

**EXPLANATORY MEMORANDUM TO THE
HAZARDOUS WASTE (ENGLAND AND WALES) REGULATIONS**

2005 No. 894

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.

This memorandum contains information for the Joint Committee on Statutory Instruments.

2. **Description**

- 2.1 These Regulations make provision for the controlled management of hazardous waste from the point of production to the final point of disposal or recovery.

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

- 3.1 Currently, the Environment Agency recovers the costs incurred carrying out its functions in relation to hazardous waste by means of a charge imposed for issuing consignment notes, which are needed in order to move waste in accordance with the Special Waste Regulations.

- 3.2 The regime introduced by the Regulations will not rely on the Environment Agency issuing consignment notes. This means that the Agency will need to recover its costs by a different route and this in turn means that payments are required in different circumstances. This means that there are fee increases in some circumstances because previously no fees were payable. However, whilst some producers may face fee increases, those who make more than two consignments of hazardous waste will be able to benefit from reduced costs.

- 3.3 The Regulations require notification of premises at which waste is produced or removed. This notification requirement is new and will be subject to a charge. The intention is generally is that producers will notify the premises at which the waste is produced. If waste is removed from other premises, the person responsible for the removal (the consignor) will notify. The charge will be included in a charging scheme made under section 41 of the Environment Act 1995 (c. 25). In the meantime, Schedule 9 to the Regulations includes transitional charges.

- 3.4 The Regulations also now require a quarterly return from consignees (i.e. those who receive the waste) and from those producers who dispose on the site of

production. The Environment Agency intends to impose a charge in both cases, with consignees given a right to re-claim any payment from the consignor who sent them the waste. In practice, consignees will pass on any charges in any event but structuring the charging regime in this way is administratively more efficient and results in lower costs to the Agency and hence lower charges overall. Again a transitional charging scheme is put in place until a scheme can be made.

4. Legislative Background

4.1 The Regulations are made under section 2(2) of the European Communities Act 1972 (1972 c.68) and section 156 of the Environmental Protection Act 1990 (“the 1990 Act”) (1990 c.43).

4.2 The Regulations are made for the purpose of implementing the Hazardous Waste Directive (91/689/EEC).

4.3 The Regulations replace current transposition through controls imposed by the special waste regime set out in Part 2 of the 1990 Act and the Special Waste Regulations 1996 in particular. In part they address an unfavourable judgment made by the ECJ in relation to our transposition of the Directive (Case C-431/02). This concerned failure to transpose several articles, largely because our domestic provisions did not dovetail adequately with those in the Directive.

4.4 With the exception of Part 11, the National Assembly for Wales will be making its own regulations for hazardous waste in Wales to cover all other aspects covered by these Regulations. The changes in Part 11 rely on section 156 of the 1990 Act to broaden the offence in section 33 of the 1990 Act by including a new definition of hazardous waste and to include a new power to list waste which displays hazardous properties. Section 156 has not been transferred to Wales and it has therefore been necessary for those provisions to extend to Wales. The definition of hazardous waste inserted into the 1990 Act differs for Wales because it is not possible to refer to the equivalent Regulations in Wales until they are made. The intention is that the equivalent NAW regulations will come into force on the same day and there will then be an opportunity to bring the definitions into line. If the NAW do not make the bring forward regulations governing hazardous waste in Wales for any reason, it will be necessary to revoke these provisions in relation to Wales before they come into force.

4.5 A transposition note is attached at Annex A. This also covers the List of Wastes (England) Regulations 2005.

5. Extent

5.1 This instrument applies to England and Wales.

5.2 The only provisions that apply to Wales are changes to the 1990 Act contained in Part 11 of the Regulations and the provisions relate to that Part.

6. European Convention on Human Rights

6.1 The Minister of State (Environment and Agri-Environment) (Mr Elliot Morley) has made the following statement under section 19A(1)(a) of the Human Rights Act 1998:

“In my view the provisions of the Hazardous Waste (England and Wales) Regulations 2005 are compatible with the Convention rights.”

7. Policy background

7.1 The requirements of the Hazardous Waste Directive are largely already transposed in England under the special waste regime. This is done primarily by requiring movements of hazardous waste to be documented in consignment notes and by ensuring that records of the disposal and recovery of such waste are kept. The Regulations replace the domestic special waste regime with a more transparent transposition of our Community obligations referring instead to hazardous waste.

7.2 The Regulations will apply tracking and movement controls contained in the Directive to hazardous waste, which is wider than the current definition of special waste. This reflects the European List of Wastes reflected in Decision 2000/532/EC (as amended by 2001/118/EC; 2001/119/EC and 2001/573/EC). There are transitional provisions in Schedule 12 to deal with cases where someone finds that their activity is rendered unlawful by reason of the change in status of the waste that they are disposing or recovering.

7.3 There is also a temporary exclusion from these controls for waste from agriculture and from mines. This is because these wastes are currently excluded from the controlled waste regime under the 1990 Act but are being brought into control in a separate set of regulations <http://www.defra.gov.uk/corporate/consult/wastereg-haz/consult.pdf> . The intention is that the hazardous waste controls should apply once those wastes are brought fully into the controlled waste regime. It is anticipated that this date will be 1 September 2006 but this date may need to be amended depending on the progress made with those other regulations.

7.4 The Regulations also give the Secretary of State a duty to designate as hazardous, wastes which are not on the list but exhibit hazardous properties. In individual cases, determinations that a waste is or is not hazardous can also be made.

7.5 The changes introduced by the Regulations will streamline existing procedures and shift the focus of control further up the waste management chain from waste managers to waste producers. Under the Special Waste Regulations, much of the responsibility for the waste fell on the “consignor”. This is the person who causes the waste to be removed from the premises at which it was held and may be the waste management contractor rather than the person who produced the waste. The Hazardous Waste Regulations will place more responsibility on those who produce the waste and introduce a more focussed producer inspection regime.

7.6 A consultation paper setting out preliminary proposals was issued in March 2001 and the response was broadly favourable. A further consultation paper, including more detailed proposals and draft regulations, was issued in July 2004. About two hundred responses were received, which were broadly favourable. Some further changes were made to the Regulations following consultation to reflect the main areas of concern that were raised.

8. Impact

8.1 A Regulatory Impact Assessment is attached to this memorandum.

8.2 The impact on the public sector including local authorities and the healthcare sector is explored in the RIA. In recognition of the changes to the Hazardous Waste List, local authorities were given additional funding in the Spending Review 2002 to reflect the wider range of domestic waste classified as hazardous, and arising at civic amenity sites. There will be some impact on Government departments, who will be subject to the requirement to notify sites producing hazardous waste to the Agency, and in a common with the requirements on special waste under the special waste controls, they will need to consign hazardous waste when it is moved off site. The other main impact will be on the Environment Agency who are the regulator for the hazardous waste controls in England and Wales. The Regulations will enable the Agency to deploy more staff time on enforcement of the hazardous waste control regime and in advice giving to hazardous waste producers, and less on administrative and office based duties.

9. Contact

Alison Gadsby at Defra Tel: [020 7082 8759] or e-mail: alison.gadsby@defra.gsi.gov.uk can answer any queries regarding the instrument. (These contact details are supplied for Parliamentary purposes only. For HMSO Online, these details should be deleted and replaced by waste.policy@defra.gsi.gov.uk.)

TRANSPPOSITION OF THE HAZARDOUS WASTE DIRECTIVE 1991/689/EEC
This Transposition Note has been prepared by the Department for Environment, Food and Rural Affairs to show how the main elements of Directive 91/689/EEC of 12 December 1991 and which approximate the laws of the member states on the controlled management of hazardous waste have been transposed.

This note has been published to accompany the Hazardous Waste (England and Wales) Regulations 2005 and the List of Wastes (England) Regulations 2005, which were laid before Parliament on

Background

The Waste Framework Directive (75/442/EEC) as amended controls the recovery and disposal of waste. The Hazardous Waste Directive supplements these requirements with additional controls for hazardous waste. Article 1(4) of the Directive defines "hazardous waste" as waste on a list drawn up by the European Commission. The current list is set out in EC Decision 2000/532/EC http://europa.eu.int/eur-lex/en/consleg/pdf/2000/en_2000D0532_do_001.pdf as amended by 2001/118/EC, 2001/119/EC and 2001/573/EC.

These have so far been transposed by the Special Waste Regulations made under Part 2 of the 1990 Act. These Regulations revoke those in England and put in place a new regime, which refers to Directive terms more clearly. Similar amendments are being made in Wales. Article 1(4) of the Directive (which deals with the definition of hazardous waste) is in part transposed in Wales by these Regulations.

Main elements of the Directive

HAZARDOUS WASTE DIRECTIVE (91/689/EEC)			
Articles	Objectives	Implementation	Responsibility
1(4)	Definition of Hazardous Waste. This has been supplemented by a list set out in Commission Decision 2000/532/EC. Article 3 of the Decision also allows Member States to determine that waste indicated as hazardous on the list does not display the relevant properties.	Regulation 6 (a) defines as hazardous waste that is listed as hazardous in the List of Wastes as set out from time to time in the List of Wastes (England) Regulations 2005. This replicates the European List.	The European Commission has responsibility for changes to the European List. The Secretary of State will be responsible for transposing any future changes in the List of Wastes (England) Regulations 2005.
	The European list can be supplemented by waste that Member States consider also	Regulation 6 (b) includes in the definition of "hazardous", wastes listed as such in	The Regulations give the responsibility of designating extra

	displays hazardous properties. .	Regulations under section 62A of the Environmental Protection Act 1990. Section 62A (as inserted by Part 11 of these regulations), requires the Secretary of State to include on a list any waste in England which is not on the European list but appears to display hazardous properties. The National Assembly for Wales are under the same duty in Wales	wastes as hazardous in England to the Secretary of State and in Wales to the National Assembly for Wales.
Article 1(5)	Domestic waste is excluded from the Directive's requirements.	Regulation 12(2) excludes domestic waste from the requirements of the regulations.	The Secretary of State has carried forward this requirement in regulation 12(2).
Article 2(1)	On every site where hazardous waste is tipped (discharged) the waste must be recorded and identified.	Regulation 47 requires any person tipping or discharging hazardous waste to record and identify the waste in accordance with various requirements set out in the regulation. Regulation 48 places record keeping requirements on other disposal or recovery of hazardous waste or waste received by treatment and transfer stations.	Those who receive hazardous waste (consignees).
Article 2(2)	Establishments and undertakings, which dispose of, recover, collect or transport hazardous waste must not mix different categories of hazardous waste, nor mix hazardous waste with non-hazardous waste or other substances and materials.	Regulation 18 defines mixing as the mixing of hazardous waste with a different category of hazardous waste, with a non-hazardous waste or with any other substance or material. Regulation 19(1) prohibits establishments or undertakings that carry out the disposal or recovery of hazardous waste, or which produce, collect or transport hazardous waste, from mixing the waste.	Anyone who produces, collects, or transports hazardous waste and anyone who carries out disposal and/or recovery of hazardous waste.
Article 2(3)	As a derogation from Article 2(2), mixing can be allowed where the operation is subject to the permitting requirements in Articles 9,10 and 11 of Directive 75/442/EEC.	Regulation 19(3) disapplies the prohibition in regulation 19(1), where the mixing operation is authorised and conducted in accordance with the requirements of a waste permit.	Any holder of hazardous waste who mixes must obtain prior authorisation.
Article 2(4)	Where waste is already mixed with other waste, substances or materials, separation must be effected where technically	Regulation 20 places a duty on the holder of hazardous waste to separate mixed waste where separation is technically and	The holder of the waste.

	and economically feasible and where necessary to comply with Article 4 of Directive 75/442/EEC (The Waste Directive).	economically feasible and necessary to comply with Waste Directive conditions.	
Article 3	This disapplies the derogation from permitting requirements offered to those who carry out their own waste disposal given in Article 11 (1)(a) of Directive 75/442/EEC. It also allows Member States to waive the permitting requirements of Article 10 of that Directive for establishments that recover hazardous waste, where rules are adopted for such exemptions, the establishments or organizations using them are registered with the competent authorities and the rules are notified to the EC at least three months before they come into force.	Permitting requirements and exemptions are already covered by the Waste Management Licensing Regulations 1994 (as amended) and by other parallel regimes. These Regulations do not address article 3.	Secretary of State
Article 4 (1)	The requirements of Article 13 of Directive 75/442/EEC (for appropriate periodic inspections by the competent authorities) are also to apply to producers of hazardous waste.	Regulation 56 places a duty on the Environment Agency to carry out appropriate periodic inspections of hazardous waste producers.	Environment Agency
Article 4(2)	The requirements of Article 14 of Directive 75/442/EEC (to keep records of the quantities, nature, origin and, where relevant, the destination, frequency of collection, mode of transport and treatment method and to make these records available, on request, to the competent authority) are also to apply to producers and to all establishments and undertakings that transport hazardous waste.	Regulation 49(1) places an obligation on producers of hazardous waste to keep records of the quantity, nature, origin and, where relevant, the destination, frequency of collection, mode of transport and treatment method of the waste. Regulation 50(1) places the same obligation on establishments or undertakings that transport hazardous waste. Regulation 55(1) places a duty on anybody required to keep such records, to produce the record at the request of the Environment Agency.	Hazardous waste producers
Article 4(3)	Requires records to be kept for at least three years except	Regulation 50(2) requires establishments and	

	<p>in the case of establishments and undertakings transporting hazardous waste when they need to be kept only for 12 months. Documentary evidence that management operations have been carried out must be supplied at the request of the competent holders or of a previous holder.</p>	<p>undertakings that transport hazardous waste to keep their record for at least 12 months.</p> <p>Regulations 47(5)(c)(i), 48(6)(b)(i) and 49(3) require that all other records be kept for three years unless the permit under which the site is operated is surrendered or revoked. In that case the records are sent to the Agency, which is required to keep them for at least 3 years.</p> <p>Regulation 55(3) places a duty on waste management facilities to provide the Environment Agency on request with evidence that management operations have been carried out.</p> <p>Regulation 52(1) places a duty on waste management facilities to provide previous holders with evidence that management operations have been carried out.</p>	
Article 5(1)	<p>Hazardous waste must be properly packaged and labelled in accordance with the international and Community Standards in force.</p>	<p>Packaging and labelling requirements are not affected by these Regulations and apply in addition to any requirements included.</p>	<p>Waste holder</p>
Article 5(2)	<p>Requires that hazardous waste inspections concerning collection and transport operations made on the basis of Article 13 of Directive 75/442/EEC shall cover more particularly the origin and destination of the waste.</p>	<p>Regulation 57 places a duty on the Environment Agency to conduct these inspections so that they cover more particularly the origin and destination of the hazardous waste. The duty to inspect is transposed already under paragraph 13 of Schedule 4 to the Waste Management Licensing Regulations 1994 (S.I.1994/1056).</p>	<p>Environment Agency</p>
Article 5(3)	<p>Hazardous waste is to be accompanied by an identification form containing the details specified in Section A of Annex I to Council Directive 84/631/EEC (as amended).</p>	<p>Regulation 36 and Part 6 require the completion of a consignment note where waste is removed from any premises. The consignment note includes the details specified in Section A Annex I to Council Directive 84/631/EEC (as amended). Schedule 7 deals with the</p>	<p>The waste producers, holders, carriers and consignees all have responsibilities to complete these notes.</p>

		recognition of consignment notes produced in other parts of the UK and Gibraltar.	
Article 6	Member States must draw up Waste Plans and make them public.	The Waste Strategy made under section 44A of the Environmental Protection Act 1990 has implemented this requirement in England. It does not form part of these regulations.	Secretary of State
Article 7	Requires Member States to take all necessary steps, including, where appropriate, temporary derogations from the Directive to ensure that hazardous waste is so dealt with as not to constitute a threat to the population or the environment.	Regulations 62 and 63 sets out the duties on the holder of hazardous waste and the Environment Agency in the event of an emergency. There is also a defence under regulation 66 for a person who is not able to comply with the Regulations by reason of emergency or grave danger.	The waste holder and the Agency have the responsibility for taking steps to prevent threats to the population or the environment.
Article 8(3)	Requires Member States to send annual information to the European Commission on establishments and undertakings that dispose of or recover hazardous waste.	Regulation 60 places a duty on the Environment Agency to provide the Secretary of State with the information that Defra will need in order to make these returns to the Commission.	The initial responsibility lies with the Environment Agency to provide Defra with the information. Defra is responsible for sending the information on to the Commission.

Review of the Special Waste Regulations 1996 in England

Hazardous Waste (England and Wales) Regulations 2005 and the List of Wastes (England) Regulations 2005

Final Regulatory Impact Assessment

HAZARDOUS WASTE (ENGLAND and WALES) REGULATIONS 2005

LIST OF WASTES (ENGLAND) REGULATIONS 2005

1 PURPOSE AND INTENDED EFFECT OF MEASURES

(i) Objective

This final Regulatory Impact Assessment (RIA) is concerned with the implementation of the Hazardous Waste (England and Wales) Regulations 2005, which repeal and replace the Special Waste Regulations 1996 which transpose the European Hazardous Waste Directive (91/689/EC). This RIA also looks at the impacts of implementing the List of Wastes (England) Regulations 2005 for the purposes of the Hazardous Waste (England and Wales) Regulations 2005.

Replacement of the Special Waste Regulations 1996 (S.I. No 972) is necessary to implement the revised European Hazardous Waste List, now incorporated into the European Waste Catalogue (2001/532/EC)¹ and to revise the control system for hazardous waste to ensure complete transposition of the Hazardous Waste Directive.

The Welsh Assembly Government will issue Regulations for Wales separately although the proposed changes to the control system will be very similar to those in England. Given that the Environment Agency is the relevant regulatory authority for the control of hazardous waste for England and Wales this RIA addresses the regulatory impacts for England and Wales. In Scotland the Special Waste Amendment (Scotland) Regulations came into force on 1 July 2004. Northern Ireland will be making their own provisions for implementing the Hazardous Waste List into their legislation, and any changes to the control system for hazardous waste.

(ii) Background

Hazardous waste is essentially waste that contains hazardous properties that may render it harmful to human health or the environment. Given the risks that it may pose to human health and the environment it is especially important that hazardous waste is managed properly. At present, there are around five million tonnes of special² waste generated annually in England and Wales, and around 500,000 consignments of this waste. The Hazardous Waste Directive sets out provisions to ensure the controlled management of such waste, and is transposed and implemented in Great Britain through the Special Waste Regulations 1996.

¹ As amended by Commission Decisions 2001/118/EC and 2001/119/EC, and Council Decision 2001/573/EC

² 'Special' waste is the term used to define all wastes that are controlled as hazardous waste within the UK. The proposed Hazardous Waste Regulations will bring the UK definition of hazardous waste broadly in line with the European definition.

The scope of the Directive is defined by the Hazardous Waste List. The list was revised and incorporated into the European Waste Catalogue in 2000, with the changes taking effect on 1 January 2002. The UK Government is obliged to transpose the revised list into UK law. This will be done through the List of Wastes (England) Regulations 2005.

Given that implementation of the revised Hazardous Waste List will significantly increase the number of hazardous waste producers, and the number of hazardous waste consignments, the system for controlling the movement and management of hazardous waste must be both efficient and effective. The UK Government has, therefore, taken the opportunity to review the Special Waste Regulations 1996 more generally in order to simplify administrative procedures for consigning hazardous waste and to amend the charging scheme for those procedures. The review has also addressed areas where transposition of Directive obligations has been incomplete. The revised control system for hazardous waste is set out in the Hazardous Waste (England and Wales) Regulations 2005 (the 'Hazardous Waste Regulations').

Changes to the procedures for consigning and monitoring hazardous waste

The Directive requires that hazardous waste must be tracked from source to final disposal to ensure that it has been managed properly. This is currently carried out in the UK using a system of consignment notes, issued by the relevant regulatory authority (the Environment Agency in England and Wales). A consignment note is required every time a load of hazardous waste is moved from one site (consignor) to another (consignee). Each movement is tracked and recorded by the Environment Agency.

The revised control system reduces the administrative burden on both the regulator and those operating within the system and shifts the regulatory focus from administration of the system to assessment of compliance, targeting sites and activities that present the highest risk, with emphasis placed on the waste producer.

The Hazardous Waste Regulations incorporate the following key changes to the consignment system:

- Introduction of obligation to notify premises where hazardous waste is produced;
- Removal of the requirement for pre-notification of consignments to the Environment Agency three days before movement of hazardous waste;

- Consignment notes will still be required to track the movements of waste but the requirement to submit them to the Environment Agency has been removed;
- The introduction of quarterly reporting, by the consignee, of hazardous waste consignments to the Environment Agency rather than the return of individual consignment notes. Charging for each consignment will be made on the basis of these quarterly returns.

Notification of premises

A general requirement for hazardous waste producers to notify sites where hazardous waste is produced, to the Environment Agency, has been introduced, for which an annual 'site notification' fee will be charged.

It is recognised that many 'new' hazardous waste producers (those coming within the scope of the control system for the first time by virtue of the revised and expanded Hazardous Waste List) will only be producing minimal arisings of hazardous waste, and often on a sporadic basis. While these wastes must be subject to the control system there is little environmental benefit to be gained from the notification of such sites. The Hazardous Waste Regulations will therefore exempt certain small businesses from the requirement to notify their premises providing they meet the qualifying limitations³. The following premises may use this exemption: offices and shops, small agricultural businesses, caravans, camp sites, houseboats, residential homes, premises forming part of a university, school or other educational establishment or a hospital or nursing home, doctors' surgeries, dental surgeries, health clinics, prisons, public meeting halls, and premises used by charities.

Consignment notes and quarterly reporting

Under the Hazardous Waste Regulations there is no requirement for pre-notification of a consignment, eliminating a regulatory and administrative burden on companies consigning waste and offering greater flexibility on the timing of consignments to consignors. Waste movement notes still need to accompany consignments although the obligation to submit them to the Agency has been removed. Copies must be kept by consignors and consignees for at least three years.

The audit trail of hazardous waste arisings will be monitored by the Environment Agency through the submission of quarterly reports by consignees. Charges for waste movements will be made, by the Environment Agency to the consignee, on the basis of these reports.

³ Less than 200kg of hazardous waste is produced at the premise in any twelve month period.

Multiple collections - modification of carrier rounds

It is recognised that for small loads of similar wastes, such as waste oils from garages, that it is practical and efficient to collect a series of smaller loads from many producers on the same vehicle.

However, the Hazardous Waste Regulations modify procedures for loads collected on carrier rounds (now called "multiple collections"). To meet Directive requirements, information must be obtained about each load collected, including details about each producer. Under the multiple collection procedure, each load collected will, therefore, be required to have a unique consignment code and a separate consignment note for multiple collections will obtain all the information required on individual loads whilst also providing streamlined summary information for carriers and consignees. Charging for loads on multiple collections will also change such that each load will be subject to a waste movement fee (although this fee will be lower than the fee for single waste movements). However, in order to simplify administrative procedures, and avoid excessive paper work, the Regulations include a schedule for recording loads on multiple collections.

Changes to mixing requirements

There is a general prohibition on the mixing of different types of hazardous waste or mixing of hazardous waste with non-hazardous waste in the Hazardous Waste Directive. This provision, which previously applied to those who dispose of, recover, collect or transport hazardous waste, has been extended to those producing hazardous waste (mixing will still be allowed where it is being undertaken in accordance with a permit). Although this is not an explicit provision of the Directive it is justified by the environmental benefits to be gained. As the source of hazardous waste, producers are the first place in the waste management chain where wastes could be mixed. Mixing of different hazardous wastes is generally discouraged given the unknown risks associated with the resulting waste. The types of reactions that can occur when mixing such wastes are complex and the hazard characteristics of the resulting waste are not always easy to ascertain.

The mixing of hazardous waste with any other materials, whether hazardous or not, is also undesirable for a number of reasons. Firstly it might be undertaken to dilute the hazardous waste to below threshold value levels, thus avoiding hazardous waste controls. Secondly, such mixing can in some cases increase the volumes of hazardous waste arisings, by rendering non-hazardous waste hazardous. An example of this would be fluorescent tubes disposed in a skip full of otherwise non-hazardous commercial waste. The presence of these tubes would result in the whole skip full of waste being classified as hazardous waste. Separation of wastes at source is also known to encourage recycling, fluorescent tubes are a good example. The recycling of these tubes is technically feasible but

recycling rates have been low through minimal separation of the tubes from general commercial waste arisings.

Implementing the revised Hazardous Waste List

The revision of the Hazardous Waste List resulted in an expanded list of wastes now classified as hazardous within the EU. While more than 200 additional waste streams have been added to the list many of these are already controlled as hazardous wastes within Great Britain, through the Special Waste Regulations, because of their hazardous properties. Nevertheless, it is expected that there will be a significant increase in the number of hazardous waste producers and hazardous consignments as a result of implementation of the revised list. A summary of the most important changes is at Annex A.

(iii) Risk Assessment

The UK is subject to infraction proceedings for incomplete transposition of the Directive. An adverse judgement, under Article 226 of the Treaty, was received from the European Court of Justice in October 2004. This judgement has now been referred back to the Court, under Article 228 of the Treaty, by the European Commission. Without the proposed changes an unfavourable ruling, and the imposition of significant daily fines, from the Court are likely. It is difficult to predict the size of the fines but one Member State has been charged €20,000 (£12,500) a day, by the Court, for non-compliance with the Waste Framework Directive.

Hazardous wastes, by their very nature, possess hazardous properties. Some may present direct risks to human health, for example because they are carcinogenic. Others have serious safety implications due to high flammability. Hazardous wastes that are ecotoxic or mutagenic may present long-term risks to the environment. The Hazardous Waste List was revised to incorporate it into the European Waste Catalogue, providing the opportunity to amend the list in view of waste already considered hazardous by Member States. Around 200 wastes were formally added to the list though many were already controlled as 'special' waste within Great Britain.

The risks from hazardous wastes are exacerbated if hazardous wastes are incorrectly handled, stored, transported, recycled or disposed of without due care. For example, irresponsible disposal of waste oils or solvents could lead to the severe contamination of groundwater. A mandatory audit trail for such waste, as provided for in the Hazardous Waste Regulations, allow the waste to be tracked from cradle to grave, thus deterring waste holders from attempting to dispose of hazardous waste incorrectly. By shifting the focus of the system onto hazardous waste producers, and shifting increased regulatory resources to inspection activities, the Regulations will help tackle instances where wastes are not notified, or are incorrectly consigned.

One of the key aims of the Government's waste management strategy⁴ is the minimisation of hazardous waste. A more simplified control system as provided by the Hazardous Waste Regulations allow the Environment Agency to shift resources from administration of the system to monitoring and inspection activities. These will include producer visits, whereby Environment Agency staff sign-post advice to waste producers on minimisation of waste, and/or hazardous waste production management. These visits will inform assessment of sector compliance to allow future visits to be targeted according to risk.

3 OPTIONS

Three options were fully considered in the consultation on draft Regulations with a fourth 'alternative' option⁵ suggested but not fully worked up (i.e. no charges were identified). In light of comments received during consultation this RIA consider four options.

Baseline: Business as usual

The 'business as usual' scenario implies non-compliance with the requirements. However, it is Government policy to fulfil its legal obligations to transpose and implement EU Directives in a manner proportionate to the risk and without 'gold plating'. As such, the 'business as usual' scenario is not a viable option, it is however useful for examining the effects of the proposed options.

Option 1 - Implement the revised Hazardous Waste List only (no change to control system or charging scheme)

This option would implement the changes to the Hazardous Waste List only, with no changes to the control system or charging scheme. The Hazardous Waste List now includes a number of significant additional waste streams. Many of these waste streams include items that are likely to be generated at some time by most UK businesses or commercial premises, e.g. computer monitors containing cathode-ray tubes.

This option would not fully implement the provisions of the Hazardous Waste Directive relating to mixing, separation and cradle to grave monitoring of waste.

Experience with the charging scheme for special waste has shown that charges for carrier rounds do not fully cover the regulatory costs of assessing compliance of all the producers of waste on each round in line with Directive requirements. Consequently there is some cross-subsidy between producers who use carrier rounds and those who do not.

⁴ Waste Strategy 2000 for England & Wales, DETR

⁵ Paragraph 7.10 of the consultation paper, and in the partial RIA for that paper (paragraph 4.42 of annex C)

Option 2 - Implement the revised Hazardous Waste List but with package of de-regulatory changes to the control system, including changes to carrier rounds (full charges for loads on carrier rounds)

This option is the same as option 1 with the addition of the following regulatory changes to the control system:

- Remove obligation for pre-notification;
- Introduce requirement for site notification;
- Remove obligation to copy consignment notes to Environment Agency, introducing instead an alternative consignment related charge based on quarterly reporting;
- The prohibition on the mixing of wastes (hazardous with hazardous, and hazardous with non-hazardous) would be extended to producers;
- Modified procedures for carrier rounds:
 - Individual consignment code for each individual load collected;
 - Charge payable for each individual consignment. This would introduce a level playing field for all producers, with no cross subsidy dependent on method of collection.

Option 3 - Implement the revised Hazardous Waste List but with package of de-regulatory changes to the control system but no change to carrier rounds

This option is the same as option 2 except that carriers rounds remain unmodified.

Under this option charges would be set to maintain the financial advantages of carrier rounds, but at the expense of producers who do not use them. Experience with the current charging scheme has shown that charges for carrier rounds do not fully cover the regulatory costs of assessing compliance of all the producers of waste on each round. Consequently there is cross-subsidy between producers who use carrier rounds and those who do not.

Option 4 - Implement the revised Hazardous Waste List but with package of de-regulatory changes to the control system, including changes to carrier rounds (partial charges for loads on carrier rounds)

This option is a variation of option 2 in terms of charges for loads of wastes on carrier rounds. Under this option the same regulatory changes envisaged under options 2 and 3 would be introduced. However, although individual consignments on a carrier round would levy a charge this would be set at a lower rate than for single consignments.

4 BENEFITS AND COSTS

Business sectors affected

Most industries and businesses already produce waste (non-hazardous) of some sort, but under the Hazardous Waste Regulations and the List of Wastes Regulations many will become hazardous waste producers, for the first time.

The impacts can be summarised as follows:

- *Existing hazardous waste producers* will be affected by the administrative changes to the hazardous waste control system and the changes to the charging scheme. Some existing hazardous waste producers may have to consign increased quantities of waste as a result of implementation of the revised Hazardous Waste List. The regulatory impact of the proposed options varies depending on the current pattern of hazardous waste production and management of the organisation.
- *New hazardous waste producers* will come within the control system for hazardous waste for the first time as a result of implementation of the revised to the Hazardous Waste List. This will have administrative and financial implications for these businesses.
- *Waste management operators* may have new business opportunities as a result of implementation of the revised Hazardous Waste List, with new waste streams coming within the control system for the first time. Most waste management companies offer inclusive services to their customers covering any administration services as well as the management of the hazardous waste. Consignees will be obliged to submit quarterly reports, detailing consignments received, to the Environment Agency, against which charges for waste movements will be levied. Thus operators may be able to offer new services such as consignment services and site notification to hazardous waste producers. Waste management companies, that are also consignees, will have a new requirement to maintain an inventory of hazardous waste on their site (although many keep one already as part of normal business practices, or as a requirement of their permit). Implementation of the revised list may result in increased costs for waste management companies where they generate waste new to the list.

The impacts can also be considered by sector as follows:

Impact on agriculture

Agricultural waste is currently excluded from the UK's waste management controls which implement the Waste Framework Directive (WFD), and thus it is currently excluded from the controls implementing the Hazardous Waste Directive. However, the Government has given a commitment to introduce the Regulations necessary to extend the UK's waste management controls to agricultural waste. A consultation exercise on these proposals, along with a partial RIA, commenced in December 2004. It is likely that a number of agricultural wastes will be classified as hazardous waste, such as waste oils, asbestos, veterinary wastes and pesticides, and will thus be subject to hazardous waste controls. For the purposes of agricultural waste coming within the Hazardous Waste (England and Wales) Regulations 2005, farmers are considered as 'new hazardous waste producers' within this RIA.

The Environment Agency recently commissioned some work⁶ to provide information on the quantities of hazardous waste produced on holdings and, in particular, to enable consideration of the 200kg threshold for exemption from the requirement to register as hazardous waste producers. All of the holdings surveyed were found to generate one or more types of hazardous waste. The most common type being lead acid batteries, with other wastes including waste oil, syringes and needles, aerosols and electronic and electrical equipment. The mean quantity of waste generated by the surveyed holdings was estimated to be 430kg per year, of which more than half, an estimated 250kg, is represented by scrapped vehicles. However, the survey noted that wastes such as vehicles and electronic equipment are not generated on an annual basis. 43% of the holdings surveyed were estimated to produce more than 200kg of waste in a typical year and, as such would be required to register as hazardous waste producers under the Hazardous Waste Regulations.

Impact on charities and the voluntary sector

Implementation of the revised Hazardous Waste List which includes certain waste electronic and electrical equipment such as cathode ray tubes (commonly found in televisions and computer monitors) means that a number of charities and voluntary sector organisations come within the hazardous waste control system for the first time. There are a number of charitable organisations currently involved in the recovery, refurbishment, re-use and recycling of waste household electronic and electrical equipment. Any collection and onward movement of these wastes, where hazardous, will need to be consigned and storage facilities will need to be licensed accordingly. However, these organisations may benefit from proposed new licensing exemptions currently being drawn up for the

⁶ Survey of Hazardous Waste on Farms, Hyder Consulting for the Environment Agency, February 2005

storage, pending recovery, of certain types of hazardous waste. Furthermore, in the case of WEEE, exemptions from licensing are being developed for low risk treatment of these wastes leading to their recovery.

Impact on local authorities

Domestic waste (i.e. that produced by accommodation used solely for living purposes) is exempt from the provisions of the Hazardous Waste Directive so householders may take domestic hazardous waste to civic amenity sites without needing to consign the waste. In addition, where local authorities make collections of hazardous waste from domestic premises, it would be impractical to require consignment notes for each collection. Thus hazardous waste separately collected from domestic premises is not be subject to the provisions of the Regulations until it has been delivered to the local authority collection point, and needs to be consigned on from that point. In recognition of the changes to the Hazardous Waste List, local authorities were given additional funding for the expansion of the Hazardous Waste List in the SR2002 EPCS⁷ settlement to reflect the wider range of domestic waste classified as hazardous.

Impact on the healthcare sector

The adoption of the hazard property H9 (infectious) in the classification of waste from the healthcare sector is likely to lead to more clinical waste being classified as hazardous. Estimates of the cost impact are difficult to quantify, but will be offset by the decision to classify only cytotoxic and cytostatic medicines as hazardous waste, rather than all discarded POMs. The costs will also be offset by more of the current yellow bag waste stream going to landfill rather than incineration. This reduction in yellow bag waste assumes a greater degree of segregation of non-hazardous waste streams from the clinical waste streams, and the development of the guidance should assist this process. The reduction also envisages a pragmatic approach in relation to the use of the H9 hazard property, and if necessary, the development of guidance additional to the Environment Agency's current guidance document WM2 to assist that process. It is estimated that if all clinical waste was to be classified as infectious under the hazard property H9, this would make the costs to the NHS in England in the region of £90m per annum compared to £50m now. Allowing for a 10% reduction as a result of POMs being diverted out of this waste stream, the cost would be approximately £81m compared with £50m currently.

The decision to increase the threshold for the site notification provisions from 50kg to 200kg will remove the requirement for most GPs practices to notify their premises.

⁷ Spending Review 2002 for the Environment Protection and Cultural Services block

Impact on dentists

The addition of new waste streams, such as dental amalgam, cathode ray tubes and fluorescent tubes, in the revised Hazardous Waste List mean that more waste items from dental premises will be classified as hazardous. However, the major impact in dentistry will be the requirement to limit environmental pollution from waste dental amalgam by the use of amalgam separators to filter wastewater from surgeries.

There are approximately 10,000 dental surgery locations in England, the majority of which are independently owned or leased, and operated by, dentists who provide significant levels of NHS treatments. In addition there is a smaller number of dental surgeries located within NHS premises and 12 dental teaching establishments in England.

Practices regularly replace, improve and upgrade their equipment and premises to enable them to deliver high quality services, and to comply with legislative and other requirements including health and safety requirements. The cost of making all dental surgeries compliant is difficult to estimate as an unknown number may already be suitably equipped, However, it is likely that these will be a small proportion of surgeries. Where the installation of an amalgam separator is necessary, a typical purchase cost may be about £500, but individual and installation costs may vary considerably depending on the nature of the equipment used in a particular surgery, its physical layout and plumbing arrangements, and the scheduling of installation to minimise disruption to clinical sessions.

As with all hazardous waste producers, there will be some additional overheads e.g. in keeping consignment records, cost of collection of waste and the servicing of any specialist equipment such as amalgam separators.

BENEFITS

Economic benefits

Implementation of the revised hazardous waste List and the new control system for hazardous waste will provide new business opportunities for waste management companies. Information on the impact on competition within the waste management industry can be found in section 7.

Environmental benefits

The environmental benefits of the proposed Hazardous Waste (England and Wales) Regulations 2005 will be delivered through the control of a wider range of hazardous wastes than at present as regards their handling, storage, transportation, recycling and disposal. Revision of the control system will ease the regulatory burden on existing hazardous waste producers, and will shift the

regulatory effort of the Environment Agency from administrative activities to field-based activities with the aim of increased reduction and prevention of pollution incidents, and greater detection and control of breaches. Producer visits will also contribute to hazardous waste minimisation in the long term.

The ban on mixing and greater segregation at source encourages waste management options further up the waste hierarchy.

Option 1

The UK fully transposes and implements the revised Hazardous Waste List so bringing additional waste streams into the hazardous waste control system for the first time

Option 2

The proposed changes to the procedures for consigning hazardous waste would have a number of benefits in addition to those listed under option 1:

- reduce the regulatory burden on industry and the administrative burden on the regulator by removing the requirement to pre-notify the movement of hazardous waste, and send copies of the consignment notes, to the Environment Agency;
- shift more responsibility for the waste to the producer;
- annual notification of producers/sites will help focus enforcement effort on non-compliance and enable more advice on waste minimisation at source
- the improved cradle-to-grave tracking of waste movements will help producers meet the requirements of Duty of Care and of Environmental Management Systems such as ISO14001.

The proposed changes to extend the mixing prohibition to producers will also have a number of benefits:

- prevent risks associated with the mixing of hazardous waste with other hazardous waste, or with non-hazardous waste;
- reduce hazardous waste arisings;
- encourage re-use and recycling of certain wastes.

Both the changes to the consignment procedures and the extension of the mixing prohibition will contribute to the reduction in the environmental and human health

risks associated with the production, handling, transportation and management of hazardous waste.

Option 3

The proposed changes to the procedures for consigning hazardous waste would generate the same benefits as above, with the exception of the charging scheme. Maintaining the cross-subsidy of carrier rounds results in a higher consignment charge for producers not using carrier rounds and also means the charges are less reflective of regulatory effort.

Option 4

The proposed changes to the procedures for consigning hazardous waste would generate the same benefits as option 2, with the exception of the charging scheme. Maintaining some element of cross-subsidy of carrier rounds would result in a higher consignment charge for producers not using multiple collections and means the charges are less reflective of regulatory effort. However, a lower fee for loads on carrier rounds encourages the use of an effective and efficient means of collecting small quantities of hazardous wastes.

Social benefits

The implementation of the revised Hazardous Waste List will bring a wider range of wastes within the control regime for hazardous wastes thus providing a higher level of health and safety for workers within the organisations of hazardous waste producers and the waste management industry. However, it is not possible to quantify these benefits.

COSTS

The costs section focuses on the regulatory costs setting out the charges to be levied, by the Environment Agency, for site notification and waste movements for each option. The charges are based on cost recovery for the Agency's activities.

Uncertainties & assumptions

The regulatory costs of the control system, must be met by charges for administration and operation of the system, such as charges to notify premises at which hazardous waste is produced, and for each movement of waste through quarterly returns from consignees. Thus the number of hazardous waste producers and hazardous waste consignments influence the costs of regulating the system. There are a number of uncertainties in calculating the current number of hazardous waste producers. It is also difficult to calculate the current number of consignments from each producer as many loads of waste are consigned on carrier rounds (where the numerous loads are consigned as one load).

Number of waste producers (notified sites)

There are also a number of uncertainties associated with implementation of the revised Hazardous Waste List, such as the lack of reliable data on the likely number of new hazardous waste producers, and hazardous consignments. Analysis of the Environment Agency's Special Waste Tracking (SWaT) data indicates that there is an average of 100,000 special waste producers per annum.

Due to the nature of some of the new entries on the Hazardous Waste List every small business has the potential to become a hazardous waste producer. It is estimated that there are close to 3.4 million small firms (those with under fifty employees) within the UK⁸. However, it is estimated that around 2.4 million of these are companies with no employees (i.e. are sole traders or dormant companies) and are hence not all likely to be hazardous waste producers. Research, for the Environment Agency, on estimating the impacts of expansion of the Hazardous Waste List estimated that there could be 100,000 to 1.3 million hazardous waste producers (based on 10% of SMEs with no employees and inclusive of all SMEs with employees).

However, it is assumed that many small companies will qualify for the exemption from notification, or produce hazardous waste less than once a year. For the purposes of the partial RIA, with all the uncertainties in the data, outlined above, it was estimated that there would be 110,000 notified sites⁹ in year one.

A number of consultation responses suggested that this estimate was overly conservative. However, as the exemption from site notification has been widened (in response to comments received during the consultation) the estimate of **110,000 notified sites** is seen as a reasonable figure for the final RIA. This estimate of expected activity level is considered to be reasonable and pragmatic and attempt to balance the risk to the Environment Agency under-recovering their costs, with the risk of achieving a surplus. Experience from year one of the new system will inform the Environment Agency's charging scheme for subsequent years, reviewing any charges, if necessary. Following two to three years of operation it is anticipated that risk-based charging will be incorporated into the charging scheme.

Number of waste movements

Implementation of the revised Hazardous Waste List will result in an increase in hazardous waste arisings. Estimates of the scale of the increase come with their

⁸ Small and Medium Sized Enterprise (SME) Statistics for the UK 2001, Small Business Service 2002.

⁹ Based on the average number of hazardous waste producers for 1999-2001 with a 10% increase as the net effect of all the uncertainties

own set of uncertainties and assumptions. Under the current system the average number of consignments is 529,000 per annum. The data suggests that of these consignments 16% are carrier rounds. For modelling purposes it is estimated that there is an average of six collections of waste on each carrier rounds (the majority of consultation responses support this estimate). These figures generate a total of 952,200 waste consignments.

For the purposes of the partial RIA, and on the basis on the uncertainties in the data, outlined above, it was estimated that there would be 1,000,000 individual consignments generated under the new system in year one. However, in light of comments received during the consultation, and further examination of the data, the estimate for number of **waste movements** has been revised to **1,150,000**. Again this figure reflects a balance between the risks of the Environment Agency under or over recovering their costs.

Regulatory Costs

Charging mechanism

Charges for the first year are set out in Schedule 9 of the Hazardous Waste Regulations. There are differential charges for site notification and waste movements based on the method of application, e.g. electronic versus paper, reflecting the varying administrative costs for each application method. Given that the requirement for site notification is the same across the options, the fee remains the same across the options (see Table 1). However, given the variations in charging for multiple collections between the options the waste movement fee varies between them (see Table 2).

Table 1 – Summary of site notification fees for different methods of application

Method of application	Site notification fee
Internet	£18
Other electronic	£18
Telephone	£23
Paper	£28

Table 2 – Summary of waste movement charges for single loads and for loads on multiple collections across the different options

	Option 1	Option 2		Option 3		Option 4	
Type of consignment	Paper	Electronic	Paper	Electronic	Paper	Electronic	Paper
Single	£16.35	£7	£14	£15	£22	£10	£19
Load on multiple collection	£16.35 charged per multiple collection	£7	£14	£15 charged per multiple collection	£22 charged per multiple collection	£5	£10

While cost savings will be made, by the Environment Agency, through simplification of the control system, increased resources will be needed to deal with the increase in the number of hazardous waste producers and hazardous waste consignments. The Environment Agency estimate that the charging scheme will need to recover approximately £10 million to £10.5 million in the first full year of implementation (in comparison to £8.3 million generated by the existing system).

The Hazardous Waste Regulations include powers for the Environment Agency to establish a charging scheme. It is expected that the Environment Agency will consult stakeholders on a proposed charging scheme for the Hazardous Waste Regulations later this year. The final charging scheme will need to be approved by HM Treasury, Defra and DTI.

Compliance activities

Over 85% of the regulatory costs will be apportioned to enforcement and compliance activities - including visits to consignees, identifying and examining incidents of non-compliance and enforcement campaigns - with nearly 30% of these earmarked for producer visits.

Compliance effort will be targeted at high-risk sectors. In time, risk-based charging will be introduced, but until then the Environment Agency will undertake risk assessments on the site notification database to prioritise inspection activities. In general, it is likely that those sites producing and consigning significant quantities of hazardous waste, that are not regulated under other legislation – such as waste management licensing and PPC Regulations – will be most likely to be targeted for visits.

(i) Compliance costs for industry

The costs falling on hazardous waste producers for each of the options are discussed below in more detail. The scale of cost falling on industry depends on whether the producer has previously consigned waste under the Special Waste regime, in which case increase to costs may be relatively minor, and if so whether the waste is being consigned as part of a carrier round. The largest impacts will be on existing hazardous waste producers that use carriers rounds, and new hazardous waste producers coming within the hazardous waste control regime for the first time. The tables in annexes B and C set out the total regulatory costs across the options. The notes to the tables recognise that waste movements fees will be charged to consignees. For the purposes of this RIA it has been assumed that the full regulatory costs will be passed on to hazardous waste producers.

The comparison of costs, below, has been considered on the basis of existing hazardous waste producers and new hazardous waste producers. The tables in annexes B and C set out the total regulatory costs under the options. The costs for existing hazardous waste producers should be compared against what they already pay (reflected in option 1).

Option 1

Under this option it is proposed that hazardous waste producers would continue to pay £16.35 per consignment¹⁰, with the payment made when the consignment code is issued. Those using carrier rounds would continue to divide the consignment fee between the waste loads on the round. As discussed above, implementation of the revised Hazardous Waste List will increase the number of waste producers and the number of consignments of hazardous waste. This additional consignment activity would have a proportionate increase on the workload of the Environment Agency so any increase in annual revenue would be used to cover the Environment Agency's additional costs.

Existing hazardous waste producers

This option would generally be cost neutral to those currently consigning hazardous waste. Those consigning waste without the use of carrier rounds would continue to 'subsidise' those producers using rounds.

New hazardous waste producers

New producers would be subject to a £16.35 fee per consignment. This would maybe be lower for producers whose waste is collected as part of a carrier round as the cost of the consignment can be shared between all the producers on the round. The regulatory costs are not considered to be substantial, particularly in comparison to the overall costs in managing the waste.

¹⁰ The Environment Agency are seeking a 2.5% increase on this fee from 1 April 2005, subject to approval by HMG.

There is a also significant risk of infraction costs for Government with this option due to incomplete transposition/implementation of the Hazardous Waste Directive.

Option 2

If all the individual loads on a carrier round were charged separately, this would distribute the regulatory costs more evenly. This would benefit those producers not using carrier rounds, who at present in effect 'subsidise' the regulatory costs of those using carrier rounds.

As the financial advantage of using carrier rounds would be removed a lower waste movement fee of £7 could be charged for all consignments, again on the basis of quarterly returns from consignees.

Existing hazardous waste producers

As shown in annex B, under this option the impact on the costs to hazardous waste producers would be largest for producers with only one waste consignment per year with a total regulatory cost of £25 against current costs of £16.35. However many of these are likely to be small producers who will qualify for exemption from premise notification obligations, so the costs would be reduced (by £18). The increase is not considered to be substantial, particularly in comparison to the overall costs in managing the waste. All producers consigning more than one load would benefit from reduced charges (where they have not previously used carrier rounds) under this option.

Annex C shows that the biggest cost implications under this option are for waste producers who currently use carrier rounds. A full assessment of how much of the regulatory cost individual producers on a carrier rounds currently pay is difficult as it depends on how the carrier round operator decides to pass on the consignment cost and how many producers there are on the round. However, for the purposes of this RIA it is estimated that consignment of a load on a carrier round would cost a producer £2.73 per load. This is based on the consignment charge of £16.35 (under the Special Waste regime) divided by an average of six loads on a carriers round (consultation responses supported the average of six loads per carriers round we are aware that some sectors have significantly higher loads per round).

New hazardous waste producers

Annex B and C show the costs for new producers. Under this option the waste movement fee would be the same regardless of whether the consignment was a single load or part of a multiple collection. Many of new producers are likely to be small producers who will qualify for exemption from premise notification obligations, so the costs would be reduced (by £18).

Option 3

Under this option a site notification fee of £18 for hazardous waste producers would be introduced. A waste movement fee of £15 would also be charged quarterly on the basis of electronic quarterly returns from consignees.

Existing hazardous waste producers

As shown in annex B, the impact on costs to hazardous waste producers, under this option, is that cost savings are only made to those consigning more than thirteen loads per year. The costs savings to those that do are also much less than those in option 2.

Annex C shows that costs to producers using multiple collections would be slightly higher than at present but not significantly so.

New hazardous waste producers

Annex B and C show the costs for new producers. Under this option the waste movement fee would be the same regardless of whether the consignment was a single load or part of a multiple collection. Many of new producers are likely to be small producers who will qualify for exemption from premise notification obligations, so the costs would be reduced (by £18). The regulatory costs are not considered to be substantial, particularly in comparison to the overall costs in managing the waste.

Option 4

The option sits between option 2 and 3 in terms of the changes to the charging system for loads on multiple collections. Under this option a site notification fee of £18 for hazardous waste producers would be introduced. Consignment fees would be charged depending on the type of waste movement. Single consignments would be charged £10 or £19 (for those using electronic or paper consignment notes respectively) and loads on multiple collections would be charged £5 or £10 (for those using electronic or paper consignment notes respectively).

Existing hazardous waste producers

The impact on the costs to hazardous waste producers, under this option, as shown in annex B, would be largest for producers with only one or two waste consignments per year. However many of these are likely to be small producers who will qualify for exemption from premise notification obligations, so the costs would be reduced (by £18). The increase is not considered to be substantial, particularly in comparison to the overall costs in managing the waste. All existing

producers consigning more than two loads would benefit from reduced charges (where they have not previously used carrier rounds) under this option.

Annex C shows that the biggest cost implications under this option are for waste producers who currently use carrier rounds. As per option 2 a full assessment of how much of the regulatory cost individual producers on a carrier rounds currently pay is difficult and the same estimates and assumptions apply when considering the impact.

New hazardous waste producers

Annex B and C show the costs for new producers. While the costs are a new impact on producers they are generally lower than the charges made under the Special Waste regime (for more than two consignments). In addition, many of new producers are likely to be small producers who will qualify for exemption from premise notification obligations, so the costs would be reduced (by £18). The regulatory costs are not considered to be substantial, particularly in comparison to the overall costs in managing the waste.

(ii) Other costs

It can be expected that hazardous waste producers will incur additional costs to those charged by the Environment Agency for site notification and waste movement fees (the latter are charged to the consignee but are likely to be passed on to the producer as part of any service). There might also be some administrative costs associated with completing paperwork for site notification and consignments forms.

The requirement for the producer to keep records of hazardous waste produced on-site will incur costs although it is likely that many site will already undertake such activities as part of their licence/permit conditions.

Consignees will also incur additional administrative costs through the requirement to compile quarterly reports to the Environment Agency, and through the requirement to maintain inventories of hazardous waste received on site. Again some consignees may already undertake elements of these activities. It is not clear how much of these costs will be passed on to hazardous waste producers.

New hazardous waste producers will face additional costs for the management (recovery, recycling, treatment and/or disposal costs) of their waste. Costs for treating and disposing of hazardous wastes are generally higher than those for non-hazardous wastes. In addition given the uncertainty regarding hazardous waste capacity in the UK, as a result of implementation of the requirements of the Landfill Directive, these costs are expected to rise over the next few years. Detailed current and expected costs are limited given commercial confidentiality.

Annex D lists the estimated range of current costs for different management methods. The regulatory charge forms only a very small proportion of total costs to industry for hazardous waste management.

Consignees will incur costs as a result of the need to compile and submit quarterly reports of consignments to the Environment Agency. The bulk of these costs are likely to be passed onto waste producers.

(iii) Costs for a typical business

It is difficult to define a typical business as there is not a typical pattern of waste production and movement. The costs incurred by hazardous waste producers will depend on whether they were hazardous waste producers under the Special Waste Regulations 1996, the pattern of any consignments of hazardous waste and how much hazardous waste they will produce under the new system. The biggest impact will generally be on those producers coming within the hazardous waste control regime for the first time. However, the tables in annexes B and C highlight the relative costs for a range of waste movements.

5 EQUITY AND FAIRNESS

The revisions to the hazardous waste control system, as set out in the Hazardous Waste Regulations, put the onus of responsibility for the hazardous waste on the producer, in keeping with the polluter pays principle. Introduction of producer notification, through premises notification, will enable the Environment Agency to identify and track those responsible for consignments of hazardous waste within the waste management chain.

Implementation of the Landfill Directive, and in particular the implementation of the ban of co-disposal of hazardous wastes with non-hazardous wastes in July 2004, has resulted in a reduction of the number of dedicated landfill sites taking hazardous waste. However, the corresponding increase in landfill gate fees has resulted in greater minimisation of hazardous waste, with a measured reduction in arisings since July 2004. Whilst some regions have no dedicated merchant landfill site, all regions have access to either separate cells for stable non-reactive hazardous waste including asbestos, or like London, have never had a hazardous waste landfill. Hazardous waste has always travelled between regions in response to market conditions.

6 SMALL FIRMS' IMPACT TEST

Due to the nature of the wastes which are classified as hazardous wastes in the revised Hazardous Waste List, such as discarded computer monitors, it is anticipated that the majority of all small and medium-sized enterprises will become hazardous waste producers for the purposes of the Hazardous Waste

Regulations. The impacts on each small business will depend on whether the business previously produced hazardous waste, if so whether they use carrier rounds, or if the business will be a new hazardous waste producer under the new control system. For existing hazardous waste producers the scale of impact will be greater if they use carrier rounds. It is estimated that approximately 80% of companies employing the carrier rounds system are small businesses. There will be increased regulatory costs for those organisations that currently use carrier rounds although these will be minimised through the provision of the exemption for small producers.

The proposed changes will have administrative and financial implications for those small businesses brought within the hazardous waste control system for the first time. While the majority of these businesses will be producers of non-hazardous waste, and thus aware of duty of care provisions, and many are likely to have contracts with waste management companies, some will incur higher regulatory costs.

7 COMPETITION ASSESSMENT

The competition filter was applied to assess the risk of a significant detrimental effect on competition. The test was informed by discussions with the Environment Agency and industry.

These proposals focus on the administrative procedures for the Hazardous Waste Regulations and this assessment is therefore focused on the impact of these administrative changes on competition. The answers to the competition filter indicated that the risk of a significant detrimental effect on competition is low.

Amongst hazardous waste producers

Most companies and businesses, whatever their market, are likely to produce some form of hazardous waste at some point e.g. when renewing IT systems and disposing of old computer monitors. The Regulations will therefore impact on many markets but, within any given market, the Regulations will impose the same requirements on all companies producing hazardous waste.

As discussed in the Small Firms Impact test, some firms may face increased costs but as shown in Tables 1 and 2, the costs that will be incurred rise in proportion to the number of consignments. As a result, bar differences in the volume of hazardous waste produced, we do not expect any firms to be affected substantially more than others. Many companies will also come within the hazardous waste control system for the first time but they will not be subject to any costs that existing producers do not have to meet. We do not expect that the costs detailed in this RIA will be significant enough to be a barrier to entry for any

given market, nor do we expect the costs to be significant enough to affect the market structure (e.g. changing the number of firms) for any given market.

Amongst waste management companies

The Regulations place the same obligations on all waste management companies. The obligation to provide quarterly reports will place an administrative burden on such companies although it is likely that these costs will be passed on to hazardous waste producers. Although larger waste management companies are more likely to be able to absorb these costs, and therefore be more competitive, it is not thought that that it will be significant enough to affect market structure. Estimates (from data two years ago) based on revenue (converted to tonnages and extrapolations based on average disposal rates), actual and guessed tonnages and extrapolations based on disposable assets, found that the greatest market share of any one company for technical waste (including non-special liquids) was 10%. The impacts will also depend upon other factors such as type of waste, volume of waste, frequency of collection, location etc.

8 ENFORCEMENT AND SANCTIONS

The Environment Agency for England and Wales will enforce the Hazardous Waste Regulations. The penalties for offences committed under the proposed Regulations will be a fine of up to £5,000 on summary conviction (Magistrates Court), and up to two years imprisonment on conviction on indictment (Crown Court).

Fixed notice penalties of £200 will be issued by the Environment Agency for the following offences:

- failure to comply with the requirements of the Regulation covering quarterly returns to the Agency and producer returns and/or failure to properly complete the returns;
- failure to complete, properly or at all a consignment note or failure to comply with requirements for schedules and written explanations etc.

The simplified control system set out in the Hazardous Waste Regulations has been designed to allow the Environment Agency to shift resources from administration activities to on-site visits and inspections. In the longer-term it is anticipated that inspections will be undertaken using a risk-based approach.

9 MONITORING AND REVIEW

The effectiveness of the proposed Regulations will be monitored through the administration of the hazardous waste control system, primarily through the Environment Agency's ability to monitor, track and account for all hazardous consignments within England and Wales.

Data will continue to be compiled and submitted to the European Commission in line with the reporting requirements of the Hazardous Waste Directive.

The elaboration of the Strategy on Prevention and Recycling on Waste includes an assessment of existing waste policies. In this regard the European Commission is seeking views of Member States and stakeholders on a detailed examination of the Waste Framework Directive and related legislation. One of the key aims of the review is to simplify waste legislation, one proposal is the integration of the Hazardous Waste Directive with the Waste Framework Directive. The UK Government has responded to the questionnaire, and the response is available on the Defra website¹¹.

10 CONSULTATION

(i) Within Government

This final RIA has been prepared in consultation with relevant divisions within Defra, the DTI, the Cabinet Office Regulatory Impact Unit, the Small Business Service and the Environment Agency.

(ii) Public Consultation

A preliminary review of the Special Waste Regulations 1996 was undertaken in 2000. This highlighted recommendations for change in the management of hazardous waste. A first consultation document was published by the (then) DETR in 2001, inviting views on a number of proposed changes. Responses were received from around 115 stakeholders and the original proposals have been amended to take account of these views.

A second consultation document was published on 30 July 2004¹² inviting views on the four options outlined in this RIA. 205 responses were received, a number of which were included specific comments on the partial RIA. This final RIA has been prepared following consultation on draft Regulations and it supplements and extends the partial RIA presented in the consultation paper. The responses generally indicated support for option 3 or for the 'alternative' option (option 4). Option 4 has been further developed in light of the comments received.

¹¹ <http://www.defra.gov.uk/environment/waste/thematicstrat/questionnaire-ukresponse.pdf>

¹² Review of the Special Waste Regulations 1996 in England – Proposals for replacement Hazardous Waste Regulations and List of Wastes Regulations, Defra 2004

11 SUMMARY AND RECOMMENDATIONS

This final Regulatory Impact Assessment considers the costs to businesses of the Hazardous Waste (England and Wales) Regulations 2005, and should be read in conjunction with the consultation paper *'Review of the Special Waste Regulations 1996 in England'*.

The RIA considers the impacts of implementation of the revised Hazardous Waste List for the purposes of the Hazardous Waste Directive, and changes to the administration of the control system for consignment of hazardous waste and the necessary changes to the charging structure.

Recommendation

In view of the benefits and costs assessed for each option and the risks associated it is recommended that the **option 4** be selected. This will have the following effect:

- Transposition and implementation of the revised Hazardous Waste List;
- Simplification of the administrative system
 - the requirement to pre-notify movements of hazardous waste will be removed;
 - movements of waste will be reported to the Environment Agency on a quarterly basis;
 - modified procedures for carrier rounds but with favourable charges for those consigning loads on multiple collections.
- Shift the regulatory focus onto compliance activities rather than administration – premises at which hazardous waste is produced will be notified to the Environment Agency on an annual basis facilitating inspection activities.

12 Declaration

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

Elliot Morley

Minister of State for Environment and Agri-environment, Department for Food, Environment and Rural Affairs

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Annex A

Key Impacts of the Changes to the Hazardous Waste List in the UK

The updated European Waste Catalogue (2001/532/EC) now includes the revised Hazardous Waste List. A number of additional items are now formally classed as hazardous waste when discarded and must be consigned and disposed of accordingly. These will include *inter alia* refrigerators, end-of-life vehicles, personal computers and televisions, fluorescent lighting, contaminated soil and incinerator bottom ash. A full summary of the Hazardous Waste List can be found on the Commissions website¹³.

Expansion of the list of wastes means that almost all organisations or businesses will produce hazardous waste at one time or another and there will thus be a significant increase in the total number of consignments. It is difficult to predict with any certainty how these changes will affect UK consignment activity but estimates, from a study¹⁴, for the most significant changes are detailed below.

Table 3 - Estimates of the additional number of consignments and sites producing hazardous waste following changes to the Hazardous Waste List

Hazardous waste	EWC code*	Estimated number of consignments per annum	Estimated number of sites producing
Refrigerants	14 06 01	60,000	25,000
End of life vehicles (ELVs)	16 01 04	300,000 - 400,000	10,000
Fridges / freezers (households)	16 02 11	31,500	477
Fridges / freezers (commercial/industrial)	16 02 11	30,000	30,000
Cathode ray tubes (CRTs) – personal computers	16 02 13	57,000	51,000
CRTs – televisions	16 02 13	52,000	3,500
Contaminated soils	17 05 03	20,000	1,200
Insulation materials	17 06 03	1,000	1,000
Bottom ash	19 01 11	25,000	25
Fluorescent tubes	20 01 21	60,000 – 250,000	40,000 – 100,000
TOTAL		585,000 – 875,000	137,275 – 197,275

* European Waste Catalogue code

¹³ http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_047/l_04720010216en00010031.pdf

¹⁴ Review of the Special Waste Regulations – Assessment of the Expansion of the European Waste Catalogue, Envirospire, August 2001

The extension to the Hazardous Waste List could result in up to 200,000 additional sites producing hazardous waste and nearly a million more consignments. This would represent a doubling of current activity. The most significant changes in terms of likely numbers of producers and consignments are as follows:

Chapter 14 - Waste organic solvents, refrigerants and propellants

14 06 01 chlorofluorocarbons, HCFC, HFC

Waste refrigerants will be generated during the disposal or refurbishment of refrigeration equipment and air conditioning units etc. The main impact will occur on those companies that carry out maintenance work. Around 4,000 refrigeration-servicing companies maintain 300,000 systems in approximately 50,000 organisations. It is anticipated that 20% of the servicing operations (i.e. approximately 60,000) could generate small (around 1.5kg) quantities of hazardous waste. Approximately 9,500 businesses manufacture food products in England and Wales and are likely to require refrigeration, a further 1,500 store and distribute food products and more than 100,000 retail them. It is estimated that in any year, around 22,000 of these sites will generate waste supplemented by a further 3,000 in other sectors.

Some of the larger sites would need to be notified to the Environment Agency (estimated that there will be an annual total of less than 70 tonnes of hazardous waste consigned per site). More significant tonnages will be generated by the same organisations discarding redundant equipment that contain these hazardous components under 16 02 11 – see below.

Companies who operate a mobile service will be able to notify the site from which they operate rather than each site they visit, unless that site produces more than 200kg in any one year, in which case that site would also need to be notified.

Chapter 16 - Waste not otherwise specified on the list

16 01 04 - End of life vehicles

End of life vehicles (ELVs) will need to be consigned as hazardous waste. This could generate an additional 200,000 to 300,000 consignments each year (assuming loads use combinations of five or ten vehicles at a time) and require the notification of around 6,500 sites from which vehicles may be consigned. There are around 3,500 dismantling facilities in the UK that would need to be notified to the Environment Agency as they will produce hazardous waste during the process of de-polluting vehicles.

In this scenario, the proposed Regulations will increase the number of consignments by between 300,000 and 400,000 loads annually and require the notification of approximately 10,000 sites.

16 02 11 - Discarded equipment containing chlorofluorocarbons, HCFC, HFC

This entry will require the notification of all commercial and industrial premises disposing of more than 200kg of refrigeration equipment and the notification of sites accepting waste domestic refrigerators, freezers and fridge freezers.

Household Sources

Around 2.5 million domestic fridges are disposed of in the UK each year. Most of these currently end up at one of the 477 local authority owned civic amenity sites. If these items are taken off-site in loads of 50 this would produce 30,000 consignments. There are a number of fridge treatment plants operating in the UK. Removal of waste gases from these sites could generate approximately another 1500 consignments.

Commercial and Industrial Sources

Freezers, refrigerators, cold stores and air conditioning units are widely dispersed across industrial sectors, including food preparation, distribution and retail, hotels, garages etc. The replacement period for this equipment is between five and ten years (15 years for air conditioning) implying that around 86,000 refrigerators, 24,000 freezers and 78,000 air conditioning units are scrapped each year. This arising would be produced from around 30,000 sites all of which would need to be notified. Assuming that replacement includes the removal of several units from a single site, the number of additional consignments between producer and scrap yard to be approximately one per site or 30,000 annually. The consignment of hazardous components from the scrap yard might involve a further 400 consignments.

16 02 13 - Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12

Equipment containing cathode ray tubes (CRTs) will form a significant part of hazardous waste under this entry. All discarded computer monitors and televisions will be classified as hazardous waste and require a consignment note at the point at which they are discarded (in the case of domestic waste this will be from local authority sites or other collection/bulking point, not the household).

Personal Computers

Around 3.5 million personal computers were discarded in 1998, 75% of which from commercial sources. Almost all of the commercial waste arisings are handled by specialist companies that find alternative uses for the equipment, or crush it.

The personal computers in the household sector tend to be older and have genuinely reached the end of their useful lives. In some cases they have been stored for a lengthy period before disposal. This is expected to increase over the next ten to fifteen years before flat screen technologies (liquid crystal displays) enter the household waste stream and replace discarded CRTs.

For the purposes of this RIA it is estimated that all transactions would be consigned as hazardous waste and that all civic amenity (CA) site arisings would be consigned.

2,625,000 personal computers discarded from commercial premises in average loads of 50 will generate 52,500 consignments annually from perhaps 50,000 sites, as most disposals will occur as one off annual events.

A further 656,250 personal computers from CA sites will be consigned in loads of 150 to specialist contractors generating a further 4,375 consignments from the 477 CA sites. The estimates shown in the Table 3 recognise that these sites will be registered for the disposal of other wastes.

Televisions

Plastics in televisions frequently contain brominated flame-retardants, cadmium pigments and labels or adhesives that make recycling almost impossible. Of the 2,095,000 televisions discarded annually 85% arise in the household market. The majority are eventually discarded at CA sites, very few being mixed in with general household waste.

The 1,780,750 televisions discarded from household sources will be consigned from CA sites in loads of 150 to specialist contractors thereby generating 11,900 consignments from 477 sites.

Most of the remaining 314,250 televisions from the commercial sector are likely to be sold or given to staff but assuming that at least 15% are discarded separately this will generate 40,000 consignments from 3,000 sites including locations such as betting shops, bars and financial institutions.

Chapter 17 - Construction and demolition wastes (including excavated soil from contaminated sites)

Chapter 17 wastes have the potential to generate significantly higher volumes of consignable wastes. Up to the ban on co-disposal of waste in July 2004, of the

72.5 million tonnes of construction and demolition wastes, just over 1 million tonnes was consigned, 90% to landfill. However, since July 2004 arisings of contaminated soil have actually decreased. This is because the added costs of pre-treatment and the increase in landfill gate fees has encouraged better segregation of hazardous and non-hazardous soils, a reduction in 'over-consigning' and the development of more on-site treatment.

17 05 03 Soil and stones containing dangerous substances

Data on the level of contamination of soils removed for disposal is not available. Estimates of 500,000 tonnes have been tested with operators in the contaminated soils sector. Although highly uncertain, this change in the list might generate 20,000 loads from approximately 1200 individual sites.

17 06 03 Other insulation materials consisting of or containing dangerous substances

Polyurethane foams containing CFCs and HCFCs are used in rigid building insulation foams and are currently not consigned. These materials were used in buildings from the early 1980's and are unlikely to generate significant volumes of waste for several decades. They are most likely to arise during repair, extension or improvement to buildings. They will also arise at treatment centres for discarded fridges and freezers. We estimate that no more than 1,000 consignments from 1,000 sites will be produced each year. The cost of disposing of these materials from discarded fridges and freezers will present greater problems than the administrative cost of consignment.

Chapter 18 – Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)

18 01 10 amalgam waste from dental care

Amalgam waste is hazardous by virtue of mercury, and to a lesser extent other constituents such as silver and tin.

Chapter 19 - Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use

19 01 11 Bottom ash and slag containing dangerous substances

Approximately 500,000 tonnes of bottom ash and slag are produced from waste management facilities, of which 8,500 tonnes were consigned in 2000. This is expected to produce an additional 25,000 consignments each year from

approximately 25 sites. Power stations will also generate considerable quantities of bottom ash which will be covered by this entry and the related Chapter 10 entry.

Chapter 20 - Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions

20 01 21 Fluorescent tubes and other mercury containing wastes

In general use, lamps are replaced in small numbers and might be disposed of in the general waste where they would not be considered hazardous. Where end of life lamps are collected separately the arising can be in large numbers, ranging between a few hundred and several thousand at any one time. More than 60 million are discarded annually, 90% of which are from commercial and industrial sources. Certain companies employ contractors to replace lamps at intervals regardless of their condition; these waste arisings are generally sent to specialist contractors but are not consigned.

For the purposes of this study it has been assumed that around 20% of the lamps will be sent for recycling, a further 10% to crushers. These estimates are highly speculative. If 30% of the 60.75 million lamps were discarded in this way, we would expect the lamps to be collected and bulked up at transfer stations. Loads of 50 to 200 lamps would be bulked to 3500 for transit, each load generating a consignment. For larger loads the transfer station would not be used. This level of activity would generate approximately 60,000 consignments from potentially 40,000 sites. However, since almost all organisations use fluorescent lamps, it is possible that a far larger number of organisations will consign their lamps and the upper range of estimates is 250,000 consignments annually from 100,000 sites.

Annex D

Hazardous Waste Management Costs

Management method	Estimated range of costs¹⁵ (per tonne - unless stated otherwise)
Landfill	
- Solids and sludges	> £50
- Contaminated land	> £50
- Bonded asbestos	£150
Treatment	
- Solvent recovery (clear acetone)	£12 - £25 per drum
- Physico-chemical (liquid)	£20 – £60
- Stabilisation	£30 – £50 per cubic metre
High temperature incineration	
- Solids	£300 - £850
- Liquids	£0 - £250
Co-incineration	
- Substitute liquid fuels (SLF)	£0 - £50

¹⁵ From industry sources, March 2005