

Regulation of Northern Ireland Water

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Introduction

- Water Utility Regulation within NIEA
- Water Reform
- Legislative Background
- Principles of Regulation
- Discharge Consents
- Compliance within the catchment

NIEA

Environmental Protection Directorate

Water Management Unit

- Business
- Water Resources
- River Basin Planning
- Operations
- Industrial & Agricultural
- Freshwater
- Water Chemistry
- **Water Utility Regulation**
- Marine Monitoring & Assessment

Water Utility Regulation Group

- Issue Discharge Consents to water utilities
- Monitor Consent Compliance
- Input to NIW investment planning process
- Provide advice to Planning Service

Implementation of Water Reform

- Transfer of responsibility for water and sewerage services to NIW on 1 April 2007
- Commercial basis
- Regulation of economic and service delivery matters
 - NIAUR
- Environmental Regulation
 - NIEA
- Consumer Council
 - Statutory consumer representative for water and sewerage services in Northern Ireland

Water Reform - NIWL Regulation

- Bring NIWL within a normal regulatory regime
 - All discharges to have Water Order Consents
 - Removal of “Crown Immunity”
 - Exposed to full enforcement policy on breach of consent condition or the making of an illegal discharge

Legislation

- The Water (Northern Ireland) Order 1999
 - Duty to promote conservation and cleanliness of water resources.
- The Water and Sewerage Services (Northern Ireland) Order 2006
 - Duty for Water Service to provide water and sewerage services
- The Urban Waste Water Treatment Regulations (Northern Ireland) 2007
 - Minimum standards for the provision of collection systems and the treatment of waste water discharges
- Sludge (Use in Agriculture) Regulations (Northern Ireland) 1991
 - Controls on the application of sewage sludge to farm land.

Additional Legislation

- The Bathing Water Directive (76/160/EEC)
- The Freshwater Fish Directive (78/659/EEC)
- The Shellfish Waters Directive (79/923/EEC)
- The Shellfish Hygiene Directive (91/492/EEC)
- The Dangerous Substances Directive + Daughter Directives
- The Habitats Directive (92/43/EEC)
- The Birds Directive (79/409/EEC)
- The Nitrates Directive (91/676/EEC)
- The Water Framework Directive

Water (NI) Order 1999

- Person commits an offence if he discharges or deposits any poisonous, noxious or polluting matter so that it enters a waterway
- Person commits an offence if he discharges any trade or sewage effluent into a waterway, from land through a pipe or into the sea
- Person who contravenes the conditions of any consent shall be guilty of an offence

Exceptions

- Person not guilty if:-
 - Discharge made in emergency in order to avoid danger to life or health
 - Reasonable steps taken to minimise extent of discharge and its polluting effects
 - Particulars of the discharge are furnished to the Dept. as soon as reasonably practical after it occurs
 - Complying with consent

Enforcement and Prosecution Policy

- Principles governing enforcement
 - Consistent
 - Impartial between industrial sectors, race, religion etc.
 - Proportionate
 - Proportionate to the risks posed to the environment and to the seriousness of the breach of the law.
 - Transparent
 - Discussions followed by written confirmation of enforcement action and the rights of appeal

Principles for Regulation of NIW

- NIW no longer has “crown immunity
- NIW is subject to NIEA’s Enforcement and Prosecution Policy – including prosecution where appropriate
- NIW has inherited assets that have suffered from significant under-investment
- It will take a number of years to bring the infrastructure up to the required standard
- There is information on the deficiencies
- This information can be used to drive improvements

Types of Discharge

- Waste Water Treatment Works Effluent
- Intermittent Discharges from the Sewerage System
- Waste Water from Water Treatment Works
- Waste from Reservoir Cleaning / Mains Flushing

Discharge Consents

- WWTWs p.e. >250 – Numeric Consents
 - Numeric standards for specific parameters
- WWTWs p.e. <250 p.e. – Descriptive Consents
 - Specify the appropriate treatment
 - Require a maintenance programme
 - Maximum flow and maximum dry weather flow
 - Specify a screening requirement
- Sewer Systems – Non-Numeric Consents
 - Drainage Area Studies
 - Statement of Need
 - Drainage Area Plan
 - Formal Agreement
 - Implementation

Setting Numeric Discharge Standards

- Monte Carlo Simulation
 - Industry accepted method
 - Provides information on the likely impacts of discharges on water quality
 - Inputs
 - Concentration of pollutant in the discharge (mean and std. dev.)
 - Upstream flow (mean and Q95 low flow)
 - River quality (mean and std. dev.)
 - Discharge volume (mean and std. dev.)
 - Coefficient of variation (0.5 for BOD and 0.7 for ammonia)
 - Outputs
 - Downstream concentration of the pollutant
 - Can be used in reverse to calculate standards

Descriptive Consent Standards

- Discharges to inland waters require secondary treatment
- Meet the requirements of the Urban Waste Water Treatment Directive
- Require maintenance to be undertaken and documented
- Works must be operated to minimise the polluting effects of the discharge
- For new works operator must demonstrate that the works is capable of meeting its design standard
- Access for inspection must be provided
- Any change in nature of the discharge to be notified to NIEA
- Flow measurement must be provided on request

Lower Foyle Catchment

Satisfactory Works

Donnybrewer

Greysteel

Culmore

Drumahoe

Magheramason

Ballymagorry

Artigarvan

Benone

Donemana

Claudy

Feeny

Dungiven

Ballymonie

Dernaflaw

Drumsum

Limavady

Ballykelly

Strabane

Gortnahey

Bonnanaboigh

Park

Lower Foyle Catchment

Unsatisfactory Works

Aghanloo 1 & 2

Our aim is to protect, conserve
and promote our natural and built
environment for the benefit of
present and future generations.

