

Annex A

Regulation of Water Utility Sector Discharges 2014 and 2015

Produced by:
Northern Ireland Environment Agency
Water Management Unit
17 Antrim Road
Tonagh
Lisburn, BT28 2AL
Tel: (028) 9262 3100

www.ni-environment.gov.uk

Water Utility Regulation Summary Report 2014/2015

This summary report presents the compliance of Water Utility Sector discharges with relevant European standards and NIEA Water Order consents. This includes the compliance assessment of discharges from Northern Ireland Water Limited (NIW) and Public Private Partnership (PPP) contractors. It shows the trends in compliance with the standards between 2007 and 2015. Enforcement action on non-compliance issues carried out during 2014 and 2015 are also included.

The Water Utility compliance was assessed against numeric standards set for discharges from Waste Water Treatment Works (WWTW), serving a population equivalent (pe) greater than 249, for the descriptive standards of coastal works serving a population equivalent (pe) greater than 249 and for numeric standards from Water Treatment Works (WTW).

Numeric Water Order Compliance

Compliance of WWTW against the numeric conditions of their Water Order (WO) consent is a key performance indicator (KPI) for the Water Utility Sector and has improved since 2007, having reached a peak of 93% in 2011. There was a slight drop in compliance to 92% in 2013 and 2014; but this increased to 93% in 2015. NI Water has continued to outperform the PC13 compliance target of 91.0% set by the Utility Regulator (NIAUR) for this measure. In 2014 it was introduced that if a WWTW did not pass its UWWTD compliance assessment then it would be considered to have failed its Water Order Consent compliance assessment. This is because UWWTD compliance is a Consent condition and this change brings compliance assessment in NIEA into line with the rest of the UK.

Table 1: Summary of Compliance of Water Utility Sector WWTW

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of WWTWs serving PEs greater than 249 with numeric standards	244	232	231	237	238	239	237	236	236
Water Utility Sector WWTW compliance with numeric standards	84%	86%	87%	89%	93%	93%	92%	92%	93%

18 and 17 WWTW were non-compliant with their numeric standards in 2014 and 2015 consecutively (see Annex 1, Table 1).

The percentage of population equivalent (pe) served by compliant WWTWs

The pe is a measure of the organic biodegradable load of the population served by a WWTW.

Consent compliance is normally based on a failure to meet the 95-percentile (95%ile) standard and/or an upper tier standard. Compliance with the 95%ile is assessed with the “look-up table” set out in the Urban Waste Water Treatment Regulations (Northern Ireland) 2007 (UWWT Regulations), which specify the maximum number of failing samples allowed, depending on the total number of samples taken.

Upper Tier Standards have been set where the UWWT Regulations apply or where there is limited dilution available in the receiving waterway. The Upper Tier is an absolute standard that must not be exceeded at any time. A single exceedence of an Upper Tier standard anytime during the year will result in the works being non-compliant for the whole of that year.

This KPI target is only required by the Utility Regulator to include non compliance against the 95%ile standards. In 2014, 98% of the total pe was served by compliant works rising to 99% in 2015. The compliance figure for 2013 was 98%. NI Water has continued to outperform the PC13 compliance target of 97.80% set by the Utility Regulator (NIAUR) for this measure.

Compliance with the Urban Waste Water Treatment Regulations

Numeric compliance has also been assessed against the requirements of the Urban Waste Water Treatment (UWWT) Regulations (Northern Ireland) 2007 for the 78 WWTW that qualified under the Regulations in 2014 and 78 in 2015.

Compliance with this KPI improved since 2007 and peaked in 2013 (98%). Compliance dropped to 96% in 2014 and rose to 97% in 2015. There were 3 non-compliant WWTW in 2014 and 2 in 2015. (See Annex 1, Table 2)

Table 2: Numeric Compliance 2007-2015 for all UWWT Regulation WWTWs

YEAR	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of NIW discharges	80	77	74	79	79	79	79	78	77
Water Utility Sector compliance	86%	92%	93%	94%	96%	98%	98%	96%	97%

The percentage of population equivalent (pe) served by WWTW compliant with the UWWT Regulations

In 2010, 97% of the total pe served by UWWTD works was compliant against the standards within the UWWT Regulations, as assessed against the look-up table (95%ile) within the Regulations. This peaked at 99% in 2011, dropped to 98% in 2014 and returned to 99% in 2015.

Compliance of WWTWs with Descriptive Consents (Coastal)

The number of coastal works with descriptive standards has reduced from 17 in 2014 to 15 in 2015 due to investment and consolidation of WWTW by NIW at Ballymartin WWTW and the new Magilligan WWTW (Drumavalley WWTW). WWTW with pe of 250-10,000 that discharge to coastal waters are issued with Descriptive Consent conditions and are assessed as being compliant where the appropriate treatment is in place. Since 2007 the level of compliance has increased from 48% to 100% in 2015.

Table 3: Descriptive Compliance for 2007-2015

YEAR	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of descriptive (coastal) works	23	23	22	22	22	18	18	17	15
NIW Percentage compliance of descriptive works	48%	61%	64%	64%	73%	83%	89%	94%	100%

Water Treatment Works Compliance

As shown in Table 4 compliance has improved for the discharges from NIW Water Treatment Works (WTW) and those works operated under PPP contracts. Compliance levels reached 100% in 2013 and were maintained during 2014 and 2015.

Table 4: Compliance for Water Utility Sector WTW 2007-2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of WTW (NIW/PPP) on the Public Register	26	28	26	23	22	22	22	22	22
Percentage of compliant WTW (NIW/PPP) discharges	50%	64%	81%	96%	96%	95%	100%	100%	100%

Enforcement Action

Failure to comply with the conditions of a consent may result in enforcement action. Enforcement action can take the form of either a warning letter, or statutory notice or a file can be submitted to the Public Prosecution Service. The choice of enforcement action will be dependent upon the severity of the consent breach.

NIEA issued a number of warning letters, postal cautions and enforcement notices as a result of non-compliance in 2014 and 2015.

Table 5: Summary of Enforcement action for Non-Compliance in 2015

Year	No of advisory/Warning letters issued	No of postal cautions issued	No of enforcement notices issued
2014	14	7	16
2015	27	14	8

Enforcement action, often in the form of prosecutions, is also taken where NIW has been identified as the cause of a high or medium severity water pollution incident.

Annex 1

Table 1: Summary of WWTW that did not meet their Water Order Numeric Consent Conditions in 2014 and 2015

WATER ORDER CONSENT COMPLIANCE 2014								
NAME OF WORKS	BOD		SS		Ammonia		Total P	Total N
	mg/l		mg/l		mg/l		mg/l	mg/l
	95 %ile	U/T	95 %ile	U/T	95 %ile	U/T	Annual Mean	Annual Mean
Ardglass	X		X					
Ballycastle	X	X	X					
Ballyvoy	X		X		X			
Carrowdore	X		X		X			
Derrygonnelly*								
Downpatrick**								
Dromore (Down)				X				
Grange (Taylorstown)					X			
Hillsborough	X	X	X	X	X	X		
Irvinestown				X				
Kilmore					X			
Lisnarrick					X			
Monea	X		X		X			
Moneyreagh			X	X				
Moy		X		X				
Mullans (Antrim)	X		X		X			
Newtownstewart					X			
Portaferry			X					

Key:

- Standard does not apply
- BOD Biochemical Oxygen Demand
- SS Suspended solids
- P Phosphorus
- N Nitrogen
- 95%ile 95-percentile standard
- U/T Upper Tier standard
- X Indicates failure to comply with the standard

WATER ORDER CONSENT COMPLIANCE 2015								
NAME OF WORKS	BOD		SS		Ammonia		Total P	Total N
	mg/l		mg/l		mg/l		mg/l	mg/l
	95 %ile	U/T	95 %ile	U/T	95 %ile	U/T	Annual Mean	Annual Mean
Ardglass	X		X					
Ballycastle	X	X	X					
Ballygowan	X		X	X	X	X		
Ballyvoy	X		X		X			
Carrowdore	X		X		X			
Clabby			X					
Coalisland				X				
Galbally	X		X		X			
Garrison							X	
Grange					X			
Killygonlin	X		X					
Kilmore	X		X		X			
Maghaberry	X	X						
Monea	X		X		X			
Moy		X						
Mullans (Antrim)					X			
Ringneill			X					

Key:



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Table 2: WWTW Non-Compliant with the numeric standards of the UWWT Regulations in 2014 and 2015

Name of Works	Failing Parameters in 2014						
	BOD 95%ile	BOD U/T	COD 95%ile	COD U/T	Total P Annual Average	Total N Annual Average	Insufficient Treatment
Ballycastle	X	X	X	X			X
Downpatrick				X			
Hillsborough		X					

Name of Works	Failing Parameters in 2015						
	BOD 95%ile	BOD U/T	COD 95%ile	COD U/T	Total P Annual Average	Total N Annual Average	Insufficient Treatment
Ballycastle	X	X	X	X			X
Moy		X		X			

Key:

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