

Hazardous Waste - an action plan for its reduction and environmentally sound management

Hazardous Waste Forum, 2003

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PART 3: Supporting Documentation (web copies only)

<http://www.defra.gov.uk/environment/waste/hazforum/index.htm>

- 1) Draft Implementation action plan and timeline
- 2) Hazardous waste arisings and capacity needs
- 3) Compendium of treatment options
- 4) Waste minimisation programmes
- 5) Draft case studies on priority waste streams:
 - i) Construction & Demolition waste
 - ii) Contaminated Soil
 - iii) Waste Oil
 - iv) Air Pollution Control residues
 - v) Waste from non-ferrous metal industries
- 6) Waste awareness study
- 7) Case study: UK and France compared
- 8) List of corresponding members

Executive Summary

The Hazardous Waste Forum was established by the UK Government in December 2002 to bring together key stakeholders to advise on the way forward on the management of hazardous waste. Together the Forum has considered the likely impacts of forthcoming legislation and the decisions and actions that need to be taken to meet the requirements of the Landfill Directive in particular, and continue the sound management of hazardous wastes.

In keeping with its Terms of Reference, the Forum has concentrated initially on identifying the issues that must be addressed to achieve a way forward on hazardous waste reduction and management, and considered possible targets for hazardous waste reduction. The Forum has met five times since February 2003 and established three sub groups to consider:

- i) waste arisings and scope for minimisation,
- ii) treatment capacity, and
- ii) the strategic way forward.

This Action Plan sets out the key issues and recommended actions for stakeholders.

Summary of Objectives, Recommendations and Actions

Objective 1. To provide a clear and robust regulatory system for hazardous waste management, providing both the <i>clarity</i> of unambiguous legislative requirements and the <i>certainty</i> of consistent and transparent implementation, inspection and enforcement.
Recommended Actions
1.1A-C Government should provide clarity as soon as possible on the extent, timing and application of forthcoming changes to legislation governing the management of hazardous waste. This applies in particular to the Landfill Directive Waste Acceptance Criteria (WAC) and the new Hazardous Waste Regulations.
1.1D Government and the Devolved Administrations should strive for a consistent approach to implementation and regulations across the UK: any differences in approach should not lead to market distortion.
1.2A The Forum recommends that the Environment Agency should keep under review its regulatory effort on hazardous waste and apply it in a proportionate and risk-based manner. This will be of particular importance in the transitional period immediately following the implementation of the new control regime in July 2004.

1.2B Enforcement is a vital part of the overall control system and should be used on a consistent basis. The Forum recommends that the courts be encouraged to ensure that the penalties are such that the cost of non-compliance is greater than the cost of compliance.

1.3 The Environment Agency must ensure a 'level playing field', by applying effective control of hazardous wastes fairly and consistently to all the 'links' in the waste management chain from the 'cradle' to the 'grave', thus eliminating illegal activities. Particular attention is needed on hazardous waste producers (who will be subject to a new registration requirement), brokers and transfer stations.

Objective 2. To raise awareness of the issues surrounding hazardous waste management, in business and industry; and to promote the environmentally sound management of hazardous wastes, and in particular hazardous waste minimisation (i.e. prevention, reduction, reuse, recovery and recycling)

Recommended Actions

2.1A An information and awareness programme on hazardous waste management for business and industry should be developed and implemented as soon as possible. Co-ordinated by the Environment Agency, the programme should focus on the requirements and obligations of the new hazardous waste management control system, and its practical and financial impacts.

2.1B Envirowise, through their existing helpline, should be established as the single point of contact, to provide practical information on all aspects of hazardous waste minimisation. This focal point will have active collaboration with the Agency and needs to be clearly sign-posted, so that its user community can find it easily and quickly.

2.2-2.3 Adequately resourced and funded technical assistance programmes, to disseminate legislative requirements, good practice and to encourage innovation in hazardous waste prevention, reduction, reuse, recovery and recycling, should be established as soon as possible. Similar actions are recommended both for hazardous wastes in general, and for a series of priority hazardous waste streams in particular. Active participation by industry and relevant trade associations, as well as government and the regulators, is vital to success.

Objective 3. To ensure the provision of the hazardous waste management facilities required to meet the new legislative requirements.

Recommended Actions

3.1 Clearer information setting out likely capacity requirements should be prepared for the hazardous waste recycling, recovery, treatment and disposal capacity, which needs to be developed in the short and medium term, to meet the requirements of the new regulatory control regime, and this information needs to be kept under review.

3.2 Government should review the waste planning and permitting processes for hazardous waste management facilities. Government should also, as part of a wider statement on the need for waste management facilities, provide sufficient information about the various categories of hazardous waste, where they are produced, and types of facilities suitable for treating them in order to facilitate the efficiency of short and long term planning procedures.

3.3A Defra and the Environment Agency should consider what short-term actions may be required in the event of a hiatus between the implementation of relevant Directives and Regulations, and the provision of appropriate management options. This might include a general shortfall in treatment capacity, lack of an appropriate management route for a specific waste stream, etc.

3.3B A task force should be set up, with representatives of key stakeholder groups, to review progress in providing the short-term capacity required, and to minimise the disruption to industry of any temporary shortfalls.

Objective 4. To build on Waste Strategy 2000, to put in place a sound framework for developing hazardous waste management in England and Wales over the next 10 years and beyond

Recommended Actions

4.1 The Forum recommends that Government should carry out further work on developing a more balanced set of policy and economic instruments, including 'carrots' as well as 'sticks', to encourage hazardous waste producers to act more responsibly. The aim being to consider whether there might be instruments that could more effectively act as incentives to minimise hazardous waste production, increase reuse, recovery and recycling, and/or adopt environmentally sound management.

4.2 The Forum considers the use of targets for hazardous waste reduction as an important means of driving and monitoring progress. However, the information required to set realistic and achievable targets is not currently available. Once the information is available, the Forum will recommend where and how specific targets might be introduced.

4.3 The Forum sees the need to provide, and maintain in the long term, a diverse range of options for hazardous waste recycling, recovery, treatment and disposal, which represents the best practicable environmental option (BPEO). As proposed in Waste Strategy 2000, BPEO should be established for hazardous wastes (working on the basis of selected waste streams). Government and the Agency should lead the study, but all stakeholder groups should take an active part.

4.4 The Forum will investigate further the options for improving the availability of good quality, reliable and consistent data for improved planning and management of hazardous waste.

4.5 Separate collection of household hazardous waste should be encouraged through the wider dissemination of good practice, the provision of appropriate funding, and the possible use of supporting policy measures. The National Household Hazardous Waste Forum should continue to be the lead body in this area.

Over the next 18 months the Forum will continue to consider opportunities to reduce the production of hazardous waste and the recovery of that which is produced; the content and dissemination of Government and/or Environment Agency advice; the provision of a better basis for forward planning through improved data collection; and keep this Action Plan under review and up to date.

Introduction

1. 5 million tonnes of hazardous waste was consigned in England and Wales in 2002 (out of total for the UK of approximately 6 million tonnes). 70% of the waste came from four categories: 25% construction & demolition waste and asbestos; 20% was oil and oil/water mixtures; 12% wastes from organic chemical processes; and 13% fell into the “not otherwise specified category”¹. 39% of this hazardous waste was disposed of to landfill. In addition to consigned waste, some 4.5 million tonnes of hazardous waste was treated or disposed of at the site where it was produced, with the solid element of this waste amounting to 500,000 tonnes. Major changes to waste legislation over the next year and beyond will have a significant impact on the way hazardous waste is managed, and the treatment and disposal facilities that will need to be provided as a result of the changes.
2. The introduction in July 2004 of the Landfill Directive ban on the co-disposal of hazardous and non-hazardous wastes in landfill will result in a significant change to the way hazardous waste is managed: such waste destined for landfill will have to be treated, and depending on its nature and the level of treatment, some may go to separate cells in non-hazardous landfill, and some may go to landfill specifically for hazardous waste, of which there could be as few as ten merchant sites after July 2004. Some waste will be diverted from landfill altogether. These new treatment and management requirements and the expected reduction in hazardous waste landfill capacity are likely to increase the costs of hazardous waste disposal.
3. Changes to the European Waste Catalogue, which now encompasses the EU Hazardous Waste List, increase the number of waste streams classified as hazardous. Items such as discarded televisions, computer monitors, end-of-life vehicles, and some fluorescent tubes are now classed as hazardous waste requiring appropriate treatment. Furthermore the implementation of the Waste Incineration, Waste Electrical and Electronic Equipment (WEEE) and End-of-Life Vehicles (ELV) Directives over the next two to three years will all impact on the management of hazardous waste.
4. New investment in alternative treatment and disposal capacity requires certainty in the market. That certainty comes in part from the clear transposition, implementation and enforcement of legislation. The House of Commons Environment, Food and Rural Affairs Committee considered these issues, and accepted that a separate hazardous waste strategy was not necessary². The Committee supported the suggestion that Government set up a Hazardous Waste Forum to consider the demands on industry of existing and forthcoming legislation, to consider targets for hazardous waste reduction and recovery and to provide a means for bringing all relevant sectors together to work towards the goals of reducing hazardous waste and managing it safely.
5. The Hazardous Waste Forum held its first meeting in February 2003 and comprises stakeholders from: central government, including the devolved administrations, local government, regulators, waste producers, the waste management industry and non-

¹ Based on consignment note returns to the Environment Agency

² Hazardous Waste report printed 17 July 2002, HC 919

government organisations (see full list at Appendix A). Its role is to examine the issues affecting the sound management of hazardous waste and to help develop this Action Plan to ensure there is always a safe method for its disposal. (see Forum Terms of Reference in Box 1). The Forum has met five times, and established three sub groups to consider specific issues -

- first, a group to consider information on arisings and the scope for increased waste minimisation;
- second, a group concerned with treatment and disposal capacity; and
- third, a group to bring together the initial work of the Forum in this Action Plan.

6. This Action Plan makes a number of recommendations for action and is the beginning of a process to change the way hazardous waste is managed. The Forum will continue to meet to consider the issues raised in this document, and to make further recommendations, if necessary. The Forum will monitor the implementation of these recommendations through an Implementation Plan, which will, in relation to each recommended action, identify lead organisations, set out timescales and specify how progress will be measured.

Scope of the Forum

7. Whilst the Forum has considered the issue of hazardous waste in a UK context – waste can move freely within the UK - and has benefited from the input and experiences of representatives from the devolved administrations, the focus of work has been on the legislative impacts and changes required in England and Wales (for example implementation of the Waste Acceptance Criteria) and in relation to the work of the Environment Agency. However, each of the devolved administrations including the Welsh Assembly Government has delegated powers specifically in relation to the regulation of hazardous waste, and implementation of the controls in the Hazardous Waste Directive. Furthermore, since the HWF was established, both Northern Ireland and Wales have established separate Hazardous Waste Forums. Clearly these Fora have the opportunity to consider the relevance of the recommendations in this document to their respective areas.

Hazardous Waste Forum Main Participants

- | | | |
|---|---------------------------------------|-------------------------------------|
| • Defra | • DTI | • National Assembly Wales |
| • British Cement Association | • Environmental Industries Commission | • Oil Recycling Association |
| • Chemical Industries Association | • Environment Agency | • SEPA |
| • Chartered Institute of Waste Management | • Environmental Services Association | • The Construction Confederation |
| • Confederation of British Industry | • Federation of Small Businesses | • UK Petroleum Industry Association |
| • Construction Products Association | • Local Government Association | |
| • DOENI | | |

Role of Defra Officials

8. Government Departments are represented on the Forum, and Defra has facilitated discussions in the Forum by chairing meetings and providing the secretariat. The recommendations and suggested actions are the product of collective discussion within the Forum and are not a statement of Government policy.

Box 1. Hazardous Waste Forum: Terms of Reference

A] To advise within 6 months on the way ahead over the next 5 years to achieve hazardous waste reduction and environmentally sound management of such wastes, including advice on key decisions to be made, the timing of those decisions and encompassing consideration of targets for hazardous waste reduction.

B] To identify opportunities to reduce the production of hazardous waste and promote the recovery of that which is produced.

C] To consider the impacts of existing and forthcoming legislation, and advise on the content and dissemination of Government and/or Environment Agency advice and guidance to waste producers and waste managers about that legislation.

D] To provide a better basis for forward planning by providing up to date and reliable data on hazardous waste production and management, and make any relevant recommendations about how data collection and analysis could be improved.

E] To ensure that an adequate network of hazardous waste facilities are available in the next 5 years.

In order to achieve these objectives the Forum will need to:-

F] Consider what data is and should be available on hazardous waste arisings and the present and future capacity to deal with such arisings.

G] Set out clearly the requirements of and any uncertainties resulting from current and known prospective legislation.

Part 1: Key Issues

1. Legislative framework and its regulation

Landfill Directive

1. Historically the United Kingdom has relied heavily on landfill as a source of cheap and widely available waste disposal, including hazardous waste disposal. This has given little incentive for increased reduction or recycling of hazardous waste. That picture is set to change dramatically with the implementation of the Landfill Directive which includes progressive measures to further prevent or reduce as far as possible the negative effects of landfilling waste on the environment and on human health. The Directive bans the co-disposal of hazardous waste with non-hazardous waste from July 2004; it bans the landfilling of liquids and certain solid wastes and introduces requirements for the treatment of wastes prior to landfill and sets out a framework for:
 - the classification of landfill sites into inert, non-hazardous and hazardous sites;
 - procedures for waste acceptance to be adopted at landfill sites; and,
 - the acceptable limits for leaching of substances specified in waste acceptance criteria.
2. As a result of the Directive and the impending regulations to implement it, operators of landfills will have to manage their sites in order to accept either hazardous, non-hazardous or inert wastes. All hazardous waste sent to landfill will require pre-treatment, and each class of landfill will have to meet waste acceptance criteria.
3. To meet these waste acceptance criteria, the UK needs to develop new treatment facilities. If the treatment is not in place in time to meet the requirements of the Directive, there is the potential for large amounts of hazardous waste being produced with no treatment or disposal outlet. This has serious implications for the environment, for the sustainability of UK industry and for the country as a whole.
4. To develop new processing facilities waste managers need to be certain that regulations will ensure that waste flows to those facilities. Waste flows to the cheapest legal option. The waste management industry needs certainty on the standards to which waste needs to be treated in order to be able to put in place the required treatment and management facilities to meet those controls. The industry also needs to be assured that the controls will be effectively and consistently enforced by the regulatory agencies.
5. The potential for lack of certainty on future controls is compounded by the current actions of certain landfill operators to reduce prices and take as much waste as quickly as possible before tighter controls are introduced. These actions can result in market distortions, and could play against the interests of operators who propose to invest in the hazardous waste management business for the long term, and who have to comply with the requirements of Pollution Prevention Control (PPC).
6. For the implementation of most Directives, whilst all EU countries are starting from similar positions, each country works out its own approach to compliance, which can result in significantly different systems in different Member States (e.g. with packaging

wastes). In the case of the Landfill Directive, the starting point in other Member States is not the same as in the UK. Many other EU countries have had waste management systems in place for ten years which are consistent with the requirements of the Landfill Directive, so on the one hand, the problems the UK faces currently are fairly specific to the UK, while on the other hand, there are plenty of models in the EU of systems compliant with the Landfill Directive.

Hazardous Waste Directive and the Hazardous Waste List

7. The revised hazardous waste list which forms part of the European Waste Catalogue was adopted in the EU on 1 January 2002 (see Commission Decision 2000/532/EC as amended). The revised list incorporates a range of newly hazardous wastes previously not consigned in England, including certain everyday items such as computer monitors, televisions and fridges. Applying the full range of controls in the current Special Waste Regulations (SWR) to the increased range of hazardous wastes is regarded as too onerous.³ It is intended therefore, that the requirement in the SWR for prior notification to the Environment Agency before waste can be transferred should be dropped as is consistent with practice in other Member States.
8. The expansion of the hazardous waste list also means a substantial increase in the number of hazardous waste producers. The Hazardous Waste Directive requires producers to be subject to inspection by the competent authorities. It is intended therefore, subject to consultation, to introduce a simple system of registration in England and Wales of hazardous waste producers. This will also assist the regulators to advise and assist new producers in particular on methods of minimising waste and on treatment options, as well as meeting the requirements of the Directive.

Imports and Exports of Hazardous waste

9. The import and export of hazardous waste to and from the UK is governed by a range of legislation: the UN Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the OECD decision, the EC Waste Shipments Regulation (WSR), which is under review, and the UK Management Plan for Exports and Imports of Waste. In keeping with the principles of proximity and self sufficiency, the UK Management Plan includes a general presumption that wastes should not be imported for disposal in the UK. Similarly the Plan implements the Government's policy that no waste should be exported from the UK for disposal to any other country. At the heart of the Basel Convention is the importance of minimising the amount and reducing the hazard content of hazardous waste.
10. In accordance with the WSR, wastes may be imported and exported for recovery. The main imports and exports for recovery are waste oils and secondary liquid fuels. The issues in relation to waste oil and the controls under the Waste Oil and Waste Incineration Directives are explored more fully in the case study in the section on Further Documentation and also as part of the Treatment and Capacity Task Force.

³ see: www.defra.gov.uk/environment/consult/spwaste/index.htm

11. The distinction between “disposal” and “recovery” is thus crucial. The European Commission is currently reviewing the list of recovery and disposal operations set out in Annexes IIa and IIb of the Waste Framework Directive, and has set out its preliminary thoughts in the Communication “Towards a thematic strategy on the prevention and recycling of waste” (COM(2003)301) inviting comments from a wide range of bodies by 30 November 2003. The UK will continue to play a full part in the discussions on any proposed changes to ensure that they are compatible with UK objectives.

Other European legislation

12. Other European legislation has and will have an impact on the way hazardous waste is managed in England – the Waste Incineration Directive, the Waste Oil Directive and the WEEE and ELV Directives in particular. These impacts were summarised in Appendix A of the report “Hazardous Waste Management Market Pressures and Opportunities” commissioned by the Environment Agency⁴.

Regulation: firm and fair enforcement

13. The present regulatory system has the potential for gaps to develop in the chain of sound waste management from cradle to grave. These potential gaps can allow ‘unscrupulous’ operators to divert waste which should not go to landfill to landfill sites. Unregulated mixing and dilution of waste can occur in contravention of legislative controls, and the projected increase in costs of treatment could encourage these behaviours further.
14. For example, the July 2002 ban on co-disposal of hazardous liquid wastes saw a reported increase in quantities of liquid hazardous wastes at treatment facilities. However, after a matter of months, quantities had apparently returned to near their previous levels. Evidence suggests that at least some of these wastes were being mixed, e.g. with sawdust, and sent to co-disposal as before. This would be a clear breach of current legislation.
15. Subversion of controls undermines the compliant operator, and is a deterrent to investment in state-of-the-art treatment technology. It needs to be combated through firm, fair and consistent enforcement of the whole chain of waste management. The regulators need to ensure that resources are directed to enforcement of the current and forthcoming legislation, and take steps to deal with the threat of illegal disposal. The review of the special waste controls should introduce streamlined procedures which will ease the burden on regulators, and seek to improve levels of environmental protection.
16. As well as combating illegal activity, the regulation of similar facilities should be on a fair and consistent basis. For example, in-house treatment plants and landfill should continue to be regulated on the same basis as merchant facilities.
17. Issues on waste regulation and recommendations for action are explored in Part 2, Section 1.

⁴ see: www.environment-agency.gov.uk/commondata/105385/p1484tr.pdf?lang=e

2. Raising Awareness and Encouraging Hazardous Waste Minimisation

18. As has been noted, the changes to the treatment and disposal requirements in the Landfill Directive are likely to add significant costs to the disposal of hazardous waste⁵. It is difficult to predict with any certainty what the rise in costs will be, or even the exact timing of the change, but we can expect costs to increase as soon as the ending of co-disposal takes effect in July 2004. In addition to the changes in costs, the expansion of the hazardous waste list will increase the number of hazardous waste producers, who will thus come within the hazardous waste control regime for the first time.
19. Over the longer term, prices will rise to reflect higher standards: waste management accounts for some 0.5% of UK GDP. In other Members States which recycle, recover and treat waste to higher standards, waste management accounts for approximately 1% GDP.
20. This increase in costs will put economic pressure on producers to prevent waste and minimise hazardousness of waste, which is welcome. However, the pressure for waste prevention is only likely to be felt once there is awareness of the impending rise in costs, or even when the costs begin to bite. And knowledge of waste minimisation techniques is patchy.
21. Recent surveys (SME-nvironment) have shown that there is a marked lack of awareness amongst some industry sectors, and amongst SMEs in particular, about the effects of the legislation, and on the costs of waste disposal and treatment options for waste that will be available. There is also a general lack of information available to hazardous waste producers on ways of minimising their waste and the treatment options that are available.
22. Further initiatives to raise awareness of the new controls and the additional costs are required. The full range of stakeholders can contribute to this process: central government and the devolved administrations, local authorities, the Environment Agency, NGOs as well as the waste management industry and waste producer trade bodies. Businesses also need access to advice on hazardous waste management and techniques for waste minimisation.

Information for the Public

23. The public should also be given more information about hazardous waste management issues, and their concerns⁶ addressed. Hazardous waste is generated during the production and at the end of life of many everyday items, so the public has a key interest and a key role to play in an integrated approach to hazardous waste management. The public too is concerned about the health implications of hazardous

⁵ Though as noted in paragraph 5, it is reported that landfill gate prices are reducing in the immediate short term before the ending of co-disposal takes effect, in order that existing void space can be filled.

⁶ For example see: www.defra.gov.uk/environment/waste/hazforum/030402/hwf2-7a.pdf

production and management. To that end, the public needs to be made aware of the impact of forthcoming environmental legislation, on the need for further treatment plants to deal with hazardous waste in an environmentally sound manner, and the fact that those facilities must be provided for the benefit of all.

Encouraging hazardous waste reduction, re-use and recycling

24. As has been noted, forthcoming changes to legislation will increase the number of hazardous waste producers, at a time when costs of treatment and disposal are set to rise. These two factors will have a contrasting effect on waste arisings. In the long term, changes to legislation – for example developments on Integrated Product Policy and the implementation of the Directive on the Restriction on Hazardous Substances (RoHS) from 2006 will encourage both the reduction of hazardous waste arisings and the hazardousness of waste. The requirements of the PPC regime will also impact on and encourage further waste minimisation, and this is explored further in Section 4 of Part 3.
25. In the short term, producers need access to advice and technical assistance to reduce, re-use, recover and recycle hazardous waste. The role of Envirowise needs to be considered further.
26. Other incentives – such as the use of economic instruments should also be considered. Particular waste streams may be suitable for particular instruments – management of waste oil for example, could be influenced through the duty regime. Producer responsibility could also play a wider role.

3. Ensuring the Provision of Recycling, Recovery, Treatment and Disposal Capacity

27. Data collated by the Environment Agency indicate that on current plans, operators intend to run some thirty-seven hazardous waste landfill sites beyond July 2004. Of these, on current plans, no more than twelve are likely to be merchant sites, the remainder being in-house facilities within industry. The information shows that two regions in England and Wales - Thames and Wales - may have no merchant hazardous waste landfill site, although changes to operator plans could alter this position. For example, it has been suggested that market pressures will result in a change of plan by some landfill operators resulting in additional capacity being brought forward, such that twenty hazardous waste landfills will actually be available in the longer term⁷. In addition, operators are developing plans for stable non-reactive hazardous waste to go to separate cells in non-hazardous landfill as permitted by the Directive.
28. A rough estimate of the void capacity in the twelve merchant landfills can be made. Data for three of the sites indicate a combined void capacity of approximately 19 million

⁷ see RIA on the WAC consultation: <http://www.defra.gov.uk/corporate/consult/current.htm>

m³. If it is assumed that these are the three largest sites, and that total void capacity in the remaining nine sites is proportionately less, then this would give a conservative estimate of total void capacity of some 40 million m³ for the twelve sites. If it were assumed that 1 m³ is the equivalent of 1 tonne, and a landfilling rate of 3 million tonnes per annum, this would give a hazardous waste landfill capacity of some 12 years. Clearly this analysis includes a number of assumptions, including the fact that the twelve sites will all opt for classification as hazardous. These assumptions need to be tested more thoroughly, and the loading rates for each of the landfills needs to be considered. This would govern the permitted throughput at each site. The Forum task force on treatment and capacity will be looking more closely at this analysis.

29. In addition to disposal in dedicated hazardous waste landfills, some hazardous waste can be treated to a stable non-reactive state and managed in a separate cell in a non-hazardous landfill. Separate waste acceptance criteria apply to this treatment and disposal route, and need to be developed as quickly as possible to enable investment plans to progress. This treatment process is destined to play a major role in hazardous waste management in England, and is already used to some extent in other countries, and will provide additional landfill capacity for hazardous waste.
30. Nevertheless, hazardous waste landfill capacity is not the only important factor in relation to the ability of the England and Wales to deal with hazardous waste. The Landfill Directive requires that all hazardous waste be treated before landfill. Total treatment capacity therefore has to be considered – indeed some wastes will simply not be landfilled in the future, either because the increased cost of landfill will make alternative treatments more attractive, or because the Directive bans them from landfill altogether, as has been the case since July 2002 with liquid wastes and wastes with certain hazardous properties (explosive, corrosive, oxidising, and flammable).
31. Aside from landfill capacity, it does not appear that the required treatment capacity to meet the Directive requirements is yet in place, and as mentioned above could lead to capacity problems for the treatment and disposal of certain waste streams at least in the short term. The most recent data available to the Forum, compiled by Enviros (see Supporting Documentation) shows that there could be a gap between the requirements for treatment of hazardous waste prior to landfill after the end of co-disposal in July 2004, and the known plans for the investment in new treatment facilities. Improved clarity on legislative requirements, especially with respect to the Landfill Directive Waste Acceptance Criteria, and the operation of the risk assessment option under the Directive, will help to encourage the development of investment plans. The Forum will need to keep this area under close review through the Treatment and Capacity Task Force.

Planning Permission for new facilities

32. Provision of new hazardous waste management facilities will in most cases require planning permission. This takes time and careful preparation, and needs to be factored into any plan for dealing with hazardous waste arisings. Section 3, Part 3 analyses in more detail the planning considerations in relation to the full range of different treatment options. Development of existing waste sites - for example, the provision of solidification plants next to landfill sites - are likely to be more favourably received than green field development. The waste industry and local authorities need to work closely together to ensure that sensible plans are brought forward and an effective network of treatment facilities is developed near to where the facilities are needed. To that end,

local authorities need information on the types and quantities of waste arisings on, at least, a regional basis.

33. Overall the planning system should be seen to work in support of the provision of new facilities, and the review of Planning Policy Guidance 10 provides an opportunity to help get the framework right.

Incineration and Co-incineration of waste

34. In England and Wales there are three merchant High Temperature Incineration plants, though one is currently mothballed. HTI plant have the ability to deal with some of the country's most intractable hazardous waste, and thus play a crucial role in our ability to deal with the full range of hazardous waste arisings. The EFRA Select Committee recommended that "there should be a diversity of management options for hazardous waste and that HTI is part of this...and that if Government wishes to sustain diversity in this sector, it must recognise the problems faced by the HTI industry and should look again at the equivalency of use of high calorific value wastes as fuel in HTI plants and cement kilns." To that end, Defra is reviewing the recovery/disposal status of HTI plants burning high CV wastes, which will take into account the recent ECJ judgments on incineration and energy recovery from burning.
35. In many Member States, cement kilns and other co-incineration plants, such as power stations, play a significant role in the treatment of hazardous waste. Analysis suggests that cement kilns have the capacity to deal with significantly more hazardous waste than at present – some 90,000 more tonnes of waste derived liquid fuels, and between 90,000 and 345,000 tonnes of waste oil. The cement industry argues strongly that the current Substitute Fuels Protocol (SFP) is hampering the ability of the industry to assist in the management of hazardous waste. The EFRA Select Committee recommended that "it remains for the Environment Agency to decide how best to ensure that the environmental impact of waste management is minimised within the current regulatory regime". The Agency has begun a review of the SFP and any proposed changes will be the subject of public consultation.

4. Further developing the national framework: policy instruments, targets and household hazardous waste

A balanced compliance strategy

36. The Forum has noted that whilst a strong legislative framework is necessary, it must be complemented by an integrated package of other policy instruments to encourage compliance. Successful hazardous waste management systems across the globe draw on four categories of instrument: command and control regulation, economic instruments, information dissemination and use of a voluntary approach. Within that, experience elsewhere suggests the need for potentially at least three to five policy instruments with substantial teeth.

Policy Tool kit

37. The policy tool kit below summarises existing policy instruments from the four categories and lists potential additional instruments. Present instruments are listed in normal type face. Proposed future instruments are shown in bold. Further details are provided in Part 2 of the Action Plan.

Targets

38. The Forum has considered the use of targets to encourage further hazardous waste reduction. However, establishing realistic targets, and monitoring progress towards their achievement, requires reliable measurement and thus good baseline data, which currently are not available. Once the information required to set realistic and achievable targets is available, and this is only likely to be once the new Hazardous Waste Regulations are agreed and implemented in 2004, and the fresh data on arisings is available, the Forum will recommend where and how specific targets might be introduced.
39. There are numbers of options as to how targets could be applied, e.g. on specific waste streams, as a global percentage, on a collective industry basis, incorporated into PPC permits. There are also numbers of possible mechanisms for implementing such targets, for example through extended producer responsibility, mandatory vs. voluntary agreements, or through the PPC regime.
40. The Chemical Industries Association (CIA) already has a voluntary agreement in place (as part of its Responsible Care programme), to reduce the amount of hazardous wastes produced collectively by its members by 25% between 2000 and 2010. This provides a useful start that can be built on in the future, both in the chemical and other sectors.

Household hazardous waste

41. Hazardous waste comprises some 1% of the household waste stream⁸. The main items include paints and related materials, household and garden chemicals, motoring products including waste oil and lead acid batteries, as well as some household appliances such as fridges, freezers and televisions. Many local authorities provide a special collection service for these items, and most have provision at civic amenity sites for the public to take some or all of these waste streams. In some areas community sector initiatives provide separate collection, and in other cases retailer take back services are available. Research for the National Household Hazardous Waste Forum showed that 90% of local authorities in England offered some form of HHW collection service.
42. Nevertheless, smaller items of hazardous household waste are likely to be disposed with ordinary household waste, and in the absence of comprehensive separation of household waste streams, this is likely to continue
43. The segregation of HHW can be limited by a number of factors – the treatment capacity for most types of HHW is limited, segregated HHW is subject to the controls in the

⁸ National Household Hazardous Waste Forum

Hazardous Waste Directive - in England and Wales currently implemented through the Special Waste Regulations. This is further exacerbated by changes to the hazardous waste list. Facilities at civic amenity sites can be abused by trade waste input, and staff at such sites need training in identification, handling and health and safety aspects of hazardous waste.

44. In addition, implementation of the WEEE Directive will have important implications for the management of these waste streams, and in particular by local authorities.
45. Concern about the content of the municipal waste stream supports the separation of household hazardous waste. This might be encouraged through the wider use and dissemination of demonstration projects, and greater support and incentives for local authorities to extend separate collection schemes, and the Forum intends to look at this issue in more detail in the autumn and New Year.

Conclusion

46. This part of the Action Plan sets out the Key Issues. Part 2 lists in tabular form the specific objectives of the Action Plan (column 1), together with recommended actions by stakeholders (column 2). Column 3 sets out specific issues and relevant background information in relation to each recommended action. As noted above the Forum will monitor the implementation of these recommendations through an Implementation Plan, which will, in relation to each recommended action, identify lead organisations, set out timescales and specify how progress will be measured.

Command and Control Legislation

Current legislation and regulatory regime allows use of co-disposal, which will cease from July 2004

- New regulations in preparation to transpose recent EU Directives

Possible changes to 'tighten controls'/apply controls more evenly:

- Government commitment to clarify content of regulations and timing
- Government to clarify WAC implementation
- WAC applied without loopholes (defined and limited use of risk assessment)
- Development and application of BPEO for key hazardous waste streams
- Producer registration
- Robust, consistent and effective regulation and enforcement: proportionate and risk-based
- As far as possible, a consistent approach across the UK: no market distortion
- Effective use of adequate resources by the Environment Agency
- Tough penalties: higher than cost of compliance

Economic Instruments

Current focus is on economic 'sticks'

- Landfill Tax
- Charging for registration and licensing

Possible incentive mechanisms (economic 'carrots'):

- Government to consider economic instruments to incentivise business to reduce/ reuse/ recycle hazardous waste e.g.
 - Use of landfill tax credit scheme
 - Grants for investment
 - Low-interest loans/ enhanced capital allowances for investment
 - Further use of producer responsibility (beginning with voluntary agreements (see below))
 - Use of excise duty derogations

Some provision already, but directed at environmental management or waste management in general, but little specific to hazardous waste:

- Provision of Technical Assistance: Envirowise, DTI Manufacturing Advisory Service, Metals Industry Competitive Enterprise
- Waste Minimisation Clubs
- Public Information: e.g National Waste Awareness Initiative, Wake up to Waste (NI)
- Information Clearing House: Energy and Environment Helpline

Possible improvements:

- Co-ordinated information programme for waste producers
- Single point of contact for practical info' on all aspects of hazardous waste
- Guidance on Landfill Directive WAC
- Funded technical assistance programme for hazardous waste prevention and reduction (Envirowise)
- Funded technical assistance programmes focusing on priority waste streams
- Comprehensive data capture, management and reporting

Information dissemination and use mechanisms

Again some provision, generally as part of wider environmental management initiatives:

- Industry sector codes of practice, best practice schemes
- CIA 'Responsible Care' scheme, target of 25% reduction in waste reduction 2000-2010
- ISO14001, EMAS, EMS, company environmental reporting
- Training programmes: CIWM, Envirowise, WAMITAB

Possible changes:

- Government to study potential for increased use of producer responsibility/ duty of care as a tool to encourage hazardous waste reduction/ recycling/ proper treatment
- Initial progress via a series of bilateral agreements with industry (backed up by legislation if needed)
- Agreements to include sector specific waste reduction targets

Voluntary agreements

Part 2: Objectives, recommendations, actions and issues

1 The Regulatory System

Overall Objective 1:	<p><i>To provide a clear and robust regulatory system for hazardous waste management. This must provide both:</i></p> <ul style="list-style-type: none"> • <i>the clarity of unambiguous legislative requirements; and</i> • <i>the certainty of consistent and transparent implementation, inspection and enforcement.</i>
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1 The Regulatory System		
Specific Objectives	Recommended Actions	Comments and Specific Issues
<p>Specific Objective 1.1:</p> <p>Provide clarity of legislative requirements</p>	<p>1.1A Government should provide clarity as soon as possible on the extent, timing and application of forthcoming changes to legislation governing the management of hazardous waste.</p> <p><i>A draft implementation plan is included in this report. This will be reviewed and updated by the Hazardous Waste Forum on a regular basis.</i></p>	<ul style="list-style-type: none"> • Investment by waste producers and waste managers requires clarity on legislation, its interpretation and timing. • However, all new regulations are subject to public consultation, which affects the timing. • In the supporting documentation of this action plan it sets out the current implementation plan, including the dates for consultation on the various forthcoming regulations and the anticipated dates for laying regulations before Parliament. • The HWF is an appropriate mechanism for ensuring that the implementation plan is kept up to date and available to all parties.

1 The Regulatory System

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>1.1B The Landfill Directive Waste Acceptance Criteria (WAC). Government should confirm as soon as possible the date for the implementation of WAC: finalise the regulatory procedure for the interim year, if WAC is only to be introduced in July 2005; and confirm details of the application of the new landfill regime.</p> <p><i>This is a high-level recommended action which is detailed below</i></p>	<ul style="list-style-type: none"> • Co-disposal will end in July 2004. • From July 2004 , all hazardous waste requires treatment before landfill. • The acceptance of wastes to landfill from July 2004 will depend on the level of treatment that is required. • Government is consulting on a range of issues in relation to WAC, and the consultation ends on 17 December 2003. • A number of detailed subsidiary actions are expanded on below.
	<p>(i) <i>Government should make a decision as soon as possible on the date for the implementation of the WAC</i></p>	<ul style="list-style-type: none"> • The Landfill Directive WAC were agreed by the EU in December 2002, presenting options for implementation between July 2004, to coincide with the ending of co-disposal, and July 2005. • The Directive WAC must be applied by July 2005 at the latest. • Application of the WAC in July 2004 would require treatment capacity to be available to enable full WAC treatment standards to be met. • This is included in the current consultation on the landfill directive. The final regulations are expected in Spring 2004.

1 The Regulatory System

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>(ii) <i>If the waste acceptance criteria are to apply from July 2005, then the Government and the Environment Agency should clarify as soon as possible how the remaining hazardous waste landfill sites will be regulated in the gap year July 2004 – July 2005, between the ending of co-disposal and the full application of WAC.</i></p>	<ul style="list-style-type: none"> • If the WAC are not introduced until July 2005, in the period between July 2004 and July 2005 the treatment of hazardous waste for existing cells on hazardous waste landfills will have to meet the general acceptance criteria contained in Schedule 1 of the Landfill (England and Wales) Regulations 2002, rather than the prescriptive limit values of the WAC Decision. • The EA has already published guidance in August 2002. • Clarity is needed on how the Government intends to deal with the requirement for some form of pre-treatment for hazardous waste to landfill from July 2004, if the WAC are not applied until July 2005. • The final method of regulatory control will be subject to the same general consultation as the implementation of the WAC.
	<p>(iii) <i>Government should provide clarity as soon as possible on where and when the risk assessment criterion within the WAC will be available for use.</i></p>	<ul style="list-style-type: none"> • The Government is currently consulting on its view that the risk assessment criterion within the WAC has only limited and very specific application. • The risk assessment provision in the WAC is intended as the exception to the rule, to be used on an individual site- and waste stream- specific basis. It does not allow 'carte blanche' for the status quo of hazardous waste to landfill in England and Wales to continue. • However, clarity in the detail of where and when the exception can be used is critical to establishing certainty in the minds of waste producers, waste managers, and investors in the hazardous waste management industry.
	<p>(iv) <i>The Government needs to clarify requirements for the deposit of hazardous wastes at landfill sites which have previously received non-hazardous wastes.</i></p>	<ul style="list-style-type: none"> • Most hazardous waste only sites will have received non-hazardous wastes (i.e. that were previously co-disposal sites). Clarification is required on whether new hazardous waste cells may be tipped over former co-disposed or non-hazardous wastes. • Non-hazardous waste sites may contain separate cells for stable hazardous wastes. A determination similar to the scenario for hazardous waste sites is also needed.

1 The Regulatory System

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>(v) <i>The Environment Agency should, as soon as possible, develop, consult on, and implement, criteria for the acceptance of stable hazardous wastes in cells on non-hazardous waste landfill sites.</i></p>	<ul style="list-style-type: none"> • National criteria need to be established under the WAC. This is important, if the waste industry is to make investment decisions in stabilisation facilities, which will be one of the important options for wastes which can no longer be co-disposed in landfill after July 2004 and which will require pre-treatment prior to landfill • A study has been commissioned by the EA, from which an interim report is expected to be available to the HWF in October
	<p>1.1C The Hazardous Waste Regulations (HWR)</p> <p>Government must ensure that the HWR are in place as soon as possible and at least before 16 July 2004.</p>	<ul style="list-style-type: none"> • The new Hazardous Waste Regulations will introduce changes to the control regime in England. There will be separate, but similar regulations for Wales. Waste managers and producers need to know exactly what the new controls will be – the second consultation is due soon. • The extension of the EU Hazardous Waste List means that there will be a large number of ‘new’ hazardous waste producers. • Applying the special waste controls under the new list would be too onerous. Government therefore proposes to end the pre-notification requirement before hazardous wastes can be moved. • Some WEEE and undepolluted ELVs are newly classified as hazardous. Clarity on the implementation of the Waste Electrical and Electronic Equipment (WEEE) and End of Life Vehicle (ELV) Directives, is required.
	<p>1.1D Government and the Devolved Administrations should strive for a consistent approach to implementation and regulations across the UK: any differences in approach should not lead to market distortion.</p>	<ul style="list-style-type: none"> • Hazardous waste will often tend to travel to the cheapest legal option. • The market for hazardous waste treatment is UK wide (and for recoverable hazardous waste is international, within the OECD) . • Distortions in the market must be avoided. • However, the Devolved Administrations also need to be free to tailor the control system to achieve the common goal in the most effective and efficient manner, appropriate to their own local needs and requirements, within the constraints of EU legislation.

1 The Regulatory System

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>1.2A The Forum recommends that the Environment Agency should keep under review its regulatory effort on hazardous waste and apply it in a proportionate and risk-based manner. This will be of particular importance in the transitional period immediately following the end of co-disposal and the introduction of the new control regime in July 2004.</p>	<ul style="list-style-type: none"> • The new Hazardous Waste Regulations will bring many 'new' hazardous waste producers within the regulatory control regime for the first time. • The end of co-disposal will inevitably lead to rising costs of hazardous waste management. This could encourage unscrupulous operators to circumvent the controls, through mis-description and mis-routing of wastes (e.g. classifying hazardous waste as non-hazardous) and an increase in fly-tipping. • Robust and consistent enforcement is needed to ensure a smooth transition to the new control regime. It is vital that the regulators should be visible 'in the field'. • The proposed streamlining of procedures in England and Wales: removing the requirement to pre-notify the Agency before hazardous waste can be moved, and the introduction of quarterly consignee returns, is expected to free up inspectors from administrative duties. • Even allowing for this, the Forum recognises that additional regulatory effort may be required, at least in the transitional period. • If additional resources are needed, this will need to be funded through cost recovery on fees and charges.
<p>Specific Objective 1.2:</p> <p>Effective implementation, inspection and enforcement of the hazardous waste regulatory control system</p>	<p>1.2B Enforcement is a vital part of the overall control system and should be used on a consistent basis. The Forum recommends that the courts be encouraged to ensure that the penalties are such that the cost of non-compliance is greater than the cost of compliance.</p>	<ul style="list-style-type: none"> • The regulators should seek to educate, inform and encourage, hazardous waste producers and management companies to comply with their regulatory responsibilities, offering guidance and advice as appropriate. • However, it is important that those who choose not to comply should feel the full force of enforcement action. • The penalties must be such that possible prosecution should not be viewed as a cheap alternative to full compliance with the law

1 The Regulatory System

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>1.3A Hazardous waste producers should be subject to inspection and enforcement, through a registration scheme if appropriate.</p>	<ul style="list-style-type: none"> • Changes to the Hazardous Waste List mean that there will be a large number of new hazardous waste producers. • The Hazardous Waste Directive requires that hazardous waste producers be inspected by the competent authorities. • The waste producer is key to safe, secure and environmentally sound waste management practice. The regulators believe that more focus on the inspection of producers is essential to achieving overall control in a cost effective manner. Inspection of hazardous waste producers is also an important way to educate and advise them and to encourage their compliance. • A registration system, to be consulted upon as part of the Hazardous Waste Regulations in England, and separately in Wales, will better enable these requirements to be fulfilled.
<p>Specific Objective 1.3: Ensure a 'level playing field', by applying effective control of hazardous wastes fairly and consistently to all the 'links' in the waste management chain from the 'cradle' to the 'grave', thus eliminating illegal activities.</p>	<p>1.3B Waste brokers, carriers and transfer stations should be subject to proportionate, risk-based inspection and regulation.</p>	<ul style="list-style-type: none"> • Need to use existing powers to regulate waste brokers, carriers and transfer stations more effectively. • Investors need confidence that all operators will be regulated on a firm and fair basis. • The effectiveness of these measures should be kept under review. If they are not seen to be working, then consideration should be given to strengthening the legislative framework, e.g. by extending cradle to grave control to the eventual destination of the waste rather than to a transfer station, or by extending the some or all of the fit and proper person test to waste brokers.
	<p>1.3C An assessment should be made by the Environment Agency of the extent and risk of subversion of the hazardous waste controls, both through mixing, blending and dilution, and through the abuse of trade effluent consents.</p>	<ul style="list-style-type: none"> • It is recognised that mixing, blending and dilution of wastes, at transfer stations or elsewhere, could prove a significant means of circumventing the new hazardous waste controls. Tight regulation and enforcement will be essential. • The inappropriate and potentially illegal use of trade effluent discharge consents (e.g. at disused industrial premises) has been reported as a way of circumventing the present hazardous waste controls.

1 The Regulatory System

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>1.3D The Environment Agency should continue to ensure that all hazardous waste treatment and disposal facilities are regulated on the same, consistent basis.</p>	<ul style="list-style-type: none"> • Regulation of all (hazardous) waste management facilities should be consistent with EU law; “gold plating” of the controls should be avoided. • Robust but consistent and effective regulation and enforcement is required, which concentrates on environmental outcomes. • The ‘OPRA’ system in use by the EA already seeks to link inspection frequencies in the field to the degree of risk posed by the facility. • A level playing field should be maintained between the regulation of merchant and in-house facilities.
	<p>1.3E The Environment Agency and local authorities should enhance their working relationships to monitor and where necessary detect, deter and disrupt illegal and unlicensed activities, particularly in the transitional period following the end of co-disposal and the implementation of the new control regime in July 2004.</p>	<ul style="list-style-type: none"> • Such illegal activities may increase with the new regulations and the associated increased costs (see under R1.2A above). • The Agencies already work closely with local authorities, who also have responsibilities and powers in relation to fly tipping. An intensification of these efforts will be required while the new controls are being implemented. • Government proposes to develop a strategy to help combat fly tipping, which could encompass hazardous waste. One aspect would be to improve the data and knowledge base so that resources can be better targeted

2 Raising Awareness and Encouraging Hazardous Waste Minimisation

Overall Objective 2:	<p><i>To raise awareness of the issues surrounding hazardous waste management, in business and industry</i></p> <p><i>To promote the environmentally sound management of hazardous wastes, and in particular hazardous waste minimisation (i.e prevention, reduction, reuse, recovery and recycling)</i></p>
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2 Raising Awareness and Encouraging Hazardous Waste Minimisation		
Specific Objectives	Recommended Actions	Comments and Specific Issues
<p>Specific objective 2.1:</p> <p>Waste producers to have straightforward access to information on all aspects of hazardous waste management and associated legislative requirements.</p>	<p>2.1A An information and awareness programme on hazardous waste management for business and industry should be developed and implemented as soon as possible. Co-ordinated by the Environment Agency, and actively involving other stakeholders, the programme should focus on the requirements and obligations of the new hazardous waste management control system, and its practical and financial impacts.</p>	<ul style="list-style-type: none"> • Current awareness of hazardous wastes by (particularly smaller and 'new') producers is low. According to the EA, only 20% of SMEs are even aware of the 'duty of care' requirement. • Treatment and disposal costs are set to rise, but there are opportunities to reduce these costs through waste prevention and reduction. • Given the 'step change' in management required with the extension of the Hazardous Waste List and the ending of co-disposal, a major information and awareness campaign is required. • One example is the DTI 'road show' for producers of WEEE. A similar initiative focussing on hazardous wastes would be one option. • A possible extension to the basic information and awareness campaign would be to provide more formal 'hazardous waste awareness' training for waste producers. This could build on the experience of CIWM's general waste awareness certificate for waste producers.

2 Raising Awareness and Encouraging Hazardous Waste Minimisation		
Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>2.1B Envirowise, through their existing helpline, should be established as the single point of contact, to provide practical information on all aspects of hazardous waste minimisation. This focal point will have active collaboration from the Agency and needs to be clearly sign-posted, so that its user community can find it easily and quickly.</p>	<ul style="list-style-type: none"> • One point of contact will provide the clarity that is needed on where to go for assistance. • 60% of small businesses that have waste queries go initially to the local authority for advice, and LAs are unsure as to where to redirect queries. • Both the Agency through its inspections of hazardous waste producers, the waste management industry through its clients, and trade associations through their members, will all have important roles to play in educating and advising producers, and sign-posting the focal point for further information. • Government funding of the single point of contact is required, at least for the transitional period (2 years in the first instance, subject to review and possible extension), to allow a free advice and support service to be provided (up to a maximum time input per inquiry). • A well developed and easy to use web site is an essential part of the service required. • An important element of advice would be on the recommended options for specific types of hazardous wastes. • However, it is critical that the advice should be focused on advising on options, and on listing operators offering those services – any recommendation of a specific commercial operator (as opposed to a competitor offering an equivalent service) MUST be avoided. • Additional, sector specific, guidance materials should be developed in collaboration with the relevant trade associations.

2 Raising Awareness and Encouraging Hazardous Waste Minimisation		
Specific Objectives	Recommended Actions	Comments and Specific Issues
<p><i>Specific objective 2.2:</i></p> <p>To disseminate good practice, and to encourage innovation, in waste prevention, reduction, reuse, recovery and recycling</p>	<p>2.2 An adequately resourced and funded technical assistance programme, to disseminate legislative requirements, good practice and to encourage innovation in hazardous waste prevention, reduction, reuse, recovery and recycling, should be established as soon as possible. Active participation by industry and relevant trade associations, as well as Government and the regulators, is vital to its success.</p> <p>This could be a specifically funded and earmarked extension to the terms of reference of Envirowise.</p>	<ul style="list-style-type: none"> • The revised Hazardous Waste List (HWL) will bring many new producers into the control scheme, while the end of co-disposal may result in a step increase in costs for existing producers. The best solution, for industry, the environment and the economy as a whole, is to minimise waste quantities. • To achieve this win-win solution, producers need both information (see R3.1) and technical assistance in the short-term. Similar programmes exist or have existed in some other EU countries. • Envirowise provide a similar programme on general environmental issues to SMEs. The programme here needs to have funds specifically earmarked for hazardous wastes, and needs to be available to a wider audience than just SMEs. • It should also cover awareness raising of new legislation. • While strong Government (DTI, DEFRA, and EA) involvement is needed, the participation of industry and trade associations is also vital. If both Government and industry co-funding can be mobilised, then matching funding through the EC LIFE programme may be forthcoming (a bid is being prepared by the EA). • Landfill tax credit scheme funding is one option to be explored further.

2 Raising Awareness and Encouraging Hazardous Waste Minimisation		
Specific Objectives	Recommended Actions	Comments and Specific Issues
<p><i>Specific objective 2.3</i></p> <p>To establish and disseminate best practice for the environmentally sound management of priority waste streams</p>	<p>2.3 Adequately resourced and funded technical assistance (and where appropriate research) programmes should be set up to focus on agreed priority hazardous waste streams. Again, active participation by industry and the relevant trade associations is vital to success.</p> <p>The priority hazardous waste streams are:</p> <ol style="list-style-type: none"> i. contaminated soils, ii. construction and demolition waste, iii. waste oils, iv. air pollution control residues, v. filter cakes, vi. wastes from the non-ferrous metals industry <p>Further details of these priority waste streams can be found in the supporting documentation accessible via the relevant web-link listed in the Table of Contents.</p>	<ul style="list-style-type: none"> • The first 5 priority waste streams were agreed by the Forum at its second meeting. • Waste stream (vi) has been added by the sub group on Arisings and Minimisation which noted the significant effect of the Landfill Directive on the non-ferrous metals sector. • Construction/demolition waste, contaminated soil and waste oils are the largest waste streams currently being disposed of by co-disposal, contributing about 75% of the total, so the priority is clear. • Most waste oil is recovered and burnt as fuel in the UK. The Waste Oil Directive requires Member States to give priority to regeneration where constraints, including economic constraints, allow. • Currently no regeneration of waste oil takes place in the UK • Government needs to take a decision on how to implement the WOD requirement in the light of impending impact of the Waste Incineration Directive on combustion outlets for waste oil. • Waste streams (iv) and (v) result from the need to remove pollutants from discharges to the air or to water, and their treatment and disposal provide a particular challenge. • Waste from agriculture will add significantly to the arisings of hazardous waste requiring treatment and disposal, and this waste stream has been considered in the Agricultural Waste Forum

3 Ensuring the Provision of Recycling, Recovery, Treatment and Disposal Capacity

<p>Overall Objective 3:</p>	<p><i>To ensure the provision of the hazardous waste management facilities required to meet the new legislative requirements.</i></p> <p><i>A particular concern is to ensure that adequate capacity is available in the short to medium term, during the initial transitional period following the end of co-disposal and the introduction of the new regulatory control regime.</i></p>
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3 Ensuring the Provision of Recycling, Recovery, Treatment and Disposal Capacity		
Specific Objectives	Recommended Actions	Comments and Specific Issues
<p>Specific objective 3.1:</p> <p>Clarity on the likely scope of new infrastructure which needs to be developed, in order to meet the requirements of the new regulatory control regime for hazardous wastes</p>	<p>3.1 Clearer information setting out likely capacity requirements should be prepared for the hazardous waste recycling, recovery, treatment and disposal capacity, which needs to be developed in the short and medium term, to meet the requirements of the new regulatory control regime, and this information needs to be kept under review.</p> <p>The information should, as far as practicable, estimate waste arisings, indicate the generic types of facilities likely to be required and comment on the desirable regional distribution. This information is currently under preparation by the Hazardous Waste Forum, with support in particular from Government, the Environment Agency and the waste management industry.</p>	<ul style="list-style-type: none"> • Substantial additional recycling, recovery, treatment and disposal capacity for hazardous wastes might be needed in order to meet the requirements of the extended Hazardous Waste List and controls under the Landfill Directive and associated legislation. • Providing an appropriate climate to encourage investor confidence, so that the waste management industry can invest in such facilities, requires legislative and regulatory certainty (<i>see the detail under Section 1 above</i>). • A parallel requirement is for clearer information as proposed here. This will provide regional and local planners, planning inspectors and the public with a framework for judging planning applications. The information will also underpin the business case for and investment in new facilities. • Consideration should be given to the best form for issuing this information. It could be issued either as a HWF or as a Government document. but it does need to be seen by local authorities to have the status of a 'national statement of need' for hazardous waste facilities. • The information should focus in particular on those options that can be delivered in the short-term, and should include both currently co-disposed wastes and 'new' hazardous wastes (e.g. WEEE).

3 Ensuring the Provision of Recycling, Recovery, Treatment and Disposal Capacity

Specific Objectives	Recommended Actions	Comments and Specific Issues
<p>Specific objective 3.2:</p> <p>Make the planning and permitting systems responsive to the urgent need for additional treatment and disposal capacity</p>	<p>3.2 Government should review planning policy guidance and permitting processes for hazardous waste management facilities. Government should also, as part of a wider statement on the need for waste management facilities, provide sufficient information about the various categories of hazardous waste, where they are produced, and types of facilities suitable for treating them in order to facilitate the efficiency of short and long term planning procedures.</p> <p><i>This is a high-level recommended action that is detailed below.</i></p>	<ul style="list-style-type: none"> • The past experience of the waste industry in developing new facilities is one of delays in the planning system, and sometimes also in the permitting system. The absence of specified national requirements of the facilities that will be needed in order to meet the requirements of the Landfill Directive in particular, has not helped in this regard (see above). • The information recommended will assist in preparing the new generation of Regional Spatial Strategies and local waste development frameworks so that they can include the necessary land use planning policies and criteria appropriate to the regional or local authority level. These plans in turn will provide the basis for well-prepared and relevant proposals for hazardous waste facilities to be properly considered, and thus getting the full benefit of the procedural reforms already being made in the current Planning Bill. • Government is currently carrying out a comprehensive review of waste permitting, which is due to be implemented in 2004.
	<p>3.2A <i>Government should, in the short term, issue a general statement on the need for new or replacement waste management facilities of all types. This will help ensure that the planning system can respond effectively to the urgent need for additional treatment and disposal capacity for hazardous wastes to meet the new legislative requirements, particularly in the short-term.</i></p>	<ul style="list-style-type: none"> • Hazardous waste facilities tend to be controversial, and proper engagement of local politicians and the public, including adequate time for public consultation, is essential. • However, it is also essential that the planning system can be allowed to operate effectively in the face of inevitable local concerns, if essential short-term (and indeed longer term) capacity is to be provided. • A Ministerial statement, in the short term, would send an important message to the planners and regulators, in particular with regard to their responsibility in helping to avert a short-term 'crisis' if hazardous waste treatment capacity falls short of the demand.

3 Ensuring the Provision of Recycling, Recovery, Treatment and Disposal Capacity

Specific Objectives	Recommended Actions	Comments and Specific Issues
	<p>3.2B Government should as soon as practicable review and revise current planning guidance for waste management facilities (PPS 10) to make clear the need for new and replacement facilities of all types, including hazardous waste.</p>	<ul style="list-style-type: none"> • Present planning guidance deals with technical land use considerations and location criteria, but does not state the policy need for new waste management consents or give positive encouragement to authorities to consent proposals that are well prepared, represent BPEO, are environmentally acceptable and in conformity with the current waste local plan; • PPS10 needs to reflect a clearer categorisation of the different components of hazardous waste, the types of treatment suitable for them, and the types of facilities required as a result. This provides the basis for an indication of which types of facility are likely to be needed in all authorities, and which are more specialised and will need less dense spatial distribution, catering for broader catchment areas. • While it is not practicable to merge the present land use planning and waste permitting systems, due to their radically different legal and constitutional bases, there is scope to explore shared documentation in the planning and waste permitting processes, and joint local authority/EA project management of major cases. • Applicants need better guidance on how to put in appropriate waste applications that reflect local waste management and planning policies, and are based on sound environmental and BPEO assessments.
	<p>3.2C Government should consider ways of better informing the public about hazardous waste management issues and addressing their concerns.</p>	<ul style="list-style-type: none"> • Hazardous wastes arise primarily as a by-product of the consumer purchasing decisions we all make on a day-to-day basis. Proper engagement of the public is essential, both to reduce hazardous waste arisings in the long term (see R4.5 below), and, in a local context, to enable productive dialogue on the need for, and siting of, the infrastructure required to deal with society's hazardous wastes.

3 Ensuring the Provision of Recycling, Recovery, Treatment and Disposal Capacity		
Specific Objectives	Recommended Actions	Comments and Specific Issues
<p>Specific objective 3.3:</p> <p>Move forward with preparation for any likely shortfall in treatment capacity, post-July 2004 (or July 2005)</p>	<p>3.3A Defra and the Environment Agency should consider what short-term actions may be required in the event of a hiatus between the implementation of relevant Directives, and the provision of appropriate management options. This might include a general shortfall in treatment capacity, lack of an appropriate management route for a specific waste stream, etc.</p>	<ul style="list-style-type: none"> • The central issue facing England and Wales is to ensure that the necessary capacity is available to replace co-disposal landfill, in July 2004 or shortly thereafter. • In the event of a hiatus between the demand for treatment and the provision of these services, plans for interim measures should be in place, to be enacted as necessary. • These might include stockpiling or temporary authorisation for exports to mainland Europe, seeking derogations on specific “pinch points” in the Landfill Directive, etc.
	<p>3.3B A task force should be set up, with representatives of key stakeholder groups, to review progress in providing the short-term capacity required, and to minimise the disruption to industry of any temporary shortfalls.</p>	<ul style="list-style-type: none"> • The task force could be made up from members of the Forum, and indeed could form a sub-group. • It needs to monitor progress closely, and take corrective action if anticipated milestones are not being achieved.

4 Further Developing the National Framework for Hazardous Waste Management

Overall Objective 4:	<i>To build on Waste Strategy 2000, to put in place a sound framework for developing hazardous waste management in the UK over the next 10 years and beyond</i>
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4 Further Developing the National Framework for Hazardous Waste Management

Specific Objectives	Recommended Actions	Comments and Specific Issues
<p><i>Specific objective 4.1:</i></p> <p>Provide an integrated set of policy instruments, to encourage waste producers to reduce, reuse, recycle and recover their hazardous wastes and to adopt environmentally sound management</p>	<p>4.1 The Forum recommends that a more balanced set of policy and economic instruments, including 'carrots' as well as 'sticks', is required to encourage hazardous waste producers to act more responsibly.</p> <p>Government should carry out further work on developing economic and similar instruments that act as incentives to minimise hazardous waste production, increase reuse and recycling, and/or adopt environmentally sound management.</p> <p>The first results should be reported back to the Forum within 6 months.</p>	<ul style="list-style-type: none"> • Other EU countries have had in place, for a number of years, similar hazardous waste control systems to that which is now being developed in England and Wales. • In all cases, a strong legislative framework, rigorously implemented and enforced, is complemented by an integrated package of other policy instruments, to encourage compliance by waste producers. • The existing economic mechanisms, which might encourage hazardous waste minimisation in England and Wales, rely on instruments ('sticks'), such as landfill tax and PPC charging. • A complementary system of economic instruments ('carrots', e.g. grants, interest free loans, enhanced capital allowances) is used in many other EU countries.

	<p><i>Examples of instruments to be considered include:</i></p> <ul style="list-style-type: none"> • <i>Use of landfill tax credit scheme to provide incentives for hazardous waste prevention and reduction;</i> • <i>Grants for investment in hazardous waste prevention and reduction;</i> • <i>Low-interest loans/ enhanced capital allowances for investment in hazardous waste prevention and reduction;</i> • <i>Current possible future use of excise duty and/or product charges, e.g. to provide an incentive to regenerate waste oils;</i> • <i>Further use of producer responsibility, either on the basis of voluntary agreements with industry sectors and/or with statutory backing.</i> 	<ul style="list-style-type: none"> • Key factors in considering the alternatives include present and future regulatory requirements, the existence of markets for any recovered products and BPEO (see also R 4.3 below). • Producer responsibility is already embodied in EU Directives applying to 'new' hazardous waste streams (e.g. WEEE, ELVs, batteries). It is an integral part of future EU policy and may be expanded further. Hazardous wastes to which producer responsibility could be extended include solvents used for industrial cleaning and oils used for lubrication. • The Netherlands pioneered a series of voluntary agreements with industry, for some 29 priority waste streams (of which 12 were classified as hazardous). This was subsequently underpinned by the Memorandum on Prevention and Recycling of Waste, which set waste reduction/ recycling targets, both in general and for all 29 waste streams.
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<p>Specific objective 4.2:</p> <p>Establish, and move towards the achievement of, specific targets for hazardous waste reduction, reuse and recycling, for example through promoting producer responsibility for hazardous wastes</p>	<p>1. The Forum considers the use of targets for hazardous waste reduction as an important means of driving and monitoring progress. However, the information required to set realistic and achievable targets is not currently available. Once the information is available, the Forum will recommend where and how specific targets might be introduced.</p>	<ul style="list-style-type: none"> • The use of targets is one obvious way to drive forward waste reduction. Targets are set on the basis of what is considered achievable, and then used to monitor/ drive implementation to ensure their achievement. • Both establishing realistic targets, and monitoring progress towards their achievement, requires reliable measurement and thus good data, which currently are not available (see R 4.4 below). • Establishing realistic targets for hazardous waste reduction also requires information of what is achievable, on BPEO and on any incentives to be made available (see R 4.1 and R4.3) • There are numbers of options as to how targets could be applied, e.g. on specific waste streams, as a global percentage, on a collective industry basis, wrapped into PPC permits, etc, etc. • There are also numbers of possible mechanisms for implementing such targets, e.g. extended producer responsibility, mandatory vs. voluntary agreements, or through the PPC regime. • The Chemical Industries Association (CIA) already has a voluntary agreement in place (as part of its Responsible Care programme), to reduce the amount of hazardous wastes produced collectively by its members by 25% between 2000 and 2010. This provides a useful start that can be built on in the future, both in the chemical and other sectors.
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<p>Specific objective 4.3:</p> <p>To provide, and maintain in the long term, a diversity of options for hazardous waste recycling, recovery, treatment and disposal, which represents the best practicable environmental option (BPEO)</p>	<p>1. As proposed in Waste Strategy 2000, BPEO should be established for hazardous wastes (working on the basis of selected waste streams). Government and the Agency should lead the study, but all stakeholder groups should take an active part.</p> <p>The ultimate aim is twofold:</p> <ol style="list-style-type: none"> 1. To provide the basis for the long term provision of the required treatment and disposal facilities (to complement the short to medium term guidance document, R3.1 above); and 2. To provide authoritative guidance to hazardous waste producers as to what types of treatment and disposal options are acceptable or unacceptable for different types of hazardous wastes. 	<ul style="list-style-type: none"> • A diversity of recycling, recovery, treatment and disposal options is required in the long term. By analogy with the rest of Europe, this could include additional capacity for both high temperature incineration and waste recovery in cement kilns, as well as innovative technologies. • Waste Strategy 2000 proposed the development of BPEO for key hazardous waste streams, but little progress has been made. • It is recommended that Defra and the Agency should cooperate on the BPEO study. • The BPEO study will need to make reference to the EU BREF document on waste treatment, a draft of which is currently under consultation, as well as to earlier UK Waste Management Papers for specific waste types. • Account should also be taken of continuing EU developments, following the ECJ judgments in relation to energy recovery and incineration of waste.
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<p>Specific objective 4.4:</p> <p>Good quality, reliable and consistent data to be available on a regular basis, to form a basis for the better planning for, and management of, hazardous wastes</p>	<p>4.4 The Hazardous Waste Forum will investigate further the options for improving the availability of good quality, reliable and consistent data for improved planning and management of hazardous waste.</p>	<ul style="list-style-type: none"> • All stakeholders need to work together with the aim of improving the quality, reliability and consistency of the available data on hazardous waste management. • Such data are essential both to establish the BPEO and to underpin planning for the future infrastructure which is required for the environmentally sound management of hazardous wastes. • The Agency's SwaT database only records movements of consigned waste, and does not record arisings of hazardous waste dealt with on site, but the implementation of the Hazardous Waste Regulations provides an opportunity to improve data collection and recording, for example by requiring annual or quarterly data returns from registered hazardous waste producers on waste arisings even where such waste is not consigned. • A common policy instrument in Europe is to extend registration of hazardous waste producers to include periodic mandatory reporting to the authorities. This was in place in 10 out of the 11 EU countries included in a 1997-8 ISWA survey (i.e all except the UK). • A further advantage of this option is that data would then become available on all hazardous wastes produced, rather than just on wastes consigned. It is estimated that, at present, around 5 million tonnes a year of wastes are consigned in England and Wales, compared to 4.5 million tonnes that are not, so this is a significant issue.
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<p>Specific Objective 4.5</p> <p>Encourage greater levels of segregation and separate collection of household hazardous wastes (HHW)</p>	<p>4.5 Separate collection of HHW should be encouraged through the wider dissemination of good practice, the provision of appropriate funding, and the possible use of supporting policy measures. The National Household Hazardous Waste Forum should continue to be the lead body in this area.</p> <p><i>The HWF should consider HHW further in its next phase of work, focusing in particular on:</i></p> <ol style="list-style-type: none"> 1. <i>Policy measures to reduce the hazardous content of consumer products through better design and to promote retailer take- back. The initial focus is likely to include identifying priority candidates for voluntary agreements.</i> 1. <i>Encouraging wider public participation. This needs to be linked to any wider public awareness campaign (see R3.2.C above).</i> 	<ul style="list-style-type: none"> • Many local authorities provide separate collection services for HHW • Drivers for better collection and segregation of HHW are the need to reduce contamination of both materials for recycling and residual municipal wastes; legislative requirements such as retailer take back; or to meet targets for separate collection. • Major barriers include the high costs involved and the shortage of suitable treatment capacity. It is important that controls on the permitting of operations, and movements, involving HHW are proportionate to the risks, and not set to such a level to discourage separate collection. • The National Household Hazardous Waste Forum (NHHWF) already promotes good practice amongst local authorities, and a number of schemes exist to target specific waste streams such as Community Re-Paint, and the Oil Care Campaign. • Promotion of the segregation and separate collection of HHW will have resource implications, and Government should consider incorporating this in the Waste Implementation Programme. • Take-back requirements are already envisaged under the WEEE Directive, and other waste streams could be subject to such a system. • Government is committed to looking at a voluntary agreement to increase the recycling of waste consumer batteries, some of which can be hazardous. This could be extended to other HHW streams, for example waste oil, household paint, garden pesticides • Public participation is essential to the success of any separation scheme for HHW, and also to put pressure on manufacturers and retailers to reduce the hazardous content of consumer products.
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