

The Second Update Report on data presented in the EPA Report “Focus on Urban Waste Water Discharges in Ireland”

Urban Waste Water Treatment in 2011

1. Introduction to this report

This report provides data on the performance of urban waste water treatment plants and waste water infrastructure in place in Ireland in 2011¹. It is the second update to the “[Focus on Urban Waste Water Discharges in Ireland](#)” report, which was published by the EPA in February 2012. The original report provided a review of the operation of urban waste water treatment plants, mainly covering data for 2008 and 2009, and included recommendations to improve compliance with waste water discharge authorisations, the Urban Waste Water Treatment Directive and the Water Framework Directive. The [first update report](#), published in June 2012, presented data for the year 2010. The second update report complements the first update report by including additional nutrient data for 2010. The report is a follow on from the previous two reports and the overall recommendations in “Focus on Urban Waste Water Discharges in Ireland” still apply to this data set. This report assesses compliance against the requirements of the [Urban Waste Water Treatment Directive](#) (UWWTD), however in the context of Water Framework Directive compliance and the Waste Water Discharge Licencing programme, the EPA is establishing limits above and beyond the UWWTD requirements.

2. National summary

Table 2.1 summarises the level of waste water treatment provided in 2011 at 544 urban areas that are subject to the waste water discharge licensing process. Table 2.2 illustrates the treatment received by the national waste water load² during 2011.

Table 2.1: Summary of the level of waste water treatment provided in 2011 (by urban area)³

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.	24	63	180	98	365
from 2,000 to 10,000 p.e.	7	6	54	50	117
Over 10,000 p.e.	6	0	25	31	62
Total	37	69	259	179	544

¹ The report relates to discharges from urban areas that are subject to the waste water discharge licensing process (i.e. areas with a population equivalent greater than 500). The report was first published on the EPA website on 20th Dec 2012. This was replaced by a revised report on the 8th Jan 2013 to correct a formatting mismatch with links to two of the footnotes referred to in Table 4.2 of the report.

² 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 (BOD₅) of 60g of oxygen per day.

³ Information on the level of treatment provided was supplied to the EPA by the water services authorities.

Table 2.2: Waste water treatment provided for the national waste water load in 2011 (by p.e.)

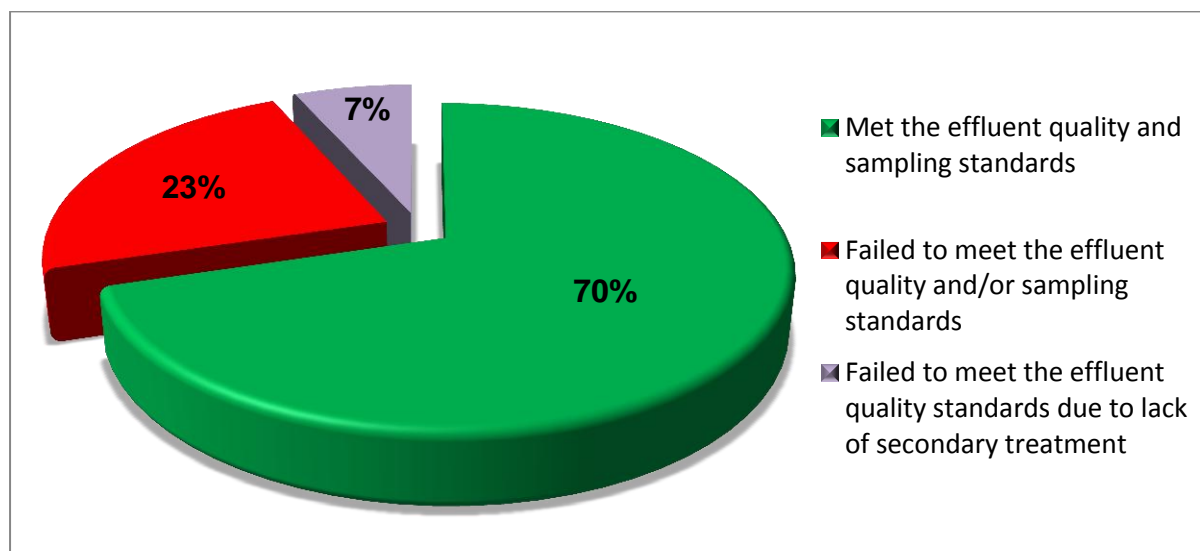
No treatment or preliminary treatment (%)	Primary treatment (%)	Secondary treatment (%)	Secondary treatment & nutrient reduction (%)
5.7	1.6	72.1	20.6

The UWWTD specifies quality standards for effluent discharged from urban areas by setting limits on the concentration of biochemical oxygen demand (BOD), chemical oxygen demand (COD) and total suspended solids (TSS) that are permitted 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, i.e. all areas with a population equivalent greater than 10,000, and areas with a population equivalent greater than 2,000 that discharge to freshwater or estuaries.

There were 165 larger urban areas in Ireland in 2011 and these accounted for over 92% of the national waste water load. A summary of the 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 2.1⁴. 70% of larger urban areas complied with all of the standards in 2011.

An insufficient number of sampling results were provided by the water services authorities for waste water treatment plants serving 8 larger urban areas. This included 4 plants that met the effluent quality standards but failed due to insufficient sampling.

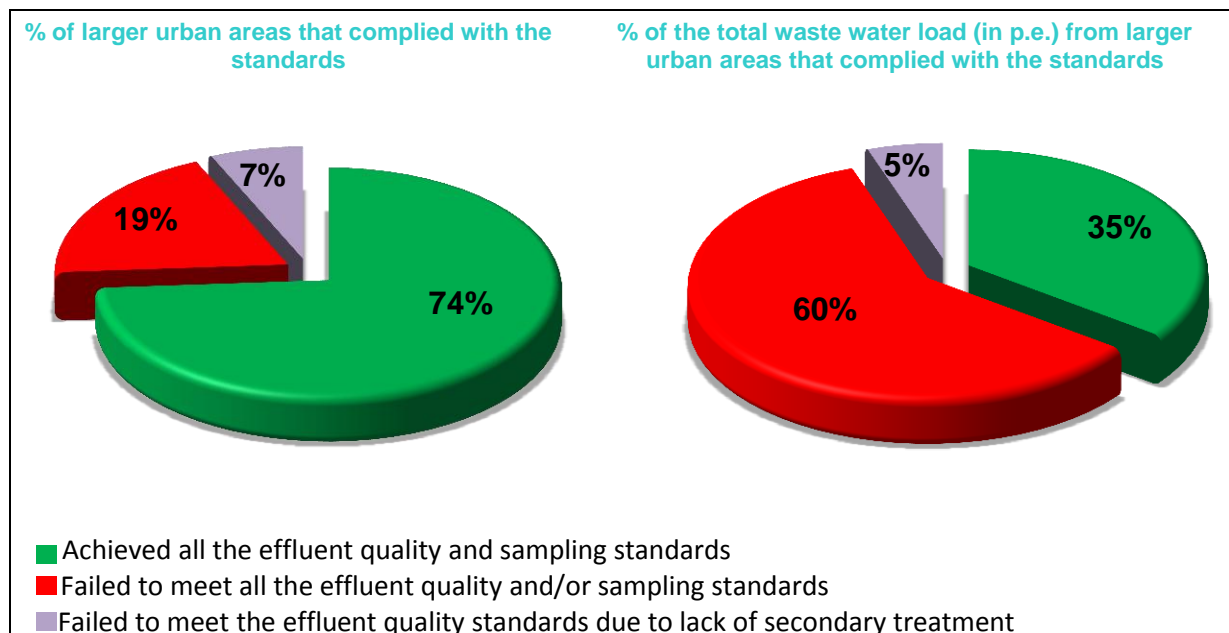
Figure 2.1: Compliance of all larger urban areas (165 no.) in 2011 with the effluent quality (BOD, COD & TSS) and sampling standards in the Waste Water Treatment Directive.



⁴ 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.

The requirement to comply with the TSS concentration limit in the Directive is optional⁵. A national summary of compliance of urban waste water discharges from the 165 larger urban areas with the BOD and COD effluent quality and sampling standards in the Directive is presented in Figure 2.2.

Figure 2.2: Compliance of all larger urban areas (165 no.) in 2011 with the mandatory effluent quality (BOD & COD) and sampling standards in the Waste Water Treatment Directive.



Almost half of the pollution load from larger agglomerations was from the Greater Dublin area. Excluding this from the assessment, 68% of the pollution load from the remaining 164 larger urban areas complied with the standards. Approximately one-third of the pollution load that did not receive secondary treatment in 2011 was from urban areas that were provided with secondary treatment during 2012.

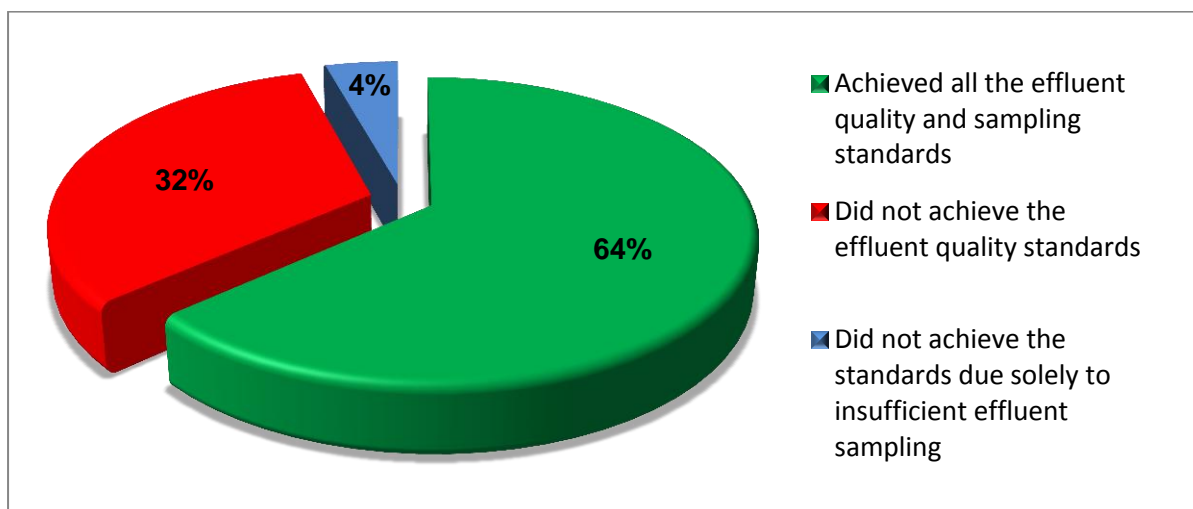
Secondary treatment was provided at 438 urban areas in 2011 (refer to columns 4 and 5 of Table 2.1). The EPA used the effluent quality and sampling standards in the Directive as a guide to assess the performance of these secondary treatment plants in 2011⁶. A national summary of this assessment is presented in Figure 2.3. 64% of the 438 secondary treatment plants achieved the effluent quality and sampling standards in 2011.

The urban areas with secondary treatment that did not achieve the effluent quality standards, as shown in Figure 2.3, includes 18 urban areas that also failed to provide a sufficient number of sampling results.

⁵ Refer to footnote 3 in Table 1 of the Directive.

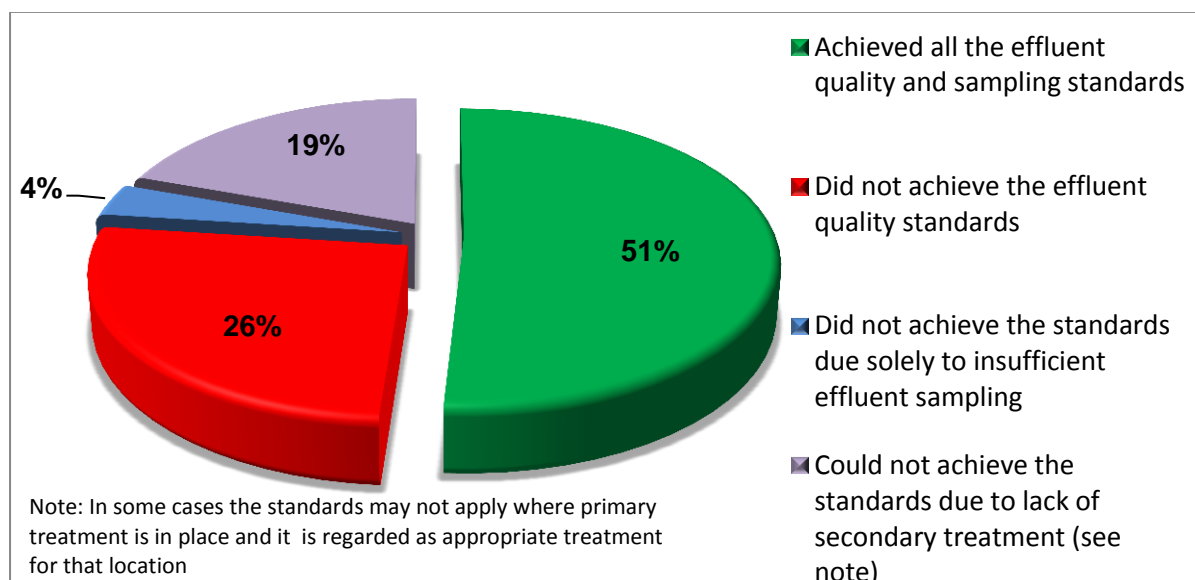
⁶ The Directive does not specify the minimum number of samples required per year for urban areas with a population equivalent less than 2,000. The EPA set the minimum number of samples required at these areas at either 6, or the number of samples specified in the Waste Water Discharge Licence if this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

Figure 2.3: Assessment of discharges from all secondary treatment plants (438 no.) in 2011 against the effluent quality (BOD, COD & TSS) and sampling standards in the Waste Water Treatment Directive



106 urban areas did not have secondary treatment in place in 2011 (refer to columns 2 and 3 of Table 2.1), including 37 areas where waste water received no treatment or just basic preliminary treatment prior to discharge⁷. Effluent from these 106 urban areas is unlikely to achieve the quality standards specified in the Directive. A national summary of the effluent quality from all 544 urban areas that are subject to the waste water discharge licensing process is presented in Figure 2.4. A total of 51% of all these urban areas achieved the effluent quality and sampling standards in 2011.

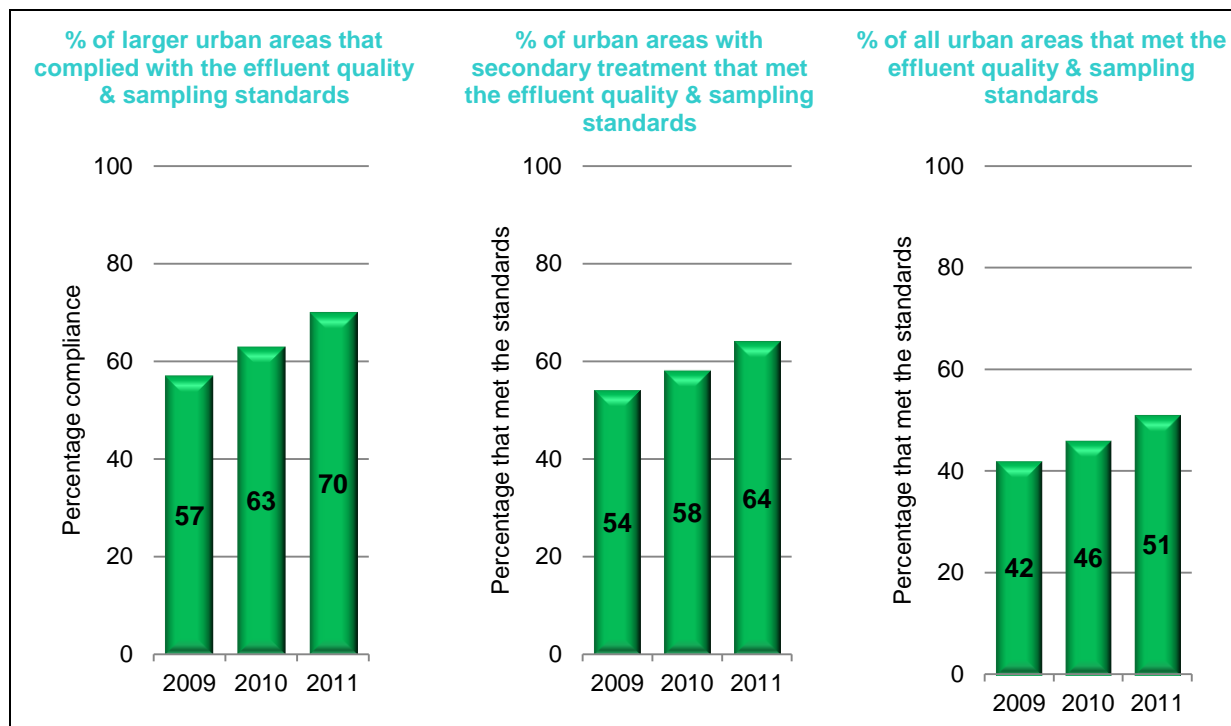
Figure 2.4: Assessment of discharges from all urban areas (544 no.) in 2011 against the effluent quality (BOD, COD & TSS) and sampling standards in the Waste Water Treatment Directive



⁷ In accordance with the Directive, 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 may not necessarily require secondary treatment but 'appropriate treatment' must be provided. This 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.

Figure 2.5 illustrates the improvement in the national performance of waste water treatment plants between 2009 and 2011.

Figure 2.5: Assessment of discharges from urban areas in the period 2009 - 2011 against the effluent quality (BOD, COD & TSS) and sampling standards in the Waste Water Treatment Directive⁸



A summary of urban waste water treatment within each water services authority's functional area in 2011 is provided in Table 2.2. The table includes details on BOD, COD and TSS monitoring results. Nutrient monitoring results are not included in the table, but are addressed in section 4 of this report.

⁸ 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 these 379 smaller urban areas the standards were used by the EPA for comparison purposes as a guide to assess plant performance.

Table 2.2: Summary of waste water treatment in 2011 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 process	Number of urban areas without secondary treatment ⁹	Number of urban areas where nutrient reduction is required under the Directive but had not been provided	Number of urban areas with secondary treatment that did not meet the BOD, COD & TSS standards ¹⁰	
Carlow	12	0	0	4 (3)	→
Cavan	16	0	0	5 (1)	↓
Clare	23	5	0	7 (2)	↓
Cork City	1	0	1	1	↑
Cork County	74	22	1	17 (8)	↓
Donegal	39	19	1	13 (8)	→
Dublin City	1 ¹¹	0	1	1	→
Dun Laoghaire-Rath	1	1	0	0	→
Fingal	9	4	0	3 (1)	→
Galway City	1	0	0	0	→
Galway	22	7	0	9 (3)	↑
Kerry	25	13	1	1	→
Kildare	13	1	0	2 (1)	→
Kilkenny	21	6	1	7 (3)	↓
Laois	14	0	0	12 (9)	→
Leitrim	8	0	0	4	↓
Limerick City	1	0	0	0	→
Limerick	25	5	0	14 (4)	↓
Longford	7	2	0	1	↑
Louth	14	0	1	0	↓
Mayo	33	3	0	10 (5)	→
Meath	23	0	0	4	↓
Monaghan	14	0	0	4	→
Offaly	14	0	0	2 (1)	↓
Roscommon	13	0	0	6 (2)	↓
Sligo	16	2	0	5 (3)	↓
Tipperary North	12	0	0	2 (1)	↓
Tipperary South	14	0	0	2 (1)	↓
Waterford City	1	0	0	1	↑
Waterford	11	6	0	2	→
Westmeath	15	0	0	6	↑
Wexford	27	6	1	9 (2)	↑
Wicklow	24	4	0	6 (2)	↑
Total	544	106	8	160	

⁹ In some cases smaller agglomerations may not necessarily require secondary treatment but 'appropriate treatment' must be provided; for details refer to footnote 7.

¹⁰ The arrows indicate whether the number of areas with secondary treatment that did not meet the standards in 2011 was the same as in 2010 (→), less than in 2010 (↓) or greater than in 2010 (↑). The numbers in parentheses are the number of plants with persistent emission limit failures during 2011.

¹¹ 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.

3. Assessment of compliance with standards for BOD, COD and suspended solids

The results of the 2011 compliance assessment for discharges from all urban areas that are subject to the waste water discharge licensing process (i.e. areas with a population equivalent (p.e.) greater than 500¹²) are summarised in Appendix A of this report. The data is organised in alphabetical order, by water services authority, and contains the following information:

Urban area: The name of the 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 2011 results met the standards set in the [Directive](#) for effluent quality¹³, and a sufficient number of effluent samples were collected, analysed and reported to the EPA.

Fail – the 2011 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*¹⁴ – 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 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.

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 2011. This is indicative of poor plant performance or overloading of the treatment plant.

¹² 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 this report.

¹³ Quality standards in this section refer to the standards for BOD, COD & TSS only; quality standards for nutrients are addressed in section 4. 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.

¹⁴ 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.

Urban area (p.e.): An estimate by the water services authority of the waste water load collected, by the waste water works.

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 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 typically involves the breakdown of biodegradable organic matter in the waste water by microorganisms.

Secondary & nutrient reduction – in addition to secondary treatment, nutrients such as phosphorous and/or nitrogen were 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 receiving water is 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.

4. Assessment of compliance with standards for phosphorus and nitrogen

In order to protect waters that may be at risk of eutrophication the [Directive](#) specifies additional requirements on certain nutrients in effluent discharged to sensitive areas from urban areas with a population equivalent greater than 10,000¹⁵. Annex I to the Directive sets limits on the concentration of total phosphorus and total nitrogen permitted in waste water discharges from these areas and sets out the minimum annual number of samples to be analysed, based on the size of the treatment plant. The Directive also stipulates that one or both nutrient parameters may apply, depending on the local situation. It is the responsibility of the EPA to determine during the waste water discharge licensing process which nutrient parameter or parameters shall apply¹⁶. This section covers urban areas discharging directly to sensitive areas. Urban areas discharging to the catchments of sensitive areas (where they have an impact) are not dealt with here, but will be covered in subsequent reports.

32 urban areas¹⁷ with a population equivalent greater than 10,000 discharged directly to sensitive areas in 2010 and 2011¹⁸. The EPA has issued licences for waste water discharges from 25 of these urban areas and has determined during this process that the phosphorus requirements apply at 22 of the licensed urban areas and the nitrogen requirements apply at 14 of the licensed urban areas. The EPA has not made a final determination on which parameter or parameters shall apply at the licensed urban area of Killybegs¹⁹, while 7 urban areas are at the licence application assessment stage and consequently the nutrient parameter or parameters that shall apply at these areas has not been determined. For the purposes of this report a precautionary approach is taken in relation to these 8 areas whereby both nutrient parameters are assumed to apply on a provisional basis pending the issue of each licence or a decision by the EPA on the parameter(s) that apply²⁰.

The results of the 2010 and 2011 compliance assessments for discharges to sensitive areas from the 22 urban areas where the total nitrogen requirements applied are summarised in Table 4.1 and the results from the 30 urban areas where the total phosphorus requirements applied are in Table 4.2.

An urban area 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 samples was collected, analysed and reported to the EPA.

24 of 29 urban areas where the phosphorous requirements were considered to apply were in compliance with the requirements in 2011, up from 22 in 2010. This means that total phosphorus compliance improved from 76% in 2010 to 83% in 2011.

¹⁵ Sensitive areas are listed in the Urban Waste Water Treatment (Amendment) Regulations 2010 [S.I. No. 48 of 2010](#).

¹⁶ The EPA was assigned this responsibility under [S.I. No. 48 of 2010](#).

¹⁷ S.I. No. 48 of 2010 designated new sensitive areas including the receiving waters for discharges from Ennis North, Drogheda and Clonakilty. The Regulations require nutrient reduction to be provided at Ennis North by 22/12/2012 and at Drogheda and Clonakilty by 22/12/2016. As these 3 urban areas have been given a specific period of time to meet the nutrient reduction requirements they are not part of the 32 urban areas included in the 2010 and 2011 nutrient assessment. The EPA will report on compliance with the nutrient standards at Ennis North, Drogheda and Clonakilty after the prescribed dates.

¹⁸ This includes Thurles which had a population equivalent greater than 10,000 in 2010 only and Carrickmacross which had a population equivalent greater than 10,000 in 2011 only.

¹⁹ An application for a licence review for Killybegs was submitted to the EPA on 06/02/2012. The EPA will determine the parameter or parameters that shall apply during its assessment of the review application.

²⁰ In future reports the specific requirements of any Waste Water Discharge Licences issued for these urban areas will be taken into account when assessing compliance with nutrient requirements.

Nitrogen requirements were considered to apply at 21 urban areas in 2011 and 10 of these areas met the requirements. Nitrogen requirements applied at 22²¹ urban areas in 2010 and 7 of these were in compliance. This means that total nitrogen compliance rose from 32% in 2010 to 48% in 2011.

Table 4.1: Compliance in 2010 and 2011 with the Directive's requirements on total nitrogen in waste water discharged to sensitive areas from urban areas >10,000 p.e.

Water services authority	Urban area	Reg. No.	Nitrogen pass or fail in 2010	Reason for fail in 2010	Nitrogen pass or fail in 2011	Reason for fail in 2011
Cavan	Cavan	D0020-01	Fail	Quality & sample no.	Fail	Quality
Cork City	Cork City	D0033-01	Fail	Quality	Fail	Quality
Cork County	Carrigtohill ²²	D0044-01	Fail	Quality & sample no.	Fail	Quality
Cork County	Mallow ²²	D0052-01	Fail	Quality	Pass	
Cork County	Midleton	D0056-01	Pass		Pass	
Donegal	Killybegs ²³	D0011-01	Fail	Quality & sample no.	Fail	Quality & sample no.
Dublin City	Dublin City (Ringsend)	D0034-01	Fail	Quality	Fail	Quality
Fingal	Swords ²²	D0024-01	Fail	Quality	Pass	
Kerry	Killarney	D0037-01	Fail	Sample no.	Fail	Sample no.
Kerry	Tralee ²²	D0040-01	Fail	Sample no.	Fail	Sample no.
Kilkenny	Kilkenny City ²²	D0018-01	Pass		Pass	
Laois	Portlaoise	D0001-01	Pass		Pass	
Longford	Longford	D0060-01	Pass		Pass	
Louth	Dundalk	D0053-01	Fail	Quality	Fail	Quality
Meath	Navan	D0059-01	Fail	Quality	Fail	Quality & sample no.
Monaghan	Monaghan ²²	D0061-01	Fail	Quality	Fail	Quality
Tipperary NR	Nenagh	D0027-01	Pass		Pass	
Tipperary NR	Roscrea	D0025-01	Fail	Quality	Fail	Quality
Tipperary NR	Thurles ²²	D0026-01	Fail	No result	Not applicable ²⁴	
Tipperary SR	Clonmel	D0035-01	Fail	Quality & sample no.	Pass	
Wexford	Enniscorthy	D0029-01	Pass ²⁵		Pass ²⁵	
Wexford	Wexford town	D0030-01	Pass		Pass	

²¹ This comprises the 21 areas subject to the requirements in 2011 and also Thurles, which had a population equivalent >10,000 in 2010.

²² Licence application under assessment. For the purposes of this report a precautionary approach is taken whereby both nutrient parameters are assumed to apply on a provisional basis pending the issue of the licence.

²³ Pending a determination by the EPA on which parameter or parameters apply it is assumed that both apply.

²⁴ Thurles had a population equivalent of less than 10,000 in 2011 and was therefore below the reporting threshold for total nitrogen in discharges to sensitive areas.

²⁵ While there is no nutrient reduction in place at this urban area the existing secondary treatment achieved the effluent standard set by the Directive for total nitrogen.

Table 4.2: Compliance in 2010 and 2011 with the Directive's requirements on total phosphorus in waste water discharged to sensitive areas from urban areas >10,000 p.e.

Water services authority	Urban area	Reg. No.	Phosphorus pass or fail in 2010	Reason for fail in 2010	Phosphorus pass or fail in 2011	Reason for fail in 2011
Carlow	Carlow town	D0028-01	Pass		Pass	
Cavan	Cavan	D0020-01	Pass		Pass	
Cork County	Carrigtohill ²⁶	D0044-01	Fail	Quality & sample no.	Pass ³⁰	
Cork County	Fermoy	D0058-01	Pass		Pass	
Cork County	Mallow ²⁶	D0052-01	Pass		Pass	
Donegal	Killybegs ²⁷	D0011-01	Fail	Quality & sample no.	Fail	Quality & sample no.
Dublin City	Dublin City (Ringsend)	D0034-01	Fail	Quality	Fail	Quality
Fingal	Swords ²⁶	D0024-01	Fail	Quality	Pass	
Kerry	Killarney	D0037-01	Pass		Pass	
Kerry	Tralee ²⁶	D0040-01	Pass ³⁰		Pass ³⁰	
Kildare	Athy	D0003-01	Pass		Pass	
Kildare	Leixlip	D0004-01	Pass		Pass	
Kildare	Osberstown	D0002-01	Pass		Pass	
Kilkenny	Kilkenny City ²⁶	D0018-01	Fail	Quality	Fail	Quality
Laois	Portlaoise	D0001-01	Pass		Pass	
Longford	Longford	D0060-01	Pass		Pass	
Louth	Dundalk	D0053-01	Pass		Fail	Quality
Mayo	Castlebar	D0047-01	Pass		Pass	
Meath	Navan	D0059-01	Pass		Fail	Sample no.
Monaghan	Carrickmacross	D0062-01	Not applicable ²⁸		Pass	
Monaghan	Monaghan ²⁶	D0061-01	Pass		Pass	
Offaly	Tullamore	D0039-01	Pass		Pass	
Tipperary NR	Nenagh	D0027-01	Pass		Pass	
Tipperary NR	Roscrea	D0025-01	Pass		Pass	
Tipperary NR	Thurles ²⁶	D0026-01	Pass		Not applicable ²⁸	
Tipperary SR	Clonmel	D0035-01	Fail	Sample no.	Pass	
Westmeath	Athlone ²⁹	D0007-01	Fail	Quality	Pass	
Westmeath	Mullingar	D0008-01	Pass		Pass	
Wexford	Enniscorthy	D0029-01	Pass ³⁰		Pass ³⁰	
Wexford	Wexford town	D0030-01	Pass		Pass	

²⁶ Licence application under assessment. For the purposes of this report a precautionary approach is taken whereby both nutrient parameters are assumed to apply on a provisional basis pending the issue of the licence.

²⁷ Pending a determination by the EPA on which parameter or parameters apply it is assumed that both apply.

²⁸ This urban area had a population equivalent of less than 10,000 this year and was therefore below the reporting threshold for total phosphorus in discharges to sensitive areas.

²⁹ Receiving water designated as a new sensitive area in 2010 by [S.I. No. 48 of 2010](#). The Directive requires discharges to such areas to meet the nutrient requirements within 7 years of designation, however as treatment for nutrient reduction is already provided at Athlone the results are included in this report.

³⁰ While there is no nutrient reduction in place at this urban area the existing secondary treatment achieved the effluent standard set by the Directive for total phosphorus.

5. EPA monitoring of urban waste water discharges in 2011

The EPA conducts an annual programme of independent monitoring of urban waste water discharges that are licensed by the EPA under the Waste Water Discharge (Authorisation) Regulations. 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 Schedule A and Condition 2 of 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 2011 the EPA monitoring programme comprised visits to 135 waste water works with licensed waste water discharges, and the collection of 156 effluent samples. This report addresses monitoring at plants where waste water receives secondary treatment, or more stringent treatment, prior to discharge. The 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 good quality and confirmation of this through independent EPA monitoring is not required³¹. In many cases the conditions of these licences require secondary treatment to be installed within a specified timeframe, unless the existing primary treatment is considered to be appropriate treatment at that particular location.

Table 5.1 summarises the monitoring carried out and the number of samples and plants that met all of the allowable limits.

Table 5.1: Overview of EPA effluent monitoring in 2011 at plants with secondary treatment or more stringent treatment

No. of secondary or more stringent treatment plants visited	No. of secondary 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
135	113 (84%)	156	134 (86%)

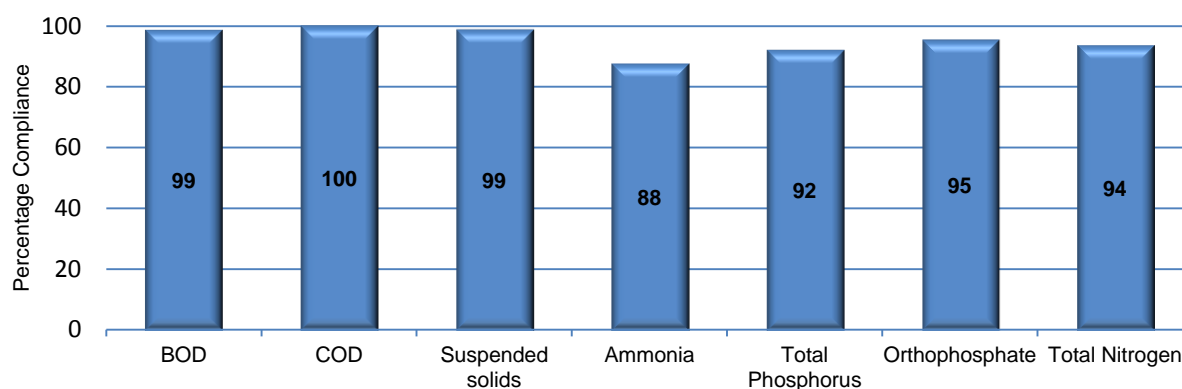
6. National summary of EPA monitoring results

Each effluent sample was analysed for a number of different parameters. Compliance with the allowable limits in the licences for the key 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 6.1. These limits may be more stringent than those set out in the UWWTD. The compliance rate for total phosphorus was down 2% when compared with the results of the EPA monitoring programme in 2010, while compliance for all other parameters improved by between 1% and 6% on the 2010 results³².

³¹ Audits of waste water works with no treatment plants or with primary treatment are carried out and a visual assessment made of effluent discharges, but effluent samples are not generally taken. 13 waste water works with less than secondary treatment were audited in 2011. An additional 6 effluent samples not included in table 4.1 above were taken during these audits. 1 of these samples met the allowable limit in the licence, 3 failed to meet some of the limits and 2 samples were from plants where limits were not specified for 2011.

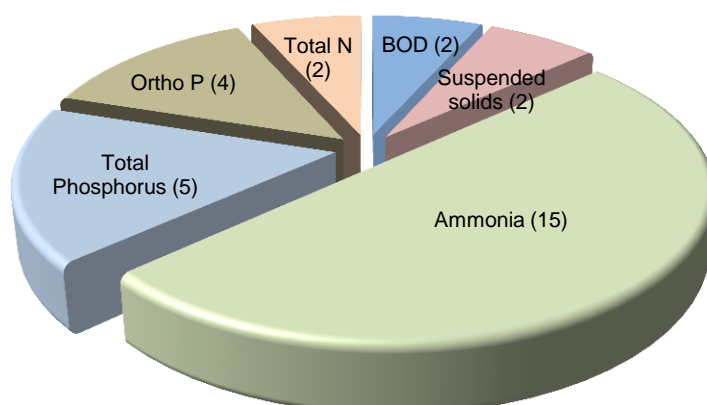
³² The 2010 data is presented on pages 19 and 20 of the [Focus on Urban Waste Water Discharges in Ireland](#) report.

Figure 6.1: EPA monitoring results for 2011 showing percentage compliance with allowable EPA licence limits at plants with secondary treatment or more stringent treatment



The EPA carried out a total of 747 tests for the key parameters on the 156 effluent samples collected from secondary treatment plants in 2011. 30 of the results breached the allowable limits. This equates to an overall compliance rate with these tests of over 95%. Figure 6.2 shows the number of breaches for each parameter.

Figure 6.2: Number of results from secondary treatment plants that did not meet the allowable EPA licence limits in 2011 for each of the key water quality parameters



Of the 22 samples that did not meet the required limits for all key parameters, 2 exceeded the limits for 3 of the parameters, 4 exceeded the limits for 2 parameters and 16 exceeded the limit for 1 parameter.

These monitoring results have all been issued to the relevant water services authorities. It is the responsibility of the licensee to implement any necessary improvements to ensure compliance with the Waste Water Discharge Licence. Where the EPA is of the view that there are significant breaches of a Waste Water Discharge Licence that are not being addressed by a water services authority then further enforcement action may be considered by the EPA.

7. Sewage sludge

During 2010 and 2011 a total of 89,991 and 85,648 tonnes respectively of sewage sludge (dry solids) was produced nationally by the treatment plants addressed in this report³³. The destination routes for the sludge produced in 2010 and 2011 are summarised in Tables 7.1 and 7.2. Most of the sludge was applied to agricultural land or reused in forestry, composting or in land remediation.

The total quantity of sewage sludge produced in 2010 and 2011 by water services authority is shown in Table 7.3.

Table 7.1: Sewage sludge destination routes in 2010

	Agriculture	Landfill	Other (e.g. forestry, composting & land remediation)	Total
Quantity (tonnes dry solids)	82,670 (91.9%)	188 (0.2%)	7,133 (7.9%)	89,991

Table 7.2: Sewage sludge destination routes in 2011

	Agriculture	Landfill	Other (e.g. forestry, composting & land remediation)	Total
Quantity (tonnes dry solids)	57,699 (67.4%)	304 (0.4%)	27,645 (32.2%)	85,648

³³ The figures in this section were reported to the EPA by the water services authorities.

Table 7.3: Sewage sludge produced by water services authorities in 2010 and 2011

Water services authority	2010 (tonnes dry solids/year)	2011 (tonnes dry solids/year)	% of the total waste water load generated nationally in 2011³⁴	% of the total sewage sludge produced nationally in 2011³⁵
Carlow County Council	1,881	4,720	0.9	5.5
Cavan County Council	1,274	1,762	0.8	2.1
Clare County Council	256	217	1.2	0.3
Cork City Council	2,973	2,932	5.4	3.4
Cork County Council	2,023	1,889	4.5	2.2
Donegal County Council	467	339	3.3	0.4
Dublin City Council	25,970	22,145	44.4	25.9
Dun Laoghaire-Rathdown	N/A	20	1.1	0.02
Fingal County Council	1,700	2,006	2.5	2.3
Galway County Council	910	895	1.5	1.0
Galway City Council	14,081	7,845	1.6	9.2
Kerry County Council	824	876	2.3	1.0
Kildare County Council	2,774	2,934	3.3	3.4
Kilkenny County Council	992	1,049	1.3	1.2
Laois County Council	Return not made	2,177	1.0	2.5
Leitrim County Council	141	89	0.3	0.1
Limerick City & Limerick County Council	1,896	1,841	3.3	2.1
Longford County Council	630	1,258	0.4	1.5
Louth County Council	2,192	2,113	4.4	2.5
Mayo County Council	8,530	8,636	1.6	10.1
Meath County Council	1,567	1,656	1.5	1.9
Monaghan County Council	791	717	0.9	0.8
Offaly County Council	6,170	864	1.0	1.0
Roscommon County Council	Return not made	566	0.7	0.7
Sligo County Council	483	2,289	0.9	2.7
North Tipperary Co. Co.	1,314	1,199	0.9	1.4
South Tipperary Co. Co.	Return not made	1,289	1.5	1.5
Waterford City Council	640	712	1.1	0.8
Waterford County Council	319	377	0.8	0.4
Westmeath County Council	7,389	7,394	1.5	8.6
Wexford County Council	649	1,324	1.9	1.5
Wicklow County Council	1,155	1,518	2.4	1.8
Total	89,991	85,648		

³⁴ The population equivalent of the county expressed as a percentage of the total population equivalent of the country. Figures for each water services authority rounded to 1 decimal point so total is not exactly 100%.

³⁵ The tonnage of sewage sludge produced in the county expressed as a percentage of the total tonnage of sewage sludge produced within the country. Figures rounded to 1 decimal point so total is not exactly 100%.

Appendix A

Click on a water services authority to view information on waste water treatment in that authority's functional area during 2011.

Carlow County Council	17
Cavan County Council	18
Clare County Council	19
Cork City Council	20
Cork County Council	20
Donegal County Council	23
Dublin City Council	25
Dun Laoghaire-Rathdown County Council	25
Fingal County Council	25
Galway City Council	26
Galway County Council	26
Kerry County Council	27
Kildare County Council	28
Kilkenny County Council	29
Laois County Council	30
Leitrim County Council	31
Limerick City Council	31
Limerick County Council	32
Longford County Council	33
Louth County Council	33
Mayo County Council	34
Meath County Council	36
Monaghan County Council	37
Offaly County Council	38
Roscommon County Council	39
Sligo County Council	40
North Tipperary County Council	41
South Tipperary County Council	42
Waterford City Council	43
Waterford County Council	43
Westmeath County Council	44
Wexford County Council	45
Wicklow County Council	47

Carlow County Council 2011

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			33,000	36,000	Secondary & nutrient	River	✓	South Eastern
Clonegal	D0395-01	Fail	Quality	✓	400	200	Secondary	River		South Eastern
Fenagh	D0246-01	Pass			800	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	River	✓	South Eastern
Myshal	D0390-01	Pass			400	800	Secondary & nutrient	River		South Eastern
Palatine	D0391-01	Pass			400	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	Fail	Quality		4,800	4,000	Secondary	River	✓	South Eastern

Cavan County Council 2011

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	Pass			1,483	1,800	Secondary & nutrient	River		N. Western
Ballyconnell	D0253-01	Pass			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	Fail	Quality		21,786	20,565	Secondary & nutrient	River	✓	N. Western
Cootehill	D0082-01	Pass			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	Fail	Quality		2,335	2,400	Secondary & nutrient	River		Neagh Bann
Mullagh	D0252-01	Pass			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

Clare County Council 2011

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			1,500		No treatment	Coastal		Western
Clarecastle	D0322-01	No secondary			1,000		No treatment	Estuarine		Shannon
Corofin	D0434-01	Pass			500	500	Secondary & nutrient	River		Shannon
Crusheen	D0424-01	Fail	Quality		500	500	Secondary	River		Shannon
Doonbeg	D0324-01	Fail	Quality		1,000	1,500	Secondary	Coastal		Shannon
Ennis North	D0048-01	Pass			17,000	17,000	Secondary	River	✓ ³⁶	Shannon
Ennis South	D0199-01	Pass			4,000	4,000	Secondary	River		Shannon
Ennistymon	D0081-01	Pass			2,000	2,000	Secondary	River		Shannon
Inagh	D0422-01	Fail	Quality		500	500	Secondary	River		Shannon
Kilkee	D0078-01	No secondary			1,330		No treatment	Coastal		Shannon
Kilkishen	D0420-01	Pass			750	750	Secondary	Lake		Shannon
Kilrush	D0075-01	No secondary			2,600		No treatment	Coastal		Shannon
Lahinch	D0080-01	Pass			8,400	8,400	Secondary	River		Shannon
Liscannor	D0430-01	No secondary			800		No treatment	Coastal		Shannon
Lisdoonvarna	D0077-01	Pass			2,500	5,000	Secondary & nutrient	River		Shannon
Milltown Malbay	D0321-01	Pass			1,360	1,360	Secondary	River		Shannon
Newmarket on Fergus	D0079-01	Fail	Quality		3,500	3,500	Secondary	Lake		Shannon
Quilty	D0536-01	Pass			175	1,365	Secondary & UV	Coastal		Shannon
Quin	D0318-01	Fail	Quality	✓	1,200	740	Secondary	River		Shannon
Scarriff	D0319-01	Fail	Quality		1,300	1,300	Secondary & nutrient	River	✓	Shannon
Shannon Town	D0045-01	Fail	Quality	✓	12,500	12,500	Secondary	Estuarine		Shannon
Sixmilebridge	D0076-01	Pass			1,500	6,000	Secondary	River		Shannon
Tulla	D0320-01	Pass			720	2,000	Secondary	River		Shannon

³⁶ Designated as a sensitive area by the Urban Waste Water Treatment (Amendment) Regulations 2010. Nutrient reduction required by 22nd December 2012.

Cork City Council 2011

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	Fail	Quality		302,842	413,000	Secondary	Estuarine	✓	S. Western

Cork County Council 2011

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			21,000	26,000	Secondary	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
Ballyhooley	D0432-01	Pass			545	750	Secondary	River	✓	S. Western
Ballymakeera	D0299-01	No secondary			1,600	1,400	Primary	River		S. Western
Baltimore	D0296-01	No secondary			1,684	1,150	Primary	Estuarine		S. Western
Bandon	D0136-01	Pass			8,200	20,000	Secondary	River		S. Western
Banteer	D0448-01	Pass			700	700	Secondary	River		S. Western
Bantry	D0168-01	Pass			5,647	6000	Secondary & nutrient	Coastal		S. Western
Blarney Cloghroe	D0043-01	Pass Fail	Quality	✓	13,000 320	13,000 200	Secondary & nutrient Secondary	River River		S. Western
Boherbue	D0437-01	Pass			800	600	Secondary & nutrient	River	✓	S. Western
Buttevant	D0303-01	Pass			1,700	3,150	Secondary	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	Quality		12,000	8,500	Secondary	Estuarine	✓	S. 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
Castlelyons	D0449-01	Fail	Quality		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	Fail	Quality	✓	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	Ground		S. Western
Clonakilty	D0051-01	Fail	Quality		15,000	15,000	Secondary	Estuarine	✓ ³⁷	S. Western
Clondulane	D0445-01	Pass			450	700	Secondary	River	✓	S. Western
Cloughduv	D0330-01	Pass			200	1,500	Secondary	River		S. Western
Cloyne	D0298-01	Fail	Quality		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	1,675	Secondary	River		S. Western
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	1,000	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
Glennville	D0515-01	Fail	Quality	✓	500	500	Secondary	River		S. Western
Innishannon	D0429-01	No secondary			887	833	Primary	River	✓	S. Western
Kanturk	D0203-01	Fail	Sample no.		2,354	3,500	Secondary	River		S. Western
Kilbrittan	D0425-01	Fail	Quality		598	800	Secondary	River		S. Western
Kildorrery	D0442-01	Pass			500	850	Secondary	River		S. Western
Kileens	D0329-01	Pass			860	1,200	Secondary	River		S. Western

³⁷ 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
Killavullen	D0447-01	Pass			700	1,000	Secondary	River		S. Western
Killeagh	D0329-01	Pass			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	Estuarine	✓	S. Western
Ladysbridge	D0328-01	Pass			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	10,000	Secondary & nutrient	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	1,500	Secondary	River		S. Western
North Cobh	D0140-01	Pass			850	4,000	Secondary	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
Ringaskiddy Village	D0436-01	No secondary			797	797	Preliminary	Coastal		S. Western
Ringaskiddy-Crosshaven-Carrigaline	D0057-01	No secondary			25,200		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	No secondary			3,000	4,700	Primary	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 2011

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		950	2,350	Secondary	Estuarine		N. Western
Ballybofey-Stranorlar	D0120-01	Pass			6,200	4,000	Secondary	River		N. Western
Ballyliffen	D0351-01	Fail	Quality		1,000	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			500	500	Primary	Estuarine		N. Western
Castlefinn	D0514-01	No secondary			900	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
Creelough	D0534-01	Fail	Quality		590	300	Secondary	Coastal		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
Dunkineoley	D0521-01	No secondary			720	1,000	Primary	Coastal		N. Western
Fahan	D0535-01	No secondary			938	800	Primary	Coastal		N. Western
Falcarragh	D0343-01	No secondary			1,588		No treatment	Estuarine		N. Western
Glenties	D0210-01	No secondary			1,200	1,000	Primary	River		N. Western
Kilcar	D0520-01	No secondary			900	1,000	Preliminary	Coastal		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
Killea	D0537-01	Fail	Quality	✓	800	800	Secondary	River		N. Western
Killybegs	D0011-01	No secondary			92,000		No treatment	Estuarine	✓	N. Western
Killygordon	D0518-01	Fail	Quality		700	1,700	Secondary	River		N. Western
Kilmacrennan	D0513-01	Fail	Quality	✓	900	500	Secondary	River		N. Western
Letterkenny	D0009-01	Fail	Quality	✓	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	Fail	Quality	✓	850	1,000	Secondary	Estuarine		N. Western
Milford	D0342-01	Pass			1,890	920	Secondary	River		N. Western
Mountcharles	D0522-01	Fail	Quality	✓	651	380	Secondary	River		N. Western
Moville	D0212-01	No secondary			1,500		No treatment	River		N. Western
Newtown-cunningham	D0349-01	Fail	Quality	✓	1,600	1,000	Secondary	River		N. Western
Ramelton	D0341-01	No secondary			1,600		No treatment	Estuarine		N. Western
Raphoe	D0209-01	Fail	Quality		1,475	800	Secondary	River		N. Western
Rathmullan	D0345-01	No secondary			1,156	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	Not reported		N. Western

Dublin City Council 2011

(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 (Ringsend)	D0034-01	Fail	Quality		2,486,830	1,640,000	Secondary & UV	Estuarine	✓	Eastern

Dun Laoghaire-Rathdown County Council 2011

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	No secondary			60,000	64,273	Preliminary ³⁸	Coastal		Eastern

Fingal County Council 2011

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	Coastal		Eastern
Loughshinny		No secondary			700	700	Primary			
Howth	D0034-01	No secondary			9,000		No treatment ³⁹	Coastal		Eastern
Lusk	D0122-01	No secondary			7,000		Primary	Estuarine	✓	Eastern
Malahide	D0021-01	Fail ⁴⁰	Quality		12,787	21,000	Secondary	Estuarine		Eastern
Portrane	D0114-01	Fail	Quality & sample no.	✓	8,000	8,000	Secondary	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	Quality		640	640	Secondary	River	✓	

³⁸ Secondary treatment was provided for Shanganagh during 2012.

³⁹ During 2011 waste water from Howth was diverted to Ringsend waste water treatment plant (D0034-01), with the exception of 112 p.e. that discharges without treatment at Doldrum Bay.

⁴⁰ Fail due to 1 of 41 samples exceeding the upper limit for total suspended solids. The Directive sets a limit for this parameter but notes that the requirement is optional.

Galway City Council 2011

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

Galway County Council 2011

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	Sample no.		580	700	Secondary	River		Western
Dunmore	D0370-01	Pass			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	Fail	Sample no.		500	800	Secondary	River		Western
Loughrea	D0194-01	Fail	Quality		10,000	9,500	Secondary & nutrient	River		Western
Mountbellew	D0219-01	Fail	Quality & sample no.	✓	1,483	700	Secondary	River		Shannon
Moycullen	D0191-01	Pass			3,273	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	Fail	Quality		22,440	24,834	Secondary & nutrient	River		Western

Kerry County Council 2011

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			1,831	8,180	Secondary	Estuarine	✓	Shannon
Ballyduff	D0418-01	No secondary			800	800	Primary	River	✓	Shannon
Ballyheigue	D0186-01	Pass			1,046	4,234	Secondary & nutrient	Coastal		Shannon
Ballylongford	D0459-01	No secondary			900	600	Primary	Estuarine		Shannon
Cahersiveen	D0181-01	Pass			4,727	5,200	Secondary	Estuarine		S. Western
Castlegregory	D0461-01	No secondary			639	500	Primary	Estuarine		Shannon
Castleisland	D0180-01	Pass			5,769	6,000	Secondary	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	Fail ⁴¹	Quality		712	150	Secondary	River		S. Western
Glenbeigh	D0286-01	No secondary			1,900	1,947	Primary	River		S. Western
Kenmare	D0184-01	Pass			8,000	5,833	Secondary	Estuarine		S. Western
Killarney	D0037-01	Pass			26,367	54,000	Secondary & nutrient	Lake	✓	S. Western
Killorglin	D0182-01	Pass			3,108	5,000	Secondary	River		S. Western
Knightstown	D0421-01	No secondary			772	800	Primary	Coastal		S. Western
Listowel	D0179-01	Pass			7,500	12,500	Secondary	River		Shannon
Lixnaw	D0462-01	No secondary			1,064	300	Primary	River		Shannon
Milltown	D0331-01	No secondary			1,474	Not reported	Primary	River		S. Western
Rathmore	D0419-01	Pass			870	500	Secondary	River		S. Western
Sneem	D0285-01	No secondary			900	2,500	Primary	Estuarine		S. Western
Tarbert	D0283-01	No secondary			1,400	800	Primary	Estuarine		Shannon
Tralee	D0040-01	Pass			42,000	50,333	Secondary	Estuarine	✓	Shannon
Waterville	D0287-01	No secondary			2,000	500	Primary	Coastal		S. Western

⁴¹ Fail due to 1 of 50 samples exceeding the upper limit for BOD.

Kildare County Council 2011

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			618	1,500	Secondary & nutrient	River		South Eastern
Athy	D0003-01	Pass			12,400	15,000	Secondary & nutrient	River	✓	South Eastern
Ballymore Eustace	D0238-01	No secondary			1,400	500	Primary	River		Eastern
Castledermot	D0236-01	Pass			1,537	2,400	Secondary & nutrient	River		South Eastern
Coill Dubh	D0242-01	Pass			1,166	2,000	Secondary & nutrient	River		South Eastern
Derrinturn	D0244-01	Pass			1,140	2,000	Secondary & nutrient	River		South Eastern
Kildare Town	D0178-01	Fail	Quality	✓	7,000	7,000	Secondary & nutrient	River		South Eastern
Kilmeague	D0233-01	Fail	Quality		1,200	700	Secondary	River		Eastern
Leixlip	D0004-01	Pass			63,640	80,000	Secondary & nutrient	River	✓	Eastern
Monasterevin	D0177-01	Pass			6,239	9,000	Secondary & nutrient	River	✓	South Eastern
Osberstown (Upper Liffey Valley Scheme)	D0002-01	Pass			83,858	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 2011

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	Pass			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	River		South Eastern
Graiguenamanagh	D0155-01	Fail	Quality		1,914	3,000	Secondary	River		South Eastern
Johnstown	D0401-01	No secondary			990	900	Primary	River		South Eastern
Kilkenny City	D0018-01	Pass			47,000	107,650	Secondary	River	✓	South Eastern
Kilmacow	D0525-01	Pass			700	2,500	Secondary	River		South Eastern
Mooncoin	D0145-01	Fail	Quality	✓	1,273	2,800	Secondary	Estuarine		South Eastern
Mullinavat	D0527-01	No secondary			411	280	Primary	River		South Eastern
Paulstown	D0339-01	Fail	Quality		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	Pass			2,347	7,500	Secondary	River	✓	South Eastern
Urlingford	D0336-01	Fail	Quality	✓	1,691	1,500	Secondary	River		South Eastern

Laois County Council 2011

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		2,209	2,300	Secondary	River		South Eastern
Ballinakill	D0384-01	Fail	Quality & sample no.	✓	850	700	Secondary	River		South Eastern
Ballylinan	D0291-01	Fail	Quality	✓	1,681	2,000	Secondary & nutrient	River		South Eastern
Ballyroan	D0385-01	Fail	Quality	✓	726	600	Secondary	River		South Eastern
Borris-in-Ossory	D0290-01	Pass			900	1,300	Secondary	River		South Eastern
Castletown	D0387-01	Fail	Quality	✓	515	500	Secondary	River		South Eastern
Clonaslee	D0386-01	Fail	Quality	✓	578	500	Secondary	River		Shannon
Durrow	D0289-01	Fail	Quality	✓	1,215	500	Secondary	River		South Eastern
Mountmellick	D0152-01	Fail	Quality & sample no.		6,300	7,000	Secondary	River		South Eastern
Mountrath	D0153-01	Fail	Quality	✓	2,069	2,300	Secondary	River		South Eastern
Portarlinton	D0158-01	Fail	Quality	✓	7,000	13,000	Secondary	River	✓	South Eastern
Portlaoise	D0001-01	Pass			27,000	39,000	Secondary & nutrient	River	✓	South Eastern
Rathdowney	D0288-01	Fail	Quality	✓	2,410	1,500	Secondary	River		South Eastern
Stradbally	D0292-01	Fail	Quality		1,600	2,000	Secondary	River		South Eastern

Leitrim County Council 2011

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	Pass			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	Fail	Sample no.		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	Fail	Quality		1,069	1,500	Secondary	River	✓	Shannon
Manorhamilton	D0150-01	Fail	Sample no.		2,372	3,500	Secondary & nutrient	River		Western
Mohill	D0277-01	Fail	Quality		1,691	3,000	Secondary & nutrient	River	✓	Shannon

Limerick City Council 2011

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			110,000	130,000	Secondary	Estuarine		Shannon

Limerick County Council 2011

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	Fail	Quality & sample no.		4,600	2,860	Secondary	River		Shannon
Adare	D0312-01	Fail	Quality & sample no.		1,600	2,500	Secondary & nutrient	Estuarine		Shannon
Askeaton	D0315-01	No secondary			1,850	550	Primary	Estuarine		Shannon
Athea	D0508-01	No secondary			735	260	Primary	River		Shannon
Ballingary	D0507-01	Fail	Quality	✓	870	500	Secondary	River		Shannon
Bruff	D0313-01	Fail	Quality & sample no.		1,480	2,140	Secondary & nutrient	River		Shannon
Bruree	D0506-01	Fail	Quality		780	1,200	Secondary & nutrient	River		Shannon
Cahercomlish	D0308-01	Fail	Quality & sample no.		1,500	2,500	Secondary & nutrient	River		Shannon
Cappamore	D0310-01	Pass			1,075	1,500	Secondary & nutrient	River		Shannon
Castletroy	D0019-01	Fail	Quality	✓	35,000	19,500	Secondary & nutrient	River		Shannon
Croom	D0307-01	Fail	Quality & sample no.		1,850	2,000	Secondary	River		Shannon
Doon	D0309-01	Pass			790	700	Secondary & nutrient	River		Shannon
Dromcollagher	D0316-01	Fail	Quality	✓	1,280	400	Secondary	River		Shannon
Foynes	D0502-01	No secondary			830	950	Primary	Estuarine		Shannon
Glin	D0504-01	No secondary			990	710	Primary	Estuarine		Shannon
Hospital	D0314-01	Fail	Quality	✓	1,290	500	Secondary	River		Shannon
Kilfinnane	D0305-01	Pass			950	1,500	Secondary & nutrient	River		Shannon
Kilmallock	D0106-01	Pass			1,700	2,200	Secondary & nutrient	River		Shannon
Murroe	D0306-01	Fail	Quality		1,150	800	Secondary	River		Shannon
Newcastle West	D0108-01	Pass			7,400	9,000	Secondary & nutrient	River		Shannon
Oola	D0505-01	Fail	Quality		620	350	Secondary	River		Shannon
Pallasgreen	D0503-01	Pass			550	750	Secondary & nutrient	River		Shannon
Pallaskenry	D0304-01	Fail	Quality & sample no.		1,170	2,000	Secondary & nutrient	Estuarine		Shannon
Patrickswell	Application due	No secondary			1,100	350	Primary	River		Shannon
Rathkeale	D0112-01	Fail	Sample no.		1,600	4,000	Secondary & nutrient	River		Shannon

Longford County Council 2011

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			1,854	2,125	Secondary & nutrient	River		Shannon
Clondra	Application due	Fail	Sample no.		400	600	Secondary	River		Shannon
Drumlish	D0489-01	No secondary			882	500	Primary	River	✓	Shannon
Edgeworthstown	D0098-01	Pass			2,065	2,750	Secondary & nutrient	River	✓	Shannon
Granard	D0187-01	Pass			1,850	3,200	Secondary & nutrient	Lake	✓	Shannon
Longford	D0060-01	Pass			16,666	20,000	Secondary & nutrient	River	✓	Shannon
Newtownforbes	D0317-01	No secondary			1,269	500	Primary	River	✓	Shannon

Louth County Council 2011

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			1,500	1,500	Secondary	Coastal	✓	Neagh Bann
Castlebellingham	D0269-01	Pass			1,603	1,700	Secondary	River		Neagh Bann
Clogherhead	D0265-01	Pass			1,700	2,000	Secondary	Coastal		Neagh Bann
Collon	D0261-01	Pass			1,100	1,200	Secondary	River		Eastern
Drogheda	D0041-01	Pass			90,000	101,000	Secondary	Estuarine	✓ ⁴²	Eastern
Dromiskin	D0264-01	Pass			1,600	2,100	Secondary	River		Neagh Bann
Dundalk	D0053-01	Pass			132,000	179,000	Secondary	Estuarine	✓	Neagh Bann
Dunleer	D0111-01	Pass			2,500	4,300	Secondary	River		Neagh Bann
Knockbridge	D0260-01	Pass			500	1,000	Secondary	River		Neagh Bann
Louth Village	D0263-01	Pass			803	1,200	Secondary	River		Neagh Bann
Tallanstown	D0270-01	Pass			400	1,000	Secondary	River		Neagh Bann
Tullyallen	D0266-01	Pass			1,380	1,800	Secondary	River		Eastern

⁴² Designated as a sensitive area by the Urban Waste Water Treatment (Amendment) Regulations 2010. Nutrient reduction required by 22nd December 2016.

Mayo County Council 2011

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			2,199	4,000	Secondary	Coastal		Western
Achill Sound	D0511-01	Pass ⁴³			569	1,200	Secondary	Coastal		Western
Balla	D0216-01	Pass			884	1,200	Secondary	River		Western
Ballina	D0016-01	Pass			12,098	25,000	Secondary & nutrient	Estuarine		Western
Ballindine	D0355-01	Pass			706	730	Secondary & nutrient	River		Western
Ballinrobe	D0070-01	Pass			8,499	8,000	Secondary & nutrient	River		Western
Ballycastle	D0356-01	Pass			340	600	Secondary	River		Western
Ballyhaunis	D0069-01	Pass			5,044	4,000	Secondary & nutrient	River		Western
Bangor Erris	D0215-01	Fail	Quality		583	1,080	Secondary	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	Fail	Quality		26,794	35,000	Secondary & nutrient	River	✓	Western
Charlestown	D0214-01	Fail	Quality	✓	1,356	1,200	Secondary	River		Western
Claremorris	D0071-01	Pass			3,051	5,333	Secondary & nutrient	River		Western
Cong	D0066-01	Pass			944	2,024	Secondary & nutrient	Lake		Western
Crossmolina	D0073-01	Pass			2,154	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.	✓	450	700	Secondary	Estuarine		Western
Kilkelly	D0357-01	Pass			500	900	Secondary	River		Western

⁴³ This refers to the performance of the new treatment plant, which was commissioned in August 2011. The assessment is based on 4 samples taken between September and December 2011.

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
Killala	D0067-01	No secondary			1,500		No treatment	Coastal		Western
Kilmaine	D0361-01	Pass			170	800	Secondary	River		Western
Kiltimagh	D0217-01	Fail	Quality		1,807	3,333	Secondary & nutrient	River		Western
Knock	D0065-01	Pass			661	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
Louisborough	D0220-01	Fail	Quality		392	1,000	Secondary	River		Western
Mallaranny	D0218-01	Pass			486	1,017	Secondary	Coastal		Western
Newport	D0224-01	No secondary			408	1,287	Primary	Estuarine		Western
Shrule	D0359-01	Pass			391	600	Secondary	River		Western
Swinford	D0068-01	Pass			3,000	6,500	Secondary & nutrient	River		Western
Westport	D0055-01	Pass			11,826	15,042	Secondary & nutrient	Coastal		Western

Meath County Council 2011

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	River		Eastern
Ballivor	D0254-01	Pass			1,929	2,000	Secondary & nutrient	River		Eastern
Carlanstown	D0488-01	Pass			604	600	Secondary & nutrient	River		Eastern
Crossakeel	D0484-01	Pass			275	450	Secondary	River		Eastern
Donore	D0251-01	Pass			726	1,200	Secondary	River	✓	Eastern
Drumconrath	D0483-01	Fail	Sample no.		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 (Johnstown Br.)	D0131-01	Pass			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	Pass			1,845	1,500	Secondary & nutrient	River		Eastern
Moynalty	D0491-01	Pass			244	800	Secondary & nutrient	River		Eastern
Navan	D0059-01	Fail	Sample no.		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	River		Shannon
Rathmolyon	D0490-01	Pass			377	800	Secondary & nutrient	River		Eastern
Slane	D0257-01	Fail	Sample no.		1,786	2,250	Secondary	River		Eastern
Stamullen	D0262-01	Pass			2,089	2,300	Secondary & nutrient	River		Eastern
Summerhill	D0259-01	Fail	Sample no.		975	3,000	Secondary	River		Eastern
Trim	D0137-01	Pass			8,649	12,000	Secondary & nutrient	River		Eastern

Note: The results from Kilcloon are not presented as the Waste Water Discharge Licence application for this agglomeration was withdrawn.

Monaghan County Council 2011

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	Fail	Sample no.		220	1,000	Secondary	River	✓	Neagh Bann
Monaghan	D0061-01	Pass			18,500	43,833	Secondary & nutrient	River	✓	Neagh Bann
Newbliss	D0458-01	Pass			650	1,000	Secondary & nutrient	River		N. Western
Rockorrey	D0454-01	Fail	Quality		550	1,000	Secondary & nutrient	River		N. Western
Scotstown	D0494-01	Pass			520	1,000	Secondary & nutrient	River		Neagh Bann
Smithboro	D0464-01	Fail	Sample no.		590	750	Secondary	River		N. Western

The results from Annyalla, Doohamlet and Scotshouse are not presented as the Waste Water Discharge Licence applications for these agglomerations were withdrawn.

Offaly County Council 2011

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	Pass			500	1,000	Secondary	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	4,500	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	Quality		814	1,000	Secondary	River		Shannon
Tullamore	D0039-01	Pass			25,000	16,000	Secondary & nutrient	River	✓	Shannon

Roscommon County Council 2011

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			2,472	2,500	Secondary & nutrient	River		Shannon
Ballinlough	D0378-01	Pass			675	800	Secondary & nutrient	Lake		Shannon
Ballyleague	D0229-01	Pass			981	1,000	Secondary	Lake	✓	Shannon
Boyle	D0121-01	Pass			5,338	6,000	Secondary & nutrient	River		Shannon
Castlerea	D0118-01	Pass			4,233	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	Quality	✓	372	800	Secondary	Lake	✓	Shannon
Monksland	D0042-01	Fail	Quality & sample no.		11,833	14,381	Secondary & nutrient	River		Shannon
Roosky	D0408-01	Fail	Sample no.		1,536	2,600	Secondary & nutrient	River		Shannon
Roscommon	D0116-01	Pass			5,417	9,550	Secondary & nutrient	River	✓	Shannon
Strokestown	D0228-01	Pass			1,923	1,000	Secondary	River		Shannon
Tarmonbarry	D0524-01	Fail	Sample no.		500	600	Secondary	River	✓	Shannon

Sligo County Council 2011

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	Pass			2,553	3,000	Secondary	River		Western
Carney	D0393-01	Pass			107	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	Fail	Quality		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			667	2,500	Secondary & nutrient	River		Western
Mullaghmore	D0239-01	No secondary			940	320	Primary	Coastal		N. Western
Riverstown	D0383-01	Pass			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	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

North Tipperary County Council 2011

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			3,325	4,000	Secondary & nutrient	River		Shannon
Borrisokane	D0326-01	Pass			1,033	1,500	Secondary	River		Shannon
Borrisoleigh	D0323-01	Pass			1,042	2,000	Secondary & nutrient	River		South Eastern
Cloughjordan	D0475-01	Fail	Quality	✓	184	500	Secondary	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			15,096	18,000	Secondary & nutrient	River	✓	Shannon
Newport	D0325-01	Pass			1,162	1,900	Secondary	River		Shannon
Roscrea	D0025-01	Fail	Quality		13,454	26,000	Secondary & nutrient	River	✓	Shannon
Templemore	D0190-01	Pass			1,592	6,000	Secondary & nutrient	River	✓	South Eastern
Thurles	D0026-01	Pass			9,602	15,000	Secondary & nutrient	River	✓	South Eastern
Twomileborris	D0474-01	Pass			600	800	Secondary	River		South Eastern

South Tipperary County Council 2011

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	River	✓	South Eastern
Cahir	D0167-01	Pass			4,390	5,000	Secondary	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	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	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 2011

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	Fail ⁴⁴	Quality		63,114	190,600	Secondary	Estuarine		South Eastern

Waterford County Council 2011

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			1,731		Preliminary	Coastal		South Eastern
Cappoquin	D0272-01	No secondary			1,668	950	Primary	River	✓	S. Western
Dungarvan ⁴⁵	D0017-01	Pass			14,500	25,000	Secondary	Coastal		South Eastern
Dunmore East	D0170-01	No secondary			5,740		No treatment	Coastal		South Eastern
Kilmacthomas	D0275-01	No secondary			1,192	600	Primary	River		South Eastern
Lismore	D0176-01	Fail	Sample no.		1,807	2,161	Secondary	River	✓	S. Western
Portlawn	D0274-01	Fail	Quality		1,500	1,750	Secondary	River	✓	South Eastern
Ring-Helvick-Ballinagoul	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	1,450	Primary	River	✓	S. Western
Tramore	D0015-01	Pass			12,630	20,000	Secondary	Coastal		South Eastern

⁴⁴ Fail due to 1 of 253 samples exceeding the upper limit for total suspended solids. The Directive sets a limit for this parameter but notes that the requirement is optional.

⁴⁵ The Ballinroad discharge was discontinued during 2011 and waste water from the Ballinroad catchment was conveyed to Dungarvan for treatment.

Westmeath County Council 2011

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			32,632	30,000	Secondary & nutrient	River	✓	Shannon
Ballymore	D0509-01	Fail	Quality		400	500	Secondary	River		Shannon
Ballynacarrigy	D0482-01	Fail	Quality		400	600	Secondary & nutrient	River		Shannon
Castlepollard	D0105-01	Pass			2,000	6,500	Secondary & nutrient	River		Shannon
Clonmellon	D0271-01	Fail	Quality		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	Fail	Quality		2,005	2,250	Secondary	River	✓	Shannon
Killucan	D0100-01	Pass			712	2,500	Secondary & nutrient	River		Eastern
Kinnegad	D0104-01	Pass			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	Fail	Quality		727	2,000	Secondary & nutrient	River	✓	Shannon

Wexford County Council 2011

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	Pass			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	Fail	Quality		613	650	Secondary	River		South Eastern
Coolgreany	D0174-01	Pass			546	2,400	Secondary	River		South Eastern
Courtown	D0046-01	Fail	Quality		12,000	12,000	Secondary	Coastal		South Eastern
Gorey		Fail	Quality		5,000	5,000	Secondary & nutrient	River		
Duncannon	D0245-01	No secondary			1,172		No treatment	Coastal		South Eastern
Enniscorthy	D0029-01	Pass			15,900	16,500	Secondary	Estuarine	✓	South Eastern
Kilagoley		Fail	Quality	✓	1,316	850	Secondary	River	✓	
Ferns	D0169-01	Fail	Quality		1,808	2,150	Secondary & nutrient	River		South Eastern
Fethard-on-Sea	D0241-01	No secondary			912	500	Primary	Estuarine		South Eastern
Kilmore Quay	D0232-01	No secondary			1,386		No treatment	Coastal		South Eastern
Kilmuckridge	D0161-01	Pass			1,686	2,000	Secondary	River		South Eastern
New Ross	D0036-01	Fail	Quality		16,000	16,000	Secondary	Estuarine		South Eastern
Piercetown	D0406-01	Fail	Quality		785	800	Secondary & nutrient	River		South Eastern

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
Rosslare Harbour	D0165-01	Pass			3,938	9,400	Secondary	Coastal		South Eastern
Rosslare Strand	D0173-01	Fail	Quality		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

Wicklow County Council 2011

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	Fail	Quality & sample no.		1,314	1,200	Secondary	River		Eastern
Avoca	D0411-01	No secondary			1,214	500	Primary	River		Eastern
Ballinaclesh	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	D0005-01	No secondary			35,000	40,000	Preliminary ⁴⁶	Coastal		Eastern
Carnew	D0064-01	Pass			2,938	2,400	Secondary	River		South Eastern
Milltown Dunlavin: Logatryna	D0476-01	Fail	Sample no.		581	600	Secondary	River		South Eastern
		Fail	Quality & sample no.	✓	1,378	300	Secondary			
Enniskerry	D0088-01	Pass			5,183	6,000	Secondary & nutrient	River		Eastern
Greystones	D0010-01	Pass			34,972	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 –new	D0086-01	Pass			2,275	3,500	Secondary & nutrient	River		Eastern
Rathdrum -old		No secondary			30	500	Primary			
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	Fail	Quality		550	800	Secondary	River		South Eastern
Stratford	D0477-01	Fail	Quality & sample no.	✓	275	600	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

⁴⁶ This urban area was connected to the secondary treatment plant at Shanganagh during 2012.