact Assessment reflect the impact of the proposed Regulations on the sector satisfactorily".

6 Competition Assessment

6.1 Application of the WFD to agricultural waste will affect the whole of the agricultural sector (estimated at 137,000 agricultural holdings in England and 25,000 in Wales). The sector includes a large number of separate agricultural markets each of which will be affected to a varying degree according to the volume and nature of the waste produced by each type of operation. Although the additional costs imposed on farmers and growers will vary as between separate markets, they are considered to be unlikely to create any significantly disproportionate cost burdens within individual markets. Disposal costs will be based on the volume of waste produced, and will therefore be broadly proportionate to the size of each agricultural holding. Where farm holdings choose off-site waste disposal methods there will be some variation in the costs involved according to the locality of individual farms. But such differences are not considered sufficient to create any significant effects for competition. Nor is it anticipated that the scale of the costs involved will create any additional barriers to entry.

- 6.2 On the basis of the available data, the Department has not been able to identify any particular markets within the agricultural sector to which these general conclusions will not apply. However, it has also not been possible to estimate accurate costs per farm across every individual affected market.
- 6.3 Application of the WFD to non-mineral waste from mines and quarries will not result in any significant increase in obligations, or associated costs, in addition to those already imposed on those operations by existing regulation. It is not therefore anticipated that the proposed Regulations will have any impact on competition in these sectors.

7 Enforcement and sanctions

7.1 The Environment Agency is prescribed as a "competent authority" for the purposes of the WFD and the Landfill Directive and will administer and enforce the waste management controls for agricultural waste, and non-mineral waste from mines and quarries, as part of its existing responsibilities. The sanctions for non-compliance with the existing controls in place to fulfil the requirements of the Directives will apply in relation to agricultural waste and non-mineral waste from mines and quarries. Defra will monitor the costs of compliance and the impact of the proposed Regulations on farming practices and income and the mining and quarrying industry, and where possible pursue opportunities for reducing these costs.

8 Implementation and delivery plan

8.1 The measure will be implemented from [**INSERT DATE**] to ensure that the relevant controls are in place. There will be a 12-month transitional period, from the date the Regulations come into force, for farmers and growers to register exemptions or to apply for a waste management licence. There will be a 6-month transitional period from the same date, for farmers and growers to register as a professional waste carrier. Furthermore, The Hazardous Waste (England and Wales) Regulations 2005 will not apply until 12 months after the date the Regulations come into force. The Environment Agency as the competent authority has taken the view that the first 12 months after the coming into force of the Regulations, will be treated as an education and awareness period and the only activities they will ask the farmers and growers to refrain from carrying out are those that are deemed to be "high risk"⁵³.

9 Monitoring and post-implementation reviewing

- 9.1 Defra will monitor the costs of compliance and the impact of the proposed Regulations on farming practices and income and the mining and quarrying industry, and where possible pursue opportunities for reducing these costs.
- 9.2 Article 16 of the WFD^{54.} requires Member States to report to the European Commission on the measures taken to implement the Directive; and for the Commission to publish a consolidated report on Member States' implementation. The Commission's latest report for the period 1998-2000 was published on 19 May 2003 (COM (03)250) and is available on their website at:- <u>http://europa.eu.int/comm/environment/waste/reporting/index.htm</u>

⁵³ Particular considerations apply in relation to the continuing use of farm dumps on and after the date the Regulations come into force.

⁵⁴ As standardised/rationalised in Directive 91/692/EEC.

- 9.3 Article 17 of the WFD also provides that the amendments necessary for adapting the lists of disposal and recovery operations in Annexes IIA and IIB to the Directive, in the light of scientific and technical progress, are to be adopted in accordance with the procedures in Article 19 the Technical Adaptation Committee.
- 9.4 On 21 December 2005, the European Commission published a Thematic Strategy on the prevention and recycling of waste and associated legislative proposals. The latter includes (a) revision of the existing WFD; (b) repeal the Waste Oils Directive (75/439/EEC); and (c) repeal and integrate the Hazardous Waste Directive into a revised WFD. The Commission's proposals are available on their website at http://europa.eu.int/comm/environment/waste/strategy.htm
- 9.5 The European Commission proposes to revise the existing WFD for three main reasons:-

(i) To clarify some of the definitions to provide greater certainty for industry, businesses and the "competent authorities" responsible for implementation of the Directive. The main clarifications concern the definitions of "waste" and "recovery". The former addresses the point at which specified waste streams are completely recovered and are consequently deemed to be no longer waste. The purpose of the latter is to enable a more effective distinction to be made between waste disposal and waste recovery operations;

(ii) To direct the revised Directive towards a specified aim by the introduction of an environmental objective. This objective focuses on the reduction of environmental impacts from the generation and management of waste. Member States are required to take measures, as a matter of priority, to prevent or reduce waste production and, where waste is produced, to ensure its recovery by means such as re-use and recycling. In the latter context, the Directive also proposes the introduction of EU-wide minimum standards for the recovery of waste; and

(iii) To simplify the existing legal framework. The two main simplifications are (**a**) the repeal of the Waste Oils Directive – including its requirement for priority to be given to waste oils regeneration over other recovery operations; and (**b**) the repeal and integration of the Hazardous Waste Directive into the revised WFD. Some obsolete or unclear provisions in the existing Directives are also repealed or modified.

9.6 The UK has actively participated in the Commission's consultations on the Waste Thematic Strategy and associated consultations; and will continue to be active in negotiations with the Commission and other Member States on the revised WFD. In doing so, we will comply with the guidance on "UK handling of EU proposals" available on the Cabinet Office's website at http://www.cabinetoffice.gov.uk/regulation/europe/uk_handling/index.asp

10 Consultation

(i) Within Government

10.1 Consultation has taken place with the Office of the Deputy Prime Minister, the Department of Trade and Industry, the Welsh Assembly Government and the Scottish Executive. The

PM's Panel of Regulatory Accountability were consulted along with DTI's Small Business Service.

(ii) Public Consultation

- 10.2 The Agricultural Waste Stakeholders' Forum see paragraph 5.1 above has been consulted about the proposed Regulations and the partial RIA. In line with the Cabinet Office Code on Consultation, a wide-ranging 14 week public consultation exercise was carried out from 9 December 2004 to 18 March 2005. The main consultation paper was sent to 495 organisations and a summary, with a pull-out questionnaire was sent to 162,000 farmers and growers in England and Wales. There were 103 responses to the main consultation and 2,485 to the summary questionnaire. The outcome of the responses was positive, with most respondents considering that the questions in the consultation paper were comprehensive. 92% of those responding to the summary consultation indicated that they would use between 1-3 of the 5 waste management options identified in the paper. A consultation report has been prepared in compliance with the Cabinet Office "Code of Practice on Consultation" and will be published on the Department's website.
- 10.3 A significant post-consultation development was a judgment by the ECJ on an infraction case against Spain involving the WFD and the classification of manure/slurry as waste (Case C-416/02). The effect of the judgment was to conclude that livestock effluent <u>may</u> fall outside classification as waste:-
 - (a) If it is used as a soil fertiliser and:-
 - (i) that use is part of a lawful practice of spreading; and
 - (ii) the spreading takes place on clearly identified parcels of land; and(b) If its storage is limited to the needs of those spreading operations;

(c) Furthermore, to fall outside classification as waste it is not necessary for livestock effluent used as fertiliser to be spread on land forming part of the same agricultural holding as that which generated the effluent.

11 Summary and recommendation

- 11.1 The UK is subject to infraction proceedings under Article 226 of the Treaty; an adverse judgment by the ECJ on that infraction; and in order to comply with that judgement it is essential to make the Regulations necessary to repeal section 75(7)(c) of the 1990 Act and to apply the requirements of the WFD and the Landfill Directive to those types of agricultural waste, and mines and quarries waste, which are not excluded from the scope of the WFD by Article 2(1)(b). These controls have applied to all other sectors of industry and types of waste since May 1994 in the case of the WFD; and since June 2002 in the case of the Landfill Directive.
- 11.1 The Department's working assumptions are that (a) none of the farm dumps/tips which are currently used to dispose of agricultural waste will be able to meet the standards required by the Landfill Directive; (b) 98%⁵⁵ of farmers and growers will decide to consign their waste for disposal off-farm; and (c) all such waste will be consigned for disposal at licensed landfill sites. On this basis, the Department estimates that the total disposal cost to farmers

⁵⁵ To provide an overall assessment, the costs subsequently referred to in paragraph 11.1 are based on 100% of farmers consigning their waste for disposal off-farm to licensed landfill sites.

and growers of complying with the extension of controls to agricultural waste to be £2.7m-£69.8m per annum – the mid-point of the range being £49.25m⁵⁶. And the average cost of meeting the extension of controls in this way represents 3.0% of farm incomes in 2004.

11.2 The Department estimates that the proposed Regulations will have no significant impact on the mining/quarrying industry because of (a) the existing regulatory controls applying to the disposal of mineral wastes; and (b) the current use by the industry of the waste management industry to dispose of its non-mineral waste within the scope of the existing controls applying to industrial waste.

Summary costs and benefits table

11.4 Table 8 shows the intensity of the impacts of each option. The "do nothing" option is not an option but has been included in the Table to highlight the negative impact on all three sustainable development (SD) aspects. The UK is subject to an adverse an ECJ judgment on infraction proceedings on the WFD relating to the exclusion in section 75(7)(c) of the 1990 Act. It is the Government's policy to fulfil its legal obligations to transpose and implement EU Directives – in a manner proportionate to the risk and without "gold plating" – see paragraph 2.1 above.

| | Social | | Economic | | Environmental | |
|---------------|----------|----------|----------|----------|---------------|----------|
| Option | Negative | Positive | Negative | Positive | Negative | Positive |
| 1 | | Х | | Х | | XX |
| 2 | | Х | | Х | | XX |
| 3 | | XXX | | XXX | | XXX |
| Do Nothing | XXX | | XXX | | XXX | |

Table 8: Impacts of the possible options

The number of (X) indicates the intensity of the specific option. One (X) being less intense than three(X).

Option 1, is to apply to agricultural waste the existing permit/licence exemptions which have been provided under Article 11 of the WFD. This option by itself is adequate, however, as not all of the existing exemptions are directly relevant to the farming industry and so the positive impact is small - see paragraph 2.6 above.

Option 2, is to amend the 1994 Regulations to provide additional permit/licence exemptions for agricultural waste. This again is plausible but on its own has less effect and the positive SD impacts are relatively minor - see paragraph 2.7 above

Option 3, is to use both options 1 and 2 together - see paragraph 2.8 above. By using this option the benefits in both options 1 and 2 to the environmental, social and economical aspects are improved significantly. It is a deregulatory option, as farmers and growers will be able to register exemptions for a number of activities rather than have to apply for a full

⁵⁶ These costs include \pounds 6.4m for landfill tax (at \pounds 18 p/t). This is a transfer payment between agriculture and the Government and does not represent an additional cost to the UK as a whole.

waste management licence/permit. They will not only have access to existing exemptions, where some are relevant to the farming industry but also to proposed new exemptions that are specifically designed for farmers and growers. Thus, encouraging the recovery of agricultural waste and committing to the Government's SD goal.

11.5 In summary, and after consideration of the adverse ECJ judgment on the infraction and the cost analysis undertaken, Government recommends that there is no option other than to apply to agricultural waste, and to non-mineral waste from mines and quarries, the waste management controls required by the WFD and the Landfill Directive. Furthermore option 3 is recommended so not to burden farmers and growers with applying for licences/permits and to encourage waste recovery activities.

12 Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed Ben Bradshaw

Date 28th March 2006

Minister's name, title, Department

13 Contact points

13.1 **Contact points** on the RIA and for more general enquires on the proposed extension of waste management controls to agricultural waste, and mines and quarries waste, are shown below:-

RIA Contact Point

James Vause Environmental Protection Economics Division Department for Environment, Food and Rural Affairs Zone 5/F6 Ashdown House 123 Victoria Street LONDON SW1E 6DE

E-mail: james.vause@defra.gsi.gov.uk

General Enquiries

Trevor Staines Waste Management Division Department for Environment, Food and Rural Affairs Zone 6/F6 Ashdown House

123 Victoria Street LONDON SW1E 6DE

Tel: 020 7082 8866 Fax: 020 7082 8764 E-mail: amqw.consultation@defra.gsi.gov.uk

Waste Framework Directive Unit Waste Management Division Department for Environment, Food and Rural Affairs (Defra) March 2006

Annex 1

The Agriculture Act 1947

"Agriculture 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, and 'agriculture' shall be construed accordingly."

Annex 2

Waste Disposal Operations

- 1. Deposit into or onto land (e.g. landfill, etc.) (D1);
- 2. Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.) (D2);

3. Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.) (D3);

4. Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.) (D4);

5. Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.) (D5);

6. Release into a water body except seas/oceans (D6);

7. Release into seas/oceans including sea-bed insertion (D7);

8. Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (D8);

9. Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcination, etc.) (D9);

10. Incineration on land (D10);

11. Incineration at sea (D11);

12. Permanent storage (e.g. emplacement of containers in a mine, etc.) (D12);

13. Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (D13);

14. Repackaging prior to submission to any of the operations numbered D 1 to D 13 (D14);

15. Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where it is produced) (D15).

Waste Recovery Operations

- 1. Use principally as a fuel or other means to generate energy (R1);
- 2. Solvent reclamation/regeneration (R2);

3. Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) (R3);

4. Recycling/reclamation of metals and metal compounds (R4);

- 5. Recycling/reclamation of other inorganic materials (R5);
- 6. Regeneration of acids or bases (R6);
- 7. Recovery of components used for pollution abatement (R7);
- 8. Recovery of components from catalysts (R8);

9. Oil re-refining or other reuses of oil (R9);

10. Land treatment resulting in benefit to agriculture or ecological improvement (R10);

11. Use of wastes obtained from any of the operations numbered R 1 to R 10 (R11);

12. Exchange of wastes for submission to any of the operations numbered R 1 to R 11 (R12); 13. Storage of wastes pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where it is produced) (R13).