

Water Utility Discharge Compliance 2008

This summary report details the compliance of the Water Utility Sector discharges with relevant European standards and NIEA Water Order consents. It presents the trends in compliance with standards between 2004 and 2008. Prior to April 2007 Northern Ireland Water (NIW) was known as The Water Service and compliance was assessed against Registered Standards.

In 2008 NIW compliance was assessed against numeric standards set for discharges from 230 Waste Water Treatment Works (WWTW), serving a population equivalent (pe) greater than 250, and against descriptive standards for 23 coastal works and numeric standards from 28 Water Treatment Works (WTW).

Compliance was also assessed in 2008 for the two Public Private Partnership (PPP) schemes for wastewater treatment; Kinnegar and the new North Down and Ards works serving Bangor, Donaghadee and Millisle.

Table 1: Summary of Compliance of Water Utility Sector WWTWs


	2004	2005	2006	2007	2008
Number of NIW WWTWs serving PEs greater than 249	276	279	287	266	253
Percentage of NIW discharges complying with numeric standards	77%	80%	88%	87%	91%
Percentage of NIW discharges complying with descriptive standards	100%	100%	32%	48%	61%
Overall NIW compliance with discharge standards	80%	82%	84%	84%	88%
Number of PPP WWTWs serving PE's greater than 249	1	1	1	1	2
PPP compliance with discharge standards	100%	100%	100%	100%	100%
Overall Water Utility Sector compliance with discharge standards	80%	82%	84%	84%	88%

Table 2: Summary of WWTWs that did not meet their Water Order Consent Conditions in 2008

WATER ORDER CONSENT COMPLIANCE 2008						
NAME OF WORKS	BIOCHEMICAL OXYGEN DEMAND mg/l		SUSPENDED SOLIDS mg/l		AMMONIA mg/l	
	95 % ile	U/T	95% ile	U/T	95% ile	U/T
ARDGLASS	X		X			
BALLYBOGEY	X		X		X	
BALLYCASTLE**	X	X	X	X		
BALLYMONEY GLENSTALL				X		
BALLYNAHINCH				X		
BALLYRICKARD	X					
BELLANALECK	X		X			
BUSH					X	
DERRYTRASNA					X	
DROMARA	X					
FEENY	X					
GLASSDRUMMAN (ANNALONG)	X		X			
GREENCASTLE			X		X	
KILLYMAN	X				X	
LISBARNET	X		X		X	
NEWRY	X	X		X		
PARKGATE	X		X			
PORTAVOGIE	X		X			
POUNDBURN	X				X	
RATHFRILAND		X			X	
SAINTFIELD	X	X	X			
STONEYFORD					X	

** Insufficient data provided to assess compliance

Key:

-  Standard does not apply
- 95% ile - 95-percentile standard
- U/T - Upper Tier standard

Numeric compliance has also been assessed against the requirements of the Urban Waste Water Treatment (UWWT) Regulations (Northern Ireland) 2007 for the 77 WWTWs that qualified under the Regulations in 2008.

Table 3: Numeric Compliance for all UWWT Directive WWTW 2004-2008

YEAR	2004	2005	2006	2007	2008
Number of NIW discharges	35	34	77	79	75
NIW Percentage compliance	43%	62%	77%	86%	92%
Number of PPP discharges	1	1	1	1	2
PPP Percentage compliance	100%	100%	100%	100%	100%
Water Utility Sector compliance	44%	63%	77%	86%	92%

Table 4: NIW WWTW Non-Compliant with the Standards of the UWWT Regulations in 2008

Name of Works	Failing Parameters						
	BOD 95%ile Limit (25 mg/l)	BOD Upper Tier (50 mg/l)	COD 95%ile Limit (125 mg/l)	COD Upper Tier (250 mg/l)	Total P Annual Average (2 mg/l)¹	Total N Annual Average (15 mg/l)²	Insufficient Sample
*Ballycastle	X	X		X			X
Benone	X	X	X	X			
Maghera	X						
Newry	X	X		X			
Saintfield	X	X	X	X			
Tullaghgarley					X		

Key:

* The required level of treatment was not in place as of January 2008.

■ Standard does not apply

95% ile - 95-percentile standard

X indicates failure to comply with the standard

P phosphorus

N nitrogen

¹ Total phosphorus standard is 1 mg/l for WWTW of more than 100,000 p.e.

² Total nitrogen standard is 10 mg/l for WWTW of more than 100,000 p.e.

Historically WTW compliance under 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.

Table 5: Numeric Compliance for WTWs 2004-2008

	2004	2005	2006	2007	2008
Number of WTW on the Public Register	30	28	31	26	28
Percentage of WTW discharges complying	40%	43%	38%	50%	64%

Table 6: WTW Non-Compliant with their Water Order Consent in 2008

Name of Works	SS	Al	Al (Sol)	Fe	Fe (Sol)	Cl	BOD	pH	Insufficient Samples
Ballinrees	X	X							X
Ballysallagh	X								
Carmoney B									X
Carran Hill		X							X
Caugh Hill									X
Dorisland									X
Dunore Point B	X						X		
Forked Bridge B									X
Forked Bridge C									X
Lough Cowey A	X	X							
Lough Macrory A		X							

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, 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 and pre-enforcement notices as a result of breaches of consent in 2008. A warning letter highlights the consent breach and warns the offender of the consequences of any further breaches. A pre-enforcement notice can state a date by which any work required to prevent any further consent breaches must be completed. A pre-enforcement notice also warns the offender of the possible consequences of failing to adhere to the requirements of the pre-notice.

Table 7: Summary of Enforcement action for WWTW >250 PE and WTWs

Type of Consent Breach	No of Warning Letters issued	No of Pre-Enforcement Notice issued
Coastal Descriptive WOC	6	2
UWWTD	2	2
Numeric WOC	34	5
WTW WOC	13	1