

An aerial photograph of a rugged coastline. On the right, a steep, layered cliff face rises from the sea, with patches of green vegetation on its top. In the middle ground, a tall, narrow sea stack stands isolated in the blue water, with white waves crashing at its base. In the distance, a small boat is visible on the horizon. The sky is clear and blue.

ENVIRONMENTAL PROTECTION AGENCY

Annual Report and Accounts 2012



Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Environmental Protection Agency

The Environmental Protection Agency (EPA) is a statutory body responsible for protecting the environment in Ireland. We regulate and police activities that might otherwise cause pollution. We ensure there is solid information on environmental trends so that necessary actions are taken. Our priorities are protecting the Irish environment and ensuring that development is sustainable.

The EPA is an independent public body established in July 1993 under the Environmental Protection Agency Act, 1992. Its sponsor in Government is the Department of the Environment, Community and Local Government.

OUR RESPONSIBILITIES

LICENSING

We license the following to ensure that their emissions do not endanger human health or harm the environment:

- waste facilities (e.g., landfills, incinerators, waste transfer stations);
- large scale industrial activities (e.g., pharmaceutical manufacturing, cement manufacturing, power plants);
- intensive agriculture;
- the contained use and controlled release of genetically modified organisms (GMOs);
- large petrol storage facilities;
- waste water discharges;
- dumping at sea.

NATIONAL ENVIRONMENTAL ENFORCEMENT

- Conducting over 1200 audits and inspections of EPA licensed facilities every year.
- Overseeing local authorities' environmental protection responsibilities in the areas of - air, noise, waste, waste water and water quality.
- Working with local authorities and the Gardaí to stamp out illegal waste activity by coordinating a national enforcement network, targeting offenders, conducting investigations and overseeing remediation.
- Prosecuting those who flout environmental law and damage the environment as a result of their actions.

MONITORING, ANALYSING AND REPORTING ON THE ENVIRONMENT

- Monitoring air quality and the quality of rivers, lakes, tidal waters and ground waters; measuring water levels and river flows.
- Independent reporting to inform decision making by national and local government.

REGULATING IRELAND'S GREENHOUSE GAS EMISSIONS

- Quantifying Ireland's emissions of greenhouse gases in the context of our Kyoto commitments.
- Implementing the Emissions Trading Directive, involving over 100 companies that are major generators of carbon dioxide in Ireland.

ENVIRONMENTAL RESEARCH AND DEVELOPMENT

- Coordinating research on environmental issues (including air and water quality, climate change, biodiversity, environmental technologies).

STRATEGIC ENVIRONMENTAL ASSESSMENT

- Assessing the impact of plans and programmes on the Irish environment (such as waste management and development plans).

ENVIRONMENTAL PLANNING, EDUCATION AND GUIDANCE

- Providing guidance to the public and to industry on various environmental topics (including licence applications, waste prevention and environmental regulations).
- Generating greater environmental awareness (through environmental television programmes and primary and secondary schools' resource packs).

PROACTIVE WASTE MANAGEMENT

- Promoting waste prevention and minimisation projects through the co-ordination of the National Waste Prevention Programme, including input into the implementation of Producer Responsibility Initiatives.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE) and Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Developing a National Hazardous Waste Management Plan to prevent and manage hazardous waste.

MANAGEMENT AND STRUCTURE OF THE EPA

The organisation is managed by a full-time Board, consisting of a Director General and four Directors. The work of the EPA is carried out across four offices:

- Office of Climate, Licensing, Research and Resource Use
- Office of Environmental Enforcement
- Office of Environmental Assessment
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet several times a year to discuss issues of concern and offer advice to the Board.



ENVIRONMENTAL PROTECTION AGENCY

EPA Annual Report 2012

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Environmental Protection Agency - Key Statistics in 2012



OVER

1,200

INSPECTIONS AND AUDITS
UNDERTAKEN BY THE EPA



OVER

24,000

SAMPLES ANALYSED
FROM IRISH RIVERS,
LAKES, ESTUARIES,
GROUNDWATERS AND
LICENSED SITES



16+1

PROSECUTIONS SUCCESSFULLY TAKEN IN THE DISTRICT COURT,
PLUS ONE ON INDICTMENT BY THE DPP IN THE HIGH COURT



OVER 1,000
STAFF FROM MORE THAN
50 AGENCIES
PARTICIPATED IN *NIECE*,
THE NATIONAL NETWORK FOR
IRELAND'S ENVIRONMENTAL
COMPLIANCE AND ENFORCEMENT



€8.76m

VALUE OF GRANT PAYMENTS MADE BY
EPA FOR NEW AND EXISTING RESEARCH



137

LICENCES ISSUED IN 2012



230

TECHNICAL ASSESSMENT REQUESTS PROCESSED



€1.2m

EPA INVESTMENT IN *BEGREEN*
RESOURCE EFFICIENCY PROGRAMMES
IN 2012



€16.5m

2012 SAVINGS FOR IRISH BUSINESSES,
PUBLIC SECTOR AND HOMES THROUGH
EPA *BEGREEN*. ALSO SAVED ENERGY &
WATER AND PREVENTED WASTE



25%

OF ALL IRISH HOTEL BEDS PARTICIPATED IN
GREEN HOSPITALITY PROGRAMME

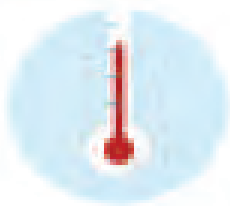


50%

OF ALL NATIONAL ACUTE BEDS PARTICIPATED
IN *GREEN HEALTHCARE PROGRAMME*

Environmental Indicators

A selection of key environmental indicators for Ireland is presented below, with the environmental status/trend of each. Visit www.epa.ie/irelandsenvironment/environmentalindicatorsdashboard to explore in more detail and view the relevant up-to-date data.



Climate Change Indicators

Status/Trend

Greenhouse Gas Emissions - Kyoto Protocol Limit
Greenhouse Gas Projections to 2020
Greenhouse Gas Emissions by Sector
Atmospheric Carbon Dioxide Levels



Air Indicators

Status/Trend

Air Quality – Nitrogen Dioxide
Air Quality – Particulate Matter
Air Quality – Ground Level Ozone
Air Emissions – Nitrogen Oxides



Water Indicators

Status/Trend

Groundwater Quality
River Water Quality
High Quality River Sites
Lake Water Quality
Estuarine and Coastal Water Quality
Urban Wastewater Treatment



Waste Indicators

Status/Trend

Recovery and Disposal of Municipal Waste
Recovery of Packaging Waste
Biodegradable Waste Diversion from Landfill
Predicted Growth in Municipal Waste



Nature Indicators

Status/Trend

Countryside Bird Populations
Conservation Status of Listed Habitats
Conservation Status of Listed Species
Threatened Species



Environment and Health Indicators

Status/Trend

Drinking Water Quality
Bathing Water Quality







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Prompt Payment of Accounts Act, 1997

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DIRECTOR GENERAL'S STATEMENT

2012 was a busy and challenging year for the EPA in the context of ongoing economic recession, public sector cuts and reduced resources. Despite these challenges, and the taking on of new responsibilities, the EPA continued to deliver the valuable societal outcomes for which it is recognised.

Our role in the EPA is to protect and improve the environment as a valuable asset for the people of Ireland. A clean, healthy and well protected environment is a vital asset in its own right and also lies at the heart of economic recovery. We are fortunate in Ireland that our environment remains generally in a good condition. This was highlighted in our State of the Environment Assessment Report, *Ireland's Environment 2012*, a report we produce once every four years. The 2012 report also highlighted, however, as had our previous assessment, the challenges we must address to ensure that Ireland's natural resources will not be degraded or exhausted in coming years. We must ensure that our economic renewal and recovery, when it comes, is based strongly on the principles of sustainable development and that we decouple future economic growth from environmental pressures.

The following are some of the key priorities we focused on during 2012.

To develop a new Statement of Strategy:

Following extensive public consultation, the EPA completed a new three-year corporate strategy in 2012. We considered over 80 submissions from members of the public and interested parties before finalising the Plan. The Strategic Plan 2013 - 2015, *Working with Others for a Better Environment*, was published early in 2013 and is the fourth formal strategy since the EPA was established in 1993. It specifies nine Strategic Priorities for the EPA across our core functions of environmental regulation, knowledge and advocacy. The Strategic Priorities are Clean Water, Better Regulation, Preventing Environmental Damage, Accessible Information, Evidence Based Decision Making, Research Programme, Working with Others, Behavioural Change and Human Health.

To merge the EPA and the Radiological Protection Institute of Ireland (RPII):

As part of the Government's Public Sector Reform Plan, a Government decision was made in November 2012 to merge the EPA and the RPII. The Minister for Environment, Community and Local Government set up a Working Group in January 2013 to manage the process of merging the RPII with the EPA. The Working Group's high level objective is to plan for and manage the merger to completion including an action plan to be completed by mid-2013, setting out the steps necessary to give effect to the merger. The Minister has decided that the bodies should be merged by creating an Office of Radiological Protection within the EPA structure, bringing the total number of Offices to five, each headed by a Director. In addition, an Advisory Committee for radiation issues will be established to provide expert input to the merged organisation. While the full implementation of the action plan will be subject to the necessary legislation being put in place, the aim is to have the merger completed by mid-2014.

To reenergise the public on the value and importance of our environment:

As well as adding to our quality of life, the environment contributes to inward investment, tourism, our reputation for food, the creation of jobs and economic recovery. To reenergise the public on the value and importance of our environment, the EPA organised national workshops, conferences and public lectures in 2012, as well as participating in various national events, details of which are set out in this report. Public attendance at our lectures and exhibition stands confirmed for us people's increased awareness of, and interest in, their environment.

We continued meanwhile to manage licensing and enforcement activities using a risk-based approach. We issued 137 licences in 2012; 39 of these were revisions to existing licences to bring them into line with recent European regulations. We issued a total of 74 Proposed Determinations during 2012, giving the public an opportunity to comment before finalising these licences. We completed a further 230 technical assessments on request.

We regularly inspect and audit sites - from licensed sites, such as industrial facilities, waste facilities and local authority urban waste water plants, to

regulated sites, such as local authority drinking water plants or, retail outlets that deal in electronic equipment. During 2012 we carried out more than 1,200 inspections and audits and held over 100 compliance meetings with licensees. We also took 16 successful prosecutions in the District Court. A further case, taken on indictment by the Director of Public Prosecutions on foot of a file prepared by the EPA, resulted in fines of over €1m being awarded for odour nuisance.

New legislation in 2012 required the EPA to put in place a National Inspection Plan for domestic waste water treatment systems, including septic tanks. Following public consultation in the latter part of 2012, the Plan was published early in 2013. To deliver the best outcome for public health and the environment, the National Plan outlines a public information campaign as well as the actual inspection process.

The EPA provided important input to a number of national strategies during the year, highlighting the vital links between the environment and the green economy, public health, food production and climate change. National policies in which we had an input in our advocacy role for the environment included the following: the *Action Plan for Jobs* and the policy statement *Delivering our Green Potential*, both produced by the Department of Jobs, Enterprise & Innovation; the Department of Health's *Your Health is Your Wealth Policy Framework*; the NESC *Climate Change Review*; the Department of Agriculture, Food & the Marine's *Food Harvest 2020* strategy, and numerous Department of the Environment, Community & Local Government reviews including those about Smoky Coal Regulations and Building Regulations. Our submissions highlighted the importance of a good quality environment to the health and wellbeing of the nation and to economic recovery. Key messages included:

- *The green economy and job creation:* The EPA supports green jobs through various programmes and works with other State bodies to deliver integrated guidance and assistance to local enterprises.
- *Food production:* Ireland must demonstrate its commitment to a 'green' and 'natural' image by actively complying with EU and international commitments in water quality and climate change.
- *Climate change:* Societal and policy consensus is vital to progress action on climate change, and science is necessary to inform policy development. New governance arrangements are also required.
- *Environment and health:* It is important to address potential health issues through preventing those factors in the environment that adversely affect health, and to maximise the benefits of contact with a high quality environment. Environment-health research is essential.

To help businesses and organisations to grow in a more sustainable and resource efficient way:

During 2012 we increased the reach and depth of the EPA *BeGreen* resource efficiency programmes. Results from programmes such as *Green Business*, *Green Hospitality*, *Green Healthcare* and others identified economic savings in excess of €16.5 million in 2012. These savings have been made, or potentially could be made, by participants through achievable resource efficient behaviours and innovations, proving that environmentally sustainable behaviour is good for society.

A major new project, *Smarter Farming*, was initiated by the EPA in 2012, in collaboration with the IFA, Teagasc, SEAI, Bord Bia and others. Its aim is to extend the resource efficiency programme into the farming sector. The EPA also provided €300,000 in grant aid to businesses through the *Cleaner Greener Production Programme* for research and development of cleaner technology solutions.

To implement the recommendations of the independent Review Body:

An independent Review of the EPA undertaken in 2011 highlighted the positive impact the Agency has had on the health and wellbeing of the people of Ireland. The Review recommended some priority actions which we implemented as follows:

- *The establishment of an additional specialist Advisory Committee to address the interface between the environment and human health:* the EPA established and made operational an EPA Health Advisory Committee in 2012.
- *Greater access to environmental information:* the EPA developed www.epa.ie/irelandsenvironment, a dedicated web resource, to complement the report, *Ireland's Environment 2012: An Assessment*.

- *Enhancement of air quality data mapping:* the EPA developed a new Air Quality Index for Health and launched it in 2013, the 'European Year of Air'.
- *Continue and progressively extend the process of making enforcement information available on the Internet:* since 2012 the EPA has placed all historical monitoring data from 2000 onwards on the EPA website. The Agency also publishes every public drinking water supply audit online and works with local authorities to ensure that up to date monitoring data, and the details of any quality breaches, are placed on their websites.

To continue to deliver a solution to Kerdiffstown Landfill:

Following a fire at Kerdiffstown Landfill near Naas in early 2011 the EPA was entrusted by the Department of the Environment, Community & Local Government with the remediation of the site. We made significant headway on this project in 2012, carrying out a drilling programme to progress characterisation of the site and to identify the types and quantities of waste on site. While the site investigation was underway the EPA continued to control leachate and odours at the site so as to minimise the impact on the surrounding environment.

Following completion of the site investigation the EPA will develop a comprehensive options report to set out the roadmap for remediation. Interaction with the local community and stakeholders will continue at all stages of the process.

To use technology to further improve delivery of EPA outcomes:

Following significant review, the EPA has developed innovative systems to enhance efficiencies throughout our licensing, enforcement, and monitoring processes. Examples in 2012 included an electronic portal for licensees which allows the EPA and 500 licensees to communicate electronically; a new licensing system for waste water discharge; a new historic landfill application system which will decrease the time required to issue historic landfill licences, and a complaints and submissions reporting system for the public via www.epa.ie. These new systems are delivering improved efficiencies and enabling better data accessibility across the EPA. Additional functionality providing access to environmental information for the public will be made available during 2013.

In conclusion

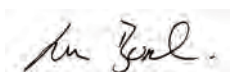
April 2012 marked the untimely death of our esteemed colleague, Micheál Mac Cárthaigh. Before joining the EPA upon its establishment in 1993 Micheál had worked within the environmental monitoring arena as part of An Foras Forbartha. He is sadly missed, particularly in our Dublin Office, and by his wider circle of colleagues within the EPA's Office of Environmental Assessment.

Having lost a number of key staff during 2010 and 2011, a further nine colleagues retired during 2012 having given over 200 years of public service between them. I would like to pay tribute to Ken Macken, Gerry Byrne, Therese Doherty, Aideen Joyce, Martin Kerr, Kathleen Maguire, Christy Murray, Gerard Hussey and Michael Stapleton, all of whom retired in 2012.

I was pleased to welcome Gerard O'Leary to the Board of the EPA in 2012. Gerard was appointed by Government as a Director of the EPA and took up the position of Director of the Office of Environmental Enforcement in April. Dara Lynott was reappointed by Government for a further five year term in 2012. Dara is the Director of the Office of Climate, Licensing, Research and Resource Use and also serves as Deputy Director General of the Agency.

I would like to thank all of the staff of the EPA and my fellow Directors for their support and commitment during the year and for their dedication to protecting the environment. I would also like to thank the fifth EPA Advisory Committee who completed their three-year term in January 2013, particularly for their input into our new Strategic Plan.

Finally, I look forward in 2013 to building on the excellent reputation of the EPA. I remain confident that by focusing on our mission we can meet the commitments of our new Strategic Plan and play our role in supporting sustainable economic recovery, while keeping the environment centre-stage.



Laura Burke
EPA Director General

MISSION, VISION & VALUES

OUR MISSION:

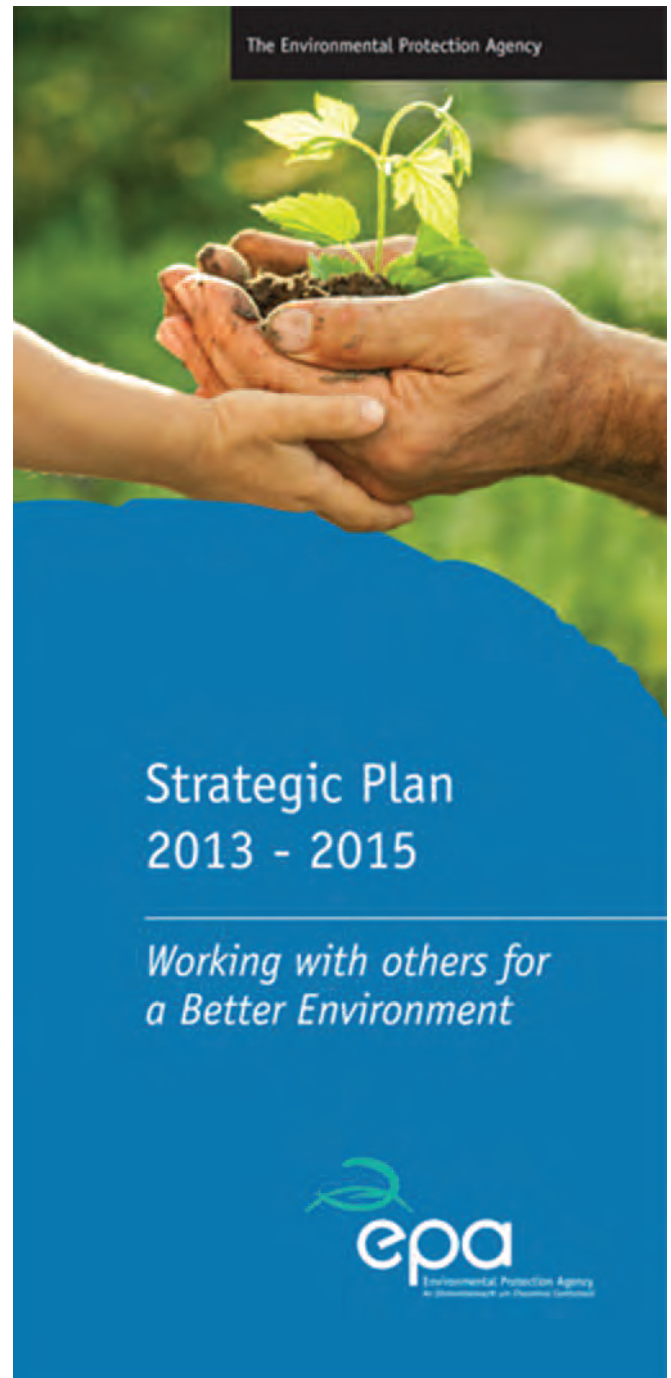
To protect and improve the environment as a valuable asset for the people of Ireland.

OUR VISION:

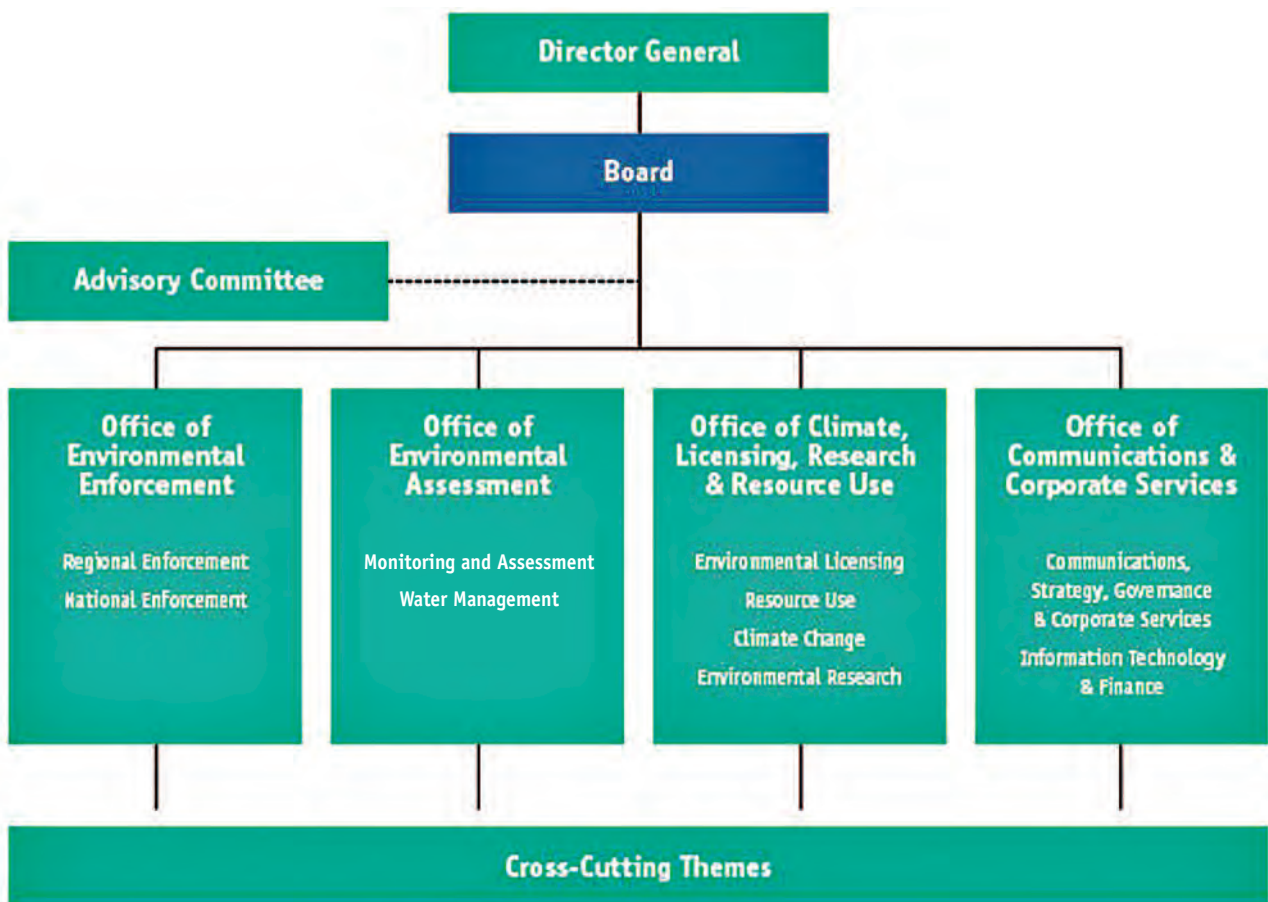
A clean, healthy and well protected environment supporting a sustainable society and economy.

OUR VALUES:

- We are an independent and authoritative voice for the environment.
- We base our decisions on the best available scientific evidence and information.
- We regulate in a fair, proportionate and transparent manner, and take decisive action against those who don't comply.
- We work with others to build effective networks and partnerships to support our mission.
- We treat people with respect, courtesy and dignity.
- We are open to change, innovation, adaptation and new ways of working.
- We are committed to continuous learning and development, and the promotion of excellence in all that we do.



EPA ORGANISATIONAL STRUCTURE



EPA BOARD of DIRECTORS



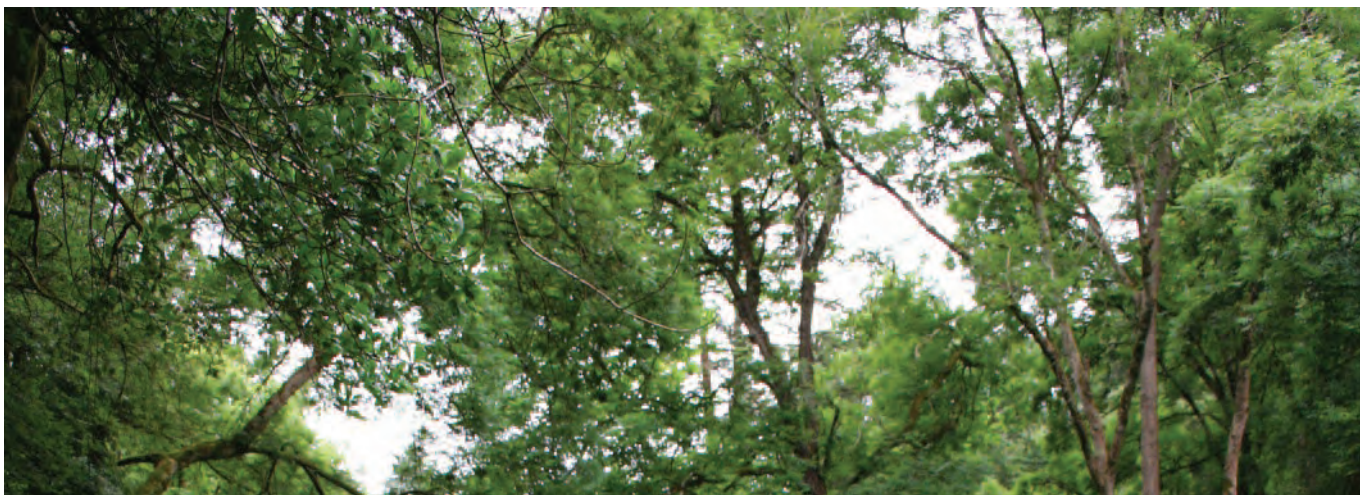
Left to right: Dara Lynott, Deputy Director General, Director, Office of Climate, Licensing, Research and Resource Use. Gerard O'Leary, Director, Office of Environmental Enforcement. Matthew Crowe, Director, Office of Communications and Corporate Services. Micheál O Cinnéide, Director, Office of Environmental Assessment. Laura Burke, Director General.

ADVISORY COMMITTEE

The EPA is assisted by an Advisory Committee of twelve members who meet to discuss issues of concern and offer advice to the Board. The Director General of the EPA is, ex-officio, a member and Chairperson of the Committee. The term of office of the Committee is three years. The 5th EPA Advisory Committee was appointed by Mr John Gormley, TD, Minister for the Environment, Heritage and Local Government on 21st January 2010. Members of this Committee comprised:

Chair: Ms Laura Burke	<i>(ex-officio)</i>
Mr Brian Buckley	<i>(nominated by the Chambers of Commerce Ireland)</i>
Mr Brendan Dunford	<i>(nominated by the Heritage Council of Ireland)</i>
Dr Shirley Gallagher	<i>(nominated by the Environmental Sciences Association of Ireland)</i>
Professor Margaret O'Mahony	<i>(nominated by the Institution of Engineers of Ireland and the Royal Irish Academy)</i>
Professor John Sweeney	<i>(nominated by NUI Maynooth)</i>
Ms Eanna Ni Lamhna	<i>(nominated by the Irish Environmental Network)</i>
Cllr Brian Meaney	<i>(nominated by the Association of Municipal Authorities in Ireland)</i>
Mr Vincent Cleary	<i>(Managing Director of Glenisk Organic Ireland)</i>
Mr David Ball	<i>(Hydrogeologist)</i>
Dr Elizabeth Cullen	<i>(co-founder and committee member of the Irish Doctors' Environmental Association)</i>
Dr Evelyn Moorkens	<i>(Ecological Consultant)</i>





SECTION 1



INTRODUCTION

Welcome to the EPA Annual Report 2012. This report provides a summary of the EPA's key activities and environmental and organisational outcomes achieved during 2012.

The work of the EPA is carried out by its four main Offices:

The Office of Climate, Licensing, Research and Resource Use has a broad remit, which includes licensing of large-scale industrial and waste facilities and waste water discharges by the Licensing Unit. The Climate Change Unit is responsible for regulating and reporting on Ireland's greenhouse gas emissions and coordinating climate change research. The Resource Use Unit is responsible for promoting the sustainable use of resources by implementing the National Waste Prevention Programme, publishing the National Waste Report, promoting the National Hazardous Waste Management Plan and enforcing a wide range of Producer Responsibility regulations. The Office is also responsible for permitting large petrol storage facilities and granting consents for genetically modified organisms and for coordinating a national environmental research programme.

The Office of Environmental Enforcement is dedicated to the implementation and enforcement of environmental legislation in Ireland. It is directly responsible for enforcing EPA licences granted to waste, industrial and other activities such as local authority waste water treatment plants. The office is the quality regulator for drinking water and urban waste water and will continue in this role following the planned transfer of responsibility of such assets to Irish Water in 2014. The Office supervises the environmental protection activities of local authorities by auditing their performance, provision of guidance and working through NIECE (Network for Ireland's Environmental Compliance and Enforcement). The supervision work was recently extended to cover the inspection of septic tanks by local authorities.

The Office of Environmental Assessment coordinates and undertakes ambient monitoring of air and water including chemical, biological and hydrometric monitoring of lakes, rivers and estuaries and the qualitative and quantitative monitoring of groundwater. It supports the EPA's licensing and enforcement functions through monitoring of emissions and various laboratory related services. It also provides sampling and laboratory assistance to local authorities. The Office has responsibility for a range of functions including: developing and using assessment tools such as Geographic Information Systems (GIS); producing regular reports on environmental quality and publishing periodic 'state of the environment' and Indicator Reports. In addition, the office is the national competent authority for the implementation of the EU Clean Air for Europe (CAFE) Directive. This EPA Office operates as Ireland's National Focal Point for the European Environment Agency (EEA), and is the authority for the Strategic Environmental Assessment Directive.

The Office of Communications and Corporate Services ensures, among other things, that the EPA conducts its business activities in an efficient manner, conforming to best business practice and also effectively communicates with its stakeholders and the general public. The Office is responsible for Finance, Communications, Corporate Governance, Information Technology, Human Resources, Training and Organisational services.

More information on EPA activities, licences, publications and newsletters can be found on the EPA website at www.epa.ie.



1. LIMITING AND ADAPTING TO CLIMATE CHANGE

EMISSIONS TRADING

Verified Greenhouse Gas Emissions (GHG) for 2011 for those installations included in the EU Emissions Trading Scheme showed emissions have decreased by 9 per cent to 15.77 Mtonnes CO₂. The emission reduction reflects both the impact of the recession in terms of reduced energy and cement demand, and the increased availability of wind generation on the grid.

In 2012, 99 installations covered by the Emissions Trading Scheme (ETS) remained open but the level of activity was low in several cases and this will be reflected in the verified emissions for the calendar year.

Ireland was again 100 per cent compliant with the ETS, with all holders of greenhouse gas permits surrendering the required amount of allowances by April 30th to match their verified emissions.

The EU Commission raised some minor queries in the first half of 2012 on the data submitted on behalf of Irish operators entitled to free allocation in Phase III, known as the National Implementation Measures or NIMs. None of the preliminary allocations notified by EPA had to be amended as a result of these queries. Allocations are preliminary as they may be subject to an EU wide cross-sectoral correction factor. The Commission delayed the publication of the cross-sectoral correction factor into 2013 because it had not completed the scrutiny of all member states' NIMs lists.

Aviation operators reported annual emissions in March 2012 for the 2011 calendar year. There was no surrender obligation. 97 aircraft operators reported for 2011 compared to 159 considered active by EUROCONTROL. The reported emissions accounted for approximately 96 per cent of EU ETS emissions from active operators assigned to Ireland. Other EU member states had a significantly higher level of non-compliance due to non-cooperation of major airlines in countries such as China and India.

In order to encourage an international agreement on reducing aviation emissions, the EU Commission proposed an amendment to the ETS Directive to allow aircraft operators to temporarily derogate their extra-European flights from the scheme. As the Irish Presidency would be responsible for negotiating the

proposal through the co-decision process, the EPA commenced technical assistance to DECLG on the proposal at end of 2012 in preparation for the Presidency.

The European Union registry was activated in 2012, replacing national registries run by member states. This new system puts in place the infrastructure needed in phase 3 of the EU Emissions Trading System and provides for an efficient registry system with greatly increased security for users.

UNFCCC MEETINGS

In preparation for Ireland's EU Presidency there was increased participation by EPA experts at the United Nations Framework Convention on Climate Change (UNFCCC) Climate Change Conference in Doha, Qatar. The EPA worked with the Cyprus Presidency team and supported EU negotiations in areas of science, research, market mechanisms, reporting and climate finance.

NATIONAL EMISSIONS INVENTORIES

The national inventory for 2010 was finalised, while the preliminary inventory for 2011 was published in October.

For 2011, total national greenhouse gas emissions are estimated to be 57.5 million tonnes carbon dioxide equivalent (Mt CO₂eq), which is lower (6% lower or 3.98 Mt CO₂eq) than emissions in 2010.

EMISSIONS PROJECTIONS

EPA projections for the period to 2020 show that Ireland can comply with its Kyoto obligations. Total emissions are projected to be 5 to 8 mt CO₂eq above the EU 2020 target.

Emissions from agriculture are projected to increase by 12 per cent by 2020 (on 2011 levels), which shows the projected impact of Food Harvest 2020 and removal of EU milk quotas. The profile of greenhouse gas emissions in Ireland is unusual in the European context, with Ireland having the highest share of its emissions coming from the agriculture sector among the EU-27 member states.

While projections published in April 2012 indicated that Ireland was expected to exceed its Kyoto Protocol limit by 4.1–5.1 Mt of CO₂e, indications from latest projection figures published in early 2013 indicate that Ireland's projected distance to its Kyoto target has reduced. In estimating Ireland's emissions with relation to the Kyoto Protocol, the impact of forest sinks is included as allowed for under Article 3.3. Purchases already made by the NTMA on behalf of Government, coupled with operation of the Emissions Trading Scheme, mean that Ireland will comply with its Kyoto obligations without any further purchases based on the latest projections published in 2013.

In the longer term to 2020, Ireland's unique position within the EU as the country with the highest national proportion of agricultural emissions will present this country with a challenge in meeting the EU's 2020 target with regard to greenhouse gas emissions. Latest projections indicate that Ireland is expected to breach its annual EU 2020 target from 2015 onwards under the best-case scenario. In addition, strong projected growth in transport emissions is a key contributor to an increasing trend in emissions to 2020.

The EPA will continue to update and refine GHG projections to take account of socioeconomic, technological and policy developments, to update key assumptions and to take account of better data and better models as they become available.

AIR CLIMATE SCIENCE

During 2012 progress was made at UN level in relation to the second commitment of the Kyoto Protocol which will cover the period 2013–2020. This progress has cleared the way for work in developing a new global agreement on greenhouse gas reductions, to enter into force in 2020. It will be necessary to increase ambition and actions, nationally and internationally, to reduce emissions of greenhouse gases before 2020 if the new agreement is to be effective in achievement of the shared goal to ensure the global temperature increase is kept below 2 degrees Celsius relative to pre-industrial temperatures.

Ireland hosted a key meeting of the Intergovernmental Panel on Climate Change to advance work on the scientific guidelines on

reporting and accounting of greenhouse gas emissions from wetlands. Four Irish based experts are contributing to the report which is needed for reporting under the 2nd Kyoto Protocol commitment period. Experts from Ireland are also authors of revised guidelines for other land use and forestry issues. Both reports will be published in 2013.

In 2012 the EPA:

- Maintained a strong presence in international activities on air and climate research and science, including observation infrastructure development and co-ordination of pan-European research.
- Contributed to work of the EU Science and Finance Expert groups on climate change.
- Worked as part of the Irish delegation at UN Climate Change meetings and represented the EU in the negotiation process.
- Continued interactions on the future work and development of the Intergovernmental Panel on Climate Change, including representing Ireland at plenary meetings and provision of review comments on IPCC reports.

RESEARCH INITIATIVES

In 2012 approximately €2.45 million funding was provided for existing and new research in the climate change area. This was focused on priority projects on emissions and sinks of greenhouse gases, including work to respond to advanced analysis of land use issues, which are a high priority for Ireland.

Twelve new projects were funded in 2012 under areas such as modelling of inventory development, soil processes leading to GHG emissions, scoping the potential for carbon sequestration in degraded peatlands, assessment of emerging technologies for Extreme Events Warning Systems, recommendations and guidance on planning measures for adaptation, assessment of technological solutions to climate change mitigation and adaptation emerging from Irish research and links to the Green Economy.

A number of research projects were completed in 2012 and project reports will be published in 2013 including:

The Status of Ireland's Climate, 2012

A final report from Ned Dwyer of the Coastal and Marine Research Centre, UCC was published. This report is a comprehensive overview of climate observation systems in Ireland, and provides information on the state of national atmospheric, oceanic and terrestrial systems.

The report:

- Reiterates the clear message that Ireland is experiencing unprecedented climate change
- Notes that the impacts of anthropogenic greenhouse gas emissions are being observed across a broad range of ecosystems
- Recommends that Ireland increase investment in observation systems to ensure continuity of data and the timely analysis of indicators of climate change and the unique challenges they may present to Ireland.

Irish TIMES, Energy Systems Model

The Irish TIMES energy modelling project came to a close in 2012. The research was undertaken at UCC led by Brian O'Gallachóir. This project modelled scenarios up to 2050 for meeting ambitious mitigation targets in the energy sector. This was the first research in Ireland to analyse options for mitigation to 2050. The work was referenced in the interim and final reports of the NESC secretariat 'Ireland and the Climate Change Challenge; Connecting "How Much" to "How To"' (NESC, 2012).

Robust Adaptation to Climate Change in the Water Sector in Ireland

The Irish Climate Analysis and Research unit at NUI, Maynooth, led by Conor Murphy reported on a project to develop tools for analysis and decision making for planning and adaptation needs related to climate change driven water supply challenges for Ireland.

Key findings include:

- Needs to improve the awareness of and planning for more uncertainty in climate and non-climatic factors influencing water supply and demand
- Decision making is best informed through an analysis of vulnerability and risk rather than simple impacts analysis
- It is recommended that additional research be undertaken to address uncertainty in the modelling of ground water systems.

COMMUNICATIONS AND STAKEHOLDER ENGAGEMENT

The climate change web-pages on the EPA website provide the latest research findings from EPA funded projects; up to date information from international climate negotiations; links to international and national organisations working on climate change and carbon calculator tools for personal and business use; and answers to frequently asked questions on climate change. Visit: www.epa.ie/climate

In July 2012, the EPA hosted the Intergovernmental Panel on Climate Change Lead Author meeting for the drafting of the IPCC Guidance for Emissions Inventories, 2013 Wetlands Supplement. This event brought together approximately 100 experts tasked to provide important new guidance on the estimation of GHG associated with wetlands management. The EPA demonstrated Ireland's strong support for IPCC processes with the support of this event and also funding the participation of four Irish scientists on the lead author team. The EPA also supports the participation of two experts in the drafting of the IPCC Guidance for Emissions Inventories, 2013 Kyoto Protocol Supplement.

In November 2012, the EPA co-hosted a major seminar entitled 'Ireland in 2050: A Low Carbon Future' in cooperation with the National Economic and Social Council. The event brought together EU and Irish policy officials with researchers from Ireland and the EU and representatives of the business community to discuss long-term greenhouse gas neutral, sustainable economy ambitions for Ireland. The concept of greenhouse gas neutrality by 2050 was introduced at this meeting, and was influential in the NESC secretariat's final report on Irish climate policy.

Progress was made on the development of a Climate Information Platform for Ireland, led by Jeremy Gault of the CMRC in UCC, which aims to provide access to

geospatial information and knowledge from multiple sources in order to allow Ireland to plan for, and adapt better to, climate change, in terms of social, economic and environmental impacts.

The EPA also provided information and analysis used in the National Adaptation Framework published in December 2012.

One lecture in the EPA's popular series of public lectures on climate change was held in 2012. This focused on the developments and potentials of remote sensing by satellite systems for Earth observations. This lecture coincided with the release of an EPA research report on opportunities for Ireland in this area. The series will continue in 2013.





2. CLEAN AIR

AIR QUALITY

The report *Air Quality in Ireland in 2011 – Key Indicators of Ambient Air Quality* found that air quality in Ireland is among the best in Europe and met all EU standards. Due to traffic, levels of nitrogen dioxide and particulate matter (PM₁₀) remain a concern in Dublin and Cork city centres and polycyclic aromatic hydrocarbons (PAHs) may be a problem pollutant in the future. PAHs mainly arise from domestic solid fuel burning and vehicle exhaust emissions. Under EU legislation, Ireland is required to reduce exposure to fine particulate matter (PM_{2.5}) by 10 per cent between 2012 and 2020.

In smaller towns, concentrations of particulate matter are elevated due to the use of solid fuel and this particularly impacts on air quality in areas where the sale of bituminous coal is permitted. The ban on bituminous coal was strengthened by new regulations in 2012 which introduced a ban on burning (as well as sale) of smoky coal in specified areas. Many of the existing ban areas were enlarged and the ban was extended to seven additional towns - Greystones, Letterkenny, Mullingar, Navan, Newbridge, Portlaoise and Wicklow Town.

The graph below (Figure 1) illustrates trends in particulate matter (PM₁₀) concentrations between 2002 and 2011.

AMBIENT AIR QUALITY MONITORING NETWORK

New air monitoring sites in 2012 included Kilkenny City, Balbriggan, Co. Dublin and Mullingar, Co. Westmeath. Figure 2 shows the locations of monitoring sites in 2012.

TRANSBOUNDARY AIR QUALITY MONITORING NETWORK

Ireland is a party to the **Convention on Long Range Transboundary Air Pollution**¹ (CLRTAP). The **European Monitoring and Evaluation Programme** (EMEP) is a body under CLRTAP and there is a requirement on parties to undertake air quality monitoring within their jurisdictions.

¹ Convention on Long Range Transboundary Air Pollution
http://www.unece.org/env/lrtap/lrtap_h1.html

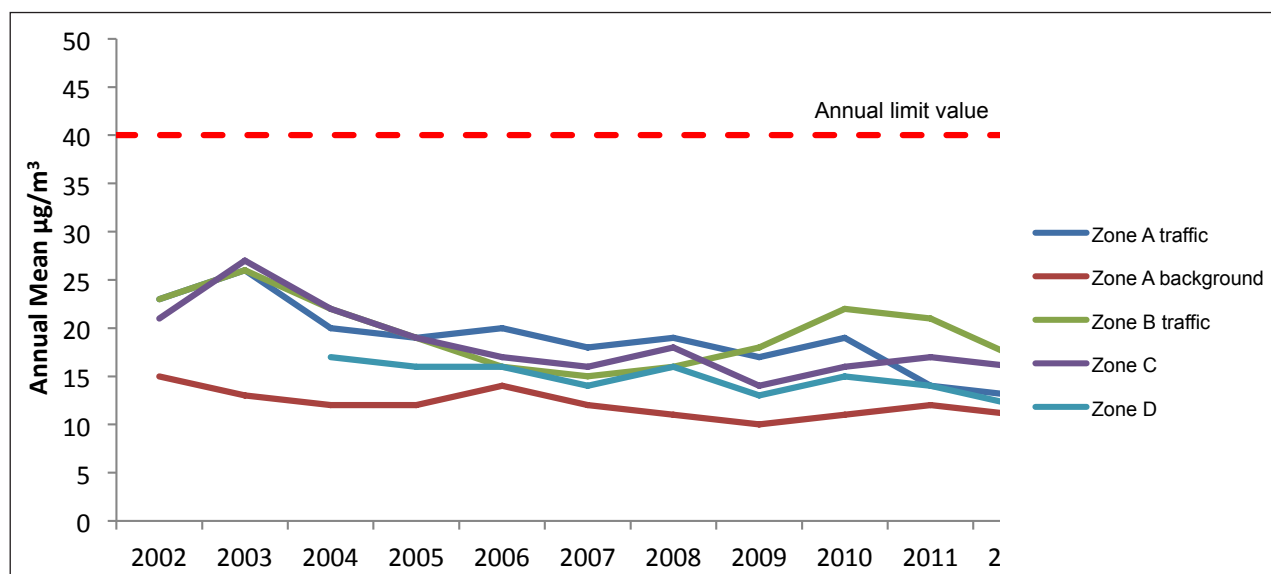
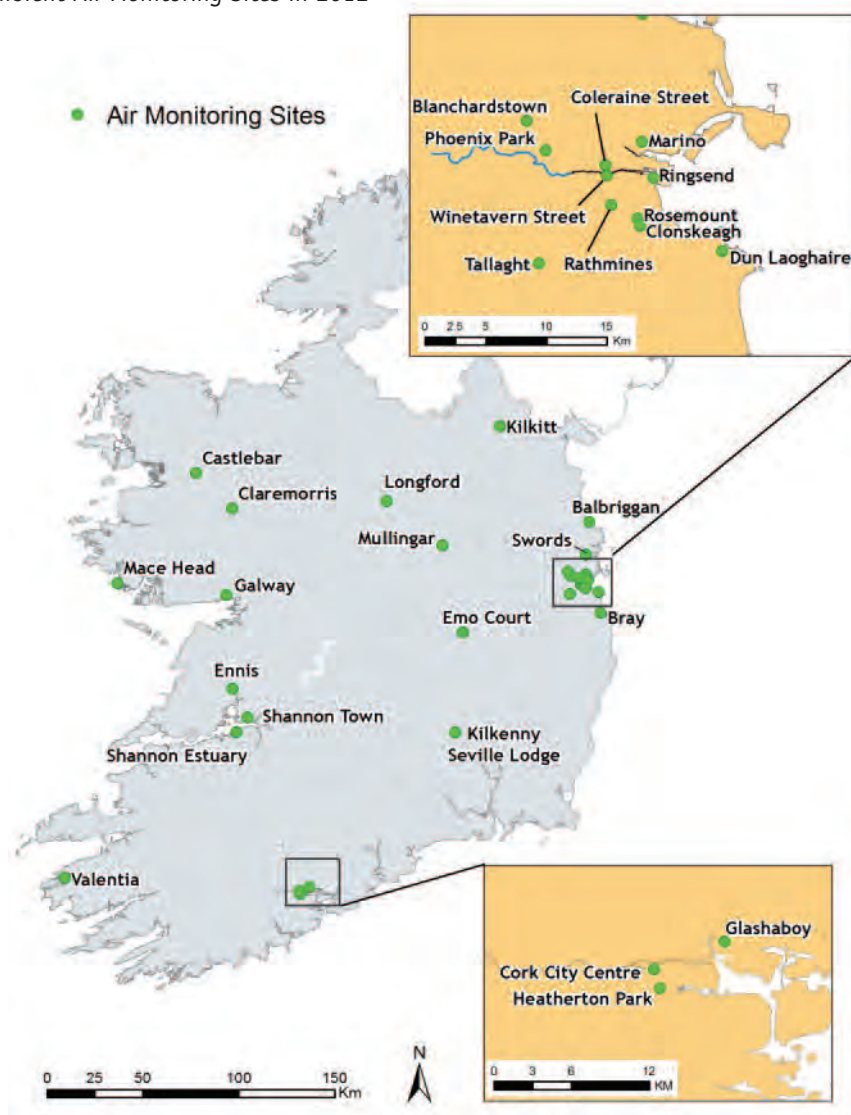


Figure 1: Trends in Particulate Matter (PM_{10}) Concentrations in 2012

Figure 2: Locations of Ambient Air Monitoring Sites in 2012



The EPA set up EMEP transboundary air quality monitoring sites through its research programme in 2004 and 2005. The new sites included Malin Head, Donegal, Oak Park, Carlow, and Carnsore Point, Wexford. The sites are run in cooperation with Met Éireann and Teagasc. Chemical analysis of filter samples and precipitation samples is carried out weekly in the Met Éireann laboratory for all sites. The sites form part of a national network of monitoring sites that includes cooperation with other organisations such as Met Éireann, National University of Ireland Galway, and Teagasc. Figure 3 monitoring sites in Ireland. A draft report on the analysis of data from the transboundary network was prepared in 2012 and will be completed in 2013. In 2009, a greenhouse gas (GHG) monitoring network was set up alongside the EMEP site infrastructure at the following sites

- Malin Head - Donegal
- Mace Head - Galway
- Carnsore Point/Wexford

This GHG network is part of the Framework Programme 7 (FP7) funded **Integrated Carbon Observation System**² (ICOS) project. Ireland is a member of ICOS and other national actors include Met Éireann and Teagasc. Teagasc is involved in the management of a number of ecosystem flux sites. ICOS monitoring sites across Europe are presented in Figure 4.

NATIONAL EMISSIONS CEILINGS DIRECTIVE

Under the National Emission Ceilings Directive, Ireland is required to limit emissions of four transboundary air pollutants by 2010 and each year thereafter. Final figures for 2010 and provisional figures for 2011 show emissions of three of these pollutants (sulphur dioxide, volatile organic compounds and ammonia) were below the prescribed emission ceilings. Emissions of the fourth pollutant, nitrogen oxide, were above the 2010 emission ceiling. The transport sector is the main source of nitrogen oxide (NO_x) emissions, accounting for 55 per cent of NO_x emissions in 2011.

ENVIRONMENTAL NOISE DIRECTIVE

The EPA continued its role as the designated National Authority under the Environmental Noise Regulations. Such duties included the coordination of the Noise Steering Group and the Noise Technical Working Group, which consisted of representatives from each of the main noise mapping bodies, the EPA and the Department of Environment, Community and Local Government (DECLG). (Noise mapping bodies are those bodies, designated under the Environmental Noise Regulations, that are required to prepare strategic noise maps for various activities particularly related to transport. Such bodies include Local Authorities, the National Roads Authority, Railway Procurement Agency, Irish Rail and Dublin Airport Authority.) These groups met on four different occasions during 2012 in order to measure progress and address any technical issues. The EPA also provided advice on a one-to-one basis to specific noise mapping bodies.

The noise mapping guidance was also revised, particularly in relation to the methodology to be used for the establishment of the population exposure statistics. This was to ensure that a consistent approach was adopted by all the noise mapping bodies in the analysis of their results. Specific reporting packages were also developed for each of the noise mapping bodies to collect the methodology reports, population exposure data and the spatial data, in a manner which facilitated scaling up and reporting to the European Commission on a national basis. The EPA submitted the noise mapping information to the European Commission in December, as required.

To assist Local Authorities in the preparation of their Noise Action Plans, the EPA organised a training workshop for all Local Authorities in November.

AIR ENFORCEMENT

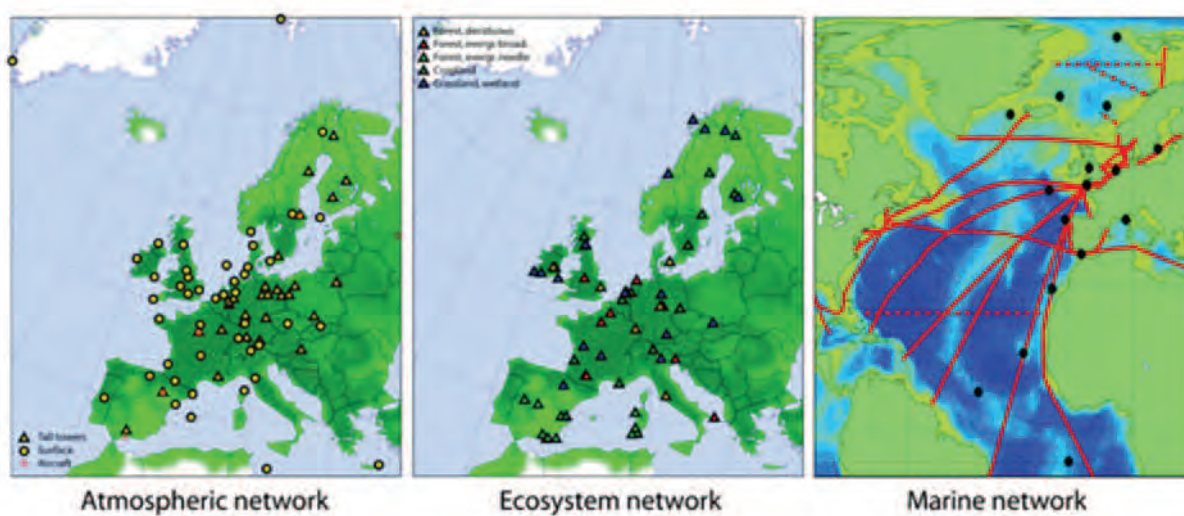
The EPA Air Enforcement Team provides technical expertise to support the work of the regional enforcement inspectors in their enforcement of EPA licensed activities where emissions to air are of potential significance. In addition the team has a role in oversight of certain Local Authority enforcement activities related to emissions to atmosphere.

² Integrated Carbon Observation System <http://www.icos-infrastructure.eu/>

Figure 3: Location of Transboundary Air Quality Monitoring (EMEP) Sites 2013



Figure 4: ICOS Monitoring Networks (Source: <http://www.icos-infrastructure.eu/>)



In 2012 the EPA Air Enforcement Team progressed sector-based enforcement of the 'air' sector, consisting of sites carrying out activities such as pharmaceutical and chemical production, electricity generation, solvent coating, printing, incineration, cement production and coating manufacture (i.e. paints). This approach to dealing with cross-sector issues (rather than solely site specific issues) has proved to be successful and has been further refined and developed for 2013.

Other air enforcement activities of note in 2012 included:

- A project to improve the accuracy of air emissions monitoring data provided to the EPA by licensees;
- A comprehensive programme of independent monitoring of licensee emissions, which identified 38 breaches of emission limit values at 27 licensed sites (out of a total of 620 tests). These breaches are under investigation by the Office of Environmental Enforcement and further enforcement action will be taken where necessary;
- Completion of air focused inspections at licensed sites;
- Working closely with the Department of Environment, Community and Local Government to develop amended regulations for the control of volatile organic compound (VOC) emissions from certain small scale activities (e.g. car bodyshops and dry cleaners) and also amended regulations for the control of the use of solid fuels for domestic home heating.

RESEARCH INITIATIVES

A project report, *Ozone Levels, Changes and Trends over Ireland: an Integrated Analysis*, was published based on work conducted in NUI Galway through EPA funding. The project team analysed ozone concentrations over Ireland, including seasonal variations, trends and changes in ozone levels at 9 stations, over periods varying from 8 up to 20 years. Key findings were:

- Surface ozone data show a reduction at all sites except at Valentia Observatory and at Mace Head.
- Ground level ozone target levels and long-term objective ozone exceedances show a downward negative trend in peak values that affect human health and vegetation.

A doctoral thesis, *Simulation Chamber Studies of the Atmospheric Degradation of Naphthalene, 1-Nitronaphthalene & Phthaldialdehyde*, was also published by University College Cork (UCC) from EPA-funded research in this area. The work examined the primary air pollutant naphthalene (plus two photo-oxidation products) and concluded that it is a potentially large source of secondary organic aerosol in urban areas and should be included in atmospheric models.

On-going research supporting the achievement of clean air includes a project led by Dublin Institute of Technology and Dublin City Council which are conducting field monitoring at four centres, to inform on the relationships between fuel usage and ambient air quality. A detailed report, taking account of EU and national policy, with conclusions and recommendations will be provided for policy makers.

University College Dublin (UCD) is continuing research into emissions from small scale combustion installations using a range of fuel types including wood, coal and peat. Results from this research will inform the ambient air quality unit as well as contributing to the accuracy of data that the EPA prepares annually for national inventories of emissions from various sectors.

Final reports are being prepared from two projects being undertaken by Trent University in Canada. The first project is a repeat of research undertaken in the mid-1990s looking at the impact of transboundary air quality on upland acid sensitive lakes. Initial results are showing an improvement in lake water quality due to international agreements to reduce emissions from certain sources, improvement in fuels standards, increased monitoring and other initiatives etc. The second research project is updating critical loads of pollutants for Ireland, in particular critical loads of nitrogen that various ecosystems can receive without being adversely impacted by this deposition.

A final report was received from UCC on new approaches to bio-aerosol monitoring. The research involved field monitoring of bio-aerosols in near real-time using innovative monitoring technology originally designed for the detection of biohazards. The results of this research have the potential to be used for environmental enforcement purposes on composting and landfill sites and other applications.

2. Clean Air

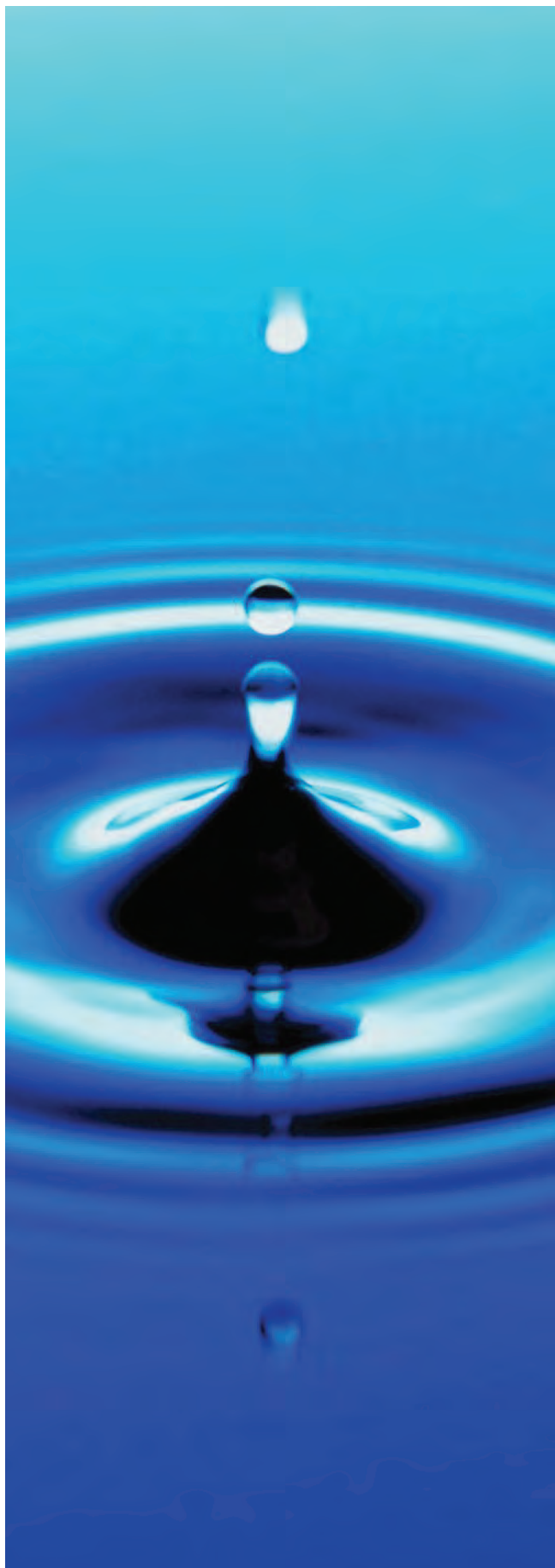
During 2012, funding was awarded to Trinity College Dublin for a two-year research fellowship to produce an air quality forecast model for Ireland at local, regional and national levels for the pollutants outlined in the CAFE Directive, particularly targeting NO_x, PM₁₀, PM_{2.5} and O₃. This work commences in early 2013 and will be conducted with input from the EPA National Ambient Air Quality Programme.

Funding was also provided for two doctoral scholarships in the area of urban environment and indoor quality. Two research fellowship grants were awarded for the continuation of atmospheric studies at Mace Head station, Co. Galway.

COMMUNICATIONS AND CUSTOMER SERVICE INITIATIVES

Real-time air quality information, updated hourly, is available on www.epa.ie. This system was improved in 2012 and data is now available from all continuous monitors in the national network.

The EPA published a report on dioxin levels in the Irish environment (based on a survey carried out in 2012) which showed that the levels in all of the samples tested were well below the relevant EU limits. The report also shows that dioxin levels measured in this survey compare favourably with those taken from similar surveys in the EU and other countries.



3. PROTECTED WATER RESOURCES

WATER FRAMEWORK DIRECTIVE (WFD)

Work undertaken in 2012 included the following:

- Twelve rounds of surface water physico-chemical sampling gave rise to analyses involving 3024 samples from rivers and lakes. Four rounds of groundwater samples were taken from 280 wells and springs.
- Four rounds of physico-chemical sampling for transitional and coastal waters gave rise to analyses involving 2200 samples.
- A STRIVE-organised study on groundwater dependent terrestrial ecosystems was completed, which provides an approach for characterising these ecosystems for the second WFD planning cycle.
- Intercalibration of ecological methods at an EU level continued in 2012 with significant EPA inputs. This work is leading to the finalising of a new EU Decision on Intercalibration due for publication in 2013.
- Ecological assessments are used to assign WFD status to surface waters for reporting to Europe and inclusion in River Basin Management Plans. These assessments assist in focusing Programmes of Measures to improve or protect ecological status. In 2012 EPA scientists undertook ecological assessments at:
 - 976 river sites on 447 rivers
 - 64 lakes encompassing 2792 sampling sites
 - 102 transitional (estuaries) and coastal water bodies encompassing over 600 sampling sites.

In 2012, the EPA continued to implement the Environmental Objectives (EO) Regulations Project. Over 80 IPPC and Waste Licence reviews were progressed in 2012 for compliance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and the European Communities Environmental Objectives (Groundwater) Regulations 2010. 55 proposed determinations and 39 final licences were issued during 2012. In addition 300 Technical Amendments were progressed of which approximately 160 issued early in 2013.

HYDROMETRIC PROGRAMME

Following the publication of the review of the EPA Hydrometric Programme, all county managers received copies of the report and revised hydrometric programmes have been agreed with most local authorities. EPA and OPW have evaluated river stretches with potential duplicate hydrometric stations and, as a consequence, some stations were dropped. 90 stations with telemetry capability have been upgraded so that water level thresholds can be set in order to facilitate targeted flow measurements.

DRINKING WATER

A continuing priority for the EPA in 2012 was Drinking Water Enforcement, including a focus on increasing the number of Water Safety Plans (WSPs) completed by Water Service Authorities (WSAs).

The EPA made significant progress in promoting the adoption of Water Safety Plans for drinking water supplies. EPA has encouraged this (non-statutory) best practice approach by the development of a standardised tool for use by Water Service Authorities.

To aid this work, a Water Safety Plan Enforcement Network Group was formed under the NIECE Network and comprises 8 WSAs (which supply drinking water to the largest populations in Ireland) and the EPA and is chaired by Galway City Council. The Working Group assists WSAs in the use of the WSP tool and its guidance, facilitates the exchange of information and experience across the different WSAs in the implementation of WSPs and provides a mechanism of feedback to the EPA on the practical implementation of WSPs. By the end of 2012, 3 Water Safety Plans were in place and a further 45 were in preparation.

The EPA published the Drinking Water Report for 2011. Data in the report showed that while public supplies continue to improve, private wells are a growing cause for concern. The report showed that public water supplies serving more than 80 per cent of the population had improved year-on-year since the EPA created a Remedial Action List four years previously. There were 339 public water supplies needing remedial action on the list at that stage in 2008 but at the end of 2012 there were 183. Remedial works were planned for completion on many of those outstanding supplies.

Inclement weather saw a doubling of drinking water notifications for July and September compared to 2011, typically with *E. coli* and trihalomethanes increases, resulting in reactive audits being carried out.

Health Service Executive figures show an increase of approximately 200 per cent in the number of verocytotoxigenic *E. coli* infections notified in Ireland during the first half of 2012, compared with the same period in 2011. EPA participated in a multi-agency group looking at actions to deal with this problem and also provided assistance to a local authority to audit a private supply where a VTEC outbreak occurred.

Drinking water supply restrictions were lifted for approximately 45,000 people during 2012.

The findings of a trihalomethane project were communicated to relevant Water Service Authorities, allowing the authorities to plan risk assessment, prevention and reduction measures.

Local authority staff attended drinking water disinfection training, and participated in Water Safety Plan training and in Drinking Water Regulations Handbook training.

An online Drinking Water Notification System was rolled out at the end of September. This will increase efficiencies in this process for both local authorities and the EPA.

WASTE WATER

Municipal Waste Water

Two hundred Waste Water Discharge Licence (WWDL) audits were completed in 2012. A circular letter issued to all County Managers with the audit findings. The findings were also highlighted at two workshops held for local authority personnel and also at the Recommended Minimum Criteria for Environmental Inspections (RMCEI) Conference for local authorities.

The EPA used waste water monitoring data to publish three reports giving detailed information on the status of Waste Water Treatment plants over the years 2008-2011. 2011 data showed that 64 per cent of secondary waste water treatment plants sampled met effluent quality standards. 106 urban areas did not have

secondary treatment in place, including 37 locations with no treatment or preliminary treatment. The 2012 data on incidents at licensed sites showed that almost 40 per cent of incidents were related to the management of the plant and suggested that the operation and maintenance of treatment plants is an area for improvement.

Inclement weather during June and July resulted in an increase in incidents being reported from waste water treatment plants and led to some instances of beach closures.

Domestic Waste Water

The new Water Services (Amendment) Act 2012 was published in February to regulate wastewater discharges from all homes that are not connected to the public sewer network. The EPA had a significant new role in relation to this new legislation during 2012. This included the development of a National Inspection Plan using a risk based approach to prioritise areas of higher risk to human health and water quality. The EPA will also have a supervisory role in relation to local authorities once the inspection regime is implemented.

A report entitled 'A Risk-Based Methodology to Assist in the Regulation of Domestic Waste Water Treatment Systems' provided the scientific basis for allocating inspections.

The EPA published an "FAQs", guidance and an animation on its website to support the registration and inspection public engagement process.

The EPA organised and participated in an International Symposium on Domestic Waste Water Treatment and Disposal Systems which was held in Trinity College Dublin, and was attended by 210 delegates.

GROUNDWATER

Delineation of zones of contribution and source protection zones around the groundwater quality monitoring points continued, and the associated reports have been published on the EPA and GSI websites. This work is contributing to the evaluation of the data and the protection of the sources and forms part of the Water Safety Plans for the water supplies.

Based on updated hydrogeological information,

proposals for amendments to the Water Framework Directive (WFD) groundwater body boundaries have been made. In conjunction with an EPA project on contaminated land, a review of contaminated sites has been undertaken to ascertain if these sites could result in failure of the WFD's environmental objectives in the next WFD planning cycle.

BATHING WATER QUALITY

Guidance notes on monitoring programmes, bathing water profile assessment and data submission were produced in 2011 to assist Public Authorities in the implementation of the new Bathing Water Quality Regulations (S.I. No. 79 of 2008). 2011 was the first year of the implementation of the regulations which give stronger focus on the protection of public health, a proactive approach to the management of bathing water quality, greater public participation and establish stricter microbiological standards for two new parameters, intestinal enterococci and E-coli.

Review of the 2011 bathing water data found that 98.5 per cent (133 of the 135 designated bathing waters) met the minimum EU Mandatory standards of achieving 'Sufficient' water quality status compared to 97 per cent (of 131 areas) in 2010. Eighty four per cent (114) met the more stringent EU guide values relating to 'Good' water quality status, a drop from 90 per cent (of 131 areas) in 2010 but comparable to the 2009 bathing season. Data for 2012 show a drop to just 66.9 per cent (91 of 136) meeting guideline values for Good quality, mainly due to weather related impacts.

Bathing water quality information is available throughout the bathing season at the 'SPLASH' website, <http://splash.epa.ie>, giving as near to real time information as is practicable on bathing water quality and other issues that will be of interest to the public.

ENVIRONMENTAL DATA MANAGEMENT

The Environmental Data Exchange Network (EDEN) processed over 2,170 electronic data uploads, consisting of over 44,211 water samples from local authorities and national organizations, including the EPA. The number of uploads increase in 2012 due to the inclusion of Urban Waste Water monitoring returns from licensed discharges.

Bathing Water Quality Map of Ireland 2012



RESEARCH INITIATIVES

The EPA Water Research programme has a strong focus on policy and has been driven by national regulations and European Directives. A sustained water research programme is an essential component of Ireland's role in protecting its water resources and meeting its requirements under water-related EU Directives and national policies.

The core areas of research carried out by the EPA Research Programme under the Water area are:

- 1. Improve Our Knowledge on State of Water Resource and Pressures:** This research aims at furthering our understanding of processes, current state of and pressures on our water resources.
- 2. Impacts on Ecosystems and Human Health:** Research in this area aims at identifying new contaminants and their impacts on water quality, ecosystems and human health; providing the knowledge base.
- 3. Protecting our Water Resources:** Research here looks into sustainable and integrated water management; measures and efficiency of measures to protect/restore water quality; novel treatment options and also sustainable water balance.
- 4. Governance Framework and Socio-economic Considerations:** This area covers governance issues such as public participation and facilitating the buy-in/policy acceptance from the public; socio-economic considerations such as costs of inactions and value of ecosystem services; as well as the improved transferability of research results into policy.

Nine new projects were funded in 2011 under areas such as the impacts of septic tank effluents on our waters, the development of novel treatment solutions to monitor our water environment (e.g. groundwater and trace chemicals in waters) and more energy efficient wastewater treatment. A number of the funded projects will investigate significant fundamental knowledge gaps on the current state of pressures on our water resources and thereby support Ireland's commitments to attain good water status under the Water Framework Directive and the Marine Strategy Framework Directive.

Six water reports were published with a number of projects related to protecting our waters including:

• Enhancing Human Health through Improved Water Quality

A final report was published based on research completed by an NUI Galway team led by Professor Martin Cormican. The research team identified:

- How the growing global emergency of antibiotic resistant bacteria is connected to our water. It demonstrates how widespread the problem of antibiotic resistant bacteria has become and adds to the evidence that there is a need to extend current campaigns to reduce the use of antibiotics in human and animal healthcare.
- How DNA technology can be used to find disease-causing bacteria and viruses in water. It demonstrates how bacterial contamination of water can be tracked back to sources such as humans or animals (e.g. cows or pigs), leading to faster corrective actions.
- How heavy rainfall can result in sudden changes in water quality as bacterial contamination gets washed into groundwater from farm sources and septic tanks.

The findings of this part of the research featured on RTE's *The Science Squad*.

• Assessment and Monitoring of Ocean Noise in Irish Waters

This research project published an interim report on the assessment and monitoring of ocean noise in Irish waters, addressing both Indicators and is a key delivery on behalf of Ireland meeting obligations under Marine Strategy Framework Directive.

• Hydraulic Fracturing (Fracking)

The EPA published a report from a preliminary study on current knowledge about the environmental considerations and impacts of shale gas exploration and extraction, and in particular the use of hydraulic fracturing technology which was conducted by the University of Aberdeen. The information provided by this preliminary research project will be used to inform a more comprehensive study to be commissioned by the EPA, in co-operation with the Department of Communications, Energy and Natural Resources and Northern Ireland Environment Agency.

The EPA hosted a number of meetings of the Water Research Advisory Group, which is a coordination committee of key national stakeholders to increase awareness, synergies and communication among research funders and to reduce the fragmentation of water research in Ireland.

At EU level the EPA research team were involved as successful partners with EU colleagues in the pioneering work of a Joint Programming Initiative on Water.

As part of ESOF (Euroscience Open Forum) the EPA hosted a workshop on water research priorities in Europe.

COMMUNICATIONS AND CUSTOMER SERVICE INITIATIVES

The EPA hosted the 2012 National Water Event in June. Entitled 'Facing New Challenges', the event covered a wide range of topics including Drinking Water, Waste Water, Irish Water, Septic Tanks and Diffuse Pollution.

In mid-2012, to coincide with the International Water Association (IWA) congress the research team published a summary brochure on the scope and extent of the research funded in the period 2007-2011.

The Research team developed the EPA Research Searchable Database erc.epa.ie/smartsimple for all completed and ongoing EPA research projects.



4. PROTECTED SOIL AND BIODIVERSITY

LANDCOVER

In 2011 a national workshop of public sector agencies on landcover highlighted the need for improved landcover data in Ireland to support both existing and future legislation. A national working group led by the EPA was set up to investigate the policy requirements and how to technically achieve the implementation of a national landcover map. In 2012 the EPA invested considerable resources to the development of a technical solution for detailed landcover mapping. As part of this work the EPA was successful in producing a detailed pilot landcover map for Co. Roscommon at an OSi Prime 2 land parcel scale. This was a major achievement and establishes a valid technical solution for the production of a national landcover map. To produce a national landcover dataset significant investment would be required.

In the past the EPA has produced a generalised landcover product called CORINE for the European Environment Agency (EEA). The EEA has scheduled a 2012 update and the EPA started production of CORINE 2012 using a semi-automated production methodology. This semi-automated methodology is an innovative approach to production and will reduce the time and resources required to produce CORINE both in 2012 and into the future.

CONTAMINATED LAND

During 2012 the EPA undertook a consultation process for a Framework on the Management of Contaminated Land and Groundwater at EPA licensed facilities. The aim is to deal with contaminated land and groundwater, thereby securing the protection of human health, water bodies and the wider environment. A best practice approach will be adopted for the assessment and remediation of relevant EPA licensed sites.

Financial Provisions

A strategic priority for the EPA is the prevention of environmental damage and its cost to the taxpayer. This priority will be progressed by the active management of environmental liabilities arising from the closure of potentially polluting activities and

providing adequate financial provision. A detailed review of the regulation of environmental liabilities and financial securities to match these liabilities across all EPA licences was completed in 2012. The review identified priority sites and licensees that the EPA will target to provide the necessary investments in both remediation and financial provision.

KERDIFFSTOWN LANDFILL REMEDIATION PROJECT

We made significant headway on this project in 2012. For remediation planning purposes, we carried out a drilling programme to progress characterisation of the site and to identify the types and quantities of waste on site. While the site investigation was underway we continued to control leachate and odours at the site to minimise the impact on the surrounding environment. We also worked very closely with the local community and community representatives to keep stakeholders fully updated on the work being undertaken, the progress being made on immediate issues of concern such as odour, and future plans. Following the completion of the site investigation the EPA will develop an options report to set out the roadmap for remediation and will continue to interact with stakeholders at all stages of the process.

Measures taken allowed for good control over odour emission and leachate emissions from the lined cell throughout 2012. Six complaints were received in 2012 compared with 110 in 2011 and 368 in 2010.

Detailed site investigations involving geophysical and borehole drilling were completed in two phases. The results of these investigations are now forming the basis for a remediation options report expected to be published in mid-2013.

BIODIVERSITY

The EPA published a Biodiversity Action Plan in 2010 and updated this plan in 2012. The plan sets out specific actions which the EPA will undertake for the implementation of its role in the protection of biodiversity. The Plan covers a range of activities in the areas of monitoring, research, assessment and reporting, environmental regulation, climate change and management and communications.

RESEARCH INITIATIVES

Soils

During the boom there was extensive over-zoning of development lands rather than aligning such provision with strategic investment priorities and decisions. The Urban Environment project was completed during 2012 which presented the results of significant research completed by a UCD-led research team. The research detailed new decision support tools for managing our urban environment with a particular focus on the Greater Dublin Region. The output of this research project is immediately relevant and would be particularly useful in the review processes underway with regard to zoning of development land.

Soil Type Mapping

Work continued on the completion of a national detailed mapping of soil types. Progress includes research work carried out as part of EPA-funded project ISIS: Irish Soil Information System. This project aims at developing a 1:250,000 soil type map for Ireland with an associated Soil Information System. The final products will provide a strengthened Irish national response to emergent policy and legislative developments in soil protection and soil environment interactions. The data will also be of significant agronomic value.

National Soil Database

A web based interactive GIS map interface has been developed to allow viewing of all the data compiled during the National Soil Database sampling campaigns (the National Soils Database is a national baseline database of soil geochemistry including data point maps and spatial distribution maps of major nutrients, major elements, essential trace elements, trace elements of special interest and minor elements). More information is available at: <http://erc.epa.ie/nsdb>.

Progress in this area during 2012 includes research work carried out as part of the following projects:

1. The interactions of soil hydrology, land use and climate change and their impact on soil quality (SoilH).
2. The characterisation of physical properties of soils using ageophysics project which aims at developing a geophysical testing framework for use on Irish soils.

Both of these reports will be completed in 2013.

Biodiversity

Two biodiversity research projects were completed in 2012:

1. One project with multiple partners developed a best practice guidance model which informs practitioners, plan/project proponents and consent authorities in integrating the requirements of SEA, EIA and AA in order to streamline biodiversity considerations.
2. Scientists at UCD and Queen's University Belfast examined the effects of loss of species in intertidal ecosystems at ambient and enriched nutrient concentrations to determine whether such effects varied with environmental context. In addition, the impacts of municipal sewage outfalls on the diversity, functioning and stability of rocky shores was examined, leading to recommendations for improved monitoring for the Water Framework Directive.

Five Biodiversity projects were awarded funding, including three doctoral scholarships and two projects dealing with green infrastructure and restored wetlands.

An end of project conference was held on the SIMBIOSYS project which is a 5-year study led by TCD on the impacts of specific sectoral activities (bioenergy crops, road landscaping and aquaculture) on biodiversity. This project will be completed in 2013.

The EPA continues to liaise closely with the National Parks and Wildlife Service and other stakeholders on the National Platform for Biodiversity Research which will run up to 2014. Working papers have been produced and published that cover the knowledge gaps and priority research needs in Freshwater, Marine and Agriculture, Grassland and Soils.

The EPA continues to participate in, and co-hosts with the NPWS, Ireland's Ramsar Wetlands Committee (IRWC). The IRWC was set up by the Government in November 2010 to assist Ireland in meeting its requirements as a signatory to the Ramsar Convention. Membership is drawn from a variety of relevant government agencies, scientific and technical institutions, regional and local authorities and non-governmental organisations. The primary objective is to promote the wise use and protection of all wetlands in Ireland.



5. SUSTAINABLE USE OF RESOURCES

Two important policy documents were released in 2012 that have significant relevance for national recovery and green growth agendas, as well as for the supporting resource efficiency activities operated by the EPA through the National Waste Prevention Programme (NWPP). Not only do these policies shape the future landscape over which the NWPP will be delivered, they also emphasise the central role of resource efficiency and the NWPP in the delivery of a sustainable future for the State.

- *A Resource Opportunity – Waste Management Policy in Ireland* (DECLG)
- *Delivering Our Green Potential – Growth and Employment in the Green Economy* (DJEI).

In addition, two other significant documents were produced in 2012 by the Department of the Environment, Community and Local Government.

- *Supporting Economic Recovery and Jobs – Locally*
- *Our Sustainable Future – A Framework for Sustainable Development in Ireland*.

The new policy document, issued by the Department of the Environment, Community and Local Government (July 2012) 'A resource opportunity – Waste Management Policy in Ireland' confirmed the Government's position that waste prevention and resource efficiency are crucial elements of a platform for sustainable economic growth. The new policy states that there will be a clear focus on prevention and resource efficiency, which builds on the success of the NWPP.

NATIONAL WASTE PREVENTION PROGRAMME

The EPA-managed NWPP has three main strands; one deals with production and consumption behavioural change (**resource efficiency**); the second with statutory **producer and holder responsibility** obligations for specified materials and substances; and the third with measurement of progress through **waste reporting**. All three strands contribute knowledge and outcomes essential to working towards sustainable production and consumption activities and behaviours.



The eighth annual report for the NWPP provides a comprehensive overview of activities during 2012 and is available on the EPA website at www.epa.ie/waste/nwpp

Resource Efficiency Highlights

- Launch of the *BeGreen* branding and marketing initiative. This included a redesigned accessible web facility (www.epa.ie/begreen) for EPA NWPP resource efficiency activities and business support services.
- *GreenBusiness* - In 2012, GreenBusiness focused on recruiting larger companies, particularly in the Food and Drink Sector, to support implementation of the *Food Harvest 2020* strategy. Forty Resource Efficiency Assessments (REAs) were completed and, on average, €70,000 of savings was identified for those companies visited.
- A significant new working partnership is developing between the NWPP and Bord Bia through the *Origin Green* programme which will see major food businesses developing resource efficiency action plans with *GreenBusiness* support.
- *Green Hospitality Programme* - By the end of 2012, the Green Hospitality Programme had 260 members with 150 properties holding certification - a 21 per cent increase on 2011. During 2012, Environment Minister Phil Hogan launched Green Hospitality case studies which presented recent successes relating to waste, water and energy management that have yielded average savings of €30,000/annum per certified member - mostly at low/minimal cost.
- *Green Healthcare* - In 2012, the main focus of the programme was to assist participating facilities to implement recommendations and changes that will prevent and reduce waste, and revisits were carried out to assess the effectiveness of the programme. 30 healthcare facilities (including 50 per cent of all national acute beds) have participated in the programme. More than 20 guides and cases studies were drafted in 2012.
- *SMILE Resource Exchange* - SMILE continued to expand and develop during the year. 6,687 tonnes of material was presented for exchange, offering significant potential cost savings for participants, with an official launch in the Dublin region by An Taoiseach, Enda Kenny, T.D. SMILE was a Finalist in the 2012 Green Awards in the Waste to Business Resource Category, and won the Best Green Initiative in the LAMA Awards.
- *Smarter Farming* - Initiated in 2012, the Smarter Farming project is aimed at expanding the green business initiative into the farming sector. Working with the IFA, Bord Bia and Teagasc, Smarter Farming will develop practical approaches to deliver on-farm cost savings along with environmental benefits, and in doing so is supporting *Harvest 2020* ambitions.
- *Print & Packaging Pilot* - Seven print & packaging sector companies participated in a resource efficiency programme under the NWPP (a further three companies to be included in 2013). Potential savings between €1,000 and €200,000 per participant were identified.
- *Local Authority Prevention Network* - The LAPN continues to build capacity in 13 local authorities for promoting resource efficiency with local partners, particularly SMEs. A particular highlight of the year was the launch of the open source fully searchable e-catalogue of prevention and resource efficiency tools, techniques, materials, case studies, etc., suitable for local initiatives (www.repository.localprevention.ie).
- During 2012, the Festivals and Events working group was particularly active and developed a 'Festival Pack' to provide guidance on running a green event. A new website was developed (GreenYourFestival.ie) to deliver this pack, which was also presented to the Association of Irish Festivals & Events conference as a keynote address.



An Taoiseach Enda Kenny, Michelle Green (SMILE), Dara Lynott (Director, EPA) and Keiron Philips (EPA) pictured at the launch of the SMILE Resource Exchange.

- Food Waste - Food waste has been identified as a priority action in the EU Roadmap for a Resource Efficient Europe. The EPA has a specific 'Stop Food Waste' campaign. In 2012, a total of 30 radio interviews were conducted, including a piece on RTE's *Drivetime* on food waste at Christmas. In November, working with 'Voice of Irish Concern for the Environment', Bia Foodbank and Food Glorious Food, the high profile Feeding the 5,000 event highlighted food waste by feeding crowds using fresh misshapen vegetables that would be typically rejected by supermarkets.
- In 2012, the NWPP provided grant assistance to the Bia Foodbank Initiative (www.biafoodbank.ie). Bia Foodbank is a new charity that aims to address the significant issue of surplus food in Ireland by developing a network of redistribution foodbanks throughout the country.
- Operation of strategic partnerships with Enterprise Ireland, IDA Ireland, Forfás, Teagasc, Local Authorities, as well as with government departments such as Department of Jobs, Enterprise & Innovation; Department of Environment, Community & Local Government; and

the Department of Agriculture, Food & Fisheries, and with representative bodies such as IBEC, IFA, Irish Hotels Federation, and others, to deliver targeted and relevant resource efficiency guidance and assistance to Irish businesses.

The strong year results for the resource efficiency aspects of the National Waste Prevention Programme are reflected in the detail of the annual Report to the Minister. Table 1 summarises some key indicators, in particular the continuing hugely positive benefits to businesses and the services sector as well as an excellent return on investment for the State. These savings are all implemented at zero or low cost to operators. Prevention has an important contribution to make to the development of a cleaner, greener, smart economy in Ireland through reducing costs, improving competitiveness, boosting innovation and encouraging the adoption of cleaner processes and products.

However, it is important to note that not all of the NWPP programmes lend themselves to measurement of progress or success. Some are engaged in

TABLE 1: SUMMARY DATA FOR A SELECTION OF NWPP FOCUSED RESOURCE EFFICIENCY PROGRAMMES

Programme	NWPP Investment (c. 2012)	Resource Efficiency	Actual and Potential Savings (in 2012)	Return on Investment (rounded)
Green Hospitality Award	€0.366M	7,000 t waste prevented 41,800,000 kWh energy saved 380,000,000 litres water saved 260 members 150 properties certified	€6.00M	16:1
Green Business Initiative	€0.34M	Water, energy & waste savings 700 active members 40 Resource Efficiency Assessments Typical savings of €70,000 per annum per company assessed	c.€3M	9:1
Green Healthcare Project	€0.148M	5,500 t waste could be prevented €210,000 measured savings in food in two acute hospitals, a 42% reduction in food waste at each	€5.29M	35:1
SMILE	€0.15M	783 members of scheme 387 waste-matches made 139 waste-matches in progress 6,687t waste potentially diverted Numerous services & logistics traded	€0.675m	4.5:1
Green Homes	€0.2M	20,000 participant households 5,500 members of greenhome.ie website (a 32% increase on 2011) Est. €320 saving potential per high performing household	€1.6M	8:1

behavioural change, others in communication, or production of guidance, or sponsorship of environmental excellence awards; as well as funding of awareness and education-type activity (Community Reuse Network, Bia Food initiative, EcoEye, etc.).

Behavioural Change Communication

Significant efforts continue in relation to the promotion of consumption and production behavioural change. The redesigned BeGreen web facility is now fully functional and is a rich resource for businesses and consumers. Significant national and local radio appearances and items, newspaper articles, as well as contributions to the *EcoEye* and *The Consumer Show* TV programmes have helped in promoting and maintaining focus on resource efficiency.

As part of the 2012 *European Week for Waste Reduction*, a series of resource efficiency workshops were organised for the benefit of the business community which involved a cooperative approach between REPAK (Packaging Prevention team), SEAI, Bord Bia and the EPA-led Green Business Initiative. This approach presented an integrated and seamless front for resource efficiency assistive services, and demonstrated the value of cooperation between national resource efficiency actors. Other participants included *Every Can Counts* and SMILE. More than 350 businesses attended the 13 workshops.

The NWPP team worked closely with the IBEC 'Green Officer' with the primary aim of marketing the Green Business Initiative offerings within IBEC, both to staff and to the 7,000 IBEC members.

Over recent years it has become clear to the NWPP that there is significant potential for achieving behavioural change through social capital mechanisms, in particular through application of social marketing techniques within specific groups. During 2012 NWPP supported programmes such as Green Schools, Green Home, Green Communities, Green Festivals, Master Composter, StopFoodWaste, which have been particularly successful in employing these techniques.

REACH (Registration, Evaluation, Authorisation and restriction of Chemical substances)

The EPA continues to work with the Health and Safety Authority (HSA) and relevant Government Departments to ensure implementation of the REACH

Regulation. Work has included input into a national report on REACH implementation prepared for the European Commission, support for a range of chemicals-related research projects and awareness raising activities.

Producer Responsibility Initiatives

Packaging: The EPA continues its enforcement activities in relation to the packaging *Essential Requirements* which prohibit a producer from supplying packaging where certain aggregate concentrations of lead, cadmium, mercury or hexavalent chromium are exceeded. Enforcement protocols and surveillance methodologies to test packaging placed on the market in Ireland have been developed. Twenty samples of packaging were tested in 2012 with one sample indicating non-compliance, which is still under investigation.

Batteries and Accumulators Regulations: This legislation came into effect in September 2008 and prohibits the marketing of batteries containing more than specified maximum amounts of mercury and cadmium, or batteries which are inappropriately labelled. In 2012 twenty battery samples were tested for compliance with one sample found non-compliant, which is still under investigation.

Deco-Paints: The Deco-paints Directive is a Single Market Directive implemented in Ireland by the Deco-paints Regulations. These Regulations specify limits for the solvent or VOC content of paints marketed to the household, professional and vehicle refinishing sectors. During 2012 twenty paint samples were tested and found compliant, with many samples indicating VOC contents well below the permitted levels.

Coal Bagging: The EPA took on new responsibilities for registration under the Solid Fuels Regulations (published in June 2011) dealing with limitation of the sulphur content of bituminous coal for residential use to 0.7 per cent by weight. As part of a market surveillance exercise, the EPA, with the cooperation of some Local Authorities, had 22 samples of coal collected, processed and tested for compliance during November and December 2012. Results of the projects are expected early in 2013.

Waste Electrical and Electronic Equipment: The EPA is responsible for enforcing many aspects of the WEEE Regulations in Ireland. In 2012 the EPA carried out

85 announced and unannounced inspections of producers and retailers of electrical and electronic equipment. A new online system for reporting of waste electrical and electronic goods was introduced in 2012 which greatly reduced the administrative burden on businesses.

Harmful Substances Enforcement

- A new Polychlorinated Bi-Phenyls (PCBs) enforcement policy was developed in 2012. A total of 259,169 litres of material either confirmed or suspected of being contaminated with PCBs was removed from the National PCB Inventory with a total volume of 69,032 litres remaining on the inventory at the end of the year.
- The EPA NWPP team prepared and published the National Implementation Plan for POPs (Persistent Organic Pollutants) in accordance with international obligations. The Plan was submitted to the UN. See www.epa.ie/waste/hazardous/pops for details.
- A campaign of 60 inspections for ozone depleting substances (ODS) took place from August 2012 to October 2012. It was found that the level of awareness and compliance among contractors was generally good, and the level of awareness and compliance among end-users/operators was relatively weak. The EPA also carried out a special investigation at the request of the European Commission to determine compliance with Article 10 of the EU ODS Regulation, on essential laboratory and analytical uses of ozone depleting substances. As part of this exercise, a new page was added to the ODS section (www.epa.ie/airenforcement/ozone) of the EPA website to increase awareness of the requirements around essential laboratory and analytical uses of ozone depleting substances.
- The EU Restriction of Hazardous Substances Directive restricts the use of certain harmful substances or groups of substances in the manufacture of electrical and electronic equipment (EEE). The objective of this Single Market Directive is to contribute to the protection of human health and the environment by ensuring the environmentally sound disposal of WEEE. Twenty-five EEE products were tested in 2012 and, while most were found to be compliant, four products tested non-compliant. Enforcement actions are being pursued in relation to the non-compliances.

National Waste Reporting

The National Waste Report for 2011 showed that Ireland continues to make good progress towards achieving the EU waste recovery and recycling targets. Significant effort was put into streamlining data collection activities through collaboration with CSO. EuroStat reporting obligations in 2012 were complied with. National waste statistics continue to play a critical role in measuring Ireland's progress towards a resource efficient and resilient economy. In 2012 the EPA NWPP team compiled and submitted 9 major data reports to Eurostat and the European Commission covering a variety of reporting obligations under different waste stream directives. In 2012 the EPA NWPP team commenced the revision of the National Hazardous Waste Management Plan which is due for completion in 2013.

RESEARCH INITIATIVES

The EPA operates the Cleaner Greener Production Programme (CGPP) which is a grant scheme to encourage Irish organisations to implement cleaner, greener practices. The scheme receives funding from the NWPP. The projects challenge organisations to produce goods and services in more environmentally friendly ways, targeting the minimisation of emissions through cleaner production methods. Companies commit to developing demonstration projects that reduce their environmental impact and are applicable across the business sector. The long-term aim of this programme is to try to ensure that cleaner, greener production and eco-efficiency become the established norm in Ireland.

Between 2008 and 2012, 24 different projects were funded under the Cleaner Greener Production Programme across sectors such as food, IT, services and manufacturing. More than 50 companies and organisations were involved and the projects are now being implemented in almost 1,600 sites across Ireland. The EPA committed approximately €2.2m in a once-off grant aid and the participating organisations also committed their own funds, demonstrating their commitment to the projects. Total investment in the projects amounted to €4.5m. A summary report outlining case studies was launched in mid-2012 entitled *Better Business in a Better Ireland - Cleaner Greener Production Programme (CGPP) Business Case Studies 2008-2012*.

During 2012, a new round of the cleaner technology research grant aid was announced and from this 16 new business and innovation support projects were provided with funding (to a total value of €600,000 over 2 years).

The EPA STRIVE research programme also funds academic-led research in the area of Waste and Resources Management. Five projects were funded in 2012, comprising three doctoral scholarships and two larger project awards.





6. INTEGRATION AND ENFORCEMENT

INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC) LICENSING

In 2012:

- A total of 74 IPPC Final Determinations were issued (39 of which were under the Environmental Objectives Project).
- In all, 72 IPPC Proposed Determinations were issued (55 of which were under the Environmental Objectives Project).
- A total of 44 Technical Amendment Decisions were issued in accordance with the licensing regulations.

Two finalised waste sector BAT notes for Landfill Activities and Waste Transfer Activities were published to the EPA website in January 2012. Two Non-IPPC Directive BAT Notes, on (i) Ferrous Metal Foundries and (ii) Ferrous Metal Processing activities, were finalised in August and published on the EPA website in September 2012.

Details of all EPA licensing activities in 2012 are set out in Table 2.

WASTE LICENSING

In 2012:

- One new waste transfer station licence was granted.
- Two Proposed Decisions were issued (1 of which was under the Environmental Objectives review Project).
- Nine Technical Amendment Decisions were issued, in accordance with the licensing regulations.
- A total of 151 Article Eleven requests were received, to determine if facilities require a Waste Licence or Permit.

COMPLIANCE WITH LANDFILL DIRECTIVE

All licences relevant to the Landfill Directive have been assessed in accordance with the Directive's requirements. A number of objections are still being considered and final decisions are anticipated in early 2013.

WASTE WATER LICENSING

- Nine waste water licence applications were received in 2012. The total number of applications on hand at the end of 2012 was 323.

- In all, 23 Final Decisions were issued in 2012.
- Five Technical Amendment Decisions were issued, in accordance with the licensing regulations.
- In 2012, 17 applications were received for certificates of authorisation for agglomerations with a population equivalent of less than 500. Four Certificates of Authorisation issued. The remaining 18 applications are currently being processed.

ENVIRONMENTAL OBJECTIVES, IPPC & WASTE REVIEWS

In excess of 80 IPPC and Waste Licence reviews were progressed in 2012 for compliance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and the European Communities Environmental Objectives (Groundwater) Regulations 2010. A total of 55 proposed determinations and 39 final licences were issued during 2012. In addition, 300 Technical Amendments were progressed of which approximately 160 issued early 2013.

ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, IPPC & WASTE

On foot of ECJ ruling C50/09 with regard to EPA, three new regulations (two for IPPC licensing and one for Waste) were enacted in 2012. As a result, licensing procedures and databases underwent significant updating. Screening of current work was carried out in order to identify those applications on hand which were affected by the new legislation.

HISTORIC LANDFILLS

Landfills that were operated by local authorities between dates in 1977 and 1997 are to be authorised by the EPA to ensure their compliance with the 1975 Waste Directive. Local authorities are currently assessing the risk of environmental pollution from these sites and will make application in due course to the EPA for a certificate of authorisation for each site. Any certificate of authorisation issued by the EPA will set out the remedial measures, if any, to be implemented at the site and will also set out what monitoring is required into the future. An online application system for local authorities was developed through LEMA and rolled out via EDEN in November 2012. In 2012, five applications were made, one Certification of Authorisation issued and 8 applications were on hand at the end of the year.

ARTICLE 27

Implementing article 5 of Directive 2008/98/EC on waste, article 27 of the European Communities (Waste Directive) Regulations 2011, allows economic operators to decide that their material is a by-product and not a waste. Any such decisions have to be notified to the EPA. The EPA is responsible for assessing these notified decisions to ensure that they conform with the Regulations and the Directive and that the materials in question are in fact by-products and are not therefore required to be regulated as waste. In 2012, 42 notifications were received by the EPA. Each notification was assessed by the EPA and 17 files were closed. The remainder are pending a decision. Development of an online notification system using the CRM system commenced in 2012 and will be rolled out in 2013.

CERTIFICATES OF REGISTRATION

The EPA issued six Certificates of Registration in 2012 in relation to local authority waste recovery facilities deemed to be low risk to the environment.

GENETICALLY MODIFIED ORGANISMS (GMOs)

At the end of 2012, there were 365 active entries on the register of GMO users in Ireland.

- A total of 26 decisions were granted in 2012 for the contained use of GMOs and one consent for deliberate release activities.
- GMO site inspections were carried out at nine registered premises, some of which contained multiple users.

DUMPING AT SEA PERMITTING

The Foreshore and Dumping at Sea (Amendment) Act 2009 transferred responsibility for the issuing of Dumping at Sea Permits from the Department of Agriculture, Food and Marine (DAFM) to the EPA, effective from 15th February 2010.

All of the dumping sites permitted in Ireland since the 1981 Dumping at Sea Act have been mapped onto the EPA's GIS system. In consultation with the Marine Institute a database of sediment chemistry consisting of results of the chemical analysis of sediments for dumping at seas permitting since 1989 has been completed and the data mapped to the EPA's GIS system. This information will be publicly available in 2013.

6. Integration and Enforcement

Table 2: Licensing Activities 2012

	IPPC Licences	Waste Licences	Waste Water Licences	Waste Recovery Certificates of Authorisation	Dumping at Sea Permits	GMO Consents	Certificates of Registration	Historic Landfill Certificates of Authorisation
Applications Received	60 (includes EO Regs Reviews)	12	9	17	5	28	14	5
Proposed Decisions	72	2	N/A	N/A	N/A	N/A	N/A	N/A
Objections Received	60	2	N/A	N/A	N/A	N/A	N/A	N/A
Final Decisions	74	1	23	4	1	27	6	1

Two meetings of the Dumping at Sea Advisory Committee, which was provided for under Section 41 of the EPA Acts 1992 to 2012, were held in 2012.

The Dumping at Sea (Fees) Regulations, 2012 were signed by the Minister on 23 July 2012 requiring a fee to be payable to the EPA in respect of an application for a Dumping at Sea permit.

An enforcement strategy for Dumping at Sea was developed during 2012. Six permitted facilities were inspected. One non-compliance and several observations were issued, all of which were resolved to the satisfaction of the EPA.

The Port of New Ross was prosecuted for Dumping at Sea without a permit. This was the first prosecution under the Dumping at Sea legislation.

The OEE presented at a Harbour Masters Workshop in June. The OEE also completed a Dumping at Sea information booklet on permitting and enforcement for stakeholders. This will be available online in 2013.

FORESHORE LICENSING

An administrative procedure and tracking system has been established for processing foreshore correspondence received from the Department of the Environment, Community and Local Government pursuant to the requirements of The Foreshore Regulations, 2011.

APPROPRIATE ASSESSMENT

Licensing procedures, databases, application forms and guidance notes underwent significant updating pursuant to the requirements of the European Communities (Birds and Natural Habitats) Regulations, 2011.

EXTRACTIVE INDUSTRIES

The EPA is required to bring 23 relevant licences into compliance with the Regulations, either by review or technical amendment. This work is ongoing and, currently, 19 licences have been updated and are in compliance with the requirements of the Regulations.

In 2012 the EPA published a guidance document (Guidance on the Waste Management (Management of Waste from the Extractive Industries) Regulations 2009). This document provides guidance to local authorities in relation to their obligations under the Regulations.

LICENCE ENFORCEMENT

The EPA invested significant resources into Change Management in 2012. The most notable of these projects was the development of a Licence Enforcement Management Application (LEMA) system to automate existing enforcement functions for accepting licensee returns, processing complaints and incidents, compliance investigations and the production of an electronic public file. In conjunction with this the EPA also developed web-based tools for EPA licensees to use for submission of data to the EPA, including the submissions of licensee monitoring data (such as ambient monitoring and emissions monitoring). There was significant development effort of the licensee system (using the ALDER/EDEN web portals) during 2012, including substantial input from the Office of Environmental Enforcement, with the intention of launching it in January 2013.

It is important to note that this new system has much greater functionality than solely the submission of monitoring reports and will provide the EPA and the

licensee with a very effective compliance management system. This development work is ongoing and will continue into 2013.

The EPA completed 135 audits and 677 inspections of waste and IPPC licensed sites and 199 audits of Waste Water Discharge Licensed sites.

In total, 826 notifications of non-compliance (NONCs) were issued by the EPA.

The EPA held 101 meetings with licensees to address non-compliance issues.

Complaints received during the year in relation to these licensed sites totalled 1,038; 78 per cent of these related to odour issues.

Incidents notified to the EPA in accordance with the terms of licences totalled 1,594.

Table 3: Enforcement Activities 2012

Activity	Number in 2012
IPPC & Waste Enforcement Inspections	658
IPPC and Waste Enforcement Audits & Inspections	812
Waste Water Discharge Licence Enforcement Audits	200
Drinking Water Audits	84
Complaints Received	1038
Notification of Non-Compliance Issued	826
Compliance Meetings Held	101
Incidents Notified to the Agency	1594

LEGAL ENFORCEMENT

The EPA progressed 16 cases through the District Court and one through the Director of Public Prosecutions in 2012. Total fines and costs awarded were €1,188,058. This included record fines awarded in the conviction of Oxygen Environmental Ltd. and Cavan County Council (€780,000 and €260,000 respectively) for waste licence breaches at Corranure Landfill, Co. Cavan. Legal enforcement activities undertaken by the EPA are outlined in Table 4.

Table 4: Legal Enforcement Activities in 2012

No. of District Court Prosecutions heard	16
No. of DPP cases heard	1
Fines awarded to EPA (District Court)	€18,850
Fines awarded on DPP cases**	€1,040,000
Fines awarded to exchequer	€2,000
Costs awarded to EPA (District Court)*	€63,583
Costs awarded on DPP cases*	€40,000
Total Fines & Costs	€1,164,433

*EPA costs include cost of legal services provided to the Agency.

**Currently under appeal.

The EPA held its first conference on Environmental Regulation and Enforcement in 2012.

STATUTORY PERFORMANCE OF LOCAL AUTHORITIES

The EPA conducted 84 drinking water audits and 200 waste water audits in 2012.

The EPA opened 205 new investigations during the year, on foot of complaints made to the EPA or based on incidents identified by the EPA, in relation to activities that were the responsibility of local authorities. A total of 206 investigations were closed out during the year. A total of six Directions were issued to local authorities. Four of these related to drinking water issues and two were in relation to waste issues.

ENFORCEMENT NETWORK

The EPA continued to coordinate a National Network for Ireland's Environmental Compliance and Enforcement (NIECE). The Network harnesses the collective resources, expertise and investigative capacity available nationally to tackle environmental issues. The Network is well established and brings together more than 1,000 staff from over 50 agencies in the country. Significant outcomes of the Network in 2012 included the establishment of a number of working groups to tackle issues in relation to drinking water, domestic waste water, noise action planning, solid fuels, solvents and decorative paints.

The EPA held an RMCEI and Complaints Coordinators workshop in November. The purpose of the workshop was to review RMCEI and Planning for 2013 and review the complaints procedure and National Environmental

Complaints Line. The programme for the day included enforcement case studies presented by Local Authority staff, the results of an RMCEI survey, national enforcement priorities for 2013, implementation of the national complaints procedure and developments in relation to the National Environmental Complaints Line.

The EPA launched a new Network Extranet website which facilitates the exchange of information and experience between members on enforcement issues. The website is used to issue weekly announcements to all members on enforcement related topics and events of interest.

E-PRTR

The EPA is responsible for compiling the European Pollutant Release and Transfer Register (E-PRTR) annually, under Regulation (EC) No. 166/2006. The Agency submitted its third E-PRTR report to the European Commission on 31st March 2011, for the year 2009.

The work associated with implementation of the PRTR Regulations has involved the following:

- Collection and verification of data submitted annually, by large industrial facilities, on up to 91 substances or pollutants. It includes emissions to air, water, waste water as well as off-site transfers of both hazardous and non-hazardous waste
- The development of a new e-reporting tool for estimating emissions of PRTR substances discharged from public waste water treatment plants, based on actual monitoring data from representative treatment plants was initiated by the EPA in June 2011. This analytical study culminated in the generation of the e-tool, which was launched in October 2012. The outcome of this 12 month study has the potential to bring about substantial cost savings in terms of monitoring costs, for each local authority as well as significantly improving the dataset for PRTR substances/pollutants from this sector.

IRELAND'S ENVIRONMENT 2012 – AN ASSESSMENT

In June the Minister for the Environment, Community & Local Government, Mr Phil Hogan, T.D., launched the EPA's fifth 'State of the Environment Report', *Ireland's Environment 2012: An Assessment*. The 'State of the Environment Report' is produced by the EPA every four years and is the most comprehensive evidence-based

assessment of the environment undertaken in Ireland.

Drawing on data produced by the EPA and a range of other bodies, the report collates in one document the state of all key aspects of Ireland's environment. This includes climate change, air, water, waste, land and soil, nature and biodiversity. It analyses the multiple pressures being placed on our environment, the way in which we are responding to current and emerging environmental issues, our progress against all key European targets, and the steps we need to take to protect this vital asset. The 2012 Report included, for the first time, a chapter on the link between environment and the health of the population and there is also an extended section on the link between the environment and our economy.

Ireland's Environment, An Assessment, 2012 shows that in some areas, such as waste management and air quality, we are generally doing well. But it also shows that in other areas, such as nature protection, water quality and climate change we have major challenges

The Report outlines four key challenges which we must meet as a country in the coming years to protect our environmental resource:

1. Valuing and protecting our natural environment, in particular water and nature protection;
2. Building a resource-efficient, low-carbon economy;
3. Implementing environmental legislation; and
4. Putting the environment at the centre of our decision-making.

To complement this Report, the EPA has also developed a dedicated section of its website which will provide the public and decision-makers with regularly updated information on key environmental indicators. This valuable resource will provide up-to-date information in a variety of formats including videos, dashboards, charts and graphs, environmental assessments, and links to other sources of information. The Report and the new online resources are available on www.epa.ie.

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) DIRECTIVE

Key Strategic Environmental Assessments undertaken by public bodies in Ireland, and for which submissions were made by the EPA during 2012 include:

- Two Transboundary – Northern Ireland Onshore Renewable Electricity Action Plan and the Strategic Riverside Masterplan for the River Foyle
- One National - Arterial Drainage Maintenance & High Risk Channel Designation Programme 2011-2015
- Two Regional Water-related - Fingal East Meath Flood Risk Assessment Management Study, Dodder Catchment Flood Risk Assessment Management Study
- One Regional Transport - Mid West Area Strategic Plan
- One Airport-related SEA – Ireland West Airport Knock Local Area Plan 2012-2018
- One County Renewable Energy Strategy (Kerry)
- Thirty-one County and Local level Land Use Plans
- Forty-two SEA Scoping Submissions
- Ninety-seven Screening Submissions

The *SEA Effectiveness Review of SEA in Ireland* was published by the EPA in December 2012, on behalf of the five SEA Statutory Authorities (SAs). The five statutory authorities established a National SEA (Environmental Authority) Technical Forum, in response to the recommendations of the SEA Review. The statutory environmental authorities jointly formulated an SEA Action Plan for the period 2012–2016 with the overall objectives of prioritising the implementation of the key findings and recommendations of the SEA Review and to improve overall SEA effectiveness in Ireland.

As part of promoting best practice in SEA in Ireland, the SEA Team participated in Regional SEA Fora, the Shannon Integrated Framework Plan Steering Group and the National CFRAMS Steering Group. The SEA Regional Fora bring Plan makers and environmental authorities together to review key SEA related aspects in the preparation of Plans/Programmes, key developments in SEA, and to facilitate sharing of case study experiences.

A dedicated SEA GIS Search and Reporting online resource is currently under development. The aim of this online resource is to provide an assessment tool



Pictured at the launch of the EPA's report *Ireland's Environment 2012- An Assessment* are Micheal O' Cinneide (Director, EPA), Phil Hogan, Minister for Environment, Community and Local Government, Micheal Lehane (EPA) and Laura Burke (Director General, EPA).

to both internal and external users. The output of the application of the tool will be a report which summarises the environmental vulnerabilities/sensitivities within a specified area to assist in the preparation of SEAs. Once rolled out, this tool has the potential to provide increased efficiency in key stages of the SEA process by identifying key environmental resources and sensitivities in a systematic and standardised manner.

INFORMATICS & GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

The Informatics & GIS unit within the EPA was successful in developing a number of significant applications in 2012. These applications provide improved access to data and to key decision support tools that allow stakeholders to carry out their tasks more efficiently.

A new internal WebGIS application called the Environmental Information System was developed to support licence and other environmental assessments. This application significantly improved functionality and included new automated decision support tools. These tools provide instant access to data which, in the past, would have taken considerable time to collate.

A new bathing water system was developed that allows local authorities to manage bathing water sites and to upload monitoring returns to the EPA in line with new EU requirements and provides for efficient EU reporting. Significant redevelopment work was also carried out on SPLASH, the public bathing water

website (<http://splash.epa.ie>), which was released for the 2013 bathing water season.

The Informatics & GIS Unit worked on a cross-office team to develop a risk assessment methodology using advanced GIS spatial analysis techniques to underpin the National Inspection Plan for domestic waste water treatment systems. The results of the analysis were used to calculate numbers of inspections to be carried out at county level. To support implementation of the plan, an online Domestic Waste Water Application was developed in EDEN to allow local authorities to plan, manage and record results of their inspections.

Under Article 15 of the Water Framework Directive (WFD), the EPA was required to submit a report on the progress of implementation of the Programme of Measures by the end of 2012. On request from the DECLG, the EPA undertook additional work in collating information for the seven River Basin Districts, as well as the official role of reporting to the European Commission. Recognising difficulties in future reporting and implementation, the Informatics & GIS unit led a project to review the issues and define management processes that will facilitate better implementation of the WFD Programmes of Measures in the future. This project will inform the development of a Programme of Measures system in 2013 and beyond.

The Informatics Unit within the EPA was extensively involved in the planning of how GIS can be used to maximum benefit within the Licence Enforcement and Monitoring Application (LEMA). In 2012, GIS was integrated within LEMA to assist in licence application and enforcement workflows. A risk assessment tool (DREAM) was also developed to assist in focusing resources required for the regulation of waste water treatment sites.

LABORATORY SERVICES

A total of 23,610 samples were taken and analysed for a range of chemical and, where appropriate, microbiological parameters. Samples were taken from rivers, lakes, groundwaters, tidal waters, landfill leachates, IPPC effluents, waste water discharges and air emissions. The work was undertaken as part of national monitoring programmes including the WFD Surveillance and Operational programmes, in support of Environmental Enforcement, and for regional programmes on behalf of local authorities in the southeast, west and north-east.

Services to the EPA's Office of Environmental Enforcement were maintained in terms of advisory content and waste water treatment plant audits.

INTERCALIBRATION PROGRAMME

The total number of laboratories participating in the EPA's intercalibration programme reduced by two to 135 in 2012. These include local authority, IPPC and contract laboratories, other laboratories supplying data to the EPA and also the EPA's regional laboratories. The sample preparation and distribution elements of the programme continue to be outsourced to an external laboratory.

The register of laboratories, provided for under Section 66 of the EPA Act, 1992, was updated in 2012 and is available for inspection at www.epa.ie.

EUROPEAN ENVIRONMENT AGENCY (EEA)

The EPA in its role as National Focal Point for Ireland continued to coordinate environmental information exchange with the EEA and to maintain and develop the national network and facilitate and coordinate contacts, requests and deliveries between national and EU level.

The EPA online Environmental Indicators meets multiple reporting requirements including EEA State of the Environment (SOE) reporting and national indicator reporting.

RESEARCH INITIATIVES HIGHLIGHTS

The Research programme continues to fund projects in support of the workings of the Office of Environmental Enforcement. These include projects on septic tanks, beneficial use of old landfills and novel enforcement technologies. New projects awarded in 2012 include the impact of on-site waste water effluent on rivers and wells, increasing Resource Efficiency in Waste Water Treatment Plants and two projects looking at Development of filtration technologies for drinking water treatment.

Presentations on the Research programme were given at a number of events in 2012 including the International Symposium on Water Resource Management (with special focus on China) in May 2012, European Environment and Health Symposium in Paris (June 2012), and the European Science Open Forum (ESOF) event in July 2012.

In addition, the EPA financially supported and participated in the Environ 2012 conference hosted by UCD over a three day period in April 2012. Approximately 250 delegates attended the event, with over 80 oral presentations from researchers across a broad spectrum of environmental topics including climate change, environment and health; environmental technologies, biodiversity and water quality.

The EPA research team have developed a database which contains information about all of these projects and is searchable by: keywords, lead researcher, research institution etc. This database was launched at the research conference on 28th June and provides details of the project abstract, expected end date and, where relevant, a link to the final report/output.

The EPA is a partner in the WATER JPI network of research funders. The Consortium received confirmation of funding from the EC under FP7. The project will be formally launched in Madrid in February 2013 and is of three-year duration.

In line with Recommendation 7.4.8 of the EPA review, the EPA research a searchable database of research funded has been made available to the public in late June 2012. There have been over 1800 searches of the database.

24 research reports were published in 2012 (see list of publications in Section 2).

COMMUNICATIONS & CUSTOMER SERVICE INITIATIVES

The Environmental Licensing Programme proactively facilitates public participation via the provision of information through statutory notices in national and local press and on the EPA website. Licence application files are uploaded to the EPA website on a daily basis.

The Environmental Licensing Programme also provides 'RSS Feeds' on its Licensing Search Pages. This allows anyone to subscribe to any licence application in which they are interested. Once subscribed, they automatically receive alerts into their 'RSS Reader' when a new document has been added to the particular licence application on the Agency's website, providing instant access.



7. BUILDING A HIGH PERFORMANCE ORGANISATION

COMPETENT/COMMITTED PEOPLE

The EPA's continuing goal is to ensure that we have a committed workforce that performs to maximum ability.

Arising from the Public Service Agreement and the Employment Control Framework, the EPA staff complement had reduced to 315 by the end of 2012. One hundred and thirty-nine staff were located at EPA Headquarters in Wexford with the remaining staff strategically located in five Regional Inspectorates and three Offices throughout the country.

The EPA keeps its organisational structure and resources under continuous review to ensure that it is best positioned to meet its statutory functions. The organisational structure has been changed significantly on a number of occasions to adapt to the loss of staff and to reflect emerging priorities and challenges.

While the EPA has conducted resource and efficiency reviews on a regular basis that were similar in nature to work-force planning, it developed a more formal work-force plan in 2012 taking account of guidelines published by the Department of Public Expenditure and Reform.

The EPA participated in the National Internship Scheme in 2012. Many of the Interns who participated in the scheme were successful in gaining full-time employment as a result of their placement with the EPA.

In order to continuously build a depth of skills and knowledge across the organisation, the EPA has a very significant commitment to staff learning and development. That commitment is reflected in a budget allocation to Learning & Development which represents approximately 2.5 per cent of payroll spend. Direct expenditure on training in the year amounted to €529,000. During 2012 staff participated in a programme of 285 (internal, external & specialist) training courses, workshops, conferences and seminars, amounting to a total of 1,878 training days, giving an average of 5.85 days' training per person.

The implementation of the 'Corporate Learning Strategy 2010-2012' continued in 2012 under the LINKS Project (Learning, Innovation, Networking, Knowledge, Sharing). The aims of the Corporate Learning Strategy (CLS) are to:

- give managers and staff access to high-quality professional and managerial training and the ongoing opportunity for personal development and growth;
- provide mechanisms through which staff will be able to monitor and keep up to date with international developments, particularly in relation to environmental protection, science, technology, research; finance, communications and information technology; find effective ways to transfer learning and embed it within the EPA;
- support high-quality decision making on all environmental issues which call for high-quality skills and judgement.

In 2012 significant work took place on the LINKS workstreams; Coaching & Performance Dialogue, Technical Capability, and Informal Learning. These areas of work were chosen to be the most significant areas for the EPA to consider and action, in order to meet the overall goals of the CLS. Leadership Behaviours, Change Management Methodology and Best Practice are also being included as part of the implementation.

A pilot 'High Performance Team Programme' also commenced in 2012, which provided a structured and systematic approach to team development.

Work continued in 2012 on 'The Way Forward for Leadership in the EPA'. There has been and continues to be a very significant investment by the EPA in developing leadership skills/competencies with the provision of the Essential Skills of Management and Leadership Programme and the People Management Programme. These and other programmes have provided excellent baseline theory and a strong foundation on which to further build leadership capacity.

The EPA has a formal Performance Management and Development System (PMDS) in place since 2002, which is well embedded with full participation. The PMDS aims are to promote high performance standards by employees, ensure achievement of business goals set out in *2020 Vision*, develop employee skills and promote clear two-way discussion between managers and employees.

In 2012, the EPA received sanction to implement a new Human Resource Management Information System. This integrated system will provide greater efficiencies and

will enhance the role of Line Managers in relation to the management of staff as well as providing an improved reporting capability for staff management. A revised Attendance and Absence Management Policy was rolled out in 2012.

The EPA is committed to ensuring the safety, health and welfare of its staff through strict adherence to Health and Safety Standards and through the provision of appropriate training, audit, risk assessment and safety awareness programmes. The EPA's excellent safety record was maintained with no serious accidents occurring at work during 2012.

Continuing emphasis was placed on internal Cross-Office collaboration for the EPA in delivering its 2012 Annual Work Programme.

A range of technical Cross-Office groups continued to operate and exchange information on topics such as the Water Framework Directive, the Groundwater Directive, the Landfill Directive, Waste, Groundwater, Air, IPPC and Waste Water Licensing and Enforcement issues.

The EPA has had a Partnership Committee (Meitheal) in place since 1999. The work of Meitheal is mainly conducted through Cross-Office groups. During 2012, Meitheal continued to play a role in the ongoing development of Health and Safety initiatives, Green Team activities, planning a staff climate survey and input into the Public Service Agreement 2010-2014 action plan and progress reports.

PUBLIC SECTOR REFORM

A Government decision to merge the Environmental Protection Agency and the Radiological Protection Institute of Ireland (RPII) was announced in November 2012 and a Working Group to manage the process was set up in January 2013 by the Minister for Environment, Community and Local Government. The Working Group comprises Dr Brian Cawley, Director General IPA (Independent Chairperson), Ms Laura Burke, Director General of the EPA, Dr Ann McGarry, Chief Executive of the RPII, Ms Fiona Quinn, Environment Policy Unit, Department of the Environment and Mr Terry Dunne, Environmental Radiation Policy Unit, Department of the Environment. The EPA's new Strategic Plan 2013-2015 takes account of the Government decision to merge the RPII with the EPA. The merger will bring together the committed and dedicated staff of both organisations to create a

strong scientific organisation that combines the expert resources and the excellent reputations of both the EPA and the RPII. Information on the merger is available on the EPA and RPII websites and will be updated regularly.

ENVIRONMENTAL CHAMPION

The EPA aims to ensure that environmental considerations are at the heart of all decision making. To support this aim, the EPA strives to ensure that the right information gets to the right people at the right time to inform, educate and enable effective environmental management.

During 2012 work began on developing a new *EPA Strategic Plan 2013-2015 – Working with Others for a Better Environment*. This is the fourth formal strategy since the EPA was established almost 20 years ago. Each strategy has built on previous strategies and each has demonstrated how the EPA has adapted to meet new and evolving challenges. In this new Strategic Plan the EPA sets out the key priority actions that it will take up to 2015 to deliver on its mission of protecting and improving our environment as a valuable asset for the people of Ireland. Central to the Strategic Plan is the belief that a clean, healthy and well protected environment lies at the heart of economic recovery and the over-riding priority for the next three years will be to keep the environment centre-stage and support economic recovery. A public consultation process was undertaken towards the end of 2012 in which over eighty submissions were received. These submissions formed a valuable input into the development of the Strategic Plan which was published in early 2013.

For the eighth year, the EPA sponsored the annual *Environment Ireland* conference in September 2012. The theme for 2012 was 'The Environment and the Economy'. Speakers examined the contribution the environment sector can make to economic recovery, and the importance of Ireland's clean, green environment in a number of growth industries, including tourism and agriculture. The conference is the largest held in Ireland each year about environmental policy and management. It is attended each year by delegates representing all the main sectors with an interest in Ireland's environment.

The EPA organised a Climate Change public lecture in November which was attended by more than 400 people. A recording of the lecture, about the potential



Humberto Delgado Rosa (European Commission), Phil Hogan (Minister for Environment, Community and Local Government) and Laura Burke (Director General, EPA) pictured at the 8th Environment Ireland Conference, Croke Park Conference Centre, Dublin.

of satellite observations for environmental monitoring, was made available on the EPA website at www.epa-pictaural.com and the EPA YouTube channel at youtube.com/user/epaireland.

The very popular *Eco Eye* TV series was again supported by the EPA in 2012. The tenth series was broadcast on RTE 1 early in the year. Viewing figures averaged 447,643 viewers per programme. The EPA agreed to support a further series and pre-production was largely completed during the year.

EPA staff engaged with stakeholders at a range of national and local events during the year, including the BT Young Scientist and Technology Exhibition, the Volvo Ocean race and the National Ploughing Championships. Material was also provided for other events to help raise environmental awareness.

Green Home and *Greening Communities* are behaviour change programmes funded under the National Waste Prevention Programme and run by An Taisce – the National Trust for Ireland. Green Home was developed as a framework to extend the Green Schools message beyond the school gates into the wider community. It supports and advises householders on ways to save money on their household bills while protecting the environment.

By the end of 2012, 70 primary school-based groups and 16 community groups had received Green Home awards. In addition, 120 Tidy Towns groups had registered to participate in Green Home; the programme had been designated as a 'Preferred Action' under the waste minimisation criteria for Tidy Towns in 2011. Greening Communities, a joint initiative of the Department of Environment, Community and Local Government, the EPA and An Taisce is a broader programme which aims to encourage the growth of robust greening communities in Ireland. The programme engages with programme operators, local authorities and community champions to record and spread best practice for positive environmental behaviour within and between communities.

EPA-funded research has provided significant support for environmental policy and decision making at national and international levels. Significant outputs from the research programme are the final reports from completed projects. 24 such research reports were published in 2012. The EPA continued to develop its web-based information in 2012. Key developments included:

- Following the introduction of a web-based grant application and project management system for the research programme in 2011 a searchable research database has been developed. This system is now routinely used for online grant applications, processing and awards. There have been almost 1,800 research searches on this database since its introduction in mid-2012.
- Improved delivery of information from EPA-funded research through the SAFER data resource which is available through the EPA web-site. There are almost 2,800 data files publicly available which are improving public access to data generated by EPA-funded research.
- The online bathing water quality website *SPLASH* (www.bathingwater.ie) was updated throughout the 2012 bathing season with near real-time data in relation to bathing water quality. Work commenced in 2012 on the development of a Bathing Water Information System and Incident Notification Module designed to facilitate electronic submission of bathing water data and documentation by Local Authorities and providing links to both the *SPLASH* website and An Taisce databases. This has been introduced for the 2013 bathing season.

The EPA also developed an online environmental indicator based web resource (epa.ie/irelandsenvironment) to accompany the State of the Environment report. This resource was designed to provide concise, up-to-date information about the Irish environment for the general public and policy makers. The report and indicator information are available in a number of formats including elevator videos, e-book facility etc. The indicator resource was regularly updated throughout 2012. It allows the EPA to fulfil certain EU reporting obligations in close to real-time, while providing environmental assessments to stakeholders in a format that is useable for them.

A review of the EPA website was completed in 2012 with a view to updating the EPA's online strategy and to identify how the EPA's use of the web can better serve it and its audiences online. Extensive consultation was carried out with stakeholders to allow the EPA to understand its audiences' online needs and develop clear audience-focused online communications. The findings of the review were analysed and a plan to redevelop the website was undertaken. This work commenced towards the end of 2012 and will be completed in 2013 with the launch of a new user-focused website.

EPA Environmental Management System

The EPA is committed to reducing the environmental impacts of its own operations. The EPA's Environmental Management System (EMS) is audited twice a year by an external accredited body to ensure that the requirements of the internationally recognised ISO14001 EMS Standard are met and exceeded. During 2012 the EPA continued to maintain certification to the ISO14001 standard for all sites and activities that have a significant environmental impact.

Overview of Energy Usage in 2012

The main energy consumption at EPA offices and laboratories is related to space heating, lighting, power and hot water. In 2012 EPA consumed 2407.90 MWh of energy, which represents approximately 8 per cent reduction on our 2011 consumption. The breakdown of energy usage is as follows:

1148.71 MWh of electricity
723.76 MWh of renewable fuels
366.36 MWh of natural gas
117.72 MWh of kerosene
51.35 MWh of LPG

The EPA has a fleet of 40 vehicles using mostly diesel and also bio fuel, when available. In 2012, these vehicles used 599.7 MWh of transport fuels (diesel).

In 2012 the EPA undertook a range of initiatives to improve buildings' energy performance with the main work being a complete refurbishment of the Cork offices. This included upgrading the glazing with an improvement in U values from 4.37 to 1.4, giving a predicted saving of 70 kWh per square metre.

CUSTOMER FOCUSED

The EPA strives to be a customer focused organisation.

We continue to adhere to the standards laid out in the customer charter and there were no complaints referred to the QCS officer in 2012.

The Environmental Queries Unit continues to centralise and manage environmental queries received from the public via telephone, email and the internet. In 2012, approximately 3,000 queries were processed with 86 per cent of these queries being directly closed out by the Unit, providing customers with a high level of service.

The EPA continually strives to improve our communications and educational resources to better inform decision makers about the environment and to influence business, the public and the organisations that we work with.

During 2012, a total of 378 media enquiries were dealt with by the EPA.

Tailored articles were developed for regional media featuring information on a variety of EPA issues. In 2012, six regional press releases were developed and issued, generating 160 articles overall.

An *End of Year Statement* by the Director General was published and disseminated. The Statement captured the highlights of the EPA's main activities and achievements during 2011.

Two editions of *EPANews*, the corporate newsletter, were distributed to subscribers during the year in the new electronic format as an e-zine.

The EPA sponsored a lesson on noise in *Science and Technology in Action*, a multimedia resource for second

level schools. The EPA also sponsored two successful exhibitions during 2012, the first run by the Science Gallery entitled *Water - Surface Tension* which ran over a three month period, and the second by The Ark Cultural Centre for Children entitled *Awakening Curiosity*.

ORGANISATIONALLY EFFICIENT

The EPA is committed to maintaining the highest standards of corporate governance and embedding the culture of good governance in all Offices and business units. As part of the ongoing implementation of the Code of Practice for the Governance of State Bodies, the EPA continued to conduct internal audits under the stewardship of the Internal Audit Committee.

CORPORATE GOVERNANCE

The EPA had an independent assessment of its compliance with the Code of Practice for the Governance of State Bodies carried out in early 2010 following revision of the Code in 2009. The report found, based on the work undertaken, that corporate governance standards are given high priority within the EPA. It also found that there are high levels of management awareness of corporate governance obligations and that these are kept under regular scrutiny and that, as appropriate, the EPA's governance policies and procedures are consistent with the Code. A further independent review of EPA compliance with the Code is planned for early 2013.

RISK MANAGEMENT

The EPA completed a comprehensive review of its Risk Management Structures in 2012 following which the EPA Risk Management Policy was revised to bring it into full compliance with the provisions of the revised Code of Practice for the Governance of State Bodies. The EPA has a Chief Risk Officer and a Risk Committee.

The Risk Management process in the EPA includes the identification, classification, evaluation, monitoring and control of events and activities.

The system operates through a series of linked activities including:

- Facilitated Workshops
- Individual and group discussions at Office level
- The production of risk registers
- The planning, monitoring and control of identified risks by assigned owners
- The production of control and risk assurance statements

- Oversight by the Risk Committee which is a sub-committee of the Board

In total this provides a cycle of risk management procedures as well as a framework for managing ad-hoc risks as they arise.

The Risk Committee met on two occasions in 2012. A fundamental review of Office level risks was completed in 2012 and an All-Office Risk Register was established.

The Corporate Risk Register was updated to reflect changes that had occurred in relation to principal risks and mitigations. The Corporate Risk Register sets out key risks under the following nine headings:

- Reputation
- Operational & Business Controls
- Personnel
- Legal and Regulatory
- Information Management and Technology
- Fraud and Corruption
- Budgetary/Financial
- Health & Safety and
- Inter-Agency.

Both the All-Office and Corporate Risk Registers are subject to regular monitoring.

The EPA identified challenges and opportunities as part of the development of EPA's Strategic Plan 2013-2015, under the four headings Environmental Protection, Economic Recovery, Society and Reform.

Internal Audit

The EPA's Internal Audit Committee comprises an external Chairperson and other external expertise in lieu of non-executive Director input, together with a senior representative from the EPA. The EPA Internal Audit Plan 2012-2013 was progressively implemented with two standard audits completed and two Value for Money (VFM) Reviews carried out.

Internal audits were carried out in the areas of:

- LEMA Project, Phase 1; and
- Review of Procurement in the EPA.

Implementation Plans to address the audit recommendations are approved by the Internal Audit Committee and the Board of the EPA. Progress on the implementation of the actions in each of the Internal Audit Implementation Plans is regularly reviewed and reported to the Internal Audit Committee and the EPA Board.

Value for Money reviews were carried out in the areas of the:

- National Waste Prevention Programme and
- Water Framework Directive.

Both reports were being finalised at the end of 2012 and final reports will be presented to the Internal Audit Committee in 2013. The Value for Money Reviews were carried out in accordance with Department of Finance Guidelines.

Progress on the implementation of the actions in Internal Audit Implementation Plans is regularly reviewed and reported to the Internal Audit Committee and the EPA Board.

The Internal Audit Plan for the period 2013-2014 was developed during 2012 and approved in November 2012. It reflects the risks identified in the EPA's Corporate Risk Register, the requirements of the Comptroller and Auditor General, and developments and issues in relation to Corporate Governance that have arisen in the Public Sector in general. This Internal Audit Plan was approved by the Internal Audit Committee and by the EPA Board.

BOARD OF THE EPA

The EPA Board comprises of five full-time Executive Directors. A total of 48 meetings were held in 2012, including 13 general meetings, at which corporate policy, strategy, finance and planning issues were dealt with and 35 technical meetings, at which licence applications, prosecutions and operational issues were dealt with.

ADVISORY COMMITTEE

The 5th EPA Advisory Committee was appointed by Mr John Gormley, TD, Minister for the Environment, Heritage and Local Government on 21st January 2010. The Committee held four meetings during 2012 and continued to provide useful and timely advice to the EPA on a range of issues.

PUBLIC SERVICE AGREEMENT 2010–2014

The EPA developed a revised Action Plan under the Public Service Agreement 2010–2014 (referred to as the 'Croke Park Agreement') in October 2012 and presented its third Progress Reports to the DECLG up to the end of December 2012. This Action Plan gives effect to the measures set out in the Agreement and outlines the specific actions to be taken by the EPA to achieve efficiencies and savings, the timescale for these, the benefits and verifiable savings arising and the periods in which they will be achieved.

An EPA Implementation Group was established in 2011 to oversee the implementation of the EPA Action Plan and progress on the plan is monitored by the Board and reported to the Implementation Body as required through the DECLG. Significant progress was made on the Implementation of the EPA Action Plan during 2012.

INFORMATION TECHNOLOGY (IT)

The EPA adopts a proactive approach to the use and governance of IT under the guidance of an internal steering group comprising a Director, senior management and staff directly involved in IT activities. The annual IT plan for 2012, produced by the steering group, was approved by the EPA Board and the Department of Finance as per ICT Circular 2/09 and Circular 2/11.

During 2012 the EPA focused its IT resources on continuing to deal with the challenge of the increasing demands of delivering on its environmental and corporate obligations. The approach was based on the prioritisation of ten lead IT development projects, and the support of existing systems, with the overall objective of improving processes and enhancing IT services/solutions for environmental and corporate systems. Significant IT enabled change took place in 2012 leading to savings and benefits in relation to the Public Service Agreement. A number of these achievements are outlined below.

Following significant review, the EPA has developed innovative systems to enhance efficiencies throughout our licensing, enforcement, and monitoring processes known as LEMA. One such innovation is an electronic portal for licensees, which allows the EPA and 500 licensees to communicate electronically. This portal eliminates the need for licensees to submit numerous paper documents annually in triplicate and for subsequent filing and archiving by the EPA. Reports

from licensees such as monitoring information go directly to the relevant inspector and the status of actions is visible to the licensee and the EPA in real time.

The EPA implemented a new licensing system for Waste Water Discharge licences. This system automates transactions with the licensee, delivering improved efficiencies and enabling better data accessibility across the EPA. The EPA also built a new historic landfill application system in 2012 which provides for detailed risk assessment based on contemporary geospatial data and known waste details. The system facilitates developing a structured remediation plan and will decrease the time required to issue historic landfill licences.

Members of the public can now report complaints and submissions via an online form on www.epa.ie with immediate automatic upload to the relevant EPA system. Additional functionality providing access to environmental information for the public will be available in 2013.

The EPA, working with Local Authorities, has replaced a historical paper-based waste data reporting system with an electronic reporting system. This will result in significant efficiencies and cost savings for the Waste Industry and for Public Authorities. Waste management companies now have to report only once and not multiple times to different authorities as heretofore. The EPA now collects data for national and EU reporting purposes at one location through the e-portal making reporting easier and less onerous for both local authorities and waste operators.

The EPA is continuing to expand the EDEN (Environmental Data Exchange Network) to facilitate and streamline environmental reporting by Local Authorities and other public bodies.

The EPA continued to improve access to environmental information through its web-site. The environment in focus section was continually updated with the most recently published indicator data and a new facility is now available for people to search the map-based information using their address. A new section was added to the EPA web-site (called PRTR) publishing the emissions records of factories, farms, waste water treatment plants, power generators and other regulated industries. These developments are making environmental data more accessible to the public and

encouraging public participation in environmental decision making.

The EPA also introduced IT solutions to support the risk-based approach to inspection and enforcement of on-site waste water systems (including septic tanks) which will lead to a more cost-effective and targeted approach that will provide a high level of protection for the environment at least cost to both the State and the citizen.

A system to provide online facilities for all emissions trading activities including submissions/communications from external parties, internal EPA reporting/processing and EPA submissions to the EU was implemented.

In 2012, the EPA consolidated Ireland's emissions trading registry systems into one European Union Registry system which is being maintained centrally by the European Commission. This allows the EPA to focus on maintaining Ireland's National Emissions Trading Registry and will lead to a reduction in IT running costs across Europe.

The system for real time air quality monitoring and publishing on the internet has been upgraded to incorporate additional data monitoring devices and to enhance the service provided.

Improvements in Corporate Services systems have been focused on the upgrade of EPA's internal financial systems, the introduction of employee self-service for pay slips and P60s, selection of a new HR system, use of E-publishing to help reduce publishing costs by €105,000, use of video-conferencing to reduce travel costs by €75,000 and the installation of building management systems to help reduce energy costs.

In line with the eGovernment plan, the EPA has built on the central contacts master file created in 2011 using Customer Relationship Management (CRM) software. This contacts file is now the backbone for general communication to all stakeholders, information exchange with Local Authorities on Bathing Water Quality and via EDEN, and with private sector licensees for WEEE compliance and the activities referred to above under LEMA.

EPA's technology change project continued with the implementation of Microsoft Exchange 2010, the continued use of CRM software; implementation of IT

Infrastructure monitoring and software deployment tools, replacement of the EPA.ie technical infrastructure and ongoing improvement in capability for self-sufficiency through knowledge transfer to internal staff on technology changes.

SECTION 2



CONSULTANTS AND ADVISERS ENGAGED IN 2012

Accenture Ireland	Compass Informatics Ltd	Mott McDonald Pettit Ltd
Achilles Procurement Services	Cora Systems Ltd	PA Consulting Services Ltd
Acustica Ltd	Deloitte	Penna Plc.
Aether Ltd	EnviroGuide	Petrus
Amec Earth & Environmental UK Ltd	Geosyntec Consultants	Sara Jane Kimberly
Antaris Consulting	Fehily Timoney & Company	River Crossing Business Solutions Ltd
Apex Geoservices Ltd	Ford Consulting Group	RPS Group
ARIA Wealth & Investment Ltd	IP Forensics Limited	Sinclair Knight Merz (Ireland) Ltd
Assure Health & Safety Consultants	Institute of Public Administration	SLR Consulting
AWN Consulting	Kefron Consulting	Tandem Consulting
Barry Doyle & Company	KIS	Tobin Environmental Services
Carr Communications Ltd	KPMG	URS Ireland Ltd
Clean Technology Centre	Mason, Hayes & Curran	White Young & Green Ireland Ltd

PROMPT PAYMENT OF ACCOUNTS ACT, 1997

The Environmental Protection Agency comes under the remit of the Prompt Payment of Accounts Act, 1997, which came into effect on 2nd January 1998, and the European Communities (Late Payment in Commercial Transactions) Regulations 2002 which came into effect on 7th August 2002.

It is the policy of the EPA to ensure that all invoices are paid promptly. Specific systems and procedures have been put in place to enable invoices to be tracked and to ensure that payments are made before their due date. Purchase invoices are logged on a daily basis in Accounts Section, and are followed up systematically to ensure that they are certified and returned for payment without delay. Payments are issued as required to ensure prompt payment.

These controls are designed to provide reasonable, but not absolute, assurance against material non-compliance with the Act and Regulations.

There were no late payments with values in excess of €317 during 2012.



Laura Burke
Director General EPA

EPA PUBLICATIONS 2012

The majority of EPA publications are available to download from the EPA website www.epa.ie/pubs/reports. All publications can also be purchased either online or from EPA Publications' Sales at +353 (0) 53 916 0642.

AIR

The following air reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/air/

- Air Quality in Ireland 2011 - Key Indicators of Ambient Air Quality
- Ireland's Greenhouse Gas Emissions Projections 1990-2011
- Ireland's Transboundary Gas Emissions in 2010
- Verified Emissions 2005-2011
- Ambient Air Monitoring in Celbridge
- Dioxin Levels in the Irish Environment 2011

CORPORATE

The following corporate reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/other/corporate/

- EPA Annual Report and Accounts 2011
- 2011 End of Year Statement
- EPA News
- Biodiversity Action Plan Update 2011-2013
- Ireland's Environment 2012- An Assessment

ENFORCEMENT

The following report can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/enforcement

- EPA Guidance Note on Enforcement Charging Policy

WASTE

The following waste reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/waste/

- National Waste Report 2010
- National Waste Prevention Programme (NWPP) Annual Report 2012

WATER

The following water reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/water/

- The Provision and Quality of Drinking Water in Ireland: A Report for the Year 2011
- The Quality of Bathing Water in Ireland 2011
- Integrated Water Quality Report for 2011 - South East Ireland
- Integrated Water Quality Report for 2011 - Galway, Mayo and Sligo
- Integrated Water Quality Report for 2011 - Monaghan and Louth
- Focus on Urban Waste Water Discharges in Ireland (Report for the Years 2008-2011)

GUIDANCE NOTES

The following guidance notes can be found on the EPA website at www.epa.ie/pubs/advice/

- Guidance to Licensees on Surrender, Cessation and Closure of Licensed Sites
- Dumping at Sea Judicial Review Process
- Guidance on Setting of Trigger Values for Storm Water Discharges to Off-Site Surface Waters at EPA licensed IPPC and Waste Facilities
- Review of Effectiveness of SEA in Ireland - Main Report
- Review of Effectiveness of SEA in Ireland - Summary
- Review of Effectiveness of SEA in Ireland - Action Plan

ENVIRONMENTAL RESEARCH REPORTS**CLIMATE CHANGE**

The following climate change research reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/climate/

- Integrated Modelling Project Ireland (CCRP 12)
- Carbon Restore - The Potential of Restored Irish Peatlands for Carbon Uptake and Storage (CCRP 15)
- Robust Adaptation to Climate Change in the Water Sector in Ireland (CCRP 16)
- A New Approach to Bioaerosol Monitoring in Ireland (CCRP 18)
- National Adaptive Capacity Assessment (CCRP 17)

- Integrating Climate Change Adaptation into Sectoral Policies in Ireland (CCRP 10)
- Integrated Modelling Project Ireland (CCRP 12)
- Ireland Adapts to Climate Change (CCRP 9)
- Earth Observation Strategy for Ireland (CCRP 8)

WATER

The following water research reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/water/

- Water Quality and the Aquatic Environment (STRIVE 91)
- Molecular Diversity and Dynamics of Toxigenic Blue-Green Algae in Irish Lakes (STRIVE 88)
- Assessment and Monitoring of Ocean Noise in Irish Waters (STRIVE 96)
- Management Strategies for the Protection of High Status Water Bodies (STRIVE 99)
- Biogeography and Ecology of Irish Groundwater Fauna (STRIVE 95)
- Benefit Transfer for Irish Water (STRIVE 94)
- EPA STRIVE Water Research in Ireland 2007-2011

BIODIVERSITY

The following biodiversity research reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/biodiversity/

- Effects of Species Loss and Nutrients on Biodiversity (STRIVE 87)
- Final Report: Integrated Biodiversity Impact Assessment, Streamlining AA, SEA and EIA Processes. Best Practice Guidance (STRIVE 90)

LANDUSE, SOILS AND TRANSPORT

The following landuse, soils and transport research report can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/land/

- Urban Environment Project (STRIVE 92)

WASTE AND RESOURCE MANAGEMENT

The following resource management research reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/waste/

- EPA STRIVE Sustainable Environmental Research in Ireland 2007-2011
- Spent Mushroom Compost Management and Options for Use (STRIVE 74)

- Summary of Findings - Hemp Lime Bio-Composite as a Building Material in Irish Construction (STRIVE 97)

Socio-Economics

The following socio-economic research report can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/econ/

- Decision-Support Tools for Managing the Urban Environment in Ireland (STRIVE 92)

Environmental Technologies

The following environmental technology research reports can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/tech/

- Cleaner Greener Production Programme (CGPP) Business Case Studies 2008-2012

Environment and Health

The following environmental and health research report can be found on the EPA website at

www.epa.ie/downloads/pubs/reports/research/health/

- Enhancing Human Health through Improved Water Quality (STRIVE 89)

Air Quality

The following air quality environmental research report can be found on the EPA website at

www.epa.ie/pubs/reports/research/air/

- Ozone Levels, Changes and Trends Over Ireland- An Integrated Analysis (STRIVE 93)

Small Scale Studies

The following small scale environmental research report can be found on the EPA website at

www.epa.ie/pubs/reports/research/sss/

- Hydraulic Fracturing or Fracking: A Short Summary of Current Knowledge and Potential Environmental Impacts





SECTION 3



FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st DECEMBER 2012

- Statement of Responsibilities of the Agency
- Statement on Internal Financial Control
- Report of the Comptroller and Auditor General
- Accounting Policies
- Income and Expenditure Account
- Statement of Total Recognised Gains and Losses
- Balance Sheet
- Cash Flow Statement
- Notes to the Financial Statements


STATEMENT OF RESPONSIBILITIES OF THE AGENCY

Section 50(1) of the Environmental Protection Agency Act, 1992, requires the EPA to prepare financial statements in such form as may be approved by the Minister for the Environment, Community and Local Government in consultation with the Minister for Finance.

In preparing those financial statements, the EPA is required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the EPA will continue in operation;
- disclose and explain any material departures from applicable accounting standards.

The EPA is responsible for keeping proper books of account which disclose with reasonable accuracy, at any time, the financial position of the EPA and which enable it to ensure that the financial statements comply with Section 50 of the EPA Act. The EPA is also responsible for safeguarding its assets and for taking reasonable steps for the prevention and detection of fraud and other irregularities.



Laura Burke
Director General



Gerard O'Leary
Director

STATEMENT ON INTERNAL FINANCIAL CONTROL 2012

1. On behalf of the Directors of the EPA, I acknowledge our collective responsibility for ensuring that an effective system of internal financial controls is maintained and operated, for preparing the accounts of the EPA and for complying with all statutory obligations applicable to the EPA.
2. The Directors of the EPA acknowledge also that the system of internal financial controls can provide only reasonable and not absolute assurance that assets are safeguarded, transactions are authorised, properly recorded, and that material errors or irregularities are either prevented or would be detected and rectified in a timely period.
3. **Key Procedures to Provide Effective Internal Financial Control**
 - (i) The Directors of the EPA have taken steps to ensure an appropriate control environment within the EPA by:
 - Publishing the EPA Strategy Statement 2020Vision – Protecting and Improving Ireland's Environment. This Strategy covers the period to 2020 and sets out the EPA's environmental and organisational goals. Implementation of the Strategy is monitored and reported to the Board of the EPA on a periodic basis. The draft EPA Strategic Plan 2013-2015 Working with Others for a Better Environment was issued for public consultation in late 2012 and the final strategy was published in Quarter 1/2013.
 - Agreeing a detailed work programme for each year and monitoring and evaluating progress against the work programme on a monthly basis.
 - Holding regular Board meetings, including monthly management meetings where the Agenda includes strategic issues such as Corporate Governance, Financial Management, Corporate Strategy and staffing matters.
 - Adopting a set of financial procedures to control the significant financial elements of the EPA's business and publishing these in the staff Finance Manual.
 - Maintaining a comprehensive schedule of insurances to protect the EPA's interests.
 - Establishing an Internal Audit Committee, as part of the ongoing systematic review of the control environment and governance procedures within the EPA, to oversee the Internal Audit function and advise the Board in relation to the operation and development of that function.
 - Establishing and operating a Risk Management

Policy and Framework, appointing a Risk Committee and a Chief Risk Officer.

- Adopting a Policy for monitoring and assessing compliance with corporate legislation.
- Clearly defining management responsibilities, delegating appropriate functions, and reviewing and approving all EPA policies and procedures.
- Adopting a Code of Business Conduct for Directors and Staff in accordance with the requirements of the Code of Practice for the Governance of State Bodies.
- Ensuring compliance with the Ethics in Public Office Acts requirements and Sections 37 & 38 of the EPA Act 1992, relating to the Declaration and Disclosure of Interests.

(ii) The EPA completed a comprehensive review of its Risk Management Structures in 2012 following which the EPA Risk Management Policy was updated to bring it into full compliance with the provisions of the revised Code of Practice for the Governance of State Bodies. A Chief Risk Officer was appointed and a Risk Committee was established in 2011 in line with the revised Policy. The Risk Committee met on two occasions in 2012. A fundamental review of Office level risks was completed also in 2012 and an All-Office Risk Register was established. The Corporate Risk Register was updated to reflect changes that had occurred in relation to principal risks and mitigations and sets out the key risks for the Agency.

Both the All-Office and Corporate Risk Registers are subject to regular monitoring and are reviewed by the Internal Audit Committee. Each Director provides quarterly assurance statements to the Board acknowledging responsibility for the on-going update, monitoring and review of the Risk Register for their Office and for ensuring the implementation of the Risk Management Policy.

(iii) The system of internal financial controls is based on a framework of regular management information, a system of delegation and accountability, a set of financial and administrative procedures including segregation of duties. In particular it includes:

- A comprehensive budgeting system with an annual budget, which is reviewed and approved by the Board of Directors.
- The assignment of budgets and budgetary authority and responsibility for specific functions to selected managers. A Finance Manual was published in 2007, which sets out policies and procedures in relation to budgetary and financial issues.

- Restricting authority for authorising all payments of EPA monies, payment of salaries, pensions, creditors, and expenses etc. (whether by cheque or electronic fund transfer) to Directors and three named Programme Managers.
- Segregation of payment transaction processing duties into two steps: 1: confirmation that goods/services were received and salaries, pensions and expenses were due, by staff responsible for these transactions and 2: calculation of the total monies due by the Finance Unit, prior to seeking authorisation for payment.
- Arrangements for all purchasing to be conducted and controlled through the EPA's financial management system and procedures.
- Regular and ongoing review of payments by senior management.
- Regular reviews by the Board of Directors of periodic and annual financial information and reports (including key financial management information and purchasing commitments), which indicate financial performance against budgets.
- The application of project management disciplines in respect of building programmes and major consultancy projects.
- A system of control on the overall approval of capital and consultancy contracts.
- Development of an Asset Management Process and Procedures.
- Adoption in 2011 of a Corporate Procurement Plan.

(iv) The financial implications of business risks have been considered through the formal business risk assessment process and in the preparation of the EPA Internal Audit Plans. These are further assessed and evaluated through the phased implementation of the EPA's Internal Audit Plan. A comprehensive set of Financial Procedures have been put in place to control the significant financial elements of the EPA's business including authorisation limits for purchasing/expenditure.

(v) The EPA's Internal Audit Committee comprises an external Chairperson and other external expertise in lieu of non-executive Director input, together with a senior representative from the EPA. The EPA Internal Audit Plan 2012–2013 was progressively implemented with two standard audits completed and two Value for Money (VFM) Reviews carried out.

Internal audits were carried out in the areas of:

- The LEMA Project, Phase 1 (a bespoke IT System); and
- Procurement in the EPA.

The Internal Audit on Procurement was carried out at the end of 2012 and a report was approved by the Board in February 2013. It identified a number of instances where goods and services had not been procured in accordance with public procurement guidelines. An Implementation Plan to address the audit recommendations was put in place and has since been approved by the Audit Committee and the Board of the EPA. In accordance with the audit recommendations a full-time Procurement Officer has been appointed to oversee the implementation of the approved Plan. In addition a cross-office team has been established to provide support with the implementation of the recommendations of the Internal Audit Report.

Progress on the implementation of the actions in each of the Internal Audit Implementation Plans is regularly reviewed and reported to the Internal Audit Committee and the EPA Board.

VFM reviews were carried out in the areas of:

- the National Waste Prevention Programme and
- the Water Framework Directive.

Both reports were being finalised at the end of 2012 and final reports will be presented to the Internal Audit Committee in 2013.

The Value for Money Reviews were carried out in accordance with Department of Finance Guidelines.

The Internal Audit Plan for the period 2013-2014 was developed during 2012 and approved in November 2012 and reflects the risks identified in the EPA's Corporate Risk Register, the requirements of the Comptroller and Auditor General, and developments and issues in relation to Corporate Governance that have arisen in the Public Sector in general. This Internal Audit Plan was approved by the Internal Audit Committee and by the EPA Board.

4. Annual Review of Controls

I confirm that, in addition to the internal audits carried out and referred to in paragraph 3 (v) above, the EPA arranged for a formal independent review, in March 2013, of its compliance with the Code of Practice for the Governance of State Bodies and of the internal control systems in place in the EPA. This review was carried out using external

expertise and was based on a detailed examination of governance, financial management and control documentation.

The review found that it was evident that the EPA invests in Corporate Governance and Internal Control processes. It was noted that the EPA has a full-time Corporate Governance Unit with responsibility for overseeing and reporting on the implementation of and compliance with the Code of Practice for the Governance of State Bodies. The review also stated that the EPA has a multitude of policies and procedures covering the key areas of governance and internal control. The policies were reviewed and it was noted that they were adequate and generally in line with good practice.

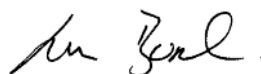
The report noted also that regular management meetings and workshops are held in the areas of governance and internal control and there is a high level of awareness of the need for a strong system of control throughout the organisation.

The overall conclusion of the review was that:

- there is a strong system of Corporate Governance in operation within the EPA and the EPA is substantially compliant with the Code of Practice for the Governance of State Bodies.
- Corporate Governance is at a well-developed stage in the EPA when benchmarked against other state agencies.
- the control environment in the EPA is generally adequate, with a small number of areas for improvement noted in relation to finance.

An Implementation Plan to address the recommendations of the above review to further enhance the system of internal financial controls will be put in place in 2013.

I confirm also that the Directors of the Agency conducted a review of the system of internal controls in the EPA in 2012.



Laura Burke
Director General
8 August 2013

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL FOR PRESENTATION TO THE HOUSES OF THE OIREACHTAS

ENVIRONMENTAL PROTECTION AGENCY

I have audited the financial statements of the Environmental Protection Agency for the year ended 31 December 2012 under the Environmental Protection Agency Act 1992. The financial statements, which have been prepared under the accounting policies set out therein, comprise the accounting policies, the income and expenditure account, the statement of total recognised gains and losses, the balance sheet, the cash flow statement and the related notes. The financial statements have been prepared in the form prescribed under Section 50 of the Act, and in accordance with generally accepted accounting practice in Ireland.

RESPONSIBILITIES OF THE AGENCY

The Agency is responsible for the preparation of the financial statements, for ensuring that they give a true and fair view of the state of the Agency's affairs and of its income and expenditure, and for ensuring the regularity of transactions.

RESPONSIBILITIES OF THE COMPTROLLER AND AUDITOR GENERAL

My responsibility is to audit the financial statements and report on them in accordance with applicable law.

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation.

My audit is carried out in accordance with the International Standards on Auditing (UK and Ireland) and in compliance with the Auditing Practices Board's Ethical Standards for Auditors.

SCOPE OF AUDIT OF THE FINANCIAL STATEMENTS

An audit involves obtaining evidence about the amounts and disclosures in the financial statements, sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of

- whether the accounting policies are appropriate to the Agency's circumstances, and have been consistently applied and adequately disclosed
- the reasonableness of significant accounting estimates made in the preparation of the financial statements, and
- the overall presentation of the financial statements.

I also seek to obtain evidence about the regularity of financial transactions in the course of audit.

In addition, I read the Agency's annual report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my report.

OPINION ON THE FINANCIAL STATEMENTS

In my opinion, the financial statements, which have been properly prepared in accordance with generally accepted accounting practice in Ireland, give a true and fair view of the state of the Agency's affairs at 31 December 2012 and of its income and expenditure for 2012.

In my opinion, proper books of account have been kept by the Agency. The financial statements are in agreement with the books of account.

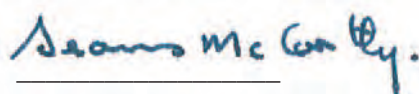
MATTERS ON WHICH I REPORT BY EXCEPTION

I report by exception if

- I have not received all the information and explanations I required for my audit, or

- my audit noted any material instance where money has not been applied for the purposes intended or where the transactions did not conform to the authorities governing them, or
- the information given in the Agency's annual report for the year for which the financial statements are prepared is not consistent with the related financial statements, or
- the Statement on Internal Financial Control does not reflect the Agency's compliance with the Code of Practice for the Governance of State Bodies, or
- I find there are other material matters relating to the manner in which public business has been conducted.

I have nothing to report in regard to those matters upon which reporting is by exception.



Seamus McCarthy

Comptroller and Auditor General

15 August 2013

ACCOUNTING POLICIES

1 BASIS OF ACCOUNTING

The financial statements have been prepared under the historical cost convention and in the form approved by the Minister for the Environment, Community and Local Government with the consent of the Minister for Finance in accordance with Section 50 of the Environmental Protection Agency Act, 1992.

The financial statements are prepared on an accruals basis, except as stated below, and in accordance with generally accepted accounting practice. Financial reporting standards recommended by the recognised accountancy bodies are adopted as they become applicable.

2 OIREACHTAS GRANTS

The figures shown are the actual grants received in the accounting period.

3 LICENCE FEES

Applicants for all licences are required to pay the full licence application fee at the time of making the application. The amounts received are apportioned to the Income and Expenditure Account on completion of the following stages of the licensing process:

INTEGRATED POLLUTION PREVENTION AND CONTROL AND WASTE MANAGEMENT LICENCES:

• Application	30%
• Proposed Determination	50%
• Licence Issue	20%

WASTE WATER DISCHARGE LICENCES:

• Application	10%
• Acknowledgement of complete application	40%
• Licence Decision Issue	50%

4 FUNDING OF EMISSIONS TRADING UNIT

The Emissions Trading Unit (ETU) was established within the Environmental Protection Agency in 2003. The auction/sale of a quantity of the total allowances (not greater than 0.5%) is provided for in the Government direction to the Environmental Protection Agency in connection with the EU emissions trading scheme. Auction/sale proceeds are used to defray the costs of administering the emissions trading scheme and the balance is paid over to the Department of the Environment, Community and Local Government and is not treated as income of the Agency. In 2012 the

costs of the ETU were recovered from the proceeds of the sale which took place in 2009, 2010 and 2011. Auction/sale proceeds retained by the Agency to fund the ETU are recognised as income of the Environmental Protection Agency in line with the associated costs. No sale of allowances took place in 2012.

5 RESEARCH GRANT PAYMENTS

The EPA enters into commitments in respect of research projects awarded for funding. Expenditure on these research projects is charged in the financial statements on the basis of the initial payments made on signing of the grant award, interim payments which may be made subject to satisfactory performance and further payments which are issued on receipt and verification of claims in respect of work completed. Costs incurred by the EPA in the implementation of the research programmes are charged to the financial statements as they are incurred.

6 FIXED ASSETS AND DEPRECIATION

Fixed assets are stated at cost less accumulated depreciation. Depreciation is provided on a straight line basis at the rates stated below which are estimated to reduce the assets to their realisable values at the end of their expected working lives:

• Buildings	2%
• Furniture and Fittings	10%
• Laboratory and Field Equipment	15%
• Equipment	20%
• IT and Computer Equipment	25%
• Motor Vehicles	20%

7 CAPITALISATION OF INTERNALLY DEVELOPED SOFTWARE

The external costs of software developed for internal use are capitalised where it can be separately identified as feasible software for use by the Agency and where it is expected to convey business benefits for a number of future years. The internal staff costs of software development for internal use are not capitalised.

8 CAPITAL FUNDING

The fixed assets of the EPA and advances to fund work in progress and asset purchases are met from a combination of capital grants, approved borrowing and allocations from current revenue. Funding sourced from grants (including that used to repay borrowings) is transferred to a capital account which is amortised in line with the depreciation of the related assets.

9 STOCKS

All stocks, including consumables are written off in the year of purchase.

10 DEBTORS

Provision for doubtful debts is made, where warranted, in the accounts. Bad debts, as they arise, are written off against that provision.

11 SUPERANNUATION

The Environmental Protection Agency operates defined benefit pension schemes, which are funded annually on a pay as you go basis from monies available to it, including monies provided by the Department of the Environment, Community and Local Government and from pension contributions deducted from staff salaries.

Pension Scheme liabilities are measured on an actuarial basis using the projected unit method.

Pension costs reflect pension benefits earned by employees in the period and are shown net of staff pension contributions which are retained by the Agency. An amount corresponding to the pension charge is recognised as income to the extent that it is recoverable, and offset by grants received in the year to discharge pension payments.

Actuarial gains or losses arising from changes in Actuarial assumptions and from experience surpluses and deficits are recognised in the Statement of Total Recognised Gains and Losses for the year in which they occur and a corresponding adjustment is recognised in the amount recoverable from the Department of the Environment, Community and Local Government.

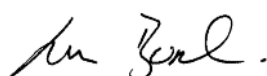
Pension liabilities represent the present value of future pension payments earned by staff to date. Deferred pension funding represents the corresponding asset to be recovered in future periods from the Department of the Environment, Community and Local Government.

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR END 31 DECEMBER 2012

		2012	2011
INCOME	Note	€'000	€'000
State Grants	1	41,453	46,783
Emissions Trading Costs Recovered	2	1,387	1,194
Other Services		36	28
Income from Regional Laboratories		1,140	1,217
Licensing Activities	3	835	2,205
Enforcement Activities	4	6,932	7,353
Sundry Receipts	5	27	70
Net deferred funding for pensions	22(c)	5,556	6,297
		<u>57,366</u>	<u>65,147</u>
 EXPENDITURE			
Salaries and PRSI	6	19,403	19,799
Pension Costs	22(a)	7,818	7,486
Travelling Expenses	7	1,354	1,352
Laboratory and Field Costs	8	1,906	3,210
Accommodation Costs	9	1,768	1,750
Other Administration Costs	10	6,136	5,420
Consultants	11	206	787
Contractors, Grants and External Service Providers	12	7,628	8,305
Environmental Research	13	9,630	13,338
Depreciation	18	2,993	2,555
		<u>58,842</u>	<u>64,002</u>
Transfer (from)/to Capital Account	14	(311)	536
		<u>58,531</u>	<u>64,538</u>
 Operating (Deficit)/Surplus		<u>(1,165)</u>	<u>609</u>
Surplus on Disposals of Assets		64	10
(Deficit)/Surplus before Interest		<u>(1,101)</u>	<u>619</u>
Interest Received	15	85	61
Interest Payable and Similar Charges	16	(47)	(43)
(Deficit)/Surplus for Year		<u>(1,063)</u>	<u>637</u>
Surplus at 1 January		1,363	726
Surplus at 31 December		<u>300</u>	<u>1,363</u>

The results for the year relate to continuing operations.

The statement of accounting policies and cash flow statement, together with notes 1 to 25 form part of these financial statements.



Laura Burke
Director General



Gerard O'Leary
Director

STATEMENT OF TOTAL RECOGNISED GAINS AND LOSSES FOR THE YEAR ENDED 31 DECEMBER 2012

	Note	2012 €'000	2011 €'000
(DEFICIT)/SURPLUS FOR THE YEAR		(1,063)	637
Experience gains on pension scheme liabilities		(102)	1,429
Changes in assumptions underlying the present value of pension scheme liabilities		(12,881)	(4,838)
Actuarial (Loss)/Gain on Pension Liabilities	22(b)	(12,983)	(3,409)
Adjustment to Deferred Pension Funding		12,983	3,409
Total Recognised Gains and Losses for the Year		(1,063)	637

The results for the year relate to continuing operations.

The statement of accounting policies and cash flow statement, together with notes 1 to 25 form part of these Financial Statements.



Laura Burke
Director General



Gerard O'Leary
Director

BALANCE SHEET AS AT 31 DECEMBER 2012

		2012	2011
	Note	€'000	€'000
Fixed Assets	18	36,574	37,409
Current Assets			
Debtors and Prepayments	19	1,324	904
Cash on Hand and at Bank	20	10,590	15,041
		<u>11,914</u>	<u>15,945</u>
Less Current Liabilities			
Creditors (Amounts falling due within one year)	21(a)	<u>(11,601)</u>	<u>(14,805)</u>
Net Current Assets/(Liabilities)		313	1,140
Creditors (Amounts falling due after more than one year)	21(b)	<u>(1,221)</u>	<u>(1,509)</u>
Total Assets less Current Liabilities before Pensions		<u>35,666</u>	<u>37,040</u>
Pension Liabilities	22(b)	122,848	104,309
Deferred Pension Funding	22(c)	<u>(122,848)</u>	<u>(104,309)</u>
		<u>0</u>	<u>0</u>
Total Net Assets		<u>35,666</u>	<u>37,040</u>
REPRESENTED BY:			
Capital Account	14	35,366	35,677
Income and Expenditure Account		<u>300</u>	<u>1,363</u>
		<u>35,666</u>	<u>37,040</u>

The statement of accounting policies and cash flow statement, together with notes 1 to 25 form part of these financial statements.



Laura Burke
Director General



Gerard O'Leary
Director

CASH FLOW STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2012

	Note	2012 €'000	2011 €'000
RECONCILIATION OF SURPLUS TO NET CASH			
Inflow from Operating Activities			
(Deficit)/Surplus for year		(1,063)	637
Interest Received	15	(85)	(61)
Interest Paid	16	47	43
Surplus on Disposal of Assets		(64)	(10)
Transfer from Capital Account	14	(311)	536
Depreciation charge for year	18	2,993	2,555
Decrease in Debtors and Prepayments		(183)	622
Increase in Creditors (other than Loan Creditors)		(3,205)	(684)
Net Cash Flow from Operating Activities		(1,871)	3,638
CASH FLOW STATEMENT			
Net Cash Flow from Operating Activities		(1,871)	3,638
RETURNS ON INVESTMENTS AND SERVICING OF FINANCE			
Bank Interest Received	15	85	61
Bank Interest Paid	16	(47)	(43)
INVESTING ACTIVITIES			
Proceeds on disposal of fixed assets		76	15
Payments to acquire fixed assets		(2,407)	(2,810)
Net Cash Inflow Before Financing		(4,164)	861
FINANCING			
Fixed Asset Loan Repayments		(287)	(286)
Increase in Cash		(4,451)	575
RECONCILIATION OF NET CASH FLOW TO MOVEMENT IN CASH BALANCES			
Increase in cash in year		(4,451)	575
Funds at 1 January		15,041	14,466
Funds at 31 December		10,590	15,041

The statement of accounting policies together with notes 1 to 25 form part of these financial statements.



Laura Burke
Director General



Gerard O'Leary
Director

NOTES TO THE FINANCIAL STATEMENTS

		<u>2012</u>	<u>2011</u>
		<u>€'000</u>	<u>€'000</u>
1 State Grants			
Grants from the Department of the Environment, Community and Local Government:			
Grants from the Department's Vote	Current	16,050	18,352
	Capital	1,100	1,000
	Other Programmes	302	204
		<u>17,452</u>	<u>19,556</u>
Grants from the Environment Fund	Non-Pay	2,500	0
	Research	9,600	13,000
	Other Programmes	11,901	14,227
		<u>24,001</u>	<u>27,227</u>
Total State Grants		<u>41,453</u>	<u>46,783</u>

The Research Funding is a specific allocation to meet the cost of Environmental Research. €9.63M was expended on these research activities in 2012 (2011- €13.338M).

		<u>€'000</u>	<u>€'000</u>
2 Emissions Trading Unit (ETU) Activities			
(a) Cost of Emissions Trading Unit			
Emissions Trading Operator Registration Fees, etc.		38	13
Costs to be recovered from Auction Funds, etc.		1,349	1,181
Total Funding of ETU Costs		<u>1,387</u>	<u>1,194</u>
(b) Summary of Emissions Trading Unit Funds:		<u>€'000</u>	<u>€'000</u>
ETU Operator Fees Received		33	1
Sale of Allowances		0	3,115
Bank Interest Received		85	89
Aviation Fees Received		5	11
Total Funds Generated		<u>123</u>	<u>3,216</u>
Funds Carried Forward		4,251	2,229
Total Current Year ETU Costs		<u>(1,387)</u>	<u>(1,194)</u>
ETU Funds Carried Forward		<u>2,987</u>	<u>4,251</u>

In previous years, the EPA sold emissions trading allowances in the market. No allowances were sold in 2012. With effect from 2013, the sale of such allowances is a matter for the Department of the Environment, Community and Local Government, with auctions being conducted at EU Level.

		<u>€'000</u>	<u>€'000</u>
3 Licensing Activities - IPPC, Waste and WWD			
Licence Fees prepaid at 1 January		5,827	7,343
Fees Received		291	689
Less Refunds Paid		0	0
Licence Fees prepaid at 31 December (see Note 21 (a))		(5,283)	(5,827)
Amount credited to Income and Expenditure Account		<u>835</u>	<u>2,205</u>

Licensing: Integrated Pollution Control (IPPC) and Waste

Under Section 83 of the Environmental Protection Agency Act, 1992 the EPA is responsible for the licensing of large/complex industrial and other processes with significant polluting potential. Under Section 40 of the Waste Management Act, 1996 the EPA is responsible for the licensing of all significant waste recovery & disposal activities operated by local authorities and private enterprise.

Licensing: Waste Water Discharges (WWD)

The Waste Water Discharge (Authorisation) Regulations 2007 provide for the licensing of local authority waste water discharges. Discharges from areas that serve over 500 population equivalent will require a licence from the EPA. Areas that serve less than 500 population equivalent will be required to be certified by the EPA.

The EPA's licensing income arises from fees charged in respect of processing such licensing applications.

		<u>€'000</u>	<u>€'000</u>
4 Enforcement Activities - IPPC and Waste			
Enforcement Charges Invoiced		6,864	6,984
Enforcement Income from Prosecutions		68	369
Total Income from Enforcement Activities		<u>6,932</u>	<u>7,353</u>

Under Section 96 of the Environmental Protection Agency Act, 1992 the EPA is responsible for the regulation of large/complex industrial and other processes with significant polluting potential. Under Section 15 of the Waste Management Act, 1996 the EPA is responsible for the regulation of all significant waste recovery and disposal activities operated by local authorities and private enterprise. The EPA's enforcement income arises from fees charged in respect of this monitoring work.

5 Sundry Receipts

	2012 €'000	2011 €'000
Insurance claims	0	3
Sales of publications	3	3
Sundry	24	64
	27	70

Receipts from Insurance Claims in 2012 amounted to €6,888 and has been netted off against the expenditure to which it relates.

6 Salaries and PRSI of Staff

	€'000	€'000
Salaries	17,867	18,311
Employers' PRSI	1,536	1,488
Total Salary Costs	19,403	19,799

The numbers of employees on 31 December were :

Headquarters	138	143
Regional Inspectorates :		
Castlebar	28	29
Cork	40	40
Dublin	76	80
Kilkenny	19	21
Monaghan	12	12
Regional Offices	5	6
	318	331

Director General's Remuneration Package and Director's Fees

The Director General received a salary of €164,464 in 2012 (2011-€164,464) and is also entitled to a pension in line with the standard entitlements of the Environmental Protection Agency (Director General and Director) Staff Superannuation Scheme, 1996. This scheme has been approved by the Minister and is in line with standard entitlements of similar defined benefit schemes in the Public Sector. The Directors of the Environmental Protection Agency are full time executive Directors. They are paid an inclusive salary and consequently no Directors fees are paid.

There is no performance related payment scheme in place for the posts of Director General or Director of the Environmental Protection Agency and thus no performance related payments have been paid.

Pension Levy

In 2012 €1.215M (2011- €1.228M) of pension levy was deducted and paid over to the Department of Environment, Community and Local Government.

7 Travelling Expenses

	€'000	€'000
Travel and Subsistence	1,201	1,200
Motor Vehicle Expenses	172	169
Travel Refunds	(19)	(17)
	1,354	1,352

Board Members Expenses

The Directors of the Environmental Protection Agency are full time executive Directors based at Headquarters in Wexford.

The majority of Board meetings are held in Wexford in which case no expenses arise. Where, for business reasons, Board meetings are held in another location, Travel and Subsistence expenses are reimbursed at the rates applicable for the Civil Service.

Expenses paid to Directors in relation to attendance at Board meetings in 2012 amounted to €1,392 broken down €912 mileage, €389 subsistence and €91 other expense costs. The 2011 total was €441 (€332 mileage, €109 subsistence and €0 other expenses).

Staff Development & Training Costs

A sum of €118,996 (2011- €133,784) in respect of travelling expenses is included under staff development and training costs at Note 10.

8 Laboratory and Field Costs

	€'000	€'000
Laboratory and Field Expenses	1,621	2,925
Equipment Repairs and Maintenance	272	258
Protective Clothing	13	27
	1,906	3,210

9 Accommodation Costs

	€'000	€'000
Rent and Rates	257	256
Power, Light and Heat, Cleaning	596	549
Repairs, Maintenance, Security	915	945
	1,768	1,750

	2012	2011
	€'000	€'000
10 Other Administration Costs		
Telephone and Postage	304	250
Printing of Publications and Stationery Supplies	287	310
Insurance	156	153
Computer and Data Processing Charges	3,476	2,546
Audit Fees	16	16
Corporate Governance and Internal Audit Costs	61	31
Legal Fees	652	796
Staff Appointment Costs	38	49
Bank Interest and Charges	4	4
Books, Periodicals, and Library	51	54
Staff Development and Training Costs	527	591
Advertising	218	112
Communications	271	424
Sundries	75	84
	6,136	5,420

	€'000	€'000
11 Consultancy Costs		
Consultants	206	787
	206	787

The work programme activities which made use of these consultancies were:

	€'000	€'000
Water Framework Directive Programme	6	0
Environmental Assessment	3	62
Environmental Enforcement	146	674
National Waste Prevention Programme	7	38
Emissions Trading Unit	0	3
Communications and Corporate Services	44	10
	206	787

	€'000	€'000
12 Contractors, Grants and External Service Providers		
Contractors	3,814	2,448
Grants	1,226	1,283
External Service Providers	2,588	4,574
	7,628	8,305

The main work areas which incurred costs under this heading were:

	€	€
Communications and Corporate Services	294	345
Water Framework Directive Programme	1,853	1,892
Environmental Enforcement	1,794	1,934
National Waste Prevention Programme	3,208	3,613
Environmental Assessment	384	368
Emissions Trading Unit	70	127
Climate, Licensing and Resource Use	25	26
	7,628	8,305

	€'000	€'000
13 Environmental Research		
EPA Research Programme	9,630	13,515
Co - Funding Research Income	0	(177)
Research Programme Payments	9,630	13,338

The current EPA environmental research programme was launched in 2007. It is being funded through the NDP 2007 - 2013 and the Government Strategy for Science, Technology and Innovation (SSTI). The research programme aims to fund research that will address key environmental management issues, which will ultimately protect and improve the natural environment.

In 2012 the EPA Research Programme expenditure of €9.63M includes Grant Payments of €8.77M and implementation and activity costs of €862,892

13 Environmental Research (continued)

At 31 December 2012 commitments entered into but not yet charged to the financial statements in respect of Research projects amounted to €19.491M (2011- €22.277M) with the following breakdown:

	2012	2011
	€'000	€'000
Outstanding Grant Commitments at 1 January	22,277	31,372
Grants Approved during the year	7,169	5,995
Grants Decommited during the year	(1,141)	(2,384)
Grant Payments made in the year	(8,814)	(12,706)
Outstanding Commitments at 31 December	19,491	22,277

These figures exclude EPA implementation costs in respect of Research programmes.

14 Capital Account

	€'000	€'000
At 1 January 2012		35,677
Transfer from Income and Expenditure Account :		
Income Allocated for Capital purposes	- Fixed Asset Additions	2,081
	- To Fund Future Additions	326
	- Repayment of Loans	287
		2,694
Less		
Disposals		821
Less prior depreciation on disposals		(809)
		12
Depreciation charge for year		2,993
Net Transfer from Income and Expenditure Account		(311)
At 31 December 2012		35,366

At 31 December 2012 the Capital Account balance includes €346,773 (2011-€110,000) in respect of prepayments for fixed assets (see Note 19 - Debtors and Prepayments).

15 Interest Received

	2012	2011
	€'000	€'000
Total Bank Deposit Interest Received	170	150
Less Deposit Interest Earned on ETU Funds incl. in ETU Total Funds Generated at Note 2(b) above	(85)	(89)
Bank Deposit Interest Earned on EPA Funds	85	61

16 Interest Payable and Similar Charges

	€'000	€'000
Bank Loans repayable by Instalments - Mortgage on Headquarters building	47	43

17 Taxation

The EPA is specifically exempted under the provisions of Section 32, and Schedule 2, of Finance Act, 1994. Accordingly no taxation charges have been included in the accounts.

18 Fixed Assets

Cost	Total	Buildings	Furniture & Fittings	IT & IS Equipment	Lab & Field	Motor Vehicles
	€'000	€'000	€'000	€'000	€'000	€'000
At 1 January 2012	56,995	37,865	3,094	5,679	9,258	1,099
Transfers	89	84	5	0	0	0
Additions	2,081	35	22	1,938	50	36
Disposals	(821)	0	(12)	(131)	(638)	(40)
At 31 December 2012	58,344	37,984	3,109	7,486	8,670	1,095
Depreciation						
At 1 January 2012	19,586	6,099	2,214	3,487	6,952	834
Charge for Year	2,993	762	238	1,094	772	127
On Disposals	(809)	0	(8)	(131)	(630)	(40)
At 31 December 2012	21,770	6,861	2,444	4,450	7,094	921
Net Book Value						
At 31 December 2012	36,574	31,123	665	3,036	1,576	174
At 31 December 2011	37,409	31,766	880	2,192	2,306	265

18 Fixed Assets (continued)

Headquarters for the Environmental Protection Agency were built on the grounds of Johnstown Castle Estate, County Wexford, on a site whose title is vested in Teagasc. The EPA is in the process of finalising a long - term lease of this site from Teagasc. The headquarters building was constructed by the Office of Public Works (OPW) who financed the construction by means of a commercial loan. The EPA funds the annual repayments made by the OPW. The interest element of the repayments met by the EPA is accounted for in the year it arises.

Both the asset and the associated funding arrangements have been recorded in the books of the EPA to reflect the substance of the underlying transactions.

Under an arrangement with Cork County Council the EPA shared a building at Inniscarra, Co Cork for a number of years and by agreement the EPA took possession of the entire building in 2008. The legal transfer of the premises from Cork County Council to the EPA is being handled by the respective legal advisers.

The EPA regional inspectorate building at Seville Lodge, Kilkenny was constructed by the Office of Public Works on a site acquired for EPA. The legal transfer of the site to the EPA is being processed by the OPW through the State Solicitors Office.

In 2012 the EPA capitalised €1.465M (2011- €1.4M) in respect of the external cost of software development for internal use. This is in line with our new Accounting Policy for *Capitalisation of Intenally Developed Software*.

19 Debtors and Prepayments

	2012	2011
	€'000	€'000
Debtors	977	794
Prepayments for Fixed Assets	347	110
	1,324	904

Prepayments for Fixed Assets:

At 31 December 2012 prepayments totalling €346,773 (2011-€110,000) had been made as set out hereunder. These prepayments have been included in the amounts transferred from the Income and Expenditure Account to the Capital Account.

Advances to the Office of Public Works (OPW)

At 31 December 2009 advance payments of €100,000 had been made to the OPW in respect of minor capital works in Regional Inspectorates. In 2012 works of €84,154 were confirmed complete by the OPW and this was transferred to Fixed Assets. Payment of €10,000 was paid to OPW in 2011, in 2012 €4,716 of this was paid to a number of suppliers for furniture and transferred to Fixed Assets.

Advance payments for other Fixed Assets

€100,000 has been paid in 2012 by the EPA to the Local Government Management Agency as an initial contribution toward licence & implementation costs of the Core HR Payroll & Superannuation System. This payment will be transferred to Fixed Assets when the system is installed.

Also included are payments of €225,643 made to a number of suppliers in relation to building works in the Regional Inspectorate Cork. When works are complete this full cost will be transferred to Fixed Assets.

All debtors fall due within one year.

20 Cash on Hand and at Bank.

	€'000	€'000
Cash and Bank Balances	10,590	15,041

Prepaid Licensing income (see Note 3) accounts for €5.283M (2011- €5.827M) of the Bank balances at the Balance Sheet date.

21 Creditors and Accruals

	€'000	€'000
(a) Amounts falling due within one year :		
Licence Fees (see Note 3)	5,283	5,827
Proceeds of ETU Auction (see Note 2 (b))	2,987	4,251
Trade and Other Expenses	2,996	4,393
Instalments due on purchase of Fixed Assets	335	334
	11,601	14,805

Included in Trade and Other Expense above are the following amounts due to revenue

Professional Service Withholding Tax	328	384
PAYE/PRSI/USC	536	522
VAT	181	150
Relevant Contract Tax	29	11
	1,074	1,067

(b) Amounts falling due after more than one year :

Instalments due on purchase of Fixed Assets	1,221	1,509
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22 Pension Costs

	2012	2011
	€'000	€'000
(a) Analysis of total pension costs charged to Expenditure		
Current Service Cost	3,443	3,329
Interest on Pension Scheme Liabilities	5,313	5,086
Employee Contributions Received	(938)	(929)
	7,818	7,486
(b) Movement in Net Pension Liability during the financial year	€'000	€'000
Net Pension Liability at 1 January	104,309	94,603
Current Service Cost	3,443	3,329
Interest Costs	5,313	5,086
Actuarial Loss / (Gain)	12,983	3,409
Pensions paid in the year	(3,200)	(2,118)
Net Pension Liability at 31 December	122,848	104,309

(c) Deferred Funding for Pensions

The EPA recognises these amounts as an asset corresponding to the unfunded deferred liability for pensions on the basis of the set of assumptions described above and a number of past events. These events include the statutory basis for the establishment of the superannuation schemes, and the policy and practice currently in place in relation to funding public service pensions including contributions by employees and the annual estimates process. The EPA has no evidence that this funding policy will not continue to meet such sums in accordance with current practice.

The Net Deferred Funding for Pensions recognised in the Income and Expenditure Accounts was as follows:

	€'000	€'000
Funding Recoverable in respect of current year pension costs	8,756	8,415
State Grants applied to pay pensioners	(3,200)	(2,118)
	5,556	6,297

The deferred funding asset for pensions at 31 December 2012 amounted to €122.848M (2011 €104.309M).

(d) History of defined benefit obligations

	2012	2011	2010	2009	2008
	€ M	€ M	€ M	€ M	€ M
Defined benefit obligations	123	104	95	91	95
Experience Gains / (Losses) on Scheme Liabilities:					
Amount (€ '000)	-0.1	1	10	6	(5)
Percentage of Scheme Liabilities	-0.1%	1.0%	11.0%	6.9%	5.2%

The cumulative actuarial loss recognised in the Statement of Total Recognised Gains and Losses amounts to €6.023M

(e) General Description of the Schemes

The schemes are defined benefit final salary pension arrangements with benefits and contributions defined by reference to current "model" public sector scheme regulations. The schemes provide staff members with a pension (1/80 per year of service), a gratuity of lump sum (3/80 per year of service) and spouse's and children's pensions. Normal Retirement Age is a member's sixty fifth birthday, and pre 2004 members have an entitlement to retire without actuarial reduction from age 60. The schemes provide Board members with a pension (1/48 per year of service), a gratuity or lump sum (1/32 per year of service) and spouse's and children's pensions. Board members are entitled to retire when their contract ends. Pensions in payment (and deferment) are assumed to increase in line with general salary inflation.

The valuation used for FRS 17 (Revised) disclosures has been based on a full actuarial valuation at 15 March 2013 by a qualified independent actuary taking account of the requirements of the FRS in order to assess the scheme liabilities at 31 December 2012.

The principal actuarial assumptions were as follows:	2012	2011
Rate of increase in salaries	3.00%	3.50%
Rate of increase in pensions in payment	2.50%	3.25%
Discount rate	3.75%	5.00%
Inflation rate	2.00%	2.00%

The mortality basis adopted explicitly allows for improvements in life expectancy over time, so that life expectancy at retirement will depend on the year in which a member attains retirement age (age 65). The table below shows the life expectancy for members attaining age 65 in 2012 and 2032.

Year of attaining age 65	2012	2032
Life expectancy - male	87.3	89.9
Life expectancy - female	88.7	90.9

23 Kerdiffstown Emergency Response

In 2011, the Environmental Protection Agency took the lead in co - ordinating the emergency response to an underground landfill fire at Kerdiffstown, Naas and took charge of the subsequent management of the site. The total cost of this work in 2012 was €2,181,884 (2011- €4,095,979) and this cost is reflected under the following cost headings in these financial statements:

	<u>2012</u>	<u>2011</u>
	<u>€'000</u>	<u>€'000</u>
Note 8 Laboratory and Field Costs - Site Operations (including extinguishing fire), Waste Disposal, etc.	912	2,129
Note 9 Accommodation Costs - Mainly Security costs of the site.	598	641
Note 10 Other Administration Costs - Mainly Communications, Health and Safety and Insurance costs.	134	103
Note 11 Consultancy Costs - Mainly firefighting consultancy, geophysical and solution design work.	0	304
Note 12 Contractors and External Service Provider Costs - Mainly personnel for fire fighting work, etc.	502	195
Note 18 Capital Expenditure - Mainly portable landfill gas management equipment and site offices.	17	709
Note 7 Travelling Expenses - Travel and Subsistence costs of EPA staff.	19	14
Total Costs Incurred	<u>2,182</u>	<u>4,095</u>

The ongoing management of the Kerdiffstown site by the Environmental Protection Agency is continuing in 2013. The EPA is involved in legal proceedings on this matter and is seeking to recover the costs of remediation.

24 Board Members' Interests

The EPA has adopted procedures to govern its decision making in accordance with the Environmental Protection Agency Act, 1992 and the Ethics in Public Office Act, 1995 and regulations made thereunder. These procedures have been adhered to by the EPA during the year.

25 Approval of Financial Statements

The Financial Statements were approved by the Board of Directors on the 8th of August 2013.



An Ghníomhaireacht um Chaomhnú Comhshaoil

Is í an Ghníomhaireacht um Chaomhnú Comhshaoil (EPA) comhlachta reachtúil a chosnaíonn an comhshaoil do mhuintir na tíre go léir. Rialaímid agus déanaimid maoirsiú ar ghníomhaíochtaí a d'fhéadfadh truailliú a chruthú murach sin. Cinntímid go bhfuil eolas cruinn ann ar threochtaí comhshaoil ionas go nglactar aon chéim is gá. Is iad na príomh-nithe a bhfuilimid gníomhach leo ná comhshaoil na hÉireann a chosaint agus cinntiú go bhfuil forbairt inbhuanaithe.

Is comhlacht poiblí neamhspleách í an Ghníomhaireacht um Chaomhnú Comhshaoil (EPA) a bunaíodh i mí Iúil 1993 faoin Acht fán nGníomhaireacht um Chaomhnú Comhshaoil 1992. Ó thaobh an Rialtais, is í an Roinn Comhshaoil, Pobal agus Rialtais Áitiúil.

ÁR bhFREAGRACHTAÍ

CEADÚNÚ

Bíonn ceadúnais á n-eisiúint againn i gcomhair na nithe seo a leanas chun a chinntiú nach mbíonn astuithe uathu ag cur sláinte an phobail ná an comhshaoil i mbaol:

- áiseanna dramhaíola (m.sh., líonadh talún, loisceoirí, stáisiúin aistrithe dramhaíola);
- gníomhaíochtaí tionsclaíocha ar scála mór (m.sh., déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta);
- diantalmhaíocht;
- úsáid faoi shrian agus scaoileadh smachtaithe Orgánach Géinathraithe (GMO);
- mór-áiseanna stórais peitreal.
- scardadh dramhuisce
- dumpáil mara

FEIDHMIÚ COMHSHAOIL NÁISIÚNTA

- Stiúradh os cionn 2,000 iniúchadh agus cigireacht de áiseanna a fuair ceadúnas ón nGníomhaireacht gach bliain.
- Maoirsiú freagrachtaí cosanta comhshaoil údarás áitiúla thar sé earnáil - aer, fuaim, dramhaíl, dramhuisce agus caighdeán uisce.
- Obair le húdarais áitiúla agus leis na Gardaí chun stop a chur le gníomhaíocht mhídhleathach dramhaíola trí chomhordú a dhéanamh ar líonra forfheidhmithe náisiúnta, díriú isteach ar chiontóirí, stiúradh fiosrúcháin agus maoirsiú leigheas na bhfadhbanna.
- An dlí a chur orthu siúd a bhriseann dlí comhshaoil agus a dhéanann dochar don chomhshaoil mar thoradh ar a ngníomhaíochtaí.

MONATÓIREACHT, ANAILÍS AGUS TUAIRISCIÚ AR AN GCOMHSHAOIL

- Monatóireacht ar chaighdeán aer agus caighdeán aibhneacha, locha, uisce taoide agus uisce talaimh; leibhéil agus sruth aibhneacha a thomhas.
- Tuairisciú neamhspleách chun cabhrú le rialtais náisiúnta agus áitiúla cinntí a dhéanamh.

RIALÚ ASTUITHE GÁIS CEAPTHA TEASA NA hÉIREANN

- Cainníochtú astuithe gáis ceaptha teasa na hÉireann i gcomhthéacs ár dtiomantas Kyoto.
- Cur i bhfeidhm na Treorach um Thrádáil Astuithe, a bhfuil baint aige le hos cionn 100 cuideachta atá ina mór-ghineadóirí dé-ocsaíd charbóin in Éirinn.

TAIGHDE AGUS FORBAIRT COMHSHAOIL

- Taighde ar shaincheisteanna comhshaoil a chomhordú (cosúil le caighdeán aer agus uisce, athrú aeráide, bithéagsúlacht, teicneolaíochtaí comhshaoil).

MEASÚNÚ STRAITÉISEACH COMHSHAOIL

- Ag déanamh measúnú ar thionchar phleananna agus chláracha ar chomhshaoil na hÉireann (cosúil le pleananna bainistíochta dramhaíola agus forbartha).

PLEANÁIL, OIDEACHAS AGUS TREOIR CHOMHSHAOIL

- Treoir a thabhairt don phobal agus do thionscal ar cheisteanna comhshaoil éagsúla (m.sh., iarratais ar cheadúnais, seachaint dramhaíola agus rialacháin chomhshaoil).
- Eolas níos fearr ar an gcomhshaoil a scaipeadh (trí cláracha teilifíse comhshaoil agus pacáistí acmhainne do bhunscoileanna agus do mheánscoileanna).

BAINISTÍOCHT DRAMHAÍOLA FHORGHNÍOMHACH

- Cur chun cinn seachaint agus laghdú dramhaíola trí chomhordú An Chláir Náisiúnta um Chosc Dramhaíola, lena n-áirítear cur i bhfeidhm na dTionscnamh Freagrachta Táirgeoirí.
- Cur i bhfeidhm Rialachán ar nós na treoracha maidir le Trealamh Leictreach agus Leictreonach Caite agus le Srianadh Substaintí Guaiseacha agus substaintí a dhéanann ídiú ar an gcrios ózóin.
- Plean Náisiúnta Bainistíochta um Dramhaíl Ghuaiseach a fhorbairt chun dramhaíl ghuaiseach a sheachaint agus a bhainistiú.

STRUCHTÚR NA GNÍOMHAIREACHTA

Bunaíodh an Ghníomhaireacht i 1993 chun comhshaoil na hÉireann a chosaint. Tá an eagraíocht á bhainistiú ag Bord lánaimseartha, ar a bhfuil Príomhstiúrthóir agus ceithre Stiúrthóir. Tá obair na Gníomhaireachta ar siúl trí ceithre Oifig:

- An Oifig Aeráide, Ceadúnaithe, Taighde agus Úsáide Acmhainní
- An Oifig um Fhorfheidhmiúchán Comhshaoil
- An Oifig um Measúnacht Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáide

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag ball air agus tagann siad le chéile cúpla uair in aghaidh na bliana le plé a dhéanamh ar cheisteanna ar ábhar imní iad agus le comhairle a thabhairt don Bhord.

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