Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Focus on Urban Waste Water Treatment in 2012

A Report for the Year 2012

Environmental Protection Agency

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

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

OUR RESPONSIBILITIES

LICENSING

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

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

NATIONAL ENVIRONMENTAL ENFORCEMENT

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

MONITORING, ANALYSING AND REPORTING ON THE ENVIRONMENT

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

REGULATING IRELAND'S GREENHOUSE GAS EMISSIONS

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

ENVIRONMENTAL RESEARCH AND DEVELOPMENT

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

STRATEGIC ENVIRONMENTAL ASSESSMENT

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

ENVIRONMENTAL PLANNING, EDUCATION AND GUIDANCE

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

PROACTIVE WASTE MANAGEMENT

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

MANAGEMENT AND STRUCTURE OF THE EPA

The organisation is managed by a full time Board, consisting of a Director General and four Directors.

The work of the EPA is carried out across four offices:

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

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

Focus on Urban Waste Water Treatment in 2012

Environmental Protection Agency

An Ghníomhaireacht um Chaomhnú Comhshaoil

P.O. Box 3000, Johnstown Castle Estate, County Wexford, Ireland

Telephone: +353 53 9160600 Fax: +353 53 9160699

E-mail: info@epa.ie Website: www.epa.ie

LoCall: 1890 335599

Focus on Urban Waste Water Treatment in 2012

Authors: David Shannon, Brendan Wall and David Flynn

Published by the Environmental Protection Agency, Ireland

ISBN: 978-1-84095-531-6

Cover photograph courtesy of John Doheny, EPA

Table of Contents

Executive Summary

Introduction

This report provides an overview of urban waste water treatment in Ireland during 2012, based on EPA licensing and regulation of waste water discharge authorisations and information from water services authorities. It outlines the performance of waste water treatment plants across the country before Irish Water, the new national water utility established under the Water Services Act 2013, takes over responsibility for these assets from the 34 water services authorities. The transfer of responsibilities commenced in January 2014.

The Urban Waste Water Treatment Regulations 2001-2010 and the 1991 Urban Waste Water Treatment Directive (the Directive) set requirements on the provision of urban waste water collection systems and treatment plants, provide for the monitoring of waste water discharges and specify limits for certain parameters in the discharges. Irish Water will be responsible for ensuring compliance with this legislation. The EPA will be the environmental regulator for this new semi-state company.

Key findings

➢ Infrastructure

- **94%** of the national waste water load received secondary (biological) treatment in 2012, a three-fold increase in just over a decade.
- Continued infrastructural investment is required however as some areas did not have the necessary treatment infrastructure in place in 2012.
  - **Seven** larger urban areas listed in Table 1 did not meet the European Union Directive requirement to provide secondary treatment.

Table 1. Areas where secondary treatment required by the European Union Directive is not in place

Urban area	Water services authority estimated completion date
Killybegs	2015
Clifden	Mid-2015
Youghal	End 2015
Cobh	Late 2016
Passage West / Monkstown	Late 2016
Ringaskiddy / Crosshaven / Carrigaline	Late 2016
Arklow	2016

  - **Eight** of the larger urban areas that failed the mandatory nutrient quality standards have also not met the Directive's requirement to provide the relevant nutrient reduction in addition to secondary treatment for discharges to sensitive areas. These areas are Greater Dublin (Ringsend), Cork City, Dundalk, Killybegs, Navan, Cavan, Roscrea and Carrigtohill (refer to section 2.5 of the report for further details).

- **Twenty-eight** smaller urban areas have no treatment or just basic screening in place. These must be upgraded to meet the relevant treatment requirements in the Directive (see Appendix B in the report).

➢ Effluent quality

- The European Union Directive on Urban Waste Water Treatment specifies monitoring requirements and sets waste water discharge limits for the water quality indicator parameters of biochemical oxygen demand (BOD), chemical oxygen demand (COD) and total suspended solids (TSS). The trend in improving national compliance observed in recent years continued in 2012 but there is still room for significant improvement as compliance rates are below those found in many other European countries.
- The European Union Directive's standards are mandatory at 170 larger urban areas and **76%** of these areas met all the effluent quality and sampling standards for BOD, COD and TSS. In 2011 the compliance rate was 70%.
- The Directive also sets limits on the concentration of certain nutrients in effluent discharged to sensitive areas from large towns and cities. The compliance rates for the mandatory phosphorus and nitrogen standards were **77%** and **50%** respectively.
- **44** larger urban areas did not meet all the relevant mandatory effluent quality standards for biochemical oxygen demand, chemical oxygen demand, nitrogen and phosphorus.
- When the effluent quality from all 541 urban areas was examined, and compared against the BOD, COD and TSS standards, the compliance rate was **57%**, up from 51% in 2011.
- 443 secondary treatment plants were operated by local authorities during 2012 and **69%** of these met the BOD, COD and TSS standards, up from 64% in 2011.
- The sampling programme at **5%** of areas with secondary treatment plants was inadequate and insufficient samples were collected and analysed.

➢ Implementation and enforcement of waste water authorisations

- Most incidents reported to the EPA are attributed to either issues surrounding the operation and management of waste water treatment plants, or a lack of treatment capacity.
- **59%** of the 266 improvement works specified in EPA waste water discharge licences due by the end of 2012 were reported as complete, while the remainder were still outstanding at the beginning of 2013.
- The EPA conducted independent effluent monitoring at 164 licensed areas in 2012 and compliance with the limits set in the licenses for seven key water quality parameters ranged between **86%** and **99%**.

Improving urban waste water management in Ireland

This report outlines the challenges that remain and the work the EPA considers necessary to ensure compliance with waste water regulations.

Urban waste water is one of the principal causes of pollution of our water resources. Considerable investment has been made in the provision of waste water infrastructure throughout the country, as outlined in the Reform of the Water Sector in Ireland Position Paper. However, further investment in infrastructure is necessary to meet European Union requirements such as the Urban Waste Water

Treatment Directive and the Water Framework Directive and to ensure compliance with EPA waste water discharge authorisations. This investment will have many benefits for Ireland, as clean water is a valuable resource and is important to public health, the tourism industry, food production and other industrial sectors.

In some cases, where the required infrastructure is in place, operational and maintenance issues have prevented waste water from being consistently treated to the required standards. Prioritising the operation and maintenance of treatment plants and collection networks plays an important role in optimising the performance of waste water works in order to protect receiving water and ensure that Ireland meets its obligations under the Urban Waste Water Treatment Directive and the Water Framework Directive.

1 Introduction

Waste water must be treated prior to being released back into the environment in order to remove contaminants that could pose an environmental risk. This report provides a review of the performance of urban waste water treatment plants and waste water infrastructure in place in Ireland during 2012[1]. The EPA published the Focus on Urban Waste Water Discharges in Ireland report and two subsequent update reports during 2012. This report is a follow on from these three reports. The recommendations in this report add to those from the Focus on Urban Waste Water Discharges in Ireland. The recommendations will be of key relevance to Irish Water, the new national water utility. Responsibility for urban waste water collection and treatment transfers from the 34 local authorities to Irish Water in 2014[2].

Waste water discharges from water services authority waste water works must be authorised by the EPA[3]. The purpose of the authorisation system is to prevent and reduce pollution of waters by waste water discharges and set out a roadmap towards compliance with the Urban Waste Water Treatment Directive and the Water Framework Directive. The EPA received applications for waste water discharge licences for 529 urban areas and applications for certificates of authorisation for 542 areas and has issued 284 licences and 512 certificates of authorisation[4]. Compliance with waste water discharge authorisations is outlined in Chapter 3 of this report.

Where necessary the EPA sets more stringent standards in the licences than those in the Urban Waste Water Treatment Directive in order to protect the receiving waters, prevent and reduce environmental pollution and meet standards in European Directives and domestic water quality objectives. This report deals mainly with the assessment of waste water discharges against the quality and sampling standards set in the Urban Waste Water Treatment Directive, using monitoring data provided to the EPA by the water services authorities. In section 3.3 of this report the results from EPA monitoring of waste water discharges are assessed against the standards set in the waste water discharge licences.

[1] The report relates principally to discharges from urban areas that are subject to the waste water discharge licensing programme (i.e. areas with a population equivalent greater than 500).
[2] 34 County and City Councils acted as water services authorities prior to 2014, with functions relating to the collection and treatment of urban waste water. From 2014 these functions transfer to a single water services authority, Irish Water.
[3] In accordance with the requirements of the Waste Water Discharge (Authorisation) Regulations, discharges from urban areas with a population equivalent of 500 or more require a waste water discharge licence while discharges from areas below this threshold require a certificate of authorisation.
[4] As at 1st December 2013. The figures exclude applications that were subsequently withdrawn and reviews of existing authorisations.

2 Waste water treatment infrastructure and effluent quality in 2012

2.1 Waste water treatment infrastructure

Table 2.1 summarises the number of urban areas subject to the waste water discharge licensing programme during 2012 and the level of waste water treatment provided at these areas.

Treatment provided for the waste water load (by population equivalent) generated across Ireland during 2012 is presented in Table 2.2[5]. In 2012 approximately 94% of the national waste water load received at least secondary treatment.

Table 2.1: Summary of the level of waste water treatment provided in 2012 (by urban area)[6]

Size of urban area	Number of areas with no treatment or preliminary treatment	Number of areas with primary treatment	Number of areas with secondary treatment	Number of areas with secondary treatment & nutrient reduction	Total
less than 2,000 p.e.	23	59	161	116	*359*
from 2,000 to 10,000 p.e.	7	4[7]	44	62	*117*
Over 10,000 p.e.	5[8]	0	27	33	*65*
Total	***35***	***63***	***232***	***211***	***541***

Table 2.2: Waste water treatment provided for the national waste water load in 2012 (by p.e.)

No treatment or preliminary treatment (%)	Primary treatment (%)	Secondary treatment (%)	Secondary treatment & nutrient reduction (%)
4.6	1.5	71.1	22.8

Article 4 of the Urban Waste Water Treatment Directive (hereinafter referred to as "the Directive") makes the provision of secondary treatment mandatory at all larger urban areas, i.e. all areas with a population equivalent greater than 10,000, and areas with a population equivalent between 2,000 and 10,000 that discharge to freshwater or estuaries. 96% of the 170 larger urban areas in Ireland in 2012 complied with this requirement. There were 7 larger urban areas (listed in Table 2.3) without secondary treatment at the end of 2012, and no treatment or just basic preliminary treatment was provided at 6 of these (listed in Appendix B). This is a slight improvement from the 11 larger urban areas without secondary treatment at the end of 2011.

[5] Waste water load is the organic biodegradable load in the waste water of an urban area expressed in population equivalent. This takes into account the load generated by the resident population, the non-resident population (e.g. tourists) and industries. A population equivalent (p.e.) of 1 is defined as the organic biodegradable load having a five-day biochemical oxygen demand of 60g of oxygen per day.
[6] Information on the level of treatment provided was supplied to the EPA by the water services authorities.
[7] Includes Lusk. This discharge ceased permanently in mid-2012 when it was connected to, and amalgamated with, Portrane waste water treatment plant which provides secondary treatment.
[8] Includes Bray. This discharge ceased permanently in late 2012 when it was connected to, and amalgamated with, Shanganagh waste water treatment plant which provides secondary treatment.

Table 2.3: Areas where secondary treatment required by the Directive was not provided at the end of 2012

Water services authority	Urban area	Size of urban area (p.e.)	Receiving water	Date secondary treatment required by Directive	Estimated completion date[9]
Donegal	Killybegs	81,382	Estuarine	2000	2015[10]
Galway	Clifden	4,779	Estuarine	2005	Mid-2015[10]
Cork	Youghal	9,600	Estuarine	2005	End 2015
Cork	Cobh	12,000	Coastal	2005	Late 2016
Cork	Passage West/Monkstown	7,600	Estuarine	2005	Late 2016
Cork	Ringaskiddy/Crosshaven /Carrigaline	39,200	Coastal	2000	Late 2016
Wicklow	Arklow	16,997	Coastal	2000	2016

Article 7 of the Directive requires appropriate treatment at all smaller urban areas, i.e. those below the minimum thresholds outlined previously for larger urban areas[11]. 28 smaller urban areas, listed in Appendix B, have no treatment or basic preliminary treatment in place and these must be upgraded to provide appropriate treatment. 61 smaller urban areas have primary treatment in place, which may or may not be appropriate depending on site specific conditions and associated risks.

2.2 Effluent quality at large urban areas

Biochemical oxygen demand (BOD), chemical oxygen demand (COD) and total suspended solids (TSS) are the three water quality indicator parameters most commonly used to assess the effectiveness of a waste water treatment plant in removing organic contaminants from waste water. In order to set regulated quality standards on treated waste water or effluent reintroduced to the environment from urban areas, the Directive specifies limits on the concentration of these three parameters in the effluent. The Directive also specifies the minimum number of effluent samples to be collected and analysed on an annual basis.

Water services authorities (i.e. County and City Councils) are responsible for effluent sampling and analyses and for reporting the results to the EPA. The EPA assesses the results reported to it on an annual basis against the quality standards and sampling frequencies specified in the Directive, and reports on the findings. Compliance with the quality and sampling standards in the Directive is mandatory for discharges from larger urban areas (all areas with a population equivalent greater than 10,000, and areas with a population equivalent between 2,000 and 10,000 that discharge to freshwater or estuaries).

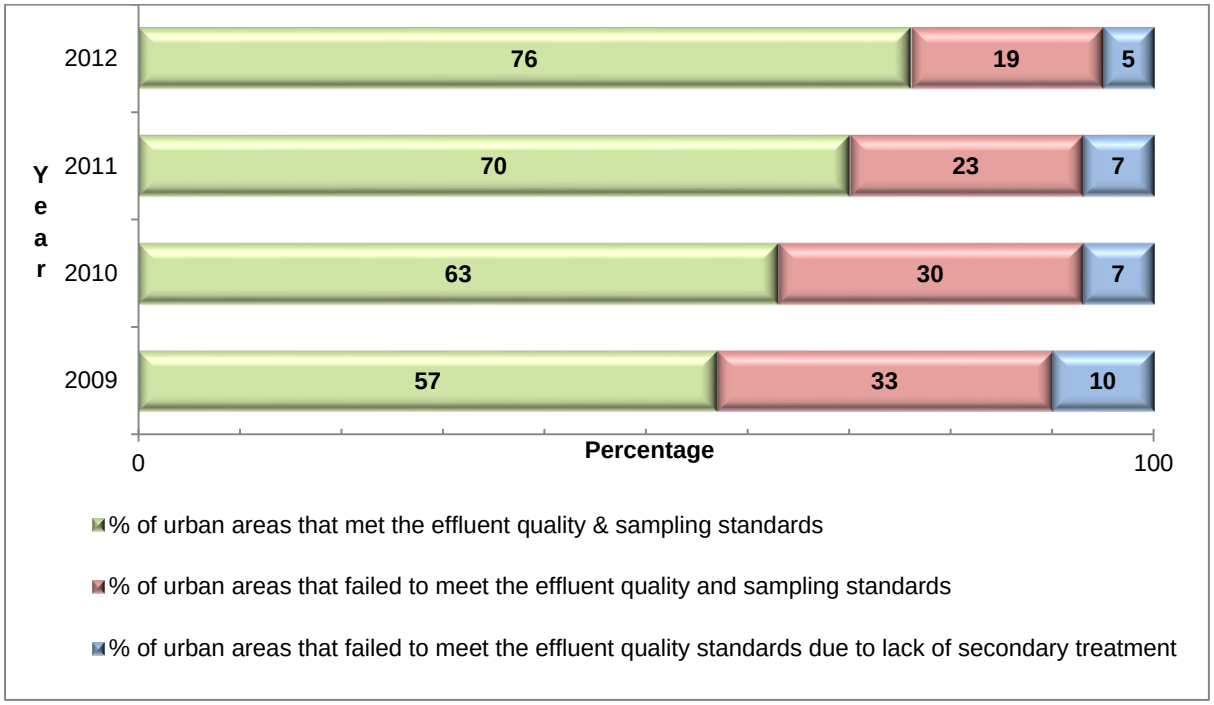
There were 170 larger urban areas in Ireland in 2012 and these accounted for approximately 93% of the national waste water load. A summary of compliance of urban waste water discharges from these areas with the BOD, COD and TSS effluent quality and sampling standards in the Directive is presented in Figure 2.1[12]. The rate of compliance at larger urban areas during the years 2009 to

[9] Some dates for provision of secondary treatment listed in the Focus on Urban Waste Water Discharges in Ireland report have been revised outwards since the report was published and the current best estimated dates, as received from the water services authorities, are presented here.
[10] EPA enforcement action is on-going in relation to this issue.
[11] Appropriate treatment means treatment of urban waste water by any process and/or disposal system which after discharge allows the receiving waters to meet the relevant quality objectives and the relevant provisions of the Urban Waste Water Treatment Directive and other Community Directives.
[12] This refers to the primary discharge from the urban area. Storm water overflows are not included in the assessment. This is in line with the Water Information System for Europe (WISE) reporting.

2011 is also shown in this figure. The trend in improving compliance observed in recent years continued in 2012.

An insufficient number of sampling results was provided by the water services authorities for waste water treatment plants serving the following 6 larger urban areas: Rathcormac (Cork), Portrane (Fingal), Clones (Monaghan), Athy (Kildare), Rathdowney (Laois) and Courtown (Wexford). The first 3 of these previously failed to provide a sufficient number of samples for 2011.

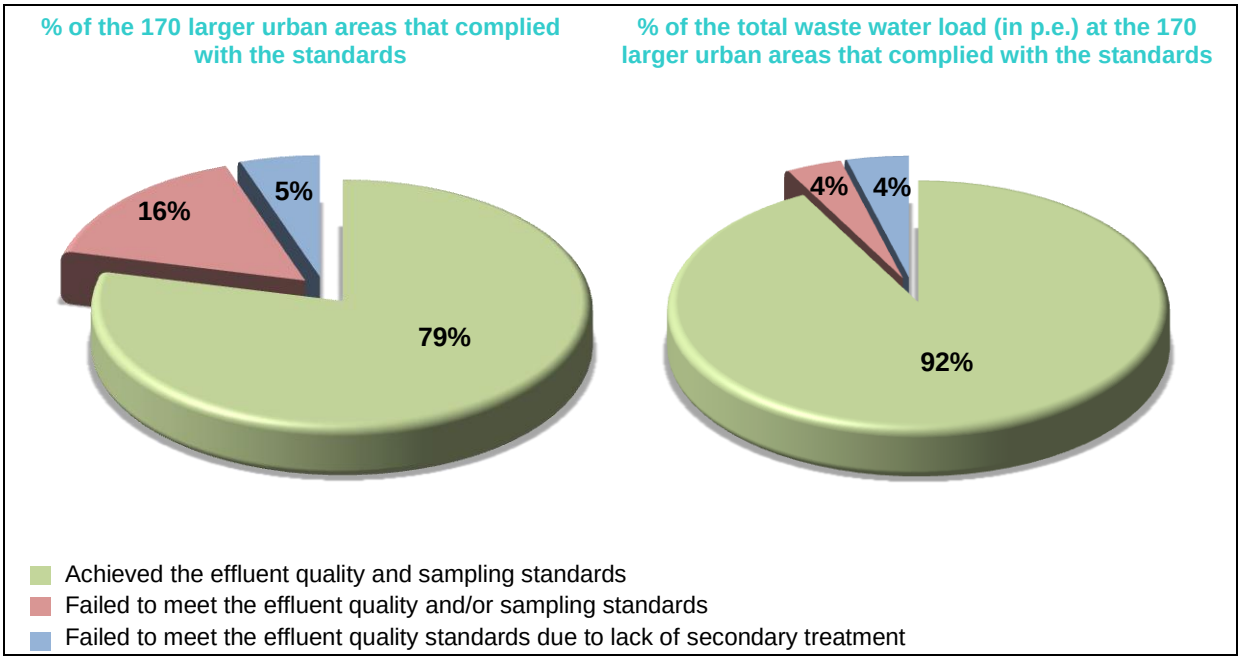
Figure 2.1: Compliance of all 170[13] larger urban areas with the effluent quality (BOD, COD & TSS) and sampling standards in the Urban Waste Water Treatment Directive for the period 2009 to 2012



The requirement to comply with the TSS concentration limit in the Directive is optional[14]. The national summary of compliance of urban waste water discharges from the 170 larger urban areas with just the BOD and COD effluent quality and sampling standards in the Directive is presented in Figure 2.2.

[13] 170 refers to 2012. The number of larger urban areas (i.e. all areas greater than 10,000 p.e., and areas greater than 2,000 p.e. discharging to freshwater or estuaries) can vary from year to year. The numbers of areas in this category in 2011, 2010 and 2009 were 165, 169 and 174 respectively.
[14] Refer to footnote 3 in Table 1 of the Directive. European Commission reports on compliance with secondary treatment standards exclude suspended solids results.

Figure 2.2: Compliance of all larger urban areas (170 no.) in 2012 with the mandatory effluent quality (BOD & COD) and sampling standards in the Urban Waste Water Treatment Directive



The improvement in compliance for the total waste water load, up from 35% in 2011 to 92% in 2012, is due mainly to Ireland's largest waste water treatment plant at Ringsend, Dublin, which serves a population equivalent of over 2.3 million, achieving the BOD and COD quality standards during 2012.

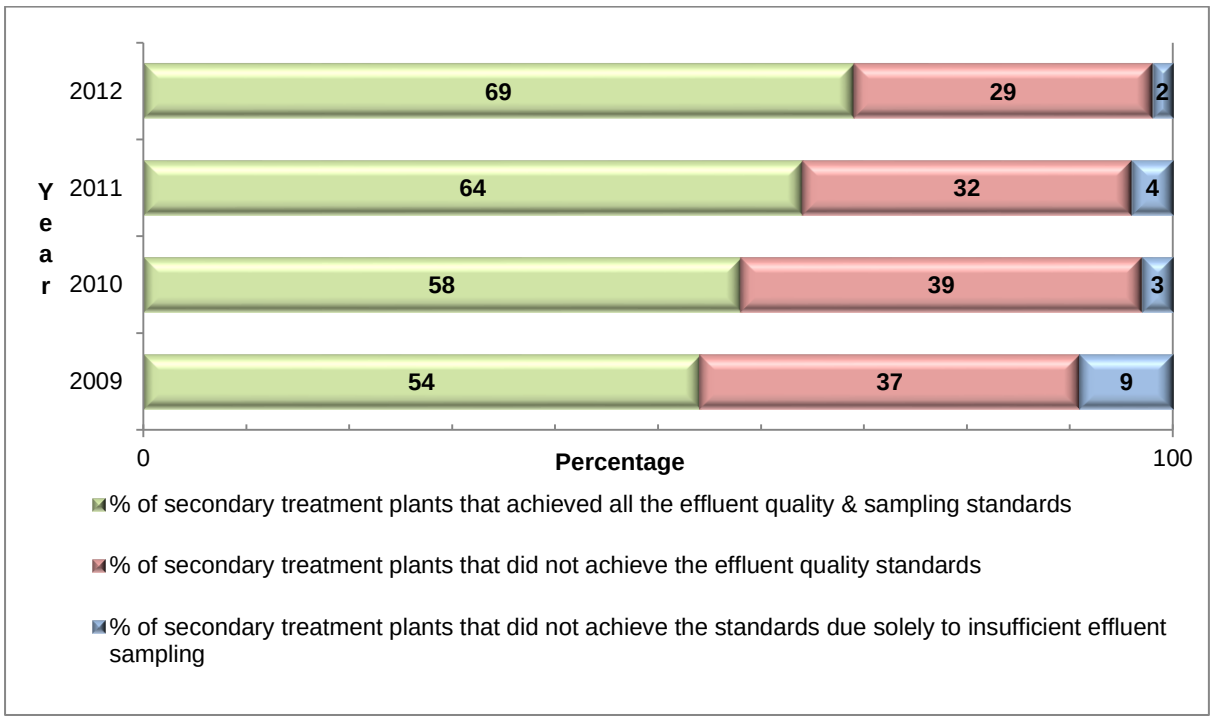
2.3 Effluent quality at all urban areas with secondary waste water treatment

Secondary (biological) treatment was provided at 443 urban areas in 2012 (refer to columns 4 and 5 of Table 2.1). The EPA used the effluent quality and sampling standards in the Directive as a guide to assess the performance of these secondary treatment plants during 2012[15]. A national summary of this assessment is presented in Figure 2.3. The performance of secondary treatment plants during the years 2009 to 2011 is also shown in this figure. The trend in improving compliance observed in recent years continued in 2012. However, the national data shows that the operation of existing plants needs to improve. In order to improve performance and rectify the cause of failures improvements in operation and maintenance are needed, as well as capital investment to fix treatment capacity issues.

Sampling carried out at 5% of secondary treatment plants was inadequate. 10 secondary treatment plants did not achieve the standards in 2012 due solely to providing an insufficient number of effluent sample results. A further 12 that did not achieve the effluent quality standards in 2012 also failed to provide a sufficient number of sampling results.

[15] The Directive does not specify the minimum number of samples required per year for urban areas with a population equivalent less than 2,000. The EPA set the minimum number of samples required at these areas at either 6, or the number of samples specified in the Waste Water Discharge Licence if this is less than 6.

Figure 2.3: Assessment of discharges from all 443[16] secondary treatment plants against the effluent quality (BOD, COD & TSS) and sampling standards in the Urban Waste Water Treatment Directive for the period 2009 to 2012



2.4 Effluent quality at all urban areas

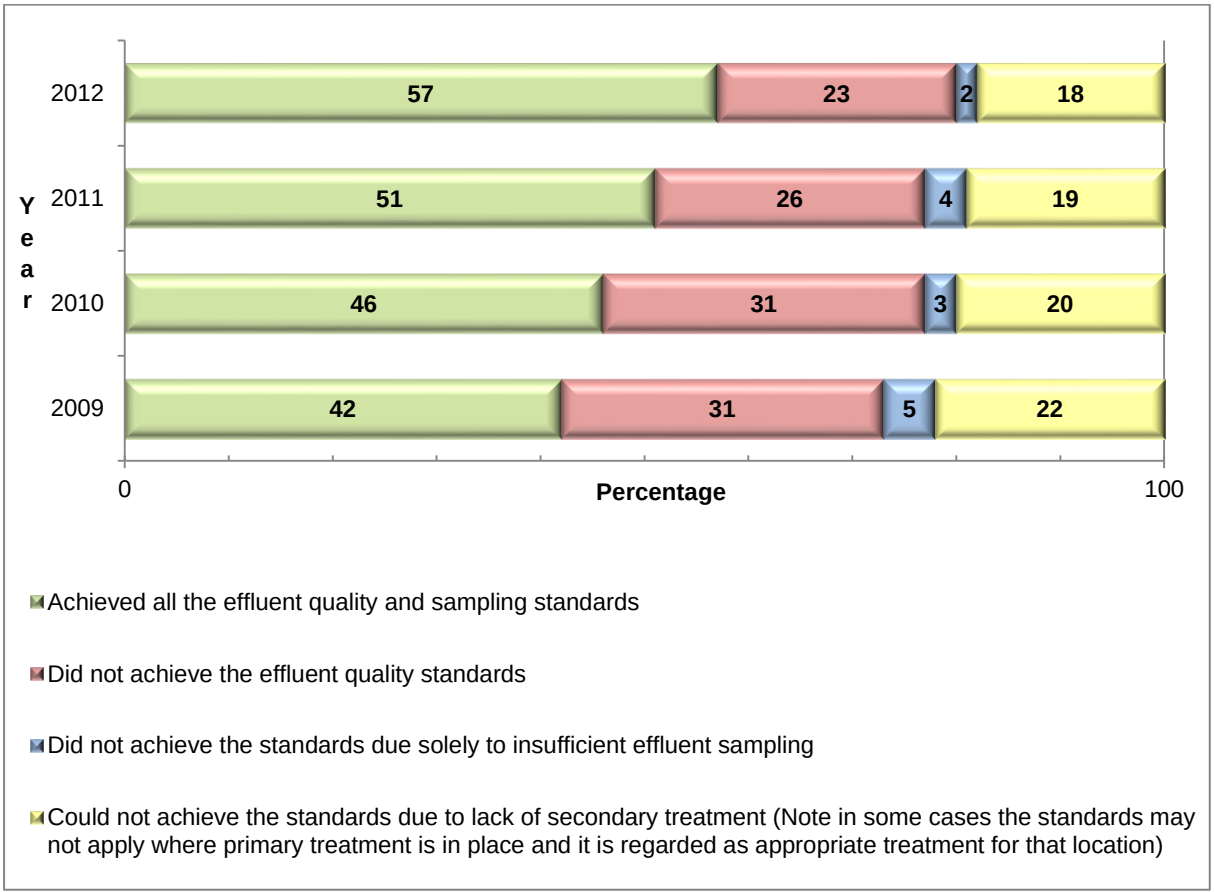
Figure 2.4 provides a summary of the quality of effluent discharges from all urban areas subject to the waste water discharge licensing programme. While 443 of these urban areas had secondary treatment in place during 2012 the remaining 98 urban areas (see table 2.1) did not have secondary treatment[17]. Waste water received no treatment or just basic preliminary treatment prior to being discharged at 35 of these areas[18]. Effluent from urban areas with less than secondary treatment is unlikely to achieve the quality standards specified in the Directive.

[16] This figure refers to 2012 and is made up of 232 secondary treatment plants and 211 plants with secondary treatment and nutrient reduction. The numbers of areas in this category in 2011, 2010 and 2009 were 438, 432 and 420 respectively.

[17] Includes Lusk & Bray where the discharges ceased permanently during 2012 when waste water was connected to waste water treatment plants with secondary treatment serving adjacent urban areas.

[18] Includes Bray which was connected to a secondary treatment plant in late 2012. Does not include a small secondary discharge of 120 p.e from Howth, which is part of the Greater Dublin area.

Figure 2.4: Assessment of discharges from all urban areas against the effluent quality (BOD, COD & TSS) and sampling standards in the Urban Waste Water Treatment Directive for the period 2009 to 2012[19]



A summary of urban waste water treatment within each water services authority's functional area in 2012 in provided in Table 2.4. The table includes details on BOD, COD and TSS monitoring results. Nutrient data is not addressed in the table, but is covered in the next section of this report. The results of the 2012 compliance assessment for each urban area are summarised in the county pages in Appendix A.

[19] The effluent quality and sampling standards in the Directive are not a statutory requirement for urban areas <2,000 p.e. discharging to freshwater or estuaries and <10,000 p.e. discharging to coastal water (unless specified in a waste water discharge licence). In the case of the 371 smaller urban areas in 2012 the standards were used by the EPA for comparison purposes as a guide to assess plant performance.

Table 2.4: Summary of waste water treatment in 2012 and compliance with BOD, COD and TSS requirements in each water services authority's functional area

Water services authority	Number of urban areas subject to the waste water discharge licensing programme	Number of urban areas without secondary treatment[20]	Number of urban areas with secondary treatment that did not meet the BOD, COD & TSS standards[21]		
Carlow	11	0	2	(2)	↓
Cavan	16	0	7	(3)	↑
Clare	23	5	3	(2)	↓
Cork City	1	0	0		↓
Cork County	76	20	21	(14)	↑
Donegal	39	19	12	(6)	↓
Dublin City	1[22]	0	1		→
Dun Laoghaire-Rathdown	1	0	0		→
Fingal	8	3[23]	2		↓
Galway City	1	0	0		→
Galway	22	7	7	(3)	↓
Kerry	25	10	0		↓
Kildare	13	1	2		→
Kilkenny	21	6	6	(3)	↓
Laois	14	0	11	(10)	↓
Leitrim	8	0	2		↓
Limerick City	1	0	0		→
Limerick	25	5	8	(1)	↓
Longford	6	2	0		↓
Louth	14	0	0		→
Mayo	33	3	11	(5)	↑
Meath	23	0	7	(2)	↑
Monaghan	14	0	3		↓
Offaly	14	0	3	(1)	↑
Roscommon	13	0	6	(3)	→
Sligo	16	2	6	(3)	↑
Tipperary North	12	0	1		↓
Tipperary South	14	0	2	(1)	→
Waterford City	1	0	0		↓
Waterford	11	6	2		→
Westmeath	15	0	2	(1)	↓
Wexford	27	6	8	(2)	↓
Wicklow	22	3[23]	2	(1)	↓
Total	***541***	***98***	***137***	***(63)***	

[20] In some cases smaller agglomerations may not necessarily require secondary treatment but 'appropriate treatment' must be provided; for details refer to footnote 11.
[21] The number in parentheses is the number of plants that persistently did not meet the standards during 2012. The arrows indicate whether the number of areas with secondary treatment that did not meet the standards in 2012 was the same as in 2011 (→), less than in 2011 (↓) or greater than in 2011 (↑).
[22] Waste water arising from some towns within Fingal, South Dublin, Dun Laoghaire-Rathdown & Meath County Councils' functional areas is also treated and discharged from the Dublin City Council plant at Ringsend.
[23] One of these areas was connected to an adjacent area with secondary treatment during 2012.

2.5 Assessment of compliance with standards for phosphorus and nitrogen

Secondary treatment alone may not offer sufficient protection to vulnerable receiving waters at risk of eutrophication[24]. In order to protect such waters and to prevent the accumulation of excessive nutrient loads Article 5(2) of the Directive requires a more stringent level of waste water treatment (nutrient reduction) to be provided at larger towns and cities (those with a population equivalent greater than 10,000) discharging directly to sensitive areas[25] [26]. There were 32 such larger towns and cities in Ireland where the more stringent treatment criteria applied in 2012[27].

The Directive sets limits on the concentration of phosphorus and nitrogen in effluent discharged to sensitive areas from larger towns and cities. As the receiving waters may not be equally vulnerable to both phosphorus and nitrogen the Directive specifies that one or both nutrient parameters may apply, depending on the local situation. The EPA is responsible for determining during the waste water discharge licensing process which nutrient parameter(s) shall apply[28].

The EPA has determined the nutrient parameter(s) that shall apply at 29 of the 32 larger towns and cities discharging to sensitive areas. A determination on the nutrient parameter(s) applicable at the remaining 3 areas has not yet been made and for the purposes of this report a precautionary approach is taken in relation to these areas, whereby both parameters are assumed to apply on a provisional basis pending a final decision by the EPA.

A summary of compliance with the nutrient quality and sampling standards in the Directive is presented in Table 2.5. Effluent was deemed to have failed to comply with the Directive's requirements if the annual mean concentration of a given nutrient (phosphorus or nitrogen) in the effluent exceeded the allowable concentration in the Directive and/or an insufficient number of sample results were reported to the EPA. The Directive specifies the minimum annual number of samples, based on the size of the treatment plant.

21 (66%) of the 32 larger towns and cities achieved all the applicable nutrient quality and sampling standards. Some heavily populated areas did not meet the standards and consequently just 17% of the total waste water load (in p.e.) discharged to sensitive areas from the 32 larger towns and cities met all the applicable nutrient quality standards.

Phosphorous requirements applied at 30 of the 32 large urban areas and 77% of these met the phosphorus standards in 2012. Nitrogen requirements applied at 20 of the 32 large urban areas and 50% of these met the nitrogen standards in 2012.

[24] Eutrophication means the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorus, causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water.
[25] Sensitive areas are listed in the Urban Waste Water Treatment (Amendment) Regulations 2010 S.I. No. 48 of 2010. A water body is identified as sensitive if it (i) is eutrophic (ii) may become eutrophic if protective action is not taken or (iii) is intended for abstraction of drinking water and contains more than 50 mg/l of nitrates.
[26] This section covers larger towns and cities reported as discharging directly to sensitive areas. Urban areas discharging to the catchments of sensitive areas, where they may have an impact on those areas, are covered by Article 5(5) of the Directive and these discharges are not dealt with here in this assessment. Monaghan and Killarney were included in this section of previous EPA reports on urban waste water treatment but are not included here as the primary discharge is outside of the sensitive area.
[27] Excludes Drogheda and Clonakilty. The receiving waters for discharges from these 2 areas were designated as sensitive areas by S.I. No. 48 of 2010 however the Regulations require nutrient reduction to be provided by 22/12/2016. As they have been given a specific period of time to meet the nutrient reduction requirements they are not included in the 2012 nutrient assessment.
[28] The EPA was assigned this responsibility under S.I. No. 48 of 2010.

Table 2.5: Compliance in 2012 with the Directive's quality and sampling standards for nutrients in waste water discharged to sensitive areas from larger towns and cities (>10,000 p.e.)

Water services authority	Urban area	Reg. No.	Phosphorus pass or fail in 2012	Reason for fail	Nitrogen pass or fail in 2012	Reason for fail
Carlow	Carlow town	D0028-01	Pass		Refer to note 29	
Cavan	Cavan	D0020-01	Fail	Quality	Fail	Quality
Clare	Ennis North	D0048-01	Pass		Pass	
Cork City	Cork City	D0033-01	Refer to note 29		Fail	Quality
Cork County	Carrigtohill[30]	D0044-01	Fail	Quality	Fail	Quality
Cork County	Fermoy	D0058-01	Pass		Refer to note 29	
Cork County	Mallow	D0052-01	Pass		Pass	
Cork County	Midleton	D0056-01	Refer to note 29		Pass	
Donegal	Killybegs[30]	D0011-01	Fail	Quality	Fail	Quality
Dublin City	Greater Dublin	D0034-01	Fail	Quality	Fail	Quality
Fingal	Swords	D0024-01	Pass		Pass	
Kerry	Tralee	D0040-01	Pass		Fail	Sample no.
Kildare	Athy	D0003-01	Pass		Refer to note 29	
Kildare	Leixlip	D0004-01	Pass		Refer to note 29	
Kildare	Osberstown	D0002-01	Pass		Refer to note 29	
Kilkenny	Kilkenny City	D0018-01	Fail	Quality	Refer to note 29	
Laois	Portarlington[30]	D0158-01	Fail	No results	Fail	No results
Laois	Portlaoise	D0001-01	Pass		Pass	
Longford	Longford	D0060-01	Pass		Pass	
Louth	Dundalk	D0053-01	Fail	Quality	Fail	Quality
Mayo	Castlebar	D0047-01	Pass		Refer to note 29	
Meath	Navan	D0059-01	Pass		Fail	Quality
Monaghan	Carrickmacross	D0062-01	Pass		Refer to note 29	
Offaly	Tullamore	D0039-01	Pass		Refer to note 29	
Tipperary NR	Nenagh	D0027-01	Pass		Pass	
Tipperary NR	Roscrea	D0025-01	Pass		Fail	Quality
Tipperary NR	Thurles	D0026-01	Pass		Refer to note 29	
Tipperary SR	Clonmel	D0035-01	Pass		Pass	
Westmeath	Athlone	D0007-01	Pass		Refer to note 29	
Westmeath	Mullingar	D0008-01	Pass		Refer to note 29	
Wexford	Enniscorthy	D0029-01	Pass		Pass	
Wexford	Wexford town	D0030-01	Pass		Pass	

The table above shows that 11 areas failed to meet all the nutrient quality and sampling standards. Details on the infrastructure in place at these urban areas and the reasons for the failures is summarised below:

- Nutrient reduction for nitrogen and phosphorus was not in place in 2012 at 6 of the areas that failed the quality standards. Nutrient reduction (to reduce phosphorus) was subsequently provided at one of these, Kilkenny City, during 2013. The remaining 5 areas that did not have any nutrient reduction in place, with estimated completion dates in brackets for provision of this treatment, are: Dundalk (Mid-2014), Carrigtohill (Mid-2015), Cork City (Sept 2015),

[29] In accordance with S.I. No. 48 of 2010, and taking into account the local situation, the EPA determined during the licensing process that this parameter does not apply.
[30] Pending a determination by the EPA on the appropriate nutrient parameter(s) that shall apply a precautionary approach is taken whereby both are assumed to apply on a provisional basis.

Killybegs (2015) and Greater Dublin-Ringsend (Not available) [31]. In these cases secondary treatment is in place, except for Killybegs where there is no treatment[32].

- Cavan, Navan and Roscrea failed the quality standards for nitrogen and did not provide nutrient reduction for nitrogen, but did have more stringent treatment to reduce phosphorus. The estimated date for provision of nutrient reduction for nitrogen at Navan is early 2014, at Cavan it is the end of 2014 and a date is not available for Roscrea.
- Tralee failed because an insufficient number of nitrogen results were provided.
- Portarlington exceeded the 10,000 p.e. threshold for the first time during 2012 and failed because no nutrient monitoring was carried out and nutrient reduction is not provided.

The treatment provided at Ennis North, Enniscorthy and Tralee is reported as secondary treatment only. Monitoring data indicates that the existing treatment provided at these plants is achieving the nutrient quality standards[33].

While more stringent treatment for nitrogen is not provided at Mallow, Longford, Nenagh and Clonmel the existing treatment is achieving the nitrogen quality standards in the Directive.

[31] Some dates for provision of treatment given in the Focus on Urban Waste Water Discharges in Ireland report have been revised outwards since the report was published and the current best estimated dates, as provided by the water services authorities, are presented here.

[32] 42,366 p.e. discharged to the sensitive area at Killybegs in 2012 and 39,016 p.e. discharged outside the sensitive area.

[33] In the case of Tralee the nitrogen assessment is based on 8 sample results provided by the water services authority for 2012. 24 samples were required as the plant is > 50,000 p.e. The estimated timeframe for the provision of nutrient reduction at Ennis North is mid-2015 and at Enniscorthy it is the end of 2016.

3 Enforcement of waste water discharge authorisations in 2012

EPA waste water discharge authorisations contain legally binding conditions and compliance with these conditions plays a key role in protecting water resources and the aquatic environment. This chapter outlines how water services authorities have complied with the conditions of their authorisations in 2012.

The EPA takes a risk based and outcome driven approach to licence enforcement with resources targeted where they are most effective. The outcome sought is to protect high quality waters from the impacts of waste water discharges, restore the quality of waters seriously impacted by waste water discharges, prevent environmental pollution by waste water discharges and improve compliance with the Urban Waste Water Treatment Directive. The EPA enforcement strategy focuses on the following five intermediate outcomes[34] in working towards the final goal.

- Progress on infrastructural improvements required by the licence.
- Reducing the environmental risk profile of waste water works.
- Compliance with emission limit values where infrastructure is in place.
- Reducing environmental incidents and complaints.
- Comprehensive and accurate reporting by water services authorities to the EPA.

3.1 Progress on infrastructural improvements required by the licence

Waste water discharge licences include a requirement to carry out infrastructural improvements within certain timeframes in order to improve waste water discharges and reduce their environmental impact. Such improvements typically include upgrades to the waste water treatment plant, the storm water overflows and/or the waste water collection network and the cessation of certain discharges.

- Two thirds of EPA licences issued by 01/12/2013 have requirements for infrastructural improvements, with approximately 700 individual improvement works specified.
- Dates prescribed for completion of the works range between 2009 and 2021, with half of the improvements due prior to 2014.
- 59% of the 266 individual improvements due before the end of 2012 were reported as complete, while the remainder were still outstanding at the beginning of 2013.

The works completed by the end of 2012 include the cessation of over 60 discharges, improvements to waste water collection networks at approximately 25 urban areas and significant upgrades to over 20 waste water treatment plants. Some important infrastructural works necessary to improve waste water discharges are still overdue, e.g. new treatment plants at Clifden, Killybegs and Bundoran. These must be addressed as a priority, particularly if non-completion of the work results in waste water discharging without treatment or causing a public health risk. The EPA has commenced legal actions in relation to delays in the provision of infrastructure at three urban areas.

3.2 The environmental risk profile of the waste water works

The EPA developed a Dynamic Risk Enforcement Assessment Methodology (DREAM) to assist with risk based enforcement of waste water discharge licences. The risk assessment is carried out

[34] Intermediate outcomes are the key stepping stones or targets that must be achieved in order to secure a final goal. They relate to the environmental behaviour or compliance level of the regulated community and are the core short to medium term focus of outcome based enforcement.

annually by the EPA and each urban area is assigned to one of four enforcement categories, based on risk scores for each of the following:

- Level of waste water treatment provided.
- Effluent quality.
- Impact of waste water discharges on the receiving waters.
- Proximity to sensitive environments such as bathing waters or shellfish waters.
- Compliance with the waste water discharge licence.
- Integrity of the collection network.

The risk assessment results are used to determine the annual enforcement fee to be paid by the licence holder for its waste water discharge licence and to set the number of EPA audits to be carried out at each area. Higher fees are charged to urban areas in the higher enforcement categories and EPA enforcement resources are targeted at such areas. Table 3.1 shows how the licensed sites were divided between the four enforcement categories at the end of 2012.

Table 3.1: Percentage of licensed urban areas assigned to each enforcement category

Very High	High	Medium	Low
18%	22%	21%	39%

3.2.1 Making a difference to water quality

The following 10 criteria are used by the EPA to identify waste water works where infrastructure or operational improvements or best practice in operation will make a difference to water quality, protect sensitive areas, reduce public health risks from effluent discharges and ensure compliance with the infrastructure requirements of the Urban Waste Water Treatment Directive:

1. **Serious pollution:** Seriously polluted river locations where the source of pollution is attributed to urban waste water discharges.
2. **Bathing water failure:** Designated bathing waters where urban waste water discharges are the principle or a contributory factor to poor water quality status.
3. **Moderate or slight pollution:** Moderately or slightly polluted river locations where there is a high probability that the principle cause of pollution can be attributed to urban waste water discharges.
4. **Pearl mussel catchment:** Waste water works prioritised to protect freshwater pearl mussel catchments.
5. **Pressure on shellfish water:** Urban waste water works identified in Pollution Reduction Programmes as key pressures on designated shellfish waters.
6. **Secondary or tertiary treatment required by the Directive is overdue:** Urban areas where secondary treatment or nutrient reduction is required by the Directive but is not yet in operation.
7. **No treatment or preliminary treatment only:** Urban areas where waste water receives no treatment or just basic preliminary treatment. These areas require appropriate treatment under the Directive.
8. **Risk to drinking water abstraction points:** Waste water works that have been identified as a high risk to a drinking water abstraction point as part of the preparation of a Drinking Water Safety Plan.
9. **Risk to estuarine or coastal waters:** Waste water works which, in the opinion of the EPA, are impacting on the Water Framework Directive status of estuarine or coastal waters
10. **Environmental pollution risk:** Waste water works which, in the opinion of the EPA, should be

prioritised for other site specific reasons, including any waste water works identified as failing mandatory effluent quality or sampling standards in the Directive, causing environmental pollution or causing a significant risk of eutrophication in sensitive waters.

3.3 Compliance with emission limit values in licences

Chapter 2 of this report assesses water services authority self-monitoring results against the quality and sampling standards set in the Directive. This section covers an assessment of EPA monitoring results against the allowable limits set in each licence. The limits set in the licences may be more stringent than those in the Directive if deemed necessary to protect the receiving waters and/or public health.

The EPA conducts an annual programme of independent monitoring of urban waste water discharges at licensed sites. Monitoring involves taking a discrete sample of treated waste water or effluent, analysing the sample in a laboratory for various water quality parameters, and comparing the results with allowable limits for effluent quality set out in the waste water discharge licence. Compliance with effluent quality limits is one of the key drivers to protect waters from the impacts of waste water discharges.

In 2012 the EPA monitoring programme comprised visits to 164 waste water treatment plants with licensed waste water discharges, and the collection of 174 effluent samples. The analysis relates only to routine EPA monitoring conducted at plants where waste water receives secondary treatment, or more stringent treatment, prior to discharge. The EPA monitoring programme does not include routine monitoring of effluent from plants with less than secondary treatment, as effluent from such plants is unlikely to be of high quality and confirmation of this through independent EPA monitoring is not required[35]. Table 3.2 summarises the EPA effluent monitoring conducted during 2012.

Table 3.2: Analysis of EPA effluent monitoring in 2012 at plants with secondary treatment or more stringent treatment

No. of secondary or more stringent treatment plants visited	No. of plants that met all the effluent quality limits in the licence	No. of effluent samples analysed	No. of samples that met all of the effluent quality limits in the licence
164	132 (80%)	174	140 (80%)

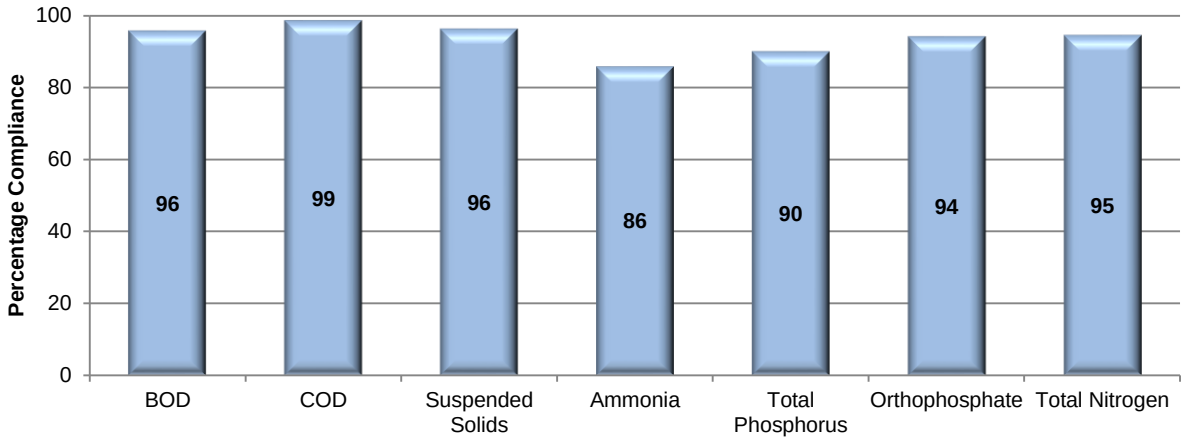
Each effluent sample was analysed for a number of different parameters. Compliance with the allowable limits set in the licences for the water quality parameters of biochemical oxygen demand (BOD), chemical oxygen demand (COD), suspended solids, ammonia, total phosphorus, orthophosphate and total nitrogen is shown in Figure 3.1.

The compliance rate for total nitrogen was up 1% when compared with the results from the EPA monitoring programme in 2011, while compliance for all other parameters was down by between 1% and 3% on the 2011 results[36]. The 2012 assessment was based on a dataset of 164 plants, while the 2011 assessment was based on 135 plants.

[35] Audits of waste water works with no treatment plants or with primary treatment are carried out but effluent samples are not generally taken during such audits. 28 audits were carried out at 25 different waste water works with less than secondary treatment during 2012. In many cases these licences require secondary treatment to be installed within a specified timeframe, unless the existing treatment is considered to be appropriate at that particular location.

[36] The 2011 data is presented on pages 12 and 13 of the Urban Waste Water Treatment in 2011 update report.

Figure 3.1: EPA monitoring results for 2012 showing percentage compliance with allowable licence limits at plants with secondary treatment



The EPA carried out a total of 851 tests for the key parameters on the 174 effluent samples collected during 2012 and assessed the results against the allowable limits in the licences. 48 of the results breached the allowable limits. This equates to an overall compliance rate with these tests of 94%, which is slightly down from 95% in 2011.

3.4 Environmental incidents and complaints

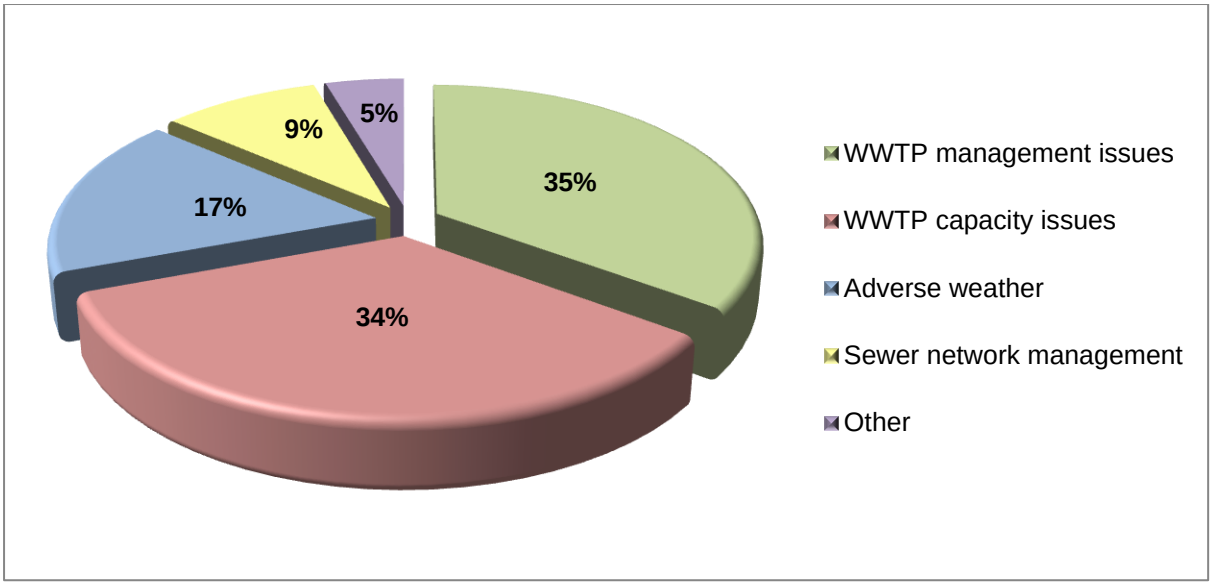
An incident is any discharge that does not comply with the requirements of a waste water discharge licence or any occurrence at a waste water works with the potential for environmental contamination or requiring an emergency response by the water services authority. Waste water discharge licence and certificate of authorisation holders must report all incidents to the EPA as soon as practicable after occurrence. Guidance on the types of incidents that must be reported is available on the EPA website.

- In 2012 the EPA received 568 incident notifications in relation to 121 licences and 13 certificates of authorisation[37]. The EPA opens compliance investigations to follow up on significant issues and 73 of the incidents from 2012, relating to 20 different licences, are linked with 20 open compliance investigations[38]. Most of the incidents linked with open compliance investigations are attributed to a lack of treatment capacity.
- Approximately 70% of incidents were listed as breaches of allowable limits or trigger levels. The remainder were mainly listed as spillages or uncontrolled releases.
- The root causes of all incidents, as identified by the water services authorities, are summarised in Figure 3.2.
- No incidents were reported in 2012 for 97% of the certificates and 44% of the licences.

Most incidents are attributed to either issues surrounding the operation and management of the waste water treatment plant, or a lack of treatment capacity. Investment is required in infrastructure and a step change is needed in the operation and maintenance of treatment plants in order to reduce incidents.

[37] A few licences with recurring incidents are not required to report each recurring incident individually to the EPA but must provide regular reports on the incidents and progress in addressing them. Such incidents are not included in these figures.
[38] Compliance investigations open as at 10th December 2013.

Figure 3.2: Causes of incidents reported to the EPA in 2012



In 2012 the EPA received 50 complaints about licensed or certified waste water works. Over three quarters of the complaints relate to sewage discharges, with the remainder relating mostly to odours or air emissions. The complaints are associated with 25 licensed waste water works and 4 with certificates of authorisation. 14 of the complaints from 2012, linked with 6 different waste water works, have not been closed out[39] and Lifford waste water works in Co. Donegal accounts for over half of these. Infrastructural improvements are necessary to address the issues that gave rise to most of the open complaints from 2012.

3.5 Comprehensive and accurate reporting by water services authorities to the EPA

Water services authorities are required to submit an Annual Environmental Report to the EPA for each licensed urban area. This is an important reporting tool and provides an annual update on licence compliance, the status and performance of the waste water works, and any associated environmental risks or impacts. The reports can be viewed on the EPA website.

- Reports for 2012 were received for approximately 80% of licensed urban areas by 31/07/2013[40]. The quality of the reports varied considerably. In some cases licensees advised that they did not include all the necessary information due to a lack of resources. Meath County Council failed to submit any Annual Environmental Reports for 2012[41].
- There were almost 1,000 storm water overflow discharge points at licensed urban areas in 2012[42]. An assessment of their performance against national criteria is required in the Annual Environmental Report[43]. An adequate assessment was not provided by water services

[39] As at 10th December 2013.
[40] The due date for the reports was 28th February 2013.
[41] As at 10th December 2013.
[42] A storm water overflow is an outlet on the sewerage system designed to relieve the system of excess flow collected as a result of heavy rain. The excess flow bypasses the treatment plant and discharges to receiving waters via the storm water overflow. Without such overflow mechanisms the waste water treatment works and private properties could be at risk of flooding during and after rainstorms.
[43] Discharges from storm water overflows are diluted with significant volumes of rainfall, however they may still have the potential to impact on the environment and consequently they must be designed to meet certain criteria and standards. These are set out in the Department of the Environment 'Procedures and Criteria in relation to Storm Water Overflows'.

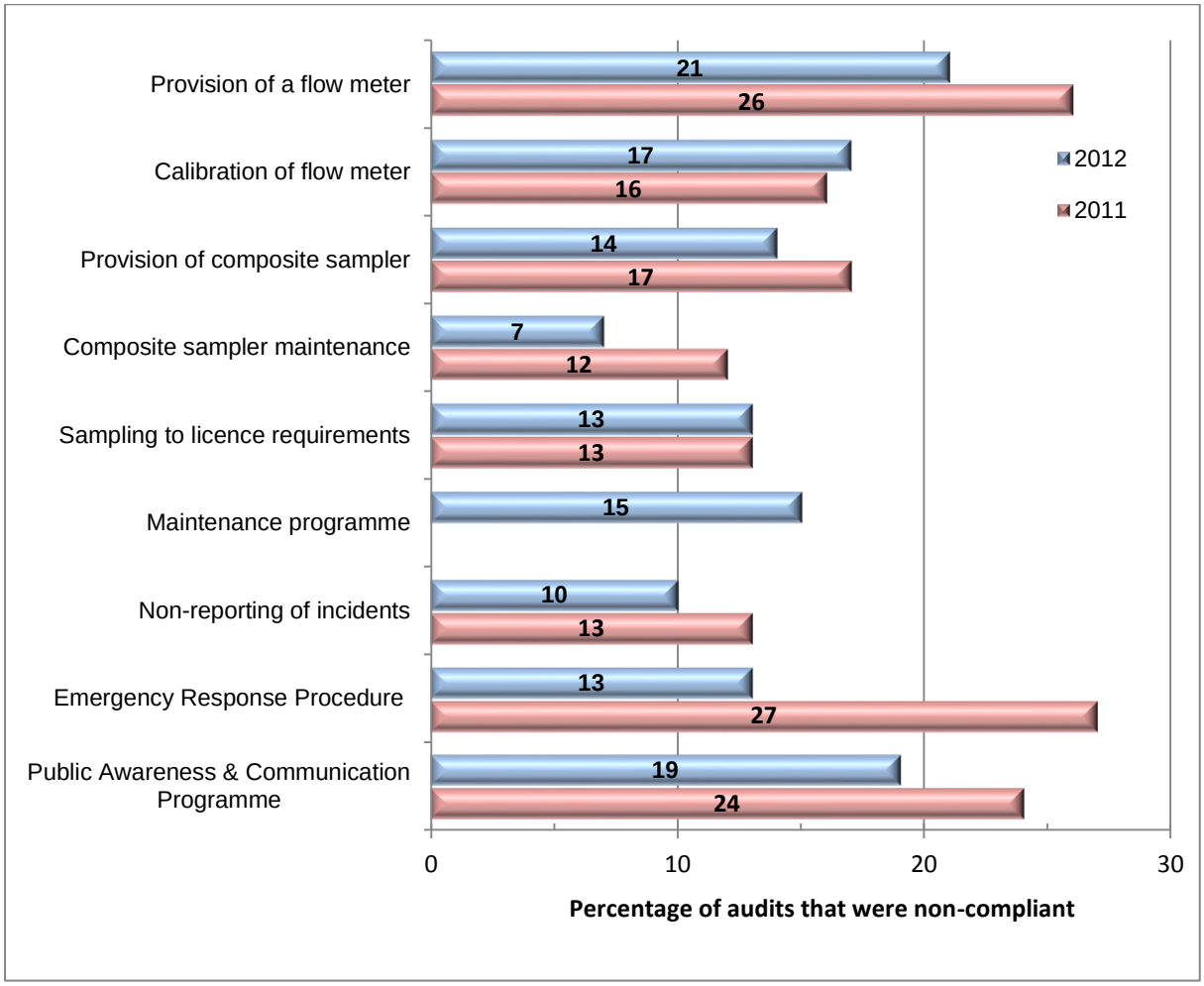
authorities for many overflows. This information gap highlights a need for improved data collection, assessment and awareness of the operation and management of overflows. The EPA and the Water Services Training Group are developing guidance and training on the management and operation of waste water overflows to address this issue.

- Approximately 15% of reports concluded that the treatment plant was overloaded.

3.6 EPA audits

The EPA carried out approximately 200 audits at licensed waste water works in 2012 to determine compliance with licence requirements. Non-compliance rates in relation to 9 key areas assessed during the audits are illustrated in Figure 3.3. Results from the 2011 audit programme are also presented in this figure. The audit findings from 2012 indicate slight improvements across most areas examined by the EPA.

Figure 3.3: Percentage non-compliance with key licence requirements identified during 2011 and 2012 EPA audits[44]

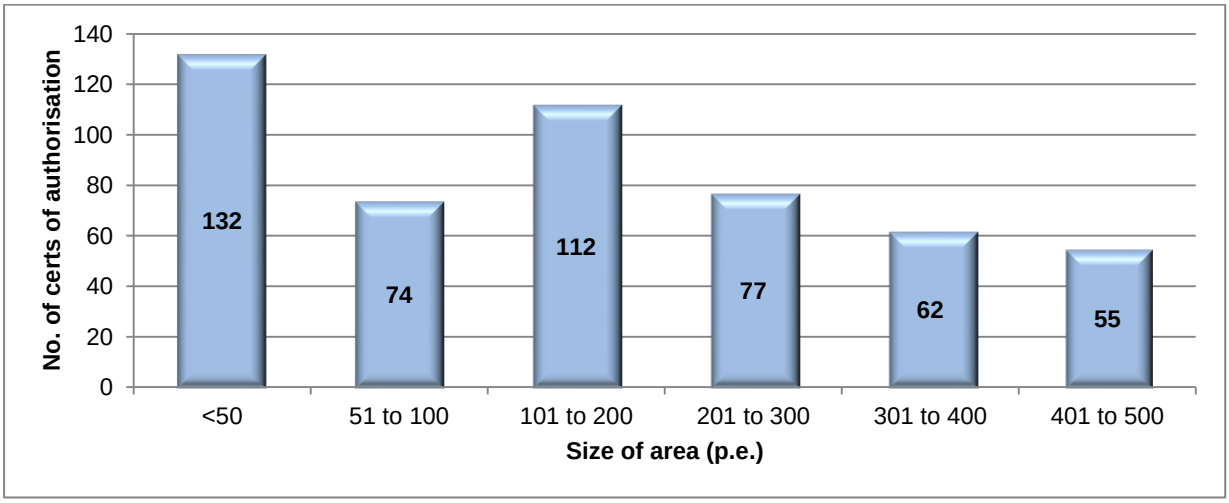


[44] Maintenance programmes were not assessed during the 2011 audits.

4 Certificates of authorisation

A certificate of authorisation is required for waste water discharges from water services authority waste water works that serve areas with a population equivalent of less than 500. The EPA has granted 512 certificates of authorisation, covering waste water discharges from a total population equivalent of approximately 92,500. The size of the areas ranges between 5 p.e. and 495 p.e., with a mean of 180 p.e. Figure 4.1 summarises the size of the areas[45].

Figure 4.1: Size of areas covered by certificates of authorisation



The level of waste water treatment provided at the areas subject to a certificate of authorisation is outlined in Table 4.1. Waste water receives at least secondary treatment prior to discharge at approximately 70% of these areas[46]. 73% of the total waste water load (by population equivalent) from areas with a certificate of authorisation receives at least secondary treatment.

Table 4.1: Waste water treatment provided at areas subject to a certificate of authorisation

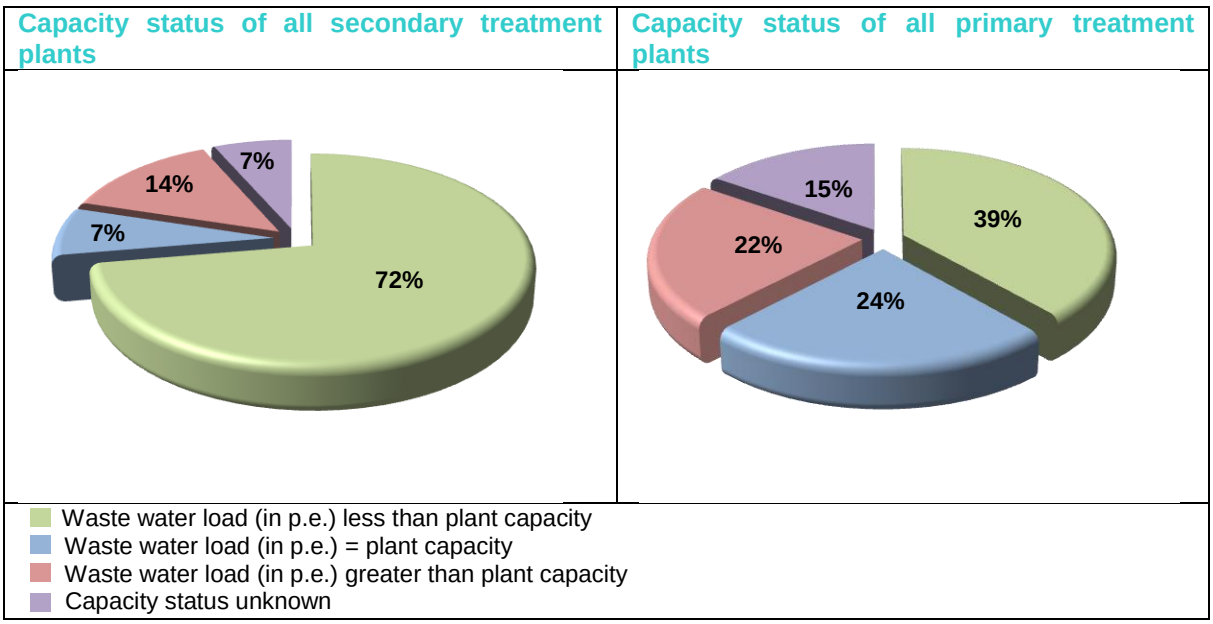
	No treatment	Primary treatment	At least secondary treatment
Number of certificates of authorisation	9[47]	147[48]	356

80% of certificates of authorisation discharge to surface water (i.e. river, stream, lake, transitional or coastal water), 18% discharge to ground and 2% have discharges to both surface water and ground. In terms of population equivalent, approximately 93% of the waste water load from areas with a certificate of authorisation discharges to surface waters.

[45] Information such as the size of the area and the type of treatment was provided to the EPA by water services authorities during the certificate of authorisation application process.
[46] Areas subject to a certificate of authorisation may not necessarily require secondary treatment but 'appropriate treatment' must be provided. Refer to footnote 11.
[47] Includes 1 area served by private on-site treatment plants and the certificate application relates to a planned municipal treatment plant; 2 where some waste water discharges without treatment and some receives primary treatment; 2 where some waste water discharges without treatment and some receives secondary treatment; and 1 where some waste water discharges without treatment, some receives primary treatment and some receives secondary treatment. The 9 areas are listed in Appendix B.
[48] Includes 13 areas with more than 1 waste water treatment plant where some waste water receives primary treatment and some receives secondary treatment prior to discharge.

The treatment capacity status, determined by comparing the waste water load (or population equivalent) with the design capacity of the treatment plant, is summarised in Figure 4.2[49].

Figure 4.2: Capacity status of all treatment plants at certificate of authorisation sites



At 86 certificate of authorisation sites a treatment plant is reportedly overloaded or operating above capacity, i.e. the waste water load (in p.e.) exceeds the design capacity of the treatment plant. It is the responsibility of the certificate of authorisation holder to maintain available treatment capacity to ensure that there is no environmental risk posed to the receiving water environment as a result of the discharge and to upgrade the waste water works where there is inadequate treatment capacity.

Where waste water discharges may have a potential to impact on vulnerable receptors the certificate of authorisation holder is required to carry out an assessment of the impact of the discharge on such receptors and to take any action necessary to minimise potential impacts. 50 certificates of authorisation require ecological assessments to protect freshwater pearl mussels, 24 require risk assessments to protect downstream drinking water abstraction points and 16 require microbiological assessments to protect designated shellfish waters.

[49] The capacity status is reported as unknown where the plant size and/or the waste water load (p.e.) entering the plant is unknown.

5 Sewage Sludge

Sewage sludge is a by-product of the waste water treatment process and includes biosolids removed from waste water during treatment as well as residual organic matter used in the treatment process. The treatment plants covered in this report produced a collective total of 72,429 tonnes of sewage sludge (dry solids) during 2012[50]. Destination routes for the sludge are summarised in Table 6.1. Most of the sewage sludge produced in 2012 was treated and then reused on agricultural land as a fertiliser or soil enhancer.

Table 6.1: Sewage sludge destination routes in 2012

	Agriculture	Composting and other uses	Landfill	Total
Quantity (tonnes dry solids)	68,329 (94.3%)	4,096 (5.7%)	4 (<0.01%)	**72,429**

The total quantity of sewage sludge produced in 2012 by each water services authority is shown in Appendix C.

[50] Based on information reported to the EPA by the water services authorities.

6 Recommendations

Urban waste water is one of the principal causes of water pollution in Ireland and continued financial investment in waste water infrastructure is vital to ensure that infrastructural improvements specified in licences are completed in a timely manner and that Ireland meets its obligations under the Urban Waste Water Treatment Directive and the Water Framework Directive. Complying with the conditions of waste water discharge authorisations and meeting the effluent quality standards in the authorisations plays a key role in protecting our water resources.

The EPA enforcement strategy focuses on five intermediate outcomes. These outcomes can be applied to all urban areas, both licensed and at application stage. The EPA makes the following recommendations in relation to actions to achieve these intermediate outcomes.

6.1 Progress on infrastructural improvements

- The provision of secondary treatment for the 7 urban areas in Table 2.3 that did not have the required level of treatment at the time of reporting should be progressed as a matter of priority.
- Nutrient reduction must be provided at the 8 urban areas greater than 10,000 p.e. that failed the nutrient quality standards and continue to discharge to sensitive areas in the absence of the necessary nutrient reduction (see section 2.5).
- Appropriate treatment should be provided at the 28 smaller urban areas where waste water is discharged with either no treatment or preliminary treatment only. For the 61 smaller agglomerations with primary treatment in place, it must be determined whether primary treatment is appropriate treatment. This must be decided on a site specific basis.
- National capacity for sludge treatment needs to improve and the future needs reviewed in light of the legislation to control on-site waste water treatment systems.

6.2 Reducing the environmental risk profile of waste water works

- Prioritising any necessary infrastructure improvements or upgrades and implementing best operational practice at waste water works are important steps to take in order to improve water quality, protect sensitive areas, reduce public health risks from effluent discharges and ensure compliance with the requirements of the Urban Waste Water Treatment Directive, the Water Framework Directive and EPA waste water discharge authorisations.

6.3 Compliance with effluent quality standards

- The operation of waste water works that did not meet the mandatory effluent quality standards in the Directive in 2012 (highlighted in Appendix A) should be optimised to improve effluent quality.
- Failures due to insufficient sampling should be eliminated.
- Key equipment necessary to monitor plant performance, such as flow meters, telemetry and alarms, should be installed where necessary and maintained.
- Training and up-skilling of plant operators should be examined in order to improve the management and operation of waste water treatment plants.

6.4 Environmental incidents and complaints

- Maintenance and operation programmes should be put in place for all plant and equipment to ensure the correct operation of the waste water works at all times and to prevent environmental pollution. These programmes also serve to improve effluent quality. This programme should also address the provision of back up equipment (duty and standby) such as mobile generators and pumps.

- All environmental complaints should be dealt with in accordance with the national environmental complaints procedure.

6.5 Comprehensive and accurate reporting to the EPA

- Sampling and analyses should be carried out using the methods specified in the licence. In particular, time-based twenty-four hour or flow-proportional composite samples should be taken.

- A nationwide summary of the assessment of storm water overflows against national standards and criteria should be collated by Irish Water and submitted to the EPA in order to address current information gaps. Non-compliant storm water overflows should be upgraded or decommissioned in line with the requirements of EPA waste water discharge authorisations.

Appendix A: County reports.

Explanatory note on assessment of compliance with standards for BOD, COD and suspended solids.

The results of the 2012 compliance assessment for discharges from all urban areas that are subject to the waste water discharge licensing programme (i.e. areas with a population equivalent (p.e.) greater than 500[51]), based on data provided by the water services authorities to the EPA, are summarised in this Appendix. The data is organised in alphabetical order, by water services authority, and contains the following information:

Urban area: The name of the city, town or village where the waste water arose, or the name of the waste water treatment plant where the waste water was treated.

Reg. No.: The reference number of the waste water discharge licence or application for the urban area. Water services authorities must apply to the EPA for a licence authorising discharges from waste water works serving urban areas with a population equivalent greater than 500. Further information on all licence applications and all licences issued by the EPA can be viewed on the EPA website by clicking here.

Pass or Fail:
Pass – the 2012 results met the standards set in the Directive for effluent quality[52], and a sufficient number of effluent samples were collected, analysed and reported to the EPA.
Fail – the 2012 results did not meet the standards set in the Directive for effluent quality and/or an insufficient number of effluent samples was collected, analysed and reported to the EPA.
No secondary[53] – waste water received no treatment or a basic level of treatment (i.e. preliminary treatment or primary treatment) prior to discharge and consequently the effluent could not achieve the quality standards specified in the Directive.

Reason for failure: This refers to plants with at least secondary treatment that did not meet the standards set in the Directive.
Quality – the discharge did not achieve the quality standards set in Annex I to the Directive for at least one of the following parameters (i) biochemical oxygen demand, (ii) chemical oxygen demand and (iii) total suspended solids. A failure for quality implies that the waste water treatment works did not perform to an acceptable standard on at least one sampling occasion during the year.
Sample no. – an insufficient number of effluent samples was collected, analysed and reported to the EPA. The minimum number of samples required for urban areas with a population equivalent greater than 2,000 is set in Annex 1.D to the Directive. The EPA requires a minimum of 6 samples per year from areas subject to the waste water discharge licensing programme with a population equivalent less than 2,000, or else the number of samples specified in the waste water discharge licence if this is less than 6.

[51] In some cases water services authorities applied for a licence for urban areas with a population equivalent below the 500 p.e. threshold in anticipation of future increases in the organic biodegradable load collected within the waste water works. Such areas are included in Appendix A.
[52] Quality standards in this section refer to the standards for BOD, COD & TSS only; compliance with quality standards for nutrients is summarised in table 2.5. The quality standards are mandatory for waste water from urban areas >2,000 p.e. discharging to freshwater or estuaries and >10,000 p.e. discharging to coastal waters. In the case of smaller urban areas below the Directive thresholds the EPA applied the quality standards as a guide to assess the performance of the waste water works.
[53] Secondary treatment is mandatory for urban areas >2,000 p.e. discharging to freshwater or estuaries and >10,000 p.e. discharging to coastal waters. Smaller urban areas below these thresholds require appropriate treatment, which means treatment by any process and/or disposal system which after discharge allows the receiving waters to meet relevant quality objectives and relevant provisions of European Directives.

Persistent failures: A tick mark indicates that at least half of the effluent samples from a plant with secondary treatment did not achieve all of the relevant quality standards in 2012. This is indicative of poor plant performance or overloading of the treatment plant.

Urban area (p.e.): An estimate by the water services authority of the waste water load collected in the waste water works. This should be calculated on the basis of the maximum average weekly load entering the waste water works during the year, excluding unusual situations such as those due to heavy rain.

WWTP (p.e.): A measure of the organic biodegradable load and the population equivalent that the waste water treatment plant was designed and constructed to deal with.

Level of treatment provided: The level of treatment that the waste water received prior to discharge.
No treatment – waste water was discharged without receiving any treatment.
Preliminary – a basic form of treatment typically designed to remove floating debris, oils, fats, grease, grit, rags and large solids from the raw waste water.
Primary – a physical process that involves the settling out and removal of a proportion of the suspended, generally organic, matter from the raw waste water and a consequential reduction in biochemical oxygen demand and total suspended solids.
Secondary – takes place after the primary treatment process and involves a biological process whereby organic matter in the waste water is broken down and consumed by microorganisms.
Secondary & nutrient reduction – in addition to secondary treatment, nutrients such as phosphorous and/or nitrogen are removed from the waste water in order to minimise the risk of eutrophication in waters receiving the final effluent.

Receiving water: The type of water body into which the waste water was discharged.

Sensitive area: A tick mark indicates that the primary discharge point is located within a designated sensitive area. The legislation identifying sensitive areas can be viewed by clicking here. Criteria for identifying sensitive areas (e.g. waters that are eutrophic or may become eutrophic unless protected) are set out in Annex II to the Directive.

River Basin District: The River Basin District into which the waste water discharged.

Compliance with quality and sampling standards in the Directive is mandatory for all larger urban areas, however the suspended solids requirement is optional. The 44 larger urban areas that did not meet the standards for biochemical oxygen demand (BOD) and chemical oxygen demand (COD) and, where applicable, total phosphorus and total nitrogen, are highlighted in red in this Appendix.

Carlow County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballon	D0247-01	Pass			750	1,200	Secondary & nutrient	River		South Eastern
Borris	D0248-01	Pass			1,200	1,500	Secondary	River		South Eastern
Carlow town	D0028-01	Pass			31,788	36,000	Secondary & nutrient	River	✓	South Eastern
Fenagh	D0246-01	Pass			950	1,500	Secondary & nutrient	River		South Eastern
Hacketstown	D0243-01	Fail	Quality	✓	1,170	600	Secondary	River		South Eastern
Muinebheag	D0090-01	Pass			5,000	4,500	Secondary & nutrient	River	✓	South Eastern
Myshal	D0390-01	Pass			400	800	Secondary & nutrient	River		South Eastern
Palatine	D0391-01	Pass			522	1,000	Secondary & nutrient	River		South Eastern
Rathoe	D0240-01	Pass			350	2,000	Secondary & nutrient	River		South Eastern
Rathvilly	D0237-01	Fail	Quality	✓	1,000	600	Secondary	River		South Eastern
Tullow	D0091-01	Pass			4,800	4,000	Secondary	River		South Eastern

Clonegal was listed in previous annual assessments but is no longer included as the waste water discharge licence for this area has been withdrawn.

Cavan County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Arvagh	D0497-01	Fail	Quality	✓	905	1,200	Secondary & nutrient	River		N. Western
Bailieborough	D0085-01	Pass			2,577	2,500	Secondary & nutrient	River		Eastern
Ballinagh	D0501-01	Fail	Quality		1,483	1,800	Secondary & nutrient	River		N. Western
Ballyconnell	D0253-01	Fail	Quality		1,608	3,000	Secondary & nutrient	River		N. Western
Ballyhaise	D0496-01	Pass			780	905	Secondary & nutrient	River		N. Western
Ballyjamesduff	D0256-01	Pass			1,930	2,200	Secondary & nutrient	River		Shannon
Belturbet	D0084-01	Pass			2,266	4,000	Secondary & nutrient	River		N. Western
Blacklion	D0498-01	Fail	Quality	✓	768	1,025	Secondary & nutrient	Lake		N. Western
Cavan	D0020-01	Pass[54]			28,191	20,565	Secondary & nutrient	River	✓	N. Western
Cootehill	D0082-01	Fail	Quality		2,072	2,756	Secondary & nutrient	River		N. Western
Killeshandra	D0499-01	Pass			922	1,000	Secondary & nutrient	Lake		N. Western
Kilnaleck	D0500-01	Fail	Quality	✓	831	650	Secondary & nutrient	River		N. Western
Kingscourt	D0083-01	Pass			2,335	2,400	Secondary & nutrient	River		Neagh Bann
Mullagh	D0252-01	Fail	Quality		1,080	3,000	Secondary & nutrient	River		Eastern
Shercock	D0495-01	Pass			812	1,000	Secondary & nutrient	Lake		N. Western
Virginia	D0255-01	Pass			2,363	2,000	Secondary & nutrient	Lake		Eastern

[54] Cavan did not meet the mandatory quality standards for nitrogen and phosphorus set in the Directive.

Clare County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballyvaughan	D0327-01	No secondary			650		No treatment	Coastal		Western
Clarecastle	D0322-01	No secondary			1,000		No treatment	Estuarine		Shannon
Corofin	D0434-01	Pass			500	1,725	Secondary & nutrient	River		Shannon
Crusheen	D0424-01	Pass			420	1,000	Secondary	River		Shannon
Doonbeg	D0324-01	Pass			1,340	1,500	Secondary & UV	Coastal		Shannon
Ennis North	D0048-01	Pass			14,200	17,000	Secondary	River	✓[55]	Shannon
Ennis South	D0199-01	Pass			2,200	6,000	Secondary	River		Shannon
Ennistymon	D0081-01	Pass			1,200	2,000	Secondary	River		Shannon
Inagh	D0422-01	Pass			270	550	Secondary & nutrient	River		Shannon
Kilkee	D0078-01	No secondary			6,000		No treatment	Coastal		Shannon
Kilkishen	D0420-01	Pass			390	750	Secondary & nutrient	Lake		Shannon
Kilrush	D0075-01	No secondary			2,600		No treatment	Coastal		Shannon
Lahinch	D0080-01	Pass			1,300	8,400	Secondary	River		Shannon
Liscannor	D0430-01	No secondary			620		No treatment	Coastal		Shannon
Lisdoonvarna	D0077-01	Pass			1,050	5,000	Secondary & nutrient	River		Shannon
Milltown Malbay	D0321-01	Fail	Quality		1,360	1,360	Secondary	River		Shannon
Newmarket on Fergus	D0079-01	Pass			3,500	5,000	Secondary & nutrient	Lake		Shannon
Quilty/Kilmurry/ Ibrickane	D0536-01	Pass			200	1,365	Secondary & UV	Coastal		Shannon
Quin	D0318-01	Fail[56]	Quality	✓	1,200	740	Secondary	River		Shannon
Scarriff	D0319-01	Pass			1,300	1,400	Secondary & nutrient	River	✓	Shannon

[55] Designated as a sensitive area by the Urban Waste Water Treatment (Amendment) Regulations 2010. Nutrient reduction required by 22nd December 2012.
[56] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Shannon Town	D0045-01	Fail	Quality	✓	11,940	12,500	Secondary	Estuarine		Shannon
Sixmilebridge	D0076-01	Pass			2,300	3,000	Secondary	River		Shannon
Tulla	D0320-01	Pass			720	2,000	Secondary & nutrient	River		Shannon

Cork City Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Cork City	D0033-01	Pass[57]			284,696	413,000	Secondary	Estuarine	✓	S. Western

Cork County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballincollig	D0049-01	Pass			21,600	26,000	Secondary & nutrient	River		S. Western
Ballineen & Enniskeane	D0472-01	Pass			840	660	Secondary	River		S. Western
Ballingeary	D0431-01	No secondary			650	600	Primary	River		S. Western
Ballyclough	D0441-01	Pass			600	800	Secondary	River		S. Western
Ballycotton	D0516-01	No secondary			1,000		No treatment	Coastal		S. Western
Ballydehob	D0467-01	No secondary			560	700	Primary	Coastal		S. Western
Ballygarvan	D0540-01	Fail	Quality	✓	634	1,000	Secondary	River		S. Western
Ballyhooley	D0432-01	Fail	Quality	✓	545	750	Secondary	River	✓	S. Western
Ballymakeera	D0299-01	No secondary			1,600	1,400	Primary	River		S. Western
Baltimore	D0296-01	Pass			1,684	3,600	Secondary & UV	Estuarine		S. Western
Bandon	D0136-01	Pass			8,200	20,000	Secondary	River		S. Western

[57] Cork City did not meet the mandatory quality standard for nitrogen set in the Directive.

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Banteer	D0448-01	Pass			700	700	Secondary	River		S. Western
Bantry	D0168-01	Pass			5,647	6,000	Secondary, nutrient, UV	Coastal		S. Western
Belgooley	D0541-01	Fail	Quality		1,500	1,000	Secondary & UV	River		S. Western
Blarney Cloghroe	D0043-01	Pass Fail	Quality	✓	6,100 600	13,000 600	Secondary & nutrient Secondary	River River		S. Western
Boherbue	D0437-01	Fail	Sample no.		800	600	Secondary	River	✓	S. Western
Buttevant	D0303-01	Pass			1,700	3,150	Secondary & nutrient	River		S. Western
Bweeng	D0438-01	Pass			500	500	Secondary & nutrient	River		S. Western
Carrignavar	D0517-01	Fail	Quality	✓	500	500	Secondary	River		S. Western
Carrigtohill	D0044-01	Fail[58]	Quality	✓	12,000	8,500	Secondary	Estuarine	✓	S. Western
Castlelyons	D0449-01	Pass			400	1,200	Secondary & nutrient	River		S. Western
Castlemartyr	D0134-01	Pass			1,938	2,000	Secondary	River		S. Western
Castletownbere	D0297-01	No secondary			1,300		No treatment	Coastal		S. Western
Castletownroche	D0293-01	Pass			950	1,000	Secondary	River		S. Western
Castletownshend	D0468-01	No secondary			450		No treatment	Coastal		S. Western
Charleville	D0204-01	Pass			3,696	7,500	Secondary	River		Shannon
Churchtown	D0444-01	Pass			600	936	Secondary & UV	Ground		S. Western
Clonakilty	D0051-01	Fail[59]	Quality		15,000	15,000	Secondary	Estuarine	✓[60]	S. Western
Clondulane	D0445-01	Pass			450	700	Secondary	River	✓	S. Western
Cloughduv	D0330-01	Fail[59]	Quality	✓	200	1,500	Secondary & nutrient	River		S. Western
Cloyne	D0298-01	Pass			1,200	1,400	Secondary	River		S. Western
Coachford	D0427-01	No secondary			726	600	Primary	Lake		S. Western
Cobh	D0054-01	No secondary			12,000		No treatment	Coastal		S. Western
Conna	D0439-01	Fail	Quality	✓	510	800	Secondary	River		S. Western
Courtmacsherry	D0294-01	No secondary			1,380	500	Primary	Estuarine		S. Western
Doneraile	D0300-01	Pass			941	1,680	Secondary & nutrient	River		S. Western

[58] Carrigtohill also did not meet the quality standards for phosphorus and nitrogen set in the Directive.
[59] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.
[60] Designated as a sensitive area by the Urban Waste Water Treatment (Amendment) Regulations 2010. Nutrient reduction required by 22nd December 2016.

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Drimoleague	D0470-01	Fail	Quality	✓	635	500	Secondary	River		S. Western
Dripsey	D0426-01	Pass			390	600	Secondary	River		S. Western
Dromahane	D0302-01	Pass			1,150	1,000	Secondary	River		S. Western
Dunmanway	D0160-01	Fail	Quality		2,404	3,000	Secondary	River		S. Western
Fermoy	D0058-01	Pass			14,000	20,000	Secondary & nutrient	River	✓	S. Western
Glanworth	D0450-01	Fail	Quality	✓	607	800	Secondary	River		S. Western
Glengariff	D0471-01	No secondary			750	1,000	Primary	Coastal		S. Western
Glenville	D0515-01	Fail	Quality	✓	500	500	Secondary	River		S. Western
Innishannon	D0429-01	No secondary			887	833	Primary	River	✓	S. Western
Kanturk	D0203-01	Pass			2,354	3,500	Secondary & nutrient	River		S. Western
Kilbrittan	D0425-01	Fail[61]	Quality	✓	598	800	Secondary	River		S. Western
Kildorrery	D0442-01	Fail[61]	Quality	✓	500	800	Secondary	River		S. Western
Kileens	D0329-01	Pass			860	1,200	Secondary	River		S. Western
Killavullen	D0447-01	Pass			700	1,000	Secondary	River		S. Western
Killeagh	D0301-01	Fail	Quality		1,000	1,990	Secondary	River		S. Western
Kilworth	D0334-01	Fail	Sample no.		1,200	2,500	Secondary & nutrient	River		S. Western
Kinsale	D0132-01	Pass			8,000	10,000	Secondary, nutrient, UV	Estuarine	✓	S. Western
Ladysbridge	D0328-01	Fail[61]	Quality		650	950	Secondary	River		S. Western
Macroom	D0126-01	Pass			6,600	5,200	Secondary	River		S. Western
Mallow	D0052-01	Pass			14,000	18,000	Secondary & nutrient	River	✓	S. Western
Midleton	D0056-01	Pass			12,000	15,000	Secondary, nutrient, UV	Coastal	✓	S. Western
Millstreet	D0332-01	Pass			2,252	1,600	Secondary	River		S. Western
Mitchelstown	D0202-01	Pass			4,100	7,000	Secondary & nutrient	River		S. Western
Mogeely	D0428-01	Pass			616	1,200	Secondary & nutrient	River		S. Western
Newmarket	D0333-01	Pass			1,100	1,600	Secondary	River		S. Western
North Cobh	D0140-01	Pass			850	2,000	Secondary & nutrient	Coastal	✓	S. Western
Passage-Monkstown	D0129-01	No secondary			7,600		No treatment	Estuarine	✓	S. Western
Rathcormac	D0200-01	Fail	Quality & sample no.	✓	2,500	4,000	Secondary & nutrient	River		S. Western

[61] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ringaskiddy Village	D0436-01	No secondary			797	797	Preliminary	Coastal		S. Western
Ringaskiddy-Crosshaven-Carrigaline	D0057-01	No secondary			39,200		Preliminary	Coastal		S. Western
Riverstick	D0433-01	Fail	Quality	✓	550	550	Secondary & nutrient	River		S. Western
Rosscarbery-Owenahincha	D0172-01	No secondary			4,051	5,239	Primary	Coastal		S. Western
Schull	D0295-01	No secondary			1,680	1,266	Primary	Coastal		S. Western
Skibbereen	D0166-01	Pass			3,000	4,700	Secondary & nutrient	Estuarine		S. Western
Timoleague	D0466-01	No secondary			592		No treatment	Estuarine		S. Western
Unionhall	D0469-01	No secondary			634	344	Primary	Estuarine		S. Western
Watergrasshill	D0201-01	Pass			1,600	3,000	Secondary & nutrient	River		S. Western
Whitegate-Aghada	D0423-01	No secondary			1,953		No treatment	Coastal		S. Western
Youghal	D0139-01	No secondary			9,600		No treatment	Estuarine	✓	S. Western

Donegal County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ardara	D0512-01	Fail	Quality		940	2,350	Secondary	Estuarine		N. Western
Ballybofey-Stranorlar	D0120-01	Fail	Quality		6,200	4,000	Secondary	River		N. Western
Ballyliffen	D0351-01	Fail	Quality	✓	1,200	1,000	Secondary	River		N. Western
Ballyshannon	D0128-01	Pass			4,316	6,100	Secondary	Estuarine		N. Western
Bridgend	D0532-01	Fail	Quality	✓	670	260	Secondary	River		N. Western
Buncrana	D0125-01	No secondary			5,231	13,500	Primary	Coastal		N. Western
Bundoran	D0130-01	No secondary			8,046	9,000	Preliminary	Coastal		N. Western
Burnfoot	D0531-01	Fail	Quality	✓	551	180	Secondary	River		N. Western
Carndonagh	D0113-01	Pass			3,996	5,200	Secondary	River		N. Western
Carrigart	D0523-01	No secondary			700	500	Primary	Estuarine		N. Western
Castlefinn	D0514-01	No secondary			963	600	Primary	River		N. Western
Clonmany	D0533-01	Pass			624	650	Secondary	River		N. Western
Convoy	D0344-01	No secondary			1,199	1,500	Primary	River		N. Western
Creeslough	D0534-01	Fail	Quality		590	300	Secondary	River		N. Western
Donegal Town	D0135-01	Pass			6,500	12,000	Secondary	Estuarine		N. Western
Downings	D0350-01	No secondary			1,910	1,000	Primary	Coastal		N. Western
Dunfanaghy-Portnablagh	D0211-01	No secondary			1,700	900	Primary	Coastal		N. Western
Dungloe	D0208-01	No secondary			1,600	1,200	Primary	River		N. Western
Dunkineeley	D0521-01	No secondary			650	1,000	Primary	Coastal		N. Western
Fahan	D0535-01	No secondary			938	800	Primary	Coastal		N. Western
Falcarragh	D0343-01	No secondary			1,722		No treatment	Estuarine		N. Western
Glenties	D0210-01	No secondary			1,620	1,000	Primary	River		N. Western

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Kilcar	D0520-01	No secondary			550	1,000	Preliminary	Coastal		N. Western
Killea	D0537-01	Fail	Quality	✓	653	800	Secondary	River		N. Western
Killybegs	D0011-01	No secondary[62]			81,382		No treatment	Estuarine	✓[63]	N. Western
Killygordon	D0518-01	Pass			561	1,700	Secondary	River		N. Western
Kilmacrennan	D0513-01	Fail[64]	Quality		938	500	Secondary	River		N. Western
Letterkenny	D0009-01	Fail	Quality[65]	✓	22,500	20,000	Secondary	Estuarine		N. Western
Lifford	D0352-01	No secondary			1,969	1,550	Primary	Estuarine		N. Western
Manor-cunningham	D0519-01	Pass			651	1,000	Secondary	Estuarine		N. Western
Milford	D0342-01	Pass			1,931	920	Secondary	River		N. Western
Mountcharles	D0522-01	Fail	Quality	✓	651	380	Secondary	River		N. Western
Moville	D0212-01	No secondary			1,931		No treatment	River		N. Western
Newtown-cunningham	D0349-01	Fail	Quality		1,400	1,000	Secondary	River		N. Western
Ramelton	D0341-01	No secondary			1,630		No treatment	Estuarine		N. Western
Raphoe	D0209-01	Fail	Quality		1,600	800	Secondary	River		N. Western
Rathmullan	D0345-01	No secondary			1,600	2,000	Primary	Coastal		N. Western
Rossnowlagh	D0539-01	Pass			1,000	1,000	Secondary	Estuarine		N. Western
St Johnston	D0538-01	No secondary			924		No treatment	River		N. Western

[62] Killybegs also did not meet the quality standards for phosphorus and nitrogen set in the Directive.
[63] 42,366 p.e. discharged to sensitive area and 39,016 p.e. discharged outside the sensitive area.
[64] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.
[65] There was a marked improvement in effluent quality from October 2012, when a new waste water treatment plant commenced operation at Letterkenny.

Dublin City Council 2012

(with Fingal County Council, South Dublin County Council, Dun Laoghaire-Rathdown County Council & Meath County Council)

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Greater Dublin[66] (Ringsend)	D0034-01	Fail[67]	Quality		2,362,329	1,640,000	Secondary & UV	Estuarine	✓	Eastern

Dun Laoghaire-Rathdown County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Shanganagh	D0038-01	Pass[68]			60,000	186,000	Secondary	Coastal		Eastern

[66] In 2012 waste water from the Howth catchment was treated at Ringsend waste water treatment plant (D0034-01), with the exception of 120 p.e. which was discharged without treatment to coastal water at Doldrum Bay. This discharge is required to cease.
[67] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional. Ringsend did not meet the mandatory quality standards for phosphorus and nitrogen set in the Directive.
[68] Extreme results from 2 samples taken on 02/05/2012 were not taken into consideration in the assessment, in accordance with Annex 1.D.5 of the Directive.

Fingal County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Balbriggan-Skerries	D0023-01	Pass			30,688	70,000	Secondary & UV	Coastal		Eastern
Loughshinny		No secondary			700	700	Primary			
Lusk[69]	D0122-01	No secondary			7,000	2,300	Primary	Estuarine	✓	Eastern
Malahide	D0021-01	Pass			12,787	21,000	Secondary & UV	Estuarine		Eastern
Portrane[70]	D0114-01	Fail	Sample no.		24,403	65,000	Secondary & UV	Coastal		Eastern
Rush	D0119-01	No secondary			7,800		No treatment	Coastal		Eastern
Swords	D0024-01	Pass			62,901	60,000	Secondary & nutrient	Estuarine	✓	Eastern
Toberburr		Fail	No results		640	640	Secondary	River	✓	

Galway City Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Galway City	D0050-01	Pass			91,600	91,600	Secondary	Coastal		Western

[69] Data refers to January to June 2012. The discharge ceased permanently from June 2012 when the Lusk catchment was connected to Portrane waste water treatment plant.
[70] This refers to the new waste water treatment plant which was in operation from April 2012.

Galway County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ahascragh	D0372-01	No secondary			560	150	Preliminary	River		Shannon
Athenry	D0193-01	Pass			6,000	6,000	Secondary & nutrient	River		Western
Ballinasloe	D0032-01	Pass			11,010	13,500	Secondary & nutrient	River		Shannon
Ballygar	D0371-01	Fail	Quality	✓	944	500	Secondary	River		Shannon
Carraroe	D0388-01	No secondary			850		No treatment	Coastal		Western
Clifden	D0198-01	No secondary			4,779	1,875	Primary	Estuarine		Western
Clonbur	D0374-01	Fail	Quality		580	700	Secondary	River		Western
Dunmore	D0370-01	Fail	Quality		890	3,000	Secondary & nutrient	River		Western
Eyrecourt	D0375-01	No secondary			702	200	Primary	River		Shannon
Glenamaddy	D0379-01	No secondary			952	300	Primary	Lake		Western
Gort	D0195-01	Fail	Quality		4,836	4,310	Secondary	River		Western
Headford	D0197-01	Pass			1,390	3,000	Secondary & nutrient	River		Western
Kinvara	D0276-01	No secondary			1,270		No treatment	Estuarine		Western
Letterfrack	D0399-01	Pass			500	800	Secondary	River		Western
Loughrea	D0194-01	Pass			10,000	9,500	Secondary & nutrient	River		Western
Mountbellew	D0219-01	Fail	Quality	✓	1,483	700	Secondary	River		Shannon
Moycullen	D0191-01	Pass			3,237	4,000	Secondary & nutrient	River		Western
Moylough	D0403-01	Fail	Quality	✓	600	600	Secondary	River		Shannon
Oughterard	D0192-01	Fail	Quality		1,760	500	Secondary	River		Western
Portumna	D0196-01	Pass			5,833	3,100	Secondary & nutrient	Lake	✓	Shannon
Spiddal	D0396-01	No secondary			693		No treatment	Coastal		Western
Tuam	D0031-01	Pass			22,440	24,834	Secondary & nutrient	River		Western

Kerry County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Abbeydorney	D0417-01	No secondary			564	350	Primary	River		Shannon
Ardfert	D0282-01	No secondary			1,500	800	Primary	River		Shannon
Ballybunion	D0183-01	Pass			2,494	8,180	Secondary	Estuarine	✓	Shannon
Ballyduff	D0418-01	No secondary			800	800	Primary	River	✓	Shannon
Ballyheigue	D0186-01	Pass			1,948	4,234	Secondary, nutrient, UV	Coastal		Shannon
Ballylongford	D0459-01	No secondary			900	600	Primary	Estuarine		Shannon
Cahersiveen	D0181-01	Pass			3,073	5,600	Secondary	Estuarine		S. Western
Castlegregory	D0461-01	No secondary			500	500	Primary	Coastal		Shannon
Castleisland	D0180-01	Pass			5,058	6,000	Secondary & nutrient	River		S. Western
Dingle	D0185-01	Pass			12,000	12,000	Secondary	Coastal		S. Western
Fenit	D0284-01	No secondary			1,300	500	Primary	Coastal		Shannon
Fieries	D0460-01	Pass			1,500	1,500	Secondary & nutrient	River		S. Western
Glenbeigh	D0286-01	Pass			1,900	500	Secondary	River		S. Western
Kenmare	D0184-01	Pass			5,833	5,833	Secondary	Estuarine		S. Western
Killarney	D0037-01	Pass			42,000	54,000	Secondary & nutrient	Lake		S. Western
Killorglin	D0182-01	Pass			3,879	5,000	Secondary	River		S. Western
Knightstown	D0421-01	No secondary			128	800	Primary	Coastal		S. Western
Listowel	D0179-01	Pass			7,433	12,500	Secondary	River		Shannon
Lixnaw	D0462-01	No secondary			1,064	300	Primary	River		Shannon
Milltown	D0331-01	Pass			3,500	3,500	Secondary	River		S. Western
Rathmore	D0419-01	Pass			1,000	500	Secondary	River		S. Western
Sneem	D0285-01	Pass			2,500	2,500	Secondary & nutrient	Estuarine		S. Western
Tarbert	D0283-01	No secondary			1,400	800	Primary	Estuarine		Shannon
Tralee	D0040-01	Pass[71]			15,725	50,333	Secondary	Estuarine	✓	Shannon
Waterville	D0287-01	No secondary			495	500	Primary	Coastal		S. Western

[71] Tralee did not meet the sampling standard for nitrogen set in the Directive.

Kildare County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Allenwood	D0493-01	Pass			686	1,500	Secondary & nutrient	River		South Eastern
Athy	D0003-01	Fail	Sample no.		12,300	15,000	Secondary & nutrient	River	✓	South Eastern
Ballymore Eustace	D0238-01	No secondary			1,400	500	Primary	River		Eastern
Castledermot	D0236-01	Pass			1,498	2,400	Secondary & nutrient	River		South Eastern
Coill Dubh	D0242-01	Pass			1,226	2,000	Secondary & nutrient	River		South Eastern
Derrinturn	D0244-01	Pass			1,147	2,000	Secondary & nutrient	River		South Eastern
Kildare Town	D0178-01	Fail	Quality		10,304	7,000	Secondary & nutrient	River		South Eastern
Kilmeague	D0233-01	Pass			1,200	700	Secondary	River		Eastern
Leixlip	D0004-01	Pass			78,677	80,000	Secondary & nutrient	River	✓	Eastern
Monasterevin	D0177-01	Pass			5,446	9,000	Secondary & nutrient	River	✓	South Eastern
Osberstown (Upper Liffey Valley Scheme)	D0002-01	Pass			86,408	80,000	Secondary & nutrient	River	✓	Eastern
Rathangan	D0175-01	Pass			1,500	2,000	Secondary & nutrient	River		South Eastern
Robertstown	D0234-01	Pass			1,043	1,000	Secondary & nutrient	River		South Eastern

Kilkenny County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballyhale - Knocktopher	D0530-01	Pass			535	400	Secondary	River		South Eastern
Ballyragget	D0337-01	Fail	Quality		1,022	1,920	Secondary	River		South Eastern
Bennettsbridge	D0400-01	No secondary			1,425	610	Primary	River	✓	South Eastern
Callan	D0159-01	Fail	Quality	✓	5,700	4,000	Secondary	River		South Eastern
Castlecomer	D0149-01	Fail	Quality		1,117	2,540	Secondary	River		South Eastern
Clogh-Moneenroe	D0340-01	Pass			1,423	1,740	Secondary	River		South Eastern
Fiddown	D0528-01	No secondary			608	300	Primary	Estuarine		South Eastern
Freshford	D0526-01	No secondary			1,000	400	Primary	River		South Eastern
Goresbridge	D0529-01	No secondary			550	400	Primary	River	✓	South Eastern
Gowran	D0335-01	Pass			602	1,600	Secondary & nutrient	River		South Eastern
Graiguenamanagh	D0155-01	Pass			1,914	3,000	Secondary & nutrient	River		South Eastern
Johnstown	D0401-01	No secondary			990	900	Primary	River		South Eastern
Kilkenny City	D0018-01	Pass[72]			47,888	107,650	Secondary	River	✓	South Eastern
Kilmacow	D0525-01	Pass			700	2,500	Secondary & nutrient	River		South Eastern
Mooncoin	D0145-01	Fail	Quality	✓	1,273	2,800	Secondary & nutrient	Estuarine		South Eastern
Mullinavat	D0527-01	No secondary			411	280	Primary	River		South Eastern
Paulstown	D0339-01	Pass			783	1,000	Secondary	River		South Eastern
Piltown	D0157-01	Pass			2,326	1,500	Secondary	Estuarine		South Eastern
Stonyford	D0338-01	Fail	Quality	✓	420	500	Secondary	River		South Eastern
Thomastown	D0151-01	Fail[73]	Quality		2,347	7,500	Secondary & nutrient	River	✓	South Eastern
Urlingford	D0336-01	Pass			1,691	1,500	Secondary	River		South Eastern

[72] Kilkenny City did not meet the quality standard for phosphorus set in the Directive.
[73] The fail is due to one isolated incident that occurred during a heavy rainfall event and the monitoring results indicate that the plant performed satisfactorily throughout the rest of the year with all other results within the allowable limits set by the Directive.

Laois County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Abbeyleix	D0156-01	Fail	Quality	✓	2,136	2,300[74]	Secondary	River		South Eastern
Ballinakill	D0384-01	Fail	Quality & sample no.	✓	850	700	Secondary	River		South Eastern
Ballylinan	D0291-01	Fail	Quality & sample no.	✓	1,681	2,000	Secondary & nutrient	River		South Eastern
Ballyroan	D0385-01	Fail	Quality	✓	726	600	Secondary & nutrient	River		South Eastern
Borris-in-Ossory	D0290-01	Pass			897	1,626[75]	Secondary	River		South Eastern
Castletown	D0387-01	Fail	Quality	✓	515	500	Secondary	River		South Eastern
Clonaslee	D0386-01	Pass			578	1,200	Secondary	River		Shannon
Durrow	D0289-01	Fail	Quality	✓	1,131	500	Secondary	River		South Eastern
Mountmellick	D0152-01	Fail	Quality		6,300	7,000	Secondary	River		South Eastern
Mountrath	D0153-01	Fail	Quality	✓	2,069	2,300[76]	Secondary	River		South Eastern
Portarlington	D0158-01	Fail[77]	Quality	✓	11,000	13,000	Secondary	River	✓	South Eastern
Portlaoise	D0001-01	Pass			27,000	39,000	Secondary & nutrient	River	✓	South Eastern
Rathdowney	D0288-01	Fail	Quality & sample no.	✓	2,410	1,500[78]	Secondary	River		South Eastern
Stradbally	D0292-01	Fail	Quality & sample no.	✓	1,599	2,000	Secondary	River		South Eastern

[74] Waste water treatment at Abbeyleix is split between 2 secondary treatment plants. The smaller plant has a capacity of 1,000 p.e. Both plants failed to meet the effluent quality standards during 2012.
[75] Waste water treatment at Borris-in-Ossory is split between 2 secondary treatment plants. One of the plants, with a capacity of 1,000 p.e., also provides nutrient reduction. Both plants met the effluent quality and sampling standards during 2012.
[76] Waste water treatment at Mountrath is split between 2 secondary treatment plants. The smaller plant has a capacity of 1,000 p.e. Both plants failed to meet the effluent quality standards during 2012.
[77] Portarlington also did not meet the standards for phosphorus and nitrogen set in the Directive
[78] Waste water treatment at Rathdowney is split between 2 secondary treatment plants. The smaller plant has a capacity of 500 p.e. Both plants failed to meet the effluent quality and sampling standards during 2012.

Leitrim County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballinamore	D0281-01	Fail[79]	Quality		1,418	1,800	Secondary & nutrient	River		N. Western
Carrick-on-Shannon	D0154-01	Pass			6,100	11,500	Secondary & nutrient	River	✓	Shannon
Dromahair	D0279-01	Pass			1,100	2,200	Secondary & nutrient	River		Western
Drumshanbo	D0144-01	Pass			1,874	4,000	Secondary & nutrient	River	✓	Shannon
Kinlough	D0280-01	Pass			1,052	2,100	Secondary & nutrient	River		N. Western
Leitrim Village	D0278-01	Pass			1,069	1,500	Secondary	River	✓	Shannon
Manorhamilton	D0150-01	Pass			2,372	3,500	Secondary & nutrient	River		Western
Mohill	D0277-01	Fail[79]	Quality		1,691	3,000	Secondary & nutrient	River	✓	Shannon

Limerick City Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Limerick City	D0013-01	Pass			130,000	130,000	Secondary	Estuarine		Shannon

[79] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Limerick County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Abbeyfeale	D0115-01	Pass			2,860	2,860	Secondary & nutrient	River		Shannon
Adare	D0312-01	Fail	Quality		908	2,500	Secondary & nutrient	Estuarine		Shannon
Askeaton	D0315-01	No secondary			1,145	550	Primary	Estuarine		Shannon
Athea	D0508-01	No secondary			735	263	Primary	River		Shannon
Ballingary	D0507-01	Fail	Quality		870	500	Secondary	River		Shannon
Bruff	D0313-01	Pass			1,478	2,140	Secondary & nutrient	River		Shannon
Bruree	D0506-01	Pass			1,251	1,200	Secondary & nutrient	River		Shannon
Cahercornlish	D0308-01	Pass			1,514	2,500	Secondary & nutrient	River		Shannon
Cappamore	D0310-01	Pass			741	1,534	Secondary & nutrient	River		Shannon
Castletroy	D0019-01	Pass			28,951	44,500	Secondary & nutrient	River		Shannon
Croom	D0307-01	Pass			1,439	2,000	Secondary & nutrient	River		Shannon
Doon	D0309-01	Pass			413	1,500	Secondary & nutrient	River		Shannon
Dromcollagher	D0316-01	Fail	Quality		1,280	400	Secondary	River		Shannon
Foynes	D0502-01	No secondary			1,020	950	Primary	Estuarine		Shannon
Glin	D0504-01	No secondary			965	710	Primary	Estuarine		Shannon
Hospital	D0314-01	Fail	Quality	✓	1,290	500	Secondary	River		Shannon
Kilfinnane	D0305-01	Pass			510	1,500	Secondary & nutrient	River		Shannon
Kilmallock	D0106-01	Fail	Quality		2,128	2,250	Secondary & nutrient	River		Shannon
Murroe	D0306-01	Pass			1,145	800	Secondary	River		Shannon
Newcastle West	D0108-01	Pass			5,333	9,000	Secondary & nutrient	River		Shannon
Oola	D0505-01	Fail	Quality		439	350	Secondary	River		Shannon
Pallasgreen	D0503-01	Fail	Quality		943	750	Secondary & nutrient	River		Shannon
Pallaskenry	D0304-01	Fail	Sample no.		1,172	2,000	Secondary & nutrient	Estuarine		Shannon
Patrickswell[80]	None	No secondary			1,182	350	Primary	River		Shannon
Rathkeale	D0112-01	Pass			835	4,000	Secondary & nutrient	River		Shannon

[80] Patrickswell is scheduled to be connected to Limerick City by the end of 2013.

Longford County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballymahon	D0096-01	Pass			1,410	2,125	Secondary & nutrient	River		Shannon
Drumlish	D0489-01	No secondary			1,100	500	Primary	River		Shannon
Edgeworthstown	D0098-01	Pass			2,533	2,750	Secondary & nutrient	River		Shannon
Granard	D0187-01	Pass			3,200	3,200	Secondary & nutrient	Lake		Shannon
Longford	D0060-01	Pass			17,896	20,000	Secondary & nutrient	River	✓	Shannon
Newtownforbes	D0317-01	No secondary			1,250	500	Primary	River	✓	Shannon

Clondra was listed in previous annual assessments but is no longer included as it is now the subject of an application for a certificate of authorisation (ref. A0535-01).

Louth County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ardee	D0117-01	Pass			6,300	5,000	Secondary	River		Neagh Bann
Blackrock	D0188-01	Pass			6,000	6,000	Secondary	Estuarine	✓	Neagh Bann
Carlingford	D0268-01	Pass			1,900	1,500	Secondary	Coastal	✓	Neagh Bann
Castlebellingham	D0269-01	Pass			1,603	1,700	Secondary	River		Neagh Bann
Clogherhead	D0265-01	Pass			1,500	2,000	Secondary	Coastal		Neagh Bann
Collon	D0261-01	Pass			1,200	1,200	Secondary	River		Eastern
Drogheda	D0041-01	Pass			101,000	101,000	Secondary	Estuarine	✓[81]	Eastern
Dromiskin	D0264-01	Pass			1,600	2,100	Secondary	River		Neagh Bann
Dundalk	D0053-01	Pass[82]			179,000	179,000	Secondary	Estuarine	✓	Neagh Bann
Dunleer	D0111-01	Pass			2,500	4,300	Secondary	River		Neagh Bann
Knockbridge	D0260-01	Pass			1,000	1,000	Secondary	River		Neagh Bann
Louth Village	D0263-01	Pass			1,200	1,200	Secondary	River		Neagh Bann
Tallanstown	D0270-01	Pass			1,000	1,000	Secondary	River		Neagh Bann
Tullyallen	D0266-01	Pass			1,500	1,800	Secondary	River		Eastern

[81] Designated as a sensitive area by the Urban Waste Water Treatment (Amendment) Regulations 2010. Nutrient reduction required by 22nd December 2016.
[82] Dundalk did not meet the mandatory quality standards for phosphorus and nitrogen set in the Directive.

Mayo County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Achill Island Central	D0072-01	Pass			2,174	4,000	Secondary	Coastal		Western
Achill Sound	D0511-01	Pass			275	1,200	Secondary	Coastal		Western
Balla	D0216-01	Fail	Quality		715	1,200	Secondary	River		Western
Ballina	D0016-01	Pass			12,420	25,000	Secondary & nutrient	Estuarine		Western
Ballindine	D0355-01	Pass			1,209	732	Secondary & nutrient	River		Western
Ballinrobe	D0070-01	Pass			7,542	8,000	Secondary & nutrient	River		Western
Ballycastle	D0356-01	Pass			20	600	Secondary	River		Western
Ballyhaunis	D0069-01	Pass			4,429	4,000	Secondary & nutrient	River		Western
Bangor Erris	D0215-01	Pass			599	1,080	Secondary & nutrient	River		Western
Belcarra	D0366-01	Fail	Quality	✓	400	500	Secondary	River		Western
Belmullet	D0074-01	No secondary			800		No treatment	Coastal		Western
Bohola	D0360-01	Pass			250	650	Secondary	River		Western
Castlebar	D0047-01	Pass			20,813	35,000	Secondary & nutrient	River	✓	Western
Charlestown	D0214-01	Fail	Quality	✓	1,356	1,200	Secondary	River		Western
Claremorris	D0071-01	Pass			2,853	5,333	Secondary & nutrient	River		Western
Cong	D0066-01	Pass			922	2,024	Secondary & nutrient	Lake		Western
Crossmolina	D0073-01	Fail	Quality		2,189	3,150	Secondary & nutrient	River		Western
Doogort	D0367-01	Fail	Quality		420	700	Secondary	Coastal		Western
Foxford	D0213-01	Fail	Quality	✓	1,700	1,360	Secondary	River		Western
Gweesalia	D0368-01	Fail	Quality & sample no.		277	700	Secondary	Estuarine		Western
Kilkelly	D0357-01	Pass			500	900	Secondary	River		Western
Killala	D0067-01	No secondary			1,500		No treatment	Coastal		Western
Kilmaine	D0361-01	Fail	Quality		131	800	Secondary	River		Western

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Kiltimagh	D0217-01	Pass			1,000	3,330	Secondary & nutrient	River		Western
Knock	D0065-01	Pass			999	6,200	Secondary & nutrient	River		Western
Knock Airport	D0354-01	Pass			300	700	Secondary	River		Western
Lahardane	D0380-01	Fail	Quality	✓	430	500	Secondary	River		Western
Louisbourgh	D0220-01	Fail	Quality	✓	392	1,000	Secondary	River		Western
Mallaranny	D0218-01	Pass			412	1,017	Secondary	Coastal		Western
Newport	D0224-01	No secondary			408	1,287	Primary	Estuarine		Western
Shrule	D0359-01	Pass			736	600	Secondary	River		Western
Swinford	D0068-01	Pass			3,000	6,500	Secondary & nutrient	River		Western
Westport	D0055-01	Fail	Quality		10,338	15,042	Secondary & nutrient	Coastal		Western

Meath County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Athboy	D0124-01	Pass			3,809	5,800	Secondary & nutrient	River		Eastern
Ballivor	D0254-01	Pass			1,929	2,000	Secondary & nutrient	River		Eastern
Carlanstown	D0488-01	Fail	Quality	✓	604	600	Secondary & nutrient	River		Eastern
Crossakeel	D0484-01	Fail	Quality		275	450	Secondary	River		Eastern
Donore	D0251-01	Pass			726	1,200	Secondary & nutrient	River	✓	Eastern
Drumconrath	D0483-01	Fail	Quality		403	600	Secondary	River		Neagh Bann
Duleek	D0133-01	Pass			3,677	7,000	Secondary & nutrient	River		Eastern
Dunshaughlin	D0138-01	Pass			5,853	12,000	Secondary & nutrient	River		Eastern
Enfield	D0131-01	Fail	Quality		4,053	3,500	Secondary & nutrient	River		Eastern
Kells	D0127-01	Pass			8,093	8,000	Secondary	River		Eastern
Kentstown	D0479-01	Pass			673	600	Secondary & nutrient	River		Eastern
Kildalkey	D0486-01	Pass			580	900	Secondary	River		Eastern
Kilmainhamwood	D0481-01	Pass			436	1,000	Secondary & nutrient	River		Neagh Bann
Longwood	D0250-01	Fail	Quality	✓	1,845	1,500	Secondary & nutrient	River		Eastern
Moynalty	D0491-01	Pass			244	800	Secondary & nutrient	River		Eastern
Navan	D0059-01	Pass[83]			35,743	50,000	Secondary & nutrient	River	✓	Eastern
Nobber	D0487-01	Pass			499	600	Secondary	River		Neagh Bann
Oldcastle	D0258-01	Pass			2,063	1,500	Secondary & nutrient	River		Shannon
Rathmolyon	D0490-01	Pass			377	800	Secondary	River		Eastern
Slane	D0257-01	Fail	Quality & sample no.		1,786	2,250	Secondary	River		Eastern
Stamullen	D0262-01	Fail	Quality		2,089	2,300	Secondary & nutrient	River		Eastern
Summerhill	D0259-01	Pass			975	3,000	Secondary	River		Eastern
Trim	D0137-01	Pass			8,649	12,000	Secondary & nutrient	River		Eastern

[83] Navan did not meet the mandatory quality standard for nitrogen set in the Directive.

Monaghan County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballinode	D0435-01	Pass			487	1,000	Secondary & nutrient	River		Neagh Bann
Ballybay	D0207-01	Pass			3,135	7,283	Secondary	River		N. Western
Carrickmacross	D0062-01	Pass			12,143	12,150	Secondary & nutrient	River	✓	Neagh Bann
Castleblayney	D0205-01	Pass			5,692	12,960	Secondary	Lake	✓	Neagh Bann
Clones	D0206-01	Fail	Sample no.		3,100	4,500	Secondary	River		N. Western
Emyvale	D0346-01	Pass			1,045	2,000	Secondary & nutrient	River		Neagh Bann
Glaslough	D0347-01	Pass			720	1,850	Secondary & nutrient	River		Neagh Bann
Inniskeen	D0348-01	Pass			979	1,750	Secondary & nutrient	River		Neagh Bann
Knockaconny	D0463-01	Pass			220	1,000	Secondary	River	✓	Neagh Bann
Monaghan	D0061-01	Pass			18,500	43,833	Secondary & nutrient	River		Neagh Bann
Newbliss	D0458-01	Fail[84]	Quality		650	1,000	Secondary & nutrient	River		N. Western
Rockorry	D0454-01	Fail	Sample no.		550	1,000	Secondary & nutrient	River		N. Western
Scotstown	D0494-01	Pass			520	1,000	Secondary & nutrient	River		Neagh Bann
Smithboro	D0464-01	Pass			590	750	Secondary	River		N. Western

[84] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Offaly County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballinagar	D0362-01	Fail[85]	Quality		500	1,000	Secondary & nutrient	River		Shannon
Banagher	D0141-01	Pass			2,540	2,500	Secondary	River		Shannon
Birr	D0109-01	Pass			7,659	12,000	Secondary & nutrient	River		Shannon
Clara	D0142-01	Pass			5,776	9,000	Secondary & nutrient	River	✓	Shannon
Cloghan	D0369-01	Pass			754	800	Secondary	River		Shannon
Daingean	D0226-01	Pass			1,229	1,200	Secondary	River		South Eastern
Edenderry	D0110-01	Pass			6,992	9,500	Secondary & nutrient	River		Eastern
Ferbane	D0147-01	Pass			1,635	3,184	Secondary & nutrient	River	✓	Shannon
Kilcormac	D0225-01	Pass			1,026	2,000	Secondary	River		Shannon
Kinnity	D0363-01	Pass			418	750	Secondary	River		Shannon
Mucklagh	D0364-01	Pass			786	1,100	Secondary	River		Shannon
Rhode	D0227-01	Fail	Quality	✓	846	1,000	Secondary & nutrient	River		Eastern
Shinrone	D0365-01	Fail[85]	Quality		814	1,000	Secondary	River		Shannon
Tullamore	D0039-01	Pass			25,000	45,000	Secondary & nutrient	River	✓	Shannon

[85] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Roscommon County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballaghderreen	D0123-01	Pass			2,330	2,500	Secondary & nutrient	River		Shannon
Ballinlough	D0378-01	Pass			630	800	Secondary & nutrient	Lake		Shannon
Ballyleague	D0229-01	Fail	Quality	✓	981	1,000	Secondary	Lake	✓	Shannon
Boyle	D0121-01	Pass			5,338	6,000	Secondary & nutrient	River		Shannon
Castlerea	D0118-01	Pass			4,807	4,950	Secondary & nutrient	River		Shannon
Elphin	D0230-01	Fail	Quality		1,160	800	Secondary	River		Shannon
Frenchpark	D0376-01	Fail	Quality	✓	705	500	Secondary	River		Shannon
Hodson Bay	D0377-01	Fail[86]	Quality	✓	344	800	Secondary	Lake	✓	Shannon
Monksland	D0042-01	Fail	Quality		10,117	14,381	Secondary & nutrient	River		Shannon
Roosky	D0408-01	Pass			1,536	2,600	Secondary & nutrient	River		Shannon
Roscommon	D0116-01	Pass			4,534	9,550	Secondary & nutrient	River	✓	Shannon
Strokestown	D0228-01	Pass			1,085	1,000	Secondary	River		Shannon
Tarmonbarry	D0524-01	Fail	Sample no.		500	600	Secondary & nutrient	River	✓	Shannon

[86] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Sligo County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballisadare	D0095-01	Pass			1,766	4,500	Secondary	Estuarine		Western
Ballymote	D0094-01	Fail[87]	Quality		2,553	3,000	Secondary	River		Western
Carney	D0393-01	Pass			350	2,500	Secondary & nutrient	River		Western
Cliffoney	D0394-01	Fail	Quality	✓	710	450	Secondary	River		Western
Collooney	D0093-01	Pass			1,930	1,400	Secondary	River		Western
Coolaney	D0392-01	Pass			1,100	2,500	Secondary & nutrient	River		Western
Easkey	D0373-01	Pass			366	450	Secondary	River		Western
Enniscrone	D0102-01	Pass			3,324	5,000	Secondary	Coastal		Western
Grange	D0381-01	Fail	Quality	✓	844	280	Secondary	River		Western
Gurteen	D0382-01	Pass			350	2,500	Secondary & nutrient	River		Western
Mullaghmore	D0239-01	No secondary			940	320	Primary	Coastal		N. Western
Riverstown	D0383-01	Fail	Quality		357	600	Secondary	River		Western
Rosses Point	D0249-01	No secondary			1,409	1,500	Primary	Coastal		Western
Sligo	D0014-01	Pass			27,731	50,000	Secondary, nutrient, UV	Coastal		Western
Strandhill	D0107-01	Fail	Quality	✓	1,833	1,500	Secondary	Coastal		Western
Tubbercurry	D0092-01	Fail	Quality		2,283	1,400	Secondary	River		Western

[87] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

North Tipperary County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballina-Killaloe	D0189-01	Pass			4,175	4,000	Secondary & nutrient	River		Shannon
Borrisokane	D0326-01	Pass			828	1,500	Secondary & nutrient	River		Shannon
Borrisoleigh	D0323-01	Pass[88]			1,383	2,000	Secondary & nutrient	River		South Eastern
Cloughjordan	D0475-01	Fail	Quality		245	500	Secondary & nutrient	River		Shannon
Holycross	D0478-01	Pass			650	600	Secondary	River	✓	South Eastern
Littleton	D0480-01	Pass			600	1,000	Secondary	River		South Eastern
Nenagh	D0027-01	Pass			37,033	18,000	Secondary & nutrient	River	✓	Shannon
Newport	D0325-01	Pass			2,166	1,900	Secondary	River		Shannon
Roscrea	D0025-01	Pass[89]			15,185	26,000	Secondary & nutrient	River	✓	Shannon
Templemore	D0190-01	Pass			1,387	6,000	Secondary & nutrient	River		South Eastern
Thurles	D0026-01	Pass			10,893	15,000	Secondary & nutrient	River	✓	South Eastern
Twomileborris	D0474-01	Pass			600	800	Secondary	River		South Eastern

[88] One extreme BOD result from 06/12/2012 was not taken into consideration in the assessment, in accordance with Annex 1.D.5 of the Directive.
[89] Roscrea did not meet the mandatory quality standard for nitrogen set in the Directive.

South Tipperary County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ardfinnan	D0311-01	Pass			1,070	1,000	Secondary & nutrient	River	✓	South Eastern
Ballyclerihan	D0455-01	Pass			536	2,000	Secondary, nutrient, UV	River	✓	South Eastern
Cahir	D0167-01	Pass			4,390	5,000	Secondary & nutrient	River	✓	South Eastern
Cappawhite	D0440-01	Pass			690	1,750	Secondary & nutrient	River		Shannon
Carrick-on-Suir	D0148-01	Pass			7,557	11,000	Secondary & nutrient	River	✓	South Eastern
Cashel	D0171-01	Pass			6,842	9,000	Secondary & nutrient	River	✓	South Eastern
Clogheen	D0453-01	Pass			533	1,000	Secondary & nutrient	River		South Eastern
Clonmel	D0035-01	Pass			46,428	80,000	Secondary & nutrient	River	✓	South Eastern
Fethard	D0164-01	Pass			2,684	3,000	Secondary & nutrient	River		South Eastern
Killenaule	D0443-01	Pass			727	1,200	Secondary & nutrient	River	✓	South Eastern
Kilsheelan	D0452-01	Pass			460	1,000	Secondary & nutrient	River	✓	South Eastern
Limerick Junction	D0457-01	Fail	Quality & sample no.		656	500	Secondary & nutrient	River		Shannon
Mullinahone	D0456-01	Fail	Quality & sample no.	✓	641	800	Secondary	River		South Eastern
Tipperary	D0146-01	Pass			8,732	9,800	Secondary & nutrient	River	✓	South Eastern

Waterford City Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Waterford City	D0022-01	Pass			76,456	190,600	Secondary	Estuarine		South Eastern

Waterford County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ardmore	D0162-01	No secondary			1,924		Preliminary	Coastal		South Eastern
Cappoquin	D0272-01	No secondary			1,458	950	Primary	Estuarine	✓	S. Western
Dungarvan	D0017-01	Pass			16,500	25,000	Secondary	Coastal		South Eastern
Dunmore East	D0170-01	No secondary			5,740		No treatment	Coastal		South Eastern
Kilmacthomas	D0275-01	No secondary			1,250	600	Primary	River		South Eastern
Lismore	D0176-01	Fail	Sample no.		1,807	2,161	Secondary	River	✓	S. Western
Portlaw	D0274-01	Fail	Quality		1,500	1,750	Secondary	River	✓	South Eastern
Ring-Helvick-Baile na nGall	D0358-01	Pass			900	1,600	Secondary	Coastal		South Eastern
Stradbally	D0353-01	No secondary			600	240	Primary	Estuarine		South Eastern
Tallow	D0273-01	No secondary			1,427	450	Primary[90]	River	✓	S. Western
Tramore	D0015-01	Pass			12,630	20,000	Secondary	Coastal		South Eastern

[90] There is also a supplementary plant with secondary treatment at Tallow, which treats waste water from a population equivalent of 250 p.e. This plant met the effluent quality and sampling standards during 2012.

Westmeath County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Athlone	D0007-01	Pass			30,000	30,000	Secondary & nutrient	River	✓	Shannon
Ballymore	D0509-01	Pass			400	500	Secondary	River		Shannon
Ballynacarrigy	D0482-01	Pass			400	600	Secondary & nutrient	River		Shannon
Castlepollard	D0105-01	Pass			2,000	6,500	Secondary & nutrient	River		Shannon
Clonmellon	D0271-01	Pass			439	1,500	Secondary	River		Eastern
Collinstown	D0485-01	Fail	Quality	✓	240	1,200	Secondary & nutrient	River		Shannon
Delvin	D0267-01	Pass			950	1,250	Secondary	River		Eastern
Kilbeggan	D0103-01	Pass			2,005	2,250	Secondary	River	✓	Shannon
Killucan	D0100-01	Pass			712	2,500	Secondary & nutrient	River		Eastern
Kinnegad	D0104-01	Fail[91]	Quality		2,699	4,800	Secondary & nutrient	River		Eastern
Moate	D0097-01	Pass			4,864	5,000	Secondary & nutrient	River		Shannon
Mullingar	D0008-01	Pass			32,000	55,000	Secondary & nutrient	River	✓	Shannon
Multyfarnham	D0510-01	Pass			300	700	Secondary	River		Shannon
Rochfortbridge	D0101-01	Pass			2,341	4,500	Secondary & nutrient	River		Eastern
Tyrellspass	D0099-01	Pass			727	2,000	Secondary & nutrient	River	✓	Shannon

[91] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.

Wexford County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Ballaghkeen (Ballagh)	D0398-01	Pass			469	500	Secondary & nutrient	River		South Eastern
Ballycanew	D0402-01	No secondary			840	150	Primary	River		South Eastern
Ballymurn	D0407-01	Pass			661	600	Secondary & nutrient	River		South Eastern
Blackwater	D0143-01	Pass			1,038	2,000	Secondary	River		South Eastern
Bridgetown	D0231-01	Fail[92]	Quality		1,058	2,000	Secondary & nutrient	Estuarine		South Eastern
Bunclody	D0163-01	Pass			1,797	6,500	Secondary & nutrient	River		South Eastern
Camolin	D0405-01	No secondary			630	400	Primary	River		South Eastern
Campile	D0409-01	No secondary			639	250	Primary	Estuarine		South Eastern
Castlebridge	D0235-01	Pass			2,241	2,000	Secondary	Estuarine		South Eastern
Clonroche	D0404-01	Pass			613	650	Secondary	River		South Eastern
Coolgreany	D0174-01	Pass			546	2,400	Secondary	River		South Eastern
Courtown Gorey	D0046-01	Fail Fail[92]	Quality[93] & sample no. Quality		12,000 5,000	12,000 5,000	Secondary Secondary & nutrient	Coastal River		South Eastern
Duncannon	D0245-01	No secondary			1,172		No treatment	Coastal		South Eastern
Enniscorthy Kilagoley	D0029-01	Pass Fail	 Quality	 ✓	15,900 1,316	16,500 850	Secondary Secondary	Estuarine River	✓ ✓	South Eastern
Ferns	D0169-01	Fail	Quality[93] & sample no.		1,808	2,150	Secondary & nutrient[94]	River		South Eastern
Fetherd-on-Sea	D0241-01	No secondary			912	500	Primary	Estuarine		South Eastern

[92] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.
[93] The quality fail was for suspended solids only.
[94] There is also a plant that provides primary treatment only at Ferns and this caters for a population equivalent of less than 500.

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Kilmore Quay	D0232-01	No secondary			1,386		No treatment	Coastal		South Eastern
Kilmuckridge	D0161-01	Fail[95]	Quality		1,686	2,000	Secondary	River		South Eastern
New Ross	D0036-01	Pass			16,000	16,000	Secondary	Estuarine		South Eastern
Piercetown	D0406-01	Pass			785	800	Secondary & nutrient	River		South Eastern
Rosslare Harbour	D0165-01	Pass			3,938	9,400	Secondary	Coastal		South Eastern
Rosslare Strand	D0173-01	Fail	Quality[96] & sample no.		6,240	7,500	Secondary	Coastal		South Eastern
Taghmon	D0389-01	Fail	Quality	✓	980	600	Secondary	River		South Eastern
Tagoat	D0397-01	Pass			750	750	Secondary & nutrient	River		South Eastern
Wexford Town	D0030-01	Pass			28,000	45,000	Secondary & nutrient	Estuarine	✓	South Eastern

[95] Fail for suspended solids only. The Directive sets a limit for this parameter but notes that the requirement is optional.
[96] The quality fail was for suspended solids only.

Wicklow County Council 2012

Urban area	Reg. No.	Pass or Fail	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e.)	Level of treatment provided	Receiving water	Sensitive area	River Basin District
Arklow	D0006-01	No secondary			16,997		No treatment	Coastal		Eastern
Aughrim	D0222-01	Pass			1,314	1,200	Secondary	River		Eastern
Avoca	D0411-01	No secondary			1,214	500	Primary	River		Eastern
Ballinaclash	D0412-01	Fail	Quality		501	900	Secondary & nutrient	River		Eastern
Baltinglass	D0089-01	Pass			2,653	3,000	Secondary	River		South Eastern
Blessington	D0063-01	Pass			6,100	6,000	Secondary & nutrient	Lake		Eastern
Bray[97]	D0005-01	No secondary			35,000	40,000	Preliminary	Coastal		Eastern
Carnew	D0064-01	Pass			2,938	2,400	Secondary	River		South Eastern
Milltown Dunlavin: Logatryna	D0476-01	Pass Fail	 Quality	 ✓	581 1,378	600 300	Secondary Secondary	River		South Eastern
Enniskerry	D0088-01	Pass			5,183	6,000	Secondary & nutrient	River		Eastern
Greystones	D0010-01	Pass			36,202	30,000	Secondary	Coastal		Eastern
Kilcoole	D0087-01	Pass			1,108	2,400	Secondary	River		Eastern
Kilpedder	D0416-01	Pass			679	600	Secondary	River		Eastern
Laragh	D0415-01	Pass			527	1,000	Secondary	River		Eastern
Newcastle	D0410-01	Pass			837	1,000	Secondary	River		Eastern
Rathdrum	D0086-01	Pass			2,275	3,500	Secondary & nutrient	River		Eastern
Redcross	D0414-01	Pass			1,047	1,000	Secondary & nutrient	River		Eastern
Roundwood	D0223-01	Pass			1,088	1,600	Secondary	River		Eastern
Shillelagh	D0413-01	Pass			550	800	Secondary	River		South Eastern
Tinahely	D0221-01	Pass			1,199	1,200	Secondary	River		South Eastern
Wicklow	D0012-01	Pass			17,906	32,000	Secondary	Coastal		Eastern

Stratford was listed in previous annual assessments but is no longer included as the waste water discharge licence application was withdrawn and Wicklow County Council applied for a certificate of authorisation for the discharge (ref. A0533-01).

[97] Data refers to January to September 2012. Discharge ceased around Sept/Oct 2012 when the Bray catchment was connected to Shanganagh waste water treatment plant (ref. D0038-01).

Appendix B: Areas with no treatment or preliminary treatment only.

Larger urban areas, above the Directive thresholds[98], with no treatment or preliminary treatment only at the end of 2012.

Water services authority	Urban area	Licence number
Cork County Council	Cobh	D0054-01
Cork County Council	Passage West / Monkstown	D0129-01
Cork County Council	Ringaskiddy/Crosshaven/Carrigaline	D0057-01
Cork County Council	Youghal	D0139-01
Donegal County Council	Killybegs	D0011-01
Wicklow County Council	Arklow	D0006-01

There is also an untreated secondary discharge of approximately 120 p.e. from the Ringsend agglomeration (D0034-01) at Howth.

Smaller urban areas, in the size range 500 p.e. up to the Directive thresholds[98], with no treatment or preliminary treatment only in 2012.

Water services authority	Urban area	Licence number
Clare County Council	Ballyvaughan	D0327-01
Clare County Council	Clarecastle	D0322-01
Clare County Council	Kilkee	D0078-01
Clare County Council	Kilrush	D0075-01
Clare County Council	Liscannor	D0430-01
Cork County Council	Ballycotton	D0516-01
Cork County Council	Castletownbere	D0297-01
Cork County Council	Castletownshend	D0468-01
Cork County Council	Ringaskiddy Village	D0436-01
Cork County Council	Timoleague	D0466-01
Cork County Council	Whitegate/Aghada	D0423-01
Donegal County Council	Bundoran	D0130-01
Donegal County Council	Falcarragh	D0343-01
Donegal County Council	Kilcar	D0520-01
Donegal County Council	Moville	D0212-01
Donegal County Council	Ramelton	D0341-01
Donegal County Council	St Johnston	D0538-01
Fingal County Council	Rush	D0119-01
Galway County Council	Ahascragh	D0372-01
Galway County Council	Carraroe	D0388-01

[98] 2,000 p.e. for discharges to freshwater and estuaries, 10,000 p.e. for coastal discharges.

Water services authority	Urban area	Licence number
Galway County Council	Kinvara	D0276-01
Galway County Council	Spiddal	D0396-01
Mayo County Council	Belmullet	D0074-01
Mayo County Council	Killala	D0067-01
Waterford County Council	Ardmore	D0162-01
Waterford County Council	Dunmore East	D0170-01
Wexford County Council	Duncannon	D0245-01
Wexford County Council	Kilmore Quay	D0232-01

Certificate of authorisation areas (< 500 p.e.) where waste water is discharged with no treatment.[99]

Water services authority	Certificate of authorisation site	Certificate number
Cork County Council	Inchigeelagh[100]	A0349-01
Cork County Council	Kilmacsimon[101]	A0360-01
Donegal County Council	Burtonport[102]	A0446-01
Donegal County Council	Kerrykeel[101]	A0445-01
Galway County Council	Roundstone	A0115-01
Louth County Council	Omeath	A0072-01
Wexford County Council	Arthurstown	A0243-01
Wexford County Council	Ballyhack[100]	A0242-01

A certificate of authorisation also issued for Courtbrack in Co. Cork (Certificate number A0437-01). There was no treatment plant in place at the time of issue of the certificate and the area was served by private on-site treatment systems. The certificate relates to a proposed new waste water treatment plant.

[99] As reported by the water services authority in the application for a certificate of authorisation.
[100] A portion of the waste water at this area receives primary treatment.
[101] A portion of the waste water at this area receives secondary treatment.
[102] A portion of the waste water at this area receives primary treatment and a portion receives secondary treatment.

Appendix C: Sewage sludge produced by water services authorities in 2012.

Water services authority	Tonnes dry solids/year
Carlow County Council	799
Cavan County Council	2,110
Clare County Council	279
Cork City Council	2,805
Cork County Council	1,728
Donegal County Council	693
Dublin City Council	22,434
Dun Laoghaire-Rathdown	1,445
Fingal County Council	1,875
Galway County Council	1,019
Galway City Council	1,943
Kerry County Council	1,052
Kildare County Council	3,182
Kilkenny County Council	940
Laois County Council	753
Leitrim County Council	130
Limerick City Council. & Limerick County Council	2,786
Longford County Council	1,022
Louth County Council	1,528
Mayo County Council	9,582
Meath County Council	1,589
Monaghan County Council	759
Offaly County Council	971
Roscommon County Council	1,012
Sligo County Council	468
North Tipperary County Council	1,815
South Tipperary County Council	1,353
Waterford City Council	737
Waterford County Council	473
Westmeath County Council	3,356
Wexford County Council	1,433
Wicklow County Council	358
Total	**72,429**

An Ghníomhaireacht um Chaomhnú Comhshaoil

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

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

ÁR bhFREAGRACHTAÍ

CEADÚNÚ

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

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

FEIDHMIÚ COMHSHAOIL NÁISIÚNTA

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

MONATÓIREACHT, ANAILÍS AGUS TUAIRISCIÚ AR AN GCOMHSHAOL

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

RIALÚ ASTUITHE GÁIS CEAPTHA TEASA NA HÉIREANN

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

TAIGHDE AGUS FORBAIRT COMHSHAOIL

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

MEASÚNÚ STRAITÉISEACH COMHSHAOIL

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

PLEANÁIL, OIDEACHAS AGUS TREOIR CHOMHSHAOIL

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

BAINISTÍOCHT DRAMHAÍOLA FHORGHNÍOMHACH

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

STRUCHTÚR NA GNÍOMHAIREACHTA

Bunaíodh an Ghníomhaireacht i 1993 chun comhshaol na hÉireann a chosaint. Tá an eagraíocht á bhainistiú ag Bord lánaimseartha, ar a bhfuil Príomhstiúrthóir agus ceithre Stiúrthóir.

Tá obair na Gníomhaireachta ar siúl trí ceithre Oifig:

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

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

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters, PO Box 3000
Johnstown Castle Estate
County Wexford, Ireland

Ceanncheathrú, Bosca Poist 3000
Eastát Chaisleán Bhaile Sheáin
Contae Loch Garman, Éire

T:+353 53 916 0600
F:+353 53 916 0699

Regional Inspectorate
McCumiskey House, Richview
Clonskeagh Road, Dublin 14, Ireland

Cigireacht Réigiúnach, Teach Mhic Chumascaigh
Dea-Radharc, Bóthar Cluain Sceach
Baile Átha Cliath 14, Éire

T:+353 1 268 0100
F:+353 1 268 0199

Regional Inspectorate
Inniscarra, County Cork, Ireland

Cigireacht Réigiúnach, Inis Cara
Contae Chorcaí, Éire

T:+353 21 487 5540
F:+353 21 487 5545

Regional Inspectorate
John Moore Road, Castlebar
County Mayo, Ireland

Cigireacht Réigiúnach, Bóthar Sheán de Mórdha
Caisleán an Bharraigh, Contae Mhaigh Eo, Éire

T:+353 94 904 8400
F:+353 94 902 1934

Regional Inspectorate
Seville Lodge, Callan Road,
Kilkenny, Ireland

Cigireacht Réigiúnach, Lóiste Sevilla,
Bóthar Challainn, Cill Chainnigh, Éire

T:+353 56 779 6700
F:+353 56 779 6798

Regional Inspectorate
The Glen, Monaghan, Ireland

Cigireacht Réigiúnach, An Gleann
Muineachán, Éire

T:+353 47 77600
F:+353 47 84987

E: info@epa.ie
W: www.epa.ie
Lo Call: 1890 33 55 99