

Regulation of Water Utility Sector Discharges 2009

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This summary report presents the compliance of Water Utility Sector discharges with relevant European standards and NIEA Water Order consents. It shows the trends in compliance with standards between 2005 and 2009. Prior to April 2007 Northern Ireland Water (NIW) was known as The Water Service and as an Agency of the Department for Regional Development was not required to have discharge consents. Compliance was assessed against Registered Standards which were the equivalent of consent conditions although not enforceable under the Water (Northern Ireland) Order 1999.

In 2009 NIW compliance was assessed against numeric standards set for discharges from 227 Waste Water Treatment Works (WWTW), serving a population equivalent (PE) greater than 249, for the descriptive standards of 22 coastal works and for numeric standards from 21 Water Treatment Works (WTW). Numeric compliance was also assessed in 2009 for 4 WWTWs and 5 WTWs operated under Public Private Partnership (PPP) contracts.

Table 1: Summary of Compliance of Water Utility Sector WWTWs

	2005	2006	2007	2008	2009
Number of NIW WWTWs serving PEs greater than 249	279	287	266	253	227
Percentage of NIW discharges complying with numeric standards	80%	88%	87%	91%	87%
Percentage of NIW discharges complying with descriptive standards	100%	32%	48%	61%	64%
Overall NIW compliance with discharge standards	82%	84%	84%	88%	88%
Number of PPP WWTWs serving PE's greater than 249	1	1	1	2	4
PPP compliance with discharge standards	100%	100%	100%	100%	100%
Overall Water Utility Sector WWTW compliance with discharge standards	82%	84%	84%	88%	88%


The overall Water Utility Sector compliance of WWTWs, in 2009, remains at 88%. Table 2 sets out the reasons for failures.

Table 2: Summary of WWTWs that did not meet their Water Order Numeric Consent Conditions in 2009

WATER ORDER CONSENT COMPLIANCE 2009								
NAME OF WORKS	BOD		SS		Ammonia		Total P	Total Coliform
	mg/l		mg/l		mg/l		mg/l	Counts per 100/ml
	95 %ile	U/T	95 %ile	U/T	95 %ile	U/T	Annual Mean	95 %ile
ARDGLASS	X		X					
BALLYBOGEY	X		X		X			
BALLYCASTLE**								
BALLYKELLY	X		X	X				
BALLYMONIE			X					
BANBRIDGE				X		X	X	
BELLANALECK	X		X					
CASTLEDAWSON	X							
CASTLEDERG		X			X			
CLABBY	X		X					
DRUMSURN	X							
DUNGIVEN	X	X						
FEENY	X							
GLASSDRUMMAN Annalong	X		X					
LISBARNET	X		X		X			
MOIRA	X							
MOYGASHEL				X				
NEWMILLS					X			
NEWRY		X						
PARKGATE	X							
PORTAFERRY			X	X				X
PORTAVOGIE	X		X					
POUNDBURN	X							

** Insufficient data provided to assess compliance

Key:

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

Numeric compliance has also been assessed against the requirements of the Urban Waste Water Treatment (UWWT) Regulations (Northern Ireland) 2007 for the 74 WWTWs that qualified under the Regulations in 2009. Compliance has consistently improved since 2005 and now stands at 93%.


Table 3: Numeric Compliance 2005-2009 for all UWWT Regulation WWTWs

YEAR	2005	2006	2007	2008	2009
Number of NIW discharges	34	77	79	75	70
NIW Percentage compliance	62%	77%	86%	92%	93%
Number of PPP discharges	1	1	1	2	4
PPP Percentage compliance	100%	100%	100%	100%	100%
Water Utility Sector compliance	63%	77%	86%	92%	93%

Table 4: WWTWs Non-Compliant with the numeric standards of the UWWT Regulations in 2009

Name of Works	Failing Parameters						
	BOD 95%ile	BOD U/T	COD 95%ile	COD U/T	Total P Annual Average	Total N Annual Average	Insufficient Sample
Ballycastle	X	X					X
Ballykelly		X	X				
Benone	X	X	X	X			
Downpatrick						X	
Maghaberry		X					

Key:

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

Historically Water Treatment Works (WTW) compliance of Registered Standards was calculated against the number of individual discharges but from April 2007 this was assessed against the number of WTWs with Water Order consents. Compliance as shown in table 5 continues to improve and has reached 81% over all in 2009 with NIW achieving 76% compliance. The non-compliance reasons are detailed in table 6.


Table 5: Numeric Compliance for Water Utility Sector WTWs 2005-2009

	2005	2006	2007	2008	2009
Number of WTW (NIW/PPP) on the Public Register	28	31	26	28	26
Percentage of WTW (NIW/PPP) discharges complying	43%	38%	50%	64%	81%

Table 6: WTW Non-Compliant with their Water Order Consent in 2009

Name of Works	SS	Al	Al (Sol)	Fe	Fe (Sol)	Cl	BOD	pH	Insufficient Samples
Altnahinch		X							
Belleek		X							
Clay lake									X
Dorisland				X					
Killylane		X							

Key:

	Standard does not apply
SS	Suspended solids
Al/Al (Sol)	Aluminium total/Aluminium soluble
Fe/Fe(Sol)	Iron total/Iron soluble
Cl	Chlorine
BOD	Biochemical Oxygen Demand
X	Indicates failure to comply with the standard

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, pre-enforcement and enforcement notices as a result of breaches of consent in 2009.

Table 7: Summary of Enforcement action for Consent Breaches in 2009.

Type of Consent Breach	No of Warning Letters/postal cautions issued	No of Pre-Enforcement Notice issued	No of Enforcement Notices issued
Coastal Descriptive	2		2
UWWTD	5		
Numeric WWTW	26	5	1
WTW	7		