



The National Waste Prevention Programme

Second Annual Report 2005/06

Presented to

Mr. Dick Roche T.D.,

Minister for the Environment, Heritage & Local Government

September 2006

Acknowledgements

I would like to acknowledge the following people who assisted in the ongoing development and implementation of the National Waste Prevention Programme:

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- The Core Prevention Team: Mr Brian Meaney, Ms Caitríona Collins, Ms Fiona McCoole, Mr Martin Doyle, Ms Odile Le Bolloch, Mr David Dodd, Dr Isabelle Kurz, Ms Kirsty Nolan and Ms Deirdre Murphy for their enthusiastic creativity in devising, developing and implementing the projects described in this report;
- All other stakeholders, organisations and persons who helped in any way with this important initiative.

To all of the above, I offer my most sincere thanks.

Gerry Byrne BA (Mod), PhD, MBA.
(Chairman, National Waste Prevention Committee)

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1. Overview

Waste prevention is an important strategic activity for Ireland to engage with in order to ensure sustainable, competitive growth into the future. The ultimate objective is to stabilise waste arisings, reverse current trends in waste production, decouple waste generation from economic growth, maximise resource use efficiency and minimise environmental impact by effectively managing waste that does arise. The attainment of sustainable consumption and production is therefore a long-term strategic national objective. This will need sustained effort and adequate resources over many years to ensure its accomplishment.

The Minister for the Environment, Heritage and Local Government announced initial funding of €2 million from the Environment Fund to start a broad waste prevention initiative in April 2004. The Environmental Protection Agency (EPA) was nominated to develop and lead this National Waste Prevention Programme (NWPP). A Core Prevention Team, appointed from experienced staff already working in the waste management area within the EPA, has since then been working on a wide variety of waste prevention projects as outlined in this report. The team is also responsible for complementary work on the annual National Waste Reports and the monitoring/review of the National Hazardous Waste Management Plan. The funding provided is being used to support all of the work of the team including appointment of consultants and provision of grants for waste prevention initiatives by other bodies.

Commitment to a National Waste Prevention Programme was first made in the Government policy document “Preventing and Recycling Waste - Delivering Change” published in March 2002. The objective as stated was to establish an ambitious and well-resourced programme to deliver substantive results on waste prevention and minimisation across all waste streams. Policy envisaged that prevention measures should apply to both hazardous and non-hazardous waste arisings. The first National Hazardous Waste Management Plan published by the EPA in 2001 provided details of what might be involved in the implementation of prevention measures for hazardous waste. The proposed programme for hazardous waste prevention included production/process and product waste prevention elements. The annual cost for a hazardous waste prevention programme alone was estimated then at €7.89 million.

A National Waste Prevention Committee, which was formed in 2004 at the invitation of the Minister, is continuing to oversee the development and implementation of the programme. It is chaired by Dr Gerry Byrne, Programme Manager, EPA, and comprises a wide range of stakeholders from industry, commerce, agriculture, local authorities, non-governmental organisations and Government Departments (see Appendix A). Terms of Reference were established for the committee (see Appendix B) that includes the work done previously by the National Hazardous Waste Management Plan Implementation Committee. Members of the committee provide valuable input to Steering and Tender Selection Groups for many of the National Waste Prevention Programme (NWPP) projects in addition to providing important strategic input to the main Committee meetings. The Agenda and Minutes of all Committee meetings held to date are posted on the NWPP webpage (see <http://www.epa.ie/OurEnvironment/Waste/NationalWastePreventionProgramme/>)

The National Waste Prevention Programme endeavours to build on the success of existing and previous initiatives aimed at promoting the sustainable use of natural resources. Figure 1 is a diagrammatic representation of some of the relationships involved. Extensive contacts have been made with all relevant organisations in order

to learn from their experiences and to involve them in the development of complementary waste prevention/resource efficiency projects, as appropriate.

This report provides an overview of the progress made on a wide variety of projects related to waste prevention during the second year of the programme. In the period under review, a national Local Authority Prevention Demonstration grant scheme was launched to enable prevention programmes to be implemented locally. The team has worked closely with Repak to develop an outline Packaging Waste Prevention Programme. Additionally, considerable progress has been made on a number of Producer Responsibility Initiatives including enforcement of the Waste Electrical and Electronic Equipment (WEEE) and Restriction of Hazardous Substances (RoHS) Regulations. Resource efficiency/Waste Audits were progressed through engagement with the EU/Life HAZRED and Race Against Waste projects. The National Waste Report 2004 was published, a revised waste webpage was developed and Certified Training in Waste Prevention has continued. The review of the National Hazardous Waste Management Plan was commenced and extensive work has been done on implementing the Ozone Depleting Substances and Solvents Regulations.

Finally, plans for future waste prevention projects are outlined. In the years to come, it is hoped that these waste prevention projects and the other ongoing initiatives will yield important results. The Core Prevention Team will work to ensure that all lessons learned are applied to the ongoing development and embedding of a culture of waste prevention in Ireland.



*The Core Prevention Team
from Left, Martin Doyle, Fiona McCooile, Caitríona Collins,
Brian Meaney, Odile Le Bolloch, Deirdre Murphy, Kirsty Nolan,
Isabelle Kurz and Gerry Byrne (Programme Manager)
Missing from photograph, David Dodd*



Figure 1 – Relationships between the National Waste Prevention Programme and other Stakeholders

2. National Waste Prevention Programme Projects Report for 2005/6

Local Authority Prevention Demonstration Programme

Extensive consultation, development and selection work was completed to devise an innovative grant scheme to enable local authorities to implement demonstration programmes on waste prevention. Mr Dick Roche, T.D., Minister for the Environment, Heritage & Local Government launched this national initiative in July 2006.



At the launch of the LAPD Programme were from left, Mr. Brian Meaney (EPA), Mr. Dick Roche (TD), Minister for the Environment, Heritage & Local Government and Dr Padraic Larkin (Director EPA)

The Local Authority Prevention Demonstration (LAPD) Programme will not only help prevent waste being generated in participating sectors, businesses and local communities, its findings will also provide a template for other waste prevention projects nationwide. The pioneering LAPD Programme is being implemented in the Galway, Monaghan and Limerick-Clare-Kerry regions by seven participating local authorities, which were selected by open competition. A total of €1.75 million will be spent in supporting these local programmes over the next 30 months. The aim of the programme is to assist local authorities to design and implement local integrated waste prevention programmes. Assistance is being provided by way of both technical expertise (from the Clean Technology Centre, Cork Institute of Technology) and grant monies to increase capacity for waste prevention locally. The initiative will build in part on the success of the ongoing Race Against Waste campaign.

The overall idea is to develop integrated Regional and Local Waste Prevention Programmes by providing resources to develop practical local initiatives relevant to different circumstances on the ground. As the programme develops, a rolling series of grants to progressively include many other local authorities is envisaged. This, in time, will allow lessons learned from earlier implementation phases to be applied throughout the local authority network nationally.



Participating Local Authority (Galway Group) in the Local Authority Prevention Demonstration Programme

Packaging Waste Minimisation Programme

The Packaging Directive and associated regulations include objectives for the reduction of packaging use. While considerable progress has been made nationally in the segregated collection of packaging waste for recycling, there is a need to progress to the actual prevention or minimisation of packaging waste. Companies already tend to “lightweight” or reduce material content of their packaging to reduce transport and other costs. There is a need for business marketing decision-makers to understand the environmental impacts of their packaging design choices and for consumers to actively demand less packaging.

The National Waste Prevention Programme sponsored the SME category in the Annual Repak Awards in 2005 and particular attention was given to those participants demonstrating significant packaging waste prevention achievements. For 2006, two new categories of award will be sponsored requiring that packaging waste prevention be demonstrated (Best Packaging Waste Prevention Initiative).

The Core Prevention Team have also had detailed discussions with Repak to brainstorm ideas for the development of a Packaging Waste Minimisation Programme. These ideas include dissemination of published case studies, website development, training, workshops, research, design award and business/consumer education initiatives. The National Strategy Group for Packaging Waste Recycling

(on which the EPA is represented) has approved the proposals in principal. The programme it's funding and title are expected to be finalised in the coming months for implementation as part of an ambitious national strategy on packaging waste management being devised by this Group.



At the Repak Best Practice Awards 2005 were from left, Mr. Andrew Hetherington (CEO Repak), SME Award Winner Ms. Josephine Angland (Newmarket Co-op Creameries, Co Cork), Mr. Dick Roche (TD), Minister for the Environment, Heritage & Local Government and Dr Gerry Byrne (EPA)

Certified Waste Prevention and Minimisation Training

In order to develop capacity for waste prevention it is essential that key business decision-makers have the necessary information and skills to achieve prevention in their own organisations. Grant aid provided to the Irish Business and Employers Confederation (IBEC) assisted in the development of a suitable waste prevention training course for business. A modular course was developed by the Clean Technology Centre (CTC) that includes lectures, directed home study as well as applied in-company waste prevention projects. The first group, consisting of representatives of twelve companies, are nearing completion of the course.

Further development of the course by tailoring for different sectors is being co-ordinated by IBEC.

Resource Efficiency/Waste Audits

A survey of available waste and resource efficiency audit tools has been completed to determine best practice in Ireland and internationally. Suitable assessment tools (combining the most effective elements) along with practical methodologies for waste prevention planning are being developed. The team are working closely with the Race Against Waste campaign to develop an on-line audit tool. Much experience has been gained by the Race Against Waste campaign utilising waste audits in a wide variety of sectors and activities. A pilot audit programme for businesses will be

developed to further define and optimise the methodology. In time, it is envisaged that waste audits should be carried out regularly in production, service industries as well as administrative organisations on either a voluntary or mandatory basis.

The policy document, *Delivering Change*, proposes the introduction of a programme of *mandatory* waste audits for organisations incorporating waste reduction plans. However, it is hoped that the different sectors of society will co-operate with this initiative on a voluntary basis.

HAZRED Project

HAZRED is an EU/Life funded applied research project aimed at identifying SME sectors that generate significant amounts of hazardous waste and seeks to develop guidance and audit tools to promote waste prevention. The project is being led by the Environment Agency of England and Wales, with the EPA acting as partners in Ireland to ensure that Irish SMEs have the opportunity to participate. The project commenced in December 2004 and is due to run for three years in total. The project fits well with the Core Prevention Team's other responsibilities relating to hazardous waste prevention and management described later in this report.



Attending the HAZRED C&D Workshop were from left Mr John Donnelly (Purchasing Consultant Ltd.) and Mr David Dodd (EPA)

Detailed input has been provided at workshops and project management events in the UK. A methodology has been developed to select sectors where SMEs generate significant quantities of hazardous waste. Six sectors were selected when the methodology was applied in the UK: Manufacture of speciality organic chemicals; Maintenance and repair of motor vehicles; Treatment and coating of metals; General construction and building; Manufacturing of machinery and equipment and, Photographic processing. The Core Prevention Team organised two workshops in Dublin in 2006 involving companies from the selected sectors to discuss the project and invite them to participate. Additional bilateral meetings with interested companies have also been held to encourage them to join the project. To date seven SMEs in Ireland have signed up for the programme and others are expected to do so shortly.

The selected SMEs will next be involved in demonstrating the efficacy of a new approach to waste prevention. A draft best practice guidance document has been drawn up for each sector and expert auditor/trainers have been appointed. Each SME will receive an audit, training and advice on the guidance and will be required to sign up to a waste reduction plan. Follow up visits from the expert consultants will determine the effectiveness of the prevention effort. The best practice guidance will be finalised to include lessons learned during the final audits. Ultimately this sector selection/guidance preparation and audit/monitoring approach will be incorporated into sectoral waste prevention initiatives.



Attending the HAZRED Workshop on General Construction & Building were from left, Mr Val Smith (Star Slides Ltd) and Mr. Martin McCarthy IDC Ltd.

Waste Prevention Webpage

Up to recently, information on waste management policy, plans, statistics and management initiatives and opportunities were widely available but often in disparate locations. This made the task of accessing this information, whether by business or other interested parties, unnecessarily arduous. In turn, this often gave rise to the impression that waste was being managed in an uncoordinated manner nationally. This resulted in barriers to the better understanding of the true position and to the mobilization of effort to resolve outstanding waste issues.

To overcome this barrier, the waste section of the EPA website has now been completely revamped to now include extensive electronic links to information and documentation on all aspects of waste management in Ireland. Everything from policy documents, to regional/national waste plans, to database reports and waste management initiatives is now included. A new section on the National Waste Prevention Programme has been added with multiple electronic links to information and guidance on waste prevention. The idea is to provide a “one-stop shop” which will now act as an important Waste Information Resource Centre for businesses and the general public.

The new web-pages were launched in November 2005 and are updated on an ongoing basis (see www.epa.ie/ourenvironment/waste).

Waste Prevention Case Studies

A range of excellent waste/pollution prevention or resource conservation initiatives is being undertaken by different organisations. These include those by Enterprise Ireland (e.g. the www.envirocentre.ie website, plus support for Environmentally Superior Products and Environmental Management Systems), Sustainable Energy Ireland (conservation of energy and renewables), Eastern Region Local Authorities (e.g. Taptips.ie - water conservation), Department of the Environment, Heritage & Local Government (Race Against Waste), Repak and IBEC (annual environmental awards) and the EPA (Cleaner Greener Production Programme, IPPC licensing and Waste Prevention publications).

In order to maximise the value from, and build on, these existing important initiatives, it is important that all relevant lessons learned on waste prevention are widely disseminated. A research programme has commenced to identify, develop and publish useful prevention case studies for wider dissemination. A bounty system is being developed to provide incentives for the identification and dissemination of best practice. This is to demonstrate the cost savings and other benefits arising from waste prevention to business. Findings will be disseminated effectively using seminars and training programmes with a particular focus on company visits.



Participating Local Authority (Limerick/Clare/Kerry Group) in the Local Authority Prevention Demonstration Programme

National Waste Reports

The Core Prevention Team views the provision of accurate and timely information on waste arisings to be key to an effective waste prevention programme. The National Waste Reports provide intelligence on trends in waste arisings from a variety of sectors and help to direct prevention efforts towards priority waste streams. The reports also fulfil the very important function of providing annual feedback regarding the impact of Regional Waste Management Plans, local authority waste initiatives, and the activities of the waste management industry. Additionally, they highlight

relevant indicators on waste to regulators, policy and decision makers. Importantly, reports required by the European Commission in relation to a range of Directives, including waste and Producer Responsibility Initiatives (see below), are based on data published in the National Waste Reports. The Basel Convention Reports to the UN are also developed on foot of this information.

To develop the reports, detailed waste data is collected each year from numerous players in the waste management sector including waste operators, recyclers, industry and local authorities. Follow up and site audits form an important part of the verification waste data that is provided. It is proposed to shortly develop a full consultation process on a national Waste Data Strategy with all players in the waste sector. This is to achieve consensus on the optimum methodology for the collection, validation and collation of data on all waste streams. In time, it is envisaged that reporting and collation of such data would be facilitated by way of electronic means on the internet.

In order to provide accurate waste information, it is necessary to understand and quantify the various elements currently arising in municipal and industrial waste. The proportions of these elements change as increasing amounts of different materials are segregated for recycling. In the past, various local authorities using different methodologies at different times of year have carried out waste characterisation studies. During the past year, a detailed waste characterisation research project was completed using an updated protocol for the statistical sampling and quantification of waste materials. Two sampling and analysis surveys of municipal waste (Autumn and Spring) along with a sector based industrial waste survey were conducted. A report on the findings, and a detailed Methodology, were published and a seminar was held with local authorities to disseminate the outcome of this work. The findings greatly improved the quality of the information presented in the National Waste Report for 2004. It is proposed to follow through with a series of comparable studies on a periodic basis using the same methodology in order to increase intelligence in this important area of research. Appropriate grant aid and technical assistance will be provided to local authorities to complete this work in different geographical areas of the country. Studies were also completed on Biodegradable Municipal Waste statistics to develop a model that would allow reports to be generated for implementation of the National Strategy on Biodegradable Waste. Audits and research was conducted to further examine the data on construction and demolition waste.

The National Waste Report for arisings in 2004 was published early in 2006 and generated extensive national media coverage and public debate on the subject of waste and its correct management. All waste data are now developed in conformance with the EU Waste Statistics Regulation. The interim National Waste Report for 2005 is anticipated for publication in the fourth quarter of 2006. The next complete National Waste Report will cover arisings in the year 2006 continuing the new two-yearly cycle of reporting, as required by the Regulation.

The National Strategy on Biodegradable Waste

This strategy was published in April 2006 and details some new roles assigned to the Core Prevention Team. A Strategy Implementation Group is to be established with input from the team particularly in relation to the tracking of progress and to developing relevant projects in the National Waste Prevention Programme. The team will now consider how the various existing projects and any proposals for new projects might contribute to the prevention of Biodegradable Municipal Waste.

Additionally, the information needs for tracking performance of the strategy will be integrated into the data collection processes involved in the compilation of future National Waste Reports. A Fact Sheet on Composting in Ireland has recently been published by the team. This provides up to date summary information on capacity for composting available in Ireland. Cré (an organisation promoting best practice in composting) is being provided with funding through the EPA/Environmental Research, Technological Development and Innovation (ERTDI) Programme for the development of standards for compost products.

Producer Responsibility Initiatives

Producer Responsibility Initiatives (PRI) are economic instruments in which producers (both manufacturers and importers of products) are obliged to retain responsibility for the management of products when they become waste. Producers are required to take account of the environmental impact of their products through design and end of life management.

The Core Prevention Team provides input and support to the development and implementation of a range of PRIs, in co-operation with other stakeholders, by participating in meetings of the Producer Responsibility Liaison Group, the Waste Electrical and Electronic Equipment (WEEE) Monitoring Group, the WEEE Register Society, the National Strategy Group for Packaging Waste Recycling, the National Construction & Demolition Waste Council and the Market Development Group. In particular, information is provided on the distance from targets achieved for the recovery of all relevant waste streams as part of the National Waste Reports. The official returns to the EU Commission concerning each Directive is based on data developed for these reports also.

In August 2005, the team were given direct responsibility to lead the enforcement of the WEEE Regulations in conjunction with the local authorities. The team also provide advice and compile the official statistics in relation to Packaging Waste Recycling, WEEE and End of Life Vehicles (ELV). The work completed by the team to date on all of these PRIs is outlined below.



At the Conference "Business Benefits of Ecodesign for SME's in the Electronics Sector" were from left, Dr Gerry Byrne (EPA), Dr Dorothy Maxwell (Enterprise Ireland) and Mr David Dodd (EPA)

- Enforcement of the WEEE Regulations

Since the WEEE Regulations came into force on 13 August 2005, EPA inspectors have been undertaking random, unannounced inspections of retailers of electrical and electronic equipment (EEE). Significant efforts are being made also to identify any unregistered, potentially obligated producers or “free-riders”. To date, inspections at hundreds of electrical retail premises have been conducted with the help of consultants. Producers/distributors who supply EEE by means of distance communication (web-sites, mail order catalogues, telesales etc.) are also covered under the WEEE Regulations, and inspections of such operations are also ongoing. All complaints received, from whatever source, are acted on as part of the surveillance effort.

The team and the Office of the Director of Consumer Affairs (ODCA) have worked closely together in regard to the correct pricing of EEE at retail premises. ODCA inspectors visited hundreds of electrical retail premises in November/December 2005 to check that the retail price of EEE products on the shelf were in compliance with the Product Prices Regulations. Non-compliant advertising is being referred to the Advertising Standards Authority for Ireland (ASAI) for follow through using their established complaints adjudication procedure with their media member organisations. The Broadcasting Complaints Commission are also processing complaints relating to television and radio advertising. The team works particularly closely with the WEEE Register Society Ltd (the national producer registration body) on producer registration enforcement. The Customs and VAT Divisions of the Revenue Commissioners are providing the benefit of their expertise in relation to dealing with issues of registration/inspection of foreign and distance sellers of EEE.

Under the WEEE Regulations, local authorities also have responsibility for the enforcement of many retailer obligations. The team organised a national briefing session in November 2005 for all local authorities advising them of their role in the enforcement of the Regulations. The EPA Office of Environmental Enforcement has already developed a very successful Environmental Enforcement Network involving local authorities. The Core Prevention Team are now building on this by setting up a Producer Responsibility Enforcement Network. This will be used as a means to guide and co-ordinate local authorities in their own WEEE enforcement work. The first meeting of this enforcement network was held in June 2006.

The EPA has prepared extensive guidance on WEEE for retailers and for businesses. These and other documents were posted on to some newly developed webpage's at: <http://www.epa.ie/OurEnvironment/Waste/WEEE>. There is an extensive and ongoing national advertising campaign in the national press and targeted trade publications to highlight the WEEE Regulations. Written articles on WEEE have been placed in a variety of relevant print media. A feature on WEEE was commissioned and developed for the [Eco-Eye TV programme](#) which was broadcast in March 2006 on RTE 1 for which very high audience figures were recorded. The team has participated in a range of national seminars concerning the requirements of the WEEE Regulations. Extensive ongoing correspondence has been initiated alerting retailers and producers to their obligations under the Regulations. Enforcement files have been opened on over 700 companies on the basis of inspections and acting on complaints received from third parties.

Three successful prosecutions were taken by the EPA against Boots Retail (Ireland) Ltd. (January 2006), Spectra Photo Ltd. (May 2006) and Argos Distributors (Ireland) Ltd. (May 2006). Each company was convicted in the District Courts for breaches of

the WEEE Regulations. The fines and costs imposed were awarded to the EPA. Instructions have since been given for other prosecutions to be instigated.

Discussions have now commenced with the various stakeholders to explore ways in which WEEE could be reused or prevented as opposed to having complete reliance on material or energy recovery for its treatment following collection.

- Packaging Waste Recycling

Packaging recycling has gone from strength to strength in Ireland with the 2005 target of 50% being exceeded one year in advance. The team are responsible for verifying the packaging-recycling rate each year as part of the National Waste Report project. A pilot project on the statistical determination of “packaging placed on the market” in Ireland involving the Central Statistics Office and Repak has now been completed in response to the findings of previously commissioned research in this area. The findings of this most recent research will be circulated shortly to the relevant stakeholders for their consideration. The EPA Office of Environmental Enforcement has provided leadership to local authorities through the Environmental Enforcement Network on improving compliance with the Packaging Regulations. While it is important to continue to attain the recycling targets including those now set out for 2011, attention is being increasingly focussed on Packaging Waste Minimisation as described earlier in this report.

- End of Life Vehicles (ELV) and Farm Plastics Regulations

The Producer Responsibility Liaison Group are working on the implementation of the ELV Regulations. The EPA has provided input to their meetings in developing guidance documents. Statistics on ELV will be gathered in a timely manner for incorporation into the National Waste Report. The EPA Office of Environmental Enforcement has previously provided detailed guidance to local authorities on the enforcement of the Farm Plastics Regulations through their Environmental Enforcement Network.



Consultants from Clean Technology Centre and LHM Casey McGrath are providing Technical & Financial Assistance to Participants of the LAPD Programme

Hazardous Waste Management

The Core Prevention Team have been assigned a leading role in the prevention and management of hazardous waste in Ireland. This includes the publication and monitoring of the implementation of the National Hazardous Waste Management Plan. In addition, the team work on the development, implementation and enforcement of a range of statutory measures aimed at the management of a wide variety of potentially hazardous waste substances. These include providing input to the regional waste management plans, Transfrontier Shipment of Waste Imports (TFS), Ozone Depleting Substances (ODS), Restriction of Hazardous Substances (RoHS), Solvents & Deco-paints, Polychlorinated Biphenyls (PCBs) and Persistent Organic Pollutants (POPs) Regulations. The work of the team on each of these assignments is detailed below.

- The National Hazardous Waste Management Plan

The first National Hazardous Waste Management Plan (NHWMP) was published in 2001 and has the prevention of hazardous waste as a cornerstone of its principal recommendations. As noted earlier, the National Waste Prevention Committee now actively oversee the implementation of this plan. The Core Prevention Team continues to gather intelligence on hazardous waste management as part of the National Waste Reports described above. As part of this oversight, 17 site visits were undertaken to the different hazardous waste treatment and transfer sites in Ireland. Reports on hazardous waste were presented to the committee on a periodic basis for discussion.

In accordance with the Waste Management Act, the NHWMP is currently being revised in line with the requirements of Strategic Environmental Assessment (SEA). This process was commenced in 2005 with the appointment of consultants to prepare a Strategy Study, Technical & Policy Options and an SEA Environmental Report. A Steering Group comprising members of the National Waste Prevention Committee is providing oversight for the project. An initial public consultation has been completed and several Steering Group meetings have been held. Each hazardous waste stream will be considered in turn and fresh recommendations developed to better enable the effective prevention, collection, recycling or treatment of all such wastes, as appropriate. The relevant authorities in Northern Ireland are also involved to maintain an all-island perspective on the issues. The project schedule for the development of a draft plan by the EPA, preparation of an accompanying SEA Environmental Report and the necessary public consultation process is now in place.

The draft plan, along with the SEA Environmental Report, is expected to be published towards the end of 2006. Following full public consultation, the final plan together with an accompanying SEA Statement will be then be published.

- Regional Waste Management Plans

Based on accumulating experience in waste prevention, implementation of the National Hazardous Waste Management Plan, the operation of the various Producer Responsibility and hazardous waste management initiatives, the team have provided detailed submissions on each of the Regional Waste Management Plans, which were under review. The team also manage Waste Planning and Collection Permit submissions from local authorities on an ongoing basis.

- Transfrontier Shipment (TFS) of Waste Imports

The Core Prevention Team have responsibility for enforcing the Transfrontier Shipment of Waste Regulations (TFS) for scheduled waste being *imported* into Ireland (NB. the local authorities have this responsibility for scheduled waste being *exported* from this country). The team are responsible for developing all data for TFS reports for submission to the EU Commission. The EPA Office of Environmental Enforcement has provided leadership to local authorities through the Environmental Enforcement Network to improve compliance with the TFS Export Regulations.

The Core Prevention Team has undertaken considerable work in relation to the regulation of the importation of scheduled waste. Numerous enquiries have been dealt with concerning TFS of waste for import in connection with waste oils for recovery and railway sleepers for reuse. Enforcement inspections have been undertaken with the Department of Agriculture and notifications provided to the Health and Safety Authority as necessary. One investigation of a particular importation involved a joint inspection with Environment & Heritage Service of Northern Ireland with police and army security backup. A dedicated webpage is in development to cope with routine queries in relation to TFS of scheduled waste for import.

- Enforcement of the Ozone Depleting Substances (ODS) Regulation

The Montreal Protocol on Substances that Deplete the Ozone Layer (1989) is an international initiative to protect the stratospheric ozone layer from harm by certain anthropogenic chemicals. This ozone layer protects the Earth from damaging ultraviolet emissions from the Sun. The European Community and each Member State are Party to the Protocol. It aims to regulate the production, import/export, placing on the market, use, recovery, recycling, reclamation and destruction of specific substances that have an ozone depleting potential. Such substances are in limited use in diverse sectors such as refrigeration and air-conditioning (CFCs and HCFCs), fumigation and pest control (methyl bromide), fire prevention and suppression (halons) and the pharmaceutical sector (ozone depleting solvents).

The Irish ODS Regulation assigns responsibilities, minimum qualification requirements and reporting requirements in this matter. Responsibility for this work was given to the Core Prevention Team in late 2005, when the threat of legal action and daily fines from the European Commission for non-implementation here was a reality. Since that time, the team has worked to bring Ireland into compliance.

As there is no production of ozone depleting substances (ODS) occurring in Ireland, the implementation and enforcement of the Regulation here will focus primarily on limiting their use and the correct management of waste ODS. The regulation of import and export is concerned with the import from, and export to, non-EU countries.

Input has been provided in relation to the revision of waste legislation in the context of the handling of waste ODS. Meetings at European level of the ODS Management Committee and National Experts Committee have been attended. Liaison has been initiated with the Department of Agriculture and Food (Pest Control, Forest Services, Plant Protection), the Maritime Safety Directorate, the Air Corps and the Customs section of the Revenue Commissioners, as each body has been designated as competent bodies with responsibility for specific tasks relating to ODS.

Overdue ODS information reports for 1999 to 2004 were submitted to the European Commission in November 2005 and March 2006. The reports for 2005 were submitted on time in June 2006. Surveys (via questionnaire) and site visits to relevant sectors (including sectoral representative bodies) were carried out for the purpose of raising awareness, gathering data for the reports mentioned above and ensuring compliance with the requirements of the Regulation. Presentations have been made at a number of sectoral seminars for the purpose of raising awareness and highlighting compliance issues such as movement of waste ODS. An ODS webpage has been developed on the EPA website and this is used as the main point of information on new developments in the area of ozone depleting substances: <http://www.epa.ie/TechnicalGuidanceandAdvice/ODS/>. Sectoral guidance notes were prepared and made publicly available for the benefit of operators affected by the ODS legislation. These guidance notes will be updated as new developments occur in implementation measures. Articles and advertisements were placed in newspapers and relevant publications highlighting the requirements of the legislation on ODS. Contact has been made with educational bodies with regard to ensuring that appropriate training will be available. A Strategy for the implementation of the ODS Regulation in Ireland has been prepared.

Already, follow up enforcement actions are being taken in some cases of non-compliance with the Regulations. The team will continue to carry out surveys, site visits, awareness raising campaigns and enforcement actions, with the cooperation of the other competent bodies. As a result of all of the above initiatives, the closure of the case against Ireland for the non-implementation of the ODS Regulation was officially announced by the European Commission on 4 July 2006.

- Enforcement of the Restriction of Hazardous Substances (RoHS) Regulation

The RoHS Directive came into effect on 1 July 2006 and is intended to restrict the use of harmful substances in the manufacture of electrical and electronic equipment. This Single Market Directive is intended to contribute to the protection of human health and the environmentally sound disposal of Waste Electrical & Electronic Equipment (WEEE). The substances controlled include lead, mercury, cadmium, hexavalent chromium as well as some flame retardant chemicals. The Regulations prohibit the marketing or distribution of relevant products that contain more than the specified level of these substances. Producers must retain adequate records of certification of compliance or testing of any component utilised in production to verify compliance with these requirements. The EPA is the sole enforcement agency for RoHS and has been provided with extensive powers to investigate, test and, if necessary, issue directions for prohibited products to be withdrawn/recalled from the market. The EU Commission guidance on the implementation of Single Market Directives is applicable to the enforcement of RoHS Directive.

The Core Prevention Team have been delegated the task of enforcing RoHS in Ireland. To date the team has worked to prepare for the introduction of the Regulations. Information on the specific requirements of the Directive, as well as approved technical exemptions, have been carefully researched. A webpage has been developed at: <http://www.epa.ie/OurEnvironment/Waste/RoHS> to ensure that all information is readily available. All producers have been notified of the requirements directly via the two WEEE Compliance Schemes and the WEEE Register Society. Speakers have been provided at a range of seminars and individual meetings have been held with many producers to answer queries. A national advertising and targeted mailing campaign is ongoing in parallel with the WEEE enforcement efforts.

Input was provided to the development of guidance from the EU Commission by participating in meetings of the EU RoHS Enforcement Body. Inspections and testing of relevant products for RoHS compliance has already commenced.



Participating Local Authority (Monaghan Group) in the Local Authority Prevention Demonstration Programme

- Implementation of the Solvents and Deco-paints Directives

The Solvents Directive aims to prevent hazardous waste arising in a range of different industrial sectors. In Ireland, the EPA regulates larger solvent using installations under the Integrated Pollution Prevention and Control (IPPC) licensing regime. The Regulations require that SME operators register with their local authority, maintain detailed records of solvent use/reduction and undergo annual inspections of their operations from October 2007 onwards. These inspections will be conducted by Accredited Inspection Contractors (AIC) registered by the Irish National Accreditation Board to the ISO 17020 International Inspection Bodies Standard.

The team have developed webpage's with details of the requirements of the Solvent Regulations at <http://www.epa.ie/TechnicalGuidanceandAdvice>. Additionally, a National Solvent Audit Protocol and guidance for three SME solvent using sectors have been published. Ongoing efforts have been made to encourage suitable organisations to progress to AIC status. Speakers were provided for a number of conferences and seminars attended by the relevant sectors. A pilot audit/gap analysis exercise was completed in consultation with several volunteer businesses in the Dry Cleaning and Vehicle Refinishing sectors. A research project has now been completed to identify all SME businesses that will be potentially affected in Ireland. Each company has been directly contacted to individually alert them to their potential obligations. A directory of such businesses was also published in 2006 to enable them, as well as AICs and local authorities, to prepare for the implementation of the Solvents Directive by end October 2007. The team organised a national briefing session in November 2005 for all local authorities advising them of their role in the enforcement of the Regulations. Additionally, input was provided into research on

larger solvent users who are covered by the EPA's Integrated Pollution Prevention & Control (IPPC) licensing system and to the national report on the implementation of the Directive for the European Commission. There are a large number of SME companies potentially impacted by the Solvents Directive (up to 2,000) and so there is scope for significant reductions in hazardous waste solvents arising.

A related Single Market Directive (2004/42/CE - commonly called the Deco-paints Directive) limiting the solvent content of paints marketed to the household, professional and vehicle refinishing sectors will also need to be taken into account in rolling out the Solvents Directive. The EU Commission guidance on the implementation of Single Market Directives is applicable to the enforcement of the requirements of Deco-paints. At present, while the Regulations are currently in development, the EPA have been officially notified that the NWPP will be directly involved given the potential for reducing hazardous waste arisings at source.

- Implementation of the Polychlorinated Bi-phenyl (PCB) and Persistent Organic Pollutants (POPs) Regulations

The EPA published a Management Plan for PCBs in 2002 in accordance with the Regulations bringing Directive 96/59/EC into force. The plan described the position in Ireland regarding PCBs, provided technical guidance and outlined the requirements placed on any holders of such materials to notify the EPA. The plan and a notification form are available on the EPA website.

In order to ratify the UNECE Protocol to the Convention on Long-range Transboundary Air Pollution on Persistent Organic Pollutants (POPs), a range of measures relating to control of production, placing on the market, use, stockpiles, release reduction and waste management need to be put in place.

Responsibility for all of these matters has now been delegated to the Core Prevention Team. Initial work has commenced to gather information on both issues and a full programme is expected to be developed in the next period.

Public Communications and Liaison

The Core Prevention Team prepared press releases on significant events during the roll-out of many of the projects described above, providing suitable copy to a variety of media publications. Every opportunity was taken to speak at relevant conferences/seminars on the National Waste Prevention Programme projects. Issues arising from the National Waste Report or other publications provided many opportunities to speak on the national radio and television. All of these activities are intended to raise awareness of the issues of waste prevention, correct waste management practices and of the ongoing prevention programme. The Core Prevention Team works closely with the Race Against Waste campaign that is promoting the message widely of "Reduce, Reuse, Recycle" which links well with the objectives that the prevention programme is pursuing.

3. Future Work

With the bedding down of the wide range of practical and applied waste prevention projects as reported above, it is planned in the next period to develop a Waste Prevention Strategy. This will include short, medium and long-term goals/milestones with resource requirements over a period of years. Consideration is being given to the appointment of a Research Fellow to develop indicators and targets for waste prevention. This work will be developed in line with the Environmental Research, Technological Development and Innovation (ERTDI) Waste Prevention Framework and the revised National Hazardous Waste Management Plan.

Each of the projects as described above will continue to be progressed to completion or continued as appropriate in consultation with all collaborating parties. Opportunities for widespread dissemination of any emerging lessons learned will be sought on an ongoing basis. Ideas and solutions emerging from the rollout of the different projects will be pursued and incorporated into the overall programme.

As the projects described above develop and resources allow, consideration will be given to the initiation of additional waste prevention projects. For example,

- the development of widespread capacity in Environmental Management Accounting in businesses would enable key decision makers to identify the true costs of waste and develop innovative ways of resolving the issue themselves;
- strengthening the links between waste prevention and Environmental Management Systems in IPPC licensed (and other non-licensed) companies could ensure waste is further reduced in many more companies in Ireland;
- development of Materials Flow Indicators and Ecological Foot-printing of waste would enable the wider discussion of such issues with economic policy-makers and analysts;
- the widespread dissemination of Green Procurement (for the public and private sectors) could also effectively reinforce the work of the Market Development Group and the National Waste Prevention Programme.

The Core Prevention Team will keep best practice and research on prevention initiatives under review to see if any lessons learned could be applied to the existing or new projects.

4. Conclusions

In this, the second year of the National Waste Prevention Programme, considerable progress has been made by the Core Prevention Team in developing a wide range of relevant practical projects. These applied projects mainly target the industrial/commercial and the household sectors, as these are the waste streams of greatest concern.

In the years to come, it is hoped that these waste prevention projects and the other ongoing initiatives will yield important results. The Core Prevention Team will work to ensure that all lessons learned are applied to the ongoing development and embedding of a culture of waste prevention in Ireland. However, it is imperative that different sections of society are prepared to play their part in the ongoing effort. Best practice means for enabling the widespread adoption of the techniques and methods of waste prevention will be kept under continual review. This will include taking cognisance of advice and recommendations offered by the National Waste Prevention Committee.

Waste prevention is an important strategic activity for Ireland to engage with in order to ensure sustainable, competitive growth into the future. The attainment of sustainable consumption and production is therefore a long-term strategic national objective. This will need sustained effort by all stakeholders and adequate resources over many years to ensure its accomplishment.

Appendix A

National Waste Prevention Committee Representatives

Representative	Organisation
Dr. Gerry Byrne, Chairman	Environmental Protection Agency
Mr. Pat Macken / Ms. Nuala Bannon	Department of the Environment, Heritage & Local Government
Mr. Dale Crammond	Department of Agriculture & Food
Ms. Margo Monaghan	Department of Enterprise, Trade & Employment
Mr. Declan Nelson	City & County Managers Association
Mr. Donal Buckley	Irish Business & Employers Confederation
Mr. Brendan Keane	Irish Waste Management Association
Dr. Duncan Martin	Chartered Institute of Waste Management
Ms. Marion Byron	Irish Pharmaceutical & Chemical Manufacturers Association
Mr. Des Cummins	Small Firms Association
Dr. John Ryan	Irish Small Medium Enterprises
Mr. Tom Dunne	Irish Farmers Association
Mr. Fred McDarby	Enterprise Ireland
Ms. Bernie Walsh	Comhar
Mr. Noel Duffy	Clean Technology Centre
Mr. Frank Corcoran	Environmental NGO's Core
Mr. Paul Javens	Chambers of Commerce of Ireland
Mr. Conor Creedon	Irish Creamery Milk Suppliers Association

Appendix B

Terms of Reference

National Waste Prevention Committee TERMS OF REFERENCE

- Monitor the development and implementation of the National Waste Prevention Programme;
- Monitor the implementation, by relevant public authorities, of National Hazardous Waste Management Plan recommendations;
- Advise and provide strategic direction to the Core Prevention Team in developing and driving the National Waste Prevention Programme;
- Provide input to the Environmental Protection Agency for the purpose of section 26(6) of the 1996 Waste Management Act;
- Identify priorities for action and make recommendations to relevant public authorities and private bodies;
- Consider and make recommendations to the Minister for the Environment, Heritage and Local Government regarding appropriate policy and legislative initiatives;
- Have regard to national, European Union and international policy and legislation and best practice in relation to waste prevention and hazardous waste management;
- Facilitate, support and promote co-ordination and liaison between relevant bodies, public and private, on the National Waste Prevention Programme and the National Hazardous Waste Management Plan;
- Consider and make recommendations to relevant bodies regarding public awareness requirements in relation to hazardous waste and the prevention of waste;
- Monitor and evaluate new research and data on waste prevention, trends in hazardous and non-hazardous waste production and waste management practices;
- Consider and make recommendations to the Environmental Protection Agency and the Department of the Environment, Heritage and Local Government on research priorities;
- Monitor progress in sectoral producer responsibility initiatives;
- Disseminate information on best practice in waste prevention and hazardous waste management;

- Consider and make recommendations to relevant bodies regarding the provision of funding to support implementation of the National Waste Prevention Programme and the National Hazardous Waste Management Plan; and
- Prepare and submit to the Minister for the Environment, Heritage and Local Government an annual report outlining progress on the implementation of the National Waste Prevention Programme and the National Hazardous Waste Management Plan.