02 WASTE ENFORCEMENT

"The overall goal is a more efficient use of resources (water, energy and materials). Waste will be prevented and minimised, with the balance safely collected, recycled or recovered. Final disposal will be completed in a way that does not harm the environment"

2020 Vision – Sustainable Use of Resources – EPA 2007

2.1 INTRODUCTION

Waste disposal and recovery activities in Ireland are required to hold an authorisation in accordance with the Waste Management Acts, 1996 to 2008. A three-tier system of authorisation has been established for the regulation of such activities. A waste recovery or disposal activity at a facility requires one of the following:

- **Waste Licence**, e.g. landfill disposal, waste incineration
- **Waste Facility Permit**, e.g. small recycling/ recovery waste transfer stations, scrap metal facilities
- **Waste Certificate of Registration,** e.g. small soil recovery infill sites

The principal pieces of legislation governing the form of authorisation required for waste facilities are:

- Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004)
- Waste Management (Facility Permit & Registration) Regulations 2007 (S.I. No. 821 of 2007, amended by S.I. No. 86 of 2008)

Depending on the authorisation required, these activities are controlled either by the Environmental Protection Agency or by local authorities within their own areas. Non-exempted local authority managed waste facility activities are regulated by the EPA.

Waste disposal or recovery activities at IPPC installations are regulated by an EPA Licence under the EPA (Licensing) Regulations 1994 (S.I. No. 85 of 1994). Waste permit activities are controlled by local authorities. This chapter details waste enforcement issues in the context of this regulatory system.

The period since 1995 has seen dramatic change in the management of waste in Ireland, from a situation where no landfills were licensed and almost all were operated by local authorities to a situation where all

landfills are licensed, and privately operated landfills will soon be in the majority. There has also been a significant reduction in the number of landfills operating, from approximately 95 in 1995 to 29 accepting municipal waste in operation at the end of 2008. In parallel with this trend, a network of almost 60 non-hazardous transfer stations has developed where waste is brought for sorting and separation into separate fractions for onward disposal/recovery.

2.2 EPA LICENSED WASTE ENFORCEMENT

The EPA is responsible for regulating waste activities that have significant polluting potential. The EPA directly enforces 208 waste licences granted by the EPA, the majority of which are either landfills or waste transfer stations.

Table 2.1 provides a breakdown of the categories of activities. Seventy six facilities, representing some 36% of overall numbers, either closed down during 2006–2008 or are now not operational. This indicates that the waste industry is consolidating into a smaller number of larger facilities.

TABLE 2.1 Number of EPA waste licences

	Facilities licensed (excluding surrenders)	Total operational facilities	Total closed, ceased & under threshold or not commenced	Total surrendered in 06–08
Landfill Sector	79	35[1]	44	0
Hazardous Waste Transfer Stations	20	15	5	0
Non-Hazardous Waste Transfer Station	66	60	6	2
Compost Sector	14	7	7	0
Dredging Sector	4	1	3	0
Civic Amenity Sites Sector	9	4	5	0
Incinerator Sector[2]	13	10	3	0
Contaminated Land Sector	3	0	3	2
Total	**208**	**132**	**76**	**4**

Licensees are required to operate to a high environmental standard and maintain an environmental management system that prevents pollution and strives for continual improvement in environmental performance.

Compliance with the conditions set by the EPA for waste licences plays a significant part in achieving stated environmental goals of clean air, protected water resources, protected soil and biodiversity and sustainable use of resources. Compliance checking by the EPA is targeted at facilities that present a potential risk to the environment or that have continually shown non-compliance with licence conditions.

2.2.1 Inspections

Inspections, audits and monitoring activities are carried out to assess compliance with the 208 EPA waste licences in place at the end of 2008. Where non-compliances are detected, an escalating series of enforcement actions, from ongoing communication to warning letters, legal notices and ultimately sanctions by the courts are utilised.

EPA resources are managed and directed on an ongoing basis to focus the enforcement effort to where the risks or potential risks are highest and a combination of enforcement tools is used to bring about changes in environmental performance.

[1] Of these 35, 29 accept municipal waste and 6 accept non-municipal waste (e.g. inert waste, peat ash or sludge)

[2] This includes incinerators associated with non-waste IPPC activities in the chemical sector. No waste licensed incinerators have commenced operation.

A standardised risk-based assessment of sites was implemented in 2007, as detailed in Chapter 1.

Each waste facility is allocated an enforcement category on an annual basis and planned enforcement is based on this assessment. **Figure 2.1** shows how waste licensed sites are distributed among the enforcement category groups for the 2008 period.

Enforcement categories vary from A1 (high enforcement category) to C2 (low enforcement category). EPA waste enforcement activities over the period 2006–2008 are shown in **Table 2.2**. (See Appendix 3 for further details.)

A significant proportion (>50%) of EPA licence enforcement resources are taken up with scheduled audits and inspections activity; however, responding to complaints and incidents, and taking enforcement actions forms a large body of work. Responding to such issues has increased to approximately 35% of resources expended, which is broadly in line with the experience in other EU contries[3].

The EPA carried out 1,021 audits and inspections in the 2006–2008 period. While a lower number of audits/inspections were carried out in 2008 in comparison to previous years, enforcement activities were more focused on problematic sites (e.g. odour causing landfills) in the higher enforcement categories (A-sites). This resulted in more enforcement effort being directed where the compliance issues were greatest. When enforcement activities are focused on these sites more enforcement effort is required in the subsequent collection of evidence and taking of legal action. There was also a shift towards the use of compliance meetings in 2008. Enforcement activities in 2008 included the deployment of site agents and the assessment of landfill gas management systems – along with the taking of over sixty statements and the holding of compliance meetings with licensees, and meetings with residents. In addition, as can be seen from **Table 2.2**, over 600 water and landfill gas monitoring visits were carried out between 2006 and 2008.

FIGURE 2.1 Number of waste facilities in each enforcement category

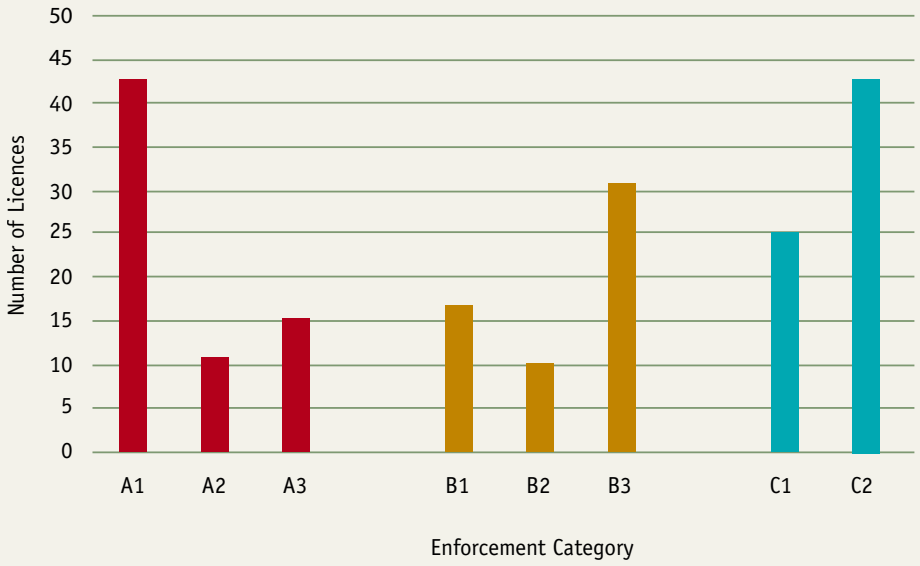


TABLE 2.2 EPA waste enforcement activities summary in 2006–2008

	2006			2007			2008		
	Audits & inspections	Water mon.	Landfill Gas mon.	Audits & inspections	Water mon.	Landfill Gas mon.	Audits & inspections	Water mon.	Landfill Gas mon.
Totals	**330**	**168**	**36**	**407**	**170**	**38**	**284**	**194**	**27**

[3] Doing the Right Things Guidance – IMPEL 2008

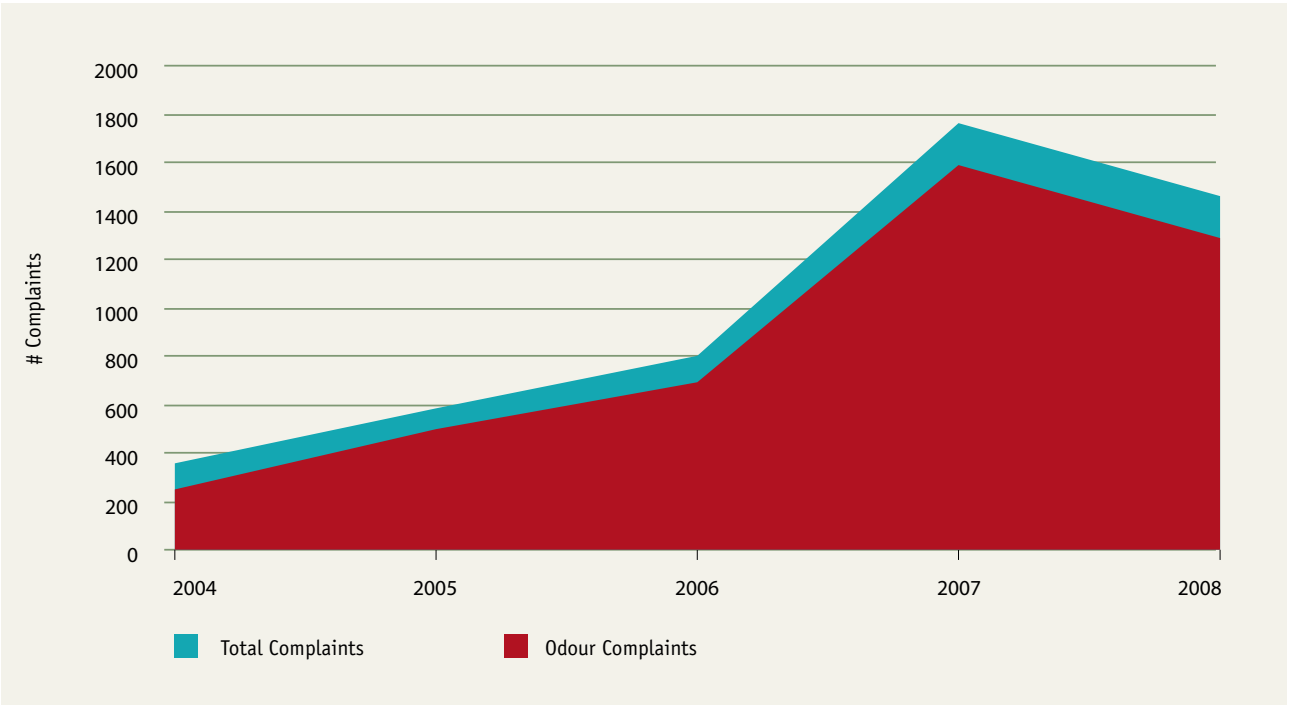
In combination with site inspections and audits, meetings and interaction with stakeholders form an important and growing aspect of the work undertaken. Communication and meetings with sectoral representative bodies including local authorities and the Irish Business and Employers Confederation (IBEC) have formed an important part of enforcement during 2006–2008. On a more local level, meetings with residents' groups, complainants, public representatives and local councillors have been very effective in improving communication, securing evidence and in increasing the effectiveness of enforcement actions taken. Compliance meetings with licensees to secure senior management commitment to corrective actions and improved environmental performance have proven to be effective with resultant improvement in compliance. A detailed analysis of the compliance issues and enforcement activity at each class of waste activity licensed by the EPA is provided in *Appendix 3*.

2.2.2 Waste facility related complaints

Landfills in Ireland are required to be operated to a much higher standard than previously, with improved management, design, monitoring and resources management. Ireland's heavy reliance on landfills[4] has meant that higher volumes of waste are entering fewer landfills every year. Combined with this is the fact that biodegradable waste disposal has increased, which parallels the increase in waste generation generally seen over the past decade. While there has been a steady improvement in the amount of waste that is diverted from landfill e.g. packaging waste, nevertheless the effect of these changes is that landfill gas generation at landfills is occurring sooner and at significantly higher rates. The modern lined enclosed design of landfills tends to force landfill gas up to the atmosphere, as there are no longer pathways for the gas to move laterally or vertically downward. To manage landfill gas effectively, earlier interventions are needed in terms of the installation of pipelines, pumps and flares of sufficient capacity to cater for the increased generation of gas. Failure by landfill operators to deal with these conditions leads to odour nuisance for residents living near landfill disposal facilities.

The total number of complaints received by the EPA increased from approximately 361 in 2004, to 1,460 in 2008. **Figure 2.2** shows the trend of complaints received about waste licensed facilities over the reporting period. It is clear that the significant increase is mainly due to an increased reporting of odour complaints. Significant enforcement efforts were hence employed to address this problem. In addition, the revision of licences to require odour management plans has been a necessary measure to deliver improved performance.

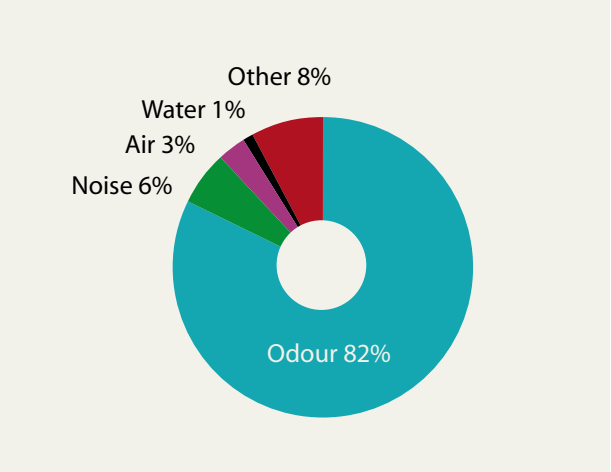
FIGURE 2.2 Trend in waste facility complaints received by the EPA over 2006–2008



[4] Over 2 million tonnes or 63.5% of Ireland's municipal waste was landfilled in 2007

The odour complaints received related to odours from waste, odours from landfill gas or both. **Table 2.3** and **Figure 2.3** illustrate the number and nature of complaints, with over 90% of complaints received relating to 10 facilities (of a total of 208 licensed facilities) – the vast majority of these are odour related. Nine of these facilities are landfills, and one is a mushroom compost production facility. Five of the ten facilities listed have been successfully prosecuted by the EPA in relation to odour nuisance issues – the cause of the majority of the complaints. Cases are in preparation in relation to a number of other facilities.

FIGURE 2.3 Causes of complaints to the EPA about waste licensed facilities



2.2.3 Specific enforcement activities

2.2.3 (a) Landfilling activities

In response to the increase in odour complaints at landfills, the EPA has taken a number of actions including: use of site agents, communication with residents' groups and other stakeholders and assessment of the landfill gas management systems.

Provision of site agents

To investigate odour and landfill gas complaints, the EPA has deployed site agents to landfill facilities. The agents are available to residents and the EPA to verify odour complaints. Site agents were deployed to six landfill sites at different times across the country for a number of weeks at a time. The agent was on-site to immediately respond to public complaints and travel to the site where weather conditions were resulting in increased odour. Between 2007–2008 a total of three person-months were spent on-site at facilities with odour issues. This is in addition to office based time for the site agent, and the preparation of evidence for court proceedings.

Compliance assessment of landfill gas management practices

The EPA has carried out detailed assessments of the landfill gas management systems at all operational landfills. The assessments determine the adequacy of operation and management of the landfill gas control systems at these sites. In addition, volatile organic

TABLE 2.3 Complaints about waste licensees in 2008

Organisation/Facility	Reg No.	Odour Complaints
Knockharley Landfill	W0146-01	300+
Corranure Landfill*	W0077-02	200+
Youghal Landfill	W0068-02	100+
East Galway Residual Landfill Site*	W0178-01	100+
Kerdiffstown	W0047-02	80–90
Ballaghaderreen Landfill*	W0059-02	60–70
Ballynagran Residual Landfill	W0165-01	40–50
Carbury Compost Limited*	W0124-01	40–50
Central Waste Management Facility	W0109-01	40–50
Arthurstown Landfill*	W0004-03	30–40

**Facilities prosecuted*

compound (VOC) emissions from the surface of the landfills were identified and mapped. Corrective actions required were then implemented. The project was successful in targeting landfill gas leakage and directing improvements required in landfill gas infrastructure. Further work in this area will continue to improve landfill gas handling practices at all landfills.

Local engagement

The EPA continues to meet with local residents, community groups, and public representatives in order to communicate and focus on concerns of residents' groups, with a view to improving environmental performance at the landfills. These include open forum public meetings, meetings on site with residents, and meetings on an individual basis. The EPA commissioned odour/landfill gas assessments which are a useful tool to validate the concerns of local residents. In these cases EPA Inspectors met with the residents and facility operators to chart a way forward. In some cases this has led to the temporary closure of sites to allow additional infrastructure to be installed. Immediate response from the site operators in installing gas management infrastructure is key to improving conditions and deferring further enforcement action/prosecution by the EPA.

During these instances waste was diverted to alternative facilities with a consequent loss in revenue to the operator.

Where further enforcement action is warranted the EPA devotes significant resources in taking statements from local residents. In three cases, a total of over 60 statements were taken from local residents detailing nuisance caused by landfilling activities. These were subsequently presented in evidence during court actions.

2.2.3 (b) Closing and restoring landfills

The number of active landfills accepting municipal waste has reduced since the previous reporting period from 36 at end 2005 to 29 at the end of 2008. This contrasts with approximately 95 active landfills in 1995. Many landfill sites have had significant restoration and aftercare programmes in place to ensure that they do not cause environmental pollution. Typical expenditure can be in the region of €4–5m for restoration and aftercare, landfill gas management and flare upgrading.

2.2.3 (c) Odour management infrastructure

Composting activities relating to mushroom producers are the source of significant odour complaints. Work is ongoing at mushroom composting facilities to ensure that adequate odour control infrastructure is installed in order to comply with licence conditions.

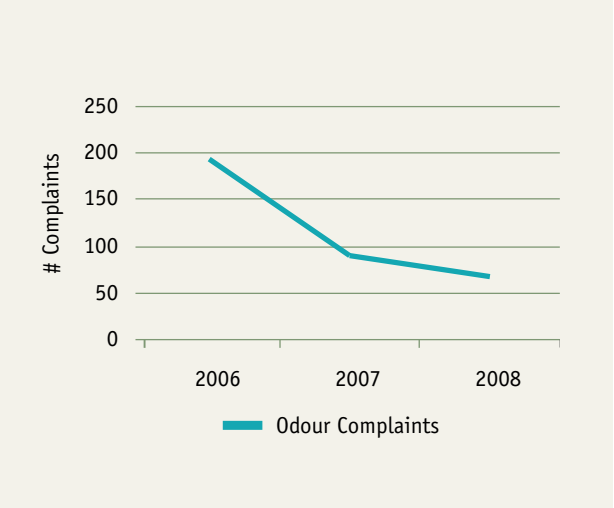
Ensuring the provision of necessary infrastructure, and in particular odour abatement systems, remains a major enforcement priority for this sector.

Prosecutions have been taken in this regard, and progress has resulted.

In one case a new 40m process emission stack was installed at a cost of €1.6m in order to provide better control and dispersion of odorous gases. However, further improvements are required in this sector.

Odour as a significant issue has dramatically decreased for waste transfer stations. An approximate 3-fold reduction in odour complaints in relation to the non-hazardous waste transfer station sector was noted between 2006 and 2008 (see **Figure 2.4**). This coincided with the installation of odour control infrastructure at a number of facilities as directed by the EPA under the terms of the waste licences.

FIGURE 2.4 Odour complaints received in relation to non-hazardous waste transfer stations



2.2.3 (d) Tracking waste

Recording of waste flows into and out of transfer stations remains a compliance challenge. In addition the following issues arise;

- inadequate waste storage arrangements
- non-compliance with the overall tonnage handling limits
- use of unapproved or unauthorised destinations for waste disposal or recovery

For further detail on all of the above waste sectors see *Appendix 3*.

2.2.4 Administrative sanctions

In the 2006–2008 period the EPA issued 567 notices of non-compliance for breaches of EPA Waste licence conditions detailing 1,539 non-compliances. There was a 37% increase in the number of non-compliance notices issued in 2008 as compared to 2006 (see **Table 2.4**).

2.2.5 Criminal sanctions[5]

The EPA took 16 prosecutions (15 waste licensees – one licensee was prosecuted twice) for breaches of waste licences in 2006–2008. It also took successful prosecutions for breaches of the waste electrical and electronic equipment (WEEE) Regulations against four retailers in 2006–2008. Other prosecutions were taken against various IPPC licence holders for the improper handling of organic, mining and treated wood wastes.

TABLE 2.4 Summary of numbers of non compliances (NONCs) and notifications of non compliance issued to waste licensees in 2006–2008

	2006		2007		2008	
	NONCs issued	NONCs detected	NONCs issued	NONCs detected	NONCs issued	NONCs detected
Totals	**165**	**511**	**217**	**563**	**185**	**465**

[5] For further details see *Appendix 4*

Successful prosecutions have been taken against three landfill sites and two waste transfer stations in the 2006–2008 period specifically in relation to odour nuisance, and enforcement action is progressing against a number of other facilities at the present time. Additionally a prosecution was secured against a landfill in 2006 for non-provision of infrastructure in relation to poor landfill gas management leading to significant odour generation. The issues that were the subject of the prosecutions are summarised in **Figure 2.5**. While a total of 16 individual prosecutions were taken in 2006–2008, the subject of each individual prosecution often covers a number of issues (i.e. a single prosecution might include a number of charges covering such issues as discharges to water, non-reporting and poor materials handling).

In addition to the above cases prosecuted successfully by the EPA, two waste cases were referred to the Director of Public Prosecutions in 2006–2008. This is in line with the Section 60 Policy direction[6] issued by the DoEHLG in 2008 which states that policy objectives should ensure that where appropriate:

'criminal prosecutions [are taken] at the highest appropriate level and particularly at Circuit or High Court level to ensure that the sanction is commensurate with the crime'

Additionally, two DPP waste cases were heard during the reporting period (2006) in relation to Waterford County Council and Waterford City Council.

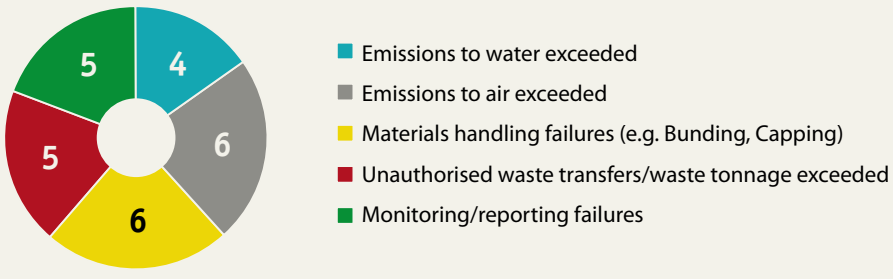
Waterford County Council – This case related to failing to put in place the infrastructure necessary for the collection and management of landfill gas and failing to install a final cap across filled cells at its landfill facility at Tramore as required under the licence.

Waterford City Council – This case also related to failing to put in place the infrastructure necessary for the collection and management of landfill gas. However, there were also breaches of conditions in relation to leachate management, surface water run-off and capping at its landfill facility.

In both of these cases the prosecutions were referred by the District Court to the Director of Public Prosecutions (DPP) for prosecution on indictment. Total fines of €10,000 were imposed in these cases. To collect evidence suitable for cases on indictment requires a substantial resource. A typical example of a case referred to the DPP by the EPA is provided below:

Witness statements	95
Question & answer interviews	9
Exhibits	390
Organisations involved	17
Meetings with various governmental authorities	24
No. of person days (approx.)	600

FIGURE 2.5 Waste prosecutions – breakdown of issues 2006–2008



[6] In this regard, the EPA has produced a policy document specifically in relation to unauthorised waste activities (see Section 2.5). All local authorities have also produced such a policy as required under the Section 60 Direction.

Of the work outlined above, interviews were undertaken in 11 different locations involving many different organisations.

By comparison, cases prepared by the EPA and heard by the District Court demand a significantly lower input of time and resources. Based on a number of cases prosecuted by the EPA the time required can vary from 5 to 20 person-days per case. This includes investigation, detection, prosecution and court appearance. Notwithstanding this, it is the intent of the EPA, in line with its unauthorised waste enforcement policy set out in Appendix 1, to pursue cases on indictment where circumstances dictate that higher penalties are warranted. The final decision as to whether or not to prosecute a case on indictment rests with the DPP. This decision is taken in accordance with the prosecution policy of the state, with the primary criteria being whether or not prosecution is in the public interest.

2.3 LOCAL AUTHORITY REGULATED WASTE ENFORCEMENT

Local authorities are responsible for controlling the collection and movement of waste in their functional areas and for regulating smaller scale waste activities that do not require a licence from the EPA. The regulations dealing with this area date from 1998 and 2001 and were recently updated by two new sets of regulations: the Waste Facility Permit and Registration Regulations 2007 and the Waste Collection Permit Regulations 2007[7]. At the end of 2008, there were over 1,700 waste facility permits and over 3,800 waste collection permits in force in Ireland. In addition, the 34 local authorities are the primary authorities for responding to and dealing with complaints about issues such as littering, illegal dumping, unauthorised activities and backyard burning of wastes.

The Enforcement Network on Unauthorised Waste Activities has matured over the four years of its existence and there is now a large body of trained technical personnel within local authorities (approx. 200 staff nationally) dealing with waste enforcement issues. Approximately 50% of environmental enforcement staff across all local authorities deal with waste enforcement issues. Over 120 additional enforcement staff have been recruited to the local authority system through the environment fund (a fund created as a result of the plastic bag and landfill levies) to enhance enforcement on the ground.

This increased resource has yielded the following results:

- Increased concerted enforcement actions
- Increased investigations for prosecution on indictment
- Increased use of the High Court by local authorities to secure orders against unauthorised sites
- Increased use of aerial surveillance by local authorities and
- Preparation of Enforcement Inspection Plans (RMCEI Plans[8]) by all local authorities

2.3.1 Local authority inspections

Excluding litter inspections, local authorities conducted over 30,000 routine waste inspections during 2008 (See **Table 2.5** for details). These include routine planned inspections of permitted facilities and waste collection-permit holders. Non-routine actions are now commonplace, and include vehicle checkpoints and use of CCTV cameras for identification of offenders at fly-tipping hot spots.

Examples of other types of local authority inspection/ enforcement actions are included in **Table 2.6**.

Other examples of specific actions and case studies can been seen in the Focus on Waste Enforcement newsletter (Oct 2007) produced by the EPA detailing work carried out by members of the Environmental Enforcement Network (including EPA and local authorities – see www.epa.ie).

[7] S.I. No. 821 of 2007, amended by S.I. No. 86 of 2008

[8] Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI) was adopted by the European Parliament and the Council in 2001

TABLE 2.5 Local authority waste inspections in 2008

Type of inspection	2007	2008
Permitted waste facilities (e.g. applications/unauthorised sites)	2,894	2,079
Transfrontier shipment	282	99
Waste collection permit holders (offices & applications)	557	935
Certificate of Registration sites	472	1,502
Vehicle checkpoints	194	252
ECJ sites/Sites under Reasoned Opinion from EU	18	65
Tyre outlet	124	449
Joint Inspections with Unauthorised Waste EEN network	7	37
Routine litter patrols/investigations	12,453	19,269
Hazardous waste inspections (e.g. garages, small labs)	-	367
C&D handling at development sites (e.g. Waste Mgt. Plans)	521	354
Other e.g. CCTV, surveillance, waste burning, fly-tipping etc.	2,670	2,434
Producer Responsibility Inspections (WEEE, Farm plastics, packaging etc.)	6,499	5,367
Subtotal (routine inspections)	**26,691**	**33,209**
Waste complaint/incident investigation (non-litter)	8,715	12,000
Inspections in relation to various waste permitting operations	-	827
Subtotal (non-routine inspections)	**8,715**	**12,827**
Total	**35,406**	**46,036**

TABLE 2.6 Other enforcement actions by local authorities

Issue	Response
End of Life Vehicles (ELVs)	Identifying and inspecting suspected unauthorized facilities including the use of helicopter surveys. Many councils are carrying out actions in this regard
Unauthorised waste movement – multi-agency cooperation	Carrying out vehicle checkpoints – co-operating with multiple agencies such as the Gardaí, Revenue Commissioners, Customs & Excise and the Dept. of Social Welfare Where necessary councils are co-operating with other councils and the EPA in tracking waste that is moved across county borders. A recent case involved three county councils co-operating in tackling illegal dumping of waste tyres
Communication regarding waste management	Use of websites, newsletters (including provision of interpreters for non-native English speakers) and open days to reach out to the public and other stakeholders regarding improving waste practices
Tackling litter and illegal dumping	Use of covert cameras, CCTV, vibration/motion/movement triggered cameras and other pieces of high tech. equipment in tackling littering is now becoming the norm

2.3.2 Capacity building in local authorities

The EPA has provided capacity building to local authorities since 2005 to ensure a consistent and high quality approach to waste enforcement. A return on investment study of a training programme on waste enforcement delivered by the EPA to over 60 staff in October 2007 demonstrated the following:

- 70% of respondents reported the implementation of a process to identify and deal with unauthorised waste activities since the training
- 63% indicated a reduction in time and an improvement of effectiveness in conducting waste inspections
- 64% of respondents indicated an improvement in the prompt writing-up of inspections and prosecutions ensuing

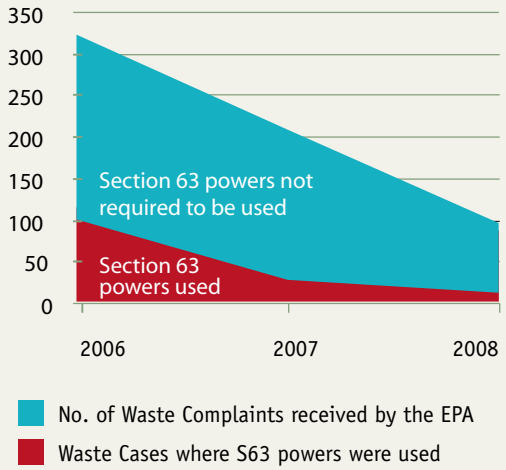
This indicates a measurable impact on waste enforcement activities of local authorities as a consequence of capacity building initiatives.

2.3.3 Local authorities' handling of waste complaints

The Service Indicators report published by the DoEHLG on an annual basis has shown that the total number of environmental complaints reported by local authorities has increased in 2006-2007 from approx. 67,700 to 76,700. Waste related complaints (not including litter) represent approximately a quarter of all complaints.

It is apparent over the reporting period that the handling of waste related complaints (and other types of environmental complaints) by local authorities has significantly improved. This coincides with the implementation of the National Environmental Complaints Procedure (see Chapter 1 for further details). The number of cases where the EPA has received complaints in relation to local authority handling of waste issues is reduced and significantly the number of cases where the EPA has decided to initiate an investigation under Section 63[9] of the EPA Act is also reduced – from 45% in 2006 to 17% in 2008 (see **Figure 2.6**). Coupled with increased local authority inspections and sanctions activity, this reduced level of investigations required regarding local authority handling of complaints indicates more effective enforcement.

FIGURE 2.6 Number of complaints received by the EPA & investigations requiring Section 63 powers.



2.3.4 Administrative sanctions

Statutory notices are important sanctions used by local authorities and if properly used, can bring about significant improvements in a short timeframe. Waste notices issued in 2007 and 2008 are detailed in **Table 2.7**.

TABLE 2.7 Waste enforcement notices issued by local authorities in 2008

Type	2007	2008
Waste warning letters issued	2,986	3,768
Section 18 (seeking information)	1,000	855
Section 55 (requiring that measures be undertaken)	737	617
Section 71 (abandoned cars)	403	713
Other	492	2,198
Total enforcement notices	**5,618**	**8,151**

[9] Section 63 of the EPA Act allows the Agency to investigate local authorities' compliance with environmental protection functions and to prosecute for failure to comply

2.3.5 Criminal sanctions

Local authorities were active in taking prosecutions for breaches of waste management legislation in 2007–2008 with **Table 2.8** showing the breakdown of prosecutions taken by local authorities. In three cases injunctions were sought to seek immediate action in relation to serious issues.

Increased waste enforcement activities of Dublin City Council and Limerick City Council in 2008 account for 36% of all waste prosecutions initiated and are the main contributors to the increase in prosecutions initiated in 2008 compared with 2007.

The High Court has been used on a number of occasions to secure enforcement outcomes. For example, a long-standing unauthorised car scrap yard in County Cork was the subject of High Court proceedings by Cork County Council with an order granted that the site be cleared of waste. The aerial photographs below (see **Figures 2.7 a&b**) show the site in late 2007, with an estimated 3,000 scrap vehicles on site and again in Spring 2008 with the site cleared. Further inspection/enforcement is ongoing at this site to ensure no recurrence of the unauthorised waste activities.

TABLE 2.8 Local authority waste prosecutions/High Court Orders in 2007 & 2008

Type	Initiated 2007	Initiated 2008
Section 18 (Failure to provide information)	83	136
Section 55 (Failure to take measures to prevent environmental pollution)	66	132
Section 32 (Holding or disposing of waste in a manner likely to cause environmental pollution)	108	167
Section 34 (Collection of waste without a permit)	36	86
Section 39 (Carrying on a waste activity without a permit)	66	65
Section 57/58	3	5[9]
Other	42	104
Total	**404**	**695**

FIGURE 2.7a Unauthorised car scrap yard in Co. Cork (November 2007)

FIGURE 2.7b Site cleared on foot of a High Court Order secured by Cork County Council (February 2008)

[9] Injunctions resolved in 2008

2.4 UNAUTHORISED WASTE ACTIVITIES

2.4.1 European Court of Justice case C-494/01

On 26 April 2005, the European Court of Justice (ECJ) delivered its judgment in Case C-494/01 and found that Ireland had failed to fulfil its obligations under the Waste Framework Directive. Centred on 12 separate complaints, the judgment found that the Irish administrative and enforcement systems were inadequate to guarantee compliance with European Community law.

Ireland is responding to the ECJ judgment and, in addition to progressing the 12 individual sites, has delivered a number of legislative and institutional changes. These include:

- Ministerial Directions under Section 60 of the Waste Management Acts in relation to unauthorised waste activities
- Identification and regularisation of historic landfill sites and production of guidance
- Revised Waste Permit Regulations and
- Forming a single TFS authority for more consistent application of TFS Regulations

Progress has been; made managing our waste in a satisfactory manner continues to be a priority.

2.4.2 Unauthorised Waste Action Plan

The EPA Report into the Nature and Extent of Unauthorised Waste Activity in Ireland published in September 2005 set out an Action Plan to deal with unauthorised waste activity in Ireland under nine main headings. **Table 2.9** lists these areas and associated measures recommended as well as an assessment of the progress made under each heading.

The range of measures implemented has dealt with many of the unauthorised waste challenges identified at the end of 2005. In 2006, the 'Dump the Dumpers' Waste Information Line 1850 365 121 (24hr confidential phone line for gathering information on illegal waste activities) was established. The line has shown that while fly-tipping and burning of waste are significant issues there is little evidence of large scale dumping now occurring.

TABLE 2.9 Progress on implementing Unauthorised Waste Enforcement Plan

	Summary of Measures	Update on Progress Made
Illegal Disposal of Waste	➤ Publish Code of Practice (COP) on Risk Assessment ➤ Gather information via a national information line	➤ COP issued in April 2007 ➤ 'Dump the Dumpers' line established June 2006
Illegal Movement of Waste to Northern Ireland	➤ Organise concerted enforcement actions ➤ Pursue on indictment those involved in illegal movement	➤ Series of actions implemented (TFS inspections, roadblocks, cradle to grave exercises) ➤ A number of Criminal investigations underway with two files sent to DPP
Illegal Movement of Waste to Europe and beyond	➤ Review system for implementation of Transfrontier Shipment Regulation in Ireland ➤ Raise the level and consistency of Transfrontier Shipment inspections	➤ TFS responsibility consolidated in one competent authority in 2007 – Dublin City Council ➤ Successful participation in IMPEL Transfrontier Shipment projects and use of Enforcement Network Working Group

	Summary of Measures	Update on Progress Made
Poor management of Construction and Demolition Wastes	➤ Consider placing on a statutory footing the draft guidelines for Construction and Demolition waste management ➤ Sufficient outlets for Construction and Demolition wastes to be planned for through the waste management planning process	➤ Many local authorities now require Waste Management Plans for large developments ➤ C&D being specifically considered as part of the DoEHLG International Review of Waste Management Policy
Unauthorised Collection and Fly-tipping of Waste	➤ Run media campaign on the issue ➤ Increased roadside inspections	➤ 'Man in the Van' advertisement campaign ➤ Multi-Agency roadblocks now a regular occurrence
Inconsistent Enforcement of Waste Legislation	➤ Waste enforcement staff should complete waste enforcement skills course ➤ Inspection plans to be developed and implemented at local and regional level ➤ Sharing of information among all relevant authorities	➤ 240 staff trained in inspection & enforcement skills ➤ Inspection Plans prepared by all local authorities in 2007 and 2008 ➤ Through Network, regional annual enforcement plans developed
Backyard Burning of Household Waste	➤ Make burning of household waste an offence ➤ Characterise extent of uncollected household waste	➤ 'Backyard burning' advertisement campaign. ➤ A number of local authorities have conducted surveys and awareness campaigns are underway ➤ Regulations enacted in 2009 prohibiting backyard burning – SI 286 of 2009
Historic Disposal of Waste (pre 1996)	➤ Publish Code of Practice (COP) on Risk Assessment ➤ Identification of sites used for historic disposal of waste and compliance with Sections 22 and 26 of Waste Management Acts	➤ COP issued in April 2007 ➤ Web based system for Section 22 and 26 registers rolled out by EPA in 2007 and updated in 2009 ➤ Regulations enacted in December 2008 require identification and registration of sites by 30/06/2009 followed by risk assessment and regularisation via an EPA authorisation system
Operation of Unauthorised Transfer Stations and Waste Processing Facilities	➤ Zero tolerance approach to be adopted to waste facilities operating without authorisation	➤ Local authorities have obtained High Court Injunctions under Sections 57 and 58 of Waste Management Acts ➤ Significant numbers of enforcements actions taken by local authorities in relation to unauthorised facilities

The EPA published a Code of Practice (COP) on Environmental Risk Assessment for Unregulated Waste Disposal Sites in 2007. The COP sets out a risk-based assessment procedure that allows historic unregulated waste disposal sites to be identified; and their risks assessed and the appropriate remedial measures or corrective actions to be put in place. The COP has been produced to ensure a consistent approach to environmental risk assessment by local authorities when assessing the environmental impact and remediation options for historic unregulated waste disposal sites. It also provides guidance on how to deal with illegal landfills that have come into being since the introduction of the waste licensing regime.

2.4.3 Ministerial Directions against unauthorised waste activity (Section 60)

On the 25th July 2008 the Department of the Environment, Heritage and Local Government issued a policy direction under Section 60 of the Waste Management Act 1996 in relation to enforcement actions and penalties. The July 2008 Direction (Circular WPRR 04/08) complements an earlier Ministerial Direction under Section 60 issued in May 2005 on actions to be taken.

The July 2008 policy direction sets out the required elements of an enforcement policy and requires that policies are directed towards the achievement of outcomes defined in terms of, inter alia,

- the cessation of illegal activity by use of legal powers,
- the application of the landfill levy,
- the regularisation of illegally deposited waste through removal and/or authorisation, and
- the remediation of sites in line with the EPA Code of Practice on Environmental Risk Assessment for Unregulated Waste Disposal Sites.

The EPA prepared a draft Code of Practice, in accordance with Section 76 of the EPA Act, as a template for the development of enforcement policies by regulators for unauthorised waste activities. The final Code of Practice was published in 2009.

The EPA Enforcement Network has reviewed each policy to ensure consistency with the Code of Practice and made suggestions regarding amendments where appropriate. The EPA policy is included in Appendix 1.

2.4.4 Special investigations – An Garda Síochána Waste Oils/Animal Feed Investigation

The EPA responded to requests for assistance from the Department of Agriculture, Fisheries and Food and An Garda Síochána in relation to dealing with the pork contamination incident of late 2008. This required the inspection of a number of facilities to investigate any linkages in fuel oil movements and to the seizure and storage of suspected contaminated oil. EPA staff formed part of the Garda Síochána investigation team. The EPA has taken over 30 samples of suspected contaminated oils and arranged for their analysis in Germany. Additionally, the EPA commissioned dioxin testing of soils and waters to confirm the absence of contamination of the surrounding areas. The investigation will continue in 2009.

2.5 TRANSFRONTIER SHIPMENT OF WASTE

Changes to the administration of transfrontier shipment (TFS) in Ireland were introduced during 2007 and new legislation consolidated Ireland's competent authority structure from 35 separate authorities to one, Dublin City Council.

TFS enforcement exercises performed under an Implementation and Enforcement of Environmental Law (IMPEL)[10] project in cooperation with local authorities in 2007/2008 showed violations detected in 1% of inspections carried out in Ireland. This compares favourably to violations in 15% of inspections across the 16 EU member states participating in the study.

In 2008, a total of 77 complaint investigations were carried out by The National TFS Office (NTFSO), along with 324 inspections (including Waste Collection Permit Holders offices, Waste Facilities, and vehicle checkpoints). In addition, a number of 'cradle to grave' operations were conducted whereby shipments of waste were placed under surveillance from source to destination. (See 'Focus on Waste Enforcement' newsletter for more details www.epa.ie)

[10] International non-profit association called EU Network for the Implementation and Enforcement of Environmental Law

2.6 PRODUCER RESPONSIBILITY AND PRODUCT COMPLIANCE

Producer Responsibility Initiatives are economic instruments, which require producers (both manufacturers and importers of products) to retain responsibility for the management of their products when they become waste. Producers are required to take account of the environmental impact of their products through design, in-use and at end-of-life management stages. The enforcement of regulations to implement producer responsibilities initiatives for packaging, farm plastics, tyres and end-of-life vehicles (ELVs) is primarily the responsibility of local authorities. Enforcement of the WEEE Regulations is carried out jointly by the EPA and local authorities. In September 2008, regulations relating to waste batteries and accumulators came into effect in Ireland. The structures and mechanisms for implementation of these regulations are largely based on those established under the WEEE Regulations.

2.6.1 Producer responsibility

The WEEE Regulations (Waste Electrical and Electronic Equipment) have had significant results whereby large quantities of potentially hazardous waste have been collected for recycling. According to the EPA National Waste Report, in excess of fifty thousand tonnes of WEEE was collected in 2007. The recovery rates exceed national targets set. The recovered material is reused, avoiding the need for virgin material to be produced.

Local authorities are responsible for the enforcement of the Packaging Regulations in their functional areas, especially for commercial entities that seek to self-comply. Regulations introduced in 2007 have brought many more businesses into the obligated producer category with thresholds reduced from 25 to 10 tonnes of packaging placed on the market. The EPA identified over 5,000 businesses that are likely to be designated obligated major producers under the regulations. While the changing economic circumstances may reduce this number, it represents a significant increase on the 2,100 major producers identified under the previous regulations and will require effort by the local authorities to ensure that those subject to the regulations are compliant. **Table 2.10** outlines inspection activities undertaken by local authorities in 2007 and 2008.

2.6.2 Product compliance

Regulations are in place which restrict the type and quantity of hazardous substances used in certain products. This reduces the impact of the hazardous substances where the products are disposed of. In certain cases the enforcement responsibility for these regulations is split between the EPA and local authorities. In general the EPA is responsible for enforcing the restrictions on the content of the materials whereas the local authorities deal with the enforcement of local retailers and collection points.

The EPA undertakes inspections to ensure compliance under the product compliance requirements for electrical and electronic equipment, batteries and paints. These are detailed in **Table 2.11** and are in addition to the inspections undertaken by the local authorities.

TABLE 2.10 Producer responsibility inspection activities by local authorities in 2007 & 2008

Producer responsibility inspections	2007	2008
WEEE	1,030	993
ELV	445	640
Farm Plastics	89	158
Plastic Bag Levy	1,831	1,542
Packaging Regulations	3,104	2,034
Total	**6,499**	**5,367**

TABLE 2.11 WEEE/batteries enforcement activities by EPA in 2006–2008

Year	Retailer Inspections	Distance Seller Inspections	Producer Audits	Trade Exhibition Inspections	Waste Management Plans & Reports received	Prosecutions closed out
2006	275	111	0	4 events	184	2
2007	121	59	19	6 events	243	0
2008	246	0	18	2 events	111 Plans 224 Reports	2

2.7 PERSISTENT ORGANIC POLLUTANTS (POPS) & POLYCHLORINATED BI-PHENYLS (PCBS)

Persistent organic pollutants (POPs) include some pesticides, industrial chemicals such as PCBs and unintentional by-products of industrial or waste treatment processes such as dioxins. The EC Regulation on POPs requires a range of measures relating to control of production, placing on the market, use, stockpiles, release, reduction and waste management. One important set of POPs is polychlorinated bi-phenyls (PCBs). PCBs generally occur in older electrical equipment such as transformers, capacitors and fluorescent lighting ballasts. The EPA prepared a national inventory of PCB holdings and a Management Plan for PCBs[11] in 2002 and updated this Inventory in 2008. Before the end of 2010 the removal and proper disposal of these materials will be undertaken in line with the National PCB management plan.

2.8 ENVIRONMENTAL OUTPUTS, OUTCOMES & FUTURE ENFORCEMENT ACTIONS

2.8.1 Environmental outputs and outcomes

The following points outline some of the key results in terms of outputs and outcomes in the waste area over the reporting period 2006–2008:

2.8.1 (a) Environmental policy

Full implementation of risk-based enforcement – This has been implemented across all licensed waste facilities. Additionally, guidance has been provided to local authorities through the enforcement network for risk assessing permitted waste facility operators.

Structured enforcement by local authorities – Implementation of the RMCEI 'Environmental Inspection Plan' system for consistent enforcement of environmental legislation by local authorities. A systematic evaluation of all RMCEI plans has shown a 30% improvement in the quality of such plans from 2007 to 2008.

Consistent risk assessment of waste sites – Publication in 2007 of the Code of Practice on Environmental Risk Assessment for Unregulated Waste Disposal Sites. The CoP provides for a consistent framework for assessing risk and deciding on remediation.

2.8.1 (b) Environmental implementation

Increased control of landfill gas – Increased monitoring and assessment of landfill gas infrastructure and control, implementation of remedial actions to correct poor performance.

Increased number of criminal waste investigations – A number of waste criminal investigations are ongoing. Two waste related cases were submitted to the DPP during 2006–2008, with two other separate waste cases heard during 2006.

Reduction in odour complaints at waste transfer stations – Complaints (mainly odour related) have reduced by over 60% during the reporting period, due primarily to infrastructure installed as directed under EPA waste licences.

[11] See www.epa.ie for further details and full report

Increased applications to the High Court – Roscommon County Council, Laois County Council and Cork County Council secured High Court orders against unauthorised waste facilities.

Implementation of the National Complaints Procedure – Better local authority handling of waste complaints along with increased inspections and sanctions activity. Clear and more consistent treatment of unauthorised waste activities through the development of enforcement policies and training on dealing with unauthorised waste activities by local authorities is evident by the increased activity in this area.

Consistent application of TFS – Designation of a National TFS office in Dublin City Council.

2.8.1 (c) Environmental capacity building

Increased expert assistance – Specialist assistance to the Department of Agriculture, Fisheries and Food and the Garda Síochána in investigation of the pork contamination incident of late 2008.

Capacity building in local authorities – Provision of training by the Environmental Enforcement Network has resulted in a reported 60–70% increase in capacity to deal with unauthorised waste activities.

Increased enforcement/prosecutions by local authorities – Between 2007 and 2008, there has been a significant increase in waste prosecutions taken by local authorities (from over 400 to almost 700).

Development of guidance –

- Updates to the Environmental Enforcement Network guidance manual used by all local authorities and the EPA have been made during the reporting period
- Guidance in the areas of Section 60 policy development on unauthorised waste activities
- Production of the Code of Practice (COP) on Environmental Risk Assessment for Unregulated Waste Disposal
- Development of a web based system and guidance on the Identification of sites used for historic disposal of waste and compliance with Section 22 of the Waste Management Act

2.8.1 (d) Environmental reporting

Enforcement reporting

- *Focus on Waste Enforcement* newsletter (2007) contains summary details on waste enforcement work undertaken by Enforcement Network

2.8.2 Future enforcement actions

The EPA enforcement effort will continue to be risk-based and outcome driven. While there has been improvement in the waste area as a result of the interventions outlined above, some issues remain, such as addressing odours from landfills. The following areas will form part of enforcement efforts in future years.

2.8.2 (a) Enforcement of biodegradable waste diversion

Compliance with the requirements of the Landfill Directive, particularly in terms of diversion of biodegradable waste from landfill remains a significant challenge. Waste diversion and pre-treatment requirement obligations are set out under Articles 5 and 6(a) of the Landfill Directive. These biowaste treatment/diversion obligations restrict the tonnage of biowaste that can be accepted at landfills. These restrictions are staggered up to 2016. The diversion obligations[12] of the Landfill Directive can be summarised as follows:

- **2010 – 25% diversion**
- **2013 – 50% diversion**
- **2016 – 65% diversion**

2.8.2 (b) Reviewing all waste landfill licences

During 2009, the EPA will review all waste landfill licences to specify treatment/diversion requirements and issue associated guidance. As outlined in the 2007 National Waste Report (EPA, 2009) significant work must be done to comply with these targets, with separate collection and development of outlets for organic waste being principal in the response to complying with these targets.[13] The enforcement of waste restriction obligations at landfills will be a major priority for the EPA in the coming years.

[12] Of quantity generated in 1995

[13] Municipal Solid Waste – Pre-treatment & Residuals Management – An EPA Technical Guidance document (2009)

2.8.2 (c) Odour control at landfills

Odour and landfill gas control remains a significant enforcement challenge. The maintenance of high standards of operational practice at licensed landfills for waste management and landfill gas control systems will be at the heart of future enforcement efforts. Facilities recording a high number of complaints will be prioritised and key points from the landfill gas management surveys will be rolled out to all operational landfills. This will ensure that licensed facilities operate to best practice by:

- The installation of landfill gas infrastructure in advance
- The provision of adequate daily and intermediate cover for the waste
- The provision of appropriate landfill gas control infrastructure
- The appropriate sizing and phasing of cells including the management of flanked areas to minimise potential fugitive air emissions
- The timely capping of landfill cells
- The proactive management of the capped areas to minimise leaks

A workshop with facility operators was carried out in October 2009 to disseminate best practice and the updated guidance notes to clarify operational requirements. In addition, updated licence conditions requiring odour management plans will come into force to deliver improved landfill gas management at landfills.

2.8.2 (d) Action against unauthorised waste activities (Section 60 Direction)

It is critical that objectives set out in enforcement policies developed under the Section 60 direction are achieved. The EPA recommended that the necessary actions should be integrated into the inspection (RMCEI) plans of local authorities, which, in turn, will be subject to auditing by the EPA. This will ensure that on-the-ground implementation will deliver positive environmental outcomes.

2.8.2 (e) Identification and regularisation of historic landfills

The Certification of Historic Unlicensed Waste Disposal and Recovery Activity Regulations[14] were enacted in December 2008. These require local authorities to complete an inventory of historic landfills by 30th June 2009. These sites will then be subject to a standardised risk assessment and will be brought into compliance with the Waste Framework Directive through a registration process with the EPA. The identification and risk assessment of historic landfills will result in the waste having to be dealt with in accordance with the EPA Code of Practice. This effort presents a significant challenge to all those involved.

The EPA will use the existing Environmental Enforcement Network to ensure the necessary progress is made and that sufficient guidance and training is available to local authorities. Many of these sites will require additional sources of funding in order to complete the necessary remedial works.

2.8.2 (f) Consistent application of transfrontier shipment of waste

Continued vigilance will be required on TFS enforcement, particularly in relation to laundered diesel oil waste. A key priority will be working through the statutory processes in dealing with legacy sites where it is suspected that waste from the Republic of Ireland was illegally disposed in Northern Ireland.

2.8.2 (g) Implementation of the National Hazardous Waste Management Plan

In 2008, the EPA published a National Hazardous Waste Management Plan for the prevention, reduction and management of hazardous waste in Ireland for the period 2008–2012. The plan contains a programme of actions to be undertaken to ensure successful implementation. The action programme recommends that local authorities commence a programme of local and/or concerted enforcement actions in 2009 to ensure good management of hazardous waste at garages, mini-labs, construction sites, industrial, healthcare and other enterprises. The EPA advised local authorities to action such requirements through inclusion in their annual inspection (RMCEI) plans.

[14] S.I. 524of 2008

2.8.2 (h) Pollutant Release and Tracking Register

Tracking emissions through PRTR, particularly of CH_4, will be used as a tool to drive enforcement actions.

2.8.2 (i) New Waste Permitting Regulations

New waste permitting legislation came into effect in 2008 for waste collection activities, waste facility activities and certificate of registration activities that have altered the waste industry in Ireland and the range of activities and the thresholds that now require a waste permit. The EPA is using the existing Environmental Enforcement Network to enhance the consistent regulation and enforcement of waste facilities operating under these new Regulations. The EPA has developed and published guidance on the implementation of these Regulations available at http://www.epa.ie/downloads/advice/waste/wastepermitregulations/ and developed a web based register of waste authorisations granted under the new legislation (www.epa.ie/wastepermit/). The site can be searched by anyone for authorisations by criteria such as waste type, company name, area of operation and address. As of July 2009, some 300 authorisations were uploaded to the website. However, it will take a period of time before the website has a complete register of all waste collection permits, waste facility permits and certificates of registration issued by local authorities.

2.8.2 (j) Environmental Liabilities Directive

The Environmental Liabilities Directive[15] came into force in April 2009. The EPA is the competent authority for all aspects of its regulation. This Directive will apply *inter alia* to facilities licensed by the EPA, including Waste and IPPC licences. This legislation is designed to discourage environmental damage and makes an operator liable for preventing and remedying any damage caused. Activity by the EPA in this regard will include:

- Assessing/investigating cases of possible environmental damage
- Issuing remediation notices
- Overseeing implementation of remediation notices and
- Taking further enforcement action where appropriate

2.8.2 (k) Management of waste from the extractive industries – 'Mining Waste Directive'

Regulations are proposed in order to implement Directive 2006/21/EC on the management of waste from extractive industries. It is likely that IPPC licensed mines, mineral processors, quarries and peat harvesting operations comply with the Directive under existing IPPC controls with possible minor amendments of their licences. The impact of this legislation on quarries (which are not licensed by the EPA) remains to be clarified.

2.8.2 (l) Increased scope of EPA licensing

The scope of activities directly licensed by the EPA will increase over the next few years as described earlier in this section. In particular:

- Lower threshold for EPA licensing of waste recovery activities
- More waste facilities requiring certificates of registration to be licensed by the EPA
- Registration of historic landfill sites with the EPA

[15] Environmental Liability Directive 2004/35/EC

03 WATER ENFORCEMENT

"Our surface water and groundwater will not be depleted and will be of excellent quality meeting all national and international standards"

2020 Vision – Protected Water Resources – EPA 2007

3.1 INTRODUCTION

The introduction of the Water Framework Directive[1] (WFD) and the European Communities (Water Policy) Regulations[2] signalled a new approach to the protection and improvement of our water resources and aquatic ecosystems. A primary environmental objective of the WFD for surface waters is that the ecological and chemical status of all water bodies will be good or high by 2015.

In November 2008 the EPA published the latest in a series of comprehensive three-year reviews of water quality[3]. As noted in this report, and in previous such reports, nutrient enrichment causing eutrophication is the principal and most widespread pressure on our aquatic environment. The principal sources of these contaminants in rivers were found to be discharges from municipal sewage treatment works and agricultural activities.

The results of this monitoring for the period 2004–2006 shows 71% of channel length was unpolluted, indicating a 2% improvement since the previous 2001–2003 monitoring cycle. Rivers that were slightly or moderately polluted comprise 28.1% while 0.5% or 39 river stations were seriously polluted.

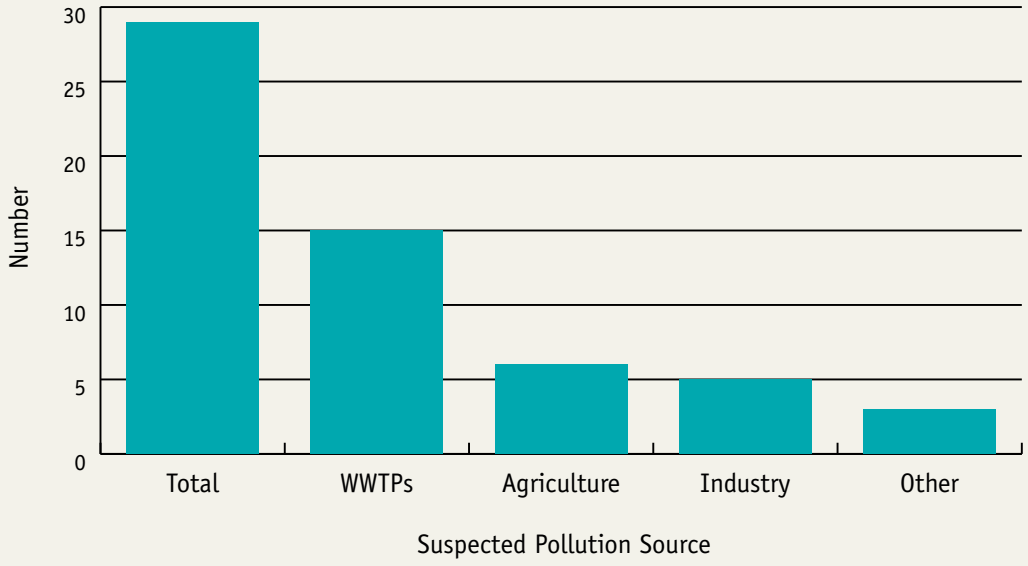
A review of the data for the period 2006–2008 shows an improvement in 17 river stations; however, as of 2008, 29 river stations are classified as being seriously polluted. These are linked to three main sources, wastewater, agriculture and industry, as shown in **Figure 3.1**.

The following sections explore how the main sources of pollution were enforced by both the EPA and local authorities throughout the period 2006–2008.

The EPA is charged with the enforcement of legislation and its functions include:

- Enforcement of discharge limits to waters from Integrated Pollution, Prevention and Control (IPPC) & Waste facilities
- Enforcement of Wastewater Discharge (WWD) licences
- Supervision of the provision and quality of drinking water by local authorities
- Supervision of statutory performance of local authorities
- Providing guidance on water quality
- Stakeholder engagement and participation and
- Water Framework Directive implementation

FIGURE 3.1 Main suspected sources of pollution at seriously polluted river stations in 2008



[1] 2000/60/EC

[2] S.I. No. 722 of 2003 (as amended)

[3] Environmental Protection Agency Water Quality in Ireland 2004–2006

The EPA actively engages and participates with a broad range of external stakeholders to promote and sponsor the strategic enforcement, improvement and protection of water quality. The enforcement tasks include the following:

- Interaction with stakeholders such as EU Commission representatives, Department of Environment, Heritage, and Local Government, local authorities, Department of Agriculture, Fisheries and Food (DAFF), Teagasc, OPW, Fisheries Board, Department of Marine and non-governmental organisations (NGOs)
- Participation in the *Agricultural Investigations Working Group* made up of senior personnel from DoEHLG, DAFF & local authorities
- Participation in the co-ordination and preparation of guidance and workshops for local authorities in relation to RMCEI[4]
- Participation in and delivering talks at various conferences, workshops and training events
- Publication of guidance documents to protect and improve water quality. Examples of such publications include Drinking Water Regulations Booklets and Manuals; *Code of Practice for Wastewater Treatment and Disposal Systems for Single Houses*; and guidance notes for the Pig and Poultry sector on Nutrient Management Plan requirements

Local authorities are charged with implementing a diverse range of environmental legislation for the protection of water including:

- Single media licensed discharges to waters and sewers under the Local Government (Water Pollution) Acts and Regulations
- Enforcement of diffuse pollution
- Maintaining bathing waters quality
- Supervision of drinking water group schemes
- Implementation of the Programmes of Measures for River Basin Management Plans

3.2 EPA LICENCE ENFORCEMENT

The EPA has licensed and enforced industrial and waste facilities with potentially significant discharges to the aquatic environment for over 15 years. In many cases, these licences include controls for emissions to waters. Ensuring compliance with licence conditions and emission limit values (ELVs) for discharges to waters plays an important part in protecting the receiving aquatic environment.

3.2.1 Specific enforcement actions

The EPA through the implementation of PRTR (Pollutant Release and Transfer Register) Regulations is promoting a progressive reduction in emissions to waters. A comparison of the annual data submitted by licensees in 2004 and 2007 from 44 facilities in the Food and Drink Sector indicates a decrease in the total mass emissions to waters (see **Table 3.1**). This decrease can be attributed to several factors including investment in on-site wastewater treatment systems.

Measures have been taken to reduce the environmental impact of industrial and waste management activities under the EPA licensing system. **Table 3.2** outlines a number of these issues and provides selected examples of where specific measures have been taken to improve water quality. Further details on these measures can be seen in Chapter 2 & Chapter 5.

TABLE 3.1 Total mass emission to waters reduction in food and drink sector

	Volume	SS[5]	BOD[5]	COD[5]	TN[5]	TP[5]
	m^3 per annum	tonnes per annum				
2004	18,795,127	2,543	7,009	12,022	404	72.9
2007	17,627,012	2,251	5,544	9,567	262	60.8
% Reduction	6%	11%	21%	20%	35%	17%

[4] Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI)

[5] SS – Suspended Solids; BOD – Biochemical Oxygen Demand; COD – Chemical Oxygen Demand; TN – Total Nitrogen; TP – Total Phosphoros

TABLE 3.2 Measures carried out under EPA licensing to reduce impact on surface and groundwater Resources

Sector and Issue	Measures	Specific Examples
Timber treatment		
Discharge of CCA (Copper, Chromium, Arsenic) and other treatment chemicals to surface and groundwater	EPA study identified specific high-risk sites with contaminated groundwater/surface water EPA has directed actions to be taken to improve water quality	Investment of greater than €1m in infrastructure/remediation – including installation of a 'pump & treat' system for groundwater remediation – resulting in a significant reduction of emission of contaminants to ground and surface water
Board and Paper Manufacturing		
Discharge of suspended solids and BOD to surface water	Additional wastewater treatment	Installation of an advanced membrane treatment facility at an approximate cost of over €2m
Fossil Fuels		
Accidental discharge of hydrocarbons to surface and groundwater	Improved containment of hydrocarbons	Installation of secondary containment of hydrocarbon fuels storage infrastructure Installation of leak detection technology
Food & Drink		
Discharge of nutrients to surface water	Installation of new and improved wastewater treatment plants (WWTP) Installation of a constructed wetland system Installation of load balancing and nitrogen removal	WWTP upgraded at a cost of €180k WWTP constructed – investment of over €1.2m WWTP constructed – investment of over €2.5m
Surface Coating		
Discharges of solvents to surface and groundwater	Clean up of historical groundwater contamination in a number of cases	Water based solvents replaced with organic solvents completely at one facility
Metals		
Discharges of effluents to surface and groundwater	Improved management and segregation of processed materials and improved housekeeping	Remediation of soil/groundwater contamination caused by the poor handling of organic solvents
Intensive Agriculture		
Slurry handling and nutrient management planning	Improved slurry management Installation of leak detection systems More facilities now have approved nutrient management plans	An estimated €5.4m was spent during 2007 at a single facility in this sector on various improvements to facility infrastructure

Sector and Issue	Measures	Specific Examples
Minerals		
Handling of mining waste and related emissions to surface and groundwater	Improved waste handling arrangements, and better management of surface water in tailings management facilities	Restoration and aftercare works costing greater than €10m to ensure licence compliance and adequate environmental protection into the future
Waste Management		
Management of waste and related emissions to surface and groundwater	Restoration of landfills and implementation of aftercare plans Overall reduction in number of operational landfills from 95 in 1995 to 35 in 2008. Adoption of unauthorized waste enforcement policy by EPA and all local authorities Elimination of management/ treatment of leachate discharges to water	Spend of over €4.5m in restoration and aftercare, including installation of geomembrane and cell capping Spend of over €3.4m on remediation works and management of landfill closure

3.2.2 Criminal sanctions

Of the 51 prosecutions taken by the EPA that were heard in the period 2006–2008, 28 related to aqueous emissions or management of materials that pose a risk to the aquatic environment and are summarised as follows:

- 8 related to breaches of Emission Limit Values for aqueous discharges
- 12 related to undertaking landspreading activities other than in accordance with Nutrient Management Plans
- 8 related to spillages or inadequate systems to prevent discharges of polluting matter to waters.

Further details of all EPA prosecutions are provided in Appendix 4 with more detailed descriptions of these prosecutions on www.epa.ie

3.3 LOCAL AUTHORITY DISCHARGE LICENCE ENFORCEMENT

Discharges of trade or sewage effluent to receiving waters or sewers require a licence from local authorities (unless subject to an EPA licence) under the provisions of the *Local Government (Water Pollution)* Acts 1977 & 1990. There were almost 5,000 discharge licences to sewers and waters in place at the end of 2008, an increase of almost 40% over the number in force in 2007 (**Table 3.3**). The most notable increase is in the number of discharge to sewer licences, which rose by almost 90% between 2007 and 2008.

Unregulated discharges of grease and fat loadings into the sewer network cause significant operational problems for municipal treatment plants. In order to address this issue, Dublin City Council carried out a study in 2004 to identify the scale of the problem. Approximately 230 premises were surveyed, including bars, hotels, convenience stores, hospitals, canteens and restaurants. The results illustrated that 41% of premises had some form of grease trap. However, most of these were undersized and poorly maintained. In response, Dublin City Council initiated a fats oils and grease (FOG) licensing programme[6]. The objective of the FOG programme is to prevent blockages in the public drainage network by restricting the discharges of fats, oil and grease from food service establishments. Local authorities carried out 8,415 inspections of discharge licences in 2008.

[6] Further information is available on the Dublin City website at http://www.dublincity.ie/WaterWasteEnvironment/WasteWater/Drainage/Documents/FOG_Info_Leaflet[1].pdf

3.4 URBAN WASTEWATER TREATMENT FACILITY ENFORCEMENT

The EPA is responsible for the implementation and enforcement of the Urban Waste Water Treatment Regulations[7] and the Waste Water Discharge (Authorisation) Regulations[8].

The Urban Waste Water Treatment Regulations set specific dates for the provision of wastewater treatment plants and standards to be achieved for effluent discharges. The Regulations set out a regime of monitoring by local authorities of discharges from wastewater treatment plants and a minimum level of treatment provision. The overall compliance of treatment plants with these requirements is reported by local authorities to the EPA on a bi-annual basis. The full details of the compliance assessment and enforcement actions are described in the Urban Waste Water Discharges in Ireland Report 2006–2007 (Environmental Protection Agency, Ireland).

The Waste Water Discharge Regulations require the EPA to regulate the discharges of wastewater from our villages, towns and cities. All discharges from sewerage systems owned, managed and operated by local authorities require a wastewater discharge authorisation or certificate granted by the EPA. Such authorisations set out specific conditions to prevent and control water pollution from urban wastewater treatment works.

Local authorities must apply for an authorisation or certificate by prescribed dates depending on the population equivalent of the area served. The number of wastewater licence applications received by prescribed dates are set out in **Table 3.4**. The licences set specific emissions limits for discharges to waters in line with national and European standards for urban wastewater discharges.

TABLE 3.3 Number of local authority water pollution discharge licences in place in 2007/2008

Water Pollution Licences	2007	2008
Discharges to waters	1,337	1,414
Discharges to sewer	1,731	3,073
Total licences in force	3,068	4,487

TABLE 3.4 Number of licence applications received by the EPA by the prescribed date

Agglomeration size	Number received	Prescribed date
>10,000	63	14th Dec 2007
2001-10,000	144	22nd Sept 2008
1001-2000	138	28th Feb 2009
500-1000	157	22nd June 2009

[7] S.I. No. 254 of 2001 (as amended)

[8] The Waste Water Discharge (Authorisation) Regulations, S.I. No. 684 of 2007

Nine wastewater discharge (WWD) authorisations were issued to local authorities during 2008. The EPA has commenced a new enforcement regime for enforcing these new WWD authorisations. The enforcement of these licences uses a risk-based approach to deliver a positive outcome for the quality of receiving waters in line with the aims of the Water Framework Directive.

Level of impact of wastewater discharges

In 2006 and 2007 the EPA audited 22 local authorities and inspected 41 wastewater treatment plants as part of these audits. The following recurring problems were identified:

- Inadequate collecting systems for wastewater (e.g. poorly performing combined sewer overflows)
- Insufficient treatment capacity
- Insufficient sampling frequencies
- Poor effluent quality
- Poor assimilative capacity for discharged effluent in some receiving waters and
- Poor sludge management on site

Many of these plants are identified as having an impact on the quality of the receiving water. These issues need to be addressed as a matter of urgency by the appropriate local authority.

The EPA has a supervisory role in relation to the statutory performance of local authorities and has powers under the EPA Acts to intervene and issue advice to local authorities in the performance of its statutory duties with respect to urban wastewater discharges.

The EPA used its statutory performance powers under Section 63 of the EPA Acts to improve compliance with the Urban Waste Water Directive prior to the introduction of the Waste Water Discharge (Authorisation) Regulations, 2007.

During 2006 and 2007, the EPA initiated 33 and 22 new investigations respectively using these powers in relation to wastewater treatment. Investigations into odour complaints were carried out under the European Communities (Waste Water Treatment) (Prevention of Odours and Noise) Regulations 2005[9]. For the period 2006 to end of 2008 a total of 13 such investigations were undertaken.

On the 11th September 2008, The European Court of Justice ruled against Ireland in Case C-316/06 concerning Ireland's failure to comply with the Urban Waste Water Directive (Directive 91/271/EEC) in respect of six areas, Bray, Letterkenny, Shanganagh, Sligo, Tramore and Howth. The case related to the failure of Ireland to provide five of the agglomerations with collecting systems and secondary treatment by 31st December 2000 at the latest. The Commission also found that although a secondary wastewater treatment plant existed at the Letterkenny agglomeration, it did not allow for complete treatment at all times of the year; in effect it was under capacity. Significant investment in infrastructure will be required to address the failures identified by the European Court of Justice.

[9] S.I. No. 787 of 2005

3.5 DRINKING WATER ENFORCEMENT

The European Communities (Drinking Water) (No.2) Regulations[10] came into force in 2007. These Regulations provide for the supervision of sanitary authority supplies by the EPA while sanitary authorities continue to be responsible for supervising group scheme supplies. Prior to these Regulations the role of the EPA was restricted to assessment and reporting of monitoring results and the provision of advice and assistance to the local authorities. The EPA now has enforcement powers to serve legally binding directions on local authorities to take action where there is a quality deficiency in a public water supply. Failure to comply with a direction is an offence, which can lead to prosecution by the EPA.

The enforcement of drinking water quality including assessment of local authority corrective action in the event of exceedances, auditing of water treatment plants and risk-based enforcement are the primary enforcement activities of the EPA in this area.

Under the Drinking Water Regulations local authorities must notify the EPA where there has been a failure to meet a quality standard in accordance with guidelines issued by the EPA. The EPA received 544 notifications in the period from March 2007 to December 2008. The EPA assesses these notifications and the corrective actions proposed by the local authority within one working day. Where the corrective action taken by the local authority is appropriate then no further action is taken by the EPA. Where the corrective action is not satisfactory the EPA issues legally binding directions or carries out an audit of the treatment plant to assess the actions to be taken.

In 2008, the EPA completed 79 audits (28 in 2007) of local authorities or individual drinking water treatment plants. In response to these audits and to the notifications received during 2008, the EPA issued 45 directions (22 in 2007) to local authorities requiring improvements to the drinking water supplies. The most significant issues identified during the audits were inadequate source protection measures, poor filter operation, inadequate process monitoring and the lack of key alert systems such as chlorine monitors and alarms.

As part of the risk-based approach to drive improvements in the quality of drinking water the EPA compiled a list of public water supplies where remedial action is required to ensure that the supply is safe and secure. This list is called the 'Remedial Action List for Public Drinking Water Supplies (RAL)'. The RAL identified 339 public water supplies representing 36% of all public drinking water supplies that required detailed profiling to determine whether the supply needed to be upgraded, improved in respect of operational practices or discontinued to ensure that the water supplied is clean and wholesome.

Of the 339 public water supplies identified by the EPA and placed on a RAL in early 2008, 83 supplies completed the necessary remedial actions and were removed from the list. However, the EPA identified a further 62 public water supplies which need to be upgraded, improved in respect of operational practices or discontinued to ensure that the water supplied is wholesome and clean. Overall at the end of March 2009 there were 320 supplies on the RAL. All local authorities have been advised to review the supplies on the RAL and ensure that measures are being taken to identify and resolve the reason why the supply is listed.

The EPA has issued a number of Drinking Water Regulation booklets and guidance manuals to aid compliance. These include:

- Guidance for Local Authorities on Regulation 9 and 10 of the European Communities (Drinking Water) (No. 2) Regulations 2007[11]
- Guidance for Sanitary Authorities on Annual Reporting of Monitoring Results to the EPA under European Communities (Drinking Water) (No. 2) Regulations 2007 [12] and Environmental Protection Agency Act 1992[13]

[10] [11] [12] S.I. No. 278 of 2007
[13] No. 7 of 1992

- Guidance for local authorities on the development of a Remedial Action List for public water supplies
- Guidance for Local Authorities on Risk Screening Methodology for Cryptosporidium

In 2008, the EPA prosecuted one local authority for failure to comply with a Direction. Galway County Council was directed to install a chlorine monitor and alarm at the Craughwell water treatment plant no later than 31 October 2007. Following an audit in November 2007, at which it was discovered that the chlorine monitor and alarm had not been installed, the EPA initiated legal proceedings. On 23 April 2008 Galway County Council pleaded guilty of failing to comply with the Direction and was fined €4,000 and costs of €5,500 were awarded to the EPA. Following the prosecution Galway County Council installed the chlorine monitor and alarm.

The European Court of Justice ruled in 2002 that Ireland failed to ensure compliance with Directive 80/778/EEC (Quality of Water Intended for Human Consumption) for breaches of microbial parameters (total coliforms & faecal coliforms) in respect of certain public and group water schemes. In addition Ireland was also found to be failing in the implementation of the requirements of the Directive in relation to group water schemes. Outstanding aspects of the EU Drinking Water Directive were transposed into Irish Law on the 12 June 2007 with the introduction of The European Communities (Drinking Water) (No. 2) Regulations 2007[14].

Under these Regulations, the local authority is the supervisory authority in relation to private water supplies (group water schemes and private supplies with a public or commercial activity on the supply) and can serve legally binding directions on operators of private water supplies where there is a quality deficiency in a private water supply. Failure to comply with a direction is an offence, which can lead to prosecution by the local authority.

3.6 BATHING WATER ENFORCEMENT

In 2008, 97% of bathing water sites met the EU mandatory standards with 90% meeting the stricter guide values. Whilst compliance with the minimum EU Mandatory Standards remained the same as in 2006, there was, however, a decrease in the number of bathing areas complying with the stricter EU Guide values. The Quality of Bathing Water 2008[15] report compiled annually by the EPA noted that bathing water quality is high but also highlighted that Ireland has a low number of designated waters in comparison with other European countries.

The EPA assesses the performance of local authorities in their enforcement of the bathing water regulations and the investigation into the causes of non-compliance. Local authority functions in relation to bathing waters include monitoring and investigating non-compliances and advising the public of such non-compliances with the standards. Local authorities also have a legal requirement to make available a register containing the results of samples or displaying monitoring results at or near the bathing area. Compliance with this requirement needs improvement. Inspections of bathing water areas have increased by more than 100% between the years 2007 and 2008.

The EPA carried out investigations and site inspections at five of the locations where a wastewater treatment plant was suspected of causing the failure and issued directions under Section 63 of the EPA Act. Bathing waters that have failed the minimum EU mandatory standards are listed in **Table 3.5**.

For some bathing water areas, improvements in wastewater infrastructure are required. Discharge licence applications for these facilities have been received and are currently being considered by the EPA, e.g. Balbriggan/Skerries agglomeration (Licence Ref: D00023-01); Clifden agglomeration (Licence Ref: D0198-01) and Youghal agglomeration (Licence Ref: D0139-01).

In the interim local authorities have erected notices posted at the beach to advice bathers on the quality of the bathing water area.

The EPA issued a Direction to Galway County Council to carry out specified works at the wastewater treatment plant at Clifden in order to improve the effluent from the works, which was the main factor contributing to the poor quality of the bathing water. A new wastewater treatment plant is required if Clifden is to comply with EU bathing water standards. Galway County Council has indicated that it expects the construction of the wastewater treatment plant to be completed by the end of 2010.

In the case of the bathing water failure at Na Forbacha, Galway County Council reported that they

[14] S.I. No. 278 of 2007

[15] The Quality of Bathing Water in Ireland 2008 (2009), EPA, Wexford

TABLE 3.5 Bathing water failures during 2006–2008

Bathing Water	County	2006	2007	2008
Balbriggan	Dublin	NC	NC	NC
Clifden	Galway	NC	NC	NC
Malahide	Dublin	NC		NC
Dunmore East	Waterford	NC		
Youghal	Cork		NC	
Na Forbacha	Galway		NC	
Ardmore	Waterford			NC
Ballyallia Lake	Clare			NC
Loughshinny	Dublin			NC
Portrane	Dublin			NC
Keeldra Lough	Leitrim			NC
Lilliput, Lough Ennel	Westmeath			NC

Compliant
Non-compliant

carried out an investigation including monitoring and septic tank surveys in the catchment. Following these investigations Galway County Council issued a Section 12 Notice under the Water Pollution Acts to a facility, directly adjacent to the bathing area, instructing them to install a new wastewater treatment plant to include UV treatment. This treatment works has been put in place by the licensed facility.

Additional information in relation to the sites listed in **Table 3.5** that failed during 2008 is to be found in the EPA report *The Quality of Bathing Water in Ireland 2008*.

3.7 DIFFUSE POLLUTION ENFORCEMENT

The European Communities (Good Agricultural Practice for Protection of Waters) Regulations[16] provide for strengthened enforcement provisions and for better farmyard management in order to comply with ECJ judgments[17] in relation to the Dangerous Substances and Nitrates Directive. They also provide the legal basis for the operation of a derogation under the Nitrates Directive granted to Ireland by the European Commission.

The Regulations strengthen enforcement powers for local authorities and enhance cross-reporting arrangements between local authorities and the Department of Agriculture, Fisheries and Food. The Regulations also include requirements for improved farmyard management and other provisions relating to making application to the Minister for Agriculture, Fisheries and Food for a derogation.

In the absence of an action programme, Ireland faced the prospect of further proceedings before the European Court of Justice and the imposition of substantial fines. In response, a national Nitrates Action Programme was initially put in place on a statutory basis under the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005 which came into effect on 1 February 2006. These Regulations have since been revoked and replaced with the Good Agricultural Practice Regulations of 2009. These Regulations provide strengthened statutory support for the protection of waters against pollution from agricultural sources and increase the role of the EPA in the enforcement of the Regulations. In April 2009

[16] S.I. No. 101 of 2009. European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009

[17] The European Court of Justice ruled in 2004 that Ireland was non-compliant with the EU Nitrates Directive mainly by reason of failing to put in place an action programme under the Directive

the EPA issued a direction[18] to all local authorities to undertake monitoring, inspections and other measures to include enforcement and reporting in accordance with the six conditions below:

1. Farm inspections for the purposes of the Nitrates Regulations shall be undertaken in accordance with the '*Farm Inspection Report Form*'.
2. Report 'non-compliance' with the Nitrates Regulations, detected during a farm inspection, to the Department of Agriculture, Fisheries and Food (DAFF)[19]. Local authorities shall inform the occupier that the non-compliance will be cross-reported to DAFF.
3. Non-compliances shall be reported to DAFF as soon as practicable after they are detected and as provided for in the *'Cross Reporting Report Form'*.
4. In instances of non-compliance recorded during farm inspections, local authorities shall take appropriate and proportional enforcement actions. Such actions shall include but are not limited to monitoring, follow-up farm inspections, issue of warning letters, issue of section notices and pursuing prosecutions.

5. Maintain a register of farm and other inspections undertaken and provide information on their enforcement activities on an annual basis to the EPA. The content and timing of such reporting shall be in accordance with the instructions of the Environmental Enforcement Network and in accordance with the requirements of the Recommendation on Minimum Criteria for Environmental Inspections (2001/331/EC) (RMCEI).
6. The existing monitoring programme undertaken as part of the implementation of the Water Framework Directive (2000/60/EEC) is considered to be appropriate at this time having regard to 'monitoring' to be specified for the purpose of Article 29(6). The programme will be amended when details relating to the location of the derogation farms are provided to the EPA by DAFF.

The enforcement of the Good Agricultural Practice Regulations (2009) will require multi-agency co-operation and integration of the work of all the government agencies involved.

The revised Farm Waste Management Scheme was introduced by the Department on 24 March 2006 and closed for new applications at the end of 2006. Information provided by local authorities indicates that there was a significant increase in planning applications for slurry storage developments in 2006 in line with funding being made available to allow farmers to provide adequate storage for slurry during the winter months. The Department of Agriculture, Fisheries and Food received 48,580 applications by the closing date of which over 30,000 were received during the final month (December 2006). Almost 43,000 approvals to commence work were issued to farmers under the scheme with 12,847 payments totalling €413.7 million made under the Scheme in 2008, 4,748 payments totalling almost €114 million in 2007 and payments totalling almost €22 million in 2006.[20] The total expenditure under the Scheme, since its introduction in 2001 is €614.8 million (end of 2008).

There was a significant increase in farm inspections numbering 3,729 in 2007 and 5,137 in 2008 with over 5,000 farm inspections planned for 2009. Some local authorities (for example County Meath) have developed a task force to tackle agricultural pollutions through inspections. Other initiatives include the preparation of explanatory booklets for farmers, and holding community information seminars.

In recent years there has been a general increase in nitrates being detected at groundwater monitoring locations[21]. This suggests a gradual deterioration in groundwater quality, particularly in the more intensive agricultural areas of the south and east of the country. Farm inspections have been identified as a key tool in reversing the upward trend of nitrate concentration in groundwater. It is envisaged that the enforcement of the Good Agricultural Practice Regulations will drive an improvement in the quality of groundwaters.

[18] In accordance with the provisions of Article 29(6) of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations

[19] EU Regulation No. 796/2004 laying down rules for the implementation of cross-compliance and other measures

[20] Annual Review and Outlook for Agriculture, Fisheries and Food 2008–2009 – see www.agriculture.gov.ie

[21] Water Quality in Ireland 2006, Key Indicators of the Aquatic Environment

3.8 LOCAL AUTHORITY INSPECTIONS AND ENFORCEMENT ACTIVITIES

Each local authority inspection and enforcement plan deals specifically with controls to maintain and improve water quality. Water inspections accounted for about 45% of all local authority inspections during 2007 and 2008. The number of inspections reported annually is increasing due mainly to better inspection plans and reporting mechanisms. (see **Table 3.7**) Examples of local authority enforcement activities relating to water quality are outlined in **Table 3.8**.

TABLE 3.7 Local authority water inspections in 2007 and 2008

Water/Wastewater related inspections	2007	2008
Discharge licences to waters and sewers	4,042	8,415
Inspections/monitoring of urban wastewater treatment plants	8,534	7,223
Dangerous substances regulations	463	982
WFD National Monitoring Programme	9,735	11,301
Other surface and groundwater protection inspections	2,143	5,941
Private drinking water schemes	324	3570
Local authority drinking water plants	12,593	18,047
Farm inspections	3,729	5137
Bathing water	727	2562
Subtotal (routine inspections)	**42,290**	**63,178**
Non-routine Water/Wastewater inspections/incident investigations	12,144	10,202
Total	**54,434**	**73,380**

TABLE 3.8 Examples of local authority enforcement activities

Issue	Response
On site effluent treatment systems and septic tanks	Cavan County Council established byelaws requiring the assessment of septic tanks. 3,168 assessments were achieved by the end of 2008 in County Cavan. Offaly County Council has carried out surveys to inspect systems and follow up on non-compliances
Contamination from oil tanks	Clare County Council initiated a best practice approach regarding oil tank bunding on sites where a water source is located on or adjacent to the site
Protection of drinking water source catchments	South Tipperary County Council has completed surveys and mapping to determine delineation zones. Offaly County Council has developed a protocol for assessing zones of contribution. Sligo County Council has prepared and adopted drinking water source protection plans. Cork County Council has informed landowners with lands within 250m of public water abstraction of their obligations under the Good Agricultural Practice Regulations and provided relevant information and maps
Water pollution from households	Offaly County Council has prepared information brochures on preventing water pollution from households
Planning enforcement activities	All local authorities are required to integrate environmental planning inspections into RMCEI Inspection Plans
Oils, fats and grease[22]	Guidance has been developed and Seminars on OFG held in 2009 – Dublin City Council. Kildare County Council has undertaken 116 inspections in relation to OFG discharges to public sewers

[22] Guidance located at http://www.dublincity.ie /WaterWasteEnvironment /WasteWater/Drainage/Documents/FOG_Info_Leaflet[1].pdf

3.8.1 Administrative sanctions

In the period 2006 – 2008, the EPA issued 104 notices under Section 63 relating to local authority poor statutory performance in relation to water quality issues. On foot of these, five directions were issued. Directions are used to target improvements at seriously polluted sites. Section 63 notices[23] require local autorities to investigate and furnish the EPA with a report on the actions taken to address the pollution. The overall number of seriously populated, or red dots sites has decreased by 10 during the period.

Local authorities are empowered to issue legal notices under various legislative instruments to direct individuals or companies to take actions to prevent or eliminate pollution. The principal notices used to control water pollution are Section 12 and 16 of the Local Government (Water Pollution) Act 1977 and Section 23 of the Local Government (Water Pollution) (Amendment) Act 1990. Section 12 was the main statutory notice used to prevent or control water pollution in the period 2006 to 2008. **Table 3.9** summarises the number of notices issued by local authorities for the years 2006–2008.

Close out of enforcement notices has been highlighted to many local authorities as an area for improved performance. There was a significant increase in the number of Section 23 Notices served for unauthorised discharges to sewer for 2008 due to the increased number of surveillance inspections.

3.8.2 Criminal sanctions

Prosecutions taken by local authorities relating to water and wastewater in the 2006 to 2008 period are shown in **Table 3.10**. Most prosecutions related to non-compliance with Section 12 notices that required the respondents to carry out actions to prevent or remedy pollution. Other areas giving rise to prosecutions related to licensable discharges (Section 4 and Section 16 prosecutions) and allowing polluting matter to enter waters (Section 3).

TABLE 3.9 Water related enforcement notices issued by local authorities

Enforcement notices	2006	2007	2008
Section 12	577	436	356
Section 16 (unauthorised discharge to a sewer)	22	6	121
Section 23 (request information on water abstraction or discharge of polluting matter)	106	83	116
Section 110 (Public Health Act)	54	33	20
Section 21 (Nutrient Management Plan)	9	1	0
Total	**768**	**559**	**613**

TABLE 3.10 Water related prosecutions by local authorities

Prosecutions	2006	2007	2008
Section 3 Water Pollution Acts	26	15	15
Section 4 Water Pollution Acts	14	22	19
Section 12 Water Pollution Acts	26	21	16
Section 16 Water Pollution Acts	4	9	14
Section 23 Water Pollution Acts	3	7	2
Section 110 Public Health Act	1	1	0
Other*	2	6	13
Total	**76**	**81**	**79**

**Other includes Water Services Act (6), Sections 7,13,14 and 17 of The Water Pollution Acts (6) and the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2006 (1).*

[23] Section 63 of The EPA Acts

3.9 ENVIRONMENTAL OUTPUTS, OUTCOMES & FUTURE ENFORCEMENT ACTIONS

3.9.1 Environmental outputs and outcomes

The following points outline some of the key results in terms of outputs and outcomes in the water area over the reporting period 2006–2008;

3.9.1.(a) Environmental policy

Urban wastewater Licensing of Urban Waste Water Treatment plants to limit emission and prevent pollution commenced during the reporting period.

Drinking water Increase of powers for EPA in the supervision and regulation of public drinking water supplies.

Good Agricultural Practice Regulations 2009 These provide for strengthened enforcement and better farmyard management in order to comply with ECJ judgments in relation to the Dangerous Substances and Nitrates Directive.

European Communities Environmental Objectives (Surface Waters) Regulations 2009 These regulations establish quality objectives for all surface waters. They also require the production of pollution reduction plans by local authorities, classification of surface water bodies and establishment of inventories of priority substances by the EPA.

3.9.1.(b) Environmental implementation

Remedial Action List publication In January 2008, the EPA published the details of 339 public water supplies representing 36% of public drinking water supplies that require detailed profiling to ensure that the supply is providing clean and wholesome drinking water.

Installation of chlorine monitors and alarms In January 2008, 30% of supplies had chlorine monitors and alarms in place and this had increased to 40% by end of August 2008. This is attributed to the strategic enforcement of drinking water supplies by the EPA.

Emission reductions 20% decrease in mass emissions of BOD and COD loads to waters from food and drink sector (IPPC).

Improvement in water quality The number of seriously polluted river stations has decreased by 10 during the period 2006–2008.

Quality of bathing waters In 2008, 122 of the 131 designated bathing areas (93 per cent) complied with the mandatory standards and thus achieved sufficient water quality status.

Farm infrastructure Almost 43,000 approvals to commence work were issued to farmers under the Farm Waste Management Scheme with 17,808 payments made during the period 2006–2008 totalling €530m (€614.8m since 2001).

Sewer licensing Significant increase in licensing of discharges to sewers by local authorities.

Enforcement activity Significant increase in water quality related inspections and sanctions carried out by local authorities.

3.9.1.(c) Environmental capacity building

Single house wastewater treatment The 'Code of Practice: Wastewater Treatment Systems for Single Houses was published, circulated for comment and finalised (2009).

Water Services National Training Group The EPA is working with the Water Services National Training Group to determine the appropriate training required for local authority and private sector staff.

Drinking Water Regulations Guidance (Booklets 1–4) (EPA, 2008) This guidance for local authorities cover the new notification requirements, the format and manner in which monitoring results are to be submitted, the purpose of the Remedial Action List and the actions that the local authority is required to take, and provides guidance on the risk screening methodology for Cryptosporidium.

3.9.1.(d) Environmental reporting

Urban Waste Water Discharges in Ireland, A Report for the Years 2006 and 2007 (EPA, 2009)

The Provision and Quality of **Drinking Water** in Ireland – A Report for the Years 2006–2007 (EPA, 2008)

The Quality of **Bathing Water** in Ireland, 2006 and 2007 (EPA, 2006 & 2008)

Remedial Action List for Public **Drinking Water Supplies** (RAL) (EPA, 2008)

3.9.2 Future enforcement actions

The priorities for enforcement in water are outlined below.

3.9.2 (a) Wastewater discharge authorisation

A risk-based methodology for enforcement of wastewater discharge authorisations will be introduced. Wastewater treatment plants with inadequate provisions to meet the relevant standards will be targeted.

3.9.2 (b) Drinking water

The Water Safety Plan Approach will be followed to ensure the safety and security of drinking water supplies by managing the catchment, treatment process and distribution network. Drinking water treatment plants with inadequate provisions to meet the relevant standards will be targeted.

3.9.2 (c) Dangerous substances

A risk-based methodology for farm inspections undertaken by local authorities under the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 wil be introduced. Enforcement of the Direction on farm inspections issued by the EPA to all local authorities.

3.9.2 (d) IPPC emissions

The downward trend of IPPC mass emissions discharged to waters will continue to be driven by the Pollutant Release and Transfer Register (PRTR).

3.9.2 (e) Water Framework Directive

A key element of the River Basin Management Plans will be a set of management measures referred to as a `Programmes of Measures' (POMs), which are designed to address the significant water management issues in each river basin. These POMs will be priority drivers to deliver good water quality and the local authorities as well as the other public bodies will be responsible for their delivery and implementation. Drafts of the programme of measures have been developed for each River Basin Management Plan (see www.wfdireland.ie. These are due to be finalised by the end of 2009 and will be operational by the end of 2012).

3.9.2 (f) Operator training

Best practice training will be determined and implemented for the operation of wastewater and drinking water treatment infrastructure.