

epaNews

The newsletter of the Environmental Protection Agency

Ireland's Environment 2008

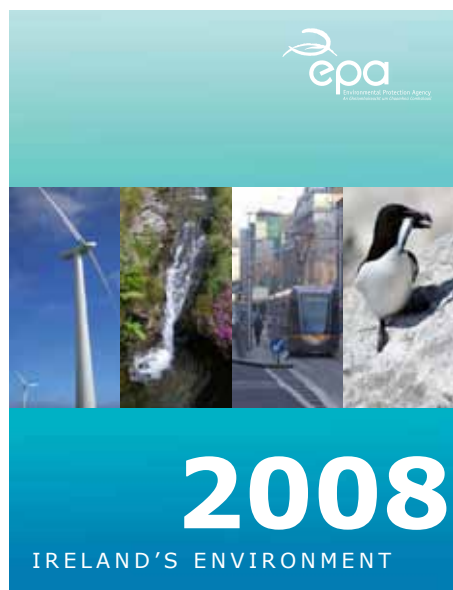
In October 2008, the EPA published its most recent report on the state of Ireland's natural environment. The report, *Ireland's Environment 2008*, provides an integrated assessment of the overall quality of Ireland's environment, the pressures being placed on it and the societal responses to current and emerging environmental issues. 'State of environment' reports are published by the EPA every four years and provide a snapshot of Ireland's environment at a particular time. They provide an evidence-based analysis to allow trends and changes in the environment to be tracked from one report period to the next and to aid policy makers and others to assess progress in key areas.

Environmental issues can no longer be considered in isolation, and the impact of human activities on the environment

is increasingly being recognised. Social and economic drivers such as population growth, economic activity and consumption patterns place pressures on the environment, and these pressures must be managed and controlled in order to minimise their environmental impacts and to avoid serious environmental damage. In previous 'state of the environment' reports there was limited capacity to assess how socio-economic projections or new developments might impact on future environmental quality.

To bridge that gap the EPA initiated a research project jointly with the Economic and Social Research Institute. In the same way that economists forecast macroeconomic indicators, such as GNP growth, unemployment and inflation, the objective of this research is to produce forecasts of environmental pollutants and waste generation and to develop scenarios to better inform decision and policy making. Though the research is not complete, it is sufficiently advanced to allow some preliminary analysis in this report. Future 'state of environment' reports will include further projections and scenario analyses.

The report is available from the EPA Publications' Office, McCumiskey House, Richview, Dublin 14 on 01-2680100 - €20 or on the EPA website at <http://www.epa.ie/whatwedo/assessment/soe/>.



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Main Findings

Since the previous report in 2004, Ireland has experienced significant economic and population changes, which has in many cases caused an intensification of pressures on the environment. Despite this, the report concludes that Ireland's environment is still generally of a high quality overall, although there is no room for complacency. It is clear that Ireland has made progress in a number of important respects over recent years. For example, the EU emissions trading scheme was successfully implemented in Ireland and is making an impact in tackling greenhouse gas emissions for the major producers. Emissions to air of sulphur dioxide, volatile organic compounds and ammonia have been successfully reduced in line with Ireland's international commitments, while producer responsibility initiatives for waste electrical and electronic equipment and for packaging waste have been very successful in tackling these priority waste streams.

(Continued on page 4...)

Director General's Statement



Welcome to the Spring edition of *epaNews 2009*. The EPA recently published the *Annual Highlights 2008* report, which provides a summary of the key activities and environmental and organisational outcomes achieved during the year. Once more, 2008 was a very busy and challenging year for the EPA. At the start of the year, there was little indication that the world was facing an economic crisis on the scale witnessed in the past few months. Yet, we must continue to face up to, and deal with, the main environmental challenges facing Ireland in the coming years. Ireland's environment is a key strategic asset for the country and we must protect, manage and invest in it to secure a healthy society and a strong economy into the future.

As you will read elsewhere in this newsletter our fourth 'state of the environment' report, *Ireland's Environment 2008*, was published in October. This flagship report is a comprehensive assessment of Ireland's natural environment.

The EPA's *2020Vision* set out goals for Ireland's environment under the headings of limiting and adapting to climate change, clean air, protected water resources, protected soil and biodiversity,

sustainable use of resources and integration and enforcement. The work of the EPA is fully aligned to this vision and this is reflected in the structure of the *Annual Highlights 2008* report, which enables the reader to see how the work of the EPA in 2008 helps us to move towards achieving these goals.

These are challenging goals and the EPA is now engaging with many other organisations and individuals in finding ways to move us along in the right direction. During 2009 and in future years, building alliances and networks with other groups and organisations will become increasingly important, given the wide range of actors involved in environmental protection. The new economic situation also calls for public sector organisations to become highly efficient in their use of scarce resources. Put simply, we have to be able to do more with less and I am committed to continuing to ensure that the EPA is an organisation that gives good value for money.

SOME KEY ACTIVITIES IN 2008:

Environmental Research & Innovation

During 2008, a range of high profile research reports were published, providing input to policy development and support to the implementation of EU legislation in Ireland. 2008 also saw the completion of a number of research projects on environmental technologies, a priority area for the EPA research programme in recent years, which feed directly into the national roadmap for environmental technologies and underpin the Smart Green Economy. The EPA held a major national conference which show-cased the depth and breadth of environmental research and innovation

that has been funded by the EPA over the past number of years. As part of its research programme, the EPA has also been working with the Economic and Social Research Institute (ESRI) and Teagasc on the development of a new way of forecasting how economic and social developments will affect the environment. The first results of this project, called the ISus project (Irish Sustainable Development Model) were presented in *Ireland's Environment 2008* and the ESRI's Medium Term Review 2008-2015.

Climate Change

The EPA continued to play its part in dealing with climate change by providing reliable information on greenhouse gas emissions, both current and future, and continuing to implement the emissions trading scheme in 2008. Funding of research into climate change continued to provide support to the Irish government at national and international level and to raise awareness about the issues facing Ireland.

Water Management and Protection

2008 was a significant year for water protection and management for the EPA. The EPA continued to deliver on its commitments under the Water Framework Directive. 2008 was our first full year with powers of supervision over the production of drinking water by public authorities and the year where we started licensing sewage discharges. These are two very significant measures, which in time will lead to improved water protection and management in Ireland. The introduction of licensing for waste water treatment discharges is particularly welcome as they were the last major unregulated point discharges into the aquatic environment.

Director General's Statement



Licensing and Enforcement

2008 has also been a busy year for both licensing and enforcement. In the licensing areas, 52 final decisions were made on licence applications and two Oral Hearing were held. The EPA commenced the licensing of urban waste water discharges during 2008, with ten licences issued. The EPA's Office of Environmental Enforcement continued to use its enforcement powers both to enforce EPA licences and to bring about improved and more consistent enforcement by local authorities. The EPA took 20 prosecutions at District Court level and three files were prepared for the Director of Public Prosecutions.

Waste Management and the Sustainable Use of Resources

During 2008 the EPA published the second *National Hazardous Waste Management Plan*. The Plan makes 29 recommendations that, when implemented, will reduce the generation of hazardous waste, ensure that all hazardous waste is collected and managed appropriately, increase Ireland's self-sufficiency in hazardous waste management, and deal with the legacy and contamination of past practices involving hazardous materials. The EPA also highlighted the difficulties

facing Ireland in relation to meeting the targets for diversion of biodegradable municipal waste from landfill and set out a number of options for dealing with the issue. Our dependence on landfill as the primary route for disposal of municipal waste must be reduced. Alternative infrastructure for dealing with biodegradable waste is badly needed.

However, when it comes to protecting the environment, there is no room for complacency. We must continue to work hard at protecting the environment where it is in good condition, and reversing environmental degradation where that has occurred. This is equally the case in times of economic challenge as in times of economic growth. It would be a shame to allow the progress made in recent years to slip. The Environmental Protection Agency has an important role to play in ensuring that the protection and improvement of Ireland's environment remains centre stage and I look forward to leading the EPA through these more challenging times.

Mary Kelly

**Dr. Mary Kelly,
Director General, E**

Waste Water Discharge Authorisations

Dun Laoghaire-Rathdown County Council

Shanganagh,
Reg No. D0038-01

Wexford County Council

Courtown/Gorey
Reg No. D0046-01

Donegal County Council

Killybegs
Reg No. D0011-01

Wicklow County Council

Greystones
Reg No. D0010-01

Cork County Council

Southern Division
Blarney
Reg No. D0043-01

Meath County Council

Navan
Reg No. D0059-01

Westmeath County Council

Mullingar
Reg No. D0008-01

Wexford County Council

Enniscorthy
Reg No. D0029-01

Cork County Council

Southern Division
Ballincollig
Reg No. D0049-01

North Tipperary County Council

Roscrea
Reg No. D0025-01

Longford County Council

Longford
Reg No. D0060-01

North Tipperary County Council

Nenagh
Reg No. D0027-01

Ireland's Environment 2008 (...Continued from page 1)

Increased investment in the provision of upgraded and new wastewater treatment infrastructure has resulted in some improvements in the quality of Irish surface waters, although much still remains to be done in this regard.

Nonetheless, the report also points to considerably less success in a number of other environmental areas and it identifies key challenges facing Ireland in the coming years. These are:

- Limiting and adapting to climate change;
- Reversing environmental degradation – particularly in relation to water pollution and the conservation status of habitats;
- Mainstreaming environmental considerations across all sectors of the economy; and
- Complying with environmental legislation and agreements

Research and Innovation

The report also underlines the role that science, research and innovation can play in rising to environmental protection challenges. Quality research provides the foundation for credible decision-making, while technology and innovation provide solutions to environmental problems. In addition to ongoing research in the environmental sciences, further research is required to understand better the socio-economic context of environmental issues. The continued strong investment in environmental research is crucial, as today's environmental research will become tomorrow's environmental protection.

The publication of *Ireland's Environment 2008* comes at a time when Ireland is facing difficult economic challenges. Within the context of sustainable development, economic well-being is intrinsically linked to protecting the environment and it is vital at this time not to lose sight of the environmental priorities. The environment is a key strategic resource and asset for Ireland, and should be protected and managed to ensure that it continues as the basis for a healthy society and a strong economy into the future.

MAIN ENVIRONMENTAL CHALLENGES FACING IRELAND

Limiting and adapting to climate change

Climate change has been identified as the greatest challenge facing this generation. *Ireland's Environment 2008* highlights the major ongoing challenge for the State in meeting its greenhouse gas emission limits under both the Kyoto Protocol and

the proposed EU 2020 targets. The EU Commission's initial proposal for the post 2012 period requires Ireland to deliver by 2020 a twenty per cent reduction, relative to 2005, in emissions of greenhouse gases (excluding sectors covered by the Emissions Trading Scheme). The projections indicate that the emissions will be at least seven million tonnes higher than this target.

The report also emphasises the urgency of Ireland getting to grips with the unavoidable consequences of climate change, for example by investing in flood prevention and ensuring efficient management of water resources. Building on some recent advances, ongoing research and technological development is needed to improve the understanding of climate impacts and the implications for Irish society, and to support the development of innovative technological solutions.

(Continued on page 5...)



Ireland's Environment 2008 (...Continued from page 4)

Reversing Environmental Degradation

The report shows that 29 per cent of river length in Ireland is polluted to varying degrees; that the condition of 66 lakes and of 15 estuarine water bodies is unsatisfactory; and that groundwaters contain elevated nitrate concentrations in parts of the east and elevated phosphate concentrations in parts of the west. Sewage discharges and agricultural sources are identified as the main causes of water pollution and these findings can be expected to be reflected in the River Basin Management Plans prepared under the EU Water Framework Directive.

In addition, many aspects of Ireland's flora and fauna remain under serious threat from human activities leading to, often irreversible, losses. The European Court of Justice ruled in 2007 that Ireland did not have in place a system of strict protection for specific protected species. In 2008 the conservation status of key habitats, that Ireland is required to protect under the EU Habitats Directive, were assessed as being far from satisfactory, with particular reference to bogs, several categories of dunes, lakes, woodlands and natural grasslands. While the status of protected species was somewhat more satisfactory, seven species were identified as having bad conservation status, including the freshwater pearl mussel and the Atlantic salmon.

Mainstreaming environmental considerations across all sectors of the economy

Economic well-being is intrinsically linked to a clean and protected environment and therefore economic policies must continue to integrate environmental issues. The provision and maintenance of sufficient infrastructure in the areas of sustainable transport, renewable energy, wastewater treatment,

waste management and flood prevention and control are critical for sustainable development in Ireland.

In achieving economic development that is sustainable, it is essential that the natural resources and environmental conditions that are fundamental to the well-being of future generations are not exhausted or degraded. It is important therefore that all sectors fully engage in the process of addressing the requirements of the Strategic Environmental Assessment Directive, where appropriate.

However, the responsibility for addressing environmental issues is not just the role of governmental bodies, it is shared by every member of society. Changing behaviours of individuals and ensuring environmentally responsible business is essential to meet the environmental challenges identified in the report – particularly in the areas of energy use, transport, heating, water conservation and waste prevention and management.

Similarly, businesses must also take greater responsibility for their environmental performance and be conscious that the cumulative impact on the environment of small, medium and large enterprises can be substantial. Business representative bodies have an important leadership role to play in increasing awareness of economic benefits of good environmental performance. Participation in green business initiatives such as *Green Business* and the *Cleaner Greener Production Programme* is a step in the right direction for Irish businesses.

Complying with environmental legislation and agreements

The report stresses the need for Ireland to continue to develop a strong culture of compliance with environmental

legislation to ensure a high quality environment. State bodies and local authorities must be proactive guardians and stewards of the environment, but all business representatives and individual citizens must also be environmentally conscious and compliant with environmental laws.

Consistent enforcement of environmental legislation at national and local level will ensure that the 'polluter pays'. Those who flout environmental law must be made accountable for their actions. Only in this way will incidents of littering, fly-tipping and backyard burning of household waste become a thing of the past. Ireland faces difficult challenges in meeting many of its environmental protection obligations under European legislation and other internationally binding legal agreements. Ireland must avoid major financial penalties and the most challenging commitments lie in the following areas:

- Preventing deterioration of water quality, under the Water Framework Directive;
- Reducing greenhouse gases, under the Kyoto Protocol and the European Commission's Climate Action and Renewable Energy Package;
- Fulfilling Ireland's obligations on the designation, classification, management and protection of sites, under the Habitat and Birds Directive;
- Achieving emissions reductions targets for transboundary gases, particularly nitrogen oxide emissions, under the National Emissions Ceiling Directive; and
- Reducing biodegradable waste disposed to landfill, under the EU Landfill Directive.

Successful first year for the Green Hospitality Award

Mr Michael Kitt T.D., Minister of State for the Environment, Heritage and Local Government, presented 54 businesses with the *Green Hospitality Award* at a ceremony held at the Westin Hotel, Dublin recently. This award recognises achievements in becoming more resource efficient, saving money by preventing waste, and conserving water and energy, while still offering a high quality guest experience.

The project, funded by the EPA National Waste Prevention Programme, is working with individual Irish hotels over a four-year period, to significantly improve environmental management practices, prevent waste and encourage resource efficiency, while reducing operating costs for the sector. Over €3 million has been saved by the Hotel Sector as a direct result of participation in the project.

The target for 2009 is to expand the current membership of 180 hotels and catering firms to 300, expanding the scheme to other similar sectors, including

contract catering, nursing homes and hospitals. Over 80 members have gained a Bronze, Silver or Gold Award, making it one of the most significant schemes of its type in Europe.

In addition, a number of special achievement awards were presented to outstanding properties. Typical savings that hotels in the scheme have made in 2008 include:

- *Water* – Through the use of water efficient taps, showers and toilets, and leak detection programmes, savings of between €5,000 and €100,000 per hotel have been achieved, equal to 280,000 cubic metres of water (600 swimming pools), for the businesses involved.
- *Waste* – By reducing packaging, preventing waste and increasing recycling and segregation, each hotel has saved between €5000 and €45,000. This is equal to 4000 tonnes or 1600 skip full's of landfill waste for *Green Hospitality* members.

- *Energy* – Energy awareness and management programmes, installation of energy efficient equipment and lighting and the adoption of alternative energy sources has resulted in savings of between €10,000 and €100,000 per hotel, equal to 187,500 kWh per hotel. This is enough to light a 100w bulb in each hotel for 214 years.
- Other actions include reducing chemical use, sourcing sustainable and local food, carbon offsetting, educating suppliers and customers and developing environmental policies.

The *Green Hospitality Award* Project is a follow up to the EPA *Greening Irish Hotels* Project (www.epa.ie/downloads/pubs/research/tech/). That project found that the potential for environmental improvement and cost savings in the Irish hotel sector was considerable. It is estimated that Irish hotels could save over €100 million per annum by making environmental improvements, many at no cost or low cost. This illustrates that environmental best practice is also a way to improve profitability.

Of course, choosing a *Green Hospitality Award* hotel when booking conference venues, accommodation and meeting rooms means visitors are not only supporting this project but also playing their part in protecting our environment.

Further information on the *Green Hospitality Award*, including a list of participating hotels and this years award winners is available at www.ghaward.ie.



Laura Burke, Director, EPA and Maurice Bergin, present the Clarion Hotel, Dublin Airport Hotel with the prize for Most Improved Waste Management.

Irish Spatial Data Exchange receives Cross Agency eGovernment Award

Mary Hanafin, T.D., Minister for Social & Family Affairs, presented the 2009 Cross Agency eGovernment Award to the *Irish Spatial Data Exchange* at an award ceremony on 19th February.

The *Irish Spatial Data Exchange* is a joint initiative between the Coastal and Marine Resource Centre at UCC; the Department of Communications, Energy and Natural Resources; the Environmental Protection Agency; the Geological Survey of Ireland; the Department of Environment, Heritage and Local Government and the Marine Institute.

The *Irish Spatial Data Exchange* (www.isde.ie) is a data discovery service for scientific and environmental data holdings by public, academic and private sector organisations. The service provides users with a single point of access to search for data from any partner's data holdings, something which was previously not possible. The required data can then be retrieved, via an online download, viewing or request service.

Ireland's eGovernment Awards, in association with eircom, jointly run by the Public Sector Times newspaper and web usage and web strategy experts Elucidate, are now in their seventh year. They are the recognised benchmark for excellence in Irish eGovernment services and standards. The Awards raise awareness and recognise the innovators, developers, forward thinkers and experts who are pioneering the changes happening in how the Irish Government delivers services to its citizens.



Back: Tom Stafford (EPA), Yvonne Shields (Marine Institute), Mary Hanafin, T.D. (Minister of Social & Family Affairs), Koen Verbruggen (Geological Survey of Ireland).

Front: Ray Scanlon (Geological Survey of Ireland), Eoin O'Grady (Marine Institute) and John Evans (Marine Institute)

GMO consents issued since September 2008

Professor Padraic G. Fallon

Institute of Molecular Medicine, Trinity Centre for Health Sciences, Trinity College, Dublin St James's Hospital, Dublin 8.

Professor Ulla Knaus

UCD School of Medicine & Medical Sciences, Conway Institute, University College Dublin, Belfield Campus, Dublin 4.

Dr. Karen Deeshan

Biochemistry Dept, BioSciences Institute, UCC, Cork.

Professor Michael Scott

School of Biomolecular and Biomedical Science, UCD, Belfield, Dublin 4.

Pfizer Biotechnology Ireland

PO Box 19, Shanbally, Ringaskiddy, Co. Cork.

Dr. Stephen Rea

Department of Biochemistry, National University of Ireland, Galway

Professor John Findlay

Department of Biology, NUI Maynooth, Co. Kildare.

Dr. Peadar Lawlor

Pig Production Development Unit, Moorepark Research Centre, Fermoy, Co. Cork.

Professor Robert Lahue

Department of Biochemistry, NUIG, Galway.

Dr. Trudee Rfair

Room 246A, Veterinary Sciences Centre, School of Agriculture, Food Science and Veterinary Medicine, College of Life Sciences, UCD, Belfield, Dublin.

Dr. Neil Ferguson

Conway Institute, University College Dublin, Belfield, Dublin 4.

Professor Mohamed Al-Rubeai

Physical Sciences, School of Chemical & BioProcess Engineering, Engineering & Materials Science Centre, UCD, Belfield, Dublin 4.

Dr. Neil O' Docherty

UCD, Belfield, Dublin 4.

Dr. Siobhan McMahon

NUIG, University Road, Galway.

STRIVE

Environmental Protection Agency Research
Programme 2007 - 2013



EPA STRIVE News

The Science, Technology, Research and Innovation for the Environment (STRIVE) programme

KEY HIGHLIGHTS - STRIVE 2008

- Award of 30 projects, corresponding to a budget commitment of approximately €11m.
- Award of 16 PhDs, 12 Masters and 6 Research Fellowships representing a commitment from the EPA of approximately €4m.
- Publication of 30 research reports in 2008.
- Launch of the online interactive map interface: *National Soil Database Archive*.
- Hosted Climate Change Research Programme seven part lecture series on climate change.
- Hosted National Environmental Research Conference, "Today's Environment Research - Tomorrow's Environmental Protection" (February 2008).
- Hosted EPA Researcher Seminar in November 2008, as part of Science Week.
- Retained six projects with Irish participants, under the FP7-Environment call in 2008, retained for funding.
- Compilation of an online *Catalogue of Irish Expertise in Environmental Research*.

EPA RESEARCHER SEMINAR 2008

The EPA Researcher Seminar 2008 was held in Dublin in November. These presentations are available for download from on the EPA website at: www.epa.ie/news/events/research/past/.

Included in the presentations were background information on FP7 Marie Curie Actions and Fulbright award.

The Best Presentation awards were given to Ms Brid Walsh from NUI Galway for her talk: *A best practice approach to socially sustainable wind farm development applicable to Ireland*, and to Dr Pádraig Murphy (DCU) for his talk: *Nanotechnology: engaging the public on health, environmental and social issues*.

The Best Poster award was given to Dr Shouming Zhou from University College Cork for his poster: *Secondary Organic Aerosol Formation from the Photo-oxidation of Naphthalene*.



Plenary Session - EPA Researcher Seminar, 13 November 2008 - Dublin

CLIMATE CHANGE RESEARCH PROGRAMME

In October, the Climate Change Research Programme continued its lecture series, by hosting a further international speaker, Prof. Haeberli (University of Zurich) who gave a talk on glacier trends. His presentation *Glacial Warning - The Climate Change Canary* provided an overview of the historical development, modern strategies, most important results and future challenges of internationally coordinated climate-related glacier monitoring. He illustrated, from analysis of the most recent data, that glaciers and ice caps are melting at an increasing rate. The implications of recent trends in glacial melting were explored from the perspective of resource management and ecosystem change.

All talks in the climate change lecture series are now available to view as video broadcasts on the EPA website at www.epa.ie/downloads/pubs/other/events/oclr/ccvideo/.

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Programme 2007 - 2013



EPA STRIVE News

The Science, Technology, Research and Innovation for the Environment (STRIVE) programme

STRIVE FEATURES

Joint EPA-HEA Environmental Technology Centre

The fifth cycle of the Programme for Research in Third-Level Institutions (PRTL I 5) was launched by the Minister for Education and Science on the 8th January 2009. This cycle includes a call for proposals for five named “*National Shared Facilities*”. These named national Infrastructures have been identified from agency/government departmental consultation, the HEA/Forfas Research Infrastructure Review and other informing policy documents.

Included in these National Shared Facilities is an Environmental Technology Centre. Proposals are invited for a national research ‘centre of excellence’ in the area of environmental technologies, specifically Waste Conversion Technologies, with special reference to solid and liquid waste management and to provide laboratory and pilot plant space for development and demonstration of waste and wastewater conversion technologies. Proposals should put forward concepts and ideas for technologies to maximise the recovery of high-value products and energy contained within by-product / waste streams.

Should a proposal for the Environmental Technology Centre be successful, the EPA would publish a targeted call for proposals to coincide with the first year

of operation of the centre(s) that would be open only to groups who are formally part of the centre(s). The value of research supported through this call would be of the order of €1m.

All queries regarding this call should be directed to the HEA by emailing FAQ@hea.ie.

Further information and the Call for Proposals can be found at drupal.hea.ie/en/node/1224.

CGPP Awards

Following the evaluation of the 62 proposals received under Phase Four of the *Cleaner Greener Production Programme*, 16 projects have now been offered funding. This represents an EPA commitment of circa €2m. Contracts are currently being processed.

The *Cleaner Greener Production*

Programme encourages Irish business and organisations to implement cleaner greener practices. To date, the EPA has committed €3.7m to 59 organisations that have received part funding for demonstration projects under this programme over 3 Phases. The long-term aim is to try to ensure that cleaner greener production and eco-efficiency become the established norm in Ireland. This programme will further support the Governments framework for a ‘Smart Economy’.



More information on CGPP can be found on the EPA website at www.epa.ie/researchandeducation/research/cgpp/.



Field trials including icy arctic winter of the Hudson Bay in northern Canada

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Environmental Technologies Research: Novel Method to Monitor Air Quality - Trace Radical Absorption through Cavity-Enhanced Spectroscopy (TRACES)

During the TRACES project, the Laser Spectroscopy Research Group at UCC developed a novel spectrometer to monitor the free radical NO_3 in the atmosphere. This real-time spectrometer uses an optical approach called incoherent broadband cavity enhanced spectroscopy (IBBCEAS). In an international instrument intercomparison experiment performed in Germany during 2007, the Cork instrument performed excellently in comparison to several other devices developed by scientists from all over the world. The UCC trace radical spectrometer was also employed in two field trials including icy arctic winter of the Hudson Bay in northern Canada and stormy coastal weather in Roches Point near Cork. The Final report STRIVE Report 15 can be downloaded from the EPA website at www.epa.ie/downloads/pubs/research/tech/.

Ag-Biota project

The Ag-Biota project (*Monitoring, Functional Significance and Management for the Maintenance and Economic Utilisation of Bio-diversity in the Farmed Landscape*), co-ordinated by Dr. Gordon Purvis (UCD), developed national expertise in biodiversity research within



the context of modern agriculture by bringing together a critical mass of researchers from University College Dublin, University of Limerick and Teagasc. The project has identified suitable bio-indicators for the environmental impacts of agriculture and will assist in the national aspiration to halt and reverse the decline in biodiversity within our wider countryside. Final results and findings will be presented at the forthcoming Ag-Biota conference on the **27th March 2009**. For more information on the project, please consult www.ucd.ie/agbiota/index.htm.

INTERNATIONAL CONTEXT SKEP Call

SKEP ERA-NET is a partnership of 17 government ministries and agencies, from 13 European countries, responsible for funding environmental research. The project aims to improve the co-ordination of environmental research in Europe.

The third joint call of the SKEP project, opened in February 2009, addresses three aspects of the impacts of emerging technologies:

- What is the current evidence base for regulation?
- What are the regulatory requirements to be addressed for emerging issues?
- What should regulators do (differently) to meet these requirements?

Research in these areas will be supported by targeted case-studies to assess the environmental, waste and health impacts of emerging technologies. For more information on this call and the SKEP projects please visit www.skep-era.net/



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The Science, Technology, Research and Innovation for the Environment (STRIVE) programme



Seventh
EU Framework
Programme
IRELAND

European Commission Framework Programme 7 (FP7) Update 2008 Calls:

Preliminary results from the FP7 Environment Calls in 2008 show that six projects - including Irish partners - were successful. Pending contract negotiations, this could correspond to circa €1.5m for Irish researchers, which is in line with the national targets in the environment field.

The six projects are:

- **WISER** (*Water bodies in Europe: Integrative Systems to assess Ecological status and Recovery*) with Trinity College Dublin,
- **MESMA** (*Monitoring and Evaluation of Spatially Managed Areas*) with University College Cork,
- **HERMIONE** (*Hotspot Ecosystem Research and Man's Impact on European seas*) with National University of Ireland, Galway and University College Cork,
- **KnowSeas** (*Knowledge-based Sustainable Management for Europe's Seas*) with University College Cork,
- **ZeroWIN** (*Towards Zero Waste in Industrial Networks*) with University of

Limerick and MicroPro Multimedia Computer Systems Ltd.,

- **ComEnvir** (*Communicating environmental impacts on water quality, availability and use*) with Ecological Consultancy Services Ltd..

Online Catalogue of Irish Expertise in Environmental Research:

This Catalogue of Irish Expertise provides an insight into Irish companies and research organisations active in the field of Environmental Research. This online database is provided to support researchers and enterprises in establishing and strengthening international co-operations for research and technological development. Its main objective is to provide a useful tool for finding appropriate partners for R&D activities.

The database is available at
[www.epa.ie/researchandeducation/
research/funding/fp7/
catalogueofirishexpertise/](http://www.epa.ie/researchandeducation/research/funding/fp7/catalogueofirishexpertise/)

RESEARCH RESOURCES

The following websites provide additional resources of interest for researchers:

- EPA Research Publications: [www.epa.
ie/downloads/pubs/research/](http://www.epa.ie/downloads/pubs/research/)
- ERC Environmental Research Data Archive website: <http://erc.epa.ie/safer/>
- National Soil Database Archive website: <http://erc.epa.ie/nsdb/>

- Cleaner Greener Production Programme website: [www.
cleanerproduction.ie](http://www.cleanerproduction.ie)
- FP7 website: www.fp7Ireland.com
- Online Catalogue of Irish Expertise in Environmental Research: [www.epa.
ie/researchandeducation/research/
funding/fp7/catalogueofirishexpertise/](http://www.epa.ie/researchandeducation/research/funding/fp7/catalogueofirishexpertise/)
- SKEP website: www.skep-era.net/

2008 Environment Ireland Conference

The annual *Environment Ireland* conference was held last September, in the Croke Park Conference Centre, Dublin. The theme of the conference was 'Achieving a Sustainable Ireland'.

This was the fourth *Environment Ireland* conference. *Environment Ireland* is Ireland's largest conference on environmental policy and management.

The conference was once again attended by over 300 delegates, bringing together all those individuals and organisations with an interest in environmental policy and management. The conference created a genuine, in-depth understanding of those areas where environmental issues impact on the island of Ireland as a whole and how progress can be made on them.

The environmental goals set out in the EPA's strategy *2020 Vision* highlighted six themes, which reflect the key issues for environmental protection. All Irish citizens are entitled to expect 'Clean Air', 'Protected Water Resources' and 'Protected Soil and Biodiversity'. 'Limiting and Adapting to Climate Change', 'Sustainable Use of Resources' and 'Integration and Enforcement' are key actions that need to be pursued vigorously to ensure a sustainable society.

The EPA is now engaging with other organisations to achieve the targets set out in this strategy.

Addressing many of these challenges will be difficult and, therefore, all sectors of

society must work together. An integrated approach from organisations across the public sector will be required to tackle these important environmental issues, particularly in light of the current difficult economic times.

The *Environment Ireland* conference presented the perfect opportunity for people from varied backgrounds and interests to meet and network. Ireland is a small country, which affords us the chance to work together in partnership to face up to the challenges ahead.

The *Environment Ireland* conference is organised by *bmf conferences* in association with the EPA and the Department of Environment, Heritage and Local Government.



Pictured at the 2008 Environment Ireland Conference were Dr. Mary Kelly (Director General, EPA), Mr. John Gormley (T.D. Minister for the Environment, Heritage and Local Government) and Mr. Tom O' Mahony (Assistant Secretary, Department of the Environment, Heritage and Local Government).

Monitoring Dioxins and other Micropollutants

In order to maintain surveillance of dioxins, furans and other micro pollutants in the Irish Environment, the EPA carries out surveys of dioxin levels in cows' milk. More than 90 per cent of human exposure to dioxins is through the food supply, especially in fat-containing media such as meat and dairy products, fish and shellfish. Much lower levels are found in plants, fruit and water. Even though human exposure from air is negligible, the primary mechanism for dioxins entering the food chain is through atmospheric deposition of dust and soot particles.

Since dioxins can be deposited by atmospheric sedimentation onto soil and vegetation such as grass, cows' milk is considered to be a particularly suitable matrix for assessing the presence of dioxins in the environment, as long as sampling is carried out during the grazing season.

Dioxins

Dioxins are a group of chemicals formed during incomplete or poorly controlled combustion processes, such as accidental fires and backyard waste burning, as well as from some industrial processes such as paper pulp bleaching and pesticide manufacture. Because of their environmental significance, the term 'dioxins' is often also used for *polychlorinated dibenzo para dioxins (PCDDs)* and *polychlorinated dibenzofurans (PCDFs)*. Certain dioxin-like *polychlorinated biphenyls (PCBs)* with similar toxic properties are often also included under the term 'dioxins'. Dioxins and PCBs are included in the "dirty dozen" list of dangerous substances known as Persistent Organic Pollutants or (POPs), which are subject to binding regulation at UN and EU level.

Sampling and Results

The most recent EPA report on dioxin monitoring covers a survey undertaken in the 2007 grazing season. Two types of sampling stations were chosen:

Type A: background stations covering the entire country (24 samples).

Type B: potential impact stations in areas of perceived potential risk (13 samples).

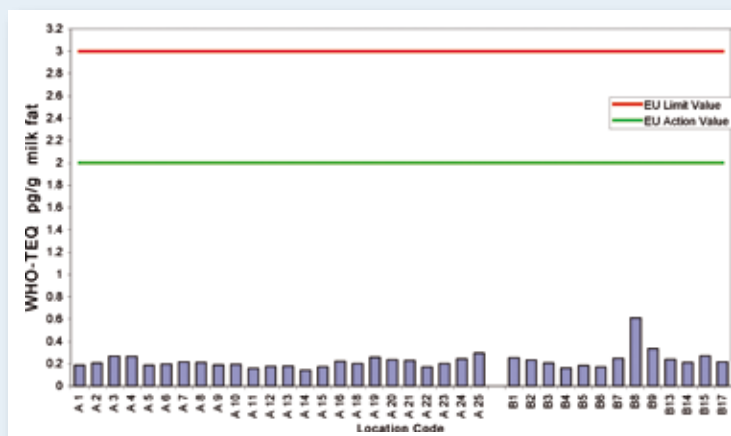
The results for dioxins are summarised in Figure 1 using the standard units of WHO Toxic Equivalent (WHO-TEQ). The ranges for concentrations of dioxins in milk fat were 0.141 to 0.611 pg WHO-TEQ/g, with overall mean values of 0.225 pg WHO-TEQ/g. When PCBs are included, the range is 0.232 to 1.51 pg WHO-TEQ with a mean of 0.425 pg WHO-TEQ/g.

These levels are well below the EU limit in milk and milk products of 3.0 pg WHO-TEQ/g for dioxins only, and 6.0 pg WHO-TEQ/g for dioxins and PCBs combined.

All levels recorded in this survey compare favourably with those taken from a random selection of similar studies in other EU countries. There is also little doubt that the trend of reductions observed in earlier surveys could be attributed to a number of regulatory measures and various technological

advances, reflecting the pattern shown in similar surveys across Europe. Examples of measures that were taken in Ireland, which may have had an impact on dioxin levels, were the virtual abolition of leaded petrol and the shutting down of all hospital incinerators. These were found to be inadequate and could not meet the high standards required by the EPA under IPC licensing.

The shutting down of an iron smelting facility in Cork will also have had an effect. Brominated flame retardants (BFRs) and brominated dioxins (PBDD/PBDF) were also measured as part of the main survey. BFRs, many of which are now banned, are found in furniture, fabrics and electronic products as a means of reducing the flammability of combustible organic materials. A broad range of the common BFRs was tested but only Polybrominated Diphenyl Ethers (PBDEs) were found. The range for PBDEs (5 samples) was 95 to 279 ng/kg fat with a mean of 152 ng/kg fat, slightly lower than the levels found in 2006 when these substances were included in the survey for the first time. These levels are relatively low by international comparisons. Brominated dioxins were not detected in the survey. They are usually formed through incineration of waste consumer products containing brominated flame-retardants.



The full report, *Dioxin Levels in the Irish Environment 2007*, may be found at www.epa.ie/downloads/pubs/air/quality/.

FIGURE 1

Water Quality in Ireland 2004-2006

The *Water Quality in Ireland* report, published by the EPA in November, presents a comprehensive review of all the main aspects of the quality of the aquatic environment for the years 2004 to 2006.

The report is based on measurements made on 1,151 rivers (13,240 km of river channel length), the four principal canal systems, 449 lakes, 69 estuarine and coastal waterbodies and at 137 groundwater sampling locations.

The water quality data have been generated primarily by the ongoing surveys carried out by the EPA and local authorities and are complemented by those provided by a number of other bodies, in particular the Central Fisheries Board and the Marine Institute.

The principal findings in the report are as follows:

Rivers and streams

- Unpolluted river channel length has increased by 2.1 per cent to 71.4 per cent (9,451km) since 2001-2003.
- Serious pollution, due largely to municipal waste discharges, has reduced further to 0.5 per cent of surveyed channel length (63.5 km).
- Nutrient enrichment affected 28 per cent of the river channel surveyed. The main suspected causes of this pollution are municipal and agricultural waste discharges.
- A marked reduction in the number of fish kills was recorded
- Nitrate concentrations are significantly above natural levels in rivers and streams in several areas, particularly in the southeast and south.

- The available data indicate that the levels of potentially dangerous substances in rivers are generally insignificant.

Lakes

- Almost 92 per cent of the total area of lake water examined was deemed to be in a satisfactory condition, showing natural or slightly enhanced levels of algal growth.
- Although open waters in the large western lakes showed low or moderate levels of planktonic algae, instances of excessive algal and attached plant growth occurred closer to the shore.
- Highly eutrophic or hypertrophic conditions continued to affect some lakes including Loughs Sillan, Oughter, Gowna and Ramor.

Estuaries and Coastal Waters

- Of the 69 tidal areas assessed for eutrophication, 54 (78 per cent) were classed as unpolluted or showing only slight signs of eutrophication.
- Eutrophic conditions were measured in 13 of the remaining 15 water bodies, while the other two were classed as potentially eutrophic.
- The levels of toxic contaminants in fish and shellfish in tidal waters remained low, and within the limits set for the protection of consumers.
- The levels of anthropogenic radioactivity in the Irish marine environment are low and do not pose a significant risk to human health.

Groundwaters

- Faecal coliforms were detected in one in four of the samples analysed (an increase on the previous period).



- Nitrate concentrations exceeded the threshold concentration in 9.5 per cent of the samples analysed. In two per cent of the samples the concentrations were above the drinking water mandatory limit.

Conclusions

The main conclusions in the report are that:

- There is an overall improvement in the quality of surface and groundwater in the state since the previous assessment period. However, this rate of improvement in surface waters is not sufficient to meet the requirement of the Water Framework Directive.
- Nutrient enrichment, causing eutrophication, is the main threat to aquatic ecosystems.
- The principal restorative measure required for surface water is nutrient loss control. This will necessitate further upgrading of sewage and industrial waste treatment plants and full implementation of the *National Action Plan* under the Nitrates Directive.
- Intermittent contamination of groundwaters with faecal coliforms is relatively widespread and constitutes a health risk to consumers of untreated drinking waters.

Air Quality in Ireland remains good

The EPA's *Air Quality in Ireland* report for 2007 was published in September. In 2007, air quality in Ireland was generally good throughout the country and complied with the air quality standards in force across Europe for all pollutants.

This annual report shows levels of air pollutants in ambient air. Results were based on monitoring data from 26 stations, producing hourly or daily data as required by the EU Directives on Air Quality.

The pollutants measured were:

- Nitrogen dioxide and oxides of Nitrogen
- Sulphur dioxide
- Particulate matter (PM₁₀ and PM_{2.5})
- Lead
- Carbon Monoxide
- Benzene
- Ozone

The pollutants of most concern in Ireland are nitrogen dioxide and particulate matter (PM₁₀). Nitrogen dioxide levels

were highest in the most urbanised areas, mainly due to traffic density. Particulates were highest in cities and smaller towns. This is most probably due to traffic density in cities and use of non-smokeless fuel in smaller towns. The results for 2007 show that there is a strong link between air quality and local emissions. Traffic and smoky fuel are the two main causes of poor air quality in Ireland. The EPA therefore would encourage members of the public to consider the environmental effects of their choice of domestic fuel and mode of transport.

Levels of sulphur dioxide, lead, carbon monoxide and benzene remained low and ozone levels remained below the "information threshold" throughout the year in 2007.

Air quality monitoring stations are located throughout the country with more located in bigger towns and cities than in less densely populated areas. Local authorities operate the monitoring networks in Dublin and Cork cities, while the EPA operates the monitors



in most of the rest of the country and mobile monitoring stations.

Students from Coláiste Ailigh, Letterkenny recently met the EPA to learn about air quality monitoring in Ireland. The transition year and leaving certificate chemistry classes, along with the Mayor of Letterkenny, Councillor Victor Fisher, attended a presentation on air quality before visiting an EPA station to see air quality monitoring in action. The mobile monitoring station is situated in the grounds of Donegal County Museum for one year to assess air quality in the town.

Real-time information, from this and other monitoring stations, is updated hourly and is available on the EPA website at www.epa.ie/whatwedo/monitoring/air/data. This website provides direct access to current levels of pollutants from relevant air quality monitoring stations across Ireland. The *Air Quality in Ireland 2007 - Key Indicators of Ambient Air Quality* report, available in both English and Irish, can be accessed on the EPA website at www.epa.ie/downloads/pubs/air/quality/.



Barbara O' Leary, EPA, speaks to students of Coláiste Ailigh, Letterkenny about air quality in Ireland.

EPA National Hazardous Waste Management Plan 2008-2012

In September 2008, the EPA published the *National Hazardous Waste Management Plan 2008-2012*. The Plan sets out a new framework for the management of hazardous waste in Ireland.

In 2007 there were 304,941 tonnes of hazardous waste generated (not including contaminated soil). This is a 7.3 per cent increase over 2006, and almost half of this waste was exported for treatment abroad. The largest quantity of hazardous waste is generated by Irish industry and includes such materials as industrial solvents, waste oils, industrial sludges and chemical wastes. The majority of this hazardous waste is managed responsibly and most facilities that manage hazardous waste are licensed and regulated by the EPA.

Households, small businesses, farms and the healthcare and construction sectors also generate large quantities of hazardous waste. This included batteries, electrical equipment, healthcare risk waste, solvent based paint, varnish waste, sheep dip and fluorescent lamps. While managed properly for the most part, some of this hazardous waste is not captured and is, in all likelihood, disposed of to landfill with general waste.

The EPA *National Hazardous Waste Management Plan* makes 29 recommendations that, when implemented, will:

- reduce the generation of hazardous waste by demonstrating available alternatives to Irish industry and society;
- ensure that all hazardous waste is collected and is managed appropriately;
- increase Ireland's self-sufficiency in hazardous waste management and reduce exports; and
- deal with the legacy and contamination of past practices involving hazardous materials.

The recommendations deal with:

1. Prevention of hazardous waste:

A prevention programme is proposed in the Plan. Six sectors are prioritised for engagement and intervention including pharmacem, transport, printing and publishing, agriculture, healthcare and households. This programme will be managed as part of the National Waste Prevention Programme (www.nwpp.ie).

2. Collection of hazardous waste and the enforcement of hazardous waste regulations:

Almost 30,000 tonnes of hazardous waste are classified as 'unreported'. A comprehensive and accessible network of local drop-off facilities for householders and small businesses is recommended. Certain commercial sectors are also highlighted for priority attention regarding the collection of hazardous waste, principally garages and farms, the source of large amounts of unreported hazardous waste. An enforcement campaign will also be required to ensure these services are used.

3. Infrastructure and moving towards self-sufficiency in hazardous waste management:

In 2007, 147,542 tonnes of hazardous waste were exported, mostly to the United Kingdom, Germany, Belgium and the Netherlands. A significant proportion of exported hazardous waste

could be dealt with in Ireland at existing authorised facilities and in cement kilns. To achieve full self-sufficiency in Ireland, hazardous waste landfill and incineration would also be required.

4. North-south potential for all-island solutions:

With the easing of restrictions in UK policy for the movement of hazardous waste between Northern Ireland and the Republic of Ireland, an all-island market for hazardous waste disposal is now possible. Implementation of the Plan will take north-south considerations into account where this is appropriate.

5. Legacy issues:

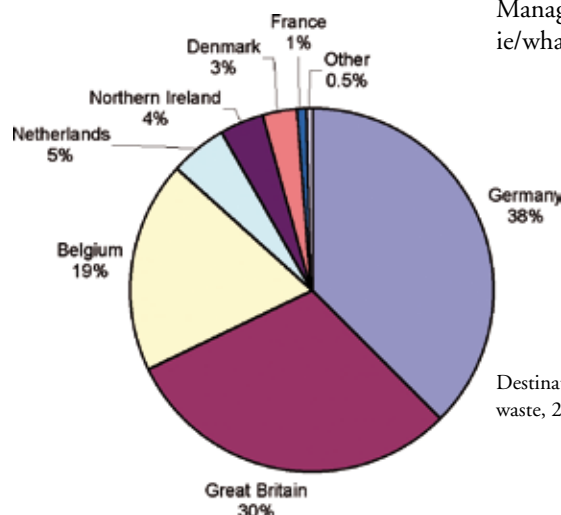
Contaminated soil exports dropped by over 60% in 2007 to 144,000 tonnes. It remains the case, however, that much of this waste could be treated in Ireland.

6. Implementation:

The EPA will take the lead in implementing a large number of the Plan's recommendations as well as monitoring the implementation of the overall Plan. A number of other public bodies are identified.

The EPA will report periodically on the Plan's implementation according to a series of targets and indicators identified in the Plan.

The National Hazardous Waste Management Plan is available at www.epa.ie/whatwedo/resource/hazardous/.



Destination of exported hazardous waste, 2007 (not including contaminated soil)

Waste Licences issued since September 2008

Landfill

Donegal County Council

Ballynacarrick Landfill Site,
Ballynacarrick, Ballintra,
Co. Donegal
Reg No. W0024-03

Cork County Council

Western Division
Derryconnell Landfill
Reg No. W0089-02

Integrated Waste Management Facility

Dublin City Council

Dublin Waste to Energy Project,
Pigeon House Road,
Poolbeg Peninsula,
Dublin 4
Reg No. W0232-01

Hazardous Waste Facility

Ormonde Organics Limited

Unit 643,
Greenogue Industrial Estate,
Rathcoole,
Co. Dublin
Reg No. W0237-01

Waste Transfer Station

Greenstar Limited

Greenstar Limited (Enniscorthy),
Clavass, Enniscorthy,
Co. Wexford
Reg No. W0241-01

Materials Recovery Facility

Padraic Thornton Waste

Disposal Ltd

Trading as Thorntons Recycling
Centre, Millennium Business Park,
Cappagh Road,
Townland of Grange,
Dublin 11
Reg No. W0242-0

IPPC Licences issued since September 2008

Chemicals

Howmedica International S. de R.L.

Trading as Stryker Orthopaedics
Raheen Business Park, Raheen,
Co. Limerick
Reg No. P0023-02

Devcon Limited

Bay 150, Shannon Industrial Estate,
Shannon, Co. Clare
Reg No. P0072-03

Micro-Bio (Ireland) Limited

Industrial Estate, Fermoy, Co. Cork
Reg No. P0082-02

Allergan Pharmaceuticals Ireland

Castlebar Rd, Carrowbeg,
Westport, Co. Mayo
Reg No. P0126-02

Metals

Pauwels Trafo Ireland Ltd

Annageliffe, Dublin Rd. Co. Cavan
Reg No. P0106-02

Cavanagh Foundry Limited

Roscrea Rd, Birr, Co. Offaly
Reg No. P0479-02

Food and Drink

Carton Bros. Limited

Darkley, Shercock, Co. Cavan
Reg No. P0024-02

Premier Proteins (2000) Limited

Poolboy, Ballinasloe, Co. Galway
Reg No. P0045-05

Grove Turkeys Limited

Smithsborough, Co. Monaghan
Reg No. P0832-01

Cement

Lagan Cement Limited

Killaskillan, Kinnagad, Co. Meath
Reg No. P0487-05

Surface Coatings

Burgess Galvin and Company Limited

Jamestown Rd, Finglas, Dublin 11,
Co. Dublin
Reg No. P0075-03

Abbott Ireland Limited

Vascular Division, Cashel Road,
Lawlesstown,
Clonmel, Co. Tipperary
Reg No. P0847-01

Intensive Agriculture

F. O'Harte Poultry Limited

Creevagh, Clones, Co. Monaghan.
Reg No. P0837-01

Mr Paul O'Harte

Legnakelly, Clones, Co. Monaghan
Reg No. P0839-01

Mr Andy Boylan

Tullyvaragh Upper, Broomfield,
Castleblaney, Co. Monaghan
Reg No. P0842-01

Mr Sean McKenna

Derrykinnigh Beg, Emyvale,
Co. Monaghan
Reg No. P0843-01

Mr James McKenna

Corryarabeg, Carrickroe,
Co. Monaghan
Reg No. P0844-01

Mr Paddy O'Reilly

Lurganmore, Castleblaney,
Co. Monaghan
Reg No. P0868-01

Mr Alan Branyan

Listraor, Ballybay, Co. Monaghan
Reg No. P0869-01

Mr Vincent Quinn

Derrylusk, Ballybay, Co. Monaghan
Reg No. P0871-01

Prosecutions

A total of seven cases were brought by the EPA before District Courts during the period September 2008 to end of January 2009. Three of the prosecutions were taken under the Environmental Protection Agency Act 1992 - 2003; three were taken under the Waste Management Acts 1996 - 2005, and the remaining prosecution was taken under the Waste Management (Waste Electrical and Electronic Equipment) (WEEE) Regulations 2005. The EPA initiated these legal actions having detected non-compliances through audits, EPA monitoring, complaints from residents and site investigations.

EPA Prosecutes Premier Proteins (2000) Limited

On the 3rd September 2008 at Ballinasloe District Court, Premier Proteins (2000) Limited pleaded guilty to two charges brought by the EPA in relation to offences under the Environmental Protection Agency Acts 1992 to 2007 for breaches of its IPC Licence (Reg. No. P0045-03).

The Company admitted breaching conditions of its licence by:

- Failing to control odours emanating from the facility; and
- Directing off-gases to alternative treatment options without the prior agreement of the EPA.

On hearing details of the offences, Judge Denis McLoughlin imposed a fine of €1,500 on each charge and awarded EPA costs of €8,820.

This prosecution was taken following a number of odour assessments carried out by inspectors from the EPA's Office of Environmental Enforcement and an audit carried out on 9th October 2007.

EPA Prosecutes Adelphi Distributors Limited

On 12th September 2008 Adelphi Distributors Limited, Co. Waterford, pleaded guilty to charges brought by the EPA in relation to four offences under the Waste Management (Waste Electrical and Electronic Equipment) (WEEE) Regulations 2005. At Waterford District Court Judge William Early heard the case and the company pleaded guilty to:

- Placing electrical and electronic equipment on the market at a time when the company was not registered as a producer of such equipment; and,
- Failing to declare the quantities, by weight or number of units, of electrical and electronic equipment placed on the market.

Fines totalling €2,000 were imposed in relation to the four charges and costs of €8,250.25 were awarded to the EPA.

This is the EPA's second prosecution of a company for failing to comply with their producer obligations under the WEEE regulations.

EPA Prosecutes Mr Binman Limited

On the 17th October 2008 at Limerick District Court, Mr Binman Limited pleaded guilty to offences under the Waste Management Acts 1996 to 2008 for breaches of its Licence (Reg. No. W0061-02).

The Company admitted breaching conditions of its Waste Licence by:

- Exceeding the licensed annual waste tonnage limit;
- Permitting an emission from an on-site waste water treatment plant that exceeded the ELV's for suspended solids;

- Permitting an emission of environmental significance from the on-site surface water oil interceptor, which was not a specified emission;
- Failing to make immediate arrangements to tanker waste water off-site in fully enclosed road tankers to the waste water treatment plant agreed with the EPA; and
- Failing to ensure that the glass processing and bottle storage bays were completely enclosed or relocated to an alternative enclosed area agreed with the EPA.

On hearing evidence from an EPA Inspector, Judge O'Donnell imposed a fine of €2,000 on the first charge, and took the other charges into account. EPA costs of €7,688 were also awarded. This prosecution was taken following an audit and site inspection carried out by EPA inspectors on 14th June 2007.

EPA Prosecutes T & J Standish (Roscrea) Limited

On the 27th November 2008, at Roscrea District Court, T & J Standish (Roscrea) Limited pleaded guilty to four charges brought by the EPA in relation to offences under the Environmental Protection Agency Acts 1992 to 2007 for breaches of their IPC Licence (Reg. No. P0320-02).

The Company admitted breaching conditions of its licence by:

- Failing to make financial provision to cover any liabilities identified in Condition 12.2.2 of the licence;
- Causing or permitting emissions from the installation, which were specified, and which exceeded the ELVs set out in Schedule B of the Licence;
- Failing to maintain appropriate records of training and, failing to provide

appropriate training for all personnel whose work could have a significant effect upon the environment; and

- Failing to test and demonstrate the integrity and water tightness of all underground pipes and tanks and their resistance to penetration by water or other materials carried or stored therein.

On hearing details of the offences, Judge Gerard Haughton imposed fines of €5,000 and EPA costs of €3,830 were also awarded. This prosecution was taken following a site inspection and a number of monitoring samples taken by EPA inspectors.

EPA Prosecutes Greenstar Recycling Holdings Limited

On the 27th and 28th November 2008 at Ballinasloe District Court, the EPA took a prosecution against Greenstar Recycling Holdings Limited for offences under the Waste Management Acts 1996 to 2007 for breaches of its Waste Licence (Reg. No. W0178-01).

Greenstar Recycling Holdings Limited was charged with:

- Failing to ensure that activities on the site were carried out in a manner such that emissions did not result in significant impairment of, or significant interference with, the environment beyond the facility boundary; and
- Failing to ensure that odours did not give rise to nuisance at the facility or in the immediate area of the facility.

On hearing evidence from EPA Inspectors, local residents and expert witnesses, Judge McGrath adjourned the case for judgement. On 5th January 2009 Judge McGrath found Greenstar Recycling Holdings Limited guilty

of both charges and imposed fines of €3,500. The matter of EPA costs will be dealt with at a later date.

This prosecution was taken following complaints from local residents, and site inspections and odour assessments conducted by the EPA within the period 9 August to 13 November 2007. The Defendant Company have lodged an appeal against the findings of the District Court, both in relation to the conviction and sentence.

EPA Prosecutes Kabeyun Limited

On the 27th January 2009, at Monaghan District Court, Kabeyun Limited pleaded guilty to three charges brought by the EPA in relation to offences under the Waste Management Acts 1996 to 2007 for breaches of its Waste Licence (Reg. No. W0121-01).

The Company admitted breaching conditions of its licence by:

- Failing to install odour control infrastructure; and
- Failing to install an enclosed storage area for poultry litter and gypsum.

On hearing details of the offences, Judge Sean McBride imposed a fine of €750 on each charge and awarded EPA costs of €7065.50.

This prosecution was taken following site inspections carried out by inspectors from the Office of Environmental Enforcement on 20th September 2007 and 10th March 2008.

EPA Prosecutes Mr Gabriel Maguire

On the 28th January 2009, at Bailieborough District Court, Mr Gabriel Maguire pleaded guilty to six charges

brought by the EPA in relation to offences under the Environmental Protection Agency Acts 1992 to 2007 for breaches of his Integrated Pollution Control (IPC) Licence (Reg. No. P0679-01).

Mr. Maguire admitted breaching conditions of his licence by:

- Permitting the unauthorised discharge of polluting matter to water;
- Failing to prevent further contamination of surface water;
- Failing to maintain on site, and for inspection by the EPA, the results of monitoring of available storage capacity for slurry/manure;
- Failing to ensure that freeboards of all covered slurry/manure storage tanks and uncovered slurry/manure storage tanks were maintained at all times;
- Failure to provide high-level alarms, external safety ladders and raised platforms on all over ground slurry storage facilities; and
- Failure to ensure that all animal tissue and carcasses stored on-site pending disposal were placed in leak-proof containers.

On hearing details of the offences from an EPA inspector, Judge Sean McBride imposed a fine of €500 for each charge and awarded EPA costs of €9,402.

This prosecution was taken following site inspections carried out by the EPA on 15th October 2007 and 3rd January 2008, with the co-operation of Cavan County Council.

BT Young Scientist Exhibition - January 2009

The EPA exhibited again this January in the ever-popular BT Young Scientist & Technology Exhibition at the RDS.

The theme of the EPA stand this year was *Waste Prevention* and our exhibition comprised an interactive computer quiz for students. The quiz tested knowledge on food waste, packaging, water conservation and resource use.

Once again, as in previous years, the EPA stand was a major attraction, with over 2,500 visitors from across the country completing the quiz, and learning a little about waste prevention and how to adopt this concept into their everyday life. After completing the quiz each participant received the now most coveted 'EPA Freebie Bag'.

Each year the EPA sponsors a Special

Award for the best Environmental Project. This year the award was won by Daisy Pemble, Laura White and Thérèse O' Donoghue from Kinsale Community School in County Cork. Their project was entitled *The Development of a Self-Cleaning Biological Water Filter For Home Use*. The idea for this project arose out of their interest in the outbreak of cryptosporidium in Galway during 2008.



A group of visitors complete the quiz at the EPA stand.



Ray Cullinane, EPA, presents the award to the winners of the EPA Best Environmental Project.

The following contributed to this issue of the EPA Newsletter:

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