National Hazardous Waste Management Plan
Implementation Committee

Annual Report

Submitted to the
Minister for the Environment, Heritage and Local Government,
Mr. Martin Cullen, T.D.

Wexford

6 August 2004

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Executive Summary

The National Hazardous Waste Management Plan Implementation Committee met on four occasions between 9 July 2003 and 5 April 2004. This is the first and final annual report of the Committee. The work of the Committee has been subsumed into the National Waste Prevention Committee, established in April 2004. The new Committee met for the first time on 13 July 2004.

The National Hazardous Waste Management Plan was prepared and published by the Environmental Protection Agency in July 2001 in accordance with the Waste Management Act, 1996. This annual report presents the first update on the Plan's implementation in the intervening period. A number of short- and long-term priorities were identified in the Plan. Progress with regard to these priorities is highlighted in the table below. This report also presents the most recent statistics available on various hazardous waste streams.

Overall, any progress with regard to the Plan's recommendations has been achieved in an unplanned and uncoordinated way. In its first year of operation, the Committee made a number of preliminary recommendations with regard to the provision of facilities for the improved collection, recovery and disposal of hazardous waste. This work will be carried forward by the National Waste Prevention Committee.

Priority	Progress	Further information
1. The establishment of an Implementation Committee.	Established July 2003. Replaced by National Waste Prevention Committee in April 2004.	Section 1.2, page 6.
2. The establishment of a Prevention Team to implement the Prevention Programme.	A National Waste Prevention Programme was launched in April 2004 and will be implemented by a Core Prevention Team within the Environmental Protection Agency.	Section 4.1, page 19.
3. The identification and elimination of unreported hazardous waste.	Reduced by 51% between 1996 and 2001 to 48,402 tonnes	Section 2.4, page 11, items no. 1 and 2.
4. The identification and assessment of hazardous waste disposal sites.	Progress is slow and unsystematic. Only one local authority has systematically carried out this recommendation.	Section 2.3.2, page 10; and section 2.4, page 11, item no. 9.
5. Establishment of an improved collection infrastructure for hazardous household, agricultural and SME wastes.	Civic waste facilities are increasing and all now accept small-scale hazardous waste to a greater or lesser extent. A mobile collection service was used by 18 local authorities in 2003.	Section 2.4, page 11, item no. 5.
6. The allocation of financial and technical assistance for the development of hazardous waste recovery and disposal facilities.	No grant aid has been provided to the private sector for the recovery and disposal of hazardous waste since the 1997 grant-aid applications round.	Section 2.5, page 17; and Appendix E of the Plan.

Priority	Progress	Further information
7. The development of hazardous waste landfill and thermal treatment capacity for hazardous wastes requiring disposal to achieve self-sufficiency.	No hazardous waste landfill has been proposed. One proposal has been made for a hazardous waste incinerator.	Section 2.4, page 11, items no. 6 and 7; and section 2.5, page 17.
8. Improved public awareness of the impacts of hazardous wastes.	It is difficult to quantify progress on this recommendation. The quantity of unreported hazardous waste has decreased, indicating increased compliance with regulations. The Race Against Waste campaign has raised public awareness of the waste issue in general.	Section 2.4, page 11, items no. 1 and 2; and section 4.2, page 19.
9. Build on on-going prevention, research and demonstration initiatives.	Examples of ongoing initiatives include: o Cleaner Greener Production Programme (EPA) o Environmentally Superior Products Programme (Enterprise Ireland) o Environmental Management Systems Grants (Enterprise Ireland)	Section 2.4, page 11, item no. 8.
Long-term priorities:		
1. The achievement of self-sufficiency in hazardous waste management.	Recovery: adequate domestic capacity exists for many hazardous waste streams. Technical feasibility is not generally a barrier. Private sector economic considerations, coupled, potentially, with grant support, will drive the development of new or expanded facilities. Disposal: inadequate domestic capacity exists for the disposal of hazardous waste by thermal treatment and landfill. Only one proposal (for a hazardous waste incinerator) has been made.	Section 2.4, page 11, items no. 6 and 7; and section 2.5, page 17.
2. No increase in hazardous waste disposed of over 1996 quantities.	Hazardous waste disposal increased to 125,629 tonnes in 2001. The recommended target is 86,754 tonnes.	Section 2.4, page 11, item no. 3.
3. The qualitative reduction (i.e. reduction in the degree of hazard) of hazardous waste.	This is difficult to measure and has as much to do with product design and manufacture as with waste. No indicators for progress are readily available.	-

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1 Introduction

1.1 Background to the National Hazardous Waste Management Plan

The National Hazardous Waste Management Plan was published by the Environmental Protection Agency in July 2001 in accordance with section 26 of the Waste Management Act 1996 and following an extended period of preparation and consultation. The Plan contains twenty-one recommendations, nine priority recommendations for action in the period 2001-2006 and three longer term priorities. The nine priority recommendations for the period 2001-2006 are:

1. The establishment of an Implementation Committee by the Department of the Environment and Local Government. This committee would be responsible for guiding the overall implementation of the Plan.
2. The establishment of a Prevention Team to implement the Prevention Programme. This 'Team' would be responsible for the development of the Programme, for the setting of priorities within the Programme itself and for their initiation.
3. The identification and elimination of unreported hazardous waste to prevent its uncontrolled disposal and resultant emissions to the environment.
4. The identification, preliminary evaluation and prioritisation of sites at which hazardous waste disposal has taken place and the implementation of remedial works at priority sites.
5. Establishment of an improved collection infrastructure for hazardous household, agricultural and SME wastes.
6. The allocation of financial and technical assistance for the development of facilities for the recovery and disposal of hazardous waste where existing capacity is unsatisfactory.
7. The development of hazardous waste landfill capacity and thermal treatment for hazardous wastes requiring disposal to achieve self-sufficiency and reduce our reliance on export.
8. Improved public awareness of the impacts of hazardous wastes.
9. Build on on-going prevention, research and demonstration initiatives – for example, the *Cleaner Production Pilot Demonstration Programme*.

Three longer term priorities beyond the five year review period of the Plan are:

1. The achievement of self-sufficiency in hazardous waste management.
2. No increase in hazardous waste disposed of over 1996 quantities.
3. The qualitative reduction (i.e. reduction in the degree of hazard) of hazardous waste.

Progress on these priorities is discussed in this report.

1.2 Implementation Committee (priority item no. 1)

An Implementation Committee for the Plan was established by the Department of the Environment, Heritage and Local Government in 2003 and the Committee met for the first time in July 2003. The Committee was chaired and the secretariat provided by

the Environmental Protection Agency. The following organisations were represented on the Implementation Committee:

- Chartered Institution of Wastes Management
- Department of Agriculture and Food
- Department of Enterprise, Trade and Employment
- Department of the Environment, Heritage and Local Government
- Environmental Protection Agency
- Irish Business and Employers' Confederation
- Irish Creamery Milk Suppliers' Association
- Irish Farmers' Association
- Irish Pharmaceutical and Chemical Manufacturers' Federation
- Irish Small and Medium Enterprises Association Ltd.
- Irish Waste Management Association
- Small Firms' Association
- VOICE (representing environmental non-governmental organisations)

A representative of the Environment and Heritage Service of the Department of the Environment, Northern Ireland, attended one meeting of the Committee.

The Implementation Committee was dissolved on 5 April 2004 and its work subsumed into that of the newly-formed National Waste Prevention Committee which met for the first time on 13 July 2004. (See priority item no. 2).

1.3 Terms of Reference for the Implementation Committee

The terms of reference for the Implementation Committee are attached to this document as Appendix A.

1.4 Schedule of Implementation Committee meetings

The Implementation Committee met on four occasions:

- 9 July 2003
- 24 September 2003
- 4 December 2003
- 10 March 2004

The agenda and minutes for each meeting are attached to this document as Appendix F.

2 Recent developments in hazardous waste policy, legislation, generation and management

2.1 Policy

Irish policy on waste and hazardous waste management corresponds closely with provisions of EU policy and legislation. Most recently, the Sixth EU Environment Action Programme[1] was published in 2002 and contains recommendations for the development of thematic strategies towards the following overall goals in relation to the management of waste and natural resources:

- a significant overall reduction in the volumes of waste generated through waste prevention initiatives, better resource efficiency and a shift towards more sustainable production and consumption patterns;
- a significant reduction in the quantity of waste going to disposal and the volumes of hazardous waste produced while avoiding an increase in emissions to air, water and soil;
- encouraging reuse;
- reducing hazardousness of waste that is still generated;
- giving preference to recovery, and especially recycling;
- minimising the disposal of waste and carrying out disposal safely; and
- treating waste for disposal as close as possible to its place of generation, while maintaining efficiency in waste treatment operations.

These goals reflect policy objectives to reduce the quantity of hazardous waste generated and reducing the hazardousness of remaining waste. The classification "hazardous waste" is a subset of "waste" and all policy initiatives that aim to reduce waste generation and improve waste management practices have an equally relevant focus on hazardous waste.

National policy has been most recently elaborated in the policy document *Waste Management - Taking Stock and Moving Forward*. The main aim of the document is to consider developments since the publication of earlier policy documents[2,3]. The latest policy document identifies a series of 21 key points that are intended to "provide a solid basis for ensuring speedier and more effective realisation of [waste] policy objectives" aimed at modernising Irish waste management infrastructure and services. Specifically, mention is made of the contribution of the National Hazardous Waste Management Plan to the national waste management planning framework and the role of local and regional waste management plans in this regard is reiterated.

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[1] Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme.

[2] Department of the Environment and Local Government, 1998. *Waste Management – Changing Our Ways*.

[3] Department of Environment, Heritage and Local Government, 2002. *Preventing and Recycling Waste – Delivering Change*.

2.2 Legislation and definitions

2.2.1 Definition of hazardous waste

The definition of hazardous waste was most recently revised by Commission Decision 2000/532/EC[4], as amended[5,6,7], in the form of the hazardous waste list. The hazardous waste list forms the basis for defining hazardous waste in Ireland. A large amount of legislation underpins the classifications presented in the hazardous waste list: however, simply referring to the hazardous waste list is adequate in all but exceptional cases.

2.2.2 Legislation

General provisions for the regulation of hazardous waste remain unchanged. Two directives have recently come into force that will alter the management systems for certain hazardous waste streams:

- o End-of-life Vehicles Directive
  - Undepolluted end-of-life vehicles and several components of end-of-life vehicles are classified as hazardous waste.
  - Implementation of the directive has been provided for in the Protection of the Environment Act 2003.
- o Waste Electrical and Electronic Equipment Directive
  - Several categories of waste electrical and electronic equipment are classified as hazardous waste, e.g. refrigerators and freezers that contain CFCs; and televisions and computer monitors that contain cathode ray tubes.
  - A Task Force on Waste Electrical and Electronic Equipment recently published a report for consultation on aspects of implementation of the WEEE Directive.

A revised directive on batteries, several categories of which are classified as hazardous waste, is under consideration at EU level.

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[4] Commission Decision 2000/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste.

[5] Commission Decision 2001/118/EC amending Decision 2000/532/EC as regards the list of wastes.

[6] Commission Decision 2001/119/EC amending Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste.

[7] Council Decision 2001/573/EC amending Commission Decision 2000/532/EC as regards the list of wastes.

2.3 Research

2.3.1 Classification of hazardous waste streams

A hazardous waste classification tool was developed under the Environmental Research Technological Development and Innovation (ERTDI) Programme operated by the Environmental Protection Agency. The classification tool reflects the complex EU legislation that underpins the definition of hazardous waste and provides guidance to the legislation in a controlled and managed fashion. The classification tool has been updated once since its original publication and will be kept up to date with evolving EU legislation.

2.3.2 Hazardous waste disposal sites (priority item no. 4)

The Plan sets out a methodology for the identification and assessment of sites used for the disposal of hazardous waste. The methodology was trialled in a pilot project funded by the ERTDI Programme. The study area was County Laois and all data gathered during the project was forwarded to Laois County Council. Results from the project will assist local authorities to identify, assess and, where necessary, remediate hazardous waste disposal sites.

The absence of comprehensive sources of data or records was identified as a difficulty in identifying old waste disposal sites. Consultation with the original area engineers and overseers proved a valuable source of information.

A total of 50 sites were identified in County Laois as potentially having been used for the disposal of hazardous waste. Two landfills, one of which is licensed by the EPA and is in operation, were categorised as priorities for action (Category A). Six illegal waste disposal sites were categorised as Category B (medium priority) and a further 18 closed landfills and 24 vehicle-dismantling facilities were categorised as lower priorities (Category C).

Significant questions were raised during the project on the subjects of liability and potential impact on the residual value of lands, and neighbouring lands, under suspicion or investigation in relation to the historic disposal of hazardous waste.

One of the principal findings of the project was that the identification and assessment of hazardous waste disposal sites should not be addressed in isolation to identifying and assessing all waste recovery and disposal facilities - a requirement of section 22(7)(h) of the Waste Management Acts, 1996 to 2003.

South Tipperary County Council has also undertaken a comprehensive survey of hazardous waste disposal sites. A preliminary risk assessment resulted in a county register being prepared. A total of two sites were allocated a Category A (high) priority for action, four sites were allocated a Category B (medium) priority and nine sites were allocated a Category C (low) priority – 15 sites in all. It is anticipated that further work will eliminate many suspect sites and reduce the number of priority sites to five.

Appendix B provides a glossary for the terminology used in this section.

2.4 Statistics and indicators

The latest available complete dataset on hazardous waste generation and management in Ireland was published in the *National Waste Database Report 2001*[8] published by the Environmental Protection Agency. The next complete dataset will be published in 2005 in relation to the year 2004. The *National Waste Database Interim Report 2002*[9] provides data on hazardous waste exports in 2002.

In order to track and demonstrate progress, or otherwise, on the priority recommendations made in the Plan, the Committee prepared a series of indicators. The following text summarises the generation and management of hazardous waste between 1996 and 2002 and draws on the indicators to illustrate trends.

1. Hazardous waste generation (reported and unreported, but excluding contaminated soil) is static since 1996. The greatest variable in hazardous waste statistics is the generation of contaminated soil: this tends to represent one-off events typically associated with large-scale infrastructure and urban redevelopments. This would be generally viewed positively as the removal of contaminants from contact with the environment.

	1996	**1998**	**2001**
Generation of reported hazardous waste (tonnes)	229,234	250,531	274,687
Generation of unreported hazardous waste (tonnes)	98,228	74,311	48,402
Sub-total hazardous waste (excluding contaminated soil) (tonnes)	**327,462**	**324,842**	**323,089**
Generation of contaminated soil (tonnes)	400	45,486	168,579
Total hazardous waste generation (tonnes)	**327,862**	**370,328**	**491,668**

2. Unreported hazardous waste generation shows a distinct downward trend perhaps indicating increased awareness with regard to hazardous waste and improved

[8] National Waste Database Report 2001, EPA, 2003, available at www.epa.ie.

[9] National Waste Database Interim Report 2002, EPA 2004, available at www.epa.ie.

management generally of hazardous waste by the business community. (See priority item no. 3).

Unreported hazardous waste is that fraction of the total that is not recorded as having been managed by an authorised contractor. Its generation is estimated using a range of methodologies.

Appendix C provides additional information on specific trends in unreported hazardous waste generation.

	1996	**1998**	**2001**
Unreported hazardous waste as a proportion of the total (excluding contaminated soil)	30%	22%	15%

3. The quantity of hazardous waste subjected to recovery and disposal operations increased between 1996 and 2001. The Plan's recommendation to maintain hazardous waste disposal at 1996 quantities has not been achieved. (See long-term priority no. 2).

	1996	**1998**	**2001**
Hazardous waste recovered (excluding contaminated soil)	138,569	128,788	157,070
Hazardous waste disposed of (excluding contaminated soil)	86,754	120,354	125,629

4. The reported export of hazardous waste increased significantly up to 2001 but decreased by 5% in 2002. Infrastructure needs to be put in place to achieve self-sufficiency in the management of hazardous waste (see long-term priority item no. 1).

	1996	**1998**	**2001**	**2002**
Export of hazardous waste (tonnes)	51,327	75,907 (48% ↑)	115,366 (52% ↑)	109,547 (5% ↓)
Export of contaminated soil (tonnes)	400	23,691	159,943	139,892
Total	**51,727**	**99,598**	**275,309**	**249,439**

5. Detailed information on the collection of hazardous waste at civic waste facilities is unavailable. The number of civic amenity facilities is increasing and all facilities have receptacles for the collection of hazardous waste. Typical facilities include receptacles for waste oils, fluorescent tubes and batteries. Some facilities provide receptacles for waste paint cans.

   A total of 18 local authorities contracted a mobile hazardous waste collection service in 2003. Although this is an expensive service to operate, it provides much-needed publicity for the need to segregate and separately manage hazardous waste at the household and small business level.

	1998	**2001**	**2002**	**2003**	**June 2004**
Number of civic waste facilities	30	53	*49	**55	***20
Mobile hazardous waste collection (tonnes)	-	125	123	154	-
Mobile hazardous waste collection – number of local authorities	-	16	16	18	-
Number of collection permits issued by local authorities that provide for the collection of hazardous waste	-	-	-	-	†197

* The reason for the decrease is not clear from available data. It is apparent that there is no standard definition of civic waste facility and different surveys carried out by different organisations in different years yield different results.

** Data from *Taking Stock and Moving Forward.* This survey found that seven facilities had been misclassified in local authority returns to the EPA in 2001, indicating an inconsistency in defining civic waste facilities.

*** Data from 16 local authorities who had responded by the date of preparation of this report.

† Data from EPA collection permit register, June 2004.

6. No "off-site" hazardous waste landfill has been established in Ireland (see priority item no. 7 and long-term priority item no. 1). Several industrial facilities have on-site landfills that are used for their own production waste in accordance with IPC-licences. The statistics for 2001 and earlier years indicate that hazardous waste was landfilled in Ireland. Exports for landfill abroad continue. Government policy, stated in *Waste Management – Taking Stock and Moving Forward*, indicates that funding may be available towards the provision of hazardous waste landfill capacity, in accordance with the Plan's recommendations (see priority item no. 6).

	1996	1998	2001	2002
Hazardous waste landfilled "off-site" in Ireland (tonnes)	2,964	3,430	*4,693	**
Hazardous waste exported for landfill (tonnes)	5,630	2,037	1,547	4,148
Total hazardous waste landfilled (tonnes)	**8,594**	**5,467**	**6,240**	**-**

* Reported by industrial enterprises in 2001 as comprising 3,762 tonnes of calcium hydroxide (06 02 01*), 223 tonnes of stripping acid (11 01 05*), 202 tonnes of iron sludge (19 02 01*), plus other smaller quantities.

** The next industrial survey will cover 2004.

7. No "off-site" hazardous waste thermal treatment facility has been established in Ireland (see priority item no. 7 and long-term priority item no. 1). Several industrial facilities have on-site incinerators that are used for their own production waste in accordance with IPC-licences. Hazardous waste continues to be exported for thermal treatment (incineration and reuse as fuel).

   Indaver Ireland has received planning permission and has applied for a waste licence (register number 186-1) for a facility in Ringaskiddy, Co. Cork. The proposed capacity is for the thermal treatment of 100,000 tonnes of hazardous and non-hazardous waste per annum.

	1996	1998	2001	2002
Hazardous waste exported for disposal by incineration (tonnes)	18,880	47,751	42,974	37,336
Hazardous waste exported for recovery by reuse as fuel (tonnes)	0	1,947	20,402	32,616
Total hazardous waste exported for thermal treatment (tonnes)	**18,880**	**49,698**	**63,376**	**69,952**

8. A number of research, demonstration and grant-aid initiatives have been conducted in recent years. Though not specifically targeting hazardous waste, the scope of the initiatives takes in waste and hazardous waste management and its prevention through cleaner production, eco-design, and the development of management systems and general awareness-raising.

Description of initiatives promoting or researching prevention	Spend on initiatives
EPA	
Cleaner Production Pilot Demonstration Programme, 14 companies grant-aided.	€1.7m, 1997-1998
Cleaner Greener Production Programme, Phase 1, 30 companies grant-aided.	€1.37m, 2001-2004
Cleaner Greener Production Programme, Phase 2	Programme launched 6 May 2004. Budget of €2.4m over 24 months
Development of a Prevention Framework for Ireland, ERTDI-funded project	-
Enterprise Ireland	
Environmentally Superior Products Pilot Programme, 12 companies grant-aided.	€286,789; March 1999 to December 2000
Environmentally Superior Products Programme, 35 companies grant-aided.	€1,050,000; July 2001 to date
Environmental Management Systems, 64 companies grant-aided.	*€286,531; 2001 to date

* All payments are made on the basis of the work being vetted by NSAI or a similar body. This is designed to ensure a level of quality and consistency in the work being grant-aided.

9. Twenty-one local authorities provided information during June 2004 on the identification and assessment of hazardous waste disposal sites (see priority item no. 4). A total of 44 sites have been identified in three local authority areas. There appears to be some uncertainty in local authorities as to the nature of their obligations in this regard under the Waste Management Act 1996 and on the guidance published in the Plan.

   One local authority, South Tipperary County Council, has carried out and reported on a formal investigation in accordance with section 26(2)(c) of the Act and the recommendations of the Plan.

   It is clear from data submitted by several local authorities that sites are being identified and assessed on an *ad hoc* basis outside of the structured approach recommended in the Plan. This is clearly illustrated by the fact that remediation

works have been undertaken at 27 sites but only 6 risk assessments have been completed.

See Appendix B for an explanation of some of the terms relating to this item.

	Information collated in 2004
Number of local authorities that have carried out section 22 assessment of all waste recovery and disposal sites	12 (including 3 partly completed assessments)
Number of local authorities that have carried out section 26 assessment of hazardous waste disposal sites	*8 (including 4 partly completed assessments)
Number of sites identified under section 22 (i.e. all waste recovery and disposal sites)	102
Number of sites identified under section 26 (i.e. hazardous waste disposal sites – a subset of "section 22" sites)	**44
Number of sites identified under section 26 categorised according to: Category A: Category B: Category C:	 2 11 31
Number of risk assessments completed	***6
Number of sites at which remediation works have been undertaken	27

* Clare, Dun Laoghaire-Rathdown, Fingal, Kilkenny, Limerick, Sligo and South Tipperary County Councils and Galway City Council. Four local authorities carried out the assessment according to the Plan's recommended methodology. Two local authorities partly followed the Plan's methodology. A further two local authorities (Longford and Meath County Councils) have made provisions to carry out identification and assessment exercises.

** Fingal County Council, 1 site; Kilkenny County Council, 28 sites; South Tipperary County Council, 15 sites.

*** Fingal County Council, 1 site; Kilkenny County Council, 3 sites; Louth County Council, 2 sites.

2.5 Facilities

There is significant capacity for the handling and processing of hazardous waste within the State. However, gaps remain, principally in the provision of hazardous waste disposal capacity in the form of thermal treatment and landfill. The provision of such disposal capacity was identified as a priority in the Plan. (See priority item no. 7).

2.5.1 Existing treatment capacity

Appendix D lists all licensed facilities authorised to treat or store hazardous waste. Some of these facilities operate as transfer stations only and waste accepted at those facilities is simply shipped, usually abroad, without any treatment being carried out. There are a relatively small number of treatment methods actually in use in Ireland and these treatment methods are used on a relatively small number of hazardous waste streams.

A list of some of the larger hazardous waste streams is provided in Appendix E. Relevant information, updating section 6.4 of the Plan, is provided in each case.

The principal bottlenecks that restrict Ireland's self-sufficiency in hazardous waste management remain the provision of hazardous waste landfill and thermal treatment capacity. Export routes to landfill and thermal treatment **disposal** facilities currently are available and are likely to so remain. However, Member States may decide to prohibit the import of hazardous waste for disposal, in accordance with EU legislation[10]. The Plan consequently recommends against an almost complete dependency on overseas facilities for the disposal of hazardous waste.

The transfrontier movement (export and import) of hazardous waste for recovery takes place within an open EU market in accordance with the transfrontier shipment of waste regulation (259/93)[11]. For this reason, export routes to **recovery** facilities are relatively secure and a number of treatment alternatives exist for most recoverable hazardous wastes. Hazardous waste recovery operations would tend to be smaller in scale and capital cost than large-scale disposal operations (referred to in the preceding paragraph). The establishment of new or upgraded recovery facilities is technically feasible in many cases; barriers are most likely to be based on economic feasibility. Grant aid for the provision of hazardous waste recovery facilities is no longer available.

Surplus treatment and/or export capacity exists domestically for several product waste streams such as oil filters, batteries and fluorescent lamps. Poor collection rates remain the major bottleneck in ensuring the segregation and treatment of these and several other waste streams, including paint packaging waste.

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[10] United Kingdom policy prohibits the import of waste for disposal. An exception is made for waste from Ireland (and Portugal) that is imported for disposal by high temperature incineration. There is no prohibition in the UK on the import of waste for recovery.

[11] No prohibitions are allowed on the movement of waste for recovery within the EU.

2.5.2 Proposed capacity

Appendix D includes references to five proposed treatment operations, one involving a licence review at an existing facility (36-2) and four involving new facilities. One of the proposed new facilities (192-1) is intended to replace two existing facilities (35-1 and 83-1). The establishment of all of the proposed activities will increase significantly the available capacity in Ireland for the treatment of several large- and small-scale hazardous waste streams; a total of three large solvent blending facilities would then be in operation, each one producing a high calorific-value solvent blend for use as a fuel in incinerators or cement kilns.

3 Implementation of the Plan's recommendations by public authorities

The majority of local and regional waste management plans were prepared during 2000 and 2001. All local and regional plans make reference to the Proposed National Hazardous Waste Management Plan that had been released for consultation in 1999. Several of the local and regional plans state that the provisions of the hazardous waste plan will be incorporated during their next review.

Most of the waste management plans make a commitment to providing information and raising awareness in respect of hazardous waste. Similarly, most state an intention to provide drop-off facilities for hazardous waste.

Few of the waste management plans published to date contain comprehensive provisions for the management of hazardous waste. However, it is apparent that local and regional waste planners have become increasingly aware of the need to ensure satisfactory management of hazardous waste and are increasingly providing services and advice to householders and small businesses in this regard.

The absence of detailed provisions relating to hazardous waste in local and regional waste management plans is not always reflected in the actual provision of services to householders and other small-scale hazardous waste generators. The availability of hazardous waste receptacles at civic waste facilities is generally on the increase. Hazardous waste types typically accepted at civic waste facilities include waste oils, fluorescent lamps and batteries. Waste paint is accepted at some facilities.

A number of local authorities have employed a hazardous waste mobile collection service to operate on a periodic basis in their areas. The mobile collection service typically accepts the same range of hazardous wastes accepted at civic waste facilities. It also accepts other waste streams that are not widely accepted at civic waste facilities, such as pesticides and other chemicals. Mobile collection services should not replace fixed facilities but should compliment them by increasing the awareness and usage of, and access to, hazardous waste collection services as a whole.

The first plan to be reviewed in 2004, by Cork County Council, contains several action points in relation to hazardous waste including, amongst others, an intention to continue to provide collection and recycling services for household hazardous waste and an intention to continue to generate educational and promotional materials for small businesses, garages and service stations.

4 Liaison with other bodies

4.1 National Waste Prevention Committee (priority item no. 2)

A National Waste Prevention Committee was established by the Minister for the Environment, Heritage and Local Government on 5 April 2004. The National Waste Prevention Committee will provide strategic direction to the Environmental Protection Agency in implementing the National Waste Prevention Programme.

The National Waste Prevention Committee replaces and subsumes the work of the National Hazardous Waste Management Plan Implementation Committee. It convened for the first time on 13 July 2004.

4.2 Race Against Waste

The project manager for the Race Against Waste campaign presented the campaign to the Implementation Committee on 4 December 2003. At its meeting on 10 March 2004, the Implementation Committee proposed the following items for the consideration of the campaign:

- A standalone guide on the management of hazardous waste by business (especially SMEs and agriculure) including:
  - legislative obligations and "duty of care";
  - dealing with contractors;
  - transport and export; and
  - what to do if things go wrong.
- Information on collection services available to householders, including:
  - location of civic waste facilities and the categories of hazardous waste they accept; and
  - advice on hazardous waste segregation and storage.
- Basic information on what is and is not a hazardous waste.
- Guidance on transfrontier shipment classifications.
- Information on routes and outlets for typical hazardous waste streams.
- Information on record-keeping obligations for generators of hazardous waste.
- Information on the management of out-of-date and unused medicines and dental amalgam.

The Committee was of the opinion that the above information should be provided via the internet.

5 Priorities identified and recommendations made by the Implementation Committee

1. The Implementation Committee is of the opinion that the priorities listed in section 9.7 of the National Hazardous Waste Management Plan should not be

read as a series of actions to be carried out in sequence. Rather, the priorities should be addressed in parallel in order for all to be achieved by 2006.

2. Grant aid for the provision of the following services and facilities should be considered by the Department of the Environment, Heritage and Local Government:

    (a) landfill disposal capacity for hazardous waste;

    (b) recovery capacity for hazardous waste; and

    (c) hazardous waste collection services provided by local authorities to householders and small business.

3. A poor collection rate for several product hazardous waste streams is identified as the principal bottleneck towards their proper management. These streams are:

    (a) small batteries;

    (b) lead-acid batteries;

    (c) oil filters;

    (d) fluorescent lamps; and

    (e) waste medicines from households and veterinary practices.

    It is recommended that initiatives be introduced to improve the collection rates of these and similar small-scale hazardous waste streams. Information and awareness campaigns aimed at relevant sectors should precede directed enforcement actions in each case.

    The Race Against Waste should incorporate specific hazardous waste modules, as described in section 4.2, in order to improve overall levels of knowledge of, and compliance with, hazardous waste legislation.

6 Future work

The National Hazardous Waste Management Plan Implementation Committee held its fourth and final meeting on 10 March 2004. From 5 April 2004, it was replaced by the National Waste Prevention Committee.

The National Waste Prevention Committee's principal functions are to advise and provide strategic direction to the EPA's Core Prevention Team in its implementation of the National Waste Prevention Programme and to continue the work of the National Hazardous Waste Management Plan Implementation Committee. In terms of hazardous waste, prevention is now firmly in the new Committee's focus.

An *Outline Work Plan 2004-2008*[12] for the National Waste Prevention Programme was published by the EPA in April 2004.

[12] Available at www.epa.ie.

Appendix A - Terms of Reference for the National Hazardous Waste Management Plan Implementation Committee

- Monitor the implementation, by relevant public authorities, of National Hazardous Waste Management Plan recommendations (other than those relating to the National Waste Prevention Programme).
- Promote overall co-ordination of hazardous waste management initiatives.
- Identify priorities for action and make recommendations to relevant public authorities (other than local authorities) and private bodies.
- Provide input to the Environmental Protection Agency for the purpose of Section 26(6) of the 1996 Waste Management Act.
- Consider and make recommendations to the Minister for the Department of Environment Heritage and Local Government regarding appropriate policy and legislative initiatives.
- Consider and make recommendations to relevant bodies regarding public awareness requirements.
- Monitor and evaluate new research and data, trends in hazardous waste production and hazardous waste management practices.
- Disseminate information on best practice in hazardous waste management.
- Consider and make recommendations to Environmental Protection Agency and Department of Environment Heritage and Local Government on research requirements.
- Consider and make recommendations to relevant bodies regarding provision of funding to support National Hazardous Waste Management Plan implementation.
- Maintain ongoing liason with the Implementation Steering Group for the National Waste Prevention Programme.
- Submit an annual report to Minister on progress with implementation of the National Hazardous Waste Management Plan.

Appendix B – Glossary of terms relating to hazardous waste disposal sites

Section 22 of the Waste Management Acts, 1996 to 2003, deals with waste management plans to be prepared by local and/or regional authorities. Section 22(7)(h) of the Waste Management Acts, 1996 to 2003, states that regional or local waste management plans shall contain information or otherwise have regard to:

> "the identification of sites at which waste disposal or recovery activities have been carried on, the assessment of any risk of environmental pollution arising as a result of such activities, measures proposed to be taken, or, where such an assessment has already been made, measures taken, in order to prevent or limit any such environmental pollution, the identification of necessary remedial measures in respect of such sites, and measures proposed to betaken, or, where such measures have already been identified, measures taken, to achieve such remediation, having regard to the cost-effectiveness of available remediation techniques."

In summary, this means that local authorities must undertake to identify and assess all sites where waste recovery and disposal activities have been carried on. Following assessment, they must propose measures to prevent or limit environmental pollution and to remediate the sites, where cost-effective.

Section 26(2)(c) of the Waste Management Acts, 1996 to 2003, states that the National Hazardous Waste Management Plan shall:

> "provide for, as appropriate, the identification of sites at which waste disposal activities, being activities that to a significant extent involved hazardous waste, have been carried on, the assessment of any risk of environmental pollution arising as a result of such activities, the taking or recommendation of measures in order to prevent or limit any such environmental pollution, the identification of necessary remedial measures in respect of such sites, and the recommendation of measures to be taken to achieve such remediation, having regard to the cost-effectiveness of available remediation techniques."

This means that the Plan must provide for similar identification, assessment and proposal of measures for the prevention of environmental pollution and the remediation of sites used for the disposal of hazardous waste.

This is a sub-section of a local authority's obligations under section 22(7)(h) and the Plan consequently assigns this responsibility to local authorities. One of the principal findings of the Laois study was that a section 26 study should not be carried out in isolation of a section 22 study. A section 26 study should follow a section 22 study and should in fact be a natural progression from one to the other, subject to the findings of the section 22 study.

Categories A, B and C are explained on page 80 of the National Hazardous Waste Management Plan. They are proposed as arbitrary categories for assigning relative priority for action to identified sites. Category A is proposed as "high priority", category B as "medium priority" and category C as "low priority".

Appendix C – Trends in unreported hazardous waste generation

Sheep dip: Decreased from an estimated 28,000 tonnes in 1996 to 19,000 tonnes in 1998 and 18,000 tonnes in 2001. An estimated 20,610 tonnes of sheep dip (including organophosphate and pyrethroid dip) was generated in 2003.

Waste oils: Decreased from an estimated 17,500 tonnes in 1996 to 2,255 tonnes in 1998 to zero in 2001. The capacity of licensed waste oil treatment facilities in Ireland has increased since 1996 and it is reported that all garages have signed up to an authorised waste oil collector. There are likely to remain small generators and DIYers who do not dispose of waste oil appropriately. At the national level, there is limited information on enforcement actions taken by local authorities to ensure that all generators of waste oils comply with the regulations.

Photochemical or photographic processing waste: An unclear trend from 642 tonnes in 1996 to 1,572 tonnes in 1998 to zero in 2001. The reported treatment of photographic waste has increased significantly from 97 tonnes in 1996, 37 tonnes in 1998 to 567 tonnes in 2001 (including 393 tonnes exported). It is reported that coverage of "mini-labs" and other photo processors is close to 100%.

Lead-acid batteries: The estimated quantity of unreported lead-acid batteries increased from 2,573 tonnes in 1996 to 9,038 tonnes in 1998 and reduced to 7,146 tonnes in 2001. The variation is most likely to be caused by the calculation method. There is anecdotal evidence of lead-acid batteries being handled by unauthorised operators.

Small batteries: Consistently high unreporting around 2,500 tonnes per annum. Waste collection rates remain very low at 5% of the total estimated use of small batteries.

Household hazardous waste: General "household hazardous waste" represents an unclear trend but a consistently high level of unreported hazardous waste.

Veterinary and other medicines: An increasing number of waste management services are available to veterinary surgeries, dental surgeries, GPs and small clinics. However, there is limited information on the management of these waste streams. It is possible that their management is reported as medical waste arising from mainstream human healthcare activities.

Fluorescent tubes: The reported collection and management of tubes increased significantly since 1998. Collection rates were 22% of total estimated use in 2001.

Paint and ink packaging: The high level of unreported paint and paint packaging waste is likely to be due primarily to poor collection rates for waste or leftover paint. For ink, there are no reports on its management.

Appendix D – Hazardous waste facilities

Licences, permits and applications for hazardous waste treatment and storage facilities (May 2004)

Company name	Licence or permit register number	Treatment or transfer facility	Hazardous waste operations	Principal hazardous wastes treated or proposed to be treated	Licensed or applied capacity * (tonnes/ annum)	Quantity treated in 2001 (and 2002 if avail-able) (tonnes)	Quantity transfer-red in 2001 (tonnes)
Operating facilities							
Atlas Ireland	184-1	Treatment	Oils and oil filters processing, contaminated soils processing	Waste oils and sludges Contaminated soils Other hazardous waste	35,000 40,000 6,000	19,998 8,500 (20,241) (7,925)	-
AVR-Safeway	50-1	Transfer	General chemical and other hazardous waste storage prior to export	None	33,150	-	1,183
Cara Waste Management	185-1	Treatment and transfer	General chemical and other hazardous waste treatment and storage prior to export	Chemical waste	33,000	-	-
Eco-Safe Systems	54-2	Treatment	Healthcare risk waste processing by heat treatment (disinfection) and shredding prior to landfill	Healthcare risk waste	11,857	910 (1,052)	-

Company name	Licence or permit register number	Treatment or transfer facility	Hazardous waste operations	Principal hazardous wastes treated or proposed to be treated	Licensed or applied capacity * (tonnes/ annum)	Quantity treated in 2001 (and 2002 if avail-able) (tonnes)	Quantity transfer-red in 2001 (tonnes)
Irish Lamp Recycling	02/2000	Pre-treatment	Fluorescent lamps pre-treatment prior to export of segregated materials and other wastes	Fluorescent lamps	None specified in permit	64 (95)	126
KMK Metals	113-1	Transfer	Metal-rich wastes and sludges storage prior to export	None	5,000	-	59
MinChem Environmental Services Limited	36-1	Transfer (see 36-2, review to incorporate solvent blending)	General chemical and other hazardous waste storage prior to export	None	None specified in licence	-	14,000
National Recycling and Environmental Protection	112-1 (applied, operating)	Transfer	General waste and lead-acid batteries storage prior to export	None	Not licensed	-	1,500
Returnbatt	105-1	Transfer	Batteries (lead acid and small batteries) storage prior to export	None	7,000	-	3,125
Safety-Kleen Ireland	99-1	Transfer	Solvents and chemical waste storage prior to export	None	None specified in licence	-	6,852

Company name	Licence or permit register number	Treatment or transfer facility	Hazardous waste operations	Principal hazardous wastes treated or proposed to be treated	Licensed or applied capacity * (tonnes/ annum)	Quantity treated in 2001 (and 2002 if avail-able) (tonnes)	Quantity transfer-red in 2001 (tonnes)
Shannon Environmental Services	41-1	Treatment and transfer	General chemical waste treatment and storage prior to export	Acid and alkali waste, photographic waste, industrial sludges, laboratory waste, solvents blending, other industrial and commercial chemical waste	34,000	6,195 (5,816)	1,214
Silver Lining Industries (Ireland)	122-1	Transfer	General chemical and electronic waste storage prior to export	None	4,650	-	897
SITA Environmental Drum Division	83-1	Treatment	Drums and IBCs processing and recycling	Contaminated drums, containers and IBCs and those containing residues	10,000	1,175 (2,059)	-
SITA Environmental Waste Treatment Division	35-1	Treatment	Oily sludges and oils pre-treatment and hazardous waste storage prior to export	Oily sludges and waste oils	None specified in licence	9,138 (11,614)	-
Soltec (Ireland)	115-1	Treatment	Solvent distillation and recycling	Solvents distillation	5,000	644 (804)	117

Company name	Licence or permit register number	Treatment or transfer facility	Hazardous waste operations	Principal hazardous wastes treated or proposed to be treated	Licensed or applied capacity * (tonnes/ annum)	Quantity treated in 2001 (and 2002 if avail-able) (tonnes)	Quantity transfer-red in 2001 (tonnes)
Sorundon (Irish Environmental Services)	40-1	Transfer	General chemical and other hazardous waste storage prior to export	None	3,440	-	2,224
Sterile Technologies Ireland	55-1	Treatment	Healthcare risk waste processing by shredding and heat treatment (disinfection) prior to landfill	Healthcare risk waste	7,500	4,541 (5,812)	-

Total number of facilities in operation: 17

… of which processors: 9

Proposed (applied) facilities

Indaver Ireland	186-1 (applied)	Treatment	Integrated waste management facility, including incineration	Chemical waste including solvents	50,000	-	-
Irish Bulk Liquid Storage **	193-1 (applied)	Treatment and transfer	Solvents and waste oils storage prior to export	Solvents blending	24,000	-	-

Company name	Licence or permit register number	Treatment or transfer facility	Hazardous waste operations	Principal hazardous wastes treated or proposed to be treated	Licensed or applied capacity * (tonnes/ annum)	Quantity treated in 2001 (and 2002 if avail-able) (tonnes)	Quantity transfer-red in 2001 (tonnes)
MinChem Environmental Services Limited	36-2 (applied)	Treatment and transfer	General chemical and other hazardous waste treatment and storage prior to export	Solvents blending	20,000	-	-
Rilta (t/a Sita Environmental)	192-1 (applied)	Treatment	General chemical and other hazardous waste treatment and storage prior to export	Oily sludges, waste oils, oil filters, photographic waste, contaminated soil, contaminated drums, containers and IBCs, WEEE	57,500	-	-
MacAnulty Clear Drains	196-1 (applied)	Pre-treatment and transfer	Waste oils and oily sludges pre-treatment prior to onward transport	Waste oils and oily sludges	32,250	-	-

* Not all licences distinguish between hazardous and non-hazardous waste.

** A proposed decision (draft licence) was issued in June 2004.

Appendix E – Hazardous waste categories and their management

The following text provides a description of the situation vis-à-vis selected hazardous waste streams and updates section 6.4 of the National Hazardous Waste Management Plan. It should be read in conjunction with section 6.4 of the Plan.

Waste oils:

Waste oils are recycled at a number of licensed facilities in the Republic of Ireland and in Northern Ireland and capacity is generally considered to be adequate.

Sludges from the treatment of waste oil, where classified as a hazardous waste, cannot be landfilled in Ireland and must be exported. In the absence of domestic thermal treatment or landfill disposal capacity for hazardous waste, or alternative treatment methods for sludges, this waste stream will continue to be exported.

Correspondence with the Commission is ongoing in relation to its opinion on Ireland's (and other Member States') failure to prioritise the regeneration of waste oils in accordance with the Waste Oils Directive.

Oil filters:

Oil filters are pre-processed at a number of licensed facilities. Pre-processing is not a challenging technical procedure and capacity would have to be considered adequate.

Following closure of Ispat, there is no steel recovery facility in Ireland. Waste steel is exported principally to the UK and Spain for recovery.

Statistics on oil filters show that collection rates remain low (less than 40%).

Lead-acid batteries:

There is no treatment of lead-acid batteries currently carried out in Ireland. The sole licensed processor mentioned in the Plan, Returnbatt, ceased treatment activities and now, like other operators, exports all units whole. The principal reason for recycling batteries is their lead content. The proper management of battery acid is equally important from an environmental pollution point of view. There remains significant scope for improving lead-acid battery collection rates and resources should be concentrated here in the first instance.

Other batteries:

A limited number of battery recycling facilities exist on mainland Europe. It is highly unlikely that a treatment facility would be established in Ireland. Resources should be concentrated on improving collection rates from their current very low level. Proposals for a revised batteries directive are likely to impose collection and recycling targets in future years.

Fluorescent lamps:

Collection rates remain very low. Irish Lamp Recycling in the sole treatment facility. The fractions are segregated (glass, metal, powder) prior to export for further recovery. Lamp collection facilities are generally available at civic waste facilities and greater awareness is likely to contribute towards increased collection rates. Given that a large number of companies export waste lamps and segregated components must, in the main, be exported in any event (for specialist glass recycling, mercury recovery, powder recovery and aluminium recycling), there is little technical justification in making a case for additional treatment capacity in Ireland. Resources should be concentrated on improving collection rates, particularly from SMEs, householders and other small-scale generators.

Photochemical waste:

One company treated 173 tonnes of photochemical waste in 2001 by electrolysis to extract metallic silver; the remaining liquors were treated by neutralisation and precipitation. Another 393 tonnes were exported for similar treatment, principally to the UK. There are few technical obstacles to applying this simple treatment process in Ireland to all Irish-sourced photochemical waste. However, given the relatively small quantity of waste available, the process is unlikely to be employed outside of existing treatment facilities.

Available economies of scale in the UK reportedly allow for more efficient and thorough silver extraction processes to be employed. It is not clear whether similar efficiencies can be economically achieved in Ireland.

Solvents:

Solvents remain the single largest hazardous waste stream (other than contaminated soil). The on-site recovery or recycling of solvents, typically as integral parts of industrial processes at IPC-licensed facilities, has decreased since 1998. The export of waste solvents has increased significantly. Soltec (Ireland) operates a solvent distillation unit with a licensed capacity of 5,000 tonnes per annum; however, a fraction of this capacity is actually in use. The solvents are distilled off for use as paint thinners. Shannon Environmental Services operate a solvent blending plant in which bulk solvents are blended to certain specifications for use as a fuel in incinerators and cement kilns in other countries. These two operations represent the principal recovery options currently available in Ireland. Further capacity for blending solvents for reuse as fuel have been proposed in addition to a proposal to establish a hazardous waste incineration facility.

Healthcare risk waste:

There is no significant change in the situation vis-à-vis healthcare risk waste. Two facilities (Eco-Safe Systems and Sterile Technologies Ireland) continue to disinfect certain categories of potentially infectious waste while the remainder (about 5% by weight) is exported for incineration.

Sludges:

The traditional outlet for sludges, landfill, is increasingly becoming unavailable for hazardous waste sludges. Some sludges (e.g. residue from treatment of oily sludges) are now exported for disposal. The lack of available domestic capacity for hazardous waste landfill, thermal treatment or other alternative treatment capacity (e.g stablisation or solidification) remains the principal limiting factor in becoming self-sufficient in the management of hazardous sludges.

Acid and base waste:

There is no significant change with regard to treatment capacity for acid and base waste. Neutralisation of acids and bases is undertaken at Shannon Environmental Services.

Paint and ink waste and its packaging:

Though there remains no processing capacity for paint waste and its packaging, the greatest difficulty here is improving collection rates. Few civic waste facilities accept paint waste and observations at, e.g. building sites, show limited attempts at segregation and separate collection by the trade. The treatment options are numerous and varied. Options include: separation of paint and container (using cryogenic/freezing or solvent-washing processes) followed by recovery of the container material and treatment of paint residues (physico-chemical or thermal); and thermal treatment of paint and container followed by metal recovery. Paint exchange, in operation at at least one civic waste facility, is an important feature of ensuring the reuse of small-scale paint waste arisings.

Agrochemical and its packaging:

The use of sheep dip has decreased since 1996, reportedly due to the increased use of pour-on products. Organophosphate-based sheep dip is often replaced by pyrethroid-based dip, itself a potential aqueous environmental pollutant.

Agrochemical packaging remains a significant unknown quantity of hazardous waste. The management of contaminated packaging (particularly small packages for pesticides, herbicides, etc.) from the agricultural and other sectors remains an area with significant scope for improvement. Current options are to triple-rinse containers to remove residues and to manage the containers as non-hazardous waste, e.g. for disposal to landfill, or to export.

Drums and large containers contaminated with dangerous substances:

One facility (SITA Environmental Drum Division) is licensed to wash and recondition drums that contain residues of dangerous substances. Other facilities crush drums (for steel recycling) and drain off residues for separate treatment or export. There appear to be few barriers in establishing the latter type of treatment capacity.

Asbestos:

Since 2002, all asbestos waste is classified as hazardous waste. The continued provision of landfill capacity for the disposal of asbestos is required in order to avoid the, often unnecessary, expense of export.

Polychlorinated biphenyls and contaminated equipment:

A *Management Plan for PCBs* was published by the EPA in 2002 and contains detailed information on the obligations facing all holders and potential holders of PCBs or equipment which contains PCBs. The Management Plan should be further disseminated and a finalised inventory of holders prepared. Export for high temperature incineration is the principal option for treating PCB waste.

Contaminated soil:

There is no significant change with regard to this waste stream. Quantities were significantly up in 2001. A total of 168,579 tonnes of contaminated soil were reported in 2001, of which 159,943 tonnes were exported for treatment. Preliminary data for 2002 show that 142,015 tonnes were exported to Germany, Belgium and the Netherlands. Despite the fact that 7,925 tonnes of contaminated soil were treated by Atlas Ireland in 2002, given the transient and relatively short term nature of contaminated soil generation, the feasibility of a domestic treatment plant dedicated to large scale contaminated soil treatment would have to be carefully considered.

Residues classified as hazardous waste from the thermal treatment of waste:

While small amounts of waste incineration residues are generated and exported, the establishment of large-scale thermal treatment for hazardous and non-hazardous waste will result in the generation of combustion residues. Flyash, bottom ash and other residues will be classified as hazardous waste if they contain dangerous substances. There are a number of treatment options for hazardous residues including landfill (with or without pre-treatment), reuse or recycling (with pre-treatment) or export.

Appendix F - Agenda and minutes for Implementation Committee meetings

Schedule of meetings

- 9 July 2003
- 24 September 2003
- 4 December 2003
- 10 March 2004
- 9 June 2004

AGENDA

1ST MEETING OF THE NATIONAL HAZARDOUS WASTE MANAGEMENT PLAN IMPLEMENTATION COMMITTEE

09th JULY, 2003 AT MONTROSE HOTEL, STILLORGAN, DUBLIN AT 3.30PM

1. Introduction.

2. Standing Orders.- Draft attached.

3. National Hazardous Waste Management Plan – copy enclosed

4. Terms of Reference of the Committee - attached.

5. Update on Hazardous Waste Arisings – verbal briefing.

6. Identification of priorities to be addressed by the Committee – to be discussed.

7. Schedule of meetings 2003/2004 – to be discussed.

8. AOB

Minutes

1st Meeting of the National Hazardous Waste Management Plan Implementation Committee

09th July, 2003 – Montrose Hotel – 3:30pm

Present:	EPA	-	Gerry Carty (Chairperson), Brian Meaney, Deirdre Murphy (Secretary)
	ICMSA	-	Lorcan McCabe
	IBEC	-	Donal Buckley
	SFA	-	Patricia Callan
	CIWM	-	Dr. Duncan Martin
	ISME	-	Dr. John Ryan
	IFA	-	Francis Fanning
	DAF	-	Dale Crammond
	DoEH&LG	-	Pat Fenton, Eamonn Markey
	IWMA	-	Laura Burke
	Voice & NGOs	-	Dr. Ruth McGrath
Apologies:	DETE	-	Gerry Wrynn
	IPCMF	-	Marion Byron

1. **Standing orders** – adopted.

   - Agreed that minutes of the committee meetings shall be circulated not later than 2 weeks from the date of each meeting.
   - Copy of the standing orders to be retained and available.
   - Agenda for the meetings will be drafted by the Secretary with input by the Committee.

2. **National Hazardous Waste Management Plan**.

   Gerry Carty (Chairperson) gave the background to the publication of the NHWMP followed by Brian Meaney (EPA) who gave an overview of hazardous waste statistics up to 2001. The committee had a general discussion regarding the recommendations made on page 89 of the plan. No action points arose from this discussion.

3. **Terms of Reference**.

   - The committee reviewed the terms of reference provided by the Minister.
   - Dr. Ruth McGrath (Voice & NGO's) advised that the groups she represents object to the use of incineration and thermal treatment in principle .
   - It was agreed that a representative from Northern Ireland would be invited to attend a future committee meeting to present information on the management of hazardous waste in Northern Ireland.
   - Pat Fenton (DoEHLG) will clarify why local authorities are excluded from point 3 of the terms of reference.
   - It was agreed that point 6, public awareness, should be high on the committee's agenda.

4. **Priorities for the Committee (Suggestions)**.

- Public awareness specific to hazardous waste and unreported hazardous waste (Can the group influence the current public awareness campaign by DEHLG? Eamonn Markey (DoEHLG) advised that John Kellegher is the contact in the Department).
- Identification of hazardous waste and labelling of products.
- Information on good practice for the management of hazardous waste, segregation, outlets, etc. Develop case studies.
- Monitor implementation of the plan, submit report to the Minister.

Dr. Ruth McGrath (Voice & NGO's) queried if the group could instigate research as part of its remit. Gerry Carty advised that it would be difficult for this committee to initiate research but that due regard should be had to research carried out by others.

5. **Schedule of Meetings**

- Wednesday 24th September – EPA Headquarters, Johnstown Castle Estate, Wexford. Start at 2:00pm. Lunch will be booked in Wexford for 12:30pm.
- Thursday 04th December – EPA Richview Office, Clonskeagh Road, Dublin 14. Start at 11:00am

6. **AOB**

- Forward any comment on any of the issues to Deirdre Murphy at deirdre.murphy@epa.ie
- Members of the committee to forward a brief paragraph on their areas of expertise to Deirdre Murphy. This document will be for circulation to other committee members only.

7. **Agenda Items for Next Meeting**

- Agenda items for the next committee meeting on 24th September should be forward to Deirdre Murphy by Friday 05th September. Agenda will issue via e.mail by Tuesday 09th September, 2003.
- Indicators to provide a baseline for the recommendations and priorities in the plan.
- Hazardous waste statistics.
- Risk assessment methodology for hazardous waste disposal sites.

AGENDA

2nd MEETING OF THE NATIONAL HAZARDOUS WASTE MANAGEMENT PLAN IMPLEMENTATION COMMITTEE

24th SEPTEMBER, 2003 AT EPA HEADQUARTERS
2.00PM

1. Minutes of Meeting of 09th July, 2003.

2. Matters Arising.
   - Committee Members Areas of Expertise.

3. Update on Hazardous Waste Arisings and Trends (reported and unreported hazardous waste).

4. Indicators for Implementation of the NHWMP Priorities – draft list for discussion.

5. Hazardous Waste in Northern Ireland.

6. The Hazardous Waste Classification Tool.

7. Risk Assessment Methodology.

8. Grant Schemes for Hazardous Waste Infrastructure.

9. AOB.

Minutes

2nd Meeting of the National Hazardous Waste Management Plan Implementation Committee

24th September, 2003 – EPA HQ, Wexford

Present:	EPA	-	Gerry Carty (Chairman), Brian Meaney
	DETE	-	Gerry Wrynn
	ICMSA	-	Lorcan McCabe
	CIWM	-	Dr. Duncan Martin
	IPCMF	-	Marion Byron
	ISME	-	Dr. John Ryan
	DAF	-	Dale Crammond
	DoEHLG	-	Pat Fenton, Eamonn Markey
	IWMA	-	Brendan Keane
	Voice & NGOs	-	Dr. Ruth McGrath
	E&HS (DOE, NI)	-	Alison Townley
In Attendance:	EPA		Gerry Byrne, Deirdre Murphy (Committee Secretary)
Apologies:	IBEC	-	Donal Buckley
	IFA	-	Francis Fanning
	IWMA	-	Laura Burke
	SFA	-	Patricia Callan

1. **Minutes of First Meeting**

The minutes of first meeting held on 09/07/03 were agreed.

2. **Matters Arising**

(a) Under matters arising, it was agreed that Deirdre Murphy would contact any committee member who has not forward summary information on their area of expertise. This will be circulated to all committee members when complete.

(b) At the meeting of 7th July 2003, there was a query regarding the wording of item 3 of the Terms of Reference. Pat Fenton, DoEHLG clarified that local authorities are excluded from this item due to the fact that the EPA is empowered under Section 63 of the EPA Act to issue advice, recommendations and directions to local authorities.

3. **Hazardous Waste Generation, Trends and Management**

Brian Meaney made a presentation on hazardous waste arisings and trends (reported and unreported hazardous waste). The presentation was based on hazardous waste data contained in the NHWMP and the National Waste Database Reports 1998 and 2001. The main conclusions drawn were that hazardous waste generation (reported + unreported) has remained relatively static between 1996 and 2001; unreported hazardous waste had decreased; reported hazardous waste had increased; treatment of on-site generation had decreased; treatment at authorised facilities off-site of generation had increased; export for recovery had increased; and export for disposal by landfill and incineration had decreased. It was proposed that increased awareness had contributed at least in part to reduced unreported hazardous waste generation. A reduction in the unreported generation of waste oils and sheep dip was particularly noted and the methodology employed for their calculation was discussed. Marion Byron stated that a survey of the pharmaceutical sector carried out by IPCMF had shown that a 1% decrease in hazardous waste generation had taken place between 2000 and 2002,

notwithstanding increased production within the sector. Brendan Keane stated that the decrease in exports for disposal by incineration is attributable to: waste being treated by recovery as opposed to disposal options (or the treatment technology being redefined); a decrease in the use of halogenated solvents since 1996; and a decrease in the water content of exported waste. Duncan Martin noted that examples of waste decreases or good practice in individual sectors or organisations do not come through in the national statistics. It was agreed that studies based on economic sectors or individual EWC codes would be required to extract this information.

4. **Indicators for the priorities in the NHWMP**

A list of proposed indicators for the priorities identified in the NHWMP was presented for discussion. Marion Byron also provided the Committee with a discussion document, which was circulated at the meeting, and both proposals were considered during the discussion.

a) Priority 1

It was agreed that no indicator was required with regard to establishment of the Implementation Committee.

b) Priority 2

It was agreed that "prevention" is outside the scope of the terms of reference of this Committee and that no indicator was required. However, it was also agreed that there are other routes by which this Committee can make an input to the consideration of prevention. Pat Fenton agreed to present an update on progress towards establishment of the National Waste Prevention Programme at the next meeting. Marion Byron queried whether this Committee would also steer the National Waste Prevention Programme.

c) Priority 3

The "identification" of unreported hazardous waste was presented in the context of table 4.16 of the National Waste Database Report 2001. The following indicators for the "elimination" of unreported hazardous waste were proposed:

- tonnes of unreported hazardous waste;
- unreported hazardous waste as a percentage of total hazardous waste;
- unreported hazardous waste presented in terms of three principal sources – households, transport and agriculture.

Alison Townley queried the likely potential changes arising from the new European Waste Catalogue and Hazardous Waste List. Lorcan McCabe queried the generation of unreported "veterinary medicines" waste as listed in table 4.16. Brian Meaney clarified that while veterinary surgeries may in fact use authorised waste collectors, this was not reflected in any reported data available to the Agency at the time of compilation of the NWD Report 2001. It was suggested that reasons for decreased (or increased) unreported hazardous waste generation should be identified.

d) Priority 4

The following indicators for waste disposal sites were proposed:

- The availability of guidance on the identification, assessment and prioritisation of waste and hazardous waste disposal sites;
- The number of sites identified under section 22;
- The number of sites identified under section 26;

- The number of risk assessments had been completed;
- The number of sites at which remediation works had been undertaken;
- The number of sites identified as priority category A;
- The number of sites identified as priority category B;
- The number of sites identified as priority category C.

e) Priority 5

The following indicators were proposed for measuring the establishment of an improved hazardous waste collection infrastructure:

- The number of fixed collection facilities (civic amenity);
- The number and frequency of mobile collection services (periodic collection);
- The number of bring-back or return facilities or schemes in operation;
- The quantity per capita collected;
- The number of facilities per region.

f) Priority 6

The following indicators were proposed for measuring the allocation of financial and technical assistance for the development of facilities for the recovery and disposal of hazardous waste:

- Financial:
    - Grant assistance provided to local authorities for the development of hazardous waste recovery and disposal facilities.
    - Grant assistance provided to private enterprises for the development of hazardous waste recovery and disposal facilities.
- Technical:
    - The availability of guidance towards development of facilities.

g) Priority 7

The following indicators were proposed for measuring the development of landfill and thermal treatment capacity for the disposal of hazardous waste to achieve self-sufficiency:

- Available capacity for hazardous waste disposal by landfill (tonnes over lifetime and t/a);
- Available capacity for hazardous waste disposal by thermal treatment (t/a).

h) Priority 8

The following indicators were proposed for measuring improved public awareness of the impacts of hazardous waste:

- The number of information campaigns;
- The number of training programmes;

- The collection rate per capita

Pat Fenton proposed that a measure of public awareness could be built into the next public attitudes survey.

i) Priority 9

It was proposed that indicators for measuring the presence of prevention, research and demonstration initiatives would be qualitative, such as the number of programmes available. Two initial entries were proposed:

- Cleaner Greener Production Programme (EPA)
- Environmentally Superior Products programme (Enterprise Ireland)

Eamonn Markey proposed that the three categories of hazardous waste – reported, unreported and contaminated soil – be disaggregated and the data presented according to the individual categories.

The discussion concluded with a cautionary note from Brian Meaney and Marion Byron that the proposed indicators consider the NHWMP priorities only. Further indicators will be developed in relation to all of the recommendations and will be included in the revised paper to be presented to the next Committee meeting .

5. **Hazardous Waste Classification Tool**

Jean Finn from the Clean Technology Centre made a presentation to the Committee on the Hazardous Waste Classification Tool and its use. The tool is available for download from the EPA Website. Brendan Keane sought clarification on the assignment of EWC codes. It was clarified that packaging waste should be classified under chapter 15, regardless of source. In relation to the ongoing electronic development of the Tool by the CTC, Marion Byron stated that interpretations should be consistent between the paper and electronic tools.

6. **Hazardous Waste Management in Northern Ireland**

Alison Townley from Department of the Environment, Northern Ireland, Environment and Heritage Service gave the Committee an update on the situation with regard to hazardous waste in Northern Ireland. Alison explained that a forum has been set up in Northern Ireland as a result of the hazardous waste strategy. The frequency of meetings is every 6-8 weeks with approximately 18 people on the forum. The Northern Ireland forum plans to concentrate on identified short term priority issues for the first 6-8 months and will provide advice on hazardous waste production, minimisation and prevention mechanisms. Similar forums are in place in Scotland, England and Wales.

Consignment notes are used for the movement of hazardous waste. However, these notes do not provide information on shipments made to Great Britain. Efforts are being made to consolidate the paper trail UK-wide to provide improved records. Of the 50,000 tonnes of hazardous waste generated in Northern Ireland in 2002, 5,000 tonnes (45% of which is asbestos construction and demolition waste) is landfilled. The Landfill Directive will reduce the landfill of hazardous waste and the forum is considering future treatment and capacity needs.
Alison acknowledged that there is potential for all-island solutions for the management of hazardous waste but advised that the UK import/export plan restricts all cross-border movements for disposal. The exception to this rule is the acceptance into the UK from Ireland of hazardous waste for disposal by high temperature incineration. However, a draft revision of the import/export plan contains a proposal to close off this exemption.

On waste oils, Alison indicated that Atlas Ireland is the principal reprocessor of waste oils in Northern Ireland. The UK is subject to proceedings from the Commission on its failure to

promote the regeneration of waste oils above its reuse as a fuel. It is probable that a ruling will cause Atlas's product to be reclassified as a waste.

The Northern Ireland forum is looking at mechanisms to raise awareness through educational needs, funding and grant schemes. The Environment and Heritage Service has £1M grant assistance for the establishment of recovery and disposal facilities by the private sector. A further £7-10M has been made available to local authorities, mostly for the management of municipal waste. Household hazardous waste is on the agenda for future consideration by the forum.

Brendan Keane clarified that two high temperature incineration facilities are available for the disposal of Irish waste in Britain - Cleanaway (Elsemere Port) and Shanks (Fawley). Shanks' facility at Pontypool has ceased operating. Neither facility recovers energy from the waste.

7. **Risk Assessment Methodology**

The final report on the pilot study carried out by OCM in Co. Laois is not yet available. It was agreed that a more substantive discussion on this issue would be possible after the report was issued.

8. **Grant Schemes – Hazardous Waste Infrastructure**

Pat Fenton advised that just under €3M is being raised each month through the plastic bag and landfill levies. Pat clarified that the Department is prepared to provide financial support for the provision of hazardous waste landfill capacity but is not prepared to provide financial support for the provision of hazardous waste thermal treatment disposal capacity. Grant assistance has been made available to local authorities. The European Commission has clarified that grant assistance may be made available to private concerns and applications for grant assistance received in 2002 will now be considered. No applications have been made to date for grant assistance for hazardous waste infrastructure (bar two proposals for feasibility studies). Local authorities have been provided with €7M to increase enforcement activities with a view to reducing illegal waste activities, as part of a structured programme of enforcement. He also stated that an Office of Environmental Enforcement will be established within the EPA.

The next Committee meeting will consider whether there is a need for further grant schemes, whether the need for additional facilities can be identified and how to bridge the gap towards provision of facilities.

How the public sector can be encouraged to provide facilities in the absence of interest from the private sector was discussed. Brendan Keane contended that an Irish hazardous waste landfill could not compete with a German equivalent who charges €125-175 per tonne given the small quantities generated in Ireland and the level of opposition likely to be manifested towards a hazardous waste landfill.

9. **AOB**

Waste Awareness Campaign

Pat Fenton gave an update on the waste awareness campaign, Race Against Waste. The scheme will be delivered in two elements:

- 30 and 60 second slots on TV around the Christmas and New Year period promoting the 3R's. This element will be launched on 16 Oct 2003.
- A waste communications strategy targeting local networks will by launched in Jan/Feb 2004.

It was agreed that Elizabeth Arnett of M.C. O'Sullivan would be invited to make a presentation at the next meeting on 4th December. The overall initiative is costing in the region of €3M and will run for approximately 3 years. Pat Fenton agreed to provide a list of the advisory groups involved in the planning stages of this initiative. Ruth McGrath suggested

that the interaction with “stakeholders” as described by Pat would be better described as a review of a campaign already designed.

Pat Fenton advised that he would make available copies of surveys done to identify issues that should be dealt with in the campaign

Next Meeting

Jurys Montrose Hotel, Dublin, Thursday 4th December, at 11:00am.

AGENDA

3rd MEETING OF THE NATIONAL HAZARDOUS WASTE MANAGEMENT PLAN IMPLEMENTATION COMMITTEE

4th December, 2003 AT JURY'S MONTROSE HOTEL, STILLORGAN, DUBLIN AT 11.00AM

1. Minutes of Meeting – 24th September, 2003.

2. Matters Arising.

3. Indicators – Revised Proposal.

4. Update on "Race Against Waste".
   - Presentation by Elizabeth Arnett, MCOS.

5. Risk Assessment Methodology.

6. Facilities for the Management of Hazardous Waste.

7. Implementation Committee Annual Report to Minister – discussion.

8. AOB

Minutes

3rd Meeting of the National Hazardous Waste Management Plan Implementation Committee

4th December, 2003
Jury's Montrose Hotel, Dublin

Present:	EPA	-	Gerry Carty (Chairman), Dr. Gerry Byrne, Brian Meaney
	ICMSA	-	Lorcan McCabe
	CIWM	-	Dr. Duncan Martin
	IBEC	-	Eric O'Donovan (representing Donal Buckley)
	IPCMF	-	Marion Byron
	IFA	-	Francis Fanning
	ISME	-	Dr. John Ryan
	IWMA	-	Laura Burke
	DAF	-	Dale Crammond
	DoEHLG	-	Dara Breathnach, Eamonn Markey
In attendance:	EPA	-	Deirdre Murphy (Committee Secretary)
Apologies:	IBEC	-	Donal Buckley
	SFA	-	Patricia Callan
	DETE	-	Gerry Wrynn
	Voice & NGOs	-	Dr. Ruth McGrath

1. Gerry Carty opened the meeting and updated the committee on the EPA strategic review and new office structure. He advised that the Office of Environmental Enforcement is based at EPA HQ and that information on the new office is now available from the EPA website.

   A copy of the strategic review booklet was distributed to all committee members.

2. **Minutes of 2nd Meeting**

   The minutes of meeting held on 24/09/03 at EPA HQ were adopted.

3. **Matters Arising**

   Laura Burke raised an issue regarding agenda item 3 – hazardous waste generation, trends and management. Laura suggested that the presentation of information on this area should be more consistent, i.e. disposal or recovery. It was agreed that Brian Meaney and Dr. Gerry Byrne would look at the presentation of this information.

   Francis Fanning raised an issue with agenda item 4 – indicators for the priorities in the NHWMP – priority item 3. He expected that a larger number of sectors would be represented as being responsible for generating unreported hazardous waste.

   Eamonn Markey advised that Pat Fenton (DEHLG) is to be replaced on the Committee by Dara Breathnach due to Pat's commitment to business on the forthcoming EU Presidency. On foot of Pat Fenton's agreeing to present an update on progress towards establishing a National Waste Prevention Programme, Eamonn advised that discussions are ongoing towards putting a Programme in place. The Programme will be launched in early 2004.

4. **Indicators – Revised Proposal**

Subsequent to meeting no. 2, Brian Meaney presented a revised paper on indicators.

Priority 1
No indicator required.

Priority 2

Prevention Team – outside the scope of this committee.

Priority 3

Identification of unreported hazardous waste
A discussion took place on the identification of unreported hazardous waste. Duncan Martin pointed out that the total unreported hazardous waste ascribed to the three sources slightly exceeds the total quantity. This is likely to be caused by inadvertent double-counting and will be checked by Brian Meaney.

Gerry Carty pointed out that there are practical difficulties with trying to estimate something that is not reported.

Francis Fanning commented that the unreported hazardous waste attributed to agriculture were an over-estimate and he disagreed with the impression given in the paper that agriculture is the greatest generator of unreported hazardous waste. Francis pointed out that there are guidelines on the disposal of sheep dip onto agricultural land and that waste sheep dip disposed of according to these guidelines would not be classified as unreported. Brian Meaney stated that the data on sheep dip does not show non-compliance with these guidelines, only that the generation of sheep dip waste is not reported. Brian also stated that there are no means of estimating the quantity of sheep dip that is landspread according to the guidelines.

It was pointed out that organophosphates have been removed from several brands of sheep dip and it was asked how does sheep dip compare to other hazardous wastes vis-à-vis hazardousness.

Lorcan McCabe requested that data on sheep dip generation in 2002 be generated. Brian Meaney agreed to follow this up with the Animal and Plant Health Association.

Marian Byron suggested using an indicative stream to assess sectors and then have a section on sources for gathering information. Brian Meaney pointed out that information on unreported hazardous waste is typically compiled based on material rather than source; e.g. estimates of unreported waste oils are based on import/export figures for lubrication oil.

Duncan Martin pointed out that there is limited information on enforcement. Gerry Carty advised that the sanctioning of posts for Environmental Enforcement Officers within local authorities by DEHLG is imminent. These personnel, combined with the efforts of the Office of Environmental Enforcement, will improve local and national reporting of enforcement activities.

The discussion concluded with agreement that data on unreported hazardous waste would be presented according to waste streams, not sources.

Priority 4
Waste Disposal Sites
A discussion took place on the indicators to be used for waste disposal sites.

Duncan Martin suggested an additional indicator – 'number of sites at which a risk assessment was carried out and which concluded that no remediation is necessary.' Brian Meaney advised the term "remediation" is difficult to quantify; it can mean a number of things, ranging from minimal pollution prevention measures to a complete restoration, depending on who is reporting it.

Eamonn Markey suggested that consideration in this context should be limited to sites identified under section 26 of the Waste Management Act and that no indicator was necessary on s22 sites.

Priority 5

Establishment of an improved hazardous waste collection infrastructure.
Laura Burke asked if it is possible to distinguish between the sources of waste accepted at civic waste facilities. Brian Meaney advised that waste accepted at civic waste facilities is generally classified as household waste, while acknowledging that this will contain an unquantifiable, but probably small, error. Duncan Martin suggested that the term "parked" should be replaced with a more specific term such as "open" or "operating".

Priority 6
Allocation of financial and technical assistance for the development of facilities for the recovery and disposal of hazardous waste
Eamonn Markey pointed out that grant assistance is available from the Department of the Environment, Heritage and Local Government and grant assistance has been drawn down by local authorities for civic waste facilities which have provision for the collection of hazardous waste. Hence the proposal to quantify the assistance provided to local authorities may be a large and unrepresentative number. No assistance has been granted to the private sector. John Ryan commented that applications for 2002 are still being processed and that money may well be available but is not always accessible. Brian Meaney proposed that the indicator distinguish between grant assistance drawn down for collection and treatment facilities. It was agreed that the following indicators be provided: (a) existing schemes and programmes (qualitative); (b) grant aid available; and (c) grant aid provided.

Priority 7
Development of landfill and thermal treatment capacity for the disposal of hazardous waste to achieve self sufficiency.

The following amendments were proposed:

- In quantifying facilities, specify "licensed" facilities;
- Remove reference to "disposal" in the 'exported for thermal treatment' indicator. Provide a breakdown of recovery and disposal at these facilities;
- Monitor progress in planning and licence applications and provide as sub-indicators: e.g.
    - planning permissions granted;
    - licences granted; and
- Indicate the capacity or proposed capacity of facilities.

Priority 8

Measuring improved public awareness of the impacts of hazardous waste.

Indicators agreed.

Priority 9

Measuring the presence of prevention, research and demonstration initiatives would be qualitative, such as the number of programmes available.

Indicators agreed.

Brian Meaney presented the additional information that had been requested on the potential influence of the modified European Waste Catalogue. An estimate of unreported end-of-life vehicles may feature in the National Waste Database Report for 2004.

4. **"Race Against Waste Campaign"**

Elizabeth Arnett, Environmental Scientist, RPS MCOS, made a presentation on the Race Against Waste campaign. Elizabeth is project manager for the campaign's public relations and is also seconded part-time to Dublin City Council to handle public consultation for the proposed Ringsend thermal treatment facility. The Department of the Environment, Heritage

and Local Government have awarded RPS MCOS a 12-month contract with an option to extend to a further 24 months.

In year one of the proposed three-year Race Against Waste campaign, it is intended to target the individual, whether at home or at work, to build real public awareness of the waste crisis via multi-media tv, radio and newspapers. To maximise the message, the campaign will support community-based programmes around the country. Elizabeth pointed out that Environmental Awareness Officers are crucial to the success of the campaign and a study trip to Amsterdam to observe the operation of integrated waste management systems, as proposed in regional waste management plans, is being organised for this group. The Race Against Waste web-site has attracted high numbers since the launch of the campaign with an average 20 minutes per person being spent at the site.

Three regional waste networks will be set up so that a feel for what the real issues are can be addressed. A series of events will be held around the country, e.g. Maynooth Arts Week will include a half day seminar in Spring.

A business programme entitled "Small Change" will target small businesses. A number of "small change" events will be run around the country in conjunction with the Chambers of Commerce of Ireland. Information on this part of the campaign will be available through the internet and will be tailored to be waste stream- and location-specific. A hotline will also be available. A programme to enable enterprises, other than Repak members, to meet their obligations under the Packaging Regulations is being devised.

Gerry Carty welcomed the wide scope and long term nature of the campaign. He queried whether the campaign has linkages to the proposed National Waste Prevention Programme and whether the campaign planned to deal specifically with hazardous waste. Elizabeth advised that linkages should be developed to explore synergies between the campaign and the NWPP and that a factsheet on household hazardous waste was being prepared. Elizabeth advised that the campaign is flexible and proposals on hazardous waste modules for the campaign can be accommodated. The Committee agreed to discuss this at the next meeting and to forward proposals to the Race Against Waste campaign.

Elizabeth stressed that recycling logistics and infrastructure vary around the country and for this reason, a focus on reduction ensures that a consistent message can be disseminated.

Duncan Martin suggested that producer responsibility is a form of prevention and its potential should be exploited.

5. **Risk Assessment Methodology**

Brian Meaney gave an overview of the provisions of Chapter 7 of the NHWMP and their relationship to the requirements of sections 26(2)(c) and 22(7)(h) of the Waste Management Act 1996. Brian outlined that the identification and assessment of hazardous waste disposal sites (s26(2)(c)) is a subset of, and must follow in a logical sequence from, the identification and assessment of waste recovery and disposal sites (s22(7)(h)).

A seven-step identification and assessment methodology is set out in the NHWMP for implementation by local authorities. A pilot study, funded by the ERTDI Programme, was run in County Laois with the cooperation of Laois County Council. General conclusions on the methodology were drawn by the consultants and all data was turned over to Laois County Council for their use. Gerry Carty clarified that the consultant's study did not progress the methodology to any great extent and that further work is proposed in this regard.

Gerry Carty stated that IPC and waste licensed facilities are excluded from local authorities obligations under this regime.

John Ryan explained that guidance is already available on assessing contaminated land.

Eamonn Markey advised that local authorities have no specific legal function in assessing contamination on privately owned land. Marion Byron commented that private sites such as the vehicle dismantlers specifically identified in the County Laois study may be difficult to access. Eamonn Markey also expressed concern that the high projected cost of these studies

does not justify the benefit accruing from them. The procedure should produce information of value to local authorities.

It was concluded that guidance in this area would be developed in the coming year.

6. **Facilities for the Management of Hazardous Waste**

The papers presented on this item were not discussed in detail due to time constraints.

Laura Burke clarified that Minchem have applied for a review of licence register number 36-1 for the operation of a solvent blending facility with a capacity of 20,000 tonnes per annum.

The paper on facilities will be updated and resubmitted to the Committee for consideration at the next meeting.

7. **Outline of report to Minister**

The proposed list of contents was broadly agreed. The following was proposed:

- add a section on liaison with the Race Against Waste campaign; and
- add a list of facilities and capacities as an appendix to the report.

8. **AOB**

a) No meeting dates were set. It was agreed that the EPA would propose meeting dates for 2004. The following dates and locations are consequently proposed:

(i) 10 March, EPA HQ, Wexford.

(ii) 9 June, Dublin (venue to be decided).

(iii) 8 September, EPA HQ, Wexford.

(iv) 1 December, Dublin (venue to be decided).

b) Photographs of the Committee were distributed to members present at the meeting.

c) A draft of the annual report to the Minister will be considered at the next meeting of the Committee in March.

d) Gerry Carty advised that due to his new position as Director of the Office of Environmental Enforcement, he will no longer chair the Committee. Dr. Gerry Byrne, Programme Manager, EPA will take over the chair from January 2004.

AGENDA

4th MEETING OF THE NATIONAL HAZARDOUS WASTE MANAGEMENT PLAN IMPLEMENTATION COMMITTEE

10 March, 2004 at 11.00am

Whitford House hotel, Wexford

1. Minutes of Meeting – 4 December, 2003.
2. Matters Arising.
3. Hazardous waste facilities
4. Proposals for the Race Against Waste campaign
5. Draft Implementation Committee Annual Report to Minister – draft for discussion.
6. AOB

Minutes

4th Meeting of the National Hazardous Waste Management Plan

Implementation Committee

10th March, 2004

Whitford House Hotel, Wexford

Present:	EPA	-	Dr. Gerry Byrne (Chairman)
			Brian Meaney
	IPCMF	-	Marion Byron
	IFA	-	Francis Fanning
	ISME	-	Dr. John Ryan
	IWMA	-	Laura Burke
	SFA	-	Patricia Callan
	DAF	-	Dale Crammond
	DoEHLG	-	Dr Brian Leech
			(substituting for Eamonn Markey)
In attendance:	EPA	-	Deirdre Murphy (Committee Secretary)
Apologies:	IBEC	-	Donal Buckley
	CIWM	-	Dr. Duncan Martin
	ICMSA	-	Lorcan McCabe
	DETE	-	Gerry Wrynn
	Voice & NGOs	-	Jack O'Sullivan
			(substituting for Dr. Ruth McGrath)

Dr. Gerry Byrne opened the meeting and welcomed attendees. He advised the Committee that he had replaced Mr. Gerry Carty as Chair of the Implementation Committee.

1. **Minutes of 3rd Meeting**

The minutes of meeting held on 3/12/03 at Jury's Montrose Hotel, Dublin, were adopted.

2. **Matters Arising**

Sheep dip

Brian Meaney stated information requested from the Animal and Plant Health Association on sheep dip sales and use in 2002 and 2003 will be forwarded to the Committee upon receipt.

Hazardousness of sheep dip

At meeting #3, it was asked how does sheep dip compare to other hazardous wastes vis-à-vis hazardousness. Brian Meaney advised that sheep dip generally contains either organophosphate- or pyrethroid-based substances. Both chemicals are classified as toxic and, as waste, are classified as hazardous waste. He stated that the definition of hazardous waste does not provide for the measurement of relative hazardousness; waste is either hazardous waste or non-hazardous waste. However, the hazardousness of a waste may become a factor in carrying out a risk assessment on options for managing a particular hazardous waste.

Brian Leech stated that in the 1980's organochlorines were predominantly used in sheep dip. These were replaced with organophosphates which have a relatively short life in the

environment but have presented health and safety problems. Pyrethroids have partly replaced organophosphates, however pyrethroids present aquatic pollution problems. In moving towards the use of pour-on products, Dr. Leech acknowledged that the use of such products does not eliminate the risk of environmental pollution.

Marian Byron suggested there are grey areas in the use of and conclusions that may be drawn from the hazardous waste classification tool and that this illustrates the potential need for risk assessment to be incorporated as a decision-making tool. Brian Meaney outlined that the hazardous waste classification tool is based on legislation underlying the definition of hazardous waste. This legislation is primarily designed for classifying products and its translation to complex mixtures of waste does present difficulties in interpretation and use.

Brian Leech added that risk assessment may be more useful than the black and white interpretation of the hazardous waste definition and may more realistically reflect the interpretations used in other countries.

3. **Hazardous Waste Facilities**

This issue was discussed briefly at the last meeting held on 03/12/03. An amended document was circulated at this meeting. A discussion took place on some of the waste streams described in the document.

Waste oils

Brian Leech stated that the Government had informed the Commission that the regeneration of waste oils in Ireland is not economically viable. It was pointed out that "waste oils" includes lubrication oils and fuel oils. The establishment of regeneration plant would require a dismantling of existing infrastructure. John Ryan indicated that a private-sector study had concluded that there is inadequate economy of scale in Ireland to justify the regeneration of waste oil. It was concluded that capacity for the treatment of waste oils in Ireland is adequate.

Oil filters

Given that waste oil collectors claim to have close to 100% coverage, it was generally queried as to why the collection of oil filters cannot have the same coverage. It was concluded that collection rates are the principal bottleneck in the management of oil filters.

Lead-acid batteries

It was concluded that no recommendation would be made on priority to be given to pre-treatment in Ireland or export of whole units.

Small batteries

It was concluded that collection rates are the principal bottleneck in the management of small batteries. It was stated that the batteries industry is very dispersed and characterised by small operators and this may lead to difficulties in implementing producer responsibility initiatives.

Fluorescent lamps

It was concluded that no recommendation would be made on priority to be given to pre-treatment in Ireland or export of whole units.

Drums and containers containing residues of or contaminated with dangerous substances

It was stated that difficulties are experienced in finding outlets in Ireland for drums that contained certain substances. Many generators do not have the technical capacity to triple-rinse these drums such that they may be accepted for treatment or reconditioning at Sita Drum Division (formerly Dempsey Drums). It was suggested that Sita's planned move to a new facility may address some of the difficulties being experienced.

Agrochemicals packaging

Francis Fanning highlighted the difficulties faced by farmers in managing empty containers and the lack of services or infrastructure to deal with this type of waste. Manufacturers continue to supply one litre containers and this increased the number of containers that have to be dealt with. Manufacturers and suppliers refuse to take back empty containers. It was noted

that the Packaging Directive excludes hazardous waste from its take-back obligations. It was also noted that the Packaging Directive contains clauses on the prevention and minimisation of packaging. It was concluded that collection is the principal bottleneck in the proper management of nominally empty agrochemicals packaging. An effective collection service or take back agreement would contribute towards addressing the management problem.

Sludges

Marion Byron stated that studies have indicated that there are no major bottlenecks with regard to outlets for sludge wastes. However, given the reclassification of some sludges as hazardous waste, the need for hazardous waste disposal or recovery capacity will become acute if export is to be avoided. Ms. Byron agreed to provide further information.

Overall conclusions from the discussion are:-

- export outlets exist for the recovery of a large number of hazardous waste streams and the lack of economies of scale in Ireland are likely to inhibit the establishment of treatment facilities and operations for several such streams here;
- the availability of an export recovery outlet should not prevent the Committee from recommending the establishment of recovery capacity in Ireland;
- the principal bottleneck in relation to the management of several hazardous wastes is poor collection rates;
- increased awareness and enforcement are necessary in order to improve collection rates;
- the Committee will consider making a recommendation for grant aid to be provided for hazardous waste collection infrastructure.

Brian Leech agreed to clarify the position on available grant aid for hazardous waste infrastructure and, in particular, hazardous waste landfill.

Committee members were requested to provide any additional comments directly to Deirdre Murphy.

4. **Race Against Waste Campaign**

Gerry Byrne advised that he would be attending a Race Against Waste steering group meeting on 11th March 2004. He also advised that the campaign has commenced the 'Small Change' element of its programme. (A copy of the *Small Change* booklet was circulated to committee members during the meeting). The Race Against Waste has collaborated with the Chambers of Commerce of Ireland in producing *Small Change* and in organising roadshows around the country. Dr. Byrne advised that the National Waste Prevention Programme will collaborate with the 'Race Against Waste' campaign.

The committee agreed with the two proposals provided in the papers for this meeting and added the following amendments and suggestions:

- the proposed guide for SME's should include the farming sector;
- basic information on what is and is not a hazardous waste should be provided;
- guidance on transfrontier shipment classifications should be provided;
- information on routes and outlets for typical hazardous waste streams should be provided;
- information on record-keeping obligations for generators of hazardous waste should be provided;
- information should be provided on the internet; and
- information on the management of out-of-date and unused medicines and dental amalgam should be provided.

5. **Annual Report to Minister**

Under the terms of reference for the Implementation Committee, an annual report is to be submitted to the Minister by 9th July 2004. A discussion took place on the proposed layout and content of the report that was distributed with the papers for this meeting.

Laura Burke stated that the report should recommend that the order in which the Plan's priorities were written does not indicate the order in which they should be implemented. It was agreed that a recommendation would be presented for the agreement of the Committee.

Marian Byron indicated that she will discuss aspects of the indicators section of the report with Brian Meaney.

Committee members were requested to provide any additional comments and feedback directly to Deirdre Murphy (deirdre.murphy@epa.ie) by 26 March, 2004.

6. **AOB**

- Dr. Gerry Byrne outlined progress in implementing the Solvents Directive and its impact on IPPC facilities and SMEs. An accredited inspection contractors (AIC) scheme is being set up in collaboration with the Department of Environment, Heritage & Local Government and the Irish National Accreditation Board and pilot inspections will commence on 11 March 2004. Inspection contractors who wish to participate in the AIC scheme must receive ISO17020 accreditation. Guidance on the Solvents Directive's requirements has to date been prepared for the dry cleaning and vehicle refinishing sectors. The objective of the Solvents Directive is to prevent and minimise the use of solvents and avoid environmental pollution. Further information is available on the EPA website on http://www.epa.ie/solvent
- The next Committee meeting will take place on Wednesday 9th June at 11:00am at EPA Regional Inspectorate, Richview, Clonskeagh Road, Dublin 14.