



South Eastern River Basin District Management System

Policy and Legislation Report

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Foreword

This report is prepared to satisfy the requirements of Task No. 1 in the Consultants Brief for the South Eastern River Basin District Monitoring & Management System. Task No. 1 requires the Consultants to prepare a report on background information relating to all relevant legislation at national and EU level, including the Framework Directive.

This report was originally published in November 2002. The report was updated in 2006 to include the changes to legislation that have occurred in the period between 2002 and 2006.

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EXECUTIVE SUMMARY

- This report describes the existing legislation European and National, which is pertinent to the Water Framework Directive and its implementation.
- Prior to the coming into force of the Water Framework Directive, the Principal Acts which empowered the Minister to introduce regulations to implement the requirements of EU Directives relating to water bodies were:
 - European Communities Act, 1972
 - Water Pollution Act, 1977
 - Environmental Protection Act, 1992
 - Waste Management Act, 1996
- The Water Framework Directive stipulated that individual Member States introduced, by 22nd December 2003, laws, regulations and administrative provisions necessary to comply with the Water Framework Directive.
- National Primary Legislation, in the form of European Communities (Water Policy) Regulations, S.I No. 722 of 2003 (amended by S.I. No 413 of 2005) puts in place competent authorities and provides a combined approach for the implementation of the Water Framework Directive.
- The Nitrates Directive has been transposed into Irish Law by the European Communities (Protection of Waters against Pollution from Agricultural Sources) Regulations, S.I. No. 378 of 2006.
- Existing legislation provides for the designation of certain waters that must comply with specific statutory environmental quality standards as a consequence of their particular beneficial uses. Within the South Eastern River Basin District these include:

➤ **Designated Bathing Waters**

<i>County Waterford</i>	Ardmore	<i>County Wexford:</i>	Ballymoney
	Bunmahon		Courtown (North Beach)
	Clonea		Curraclloe
	Dunmore Strand		Duncannon
	Counsellors Strand		Morriscastle
	Tramore		Rosslare Strand

➤ **Salmonid Water**

River Aherlow (subcatchment of the Suir)
River Nore
River Slaney

➤ **Designated Shellfish Water**

Bannow Bay, Wexford

➤ **Sensitive Waters**

<i>Stretches of the River:</i>	Barrow, Laois	<i>Stretches of the Estuary:</i>	Slaney (Upper), Wexford
	Triogue, Laois		Slaney (Lower), Wexford
	Nore, Kilkenny		Barrow, Wexford
	Suir, Tipperary		Suir Estuary (Upper), Waterford
	Suir, Tipperary		Castletown Wexford

In addition the following wildlife areas have been designated:

➤ **Wildlife Designations**

13 Special Protection Areas
45 Special Areas of Conservation

- Legislation is in place to implement many of the requirements of the Water Framework Directive with respect to monitoring, controlling discharges and measures. Powers are available to statutory authorities to further implement the directive by way of new conditions attached to licences and permissions and the introduction of bye-laws.

1.0. INTRODUCTION

1.1 General Introduction

The Water Framework Directive (2000/60/EEC) is the most significant piece of legislation in the field of Water Policy to date. This Directive entered into force on its publication in the Official Journal of the European Communities on 22nd December 2000. This was transposed into Irish Law in December 2003 by the European Communities (Water Policy) Regulations 2003 (S.I. No 722 of 2003). Article 16 was then amended in 2005 (S.I. No. 415 of 2005).

Previous water related legislation in Ireland and Europe has been fragmented and has either been emission control or water quality related. A new and more co-ordinated approach was needed and a major review of EU water policy was undertaken finally resulting in the Water Framework Directive. This 'Umbrella' directive ties together existing legislation while repealing other directives on a phased basis.

The Water Framework Directive establishes a management structure for future European water policy, with the following main objectives:

- Expanding the Scope of water protection to all waters, surface and groundwaters
- Achieving "Good Status" in all waters by 2015 and maintaining "High Status" where it already exists
- Water management based on river basins
- "Combined approach" of emission limit values and quality standards
- Getting the prices right:- Charges for water and waste water reflecting the true costs
- Getting citizens involved more closely in the water management process
- Streamlining legislation

The purpose of this report is to give an overview of European and National legislation relevant to the objective of the South Eastern River Basin District Project with particular emphasis on the Water Framework Directive (WFD). It also identifies the requirements of the WFD and the responsible authorities.

Chapter 2 of the report describes EU and Irish legislative structure and explains how EU directives are subsequently transposed into Irish law. Chapter 3 gives a detailed introduction to EU Water Policy with particular importance given to the Water Framework Directive. This chapter also provides an overview of 'water sector' and 'water related' European Legislation. Chapter 4 describes National policy and legislation in the field of water. A brief synopsis of the legislation is given and the competent Authorities identified. Chapter 5 defines the requirements of the WFD and allocates responsible bodies to fulfil each requirement.

Appendix A sets out the standards for compliance with existing Irish legislation and Appendix B lists Local Authority responsibilities as defined by existing Irish regulations in the water sector. Appendix C lists the competent authorities according to the European Communities (Water Policy) Regulations 2003 (S.I. No 722 of 2003)

2.0 LEGISLATIVE STRUCTURE

2.1. European Law

Treaties are the primary source of European Union law. Treaties set out the fundamental laws of the Union which must be agreed and ratified by the Member states. The European Commission, the Council of the European Union and the European Parliament have shared power to make legislation; the secondary source of European Law. There are four types of secondary legislation:

- **Regulations** apply to all Member States. Once brought into force regulations immediately become part of national law – new Irish legislation is not required to enforce an EU regulation.
- **Directives** are requirements on the Member States to introduce national legislation in order to achieve a specific result. The individual member states identify the form and method of legislation for implementing the Directive. Usually the Directive sets a deadline for implementation of the legislation. The means of achieving the results are largely left to the Member States/Competent Authority in accordance with the Subsidiary Principle.
- **Decisions** usually address a limited defined group of persons or member states. They may also be used to set limits or values for parameters for a directive, e.g., setting the list of priority substances for the WFD.
- **Recommendations** and opinions are not binding.

EU legislation comes into effect on the date which it is published in the Official Journal of the Community. EU legislation is superior to all national legislation therefore Irish legislation must set equal or more stringent requirements.

2.2 National Law

In Irish legislation the procedural vehicles to transpose the various EC directives into Irish law are, Acts of the Oireachtas and secondary or delegated legislation in the form of Statutory Regulations (see Figure 2.1. for EU and National legislative structure).

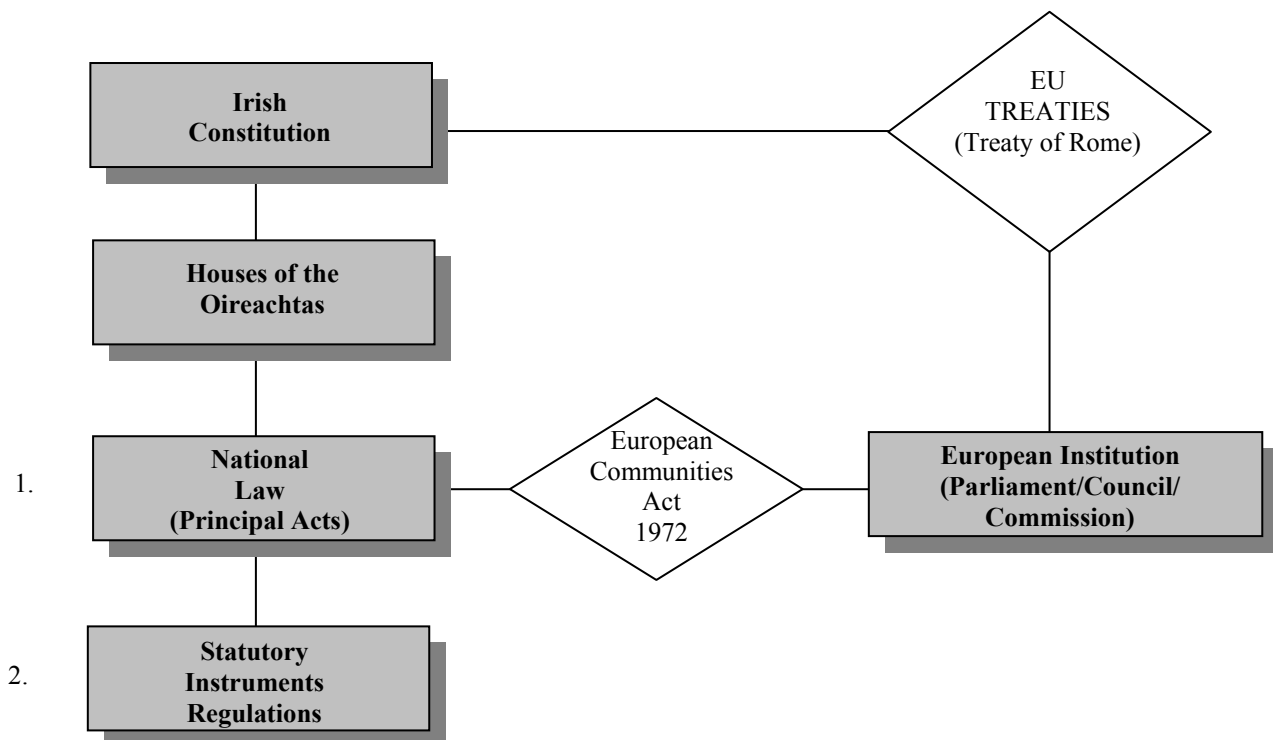
The sole and exclusive power of making laws for the State is vested in the **Oireachtas** subject to the obligations of European Union (the issuing of Directives to Member States) as provided in the Constitution of Ireland. All primary legislation i.e. **Acts of the Oireachtas** start life as Bills which are proposals for legislation.

Before a **Bill** is initiated in the Dáil or Seanad its contents will have been approved by the Government. A process of consultation with Government Departments and groups likely to be affected by the Bill will have taken place beforehand. The Government may publish a Green Paper which will be a discussion document in which it sets out its ideas and invites comment and views from individuals and relevant organisations.

Once both Houses (Dáil & Seanad) have passed a Bill, the Taoiseach presents a copy of the Bill, prepared in the Office of the Houses of the Oireachtas, to the President for signature and promulgation of the Act as a law. The signed text is then enrolled for record in the Office of the Registrar of the Supreme Court.

Secondary legislation, in the form of **Statutory Instruments**, is governed by the Statutory Instruments Act 1947. There are five main types of statutory instruments - orders, regulations, rules, bye-laws and schemes. Statutory instruments have a wide variety of functions. They are not enacted by the Oireachtas. They allow persons or bodies to whom legislative power has been delegated by statute to legislate in relation to detailed day-to-day matters arising from the operation of the relevant primary legislation. Statutory instruments are used, for example, to implement European Council Directives, designate bathing waters, salmonid waters, protected areas, etc. Specified Government Ministers and other agencies and bodies are authorised to make Statutory Instruments.

Figure 2.1. EU and National legislative structure



Notes:

1. The Principal Acts concerning the Water Framework Directive and water management include:
 - European Communities Act, 1972
(Section 2 empowers the Minister to make regulations to give full effect to the Act which includes bringing into force in Irish Law, laws made by the European Parliament).
 - Water Pollution Act, 1977 (as amended in 1990)
(Section 30 of the Act empowers the Minister to make regulations in relation to any matter referred to in the act).
 - Environmental Protection Agency Act, 1992
(Sections 6 and 59 of the Act empowers the Minister to make regulations).
 - Waste Management Act, 1996
(Section 7 of the Waste Management Act empowers the Minister to make regulations).
2. The Minister makes regulations under the powers given to him under the Principal Acts.

3.0 EUROPEAN LEGISLATION

3.1. General Introduction

The ‘first wave’ of European Legislation relating to water occurred in the mid seventies and early eighties. This ‘first wave’ of legislation introduced quality standards for specific types or uses of waters, including the Bathing Water, Freshwater Fish and Shellfish Water Directives. Emission limit control oriented Directives for specific water uses like the Dangerous Substance and Groundwater Directive were also introduced at this time. The ‘second wave’ of legislation came in the early 90’s and included further emission control directives including the Urban Waste Water Directive and the Nitrates Directive.

All these specific Directives were considered inadequate in the context of providing overall protection to water (EU, 2000a). Prior to the Water Framework Directive, the approaches adopted to deal with water pollution had been either based on a Water Quality Objectives (WQO) approach or an Emission Limit Value (ELV)/emission control approach. Both approaches had potential flaws in achieving the overall targets of ensuring the sustainable management of all waters throughout the Community. The Water Framework Directive (WFD) was therefore developed with the objective of achieving “good status” for all waters through the adoption of a combined approach looking both at quality objectives and setting limits on emission values (EU, 2000b). A summary of European Legislation in the Water Protection Sector is given in Table 3.1.

Table 3.1. European Legislation in the Water Protection Sector

Ref. Section	Legislation
3.2	<i>Combined approach</i>
3.2.1	• Water Framework Directive (2000/60/EEC)
3.2.2	• Decision on list of priority substances in the field of water policy and amending directive 2000/60/EC
3.2.3	• Ground Water Directive (2006/118/EC)
3.3	<i>Water Quality Objective oriented:</i>
3.3.1	• Bathing Water Directive (76/160/EEC).
3.3.2	• Directive on Surface Water for Drinking Water Abstraction (75/440/EEC as amended by Directives 79/869/EEC and 91/692/EEC).
3.3.3	• Directive relating to the quality of water intended for human consumption (80/778/EEC)
3.3.4	• Drinking Water Directive (98/83/EC).
3.3.5	• Freshwater Fish Directive (78/659/EEC) as amended by Directive 91/692/EEC).
3.3.6	• Shellfish Water Directive (79/923/EEC as amended by Directive 91/692/EEC).
3.4	<i>Emission-Control oriented:</i>
3.4.1	• Urban Waste Water Treatment Directive (91/271/EEC, as amended by Directive 98/15/EC) and related decision 93/481/EEC.
3.4.2	• Nitrates Directive (91/676/EEC) 1.
3.4.3	• Ground Water Directive (80/68/EEC as amended by Directive 91/692/EEC).
3.4.4	• Dangerous Substances Directive (76/464/EEC) ² and daughter directives;
	i) Directive on Discharges of Mercury from the chlor-alkali electrolysis industry (82/176/EEC).
	ii) Directive on Discharges of Cadmium (83/513/EEC).
	iii) Directive on Discharges of Mercury from other sources (84/156/EEC).
	iv) Directive on Discharges of Hexachlorocyclohexane (84/491/EEC).
	v) Directive on Discharge of List I Substances (Directive 86/280/EEC as amended by Directives 88/347/EEC and 90/415/EEC).
	¹ The Nitrates Directive (91/676/EEC) also contains the water quality objective where the criteria for designation of vulnerable zones includes for groundwaters containing more than 50 mg/l nitrates.
	² The Dangerous Substances Directive 76/464/EEC and its Daughter Directives on mercury, cadmium, hexachlorocyclohexane and List 1 substances provide, as a rule, an emission control approach. However, as an alternative they allow, under certain circumstances, a water quality objective approach.

3.2 Combined Approach

Previous Directives tended to focus on either of two different approaches. The Water Quality Objective (WQO) approach establishes the minimum quality requirements of water to limit the cumulative impact of emissions, both from point sources and diffuse sources. The Emission Limit Value (ELV) approach focuses on the maximum allowed quantities of pollutants that may be discharged from a particular source in to the aquatic environment. With a Combined Approach, Member States set down through the programme of measures both limit values and control emissions with a focus on achieving good (ecological) water quality.

3.2.1 Water Framework Directive

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

3.2.1.1. Introduction

The ever increasing demands being placed by society on water has led to the need for an overhaul of the way in which water is managed in Europe. The Water Framework Directive (WFD), which entered into force on the 22nd December 2000, reforms EU water legislation by introducing a new and innovative model for water management. The essence of the WFD is an approach to water management that focuses on both quality and quantitative status consistent with a healthy ecosystem. The Directive recognises that water is more than a commercial resource but, rather, a heritage, which must be protected, defended and maintained in a pristine state.

The purpose of this Directive is to establish a framework for the protection of all waters (inland surface waters, transitional waters, coastal waters and groundwater), in order to prevent and reduce pollution, protect the aquatic environment, improve the status of aquatic ecosystems, promote sustainable water use and mitigate the effects of floods and droughts. The directive sets out to achieve its aims through the following main objectives:

- expanding the scope of water protection to **all waters**, surface waters and groundwater;
- achieving “**Good status**” for all waters by 2015 and maintaining “**High Status**” where it exists;
- water management based on river basins, with a **combined approach** of emission limit values and quality standards;
- getting the price of water right;
- getting the citizen more closely involved; and
- streamlining legislation.

Overall, the WFD aims to achieve good status for all waters by 2015.

3.2.1.2 Key Tasks of Water Framework Directive

The Directive, through its various articles, sets out key tasks which Member States must follow in order to implement the framework. The main tasks are outlined in Table 3.2 below and described in more detail in the text that follows.

Table 3.2. Key tasks and related article of Water Framework Directive

Date	WFD Articles	Key tasks
2003	Article 24	Implementation of the WFD on a National level
2003	Article 3	Establishing of River Basin Districts as the fundamental unit for applying and co-ordinating the Directive's provisions
2004	Articles 4, 5, and 6	Characterisation of water bodies and agreeing key water management issues
2006	Article 8	Establishing and maintaining appropriate Monitoring Programme - Such monitoring must cover both surface and groundwater.
2009	Article 11	Designing Programmes of Measures and developing River Basin Management Plans for their implementation
2010	Article 9	Water pricing policies that take into account the principle of 'cost recovery' for water services
Ongoing	Article 14	Public Information and consultation

3.2.1.3 Implementation

The individual Member states were required to introduce the laws, regulations and administrative provisions necessary to comply with this Directive by the 22nd December 2003. The directive was transposed into Irish Law by the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003). The practical implementation of the Directive raises challenges that are widely shared by all Member states. These include an extremely demanding timetable (Refer to Table 3.4). There is a particular need for elaboration of the technical and scientific basis of a number of fundamental aspects of Annex II and Annex V of the Directive, in order to make the successful transition from principles and general definitions to practical implementation.

Over the life span of the Directive a number of existing water quality directives will be repealed as follows:-

Seven years after the entry into force of the Directive, the following legislation will be repealed:

- Directive 75/440/EEC Surface Water Drinking Water Abstraction
- Decision 77/795/EEC Common Procedure for the exchange of information on the quality of Surface Water
- Directive 79/869/EEC Methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water.

Thirteen years after the entry into force of the Directive, the following legislation will be repealed:

- Directive 78/659/EEC Freshwater Fish
- Directive 79/923/EEC Shellfish Water
- Directive 80/68/EEC Ground Water
- Directive 76/464/EEC Dangerous Substances, with the exception of Article 6, repealed on the date of entry into force of this Directive.

The repeal of these Directives will be phased to ensure that at least the same level of protection is afforded to waters at all times.

Common Implementation Strategy

To assist in continuity of implementation of the WFD the Member States, on the 2nd May 2001, agreed a strategic document for a Common Strategy on the Implementation of the Water Framework Directive.

The aim of the Common Strategy is to assist in a coherent and harmonious implementation of the Directive. The focus is on the development of informal and non-legally binding documents with the aim of clarifying and developing technical and scientific information required for practical implementation of the Directive. Key activities are:

- Information sharing
- Developing guidance on technical issues
- Information and data management
- Application, testing and validation
- Policy development
- Integration of the WFD in other policy areas

The Water Framework Directive stipulates the need for new Community law for specific areas such as priority substances and pollution control, groundwater and on reporting requirements. Working Groups, consisting of Member States' participants, stakeholders, NGO's and experts have been established in parallel with the key activities.

The working groups set up in 2003 to implement key activities are:

- Ecological Status -ECOSTAT
- Integrated River Basin Management -IBRM
- Groundwater -GW
- Reporting -REP
- Priority Substances

An Expert Network on Geographical Information Systems (GIS) and a Chemical Monitoring expert group have also been established. A strategic group on Agriculture and WFD and an Expert Advisory or stakeholder forum on Flood protection have also been established.

Each of the key activities aims to produce practical outputs which shall assist the WFD implementation. Table 3.3 below provides an overview on the current main guidance topics and the state of play as regards the final outputs

A testing of the guidance documents took place in the so-called "pilot river basins". The objective was to gain practical experiences and apply several documents together in order to test their consistency and coherency. The output from this, "Manual for Integrated River Basin Management" is intended for use in the preparation of the River Basin District Management Plans under the WFD. Ireland participated in Phase 1 of the pilot river basin network through the Shannon Pilot River Basin Project. Phase 2 is currently underway and final reports will be published in March 2007.

National Working Groups have been established covering the following areas in parallel with the EU Working Groups:

- Monitoring
- Groundwater
- Hydrology
- Dangerous Substances Expert Group
- Programme of Measures
- Data Management / GIS
- Environmental Management Systems
- Mathematical Modelling
- EDEN Steering Group
- Public Participation

Table 3.3 Overview of Activities under the Common Implementation Strategy

Number	Name	Output	Document
1	WATECO-Economic analysis	Guidance document	Economics and the Environment: The Implementation Challenge of the Water Framework Directive
2	Identification of Water Bodies	Guidance document	Identification of Water Bodies
3	IMPRESS Pressures and Impacts	Guidance documents	Analysis of Pressures and Impacts
4	HMWB -Heavily Modified Water Bodies	Guidance document	Identification and Designation of Heavily Modified and Artificial Water Bodies
5	COAST -Typology, classification and references conditions for transitional and coastal waters	Guidance document	Guidance on typology, reference conditions and classification systems FOR transitional and coastal waters
6	IC -Intercalibration	Guidance document	Towards a guidance on establishment of the Intercalibration network and on the process of the Intercalibration exercise
7	MON -Monitoring	Guidance document	Guidance on Monitoring for the Water Framework Directive
8	Public Participation	Guidance document	Public Participation in relation to the WFD
9	GIS -Geographic information systems	Guidance document	Guidance Document on Implementing the GIS Elements of the WFD
10	REFCOND-Reference conditions for rivers and lakes	Guidance document	Guidance on establishing reference conditions and ecological status class boundaries for inland surface waters
11	PROCLAN -Best practices in river basin planning	Guidance document	Work Package 1 Identification of River Basin Districts in Member States Overview, criteria and current state of play Guidance on Public Participation in relation to the Water Framework Directive Active: involvement, Consultation, and Public access to information
12	Wetlands	Guidance document	The role of wetlands in the WFD
13	Classification of Ecological Status	Guidance document	Overall approach to the classification of ecological status and ecological potential
14	Intercalibration Process	Guidance document	Guidance on the Intercalibration process 2004-2006
15	Groundwater - tools for assessment and classification	Report and software tools	"The EU Water Framework Directive: Statistical aspects of the identification of groundwater pollution trends, and aggregation of monitoring results"
	Integrated testing in pilot river basins	Establish pilot river basin network	Pilot River Basin Network, Summary and Fact Sheet

¹WFD CIRCA is a European Information Exchange Platform website, available at: <http://europa.eu.int/comm/environment/water/water-framework/information.html>

3.2.1.4 River Basin Districts

A key feature of the WFD is the adoption of **River Basin Districts (RBD)** as the model for future management of water in the EU. This approach recognises that water does not respect political or administrative boundaries and therefore can only be managed sustainably when looked at in its natural physical and hydrological boundaries.

At the core of the Directive is the requirement to produce a management plan for each RBD setting out how the environmental objectives are to be met. This **river basin district management plan** must be based on a detailed analysis of the pressures on water bodies within the river basin and an assessment of their impact. Information gathered allows a comprehensive **programme of measures** to be drawn up, tailored to the circumstances in each river basin district and in particular to target improvements and monitoring effort on those water bodies most at risk of failing to meet their targets.

The WFD, and therefore each river basin management plan, seeks the co-ordination of objectives to achieve at least **‘good status’** for all waters by 2015. Good status exists when both the ecological and chemical status are good. Table 3.4 details the key milestones for the implementation of the WFD in each of the Member States.

Table 3.4 A summary of the key milestones for implementation of the WFD

Year	Milestone	WFD Ref.
2000	Directive enters into force	Art. 25
2003	WFD becomes law in individual EU countries The River Basin Districts and Authorities are decided	Art. 24 Art. 3
2004	Characterisation completed: including pressures, impacts and economic analysis	Art. 5
2006	Monitoring networks are established for River Basin Districts Latest possible start of public consultation	Art. 8 Art. 14
2008	<u>Draft</u> river basin management plans are published	Art. 13
2009	Finalise river basin management plan (incl. the measures necessary to achieve them)	Art. 13 & 11
2010	Introduce pricing policies for water use	Art. 9
2012	Implement a programme of management measures aimed at achieving good status by 2015	Art. 11
2015	Ensure that the river basin management plans have delivered the required environmental objectives	Art. 4
2021	First round of water management work ends	Art. 4 & 13
2027	Second round of management work ends. This is the final deadline for meeting WFD objectives	Art. 4 & 13

3.2.1.5 Characterisation

Each Member State was required to provide for each RBD:

- an analysis of its characteristics,
 - a review of the impact of human activity on the status of surface waters and on groundwater, and
 - an economic analysis of water use
- in accordance with the technical specifications set out in Annexes II and III of the WFD.

Characterisation of water bodies and determination of typology and setting of type-specific reference conditions are fundamental to the operation of the WFD. The analysis of characteristics required the identification of the location and boundaries of the surface water bodies. All **surface waters** were identified as falling within either one of the following surface water **categories** - rivers, lakes, transitional waters or coastal waters - or as artificial surface water bodies or heavily modified surface water bodies. In this context:-

“**Surface water**” means inland waters, except groundwater; transitional waters and coastal waters, except in respect of chemical status for which it shall include territorial waters”

“**River**” means a body of inland water flowing for the most part on the surface of the land but which may flow underground for part of its course.

“**Lake**” means a body of standing inland surface water.

“**Transitional Waters**” are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater.”

“**Coastal water**” means surface water in the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point on the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters.

For each surface water category, **the relevant** (indicating not all rivers must be typed) surface water bodies within the river basin district were differentiated according to **type**. Typologies separate the water bodies according to their physical and chemical characteristics. For rivers, lakes, transitional and coastal waters, two systems (outlined in Annex II) were provided as options for the definition of typologies. There was general consensus throughout Europe that System B (see table 3.5) was preferable as it allowed further flexibility to the designation of typologies, than was capable with System A (Irvine *et. al.* 2002 & Clabby K. 2002). Ireland used System B in the definition of typologies. Reference conditions, representing generally undisturbed conditions were established for each water body type. The reference conditions will provide a ‘yardstick’ against which water status is determined.

All Irish rivers have been allocated to one of 12 primary types under Article 5 of the directive. These typologies are based on geology and its impact on water hardness and the slope or velocity of water in the channel. Research carried out studies a wide range of potential characteristics in order to assess their influence on the Annex V fauna and flora of Irish rivers (e.g. catchment size, altitude, latitude-longitude), but from a statistical point of view the most important controlling factors were geology/hardness and slope.

Twelve types of lakes have been identified in Ireland. The lake typologies were identified using alkalinity (surrogate for Geology), depth and size. A thirteenth type of lake typology was identified to include a number of lakes at altitude >300m.

Coastal and Transitional waters typologies were identified based on a research project ‘A proposed Typology for the UK and the Republic of Ireland’ published by SNIFFER in April 2003. The Coastal and Transitional typology used the factors of Latitude and Longitude, tidal range and salinity. Other factors that were taken into account include for Transitional waters

were mixing characteristics, mean substratum composition and extent of intertidal wave. For Coastal Waters wave exposure was used to identify typologies.

For the characterisation of **groundwaters**, a similar task was carried out.

“Groundwater” means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

The main elements for characterisation of groundwaters were:

- the location of boundaries,
- identification of anthropogenic pressures (pollution/ abstraction/ artificial recharge),
- the general character of the overlying strata in the catchment area from which the groundwater body receives its recharge
- the identification of directly dependent surface water ecosystems or terrestrial ecosystems

The approach used to delineate groundwater bodies grouped aquifers into four main types, based on similarity of flow regime- Karstic aquifers, gravel aquifers, productive fractured aquifers and poorly productive bedrock aquifers.

3.2.1.6 Monitoring

Member States shall ensure the establishment of programmes for the monitoring of water status in order to obtain a coherent and comprehensive overview of water status within each river basin district. The objectives of such monitoring programmes are as follows:

- provide comprehensive data on the ecological and chemical status (quantitative status must also be covered for groundwaters)
- permit the classification of status of water bodies
- designed based on the characterisation and impact assessment carried out for the RBD

The WFD requires an extensive monitoring system of water quality and quantity. Three monitoring priorities are identified:

- surveillance monitoring
- operational monitoring
- investigative monitoring

Working Groups have been established at a European and National level (Monitoring Working Group, a sub-group of the National Technical Co-ordination Group) to determine the elements, parameters and protocols for monitoring. These were set out for consultation in the draft Monitoring Programme in June 2006. The monitoring programme was implemented in Ireland in December 2006.

3.2.1.7 Programme of Measures

Central to each river basin management plan will be the **programme of measures**. The programme of measures must take account of the results and analysis from the characterisation of the river basin in order to achieve the overall environmental objectives (Article 4) of the WFD, which is to achieve “good water status” for all waters in the RBD. The measures will be composed of **basic** and **supplementary measures**. The required **basic measures** are derived from existing legislation listed in Part A of Annex VI. **Supplementary measures** provide for additional protection or improvement of waters in order to achieve the required environmental objectives. The WFD outlines a non-exclusive list of supplementary measures in Part B of Annex VI. Outlined Supplementary measures include;

- legislative instruments,
- administrative or economic instruments,
- codes of good practice,
- recreation, rehabilitation or restoration projects,
- educational projects, etc.

Figure 3.1 below summarises the programme of measures.

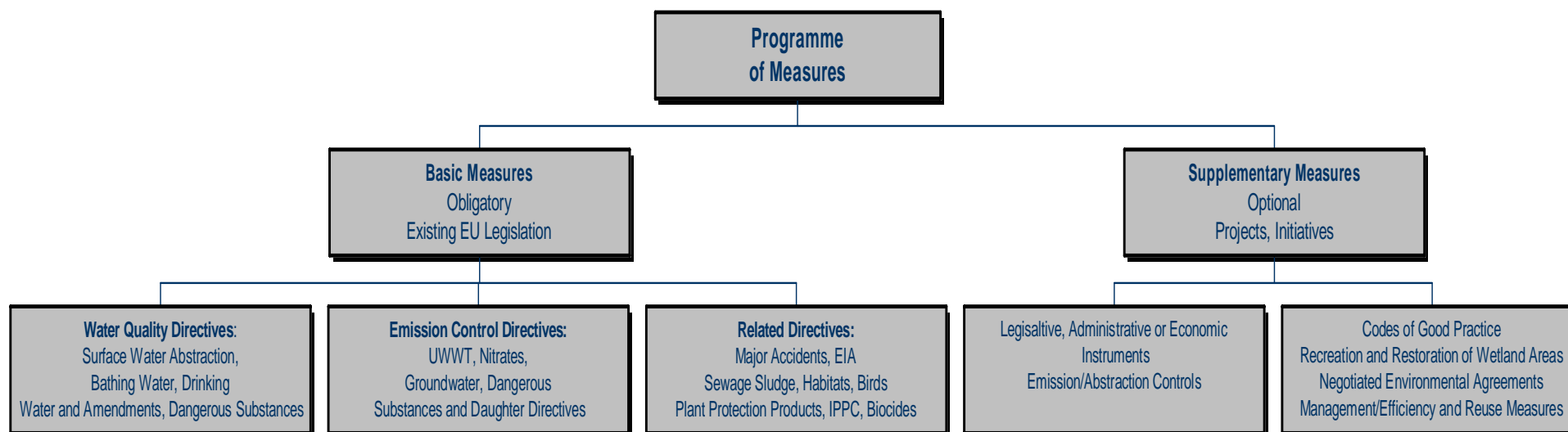


Figure 3.1. Requirements for the Programme of Measures (adapted from Introduction Paper of WFD, Environment and Heritage Service, N. Ireland)

3.2.1.8 Water pricing policies

Member States are required to take account of the principle of **recovery of costs** (Article 9) of water services, including environmental and resource costs, having regard to the economic analysis conducted according to Annex III, and in accordance in particular with the polluter pays principle.

The aim of water pricing is to encourage more sustainable use of water. The water pricing systems are to be developed in a manner that is sensitive to the physical, social, institutional and political setting as well as the geographic and climatic conditions in each RBD.

3.2.1.9 Public Information and consultation

The Directive (Article 14) encourages all with an interest to actively participate in water management activities, in particular in the production, review and updating of the river basin management plans. It is a requirement that, the timetable and work programme, interim overview of significant management issues and draft river basin district management plans, are published and made available for comments by the public.

3.2.2 List of Priority Substances

Decision No 2455/2001/EC of the European Parliament and of the council of 20 November 2001 establishing the list of priority substances in the field of water policy and amending directive 2000/60/EC.

The Decision adopts the list of priority substances including substances identified as priority hazardous substances. The list appears in the Annex to this Decision and is intended to be added to the Water Framework Directive as Annex X.

The list of priority substances established by this Decision shall replace the Commission Communication to the Council in June 1982 (OJ C 176, 14.7.1982) which identified 129 (subsequently amended to 132) candidate List I substances. It should be noted that the Dangerous Substances Directive 76/464/EEC applies up to 2013 with the exception of Article 6. The five “daughter” Dangerous Substances Directives have regulated 18 of the candidate List I substances. The Commission and the Member States shall ensure that the substance and exposure-related data needed for the implementation of the Combined Monitoring-based and Modelling based Priority Setting (COMMPS) procedure are made available to both the Commission and the Expert Advisory Forum on Priority Substances.

3.2.3 Groundwater Directive

Council Directive of the 12 December 2006 on the protection of groundwater against pollution and deterioration (2006/118/EC)

The European Commission adopted a proposal for a new Directive to protect groundwater from pollution on 19th September 2003 (COM (2003)550) subsequently the groundwater directive (2006/118/EC) came into force in December of 2006. Based on an EU-wide approach, the Groundwater Directive introduces quality objectives, obliging Member States to monitor and assess groundwater quality on the basis of common criteria and to identify and reverse trends in groundwater pollution.

The Directive introduces a mixed regime – on one hand, compliance to quality standards and on the other hand, measures to prevent or limit inputs of pollutants into groundwater. The Member States will have to establish some of the standards themselves at the most appropriate level, taking into account local or regional conditions.

The implementation of the directive will have to be reviewed six years after the directive enters into force then again every six years. Member States will have two years to transpose the directive into national law. It should therefore take effect from early 2009.

The Groundwater Directive is to be considered as a daughter directive of the Water Framework directive and has been developed in response to the requirements of the Water Framework Directive.

3.3. Water Quality Oriented Legislation

3.3.1 Bathing Water

(i) *Council Directive of 8 December 1975 concerning the Quality of Bathing Water (76/160/EC)*

This Directive sets standards to ensure the quality of bathing water, both for fresh water and for marine water bathing areas, in order to protect the environment and public health. Member States have the responsibility to designate bathing water areas and shall take all necessary measures to ensure that the quality of bathing water conforms to the limit values set in accordance with the Directive.

Irish regulations which give effect to this Directive are the Quality of Bathing Waters Regulations, S.I. No. 155 of 1992 and subsequent amendments including Quality of Bathing Waters (Amendment) Regulations, S.I. No. 230 of 1996 & S.I No. 22 of 2001. Irish Water quality standards for bathing waters and designated bathing waters in the Southern East River Basin District (SERBD) are listed in Appendix B.

The requirements of this Directive must be included in the basic measures under the programme of measures in the WFD.

(ii) *Council Directive of 15 February 2006 concerning the Management of Bathing Water Quality and repealing Directive 76/160/EEC (2006/7/EC)*

The new Bathing Water Directive replaced the existing Council Directive 76/160/EEC. The proposal for this revised Directive was originally adopted in October 2002 (COM (20002)581).

The new Bathing Water Directive will not only be a ‘results’ directive, but rather an ‘effort and results’ directive. It will look not only at monitoring water quality but also at actively tackling pollution sources, in particular waste water discharges and agricultural runoff. Under the new Directive, an assessment will have to be made at each bathing site of the likely sources of contamination, and a management plan drawn up to minimise the risk to bathers.

The revised Directive makes use of only two parameters instead of the previous nineteen (listed in Appendix B). In the revised Directive, E.Coli and Intestinal Enterococci are used as microbiological indicators of faecal contamination. The Directive 2006/7/EC includes three categories for the classification of bathing sites: poor, sufficient, good and excellent. The values for classification are set out in Appendix A. The classification of water quality at a bathing site will be determined on the basis of a three-year trend instead of a single year’s result as at present. The directive proposes reduced monitoring frequencies if the bathing water quality proves to be constantly ‘good’ or ‘excellent’. 2006/7/EC will repeal and replace 76/160/EEC by the end of 2014.

National legislation to comply with the new Directive must be introduced by March 2008. The new directive will complement the Water Framework Directive.

3.3.2. Drinking Water

General

Early European water legislation began in a “first wave”, with standards for those rivers and lakes used for drinking water abstraction (75/440/EEC), and culminated in 1980 in setting binding quality targets for drinking water (80/778/EEC). The latter Directive, (80/776/EEC), was re-examined and revised to focus on compliance with essential quality and health parameters (98/83/EC). The increasing use of water resources for the abstraction of drinking water for human consumption necessitates a reduction in the pollution of water and its protection against subsequent deterioration. Quality standards as set by the subsequent Irish Legislation to implement the above Directives for drinking water are listed in Appendix A.

(i) ***Council Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States (75/440/EEC)***

The Directive aims to protect public health by ensuring that surface water abstracted for use as drinking water reaches certain quality standards before it is supplied to the public. The Directive divides surface water into three quality categories, A1, A2 and A3. Annex I defines the appropriate treatment required for each category. Member States are required to take all necessary measures to ensure that surface water conforms to the values laid down in Annex II of the Directive and that Member States shall take the necessary measures to ensure continuing improvement of the environment.

Pertinent regulations introduced to bring the Directive into force in Irish law include – European Communities (Quality of Water Intended for Human Consumption) S.I. No. 81 of 1988, S.I. No. 350 of 1999, S.I. No. 177 of 2000, S.I. 259 of 2003 and S.I. No. 439 of 2000 European Communities (Drinking Water) Regulations, 2000.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, seven years after entry into force of the WFD, on the 22nd December 2007.

(ii) ***Council Directive of 15 July 1980 relating to the quality of water intended for human consumption (80/778/EEC)***

This Directive set the standards for water intended for human consumption. Member States are required to apply the values for the toxic and microbiological parameters listed in Annex I and the values for the other parameters which are likely to affect the wholesomeness of the foodstuff in its finished form. The values to be fixed by the Member States must be less than or the same as the values set for "Maximum admissible concentration."

Pertinent regulations introduced to give effect to the Directives in Irish law include – European Communities (Quality of Water Intended for Human Consumption) S.I. No. 81 of 1988, S.I. No. 350 of 1999, S.I. No. 177 of 2000, and S.I. No. 439 of 2000 European Communities (Drinking water) Regulations, 2000.

This Directive was repealed as of the 22nd December 2003, and was replaced by Council Directive 98/83/EC on the quality of water intended for human consumption.

(iii) ***Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption.***

The objective of this Directive is intended to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean. Member States shall ensure that the measures taken to implement this Directive have no adverse effect of allowing, directly or indirectly, any deterioration of the present quality of water intended for human consumption. Member States shall put in place all measures necessary to ensure that regular monitoring of the quality of water is carried out. Annex I sets the parameters applicable to water intended for human consumption.

This Directive 98/83/EC repealed the previous Directive 80/778/EEC relating to the quality of water intended for human consumption 80/778/EEC. The directive was transposed into Irish law by the following legislation: S.I. No. 350 of 1999 EC (Quality of Water Intended for Human Consumption) (Amendment) Regulations 1999, S.I. No. 177 of 2000 EC (Quality of Water Intended for Human Consumption) (Amendment) Regulations 2000 and S.I. No. 439 of 2000 EC (Drinking Water) Regulations 2000. Criteria for these regulations are set out in Appendix A

(iv) ***Council Directive of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States (79/869/EEC) as amended by Directive 81/855/EEC***

This Directive concerns the reference methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water, for the parameters listed in Annex II to Directive 75/440/EEC.

Pertinent Irish legislation which gives effect to the directive is – European Communities (Quality of Surface Water for Abstraction of Drinking Water) Regulations, 1989. S.I. No. 294 of 1989.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, seven years after entry into force of the WFD, on the 22nd December 2007.

3.3.3. Fresh waters for fish life

(i) *Council Directive of 18 July 1978 on the quality of fresh waters needing protection or improvement in order to support fish life (78/659/EEC)*

The aim of this Directive is to protect or improve the quality of those running or standing fresh waters which support or which, if pollution were reduced or eliminated, would become capable of supporting fish. The Directive requires Member States to designate waters and to set standards for parameters stated in the annexes to the Directive.

Regulations were introduced in 1998 to give effect to this Directive – European Communities (Quality of Salmonid Waters) Regulations, S.I. No. 293 of 1988. Water quality standards required under the Regulations and the areas designated as Salmonid waters within the South Eastern River Basin District are included in Appendix A.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, thirteen years after entry into force of the WFD, on the 22nd December 2013.

Shellfish waters

(i) *Council Directive of 30 October 1979 on the quality required of shellfish waters (79/923/EEC)*

This Directive concerns the quality of shellfish waters and applies to those coastal and brackish waters designated by the Member States as needing protection or improvement in order to support shellfish life and growth. The Directive requires Member States to designate waters and to set standards for parameters stated in the Annexes to the Directive.

Irish regulations were introduced in 1994 to give effect to this Directive – Quality of Shellfish Waters Regulations S.I. No. 200 of 1994 as amended by S.I. No. 459 of 2001. These regulations were revoked by S.I. No 268 of 2006, European Communities (Quality of Shellfish Waters) Regulations 2006. Quality standards, as set in the 2006 Irish regulations for shellfish waters are listed in Appendix A.

This directive will be integrated into the Water Framework Directive, and will thus be repealed, thirteen years after entry into force of the WFD, on the 22nd December 2013.

3.4 Emission Control Oriented Legislation

3.4.1. Urban Waste Water

(i) *Council Directive of 21 May 1991 concerning Urban Waste Water Treatment. (91/271/EEC)*

The Council Directive concerning urban wastewater treatment was brought into force by the Council of the European Communities on 21st May, 1991. Member States were required to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 30th June, 1993.

The aim of the Directive is to protect the environment from any adverse effects due to discharge of urban waste water. The Directive concerns the collection, treatment and discharge of urban wastewater and the treatment and discharge of wastewater from certain industrial sectors. The Articles of the Directive include for the following:-

- Provision by Member States of collection systems for urban wastewater by specified dates for various sizes of agglomerations.
- Provision by Member States of secondary treatment of wastewater entering collection systems by specified dates for various sizes of agglomerations.
- Identification of sensitive areas which shall receive more stringent treatment.
- Discharges of industrial wastewater into collection systems required to obtain prior authorisation.
- The re-use of treated wastewater where possible.
- The control of discharges to waters from specified industrial sectors.
- Phasing out of the dumping of sludge at sea by 31st December, 1998.

Quality standards are prescribed where secondary treatment is required and more stringent standards are set out where waters are designated as sensitive. Annex II sets out the criteria for the identification of sensitive and less sensitive areas. It is up to Member States to designate waters as sensitive. Requirements are also set out pertaining to the frequency of sampling.

The Environmental Protection Agency Act, 1992 (Urban Wastewater Treatment) Regulations, S.I. No. 419 of 1994, came into force on 14th December, 1994. These regulations were executed by the Minister under the powers conferred on him by Section 59 of the Environmental Protection Agency Act and were for the purposes of giving initial effect to the Urban Wastewater Directive (S.I. No. 419 of 1994 has since been revoked by S.I. No. 254 of 2001).

(ii) *Commission Directive 98/15/EC of 27 February 1998 amending Council Directive 91/271/EEC with respect to certain requirements established in Annex I thereof*

This Directive makes amendments to Annex I of Directive 91/271/EEC in order to clarify the minimum percentage reduction required for Total Phosphorus and Total Nitrogen from discharges of urban waste waters.

The most recent regulations issued to give effect to Directive 91/271/EEC and amending Directive 98/15/EC are the Urban Waste Water Regulations, S.I. No. 254 of 2001. Water quality standards required under this Directive as set in the Irish regulations, are included in Appendix A. This Directive must be implemented as an integrated part of the basic measures in the WFD.

3.4.2 Nitrates

(i) ***Council Directive of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. (91/676/EEC)***

This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution with the primary emphasis being on the management of livestock manures and other fertilisers. Member States are required to identify and designate waters affected by pollution and waters which could be affected by pollution if action is not taken. Member States are also required to designate as vulnerable zones areas of land draining into such waters. Other requirements of the Directive include; the establishment of codes of good agricultural practice to be implemented by farmers on a voluntary basis and the establishment of action programmes, including a programme of measures, in respect of vulnerable zones.

The Directive set a deadline of 20th December 1993 for the transposition into National Law. In Ireland the directive was implemented on a voluntary basis by the Code of Good Agricultural Practice (DAFF & DOE 1996) for a number of years before it was transposed.

Ireland has taken a “whole country” approach to the designation of vulnerable areas (S.I. 213 of 2003).

The Nitrates Directive also gave a deadline of 1993 to member states to compile a Nitrates Action Programme to implement this directive. The Irish Nitrates Action Programme was completed in July 2005 and given legal effect by the making of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2005 (SI No. 788 of 2005). However, the implementation of Part 3 of these Regulations (mainly concerning phosphates) was deferred pending a re-examination by Teagasc of the scientific basis for the nutrient table.

Both regulations, S.I. No.213 of 2003 and S.I. No 788 of 2005 were subsequently revoked by the European Communities (Good Agricultural Practice for Protection of Waters) Regulations S.I No. 378 of 2006 which came into force on 1st August 2006

The Nitrates Directive must be implemented as an integrated part of the basic measures in the WFD.

3.4.3 Groundwater

(i) ***Council Directive of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances (80/68/EEC)***

The purpose of this Directive is to prevent the pollution of groundwater by certain substances (List I – Organophosphates, Organotin, Mercury compounds, Organohalogen, Hydrocarbons, Cyanide and Cadmium compounds or List II – heavy metals etc.) and as far as possible to check or eliminate the consequences of pollution which has already occurred. Member States must prevent the introduction of substances in List I and limit the introduction of substances in List II so as to avoid pollution. A distinction is drawn between direct discharges of dangerous substances into groundwater and actions likely to result in indirect discharges. This Directive also recommends the introduction of special rules governing the artificial recharge of groundwater intended for public water supplies.

Regulations introduced to give effect to this Directive include the Protection of Groundwater Regulations S.I. No. 41 of 1999.

3.4.4 Dangerous Substances

(i) ***Council Directive of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (76/464/EEC)***

The aim of the Directive is to eliminate, or to reduce, pollution of water by certain dangerous substances listed in the Annexes of the Directive. The Directive requires that Member States shall take the appropriate steps to eliminate pollution to inland surface water, territorial waters, internal coastal waters and ground water by the dangerous substances in List I of the Annex and to reduce pollution of the said waters by the dangerous substances in List II of the Annex.

Article 1 of the Directive requires Member States to take steps to eliminate pollution of waters by List I substances and to reduce pollution of waters by List II substances. Inorganic compounds of phosphorus and elemental phosphorus are included amongst the families and groups of substances described as List II dangerous substances.

Article 7 of the Directive sets out the provisions for reducing pollution from List II substances. This Article requires Member States to establish programmes for implementation within defined deadlines. These programmes must contain provisions for:-

- Prior authorisation of discharge to waters
- Emission Limit Values for discharges based on quality objectives for water in accordance with existing Directives.

This Article also requires that summaries of the programmes and the results of their implementation be communicated to the commission.

Selected substances are regulated further by 'daughter directives', which establish emission limit values and water quality objectives for List I substances. These Daughter Directives include:

- Directive on Discharges of Mercury from the chlor-alkali electrolysis industry (82/176/EEC).
- Directive on Discharges of Cadmium (83/513/EEC).
- Directive on Discharges of Mercury from other sources (84/156/EEC).
- Directive on Discharges of Hexachlorocyclohexane (84/491/EEC).
- Directive on Discharge of List I Substances (Directive 86/280/EEC as amended by Directives 88/347/EEC and 90/415/EEC).

Irish legislation giving effect to the Directive are the Local Government (Water Pollution) Act 1977, Local Government (Water Pollution) (Amendment) Act, 1990, S.I. No. 258 of 1998 (Water Quality Standards for phosphorus) Regulations, and the Water Quality (Dangerous Substances) Regulation, S.I. No. 12 of 2001. Irish regulations giving effect to the 'daughter directives' are described in section 4.3.5.

The Water Pollution Act (Refer to Section 4.3.1) makes provisions for prior authorisation by way of licensing of discharges by Local Authorities. S.I. No. 258 of 1998 has given effect to the requirements of this Directive with respect to phosphorus.

Article 6 of Directive 76/464/EEC, was repealed on the 22nd of December 2000, the date of entry into force of the WFD. The remainder of the Directive shall not be repealed until 13 years after the date of entry into force of the WFD.

Under the WFD a review of the dangerous substances daughter directives regulating List 1 substances under Directive 76/464/EEC was required within two years of the WFD entry into force. From this review a proposal (Com (2006)397) for a Directive setting environmental quality standards for the priority substances was adopted in July 2006. The standards set out by this directive must be achieved by each Member State by 2015, to ensure "good chemical surface water status. This proposed directive will repeal the existing daughter directives

82/176/EEC, 83/513/EEC, 84/156/EEC and 82/280/EEC as amended by Directive 88/347/EEC and 99/415/EEC.

The 41 substances or substance groups for which the proposed Directive sets concentration limits include 33 substances that the Council and Parliament have designated as 'priority substances' for EU action under the WFD. These have been identified as a significant risk to the aquatic environment due to their widespread use and their high concentrations in surface waters. A further eight substances covered by existing legislation on dangerous substances in water are also included. Thirteen of the substances are also specified as 'priority hazardous substances' to which particularly strict limit values will apply. The new proposal requires approval by the European Council and Parliament before being made law.

3.5 Related Water Sector Legislation

General

Several other EU Directives are linked to the Water Sector. Water related legislation, which requires measures that may impact on water, are listed and summarised in Table 3.5. The Wild Birds, Habitats, Sewage Sludge, and Integrated Pollution Control Directives are described in more detail in this section in view of their particular relevance to the WFD.

Table 3.5 Related EU Legislation to the Water Sector

Legislation	Relevance
<i>Horizontal Sector</i>	
Environmental Impact Assessment Directive (85/337/EEC), amended by Public Participation Directive 2003/35/EC	Requires an EIA for new projects which are judged to have a significant impact on the environment. The results must be made public and views of the public taken into account in decisions. (The impact on water quality is an important and relevant issue to consider in an EIA).
Public Access to Environmental Information Directive 2003/4/EC replaced the Access to Environmental Information Directive (90/313/EEC),	Requires environmental information held by public bodies to be made available to the general public on request. Most of the water directives specify the collection of water quality information or information concerning permits. (As a rule any such information held by public bodies would be covered by this directive). The new Directive expands existing access and requires that information is granted on request without having to state interest.
Reporting Directive (91/692/EEC) and Water Questionnaires (92/446/EEC and 95/337/EEC)	Sets out provisions on the transmission of information and reports concerning certain EC directives from Member States to the Commission. The reporting requirements specified in many water protection directives are modified by this directive.
<i>Waste Sector</i>	
Waste Framework Directive (75/442/EEC and amending by 91/156/EEC, 91/692/EEC, 96/350/EC, 96/59/EC)	Requires the adoption of waste management plans. Within the plans the siting and operation of waste sites must be such as to avoid water pollution, and the possibility of water pollution occurring must be an issue to be taken into account in the plan.
Hazardous Waste Directive (91/689/EEC as amended by 94/31/EC)	Requires the adoption of hazardous waste management plans, which include provisions to prevent water pollution, e.g. through the permitting arrangements.
Sewage Sludge Directive (86/278/EEC)	Regulates the use of sewage sludge in agriculture in such a way that contamination of soil and pollution of water does not occur from metal contaminants, nitrates and phosphates.
Landfill Directive (99/31/EC)	Regulates operational and technical requirements on waste facilities and landfills, to provide for measures, procedures to prevent or reduce as far as possible the negative effects on the environment particularly the pollution of surface water and groundwaters. Annex I requires that landfills are designed so as to meet the necessary condition to prevent the pollution of soil, surface water or groundwater.
Incineration Directives (89/429/EEC, 89/369/EEC, 94/67/EEC, 2000/76/EC)	Requires the reducing as far as possible of negative effects on the environment, in particular the pollution of air, soil, surface and groundwater, and the resulting risks to human health, from the incineration of hazardous waste and, to establish emission limit values for hazardous waste incineration plants.

Legislation	Relevance
Titanium Dioxide Directives(78/176/EEC, 82/883/EEC and 92/112/EEC)	Aims to reduce and eliminate pollution of water caused by discharges from the titanium dioxide production industry.
<i>Nature Protection Sector</i>	
Conservation of Wild Birds (79/409/EEC)	Aims to provide long-term protection and conservation of all bird species naturally living in the wild within the EU through the conservation, maintenance or restoration of the biotopes and habitats. Satisfactory water quality is an essential factor in such areas.
Habitats Directive (92/43/EEC)	Aims to protect a network of habitats throughout Europe and the flora and fauna they support. Satisfactory water quality is an essential factor in such areas.
<i>Industrial Pollution Control and Risk Management Sector</i>	
IPPC Directive (96/61/EC)	Implements integrated measures for the prevention and control of pollution. Requires permits for prescribed activities which set conditions, including emission limits to water, using the principles of BATNEEC. The WFD specifically requires that measures in River Basin Management Plans must include those which give full effect to the provision of the IPPC Directive in relation to industries and activities specified in Annex I to the Directive. However, consideration of economic factors (NEEC) has been omitted in the WFD in favour of best available technology (BAT)
Risks of Existing Substances Regulation (793/93) and related Directives 67/548/EEC, Directive 1999/45/EC, 76/769/EEC	Regulation 793/93 applies to existing substances and places obligations on manufacturers and importers to provide data and on Member States to carry out risk assessments. Article 16 of the WFD specifically requires that, in drawing up strategies to deal with water pollution, the Commission must take into account risk assessments of pollutants carried out under the Regulation. 67/548/EEC requires the testing and assessment of substances in relation to their risks to human health and the environment before marketing in volumes greater than 10Kg. 1999/45/EC relates to the classifying, packaging and labelling of dangerous preparations. 76/769/EEC provides the rules and procedures relating to restrictions on marketing and use of certain dangerous substances and preparations.
Seveso II Directive (96/82/EC) (2003/105/EC)	This Directive aims to prevent major accidents which involve dangerous substances. It requires operators to develop major-accident prevention policies and to provide safety reports outlining how they intend to manage and handle dangerous substances. The amended directive extends the scope to include dangerous substances extracted in mining and quarrying.
Plant Protection Products Directive (91/414/EEC)	Regulates plant protection products in commercial form and the placing on the market and control within the Community of active substances intended for use for the protection of plants or plant products against all harmful organisms and to destroy undesired plants. Member States shall not authorise a plant protection product if it has any unacceptable influence on the environment particularly contamination of water including drinking water and groundwater.

Legislation	Relevance
Biocides Directive (98/8/EC)	Regulates biocidal products within the Member States and the establishment a positive list of active substances which may be used in biocidal products Member states must ensure that the biocidal products have no unacceptable effects itself or as a result of its residues, amongst other things, on surface water and groundwater.

3.5.1. Wild Birds

Council Directive of 2 April 1979 on the Conservation of Wild Birds (79/409/EEC)

This directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation. Member States are required to take the requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds.

The National Regulations introduced in 1985 to give effect to this Directive are the Conservation of Wild Birds Regulations (S.I. No. 291 of 1985). Areas designated under the Wild Birds Directive are to be identified as protected areas under the WFD.

3.5.2. Habitats

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

The aim of this Directive is to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.

A coherent European ecological network of special areas of conservation was set up under the title Natura 2000. The objective of Natura 2000 network is to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. The Natura 2000 network includes the special protection areas classified by the Member States pursuant to Directive 79/409/EEC.

Regulation was introduced in 1997 to give effect to this Directive – European Communities (Natural Habitats) Regulations, S.I No. 94 of 1997. Measures required under the Habitats Directive are to be included within the programme of Measures for the WFD. As with the Wild Birds Directive, areas designated under the Habitats Directive must be identified as protected areas in the WFD.

3.5.3. Sewage Sludge

Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture

The purpose of this Directive is to regulate the use of sewage sludge in agriculture in such a way as to prevent harmful effects on soil, vegetation, animals and man, thereby encouraging the correct use of such sewage sludge.

The Directive sets values for concentrations of heavy metals in soil to which sludge is applied, concentrations of heavy metals in sludge and the maximum annual quantities of such heavy metals which may be introduced into soil intended for agriculture are given in the directive.

Regulations were introduced in 1991 to give effect to this Directive – European Communities (Use of Sewage Sludge in Agriculture) Regulation's, S.I No. 183 of 1991. This is replaced by the Waste Management (Use of Sewage Sludge in Agriculture) Regulations, S.I. No. 146 of 1998, as amended by Waste Management (Use of Sewage Sludge in Agriculture) Regulations, S.I No. 267 of 2001.

Measures required by the Directive concerning sewage sludge are required to be included within the basic programme of measures for the RBD.

3.5.4. Integrated Pollution prevention and control

Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

Different approaches to controlling emissions to the air, water or soil separately can encourage the shifting of pollution between the various environmental media rather than protecting the environment as a whole. Therefore this Directive was introduced with the aim of achieving integrated pollution prevention and control arising from a number of different activities. The Directive requires Member States to establish an integrated system of permits that contain specific conditions, including emission limit values and the application of Best Available Techniques. It provides a general framework for the prevention or where that is not practicable, the reduction of emissions to the air, water and land in order to achieve a high level of environmental protection. Activities regulated by this Directive include Energy installations, Metal processing industries, Mineral industries, Chemical industries and Waste Management installations.

The Council Directive 96/61/EC was transposed into Irish Law in 2003 with the enactment of the Protection of the Environment Act 2003. This enactment gives the responsibility of IPC licensing to the EPA. Prior to the enactment of the Protection of the Environment Act IPC licensing was implemented under Part 4 of the EPA Act 1992. The EPA Licensing Regulations 1994 to 2004 strengthened and amended the IPPC licensing laws in Ireland.

The Water Framework Directive specifically requires that measures required under the IPPC Directive be included in the Programme of measures for the WFD.

3.5.5 Floods Directive

Proposal for a Directive of the European Parliament and of the Council on the assessment and management of floods COM (2006) 15 final

On 18/01/2006 the European Commission proposed a directive on the assessment and management of floods. The proposed Floods Directive lays down a framework for the reduction of risk to human health, the environment and economic activity associated with floods in the Community. Under the proposed directive member states would first need to carry out a preliminary assessment to identify the river basins and associated coastal areas at risk of flooding. For such zones they would then need to draw up flood risk maps and then flood risk management plans focused on prevention, protection and preparedness.

The proposal creates an EU framework for flood risk management that builds on and is closely coordinated with the Water Framework Directive.

4.0 NATIONAL LEGISLATION

4.1 General

Water quality standards utilised in Ireland are mainly derived from various Directives issued by the EU. The Directives establish water quality required for different beneficial uses of waters. Water quality parameters are set in the national legislation.

The primary responsibility for monitoring of surface waters for compliance with beneficial use standards is devolved to Local Authorities. The Environmental Protection Agency assists the Local Authorities in relation to laboratory facilities for sampling and analysis in some areas and co-ordinate the reporting of monitoring results on a national basis. Monitoring in connection with beneficial uses, including statutory compliance monitoring, remains with the Local Authorities (Refer to Appendix B).

The legislation discussed in this chapter has been divided into three main sections:

- Water Quality oriented legislation.
- Emission control oriented legislation
- Water Related Legislation.

The latter includes legislation whose purposes may be set out for other environmental factors such as, waste management, protection of soils etc, but must also have regard towards the protection of water.

4.2. Water Quality Oriented Legislation

Table 4.1 below provides a summary of relevant National Water Quality Orientated legislation discussed in this section. Quality standards required under this legislation are provided in Appendix A.

Table 4.1. Synopsis of Water Quality Oriented Legislation

Ref. Section	Legislation
4.2.1	<p>Bathing Water S.I. No. 84 of 1988. European Communities (Quality of Bathing Waters) Regulations, 1988 S.I. No. 99 of 1989. European Communities (Quality of Bathing Waters (Amendment) Regulations, 1989 S.I. No. 155 of 1992. Quality of Bathing Waters Regulations, 1992 S.I. No. 145 of 1994. Quality of Bathing Waters (Amendment) Regulations, 1994 S.I. No. 230 of 1996. Quality of Bathing Waters (Amendment) Regulations, 1996 S.I. No. 177 of 1998. Quality of Bathing Waters (Amendment) Regulations, 1998 S.I. No. 22 of 2001. Quality of Bathing Waters (Amendment) Regulations, 2001</p>
4.2.2	<p>Drinking Water S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000 S.I. No. 81 of 1988. European Communities (Quality of Water Intended for Human Consumption) Regulations, 1988 S.I. No. 350 of 1999. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 1999 S.I. No. 177 of 2000. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 S.I. No 294 of 1989. European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 1989</p>
4.2.3	<p>Salmonid Waters and Fisheries S.I. No. 293 of 1988. European Communities (Quality of Salmonid Waters) Regulations, 1988. Act 14 of 1959 Fisheries (Consolidation) Act, 1959. Act 23 of 1997 Fisheries (Amendment) Act, 1997. Act 35 of 1999 Fisheries (Amendment) Act 1999 Act 34 of 2000 Fisheries (Amendment) Act 2000 Act 40 of 2001 Fisheries (Amendment) Act 2001</p>
4.2.4	<p>Shellfish Waters S.I. No. 200 of 1994. Quality of Shellfish Waters Regulations, 1994 S.I. No. 459 of 2001. Quality of Shellfish Waters (Amendment) Regulations, 2001 S.I. No. 268 of 2006. European Communities (Quality of Shellfish Waters) Regulations 2006</p>
4.2.5	<p>Phosphorus Regulations S.I. No. 258 of 1998. Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) regulations, 1998.</p> <p>Bye-laws implemented to tackle Phosphate levels in surface waters</p> <ul style="list-style-type: none"> • Cavan County Council (Water Pollution) (Agriculture) Bye-Laws 2000. • Cork County Council (Regulation of Agricultural Practice in the Catchments of the River Lee the River Gradogue and the River Funshion) Bye-Laws 1999 • Tipperary (North Riding) County Council (Water Pollution) (Agriculture) Bye-Laws 2000 • Westmeath County Council (Water Pollution) (Agriculture) Bye-Laws 2000 • Offaly County Council (Water Pollution) (Agriculture) Bye-Laws 2001 • Roscommon County Council Bye Laws for the Control of Agricultural Waste, 2001

4.2.6	<i>Dangerous Substances Regulations</i> S.I. No. 12 of 2001. Water Quality (Dangerous Substances) Regulations, 2001.
4.2.7	<i>Water Policy Regulations</i> S.I. No. 722 of 2003 European Communities (Water Policy) Regulations, 2003 S.I. No. 413 of 2005 European Communities (Water Policy) (Amendment) Regulations, 2005

4.2.1 Quality of Bathing Waters

- (i) ***S.I. No. 155 of 1992. Quality of Bathing Waters Regulations, 1992, as amended by S.I. No. 145 of 1994. Quality of Bathing Waters (Amendment) Regulations, 1994, S.I. No. 230 of 1996. Quality of Bathing Waters (Amendment) Regulations, 1996, S.I. No. 177 of 1998. Quality of Bathing Waters (Amendment) Regulations, 1998.***

These regulations are intended to give effect to Council Directive 76/160/EEC concerning the Quality of Bathing Waters.

Specific beaches in the RBD have been designated as bathing areas under various Bathing Waters Statutory Instruments. There are twelve designated bathing waters in the South Eastern RBD (Refer to Appendix A). Local Authorities must monitor the water quality of the bathing water regularly at the point where the daily density of bathers is greatest. A register of the results of the monitoring is kept and subject to review. The monitoring season is from May to September. Waters within bathing areas in which bathing is practised shall meet the quality standards specified on the basis of, and subject to, the conditions so specified in these regulations (Refer to Appendix A for Quality Standards). In determining conformity with these Regulations deviations from the standards shall not be taken into consideration where the deviations are the result of floods, other natural disasters or abnormal weather conditions.

- (ii) ***S.I. No. 22 of 2001. Quality of Bathing Water (Amendment) Regulations, 2001.***

S.I. No. 22 of 2001 amends the list of bathing waters designated by S.I. No. 177 of 1998. These Regulations also assign to the Environmental Protection Agency the function of granting departures under Article 5 (Duty of Local Authority to Ensure Compliance with Standards) of the 1992 Regulations.

4.2.2 Drinking Water

- (i) ***S.I. No. 294 of 1989. European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 1989.***

A sanitary authority is required to classify surface water in their area in accordance with the quality standards specified in the regulations into three categories, A1, A2, A3, which correspond to the standard methods of treatment specified in Part I of the Schedule. Where surface waters have been classified it shall be the duty of the sanitary authority to take the necessary measures to ensure that each of the waters concerned meets the quality standards appropriate to its category, except where a departure is granted. Water which does not meet at least the quality standards specified in Part II of the Schedule in respect of category A3 water may not be used for the abstraction of drinking water (Refer to Appendix A).

- (ii) ***S.I. No. 81 of 1988. European Communities (Quality of Water Intended for Human Consumption) Regulations, 1988.***

Water intended for human consumption shall meet the quality standards specified in the regulations. These regulations were revoked by S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000 on 1st January 2004.

(iii) *S.I. No. 350 of 1999. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 1999.*

These Regulations amend the European Communities (Quality of Water Intended for Human Consumption) Regulations, 1988. They provide for remedial measures to be taken in relation to certain private drinking water schemes which are deficient in quality. Local Authorities shall:

- Warn users of the water supply where there is an unacceptable risk to public health
- Prepare an action programme
- Notify or serve notice on the person responsible for the supply

(iv) *S.I. No. 177 of 2000. European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000.*

These regulations amend Article 8 of the European Communities (Quality of Water intended for Human Consumption) Regulations, 1988. Article 8 relates to the remedial measures to be taken in relation to certain private drinking water schemes that are deficient in quality.

(v) *S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000.*

These regulations came into force on 1st January 2004. It assigned the duty of taking the necessary measures to ensure that water intended for human consumption is wholesome and clean and meets the requirements of these Regulations to the sanitary authority, except where a departure is granted. Water will be regarded as wholesome and clean if

- it is free from micro-organisms and from any substances which in numbers or concentrations, constitutes a potential danger to public health and
- it meets the quality standards specified in these regulations (Refer to Appendix A).

4.2.3 Salmonid Water and Fisheries

In Ireland, specified rivers and lakes have been designated as salmonid fisheries. However, in many water quality management plans for additional rivers and lakes the objective is of compliance with salmonid water quality conditions. Specific legislation relating to the protection and ultimately the improvement of salmonid water is in force under the European Communities (Quality of Salmonid Waters) Regulations (S.I. No. 293 of 1988). Sampling regimes are also implemented under these regulations.

In the South Eastern River Basin District three rivers are designated as salmonid waters. The main channels of the River Aherlow (Hydrometric area 16), River Nore (Hydrometric area 15) and the River Slaney (Hydrometric area 12) have all been designated as salmonid waters under European Communities (Quality of Salmonid Waters) Regulations (S.I. No. 293 of 1988).

(i) *S.I. No. 293 of 1988. European Communities (Quality of Salmonid Waters) Regulations, 1988.*

The fresh waters specified in these regulations capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*), are designated as salmonid waters for the purposes of these Regulations. Salmonid waters shall meet the quality standards specified in these regulations on the basis of and subject to the conditions so specified (refer to Appendix A). Deviations from the standard shall not be taken into consideration in determining conformity with these Regulations where the deviations are the result of floods or other natural disasters.

(ii) *Act 14 of 1959. Fisheries (Consolidation) Act, 1959.*

Important measures relating to water quality control are also contained in the Fisheries (Consolidation) Acts 1959-97. The 1959 Act provides that it is an offence to deposit “deleterious matter” in “waters”. The definition of “deleterious matter” is narrower than the subject of the Water Pollution Acts; being any substance (including any explosive, liquid or gas) the entry or discharge of which into any waters is liable to render those or any other waters poisonous or injurious to fish, spawning grounds or the food of any fish or to injure in their value as human food, or to impair the usefulness of the bed and soil of any waters as

spawning grounds or their capacity to produce the food of fish. This Act applies to any river, lake, watercourse, estuary or any part of the sea.

(iii) *Act 23 of 1997. Fisheries (Amendment) Act, 1997.*

This Act amends and extends the laws relating to fisheries, prohibiting persons from engaging in aquaculture except with and in accordance with a licence. The Act establishes a procedure for the granting, renewal, amendment and revocation of licences, to allow for appeals against decisions relating to licenses, and for continued purposes.

(iv) *Act 35 of 1999. Fisheries (Amendment) Act 1999*

This Act amends and extends the 1997 Act. It broadens the brief of the Fisheries Board to have regard for sustainable development practices in fisheries and consider the conservation of biodiversity in water ecosystems.

(iv) *Act 34 of 2000. Fisheries (Amendment) Act 2000*

This Act amends Fisheries Acts 1959 to 1999 in relation to the prosecution and fining of those found not to be in compliance with the fisheries Acts.

(vi) *Act 40 of 2001. Fisheries (Amendment) Act 2001*

This amendment relates to the appointment of members to the Fisheries Board and their superannuation.

4.2.4 Shellfish Waters

(i) *S.I. No. 200 of 1994. Quality of Shellfish Waters Regulations, 1994 as amended by S.I. No. 459 of 2001. Quality of Shellfish Waters (Amendment) Regulations, 2001.*

These regulations prescribe quality standards for shellfish waters and designate the waters to which they apply, together with sampling and analysis procedures to be used to determine compliance with the standards. The designated shellfish waters are listed in the first schedule of the regulations, which are made by the Minister for the Environment and Local Government following consultation with the Minister of Communications, Marine & Natural Resources.

Designated Shellfish waters shall conform with the quality standards specified on the basis of, and subject to, the conditions specified (Refer to Appendix A), not later than the 31st day of December, 1999. Where sampling frequency is reduced, the quality standard concerned shall be conformed with by all samples. Deviations from the quality standards specified shall not be taken into consideration in determining conformity with these Regulations when such deviations are the result of a disaster.

The Amendment Regulations of the Quality of Shellfish Waters Regulations, 1994 (S.I. No. 459 of 2001) require the preparation and implementation of action programmes in respect of all designated shellfish waters.

(ii) *S.I. No. 268 of 2006 European Communities (Quality of Shellfish Waters) Regulations 2006*

S.I. No. 268 of 2006 European Communities revokes S.I. No. 200 of 1994 and S.I. No. 459 of 2001. These Regulations prescribe quality standards for shellfish waters and designate the waters to which they apply, together with sampling and analysis procedures to be used to determine compliance with the standards. The Regulations also require the preparation and implementation of action programmes in respect of all such waters. The objective of such a programme must be to take reasonably practicable steps to reduce pollution in those waters with a view to meeting the standards (Appendix A). The regulations require cross border consultation and co-operation with the Northern Ireland public authorities to ensure shellfish waters compliance. The Minister may authorise sampling for shellfish waters to be discontinued on being satisfied that the quality of particular shellfish waters will not deteriorate. The regulations require publication of results by electronic means.

Within the South Eastern River Basin District, only Bannow Bay in Co. Wexford has been designated as shellfish water.

4.2.5 Water Quality Standards for Phosphorus

(i) ***S.I. No. 258 of 1998. Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations, 1998.***

These regulations provide for specified improvements in water quality conditions in rivers and lakes based on phosphorus concentrations or related water quality classifications and provide for periodic reporting in relation to progress in implementing the requirements of the regulations. The Regulations give effect to certain requirements arising under the Dangerous Substances Directive 76/464/EEC in relation to pollution caused by dangerous substances discharged into the aquatic environment of the Community.

Article 3 of the Regulations requires that the existing biological quality rating for any part of a river and the existing trophic status for any part of a lake shall be maintained. Existing biological quality ratings and existing trophic status are defined as the rating or status assigned by the Environmental Protection Agency based on monitoring during the period 1995-1997. Where monitoring has not been carried out during that period the rating or status shall be that first assigned by the Agency post 1997.

Article 3 also requires that the existing quality rating or trophic status shall be improved in certain circumstances. The required quality standards are set out in the Third Schedule of the Regulations (see Appendix A). Improvements must be made where the quality standards stipulated in the Third Schedule require higher standards than existing standards.

Rating of water quality for any part of a river is based principally on the composition of macro-invertebrate communities/faunal groups present and their general sensitivity to organic pollution, as used by the Environmental Protection Agency and described in the First Schedule of the Regulations. Median concentrations for Molybdate-Reactive Phosphate (MRP) are referenced to the corresponding target biological water quality rating. Annual median levels of MRP (expressed as $\mu\text{g P/l}$) are defined for each Q rating. The maximum allowable value corresponding with a minimum Q rating of 3 (moderately polluted) is 70 $\mu\text{g P/l}$, with 50 $\mu\text{g P/l}$ corresponding to Q3-4 and 30 $\mu\text{g P/l}$ corresponding to Q4.

In relation to lakes two parameters have been set as follows:-

- Trophic Status; based on Annual Maximum Chlorophyll concentrations as determined by the EPA.
- Annual Average Concentration of Total Phosphorus.

Where water quality is satisfactory at present (Q rating 5, 4-5 and 4), the objective is conservation and maintenance of that rating. Where the waters are slightly, moderately or seriously polluted, the objective is an improvement in the Q rating (Refer to Appendix A).

In accordance with the requirements of Article 7 of the original Council Directive, the timescale for the implementation of these improvements is stipulated in the Regulations. Where existing quality ratings or trophic status have been assigned, improvements must be met by 31st December 2007. Where quality ratings or trophic status have not been assigned the improvements must be implemented not later than 10 years after the EPA first assigns a rating or status.

The Regulations make allowance for an extension to the period stipulated for compliance with the Regulations. This extension is only allowable under certain defined circumstances and shall not exceed six years.

Under Article 4 of the Regulations, Local Authorities are charged with responsibility to take appropriate steps under the Principal Act (i.e. Water Pollution Act) to secure compliance with the required quality standards. Likewise the Environmental Protection Agency is similarly charged to take appropriate steps to secure compliance under the Environmental Protection Agency Act.

Article 4 of the Regulation also requires Local Authorities and the EPA to carry out certain reporting functions. Local Authorities must submit a report to the EPA setting out the

measures that it proposes to take to comply with the Regulations. The deadline for submission of this report was 31st July 1999. Every two years the Local Authorities must submit progress reports to the Agency. The first of these was due by 31st July 2000 and subsequent progress reports are required every two years thereafter.

For its part, the EPA must prepare and publish reports on the implementation of the Regulations within 9 months of the deadlines given to Local Authorities.

The reporting provisions of the Regulations are intended to comply with the reporting requirements of the Directive.

The Environmental Protection Agency has produced a “Guidance Note to Local Authorities on Preparation and Submission of the Phosphorus Regulations Measures Reports”. This guidance note provides information on the measures available to Local Authorities for the implementation of the Regulations. The Environmental Protection Agency has published three national reports relating to the Regulations. The Phosphorus Regulations Implementation Report, 2005 is the most recently published.

4.2.6 Dangerous Substances

S.I. No. 12 of 2001. Water Quality (Dangerous Substances) Regulations, 2001.

S.I. No. 12 of 2001 gives further effect to the EU Council Directive 76/464/EC (Dangerous Substances Directive) and give effect to certain provisions of the Water Framework Directive (2000/60/EC).

The regulations require that, where the existing condition of a water body does not meet a specified standard in relation to a substance, there shall be no disimprovement in the condition of the water body in relation to that substance. Standards are prescribed for dangerous substances in waters (excluding groundwater) which must be complied with not later than the 31st of December 2010 (Standards are given in Appendix A). A local authority must report to the EPA setting out the measures to be taken to achieve compliance. The Local Authority must also issue reports on progress in implementing measures to achieve compliance at prescribed deadlines, the first of which was due on the 31st July 2002 and every two years thereafter. The EPA must publish a National Report on the Implementation of the Regulations every two years; the first such was due on the 30th April 2005. The first Dangerous Substances National Implementation report, 2005 was published by the Environmental Protection Agency in January 2007.

Local Authorities must identify, in consultation with the EPA, water bodies which are so affected by naturally occurring conditions or by past human activity that compliance with the specified standard would not be possible or disproportionately expensive.

4.2.7 Water Policy

(i) *S.I. No. 722 of 2003 European Communities (Water Policy) Regulations, 2003*

These regulations give further effect to the Water Framework Directive 2000/60/EC. S.I. No 722 of 2003 established seven areas in the State as ‘River Basin Districts’ of which three relate to cross-border river basins shared with Northern Ireland. These regulations require local authorities, acting jointly in relation to each RBD to establish environmental objectives, to establish programmes of measures for the achievement of these objectives, to make river basin management plans and to establish river basin advisory councils. The Water Policy regulations provide for co-ordination and guidance at national level by the EPA and the Minister of the Environment, Heritage and Local Government. The regulations require public authorities to take measures appropriate to their functions to promote or achieve implementation of the Directive or Regulations, to co-ordinate, co-operate and liaise with these authorities including authorities in Northern Ireland for this purpose and to encourage the active involvement of all interested parties.

S.I. No. 722 of 2003 set out deadlines for the Characterisation of river basin districts and the establishment of a Register of protected areas by 22 December 2004. Under these regulations a monitoring programme was prepared for 22 June 2006.

- (ii) ***S.I. No. 413 of 2005 European Communities (Water Policy) (Amendment) Regulations, 2005***
These regulations amend Article 16 of the European Communities (Water Policy) Regulations, 2003 which relates to the establishment of River basin District Advisory Councils in relation to matters such as size, composition, duration and time of establishment of the councils. These regulations also amend the list of relevant public authorities in the First Schedule of the 2003 Regulations. 'Tourism Ireland' was deleted and substituted by 'Failte Eireann', the National Tourism Development Authority'

4.3. Emission Control Legislation

Table 4.3 below provides a summary of relevant National Emission Control Oriented Legislation discussed in this section. Quality standards required under this legislation are provided in Appendix A.

Table 4.3. - Summary of Emission Control Oriented legislation

Ref. Section	Legislation
4.3.1	<i>Water Pollution</i> Act No. 1, 1977. The Local Government (Water Pollution) Act, 1977 Act No. 21 of 1990. Local Government (Water Pollution) (Amendment) Act, 1990 S.I. No. 184 of 1996. Local Government (Water Pollution) (Amendment) Regulations, 1996. S.I. No. 42 of 1999. Local Government (Water Pollution) Amendment Regulations, 1999
4.3.2	<i>Urban Waste Water Treatment</i> S.I. No 254 of 2001. Urban Waste Water Treatment Regulations, 2001.
4.3.3	<i>Nitrates</i> Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates, 1996.* Good Farming Practice, 2001.* Protocol on roles and responsibilities for Fisheries Board Staff and Farmers, 2001.* S.I. No. 213 of 2003. European Communities (Protection of waters Against Pollution from Agricultural Sources Regulations) 2003 S.I. No. 788 of 2005. European Communities (Good Agricultural Practice for the Protection of Waters) Regulations, 2005. S.I. No. 378 of 2006. European Communities (Good Agricultural Practice for the Protection of Waters) Regulations, 2006
4.3.4	<i>Groundwater Pollution</i> S.I. No. 41 of 1999. Protection of Groundwater Regulations, 1999. S.I. No. 42 of 1999. Local Government (Water Pollution) (Amendment) Regulations, 1999.
4.3.5	<i>Dangerous Substances</i> S.I. No. 31 of 1990. European Communities (Control of Water Pollution by Asbestos) Regulations, 1990. S.I. No. 245 of 1994. Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994. S.I. No. 43 of 1994. Local Government (Water Pollution) Acts 1977 and 1990 (Control of Carbon Tetrachloride, DDT, and Pentachlorophenol Discharges) Regulations, 1994 S.I. No. 348 of 1993 Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1994. S.I. No. 55 of 1986. Local Government (Water Pollution) Act 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations, 1986 S.I. No. 294 of 1985. Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations, 1985.

* Voluntary Measures preceded the making of Irish Regulations and were not legally enforceable.

4.3.1. Water Pollution

(i) *The Local Government (Water Pollution) Act, 1977*

The Local Government (Water Pollution) Act, 1977, describes itself as “an Act to provide for the control of water pollution and for other matters connected with water pollution”.

Under this Act, Local Authorities have been assigned the primary responsibility for the control of pollution to waters. The provisions of the act also extend to the planning and implementation of measures for the protection and improvement of water quality.

In the first instance, Section 3 of the Act provides that “a person shall not cause or permit any polluting matter to enter waters”.

Local Authorities are assigned responsibility to issue licences for the discharge of trade effluent or sewage effluent. Section 4 of the Act provides that a person shall not discharge or cause or permit the discharge of any trade effluent or sewage to any waters, except under and in accordance with a licence under the section. A similar wording is used in respect of discharges to sewer which are provided for in Section 16 of the Act. Sections 4 and 16 requiring the licensing of discharges to waters and sewers came into effect on 1st October, 1978, and 1st January, 1979 respectively (S.I. No. 16 of 1978).

Section 15 of the Act provides for the preparation of Water Quality Management plans. Local Authorities may make such plans or shall make such plans if directed to do so by the Minister. Water Quality Management plans shall contain objectives for the prevention and abatement of pollution to waters.

Provisions are included in the Act for the monitoring, recording and enforcement by Local Authorities relating to licences issued under Section 4 and 16 of the Act.

Section 26 of the Act provides powers to the Minister to prescribe quality standards for waters, trade effluent and sewage effluent and standards in relation to methods of treatment of such effluents. Also, Section 30 empowers the Minister to make regulations generally with regard to any matter referred to in the Act. It is in accordance with the powers conferred on the Minister by Sections 26 and 30 of the Act that many of the subsequent regulations on water pollution and related matters have been introduced.

(ii) *Local Government (Water Pollution) (Amendment) Act, 1990*

This Act contains provisions for pollution caused by agricultural effluents. The Water Pollution Act prohibits the pollution of waters through the disposal of agricultural inputs and waste products, including chemical fertilisers, animal slurries, manures, silage effluent or other organic fertilisers. It also enables local authorities to issue bye-laws which prohibit, restrict, control and regulate the manner in which certain functions are carried out, including:

- the collection, storage, treatment, and disposal of any polluting matter used in connection with, or arising from any operation, activity, practice or use of land or other premises carried on for the purposes of agriculture, horticulture or forestry;
- any activity that involves the application to land or to growing crops, or the injection into land, of any silage effluent, animal slurry, manure, fertiliser, pesticide or other polluting matter; and
- any other operation, activity, practice or use of land or other premises for the purposes of agriculture, horticulture or forestry.

Local Authorities may regulate or restrict any activity involving the holding of polluting matter where there is a risk of water pollution, e.g. silage making and slurry spreading. This Act amends and extends the Local Government (Water Pollution) Act, 1977, and (in so far as it relates to water pollution) the Fisheries (Consolidation) Act, 1959.

(iii) *S.I. 184 of 1996. Local Government (Water Pollution) Regulations Amendment 1996*

These Regulations amend provisions of the Local Government (Water Pollution) Regulations, 1978 (S.I. No. 108 of 1978), concerning the application of the standard two month period

allowed for the determination of license applications for effluent discharges to sewers in circumstances where discharges are made to combined drains declared to be sewers for the purposes of the Local Government (Water Pollution) Acts 1977 and 1992. The Regulations also amend provisions of the Local Government (Water Pollution) Regulations, 1992 (S.I. No. 271 of 1992), on the control of discharges to aquifers in situations where harmful substances are present in discharges, materials being disposed, etc. in such small quantities as to pose no risk to the quality of groundwaters.

(iv) S.I. No.42 of 1999. Local Government (Water Pollution) (Amendment) Regulations 1999

These Regulations amend Part VI of the Local Government (Water Pollution) Regulations, 1992. The purpose is to extend the application of certain water quality standards under those Regulations to a wider range of functions performed by local authorities, the Environmental Protection Agency and An Bord Pleanála under the Local Government (Water Pollution) Acts, the Environmental Protection Agency Act, 1992 and the Waste Management Act, 1996.

4.3.2. Urban Waste Water Treatment

S.I. No. 254 of 2001. Urban Waste Water Treatment Regulations, 2001.

These regulations are intended to give effect to the Water Framework Directive 2000/60/EC, but principally to give effect to the Urban Wastewater Directive (91/271/EEC).

The 2001 Urban Waste Water Treatment Regulations are the most recent regulations giving effect to the Urban Waste Water Directive. Previous regulations, S.I. No. 419 of 1994 and previous amendment regulations S.I. No. 208 of 1999 were revoked by these regulations.

The main requirements of these regulations include:-

- Provision of collection and treatment of urban waste water by specified dates depending upon the population equivalent of agglomerations.
- Requirements for secondary treatment where this is required by the regulations. (Second Schedule –Part 1).
- Requirements for more stringent treatment where waters have been designated as sensitive. (Second Schedule – Part 2)
- Minimum requirement in respect of monitoring of discharges. (Fifth Schedule).

Sensitive waters are designated in Parts 1 and 2 of the Third Schedule. Discharges to Sensitive Waters listed in Part 1 must receive more stringent treatment on the commencement of the regulations. Discharges to Sensitive Waters listed in Part 2 must receive more stringent treatment by 31st May 2008.

The requirements for secondary treatment and for treatment of discharges to sensitive waters are provided in Appendix A. The waters in the RBD which have been designated as sensitive in Part 2 of the Third Schedule are also listed in Appendix A. No waters in the RBD were originally listed in Part 1 of the Third Schedule of the regulations.

These regulations introduce new provisions which were not included in previous regulations. Article 4(4)(b) permits that, the reduction of nutrients in discharges to estuaries, bays or coastal waters need not apply where the sanitary authority is satisfied that such a reduction will have no effect on the level of eutrophication in the receiving waters.

4.3.3. Nitrates

S.I. No. 378 of 2006 gives effect to the Nitrates Directive (Council Directive concerning the protection of waters against pollution caused by nitrates from agricultural sources (91/676/EEC). These regulations revoke and re-enact, with amendments, European Communities (Protection of Waters against Pollution from Agricultural Sources) Regulations S.I. No. 213 of 2003 and the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, S.I. No. 788 of 2005. The steps leading to the making of these regulations are set out below.

(i) **Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates, 1996, Good Farming Practice, 2001 and the Protocol on roles and responsibilities for Fisheries Board Staff and Farmers, 2001.**

Prior to the making of regulations to implement, the Nitrates Directive, its implementation in Ireland was on a voluntary basis by the establishment of a code of Good Agricultural Practice and the implementation of a range of measures to protect water from pollution by agriculture: The Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates (1996), Good Farming Practice (2001), and Protocol on roles and responsibilities for Fisheries Board Staff and Farmers, (2001) were established to implement the Nitrates Directive on a voluntary basis. The measures included the REPS and the Farm Waste Management Scheme (previously the control of Farmyard Pollution Scheme).

Past pollution control measures had relied upon preventative remedies, including financial incentives to upgrade existing waste collection and storage areas, provided by the Rural Environment Protection Scheme (REPS) and the Operational Programme for the Control of Farmyard Pollution, 1989-1993, the Operational Programme for Agriculture, Rural Development and Forestry, 1994-1999 and Partnership 2000. Provisions contained in recent legislation mean a more aggressive enforcement of control measures.

(ii) ***S.I. No. 213 of 2003. European Communities (Protection of waters Against Pollution from Agricultural Sources) Regulations 2003***

In the preparation of National legislation to implement the directive, a draft Action Programme was issued in December 2003. The Nitrates Directive requires that action programmes be implemented in relation to the whole territory of a Member State or to areas designated by the Member states as vulnerable zones. Ireland has taken a whole territory approach. S.I. No. 213 of 2003 identified the national territory of Ireland as the area to which the action programme is applied.

(iii) ***S.I. No. 788 of 2005. European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2005***

In March 2004 Ireland was found to be non-compliant by the European Court of Justice for not having established an action programme. In July 2004 a second draft action programme was published. The independent Brosnan report was published on 8 Oct 2004 commenting on the draft action programmes. The National Nitrates Action Programme was sent to the European Commission in Oct 2004. The Commission judged the report to be inadequate and in need of strengthened in relation to specific respects. A final Nitrates Action Programme was published in July 2005.

The Nitrates Action Programme was given legal effect by the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2005 (SI No. 788 of 2005) which came into effect on the 1st February 2006. However, the implementation of Part 3 of these Regulations (mainly concerning phosphates and nutrient management) was deferred pending a re-examination by Teagasc. These regulations were later revoked by S.I. No. 378 of 2006.

(iv) ***S.I. No. 378 of 2006. European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2006***

The Nitrates regulations S.I. No. 378 of 2006 address requirements such as stock rate limits, manure storage, prohibited application periods for fertilisers and best practice requirements.

The Action Programme sub-divides the country into 3 zones i.e. groups of counties by reference mainly to soil type, rainfall and length of growing season. These zones are tabulated in Appendix A. For each zone, the regulations set minimum storage capacity for all livestock manure. (Appendix A).

S.I. No. 378 of 2006 also stipulates (Appendix A)

- slurry storage capacity required for sows and pigs,
- slurry storage capacity required for cattle, sheep and poultry
- storage capacity required for dungstead manure
- storage capacity required for effluent produced by ensiled forage
- Prescribed limits for phosphorous can be exceeded up to 1st January 2011 for lands using spent mushroom compost and pigs and poultry manure from existing farming enterprises
- The application of fertiliser in accordance with a REPS plan can continue for the duration of the plan
- Revised N soils index (Appendix A) to remove certain restriction on landspreading of organic manures
- Revised P soils index (Appendix A) to allow for general use of a redefined P soils-index 3
- A significant reduction in the number of stocking-rate bands for both phosphorus and nitrogen grassland fertilisation limits, and
- An increase in the nitrogen limit for grassland for the majority of farmers.

It is also stipulated that storage facilities must be free of any structural defect, reaching the standard that is necessary to prevent water pollution by run-off/seepage. All livestock manure and other organic fertilizers, soiled water and effluents are to be collected and stored prior to their application to land.

Date restrictions for the application of livestock manures are stated in the regulations. (Appendix A). The manner of application of fertilisers, date restrictions for ploughing and the use of buffer zones around water bodies or sensitive areas are also covered in these regulations. The Nitrates Directive also includes requirements in regard to the continuation of the Livestock Register and the implementation of other livestock records. These records are to be co-ordinated and consolidated under the Nitrates Directive.

The Nitrates Regulations set a limit of 170kg of nitrogen per hectare for livestock manure spread on land including that deposited by animals themselves for all holdings. An application was made by the Irish Government for a derogation of amounts up to 250kg nitrogen per hectare from livestock manure based on an output of 85kg nitrogen per dairy cow. This application was approved by the EU Nitrates Committee on 13th November 2006. The derogation will be available to grassland farms on an individual basis but does not include pig and poultry manure.

Under the Nitrates Regulations S.I No.378 of 2006 Local Authorities have the following responsibilities:

- Monitoring of surface waters and groundwaters at selected measuring points that make it possible to establish the extent of pollution in the waters from agricultural sources and to determine trends in the occurrence and extent of such pollution
- Carry out inspections of farm holdings as is necessary for the purposes of the regulations and shall aim to co-ordinate its inspection activities with inspections carried out by other public authorities
- Develop co-ordination arrangements with other public authorities and consult with the Minister for Agriculture and Food, the EPA and the co-ordinating local authority in the relevant river basin district
- A local authority may furnish to the Department of Agriculture and Food a report of inspections carried out for the purposes of these Regulations
- A local authority may, after consultation with the EPA, specify an alternative distance for any abstraction point if an investigation has been carried out and the authority is satisfied that the alternative distance is appropriate for the protection of waters being abstracted at that point.
- A local authority shall maintain a register of prior investigations carried out, and distances specified, for the purposes of Article 17(5).
- Where a local authority specifies an alternative distance the local authority shall, as soon as possible notify the affected landowners and the Department of Agriculture and Food of

the distance specified, send to the Agency a summary of the report on the prior investigations carried for the purpose and the reasons for specifying the alternative distance, and make an entry in the register maintained.

- A prosecution for an offence under these Regulations may be taken by a local authority or the Agency.
- A prosecution for an offence may be taken by a local authority whether or not the offence is committed in the functional area of the authority
- The relevant local authorities shall provide the Agency with such information appropriate to their functions as may be requested by the Agency for the purposes of these Regulations.

Implementation of the nitrates directive will be one of a number of key building blocks ('basic measures') needed for full implementation of the Water Framework Directive. The Water Framework Directive requires that by the end of 2009 a River Basin Management Plan will be prepared in relation to each River Basin District together with a Programme of Measures to achieve the environmental objectives established in relation to the district in accordance with the Directive. It is envisaged that the measures taken, or to be taken, in the context of the Nitrates Action Programme will be the measures to be taken in relation to agriculture in the context of the Water Framework Directive. (DAF, DEHLG 2005)

The Department of Agriculture and Food and the Department of Environment, Heritage and Local Government has produced an explanatory handbook for farmers to explain the Nitrates Regulations and farmers responsibilities in relation to the regulations (DAF, DEHLG 2006).

4.3.4. Groundwater

(i) ***S.I. No. 41 of 1999. Protection of Groundwater Regulations, 1999.***

These Regulations are intended to give further effect to the EU Council Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances. The Regulations require that a sanitary authority shall not cause or permit the direct discharge by or on behalf of the sanitary authority to an aquifer of an element which contains a harmful substance save under and in accordance with a licence issued by the Environmental Protection Agency. The Agency shall not grant a licence in relation to the discharge of an effluent which contains a harmful substance specified in the First Schedule.

Any application for a licence to discharge sewage or trade effluents containing a harmful substance must be accompanied by the results of a prior investigation into the alternative methods of disposal of the harmful substance and an examination of the aquifer to determine the quality and volume of water present and any risk to the aquifer as a result of the entry of the substance.

The EPA is required to carry out or cause to be carried out monitoring in relation to the effects on groundwaters of a discharge.

(ii) ***S.I. No. 42 of 1999. Local Government (Water Pollution) (Amendment) Regulations, 1999***

These Regulations are intended to give further effect to the EU Council Directive 80/68/EEC, on the protection of groundwater against pollution caused by certain dangerous substances.

These regulations concern the licensing by a local authority in respect of sewage effluent or trade effluent containing a harmful substance which is discharged to an aquifer. The regulations require a quality standard of zero milligrams per litre for sewage effluent and trade effluent discharged to an aquifer in respect of a harmful substance specified in the First Schedule. A local authority is required to carry out or cause to be carried out monitoring to determine the effects of a discharge on water in an aquifer.

4.3.5 Dangerous Substances

(i) ***S.I. No. 31 of 1990. European Communities (Control of Water Pollution by Asbestos) Regulations, 1990.***

These Regulations give effect to the water pollution control provisions of Council Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos. The Regulations impose a general obligation to prevent the entry of asbestos to waters and specify the measures applied to certain industrial plant using asbestos. They also provide for the monitoring of effluent discharges from industrial plant.

(ii) ***S.I. No. 245 of 1994. Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994***

The Regulations give effect to Council Directive 90/415/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Council Directive 76/464/EEC. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing EDC, TRI, PER, and TBC to waters or to sewers under the provisions of the Local Government (Water Pollution) Act, 1977 as amended by the Local Government (Water Pollution) (Amendment) Act, 1990.

(iii) ***S.I. No. 43 of 1994. Local Government (Water Pollution) Acts 1977 and 1990 (Control of Carbon Tetrachloride, DDT, and Pentachlorophenol Discharges) Regulations, 1994***

The Regulations give effect to Council Directive 86/280/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Council Directive 76/464/EEC. The Regulations prescribe quality standards to be applied by

local and sanitary authorities when licensing discharges of effluents containing carbon tetrachloride (CC14), DDT and pentachlorophenol to waters or to sewers under the provisions of the Local Government (Water Pollution) Act, 1977 as amended by the Local Government (Water Pollution) (Amendment) Act, 1990.

(iv) ***S.I. No. 348 of 1993 Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl₃ Discharges) Regulations, 1994***

The Regulations give effect to Council Directive 88/347/EEC on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Council Directive 76/464/EEC. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluent containing aldrin, dieldrin, endrin, isodrin, HCB, HCBd, and CHCl₃ to waters or sewers under the provisions of the Local Government (Water Pollution) Act, 1977 as amended by the Local Government (Water Pollution) (Amendment) Act, 1990.

(v) ***S.I. No. 55 of 1986. Local Government (Water Pollution) Act 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations, 1986***

The Regulations give effect to Council Directive 84/5491/EEC on mercury discharges by sectors other than the chlor-alkali electrolysis industry. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing hexachlorocyclohexane or mercury to waters and to sewers under Section 4 of the Local Government (Water Pollution) Act, 1977.

(vi) ***S.I. No. 294 of 1985. Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations, 1985***

The Regulations give effect to Council Directive 83/513/EEC on cadmium discharges to the aquatic environment. The Regulations prescribe quality standards to be applied by local and sanitary authorities when licensing discharges of effluents containing cadmium to waters and to sewers under Section 4 of the Local Government (Water Pollution) Act, 1977.

4.4 Related Water Sector Legislation

Table 4.4 below provides a summary of Related Water Sector Legislation. Quality standards required under this legislation are provided in Appendix A.

Table 4.4. Synopsis of Related Water Sector Legislation

Ref. Section	Legislation	Relevance
4.4.1	Industrial Pollution Control	
	Act 7 of 1992. Environmental Protection Agency Act, 1992 S.I. No. 79 of 1996. Environmental Protection Agency (Licensing) (Amendment) Regulations, 1996. S.I. No. 240 of 1996. Environmental Protection Agency (Licensing) (Amendment) (No. 2) Regulations, 1996. S.I. No. 59 of 1995. Environmental Protection Agency (Licensing) (Amendment) Regulations, 1995. S.I. No. 394 of 2004. Environmental Protection Agency (Licensing) (Amendment) Regulations 2004. Protection of the Environment Act, 2003	
4.4.2	Waste Management	
	Act 10 of 1996. Waste Management Act, 1996. Act 36 of 2001. Waste Management (Amendment) Act, 2001. S.I. No. 165 of 1998. Waste Management (Permit) Regulations S.I. No. 185 of 2000. Waste Management Licensing Regulations. S.I. No. 366 of 2002 Waste Management (Licensing)(Amendment) Regulations 2002 European Communities (Amendment of Waste Management (Licensing) Regulation 2000) Regulations 2002 S.I. No. 395 of 2004 Waste Management (Licensing) Regulations, 2004 Protection of the Environment Act, 2003	Provides a framework for the prevention, management and control of waste. It prohibits the holding, transport, recovery or disposal of waste in a manner that causes or is likely to cause environmental pollution. Provides for licensing and permits concerning waste disposal and recovery.
4.4.3	Sewage Sludge	
	S.I. No. 148 of 1998. Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998. S.I. No. 267 of 2001. Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001.	These Regulations prescribe standards for the use of sewage sludge in agriculture and require that sludge is used in accordance with a Nutrient Management Plan and sets limits on the amount of matter added to soil, including technical parameters to be entered in the sludge register.

Ref. Section	Legislation	Relevance
4.4.4	Habitats Directive - Regulations	
	<p>S.I. No 94 of 1997. European Communities (Natural Habitats) Regulations, 1997.</p> <p>S.I. No. 233 of 1998. European Communities (Amendment) Regulations, 1998.</p> <p>S.I. No. 378 of 2005. European Communities (Natural Habitats) (Amendment) Regulations, 2005</p> <p>Act 39 of 1976. Wildlife Act, 1976.</p> <p>S.I. No. 254 of 1986. European Communities (Wildlife Act, 1976) (Amendment) Regulations.</p> <p>S.I. No. 397 of 1985. European Communities (Wildlife Act, 1976) (Amendment) Regulations.</p> <p>Wildlife (Amendment) Act, 38 of 2000</p> <p>S.I. 271 of 2001. Wildlife Amendment Act, 2001.</p> <p>S.I. No. 94 of 1999 Flora Protection Order.</p> <p>S.I. No. 274 of 1987. Flora Protection Order.</p> <p>S.I. No. 338 of 1999 Flora Protection Order.</p>	<p>The Minister shall identify sites of Community importance based on the criteria set out in Annex III (Stage I) to the Habitats Directive and relevant scientific information. And shall prepare a list of sites indicating in respect of each such site the natural habitat type in Annex I to the Habitats Directive which the site hosts, and the species in Annex II to the Habitats Directive that are native to the State which the site hosts.</p>
4.4.5	Others	
	<p>Act 27 of 1991. Sea Pollution Act, 1991</p> <p>Act 18 of 1999. Sea Pollution (Amendment) Act, 1999.</p> <p>Act 37 of 2001. Local Government Act.</p> <p>Act 8 of 1994. Local Government Act.</p> <p>Act 30 of 2000. Local Government (Planning and Development) Act, 2000</p>	

4.4.1 Environmental Protection Agency

(i) Act 7 of 1992. The Environmental Protection Agency Act, 1992

The Environmental Protection Agency Act, 1992, was enacted on 23 April, 1992, and under this legislation the Agency was formally established on 26th July, 1993.

The establishment of the Environmental Protection Agency under the Act of 1992 created an additional tier of responsibility with regard to environmental protection. The general functions of the EPA are described in Section 52 of Part III of the Act.

The Agency has a wide range of statutory duties and powers under the Act. The main responsibilities of the Agency include the following:

- The licensing and regulation of large/complex industrial and other processes with significant polluting potential, on the basis of integrated pollution control (IPC) and the application of Best Available Technologies Not Entailing Excessive Cost (BATNEEC).
- The monitoring of environmental quality, including the establishment of databases to which the public will have access, and the publication of periodic reports on the state of the environment;

- Advising public authorities in respect of environmental functions and assisting local authorities in the performance of their environmental protection functions;
- The promotion of environmentally sound practices through, for example, the encouragement of the use of environmental audits, the setting of environmental quality objectives and the issuing of codes of practice on matters affecting the environment;
- The promotion and co-ordination of environmental research;
- The licensing and regulation of all significant waste disposal and recovery activities, including landfills and the preparation and periodic updating of a national hazardous waste management plan for implementation by other bodies;
- Preparation and implementation of a national hydrometric programme for the collection, analysis and publication of information on the levels, volumes and flows of water in rivers, lakes and groundwaters, and
- Generally overseeing the performance by local authorities of their statutory environmental protection functions

Section 100 of Part V of the Act refers to the powers of the Minister to make orders to extend any of the provisions of the Local Government (Water Pollution) Act, 1977, to the Agency. In particular, such orders may provide that a function conferred on a Local Authority or Sanitary Authority may be exercised by the Agency in addition to or in lieu of that authority.

The EPA Act of 1992 also makes specific reference to water quality management plans and the setting of quality standards. Section 102 of the Act refers to the powers of the Minister to require the EPA to prepare a water quality management plan under Section 15 of the Water Pollution Act. Section 103 refers to the Agency's role in making recommendations to the Minister in respect of prescribing quality standards for waters, trade effluents and sewage effluents and standards in relation to methods of treatment of such effluents under Section 26 of the Water Pollution Act, 1977.

Under the Act, the EPA may prepare and publish Environmental Quality Objectives (EQOs) with respect to any medium. These objectives must be taken into account in formulating policy, establishing standards, or exercising any of their responsibilities.

Transposition of the Council Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC) into Irish law entailed amendment of the EPA Act and the enactment of the Protection of the Environment Act 2003. While the general principles of the IPPC Directive are broadly in line with the IPC licensing system previously operated under the EPA Act, changes gave full effect to the Directive. The changes to national legislation included an extension of the range of activities to be licensed and a greater emphasis on energy efficiency, residual management and reducing natural resource consumption (EPA 2002).

4.4.2 Waste Management

(i) Act 10 of 1996. Waste Management Act, 1996

The Waste Management Act was enacted to give effect to 16 stated EU Directives pertaining principally to waste materials including liquid and solid wastes. Act 10 of 1996 was further strengthened by Act 36 of 2001, Waste Management (Amendment) Act, 2001.

The Act provides a framework for the prevention, management and control of waste. It prohibits the holding, transport, recovery or disposal of waste in a manner that causes or is likely to cause environmental pollution. The definition of "waste" is very broad and specifically includes, most importantly in terms of water quality control, sludge and agricultural waste. The Act applies to any (or any part of any) river, stream, lake, canal, reservoir, aquifer, pond, watercourse or other inland waters, whether natural or artificial; tidal waters, beach, river bank, salt marsh or other area which is contiguous to the above which is for the time being dry, but does not include a sewer.

The Act is centred on the production of management plans, and the licensing, monitoring and enforcement of waste licences for holders, transporters, and disposers of waste. The Act distinguishes between hazardous and non-hazardous waste, the former to be managed by the EPA. Toxic waste inventories will be established and administered by the EPA. The EPA must assemble a national hazardous waste management plan. A list of hazardous substances is provided in the Second Schedule. Included in the Schedule are many of the substances which are the subject of several EU Directives relating to water quality standards, including cadmium, mercury and asbestos. The appropriate authorities must implement any relevant recommendations contained in the national plan.

The Act is important in terms of water quality control because it contains a framework for regulating the recovery of non-hazardous agricultural waste, including manure and slurry spreading. The recovery of sewage and water treatment sludge and specified agricultural waste, waste disposal or recovery activities are not required to be licensed, however, they are subject to the issue of alternative controls.

Section 7 of the Act empowers the Minister to make regulations for the purposes of giving full effect to the Act.

(ii) S.I. No. 165 of 1998. Waste Management (Permit) Regulations, 1998

These regulations provide for the granting of waste permits by Local Authorities in respect of specified waste disposal and recovery activities in lieu of a licence by the Environmental Protection Agency under Section 39 (1) of the Waste Management Act. The regulations also provide for the registration by the EPA of certain waste recovery activities carried out by local authorities.

Waste permits are required for activities described in the First Schedule of the regulations which include the disposal of waste, other than hazardous waste, where the annual intake does not exceed 5,000 tonnes per annum. Local Authorities are required to attach conditions to a waste permit issued under the regulations to ensure compliance with stated EU Directives including Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances.

(iii) S.I. No. 185 of 2000. Waste Management (Licensing) Regulations, 2000.

These regulations provide for the licensing by the Environmental Protection Agency of waste recovery and disposal activities under Part V of the Waste Management Act, 1996.

The regulations provide requirements for waste licences for activities listed in the First Schedule of the regulations. The EPA are required to attach conditions to a licence issued under the regulations to ensure compliance with stated EU Directives including Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances.

(iv) S.I. No. 148 of 1998. Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998

These Regulations prescribe standards for the use of sewage sludge in agriculture. The Regulations give effect to Directive 86/278/EEC on the protection of the environment, and in particular of the soil when sewage sludge is used in agriculture. These Regulations revoke S.I. No 183 of 1991.

(v) S.I. No. 267 of 2001. Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001

These Regulations prescribe standards for the use of sewage sludge in agriculture. The Regulations also require that sludge is used in accordance with a Nutrient Management Plan and sets limits on the amount of matter added to soil with limits based on absolute quantities of specified heavy metals. These Regulations amend S.I. No. 148 of 1998 Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 by including additional technical parameters to be entered in the sludge register provided for in the 1998 Regulations.

(vi) ***S.I. No. 395 of 2004 Waste Management (Licensing) Regulations 2004***

These regulations provide for the continued operation of the system of licensing by the EPA of waste recovery and disposal activities under Part V of the Waste Management Act, 1996. The regulations set out procedures for the making of waste licence applications, reviews of licences and consideration by the Agency of objections, including the holding of oral hearings.

These regulations also provide for the licensing of mobile plant used for the recovery and disposal of waste at more than one site.

The Waste Management (Licensing) Regulations 2000 (save for articles 3 and 4 and the First Schedule, Waste Management (Licensing) (Amendment) Regulations 2001, Waste Management (Licensing) (Amendment) Regulations 2002 and European Communities (Amendment of Waste Management (Licensing) Regulation 2000) Regulations 2002 are revoked by S.I. No. 395 of 2004 Waste Management (Licensing) Regulations 2004.

4.4.3. Natural Habitats

S.I. No. 94 of 1997. European Communities (Natural Habitats) Regulations, 1997

These Regulations bring Council Directive 92/43/EEC (Habitats Directive) into force in Irish Law. Programmes for wildlife protection are provided in EU Directives, most notably Council Directive 79/409/EEC, which provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas. Also, Council Directive 92/43/EEC (Habitats Directive) provides for the conservation of natural habitats and of wild fauna and flora, through the designation of Special Areas of Conservation. There are 13 areas designated as Special Protected Areas and 45 Special Areas of Conservation within the SERBD. The Special Protected Areas are listed in Appendix A. Designated species and habitats must be monitored, and reports made regularly by Member States to the EU.

The Minister shall, for the purpose of identifying as sites of Community importance and based on the criteria set out in Annex III (Stage I) to the Habitats Directive and relevant scientific information, prepare a list of sites indicating in respect of each such site either or both—

- the natural habitat type or types in Annex I to the Habitats Directive which the site hosts, and
- the species in Annex II to the Habitats Directive that are native to the State which the site hosts.

4.4.4 Sea Pollution

Act 27 of 1991. Sea Pollution Act, 1991 as amended by No. 18 of 1999. Sea Pollution (Amendment) Act, 1999

This Act makes provision for the prevention of pollution of the sea by oil and other substances, and to give effect to the international convention for the prevention of pollution from ships, and to provide for the repeal of the Oil Pollution of the Sea Acts, 1956 to 1973.

The main objective of the Amendment Act is to prevent or limit the damage caused as a result of an oil pollution incident. Each harbour authority, operator or local authority must submit an oil pollution emergency plan to the Minister for Communications, Marine and Natural Resources if requested to do so. Failure to devise such a plan or have it in place is considered to be an offence.

4.4.5 Planning and Development

(i) ***Act 30 of 2000. Local Government (Planning and Development) Act, 2000***

Provisions contained in this Act are utilised to control the location of potential sources of water pollution, including the discharge of domestic and industrial effluent. Planning authorities may refuse, or permit subject to conditions, the location of developments likely to cause pollution. Conditions likely to be imposed on all developments by planning authorities are those providing for the treatment and/or disposal of domestic effluent.

The relevance of these conditions is particularly important in unserved areas where discharges of domestic effluent from single homes are generally not required to be licensed. Discharges from septic tanks or other disposal systems of a certain maximum value which are made into an aquifer are exempt from the provisions of the Water Pollution Acts. The standard recommendations for septic tank drainage arrangements are contained in the IIRS (Institute of Industrial Research and Standards-now Enterprise Ireland) Recommendations for Septic Tank Drainage Systems Suitable for Single Homes (S.R. 6:1991).

Under Section 199 of this Act a local authority can make bye-laws in relation to the use, operation, protection, regulation or management of any lands, services, or any other matter provided by or under the control or management of the local authority (refer to Appendix B).

(ii) *Act 37 of 2001. Local Government Act, 2001*

Under Section 199 of this Act a Local Authority can make a bye-law for or in relation to the use, operation, protection, regulation or management of any land, services or any other matter provided by or under the control or management of the Local Authority whether within or without its functional area. This Act confers power on Local Authorities to amend or revoke bye-laws made by it. The Act includes the power to make bye-laws in relation to the foreshore and coastal waters adjoining the functional area (refer to Appendix B).

5.0 IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE

5.1 Requirements and Responsible Bodies

Table 5.1 below sets out the requirements of each of the Water Framework Directive's articles, identifying the bodies currently responsible for these functions and the appropriate legislation relating to the WFD articles, including the European Communities (Water Policy) Regulations, S.I No. 722 of 2003. (Later amended by S.I. No 413 of 2005), made to implement the WFD in Ireland.

The competent authorities responsible for the implementation of the WFD can be found in Appendix C. These competent authorities are set out in the European Communities (Water Policy) Regulations, S.I No. 722 of 2003 first schedule.

5.2 Establishment of River Basin Districts

The Department of the Environment, Heritage and Local Government funded the establishment of River Basin management projects in Ireland. The RBD projects are the key step towards implementing the Water Framework Directive in Ireland. Projects were established on the basis of areas called River Basin Districts.

'River Basin District' (RBD) means the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters, which is identified under Article 3 (1) as the main unit for management of river basins. (Definitions Article 2 of the WFD)

River Basin Districts were established, some of which are Cross Border River Basin Districts. The overall objective of these projects is to develop a River Basin Management System which will include a programme of measures to achieve the Environmental objectives defined in the Water Framework Directive. Local Authorities have the primary role in implementing these projects.

The EC Water Policy Regulations, 2003 required that the EPA shall, not later than 22 June 2004, forward information in relation to the boundaries, main rivers and individual river basins in the districts. Seven River Basin Districts have been identified in which the Republic of Ireland will have involvement. The Regulations identify the following co-ordinating Local Authorities for the RBDs:

- Eastern RBD (Dublin City Council)
- Western RBD (Galway County Council)
- South Eastern RBD (Carlow County Council)
- South Western RBD (Cork County Council)
- North Western IRBD (Donegal County Council)
- Neagh Bann IRBD (Monaghan County Council)
- Shannon IRBD (Limerick County Council)

For the South Eastern River Basin District Carlow County Council has been designated as the lead authority. This river basin district includes substantially all of Counties Carlow, Wexford, Kilkenny and large portions of Waterford, Laois, and Tipperary (Principal Authorities). Other counties which encroach along the boundary of the SERBD include Offaly, Limerick, Kildare, Wicklow and Cork.

5.3 Programme of Measures

The Water Framework Directive (WFD) requires a River Basin Management Plan (RBMP) to be produced for each River Basin District. A key element to this plan is the **Programme of Measures**, which is the main mechanism for achieving the Directive's environmental objectives (Ref Article 4). Article 11, identifies both Basic Measures and Supplementary Measures. The Basic Measures are the minimum requirements to be complied with and include the measures required under existing water related EU Directives as follows:

- Bathing Water Directive (76/160/EEC)

- The Birds Directive (79/409/EEC)
- The Drinking Water Directive (80/778/EEC)
- The Major Accidents (Seveso) Directive (96/82/EC)
- The Environmental Impact Assessment Directive (85/337/EEC)
- The Sewage Sludge Directive (86/278/EEC)
- The Urban Waste-water Treatment Directive (91/271/EEC)
- The Plant Protection Directive (91/414/EEC)
- The Nitrates Directive (91/676/EEC)
- The Habitats Directive (92/43/EEC)
- The Integrated Pollution Control Directive (96/61/EC)

Article 11 in Table 5.1 of this section identifies the Irish legislation in force to implement the EU directives referred to above to provide for the Basic Measures. Appendix A defines the measures that Local Authorities should currently be implementing to comply with the existing Irish Legislation. Measures identified in Appendix A will be included in the Programme of Measures for the River Basin projects in Ireland.

Supplementary measures are those needed in addition to basic measures if the environmental objectives (Good Status) of the WFD are to be achieved. The type of supplementary measures that may be adopted as part of the Programme of Measures, are stated in Article 11 and Annex VI of the Directive and include the following:-

- Legislative Instruments
- Administrative Instruments
- Economic or Fiscal Instruments
- Negotiated Environmental Agreements
- Emission Controls
- Codes of Good Practice
- Recreation and Restoration of Wetlands Areas
- Abstraction Controls
- Demand Management Measures
- Efficiency and Reuse Measures

Legislation which is in-place to implement the supplementary measures identified in Annex VI is given in Table 5.1 – Article 11.

5.4 Administration and Implementation

The administration and implementation of the River Basin District has and will require the input from both governmental organisation and non-governmental organisations (NGO's). As noted in comments in Table 5.1 – Article 3, the formalisation of a competent authority to administer the RBD has yet to be completed and will likely require additional legislation. Views have been expressed that this will be delegated to Local Authorities and, and as such, Carlow County Council and the other principal authorities will likely maintain the major interest in the administration and implementation of the RBD.

Non-governmental organisations will be required to participate in development of the management system for the RBD and in the implementation of the Programme of Measures.

Table 5.1 Implementation of the Water Framework Directive

WFD ARTICLE 1 - PURPOSE		
Article 1 ((a) to (e))		

WFD ARTICLE 2 - DEFINITIONS		
Article 2 (1 to 41)	Responsible Body	Existing National Legislation
		S.I. 722 of 2003 Water Policy Regulations Article 2(3)

ARTICLE 3 - CO-ORDINATION OF ADMINISTRATION ARRANGEMENTS WITHIN RIVER BASIN DISTRICTS		
Requirement	Responsible Body	Existing National Legislation
<p>a) Establish River Basin Districts. (RBDs)</p> <p>b) Identify individual river basins and assign them to individual RBDs. Assign groundwaters and coastal waters to the appropriate RBDs.</p> <p>c) Identify Competent River Basin Authorities by 2003 and provide the commission with a list (ref Annex I) of competent authorities by 22nd June 2004. Inform the commission within three months if information on the list changes.</p> <p>d) Assign International River Basin Districts and ensure appropriate administration arrangements including identification of an appropriate competent authority.</p> <p>e) Ensure that the requirements of the Water Framework Directive e.g. Environmental Objectives, Programme of Measures are coordinated for the whole of the RBD.</p>	<p>National Government</p> <p>-----</p> <p>a) EPA b) EPA c) EPA</p> <p>d) EPA and the Minister</p> <p>e) Co-ordinating Authority</p>	<p>The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act 1977 (as amended 1990), and Section 6 and 59 of the Environmental Protection Agency Act 1992, has powers to make regulations to give full effect to EU Directives.</p> <p>-----</p> <p>S.I. 722 of 2003 Water Policy Regulations</p> <p>a) Article 5 (2) b) Article 5 c) Article 6(3): EPA shall send to the EC not later than 22 June 2004 the information required by Article 3(8) of the directive in relation to Competent Authorities (Article 6(1-4) of the regulations identifies the Competent Authorities in relation to River Basin Districts). d) EPA shall assign International River Basin Districts under Article 5 (2 &5). The Minister shall promote the coordinated implementation of the Directive across RBDs together with the competent authorities in the State & in Northern Ireland, in relation to international RBDs & may provide such assistance to the relevant local authorities in an RBD who shall establish environmental objectives (Article 12(1a)) and programme of measures (Article 12(1b)) e) Article 6(4) specifies a local authority which shall act as co-ordinator for the relevant local authorities in an RBD who shall establish environmental objectives (Article 12(1a)) and a programme of measures (Article 12) 1B</p>

ARTICLE 4 – ENVIRONMENTAL OBJECTIVES		
Requirements	Responsible Body	Existing National Legislation
<p>FOR SURFACE WATERS</p> <ul style="list-style-type: none"> ➤ Implement measures to prevent deterioration of the status of all bodies of surface waters ➤ Protect, Enhance and restore all bodies of surface waters with the aim of achieving ‘Good Surface Water Status’ by 2015. ➤ Aim to reduce pollution from Priority Substances and phase out discharges of Priority Hazardous Substances. 	<ul style="list-style-type: none"> • National Government through the RBD Competent Authority. 	<p>The EPA Act of 1992 requires that a Minister of the Government shall have regard to information, advice or recommendations given to the Minister by the EPA under Sections 55 and 75 of Part 3 of the Act.</p>
	<p>-----</p> <ul style="list-style-type: none"> • Local Authorities 	<p>-----</p> <p>LA’s are required to implement measures under the Phosphorus Regulations (S.I. No. 258 of 1998) concerning the improving of water quality.</p> <p>LA’s have powers under Sections 4 and 16 of the Water Pollution Act 1977, to issue licences in respect of discharges to waters and to sewers. These powers can be used to reduce or phase out discharges of Priority Substances.</p> <p>S.I. No. 294 of 1989 requires LA’s to take measures to ensure the quality of surface water intended for the abstraction of drinking water.</p>
	<p>-----</p> <ul style="list-style-type: none"> • EPA 	<p>-----</p> <p>The EPA may, or if directed to do so by the Minister shall, under Section 55 of Part 3 of the EPA Act, 1992 give information or advice or make recommendations for the purposes of environmental protection.</p> <p>The EPA is required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO’s) for the purposes of environmental protection.</p> <p>The EPA may, under Section 76 of Part 3 the EPA Act 1992, prepare and publish Codes of Practice for the purposes of environmental protection and to approve codes of practice drawn up by any other body.</p>
	<p>-----</p> <ul style="list-style-type: none"> • Any other body 	<p>-----</p> <p>Any other body may draw up Codes of Practice and submit to the EPA for approval under Section 76 of Part 3 the EPA Act 1992.</p>

ARTICLE 4 – ENVIRONMENTAL OBJECTIVES		
Requirements	Responsible Body	Existing National Legislation
	<ul style="list-style-type: none"> • Relevant Local Authorities • EPA 	<p>S.I No.722 of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 12(1a): Relevant Local Authorities shall establish a programme of measures (Article 12(1b) ➤ Article 12, Article 17 in the absence of agreement at a community level, the EPA shall make recommendations to the minister in relation to the standards which should be established for all surface waters affected by discharges for such substances and such controls as may be appropriate in relation to the principal sources of such substances
<p>FOR GROUNDWATER</p> <ul style="list-style-type: none"> ➤ Implement measures to prevent/limit pollutants into groundwater and to prevent the deterioration of the status of all bodies of groundwater. ➤ Protect, enhance and restore all bodies of groundwater, ensure a balance between abstraction and recharge with the aim of achieving Good Groundwater Status by 2015. ➤ Implement measures to reverse any significant upward trends in the concentration of any pollutants from human activity in order to progressively reduce pollution to groundwater. 	<ul style="list-style-type: none"> • Local Authorities <p>-----</p> <ul style="list-style-type: none"> • EPA <p>-----</p> <ul style="list-style-type: none"> a) Relevant Local Authorities 	<p>S.I. No. 42 of 1999 gives LA’s responsibility to limit the discharge of harmful substances to groundwater through licensing under the Water Pollution Act.</p> <p>-----</p> <p>S.I. No. 41 of 1999 gives responsibility to the EPA to issue licences in respect of discharges to groundwater by LA’s and their agents. The EPA may attach conditions to such licences for environmental protection.</p> <p>-----</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 12(1a) Relevant Local Authorities shall establish environmental objectives in relation to each RBD and shall establish a programme of measures (Article 12(1b) to achieve those objectives
<p>FOR PROTECTED AREAS</p> <ul style="list-style-type: none"> ➤ Achieve compliance with any standards/objectives in relation to protected areas by 2015. 	<ul style="list-style-type: none"> • Local Authorities • EPA 	<p>S.I. No. 254 of 2001 requires LA’s to achieve standards for discharges to designated sensitive waters.</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 8: the EPA shall establish, not later than 22 Dec 2004, a register of protected areas in accordance with Article 6 of the Directive, and subsequently keep the register under review and up to date. Article 10(2d, iii). The monitoring programme shall cover, in relation to protected areas, such additional matters as may be required to meet the requirements of local, national and EC legislation establishing protected areas

ARTICLE 4 – ENVIRONMENTAL OBJECTIVES		
Requirements	Responsible Body	Existing National Legislation
<p>OTHER BODIES</p> <ul style="list-style-type: none"> ➤ Designate bodies of surface water as artificial or heavily modified. ➤ Include designations in the River Basin Management Plan and review every 6 years. 	<ul style="list-style-type: none"> • EPA • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 7(1) b, ii. The EPA shall identify each surface water body as ... an artificial surface water body or a heavily modified surface water body. ➤ Article 13: Relevant local authorities to make the RBD management plan in consultation with the relevant public authorities: includes EPA

ARTICLE 5 – CHARACTERISTICS OF THE RIVER BASIN DISTRICT, REVIEW OF THE ENVIRONMENTAL IMPACT OF HUMAN ACTIVITY AND ECONOMIC ANALYSIS OF WATER USE		
Requirements	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ For each River Basin District (RBD) <ul style="list-style-type: none"> - Provide an analysis of the River Basin District characteristics in accordance with Annex I by 2004. - Review the impact of the human activity on the status of the surface waters and on the ground waters by 2004. - Provide an economic analysis of water use in the RBD in accordance with Annex III of the directive by 2004. 	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 7(2a) Relevant Local Authorities shall not later than 22 December 2004, carry out, in accordance with Article 5 of the Directive in relation to a RBD ...an analysis of its characteristics ➤ Article 7(2b): Relevant Local Authorities shall ...review of the impact of human activity on the status of surface waters and ground waters. ➤ Article 7(2c): Relevant local authority ...an economic analysis of water use.
<ul style="list-style-type: none"> ➤ Review and update the above tasks by 2013 and every 6 years thereafter. 	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 13(12) shall, not later than 22 June 2015 and every six years thereafter, review and, if necessary, update their RBMP and subarticles (1) to (11) (of the Article 13, Regs) shall apply with appropriate modifications to any new or updated plan.

ARTICLE 6 – REGISTER OF PROTECTED AREAS		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Establish a register of Protected Areas within each RBD by 2004. It shall include the following:- (Ref Annex IV) ➤ Areas designated for the abstraction of Drinking water. ➤ Areas designated for the protection of economically significant aquatic species. ➤ Recreational Waters including bathing Waters Directive 76/160/EEC ➤ Nutrient-Sensitive Areas including vulnerable zones under Nitrates Directive 91/676/EEC sensitive areas under Urban Waste Water Directive 91/271/EEC ➤ Areas designated for the Protection of Habitats or species Directives 92/43/EEC and 79/409/EEC ➤ Review registers and keep up to date for each RBD 	<ul style="list-style-type: none"> • National Government through RBD competent Authority. • Local Authority • National Government • National Government • National Government • National Government through NPWS, DEHLG • EPA 	<ul style="list-style-type: none"> ➤ The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act, and Section 6 and 59 of the Environmental Protection Agency Act, 1992 has powers to make regulations to give full effect to EU Directives. ➤ Section 9 of the Water Pollution Act, 1977 requires LAs to establish and maintain registers of abstractions. ➤ The Minister has made regulations which designate salmonid waters (S.I. No. 293 of 1988). ➤ The Minister has made regulations which designate shellfish waters (S.I. No. 2000 of 1994) and (S.I. No. 459 of 2001). The Minister has made regulations which designate Bathing Water (S.I. No. 155 of 1992 and amended by S.I. No. 177 of 1998) ➤ Article 17, 18 and schedule 3 and 4 of the Nitrates Regulations European Communities (Good Agriculture; Practice for Protection of Waters) Regulations S.I No. 378 of 2006. ➤ Wildlife Act 1976 Wildlife Amendment Act 2000 European Communities (Natural Habitats) Regulations, S.I. No 94 of 1997 (S.I. No. 94 of 1997 and S.I. No 378 of 2005. European Communities (Natural Habitats) (Amendment) Regulations, 2005) <p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 8: The EPA shall establish not later than 22 December 2004, a register of protected areas in accordance with Article 6 of the directive and subsequently keep the register under review and up to date

ARTICLE 7– WATER USED FOR THE ABSTRACTION OF DRINKING WATER		
Requirements	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Identify in the RBDs all bodies of water (existing and future) for drinking water abstraction. ➤ Monitor in accordance with Annex V those bodies providing more than 100 m³/day as an average. ➤ Ensure Water Quality Meets the Requirements of Directive 80/778/EEC as amended by Directive 98/83/EC. ➤ Ensure the necessary protection of identified water bodies 	<ul style="list-style-type: none"> • Local Authorities • Local Authorities • Local Authorities • Local Authorities ----- • EPA 	<ul style="list-style-type: none"> ➤ Section 9 of the Water Pollution Act, 1977 requires LA's to establish and maintain registers of abstraction. ➤ S.I. No. 439 of 2000 requires LAs to take measures to ensure drinking water meets the requirement of Directive 98/83/EC ➤ S.I. No. 177 of 2000 requires LAs to implement an action programme to ensure compliance with Directive 80/778/EEC ➤ LAs have powers under the Planning and Development Act 2001 to refuse development or to attach conditions to the approval of development for the protection of identified water bodies. <p>-----</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 10 (1) The EPA shall prepare not later than 22 June 2006, following consultation with the relevant public authorities and such other persons as it considers appropriate, a programme of monitoring of water status in order to provide a coherent and comprehensive overview of water status within each river basin district in accordance with Articles 7(1) of the Directive ➤ Article 10 (2) the programme prepared by the EPA shall provide that all monitoring measures necessary for compliance with Articles 7(1) of the Directive are established and operational not later than 22 December 2006.

ARTICLE 8 – MONITORING OF SURFACE WATER STATUS, GROUNDWATER STATUS AND PROTECTED AREAS		
Requirements	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Establish Monitoring Programmes for monitoring water status ➤ Surface Water programmes shall cover Volume, level/rate of flow, Ecological and chemical status and ecological status 	<ul style="list-style-type: none"> • National Government through RBD Competent Authority. • Relevant Local Authorities 	<ul style="list-style-type: none"> ➤ Under Section 64 of Part 3 of the EPA Act 1992, the EPA may direct a LA to provide, operate and maintain gauges and other equipment for recording hydrometric data. ➤ S.I. No. 439 of 2000 and SI 249 of 1989 require LAs to monitor the quality of water intended for the abstraction of drinking water. ➤ S.I. No. 293 of 1998 requires LAs to carry out monitoring with respect to Salmonid waters. ➤ S.I. No. 155 of 1992 requires LAs to carry out monitoring with respect to Bathing Waters. ➤ S.I. No. 254 of 2001 requires LAs to carry out monitoring of water subject to a discharge from an urban wastewater treatment plant.
	<p>-----</p> <ul style="list-style-type: none"> • EPA <p>-----</p>	<p>-----</p> <p>Section 64 of Part 3 of the EPA Act requires the EPA to establish a hydrometric programme for the collection analysis and publication of hydrometric data.</p> <p>-----</p>
	<ul style="list-style-type: none"> • Others 	<p>-----</p> <p>Under Section 64 of Part 3 of the EPA Act 1992, the EPA may make arrangements with any public authority to provide, operate and maintain gauges and other equipment for recording hydrometric data.</p> <p>-----</p>
	<ul style="list-style-type: none"> a) EPA 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 10(1) shall prepare not later than 22 June 2006, following consultation a programme of monitoring of water status in order to provide a coherent and comprehensive overview of water status within each river basin district in accordance with Article 7(1) and 8 of the Directive. This programme shall cover in relation to surface water- the ecological and chemical status and ecological potential. The EPA shall publish and send to the Minister of the Government and to each authority to which a duty is assigned by a programme a copy of the programme and a summary report of the programme, together with a notice indicating that comments in relation to the programme may be sent to the

ARTICLE 8 – MONITORING OF SURFACE WATER STATUS, GROUNDWATER STATUS AND PROTECTED AREAS		
		Minister within one month of the date of the publication.
➤ Ground Waters programmes shall cover monitoring of chemical and quantitative status.	<ul style="list-style-type: none"> • Relevant Local Authorities <hr style="width: 50%; margin: 10px auto;"/> <ul style="list-style-type: none"> • EPA 	<p>S.I. No. 42 of 1999 requires LAs to carry out or cause to be carried out monitoring of effects on groundwater in respect of a licence issued under Part IV of the Water pollution Act.</p> <p>-----</p> <p>S.I. No. 41 of 1999 requires the EPA to carry out or cause to be carried out monitoring of the effects on groundwater in respect of a licence issued under these regulations.</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations Article (10) d shall cover in relation to groundwater, the chemical and quantitative status.</p>
➤ Protected Areas programmes shall cover specifications contained in community legislation under which the individual protected areas have been established.	<ul style="list-style-type: none"> • National Government through RBD Competent Authority. 	<p>Article (10) d shall cover in relation to protected areas, such additional matters as may be requires to meet the requirements of local, national and European Community legislation establishing protected areas.</p>
➤ Programmes shall be operational by 2006 and will be in accordance with Annex V	<ul style="list-style-type: none"> • National Government through RBD Competent Authority 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 10(3) A monitoring programme shall come into affect six months after the programme has been published in accordance with subarticle (3).</p>
<p><u>Comments</u> In many cases LAs commission the EPA to carry out their statutory obligations with respect to monitoring of surface waters. The South East has historically had strong dependence on the Regional Laboratory in Kilkenny, the lab was originally the Local Authority Lab but is now the EPA Regional Lab.</p>		

ARTICLE 9 – RECOVERY OF COSTS FOR WATER SERVICES		
Requirements	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Take account of the principle of cost recovery including environmental and resource costs ➤ Ensure that Water Pricing Policies provide adequate incentives to use resources efficiently. ➤ Ensure an adequate distribution of cost recovery 	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 11 (1) shall take account of the principle of recovery of the costs of water services, including environmental and resource costs, having regard to the economic analysis carries out and in accordance with the polluter pays principle. ➤ Article 11 (2) established practices referred to in Article 9.4 of the Directive shall include the provisions of section 12 of the Local Government (Financial Provisions) Act, 1997 (No. 29 of 1997)

ARTICLE 10 – THE COMBINED APPROACH FOR POINT AND DIFFUSE SOURCES		
Requirement	Responsible Body	Existing National Legislation
<p>➤ Ensure that all discharges to surface waters are controlled</p>	<ul style="list-style-type: none"> • EPA 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 6 (2) The EPA shall take such measures as it considers appropriate to promote and facilitate the co-ordination of activities for the purposes of Articles 10 of the Directive. ➤ Article 17(1) the EPA shall within the period of six years specified in Article 16.8 of the Directive in relation to the establishment of environmental quality standards under Article 16 of the Directive for substances included on the first list of priority substances, make recommendations to the Minister not more than three months after the expiration of that period in relation to the standards which should be established in accordance with that article for all surface waters affected by discharges of such substances and such controls as may be appropriate in relation to the principal sources of such substances
	<p>-----</p> <ul style="list-style-type: none"> • Relevant Authority Local 	<p>S.I. No. 117 of 1977 allows LA's to prepare a water Quality Management Plan</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations Article 13(1) shall in relation to each RBD not later than the 22 June 2009 make a river basin management plan</p>
	<p>-----</p> <ul style="list-style-type: none"> • EPA 	<p>The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO's) for the purposes of environmental protection.</p>
	<ul style="list-style-type: none"> • Relevant Authority Local 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 12(1) The relevant local authorities shall, not later than 22 June 2009, following consultation with the relevant public authorities and such other persons as the relevant local authorities consider appropriate a) establish environmental objectives in relation to each river basin district in accordance with Article 4 of the Directive,</p>

ARTICLE 10 – THE COMBINED APPROACH FOR POINT AND DIFFUSE SOURCES		
Requirement	Responsible Body	Existing National Legislation
<p>➤ Establish emission controls based on best available techniques (BAT) or relevant emission limit values or for diffuse impacts controls including best environmental practices set out in the following Directives</p>	<ul style="list-style-type: none"> • National Government <p>-----</p> <ul style="list-style-type: none"> • EPA 	<p>The EPA Act of 1992, requires that a Minister of the Government shall have regard to information, advice or recommendations given to the Minister by the EPA under Sections 55 and 75 of Part 3 of the Act.</p> <p>-----</p> <p>The EPA may, or if directed to do so by the Minister shall, under Section 55 of Part 3 of the EPA Act, 1992 give information or advice or make recommendations for the purposes of environmental protection.</p> <p>The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO's) for the purposes of environmental protection.</p> <p>The EPA may, under Section 76 of Part 3 the EPA Act, 1992 prepare and publish Codes of Practice for the purposes of environmental protection and to approved codes of practice drawn up by any other body.</p>
<p>- Directive 96/61/EC concerning Integrated Pollution Prevention and Control.</p>	<ul style="list-style-type: none"> • EPA 	<p>The Environmental Protection Agency Act, 1992 provides for a combined approach by licensing by the EPA of emissions of certain activities by way of an Integrated Pollution Control (IPC) licence.</p> <p>The Waste Management Act, 1996 provides for licensing by the EPA of waste disposal and recovery activities. The waste licence considers all emissions from the activity.</p>
<p>- Directive 91/271/EEC concerning Urban Wastewater treatment.</p>	<ul style="list-style-type: none"> • Relevant Authority <p style="text-align: right;">Local</p>	<p>S.I. No. 254 of 2001 requires LAs to carry out the requirements of the Urban Waste Water Directive.</p>
<p>- Directive 91/676/EEC concerning the protection of waters against pollution caused by Nitrates and agricultural sources.</p>	<ul style="list-style-type: none"> • Relevant Authorities <p style="text-align: right;">Local</p>	<p>S.I. No. 378 of 2006 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2006 puts in place a Nitrates Action Plan</p>
<p>- Directives referenced in Article 16</p>	<ul style="list-style-type: none"> • Relevant Authorities <p style="text-align: right;">Local</p>	<p>See Article 16</p>
<p>- Directives listed in Annex IX of the WFD</p>	<ul style="list-style-type: none"> • EPA 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 17 (2) substances subsequently included in the list of priority substances shall in relation to standards for such substances with the period of 54 months after the inclusion of such substances on the list of priority substances make recommendations to the Minister within three months of the expiration of that period in relation to the standards which should be established in accordance with Article 16.8 of the directive.</p>

ARTICLE 10 – THE COMBINED APPROACH FOR POINT AND DIFFUSE SOURCES		
Requirement	Responsible Body	Existing National Legislation
<p>➤ Where stricter conditions than those above are required to achieve quality objectives and standards, more stringent emission controls will be set accordingly.</p>	<ul style="list-style-type: none"> National Government through the RBD Competent Authority 	<p>The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act 1977 (as amended 1990), and Section 6 and 59 of the Environmental Protection Agency Act 1992, has powers to make regulations to give full effect to EU Directives.</p>

ARTICLE 11 – PROGRAMME OF MEASURES		
Requirements	Responsible Body	Existing National Legislation
<p>➤ Establish a programme of Measures for each River Basin District which shall include Basic measures and Supplementary measures where necessary.</p> <p>Required BASIC MEASURES include - The implementation of the following directives that are already in force and listed in Annex VI and the directives listed in Article 10.</p>	<ul style="list-style-type: none"> ▪ Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 12(1) shall, not later than the 22 June 2009, following consultation, (b) establish a programme of measures in accordance with Article 11 of the Directive ➤ Article 12 (3) a programme of measures shall include the basic measures specified in Article 11(3) of the directive and such supplementary measures as specified in Article 11(4) of the Directive as the relevant authorities consider appropriate
<ul style="list-style-type: none"> - Bathing Water Directive (76/160/EEC) (2006/7/EC) 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>Bathing Water Regulations and Amendments (S.I. No. 155 of 1992, S.I. No 145 of 1994 and S.I No 22 of 2001) includes for measures to be taken by LAs to enforce the Bathing Water Directive (76/160/EEC</p>
<ul style="list-style-type: none"> - The Birds Directive (79/409/EEC) 	<ul style="list-style-type: none"> • National Government • Local Authority 	<p>The Conservation of Wild Birds Regulations (S.I. No. 291 of 1985)</p>
<ul style="list-style-type: none"> - The Drinking Water Directives (80/778/EEC) and (98/83/EC) 	<ul style="list-style-type: none"> • National Government 	<p>Quality of Water intended for Human Consumption Regulations S.I. No. 81 of 1988 includes for measures to be taken by LAs to enforce the Drinking Water Directive (98/83/EC). The revised Drinking Water Directive (98/83/EC) comes into force in 2004 and Regulations to enforce this directive (S.I. 439 of 2000) come into force at the same time.</p>
<ul style="list-style-type: none"> - The Major Accidents (Seveso) Directive (96/82/EC) and (2003/105/EC) 	<ul style="list-style-type: none"> • National Government 	<p>S.I. No. 292 of 1986 and S.I. 476 of 2000 bringing into force the Control of Major Accidents involving dangerous substances</p>
<ul style="list-style-type: none"> - The Environmental Impact Assessment Directive (85/337/EEC) 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>Environmental Impact Assessment Regulations 1989 to 1998 (S.I. No. 351 of 1998) bring into force in Irish Law the requirement of the Environmental Impact Assessment Directive (85/337/EEC).</p>
<ul style="list-style-type: none"> - The Sewage Sludge Directive (86/278/EEC) 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>Use of Sewage Sludge in Agriculture Regulations (S.I. No. 148 of 1998) as amended by S.I. No. 267 of 2001 include for measures to be taken to enforce the requirements of Council Directive (86/278/EEC).</p>
<ul style="list-style-type: none"> - The Urban Waste water Treatment Directive (91/271/EEC) 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>Urban Waste Water Treatment Regulation (S.I. No. 254 of 2001) includes measures to be taken by LAs concerning the implementation of the Urban Waste Water Directive (91/271/EEC).</p>
<ul style="list-style-type: none"> - The Plant Protection Directive (91/414/EEC) 	<ul style="list-style-type: none"> • National Government 	<p>S.I. No. 135 of 1995/ S.I. No 183 of 1995 (Export and Import of certain Dangerous substances)</p>
<ul style="list-style-type: none"> - The Nitrates Directive (91/676/EEC) 	<ul style="list-style-type: none"> • National Government 	<p>S.I. No. 378 of 2006 European Communities (Good Agricultural Practices for Protection of Waters)</p>

ARTICLE 11 – PROGRAMME OF MEASURES		
<p>Basic measures continued</p> <ul style="list-style-type: none"> - The Habitats Directive (92/43/EEC) 	<ul style="list-style-type: none"> • National Government • Relevant Local Authority 	<p>National Habitats Regulations (S.I. No. 94 of 1997) include for measures to be carried out to implement the requirement of the Habitats Directive (92/43/EEC).</p>
<ul style="list-style-type: none"> - The Integrated Pollution Control Directive (96/61/EC) 	<ul style="list-style-type: none"> • EPA 	<p>The Environmental Protection Agency is responsible for Integrated Pollution Control Licensing of Activities listed in the first Schedule of the EPA Act 1992.</p>
<ul style="list-style-type: none"> - Measures deemed appropriate for the purposes of Article 9 - (Recovery of Costs for Water Services) 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 11 (1) and (2) see article 9 also.</p>
<ul style="list-style-type: none"> - Measures to promote efficient and sustainable water use not compromising the objectives in Article 4 (Environmental Objectives) 	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 12 (1) shall establish a programme of measures in accordance with Article 11 of the Directive in order to achieve those objectives.</p>
<ul style="list-style-type: none"> - Measures to meet the requirements of Article 7 (Waters used for the abstraction of Drinking Water). 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>Water Pollution Act and S.I. No. 439 of 2000 requires Local Authorities to take measures to ensure drinking water meets the requirements of Directives 80/778/EEC & 93/83/EC.</p>
<ul style="list-style-type: none"> - Establish Controls for the abstraction of fresh surface water and groundwater and impoundment of fresh surface water including a register of water abstractions a requirement of prior authorisation for abstraction and impoundment. Review controls periodically and update if necessary. 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>Section 9 of the Water Pollution Act 1977 requires Local Authorities to maintain registers of abstractions.</p>
<ul style="list-style-type: none"> - Establish Controls including a requirement for prior authorisation of artificial recharge or augmentation of groundwater bodies. Review controls periodically and update where necessary. 	<ul style="list-style-type: none"> • Relevant Local Authority ----- • EPA 	<p>S.I. No. 42 of 1999 gives LAs responsibility to limit the discharge of harmful substances to groundwater through licensing under the Water Pollution Act.</p> <p>-----</p> <p>S.I. No. 41 of 1999 gives responsibility to the EPA to issue licences in respect of discharges to groundwater by LAs and their agents. The EPA may attach conditions to such licences for environmental protection.</p>
<ul style="list-style-type: none"> - Establish prior regulations for point sources liable to cause pollution. - Prohibit entry of pollutants into water or - Establish a requirement for prior authorisation / registration based on general binding rules laying down emission controls for the pollutants concerned including controls in accordance with articles 10 and 16. - Review controls periodically and update where necessary. 	<ul style="list-style-type: none"> • Relevant Local Authority ----- • EPA 	<p>Section 4 of the Water Pollution Act provides for licensing of discharges to waters by Local Authorities.</p> <p>-----</p> <p>Part 4 of the EPA Act provides for the licensing by the EPA of certain activities listed under the First Schedule.</p>

ARTICLE 11 – PROGRAMME OF MEASURES		
<p>Establish measures to prevent/control the input of pollutants from diffuse sources. Controls may:</p> <ul style="list-style-type: none"> – Prohibit entry of pollutants into water or – Establish a requirement for prior authorisation/registration based on general binding rules where such a requirement is not otherwise provided in EU legislation. <p>Review controls periodically and update where necessary.</p>	<ul style="list-style-type: none"> • Relevant Authority Local • Relevant authorities Local • Relevant authorities Local 	<p>S.I. No. 378 of 2006 European Communities (Good Agricultural Practices for Protection of Waters)</p> <p>SI No. 258 of 1998, Water Quality Standards for Phosphorus Regulations</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations Article 13(12) relevant local authorities shall, not later than 22 June 2015 and every six years thereafter, review and, if necessary, update their river basin management plan and subarticles (1) to (11) shall apply with appropriate modifications to any new or updated plan.</p>
<p>➤ Establish controls to ensure that the hydromorphological conditions of bodies of water are consistent with the achievement of the required ecological status. Review controls periodically and update where necessary.</p>	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 10(2) Monitoring programmes must cover in relation to surface waters... the volume and level or rate of flow to the extent relevant for ecological and chemical status and ecological potential ➤ Article 13(12) relevant local authorities shall, not later than 22 June 2015 and every six years thereafter, review and, if necessary, update their river basin management plan and subarticles (1) to (11) shall apply with appropriate modifications to any new or updated plan.
<p>➤ Prohibit Direct Discharges of Pollutants into groundwater.</p>	<ul style="list-style-type: none"> • Local Authority ----- • EPA 	<p>S.I. No. 42 of 1999 gives LAs responsibility to limit the discharge of harmful substances to groundwater through licensing under the Water Pollution Act.</p> <p>-----</p> <p>S.I. No. 41 of 1999 gives responsibility to the EPA to issue licences in respect of discharges to groundwater by LAs and their agents. The EPA may attach conditions to such licences for environmental protection.</p>

ARTICLE 11 – PROGRAMME OF MEASURES		
<p>Authorise reinjection for certain activities and specify conditions.</p> <ul style="list-style-type: none"> – Activities include mining, exploration, Building, Construction and maintenance of Civil Works, Injection of Natural or Liquefied Petroleum Gas for storage purposes, Discharges of small quantities for scientific purposes for characterisation. – Discharges must not compromise the achievement of the environmental objectives established for that groundwater body of the groundwater body. <p>Measures</p> <ul style="list-style-type: none"> – to eliminate pollution of surface waters by priority substances (ref. Article 16) to progressively reduce pollution by other substances which would prevent Member States from achieving their Environmental Objectives (ref. Article 4) 	<ul style="list-style-type: none"> • National Government through RBD Competent Authority 	<p>None specific</p>
<p>Measures to prevent significant losses of pollutants from technical institutions and to prevent the impact of accidental pollution incidents resulting from floods etc.</p>	<ul style="list-style-type: none"> • National Government through RBD Competent Authority 	<p>None specific</p>

ARTICLE 11 – PROGRAMME OF MEASURES		
Requirements	Responsible Body	Existing National Legislation
<p>➤ Adopt if necessary Supplementary Measures in addition to the Basic Measures to achieve the required Environmental Objectives (Ref Article 4).</p> <p>The following is a non exhaustive list of SUPPLEMENTARY MEASURES. Ref. (Annex IV)</p> <ul style="list-style-type: none"> i. Legislative Instruments ii. Administrative Instruments iii. Economic or Fiscal Instruments iv. Negotiated Environmental Agreements v. Emission Controls vi. Codes of Good Practice vii. Recreation and Restoration of Wetlands Areas viii. Abstraction Controls ix. Demand Management Measures x. Efficiency and Reuse Measures 	<ul style="list-style-type: none"> • Relevant Local Authorities • National Government • Local Authority • EPA 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 12(1) shall, not later than the 22 June 2009, following consultation, (b) establish a programme of measures in accordance with Article 11 of the Directive. programme of measures shall include the basic measures specified in Article 11(3) of the Directive and such supplementary measures specified in Article 11(4) of the Directive as the relevant authorities consider appropriate</p> <p><u>Supplementary Measures</u></p> <p>The Minister in exercise of powers conferred on him by Section 3 of the European Communities Act, Section 30 of the Local Government Water Pollution Act 1977 (as amended 1990), and Section 6 and 59 of the Environmental Protection Agency Act 1992, has powers to make regulations to give full effect to EU Directives.</p> <p>Under Section 199 of Act 30 of 2000, Local Government (Planning & Development) Act a local authority can make bye-laws in relation to the use, operation, protection, regulation or management of any lands, services or any other matter provided by or under the control or management of the local authority (refer to Appendix B).</p> <p>The EPA may, or if directed to do so by the Minister shall, under Section 55 of Part 3 of the EPA Act ,1992 give information or advice or make recommendations for the purposes of environmental protection.</p> <p>The EPA are required under Section 75 of Part 3 of the EPA Act, 1992 to specify and publish Environmental Quality Objectives (EQO's) for the purposes of environmental protection.</p> <p>The EPA may, under Section 76 of Part 3 the EPA Act 1992, prepare and publish Codes of Practice for the purposes of environmental protection and to approved codes of practice drawn up by any other body.</p>
<p>➤ Ensure the following when data indicates that the Environmental Objectives (Article 4) are unlikely to be achieved for the body of water. -Investigate the causes of possible failure</p>	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations ➤ Article 12(1) shall, not later than the 22 June 2009, following consultation, (b) establish a programme of measures in accordance with Article 11 of the Directive</p>

ARTICLE 11 – PROGRAMME OF MEASURES		
<p>-Review relevant permits/authorisations -Review and adjust monitoring programmes where appropriate. -Establish additional measures to achieve objectives including stricter environmental quality standards.</p> <p>➤ Additional Measures may be deemed unpractical in exceptional natural circumstances that could not have been foreseen – extreme floods, prolonged droughts.</p>		<p>(2) A programme of measures shall include the basic measures specified in Article 11(3) of the Directive and such supplementary measures specified in Article 11(4) of the Directive as the relevant authorities consider appropriate</p>
<p>➤ Establish measures to avoid increase in pollution to Marine Waters.</p>	<ul style="list-style-type: none"> • National Government through RBD Competent Authority 	<p>None specific</p>
<p>➤ Establish the Programme of Measures by 2009. All the measures should be operational by 2012.</p> <p>➤ Review Programme of Measures and update by 2015 and every 6 years thereafter.</p>	<ul style="list-style-type: none"> • National Government through RBD Competent Authority 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 13(12) relevant local authorities shall, not later than 22 June 2015 and every six years thereafter, review and, if necessary, update their river basin management plan and subarticles (1) to (11) shall apply with appropriate modifications to any new or updated plan.</p>

ARTICLE 12 – ISSUES WHICH CANNOT BE DEALT WITH AT MEMBER STATE LEVEL		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Submit a report to the Commission when an issue regarding the management of its waters cannot be resolved. ➤ Commission to respond to the report within 6 months 	<ul style="list-style-type: none"> • National Government 	None Specific

ARTICLE 13 – RIVER BASIN MANAGEMENT PLANS		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Produce a River Basin District Management Plan for each river basin district. ➤ Aim to produce a single international river basin management plan for cross border river basin districts. ➤ Include the following information in the River Basin Management Plan. Reference Annex VII) <ul style="list-style-type: none"> – Description of the RBD characteristics, Ref Article 5 and Annex II. – Summary of significant pressures and impact of human Activity on the status of Waters – Identify and map protected areas, Ref. Article 6 and Annex IV. – Map monitoring network and results of monitoring programmes. (Article 8 & Annex 5). – List Environmental Objectives (Article 4) – Provide a summary of the economic analysis of water use (Article 5 and Annex III). – Provide a summary of the programme of measures. (Article 11) – Provide a register of any more detailed programmes and management plan for the RBD. – Provide a summary of Public consultation measures taken. – List competent authorities – Contact Points and Procedures. ➤ Publish River Basin Plan by 2009 ➤ Review and update by 2015 and every 6 years thereafter. 	<ul style="list-style-type: none"> • Relevant Local Authority 	<p>The Local Government (Water Pollution) Act, 1977.</p> <p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 13 (1) ... in relation to each river Basin district , not later than 22 June 2009, following consultation with the relevant public authorities and such other persons as the relevant local authorities consider appropriate- (b) make a river basin management plan in accordance with Article 13 of the directive. <ul style="list-style-type: none"> ➤ Article 13 (12) The relevant Local authorities shall, not later than 22 June 2015 and every six years thereafter, review and, if necessary update the river basin management plan.

ARTICLE 14 – PUBLIC INFORMATION AND CONSULTATION		
Requirement	Responsible Body	Existing National Legislation
<p>➤ Encourage the active involvement of all interested parties. Publish and make available to the public :-</p> <ul style="list-style-type: none"> - Timetable and work programme for the RBMP (3 years before the plan is initiated) - Overview of significant water management issues (2 years before the plan is initiated) - Draft copies of the RBMP (1 year before the plan is initiated) <p>Make available all background information used</p> <p>➤ Allow at least 6 months before commenting on the documents in writing to allow for public consultation.</p>	<ul style="list-style-type: none"> • Relevant Local Authorities 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article 3(1) It shall be the duty of every public authority to encourage the active involvement of all interested parties in relation to the measures being taken by the authority for implementation of the Directive, and (f) provide access to background documents and information used for the development of a draft river basin management plan ➤ Article 14 (1) shall prepare and publish (a) later than 22 June 2006 (and not less than three years before the period to which a river basin management plan relates) a timetable and work programme for the production of a river basin management plan in accordance with article 12, including a statement as to the consultation measures taken,(b)not later than 22 June 2007 an overview of the significant water management issues identifies in the river basin district, (c) not later than 22 June 2008 draft copies of the river basin management plan ➤ Article 14 (2) on publication of the documents specified in article (1) the relevant local authorities shall, by notice published in a daily newspaper circulating in the river basin district , invite the provision of comments in writing by any person and shall allow a period of at least six months for the provision of such comments.

ARTICLE 15 – REPORTING		
Requirement	Responsible Body	Existing Legislation
<ul style="list-style-type: none"> ➤ Forward copies of the River Basin Management Plans (RBMP) and updates to the commission and other involved member states within three months of publication. ➤ Submit a summary report of the analysis (Article 5) and monitoring programmes undertaken (Article 8) to the commission within 3 months of their completion. ➤ Submit an interim progress report to the Commission within 3 years of publicising the RBMP. 	<ul style="list-style-type: none"> • EPA 	<p>S.I. No. 722 Of 2003 Water Policy Regulations</p> <ul style="list-style-type: none"> ➤ Article13(8) in accordance with Article 15 of the Directive send a copy of all river basin management plans and their updates to the European Commission within three months of the plan or update of the plan coming into effect. ➤ Article 7(5) ... shall not later than 22 March 2005, publish and send to the Minister and the European Commission a summary report of the analyses and review carried out. ➤ Article 15(2)...shall within six months of receipt of a report in accordance with subarticle (1) in relation to a river basin district, send to the European Commission an interim report describing progress in the implementation of the programme of measures established for that river basin district

ARTICLE 16 – STRATEGIES AGAINST POLLUTION OF WATER		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ European Parliament and the Council to adopt specific measures against pollution of water by pollutants presenting a significant risk to or via the aquatic environment including risks to waters used for the abstraction of drinking water. ➤ Submit a proposal setting out a list of priority substances which present a significant risk to the aquatic environment. Substances shall be prioritised for action on the basis of a risk assessment. ➤ Identify the priority hazardous substances. (take account of legislation regarding hazardous substances & international agreements. ➤ Review the adopted list of priority substances by 2004 and every 4 years thereafter and prepare proposals where appropriate. ➤ Take account of recommendations from relevant scientific bodies, organisations and member states in preparing proposals. ➤ Submit proposals for the Control of priority substances by 2003. <ul style="list-style-type: none"> - to progressively reduce discharges/emissions of priority substances - to phase out discharges/emissions of priority hazardous substances. ➤ Submit proposals for quality standards applicable to the concentrations of the priority substances in surface water, sediments or biota by 2003. ➤ Review the limit values and quality objectives in the Daughter directives (Annex IX) of the Dangerous Substances Directive when preparing proposals for controls. 	<ul style="list-style-type: none"> • European Parliament and Council • European Commission • European Commission • European Commission • European Commission • European Commission • European Commission 	<p>Decision No. 2455/2001/EC of the European Parliament and of the Council established the list of Priority substances in the field of water policy and amended the Water Framework directive 2000/60/EC –</p> <p>The list of 33 Priority Substances is added to Annex X of the WFD.</p> <p>The list also identified substances as priority hazardous substances.</p> <p>The Commission developed a combined monitoring-based and modelling based priority setting (COMMPS), scheme, in collaboration with experts of interested parties. The 33 Priority substances were selected on the COMMPS procedure.</p> <p>“Under the WFD a review of the dangerous substances daughter directives regulating List 1 substances under Directive 76/464/EEC was required within two years of the WFD entry into force. From this review a proposal (Com(2006)397) for a Directive setting environmental quality standards for the priority substances was adopted in July 2006, to be achieved by each Member State by 2015, to ensure "good chemical surface water status.</p>

ARTICLE 17 STRATEGIES TO PREVENT CONTROL POLLUTION OF GROUNDWATER		
Requirement	Responsible Body	Existing National Legislation
<p>➤ Adopt measures to prevent and control groundwater pollution and to achieve good groundwater chemical status by 2002 Include above measures in the Programme of Measures for the RBDs</p>	<ul style="list-style-type: none"> • European Parliament and Council 	<p>S.I. No. 722 Of 2003 Water Policy Regulations Article 18 The EPA shall, in the absence of the adoption at European Community of criteria in relation to groundwater for the purposes of Article 17 of the Directive, make recommendations to the Minister not later than 22 September 2005 as to the criteria which should be established for that purpose.</p>

ARTICLE 18 – COMMISSION REPORT		
Requirement	Responsible Body	Existing National Legislation
<p>➤ Publish a report on the implementation of the Water Framework Directive by 2012 and every 6 years thereafter. Submit to European Parliament and Council.</p> <p>➤ Publish a report based on the summary reports submitted by member states. (analyses and monitoring programmes for first RBMP) Article 15(2).</p> <p>➤ Publish an interim report based on the interim reports submitted by member states describing progress on implementation. Article 15(3). Submit to European Parliament and Council.</p> <p>➤ Organise a conference of interested parties to comment on the Commission's implementation reports in line with the reporting cycle. Participants should include representatives from the competent authorities, the European Parliament, NGO's, experts.</p>	<ul style="list-style-type: none"> • Commission • Commission • Commission • Commission 	<p>N/A</p>

ARTICLE 19 PLAN FOR FUTURE COMMUNITY MEASURES		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Present to the Regulatory Committee (Article 21), on a yearly basis, a plan indicating measures being considered which may have an impact on Water legislation. The first presentation should be made by 2002. ➤ Review the Water Framework Directive by 2019. 	<ul style="list-style-type: none"> • Commission • Commission 	N/A

ARTICLE 20 TECHNICAL ADAPPTIONS TO THE DIRECTIVE		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Guidelines may be adopted to implement Annexes II and V in accordance with Article 21. ➤ For the purposes of transmission and processing of data technical formats may be adopted in accordance with Article 21 	<ul style="list-style-type: none"> • Commission 	N/A

ARTICLE 21 – REGULATORY COMMITTEE		
Requirement	Responsible Body	Existing National Legislation
The Commission shall be assisted by a 'regulatory Committee'.	<ul style="list-style-type: none"> • Commission 	N/A

ARTICLE 22 – REPEALS AND TRANSITIONAL PROVISIONS		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Repeal the following Directives in December 2007. <ul style="list-style-type: none"> - Directive 75/440/EEC, concerning surface water for Drinking Water abstraction. - Directive 77/795/EEC establishing a common procedure for the exchange of information on the quality of surface freshwater in the community. Directive 79/869/EEC, concerning the measurement of surface (Drinking) water. ➤ Repeal the following Directives in December 2013. <ul style="list-style-type: none"> - Directive 78/659/EEC Freshwater Fish Directive. - Directive 79/923/EEC Shellfish Water Directive - Directive 80/68/EEC Groundwater Directive. - Directive 76/464/EEC Dangerous Substances Directive. 	<ul style="list-style-type: none"> • European Commission/ • National Government 	<p>All statutory instruments specifically intended to enforce these EU Directives.</p>

ARTICLE 23 – PENALTIES		
Requirement	Responsible Body	Existing National Legislation
<ul style="list-style-type: none"> ➤ Determine Penalties applicable to breaches of the National Provisions adopted pursuant to this Directive. The penalties thus provided shall be effective proportionate and dissuasive. 	<ul style="list-style-type: none"> • National Government 	<p>Penalties can be imposed by the Courts resulting from actions taken under existing legislation.</p>

ARTICLE 24 – IMPLEMENTATION		
Requirement	Responsible Body	Existing National Legislation
➤ Transpose into National Law by December 22nd 2003 and inform the commission when this is completed.	<ul style="list-style-type: none"> National Government 	S.I. No. 722 Of 2003 Water Policy Regulations amended by S.I. No. 413 of 2005 Water Policy Regulations (Amendment) 2005

ARTICLE 25 – ENTRY INTO FORCE		
Requirement	Responsible Body	Existing National Legislation
➤ The Water Framework Directive came into force on the 22nd December 2000 when it was published in the Official Journal of the European Communities.	<ul style="list-style-type: none"> National Government 	The European Communities Act, 1972 requires National Government to implement European Law.

REFERENCES

- Irvine K. et al. (2000) **Review of Monitoring and Research to meet the needs of the EU Water Framework Directive – Final Report.** EPA.
- Clabby K (2002) **Presentation on River Typology for WFD.** EPA
- Chave P. (2001) **The EU Water Framework Directive – An Introduction.** IWA Publishing.
- DAF, DEHLG (2005) **Consultation Paper Draft European Communities Good Agricultural Practise for the Protection of Water Quality, Regulations** DAF, DEHLG
- DAF, DEHLG (2006) **Explanatory Handbook for Good Agricultural Practice Regulations** DAF. DEHLG
- DAFRD (2001) **Good Farming Practice.** DARFD
- DOELG, DAFF (1996). **Code of Good Agricultural Practice to Protect Waters from Pollution by Nitrates.** Department of Agriculture, Food and Forestry.
- EPA (2002) **Integrated Pollution Prevention and Control (IPPC).** www.epa.ie
- EU (2000a) **Introduction into the new EU Water Framework Directive -**
<http://europa.eu.int/comm/environment/water/water-framework/overview.html>
- EU (2000b) **Handbook on the Implementation of EC Environmental Legislation – Water Sector.**
- EU (2000c) **Communication from the Commission to the European Parliament and the Council – Developing a new Bathing Water Policy.**

BIBLIOGRAPHY

- Black, A.R., O.M. Bragg, R.W. Duck, A.M. Jones, J.S. Rowan and A. Werrity (2000). **Anthropogenic Impacts on the hydrology of Rivers and Lochs**, SNIFFER WFD Research Project (<http://www.sniffer.org.uk>)
- DELG. (1997) **Sustainable Development; A Strategy for Ireland**. Department of the Environment and Local Government, Dublin.
- WWF (2000). **Implementing the EU Water Framework Directive – Seminar Series**. www.panda.org/europe/freshwater
- Bowman, J.J. and P.F. Toner (2001). **National Lake Water Quality monitoring Programme. A Discussion Document**. Environmental Protection Agency.
- Brogan, J., M. Crowe and G. Carthy (2001). **Developing a National Phosphorus Balance for Agriculture in Ireland**. EPA
- Clenaghan, C., C. Collins, and M. Crowe (2001). **Phosphorus Regulations National Implantation Report**. Environmental Protection Agency.
- DOELG (1997). **Managing Irelands Rivers and Lakes: A catchment based strategy against Eutrophication**. Department of the Environment and Local Government, Dublin.
- DOELG (2002) **Information Paper on Good Agricultural Practice and Protection of the Environment**. DOELG
- Department of Agriculture and Food (2005) **National Action Programme Under the Nitrates Directive**
- Department of the Marine and Natural Resources. **Code of Best Forest Practice**. Department of the Marine and Natural Resources.
- Dr Lanz, K & Scheuer (2001) **EEB Handbook on EU Water Policy under the Water Framework Directive**. EEB.
- Dr. Whelan D. (2002) **Guide to Irish Law**. <http://www.llrx.com/features/irish.htm>
- EPA (1997). **Environmental Quality Objectives and Environmental Quality Standards. The Aquatic Environment. A Discussion Document**. Environmental Protection Agency.
- EPA (2000) **The Quality of Drinking Water in Ireland. A report for the Year 199 with a review of the period 1997-1999**. EPA
- EPA (2000). **Irelands Environment. A Millennium Report**. EPA
- EU (2000) **Water Policy in the European Union** <http://europa.eu.int/comm/environment/water/index.html>
- EU (2001) **Common Strategy on the Implementation of the Water Framework Directive**, Office for Official Publications of the European Communities.
- EU (2001) **Facts Sheets – Community Water Protection and Management Policy**. <http://europa.eu.int/scadplus/leg/en/s15005.htm>
- EU (2002) **The Water Framework Directive – Tap Into It!** Office for Official Publications of the European Communities.
- Hickie David (1997) **Evaluation of Environmental Designations in Ireland**. The Heritage Council.
- Irish Government (2002) **Government and politics at European level -** http://www.oasis.gov.ie/government_in_ireland/government_and_politics_at_european_level/
- Jones T. (2001) **Elements of Good Practice in Integrated River Basin Management A Practical Resource for implementing the EU Water Framework Directive**. World Wide Fund for Nature (WWF)
- Lehane, M., O LeBolloch, P. Crawley (2002). **Environment in Focus. Key Environmental Indicators for Ireland**. Environmental Protection Agency.
- Lough Derg and Lough Ree (1998). **Catchment Monitoring and Management System**. Interim Report.
- Lough Leane Catchment (2000). **A catchment based approach for reducing nutrient inputs from all sources to the Lakes of Killarney**. Second Interim Report.
- McGarrigle, M.L., J.J. Bowman, K.J. Klabby, J. Lucey, P. Cunningham, M. MacCarthaigh, M. Keegan, B. Cantrell, M. Lehane, C. Clenaghan and P.F. Toner. (2000). **Water Quality in Ireland 1998-2000**. EPA.
- McGivern F. (1999) **IEI Water Course – Urban Catchment Drainage Sanitary Services Legislation**. IEI Ireland.

-
- O'Connor S (2001) **Consultants Brief – For the Establishment of a River Basin Management System.** Carlow County Council.
 - Office of the Attorney General (1998) **Irish Statute Book.** <http://193.120.124.98/>
 - Premazzi, G. (2000) *The Perspectives of the New Water Framework Directive.*
 - Scannell, Y. (1995). **Environmental and Planning Law in Ireland.** Round Hall Press, Dublin.
 - Three Rivers Project (2001). **Water Quality Monitoring and Management. Interim Report.** MCOS
 - Wallin T. et al. (2002) **Guidance on establishing reference conditions and ecological status class boundaries for inland surface waters.**
 - WWF (2000). **Activities across Europe to assist the implementation of the EU Water Framework Directive and Integrated River Basin Management.** WWF
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APPENDIX A

APPENDIX A DESIGNATIONS AND STANDARDS AS SET THROUGH IRISH LEGISLATION

(i) Drinking Water

S.I. No. 294 of 1984. European Community (Quality of Surface Water Intended for Human Consumption) Regulations

Parameters	Unit Of Measurement	Standard for Categories		
		A1	A2	A3
pH	pH Unit	5.5-8.5	5.5-9.0	5.5-9.0
Colouration (after simple filtration)	mg/l Pt scale	20*	100*	150*
Total Suspended Solids	mg/l SS	50		
Temperature	°C	25*	25*	25*
Conductivity	ms/cm ⁻¹ at 20°C	1000	1000	1000
Odour	(dilution factor at 25°C)	5	10.0	20
Nitrates	mg/l NO ₃	50*	50*	50*
Chlorides	mg/l Cl	250	250	250
Phosphates	mg/l P ₂ O ₅	0.5	0.7	0.7
Chemical Oxygen Demand	mg/l O ₂			40
Dissolved Oxygen saturation rate	%O ₂	>60%	>50%	>30%
Biochemical Oxygen Demand	mg/l O ₂	5	5	7
Ammonium	mg/l NH ₄	0.2	1.5	4*
Total coliforms	100ml	5000	25000	100000
Faecal coliforms	100ml	1000	5000	40000
Kjeldahl Nitrogen	mg/l N	200	2,000	10,000
Dissolved iron	mg/l Fe	0.2	2	2
Manganese	mg/l Mn	0.5	0.3	1
Copper	mg/l Cu	0.05*	0.1*	1*
Zinc	mg/l Zn	3	5	5
Sulphates	mg/l SO ₄	200	200*	200*
Phenols	mg/l C ₆ H ₅ OH	0.0005	0.005	0.1
Surfactants (reacting with Methylene blue)	mg/l laurylsulphate	0.2	0.2	0.2
Fluorides	mg/l	1	1.7	1.7
Boron	mg/l	2	2	2
Arsenic	mg/l	0.05	0.05	0.1
Cadmium	mg/l	0.005	0.005	0.005
Total Chromium	mg/l	0.05	0.05	0.05
Lead	mg/l	0.05	0.05	0.05
Selenium	mg/l	0.01	0.01	0.01
Mercury	mg/l	0.001	0.001	0.001
Barium	mg/l	0.1	1	1
Cyanide	mg/l	0.05	0.05	0.05
Dissolved or Emulsified hydrocarbons	mg/l	0.01	0.2	1
Polycyclic aromatic hydrocarbons	mg/l	0.0002	0.0002	0.001
Total Pesticides	mg/l	0.0005	0.0025	0.005
Substances extractable with chloroform	mg/l	0.2	0.4000	1.0000
Faecal streptococci	Number per 100ml	200	2000	10000
Salmonella		Not present in 500 ml	Not present in 200 ml	

*=excepting climatic or geographical conditions.

S.I. No. 439 of 2000. European Communities (Drinking Water) Regulations, 2000.

Parameter	Parametric value	Unit
<i>Escherichia coli</i>	0	number/100ml
<i>Enterococci</i>	0	number/100ml
Acrylamide	0.10	µg/l
Antimony	5.0	µg/l
Arsenic	10	µg/l
Benzo(a)pyrene	1.0	µg/l
Boron	0.01	mg/l
Bromale	10	µg/l
Cadmium	10	µg/l
Chromium	5.0	µg/l
Copper	50	mg/l
Cyanide	2.0	µg/l
	50	µg/l
1,2-dichloroethane	3.0	µg/l
Epichlorohydrin	0.1	µg/l
Fluoride	10	mg/l
Lead	10	µg/l
Mercury	1.0	µg/l
Nickel	20	µg/l
Nitrate	50	mg/l
Nitrite	0.5	mg/l
Pesticides	0.1	µg/l
Pesticides – Total	0.5	µg/l
Polycyclic aromatic hydrocarbons	0.1	µg/l
Selenium	10	µg/l
Tetrachloroethane and Trichloroethane	10	µg/l
Trihalomethanes – Total	100	µg/l
Vinyl chloride	0.5	µg/l

(ii) **Salmonid Water**

S.I. No. 293 of 1988. European Communities (Quality of Salmonid Waters) Regulations.

Parameter	Units	Standard	Sampling Frequency	Conformance to standard
Temperature	°C	Downstream of thermal discharge. Discharge > 1.5°C, temperature of receiving water >21.5°C May-Oct > 10°C Nov-April	Weekly upstream and downstream	98% of time
Dissolved Oxygen (DO)	mg/l O ₂	> 9 danger at 6, Local Authority to prove no harm to fish populations E.U. Directive –guidance limits > 7	Monthly representative of low O ₂ conditions	50% of time 100% of time
pH		≥ 6 ≤ 9 not exceeded ±0.5 change in the receiving water	Monthly	95% of monthly samples 100% when less frequent monitoring
Suspended Solids (SS)	mg/l	≤ 25 does not apply to SS with harmful chemical properties	Monthly	Average over 12 months
BOD ₅	mg/l O ₂	≤ 5 EU Directive guidance limit <3	Monthly	95% of monthly samples, 100% when less frequently monitored
Nitrites	mg/l	≤ 0.05 EU Directive guidance limit <0.01	Monthly	95% of monthly samples, 100% when less frequently monitored
Non-Ionised Ammonia	mg/l NH ₃	≤ 0.02	Monthly	95% of monthly samples, 100% when less frequently monitored
Total Ammonium	mg/l NH ₄	≤ 1	Monthly	95% of monthly samples, 100% when less frequently monitored
Total Residual Chloride	mg/l HOCl	≤ 0.005	Monthly	95% of monthly samples, 100% when less frequently monitored
Total Zinc	mg/l Zn	≤ 0.03 ≤0.5 dependant on water hardness	Monthly	95% of monthly samples, 100% when less frequently monitored
Dissolved Copper	mg/l Cu	≤ 0.005 ≤ 0.112 dependant on water hardness	Monthly	95% of monthly samples, 100% when less frequently monitored
Phenolic compounds		Not adversely affect fish flavour	Monthly when presence of phenolic compounds are suspended	
Petroleum Hydrocarbons		Not form visible film on water surface or benthic surfaces; not to be detectable in fish flavour ; not produce harmful effects in fish	Monthly	

Rivers within the SERBD designated under S.I. No. 293 of 1988.

Salmonid	Extent	Hydrometric Area
River Aherlow	Main Channel	16
River Slaney	Main Channel	12
River Nore	Main Channel	15

(iii) **Shellfish Water**

S.I. No. 459 of 2001. Quality of Shellfish Waters (Amendment) Regulations, 2001.

Parameter	Units	Standard	Sampling Frequency	Conformance to standard
Temperature	°C	Discharge affecting shellfish waters should not cause receiving waters	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Colouration	Mg Pt/l	<10	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
pH	pH unit	> 7 < 9	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Suspended Solids (SS)	mg/l	Not >20% increase in unaffected waters	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Salinity	‰	≤ 40 and discharges affecting shellfish waters must not cause the salinity to exceed 10‰ to salinity of unaffected waters	Monthly	95% of samples, over a period of 12 months
Dissolved Oxygen	Saturation	≥70% and not < 60% unless not harmful effects on shellfish colonies can be proven	Monthly	
Petroleum Hydrocarbons		No visible film	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter
Organohalogenated substances		Does not detract from the quality of shellfish products	Half yearly	100% of samples over 12 months
Metals Silver Arsenic Cadmium Chromium Copper Mercury Lead Zinc Nickel	mg/l	Does not detract from the quality of shellfish products	Half yearly	100% of samples over 12 months
Faecal coliforms	Number/100 ml	With no purification treatment <300 in shellfish flesh or intervalvular liquid.	Quarterly	100% of samples over 12 months
Substances affecting the taste of shellfish		Not adversely affect flavour	Quarterly	75% of samples over 12 months where sampling is carried out once per quarter

S.I. No. 268 of 2006. Quality of Shellfish Waters (Amendment) Regulations, 2006.

Parameter	Units of Measurement	Standard/Value	Reference Method of analysis or inspection	Frequency of sampling
pH	pH unit	Not less than 7 nor greater than 9	Electrometry	Quarterly Measured in situ at the time of sampling.
Temperature	Degrees Celsius		Thermometry	Quarterly Measured in situ at the time of sampling.
Coloration (After Filtration)	Milligrams per litre	A discharge affecting shellfish waters must not cause the colour of the waters after filtration to deviate by more than 10 milligrams per litre from the colour of waters not so affected.	Filter through a 0.45 micrometre membrane. Photometric method using the platinum/cobalt scale.	Quarterly
Suspended Solids (SS)	mg/l	A discharge affecting shellfish waters must not cause the suspended solids content of the waters to exceed by more than 30 per cent the suspended solids content of waters not so affected.	Filtration through a 0.45 micrometre membrane, drying at 105 degrees Celsius and weighing. Centrifuging (for at least 5 minutes, with mean acceleration 2,800 to 3,200g), drying at 105 degrees Celsius and weighing.	Quarterly
Salinity	Practical salinity units	a) less than 40 practical salinity units, and b) discharges affecting shellfish waters must not cause the salinity of the waters to exceed by more than 10 per cent the salinity of waters not so affected.	Conductimetry	Monthly
Dissolved Oxygen	Saturation per cent	(a) equal to or greater than 70 per cent (average value) (b) no individual measurement to indicate a value less than 60 per cent unless it can be established that there are no harmful consequences for the development of shellfish colonies. Should an individual measurement indicate a value less than 70 per cent, measurements must be repeated.	Winkler's method or electrochemical method	Monthly, with a minimum of one sample representative of low oxygen conditions on the day of sampling. However, where major daily variations are suspected, a minimum of two samples in one day must be taken.
Petroleum Hydrocarbons		Hydrocarbons must not be present in the shellfish waters in such quantities as will— (a) produce a visible film on the surface of the water or a deposit on the shellfish, or both, or (b) have	Visual examination	Quarterly

Parameter	Units of Measurement	Standard/Value	Reference Method of analysis or inspection	Frequency of sampling
		harmful effects on the shellfish.		
Organohalogenated substances Polychlorinated biphenyls Polychlorinated Biphenyls: Sum of ICES 7CBs'Organohalogenated substances		Does not detract from the quality of shellfish products $\mu\text{g/L}$ (seawater) $\mu\text{g/kilogram wet weight @ 1 per cent lipid (shellfish flesh}^{\text{ii}})$	Gas chromatography after extraction with suitable solvents and purification. 0.30 300.00 The concentration of each substance in the shellfish water or in the shellfish flesh must not reach or exceed a level, which has harmful effects on the shellfish and their larvae	Half-yearly
Metals (Dissolved): Arsenic Cadmium Chromium Copper Lead Mercury Nickel Silver Zinc	$\mu\text{g.litre-1}$ (seawater)	40.00 5.00 30.00 10.00 20.00 0.40 50.00 10.00 200.00 The concentration of each substance in the shellfish water must not exceed a level that gives rise to harmful effects on the shellfish and their larvae. The synergic effects of these metals must be taken into consideration.	Spectrometry of atomic absorption preceded, when appropriate, by concentration or extraction, or both.	Half-yearly
Faecal coliforms	Number of faecal coliforms per 100 millilitres		Method of dilution with fermentation in liquid substrates in at least three tubes in three dilutions. Subculturing of the positive tubes on a confirmation medium. Count according to MPN (most probable number). Incubation temperature $44^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$.	Quarterly

(iv) **Bathing Water**

S.I. No. 155 of 1992. Quality of Bathing Waters Regulations, 1992.

Parameter	Unit	Standard
Total coliforms	No./100ml	(a) ≤ 5,000; (b) ≤ 10,000 (To be conformed with, in the case of (a), by 80% or more of samples and, in the case of (b), by 95% or more of samples. Standard not to be exceeded by any two consecutive samples in any case.)
Faecal coliforms	No./100ml	(a) ≤ 1,000; ≤ (b) 2,000 (To be conformed with, in the case of (a), by 80% or more of samples and, in the case of (b), by 95% or more of samples. Standard not to be exceeded in any case by any two consecutive samples.)
Colour		No abnormal change in colour. (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Mineral oils	mg/litre	No film visible on the surface of bathing water and no odour. (To be conformed in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Surface active substances reacting with methylene blue	mg/litre (lauryl-sulfate)	No lasting foam. (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Phenols (phenol indices)	mg/litre C ₄ H ₃ OH	≤ 0.05 and no specific odour. (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples. No sample to exceed 0.075)
Transparency	metres/depth	≥ 1 (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard. Transparency never to be less than 0.5).
Tarry residues. Floating materials such as wood, plastic articles, bottles, containers of glass, plastic, rubber and other sub-stances. Waste or splinters.		No offensive presence. (To be conformed with in 95% of inspections of bathing water. No two consecutive inspections to fail standard).
Faecal streptococci	No./100ml	≤ 300 (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples)
Salmonella	No./litre	0 (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples)
Enteroviruses	PFU/10 litres	0 (To be conformed with by 95% of samples and not to be exceeded by any two consecutive samples)
pH		≥ 6 and ≤ 9 (To be conformed with by 95% of samples. No two consecutive samples to fall outside the range.)
Dissolved Oxygen	% saturation O ₂	≥ 70 and ≤ 120 (To be conformed with by 95% of samples. No two consecutive samples to fall outside the range).

Designated Bathing Waters in the SERBD. S.I. No. 177 of 1998. Quality of Bathing Waters (Amendment) Regulations, 1998

County	Beach
Wexford	Ballymoney (north beach) Courtown (north beach) Curracloe Duncannon Morriscastle Rosslare Strand
Waterford	Ardmore Bonmahon Clonea Dunmore Strand (Dunmore East) Counsellors Strand (Dunmore East) Tramore

Proposed Bathing Water parameters.

<i>Microbiological Parameters</i>	<i>Excellent Quality (guide)</i>	<i>Good Quality (obligatory)</i>
Intestinal Enterococci (I.E.) in cfu/100 ml	100	200
Escherischia coli (E.C.) in cfu/100 ml	250	500

(v) Dangerous Substances

S.I. No12 of 2001. Water Quality (Dangerous Substances) Regulations, 2001.

Substance	Standard (µg/l)
Atrazine	1.0
Dichloromethane	10.0
Simazine	1
Toluene	10
Tributyltin	0.001
Xylenes	10

Substance	Standard (µg/l) for fresh water Harness of water (mg/l CaCO ₃)		Standard (µg/l) for tidal water
	≤100	>100	
Arsenic	25	25	20
Chromium	5	30	15
Copper	5	30	5
Cyanide	10	10	10
Fluoride	500	500	1,500
Lead	5	10	5
Nickel	8	50	25
Zinc	8 (≤10 mg/l CaCO ₃)	50 (>10 ≤100 mg/l CaCO ₃)	40

(vi) Phosphorus Standards

S.I. No 258 of 1998. Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations, 1998.

Rivers			
Existing Biological Quality Rating		MRP Median Concentration µg P/l	Minimum Target Biological Quality Target (Q) Rating
5	Unpolluted	15	5
4-5		20	4-5
4		30	4
3-4	Slightly Polluted	30	4
3	Moderately polluted	50	3-4
2-3		70	3
<2	Seriously Polluted	70	3
Lakes			
Existing Trophic Status		Minimum Target Trophic Status	Total Phosphorus Average Concentration (µg P/l)
Ultra- Oligotrophic	Satisfactory	Ultra-Oligotrophic	>5
Oligotrophic		Oligotrophic	>5 ≤10
Mesotrophic		Mesotrophic	>10 ≤20
Eutrophic	Unsatisfactory	Mesotrophic	>10 ≤20
Hypertrophic		Eutrophic	>20 ≤50

(vii) Urban Waste Water

S.I. 254 of 2001. Urban Waste Water Treatment Regulations

Parameters	Concentration	Minimum % of reduction	Method of Measurement
BOD without nitrification	25 mg/l O ₂	70-90	Homogenised, unfiltered undecanted sample. Determination of dissolved oxygen before and after five-day incubation at 20°C ±1°C in complete darkness. Addition of a nitrification inhibitor
COD	125 mg/l O ₂	75	Homogenised, unfiltered, undecanted sample Potassium dichromate
Total Suspended Solids	35 mg/l	90	-Filtering of a representative sample through a 0.45µm filter membrane. Drying at 105°C and weighing -Centrifuging of a representative sample drying at 105°C and weighing.
Requirements for discharges from urban waste water treatment plants to sensitive areas. One or both parameters may be applied depending on the local situation.			
Total Phosphorus	2 mg/l (10,000-100,000 p.e.) 1 mg/l (> 100,000 p.e.)	80	Molecular absorption spectrophotometry
Total Nitrogen	15 mg/l (10,000-100,000 p.e.) 10 mg/l (> 100,000 p.e.)	70-80	Molecular absorption spectrophotometry

Third Schedule: Part 2 (Treatment plants must be in place by 31st May 2008)	
Waterbody	Section
River Barrow	Downstream of Portarlinton sewage outfall to Graiguenamanagh bridge
River Triogue	Downstream of Portlaoise sewage outfall to confluence with River Barrow
River Nore	Downstream of Kilkenny sewage outfall to Inistioge Bridge
River Suir	Downstream of Thurles sewage outfall to Twofold Bridge
River Suir	Downstream of Clonmel sewage outfall to Coolnamuck Weir
Slaney Estuary (Upper)	From Enniscorthy railway bridge to Macmine
Slaney Estuary (Lower)	From Macmine to Drinagh/Big Island
Barrow Estuary	From the Weir at Bahana Wood to New Ross Bridge
Suir Estuary (Upper)	From Coolnamuck Weir to Mount Congreve
Castletown Estuary	From the Weir 130 m downstream of St. Johns Bridge to Pile Light

(viii) Conservation of Wild Birds (79/409/EEC)

Special Protected Areas designated within the SERBD

County	Name
Wexford	The Raven
Wexford	Wexford Nature Reserve
Wexford	Wexford Harbour
Wexford	Bannow Bay
Wexford	Ballyteigue Burrow
Wexford	Lady's Island Lake
Wexford	Tacumshin Lake
Wexford	Inish and Sgarbheen
Wexford	Keeragh Islands
Wexford	Slatee Islands
Waterford	Tramore Back Strand
Waterford	Dungarvan Harbour
Waterford	Helvick Head Coast
Wicklow	Wicklow Mountains

**(ix) Nitrates Directive (91/676/EEC)
S.I. No 788 of 2005 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005.**

Zonation of Ireland under Nitrates Regulations

Zones	Counties
Zone A:	Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly Tipperary, Waterford, Wexford and Wicklow
Zone B:	Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath.
Zone C	Cavan, Donegal, Leitrim, and Monaghan

Livestock holding minimum storage capacity for bovine livestock manure

Zones	Minimum Storage Capacity
Zone A	16 weeks
Zone B	18 weeks
Zone C	20 (Donegal and Leitrim) 22 (Cavan and Monaghan)

Periods during which the application to land of certain types of fertiliser will be prohibited

Zones	Chemical Fertiliser	Organic Fertiliser
		All Organic Fertilisers Excluding Farmyard Manure Farmyard Manure
	Grassland and Other Land	All Land
A	15 Sept. to 12 Jan.	15 Oct. to 12 Jan. 1 Nov. to 12 Jan.
B	15 Sept. to 15 Jan.	15 Oct. to 15 Jan An end date of 25 January will apply in Zone B to holdings joining REPS and extensive holdings availing of the reduced storage capacity requirements.. 1 Nov. to 15 Jan.
C	15 Sept. to 31Jan.	15 Oct. to 31 Jan. 1 Nov. to 31 Jan.

S.I. No 378 of 2006 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2006.

Slurry storage capacity required for sows and pigs

Unit type	m ³ /week ¹				
Water:meal ratio changing for finishers only	2.0:1	2.5:1	3.0:1	3.5:1	4.0:1
Breeding unit (per sow place)	-	-	-	-	0.174
Integrated unit (per sow place)	0.312	0.355	0.398	0.441	0.483
Finishing unit (per pig)	0.024	0.031	0.039	0.046	0.053
<p>1 An additional 200mm freeboard must be provided in all covered tanks and 300mm freeboard in all uncovered tanks Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.</p>					

Slurry storage capacity required for cattle, sheep and poultry

Livestock type	m ³ /week ¹
Dairy cow	0.33
Suckler cow	0.29
Cattle > 2 years	0.26
Cattle (18-24 months old)	0.26
Cattle (12-18 months old)	0.15
Cattle (6-12 months old)	0.15
Cattle (0-6 months old)	0.08
Lowland ewe	0.03
Mountain ewe	0.02
Lamb-finishing	0.01
Poultry - layers per 1000 birds (30% DM)	0.81
<p>1 An additional 200mm freeboard must be provided in all covered tanks and 300mm freeboard in all uncovered tanks. Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.</p>	

Storage capacity required for dungstead manure

Livestock type	Solid fraction (m ³ /week)	Seepage fraction (m ³ week) ¹
Dairy cow	0.28	0.04
Suckler cow	0.25	0.03
Cattle > 2 years	0.23	0.02
Cattle (18-24 months old)	0.23	0.02
Cattle (12-18 months old)	0.13	0.01
Cattle (6-12 months old)	0.13	0.01
Cattle (0-6 months old)	0.07	0.01

¹ Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Storage capacity required for effluent produced by ensiled forage

Crop	Minimum storage requirement (m ³ /100 tonnes)	
	Short Term Storage ¹	Full Storage
Grass	7	21
Arable silage	7	21
Maize	4	10
Sugar beet tops	15	50

¹ Only permitted where a vacuum tanker or an irrigation system is available on the holding.

Zonation of Ireland under Nitrates Regulations

Zones	Counties
Zone A:	Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly Tipperary, Waterford, Wexford and Wicklow
Zone B:	Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath.
Zone C	Donegal and Leitrim,
Zone D	Cavan and Monaghan

Livestock holding minimum storage capacity for bovine livestock manure

Zones	Minimum Storage Capacity
Zone A	16 weeks
Zone B	18 weeks
Zone C	20 weeks Donegal and Leitrim
Zone D	22 weeks Cavan and Monaghan

Periods during which the application to land of certain types of fertiliser will be prohibited

Zones	Chemical Fertiliser	Organic Fertiliser All Organic Fertilisers (other than farmyard manure)	Organic Fertiliser Farm yard Manure
A	15 Sept. to 12 Jan.	15 Oct. to 12 Jan.	1 Nov to 12 Jan
B	15 Sept. to 15 Jan.	15 Oct. to 15 Jan	1 Nov to 15 Jan
C and D	15 Sept. to 31Jan.	15 Oct. to 31 Jan..	1 Nov. to 31 Jan

Determining nitrogen index for tillage crops

Continuous tillage: - crops that follow short leys (1-4 years) or tillage crops			
Nitrogen Index			
Index 1	Index 2	Index 3	Index 4
Cereals Maize	Sugar beet Fodder beet Potatoes Mangels Kale Oil Seed Rape Peas, Beans		
	Leys (1-4 years) grazed or cut and grazed.		
	Swedes removed	Swedes grazed in situ	
	Any crop receiving dressings of organic fertiliser		
Vegetables receiving less than 200 kg/ha nitrogen	Vegetables receiving more than 200 kg/ha nitrogen		
Tillage crops that follow permanent pasture			
Index 1	Index 2	Index 3	Index 4
Any crop sown as the 5th or subsequent tillage crop following permanent pasture	Any crop sown as the 3rd or 4th tillage crop following permanent pasture. If original permanent pasture was cut only, use index 1	Any crop sown as the 1st or 2nd tillage crop following permanent pasture (see also Index 4). If original permanent pasture was cut only, use index 2	Any crop sown as the 1st or 2nd tillage crop following very good permanent pasture which was grazed only

Phosphorus index system

Soil phosphorus index	Soil phosphorus ranges (mg/l)	
	Grassland	Other crops
1	0.0 – 3.0	0.0 - 3.0
2	3.1 – 5.0	3.1 - 6.0
3	5.1 – 8.0	6.1- 10.0
4	> 8.0	>10.0

APPENDIX B

APPENDIX B LOCAL AUTHORITY RESPONSIBILITIES

Part 1 Water Quality Oriented Legislation

(i) Bathing Water

Regulatory Power	Measure
Section 3(1) of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Sets out the quality standards for designated bathing water. Schedule 1 lists the designated waters.
Section 4(1)(b) of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Shall conduct sampling and monitoring of the water quality of designated bathing waters
Section 4(2) of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Shall determine sampling locations
Section 5(1) of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	In the event of a non-compliance with the standards shall give public notice and take necessary measures to ensure compliance
Section 6(3) of Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992)	Arrange for the display of up to date monitoring results

(ii) Drinking Water

Regulatory Power	Measure
European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 (S.I. No. 177 of 2000)	Where the sanitary authority find that the quality of water intended for human consumption, in the case of a private water supply, does not meet the requirements of the EC (Quality of Water for Human Consumption) Regulations 1988 the authority shall issue a notice requiring the person responsible to prepare and implement an action plan (S.I. No. 81 of 1988 as amended by S.I. No. 177 of 2000)
European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 (S.I. No. 177 of 2000)	Where the sanitary authority find that the quality of water intended for human consumption, in the case of a public water supply, does not meet the requirements of the EC (Quality of Water for Human Consumption) Regulations 1988 the authority shall prepare an Action Programme for the improvement of the quality of the water (S.I. No. 81 of 1988 as amended by S.I. No. 177 of 2000)
European Communities (Quality of Water Intended for Human Consumption) (Amendment) Regulations, 2000 (S.I. No. 177 of 2000)	Where the sanitary authority find that the quality of water intended for human consumption, in the case of a private water supply, does not meet the requirements of the EC (Quality of Water for Human Consumption) Regulations 1988 the authority shall prepare an Action Programme for the improvement of the quality of the water (S.I. No. 81 of 1988 as amended by S.I. No. 177 of 2000)
Section 4(1) of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000) * These regulations will come into force on 1 st January 2004 and will revoke S.I. No. 81 of 1988 and S.I. No. 177 of 2000.	It is the duty of a Sanitary Authority to ensure that water intended for human consumption meets the requirements of the European Communities (Drinking Water) Regulations, 2000. (S.I. No. 439 of 2000).
Section 5 of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority may apply to the Environmental Protection Agency for a departure from the European Communities (Drinking Water) Regulations, 2000. (S.I. No. 439 of 2000).
Section 6 of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall ensure that the parametric values specified in Part 1 of the Schedule of the European Communities (Drinking Water) Regulations, 2000 are complied with. (S.I. No. 439 of 2000).

Regulatory Power	Measure
Section 7(1) of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall regularly monitor the quality of water intended for human consumption at the point where it is made available to the user (S.I. No. 439 of 2000).
Section 9(1) European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall ensure that any failure to meet the parametric values specified in Part 1 of the Schedule is immediately investigated so as to identify the cause of such failure (S.I. No. 439 of 2000).
Section 9(2) European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	Shall warn users of the public water supply if the quality of water intended for human consumption does not meet the requirements of the European Communities (Drinking Water) Regulations, 2000 and where there is an unacceptable risk to public health (S.I. No. 439 of 2000).
Section 9(2)(b) of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	Shall prepare an Action Plan for the improvement of the quality of water if a public water supply does not meet the requirements of the European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000).
Section 9(5) of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority shall ensure that, where remedial action is taken in relation to a water supply, consumers are informed of such action (S.I. No. 439 of 2000).
Section 12(1) of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	A sanitary authority may charge for monitoring the quality of private water supplies intended for human consumption (S.I. No. 439 of 2000).
Section 13 of European Communities (Drinking Water) Regulations, 2000 (S.I. No. 439 of 2000)	LAs will have regard to recommendations issued by the Minister regarding the quality of water intended for human consumption (S.I. No. 439 of 2000).

(iii) Surface Water

Regulatory Power	Measure
Section 3(1) of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Sets quality standards for water intended for human consumption.
Section 4(1) of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Take necessary measures to ensure that water for human consumption meets required standards
Section 7(1) of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Regularly monitor quality of water intended for human consumption
Section 8(1) of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	In the event of a non compliance with standards ensure (a) users are warned of the non-compliance (b) a action programme is implemented and (c) the person responsible for the non-compliance is notified
Section 9(1) of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	An authorised person may enter any premises in order to fulfil the requirements of this act
Section 10(1) of European Communities (Quality of Surface Water Intended for Human Consumption) Regulations 1988 (S.I. No. 81 of 1988)	Charge of the monitoring of water intended for human consumption
Section 3(1) of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Shall classify the surface water in accordance with standards set as A1, A2 or A3.
Section 3(2) of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Take steps to ensure that classified waters meet the quality standards
Section 4(1) of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Where appropriate prepare an action programme including a timetable for the improvement of water quality

Section 6(1) of European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (S.I. No. 294 of 1989)	Regularly monitor the quality of surface water at the points at which the water is abstracted prior to treatment
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(iv) Salmonid Water

Regulatory Power	Measure
Section 3(1) of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Specifies waters which are capable of supporting salmonid fish
Section 3(2) of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Sets out the quality standards of salmonid waters
Section 4(1) of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Carry out monitoring of the specified waters
Section 5(1) of European Communities (Quality of Salmonid Waters) Regulations, 1988 (S.I. No. 293 of 1988)	Adopt an action programme when the standards are not complied with

(v) Shellfish Water

Regulatory Power	Measure
Section 3(1) of Quality of Shellfish Waters Regulations, 1994 (S.I. No. 200 of 1994)	Sets the quality standards for shell fish waters
Section 5(1) of Quality of Shellfish Waters Regulations, 1994 (S.I. No. 200 of 1994)	In the event of non-compliance with the standards shall adopt an Action Programme comprising necessary measures to ensure conformity with standards

(v) Water Policy

Regulatory Power	Measure
Section 3(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Carry out its functions in a manner which is consistent with the Directive and which achieves or promotes compliance with the requirements of the Directive;
Section 3(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Take such actions to secure compliance with the Directive and with the provisions of any river basin management plan made, and any programme of measures established, in accordance with these Regulations;
Section 3(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Consult, co-operate and liaise with other public authorities and with the competent authorities in Northern Ireland to ensure co-ordination of the requirements of the Directive for achievement of the environmental objectives in relation to the whole of each river basin district and international river basin district including requirements as to the analysis of its characteristics, the review of the impact of human activity on the status of surface waters and on groundwater, the monitoring of water status, the preparation of river basin management plans and the implementation of programmes of measures;
Section 3(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Provide appropriate information to its functions as may be reasonably required by any other public authority for the purpose of compliance with the Directive and, provide such information, where so requested, in a form disaggregated by reference to river basin districts, river basins, sub-basins or such other areas as may be specified;
Section 3(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Encourage the active involvement of all interested parties in relation to the measures being taken by the authority

Regulatory Power	Measure
Section 3(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Provide access to background documents and information used for the development of a draft river basin management plan.
Section 6(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant local authorities shall acting jointly of the establish environmental objectives and programmes of measures and the making of river basin management plans
Section 6(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Specified local authority shall act as the co-ordinator for all the relevant local authorities of the RBD's
Section 7(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA had to carry out an analysis of its characteristics, review of the impact of human activity on the status of surface waters and of groundwater, and an economic analysis of water use by Dec 2004.
Section 11(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA must take account of the principle of recovery of the costs of water services, including environmental and resource costs
Section 11(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Ensure that water-pricing policies and practices are in place not later that 31 December 2009
Section 12(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Establish environmental objectives in relation to each RBD
Section 12(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Establish a programme of measures
Section 12(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Publish the programme of measures so established and send a copy of the programme to the relevant public authorities accompanied by a notice indicating that comments in relation to the programme may be sent to the Minister within one month of the date of publication of the programme.
Section 12(3) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	In preparing a programme of measures the LAs shall take account of the the Characterisation, not later than 22 June 2008 publish the draft programme and make it available for comments to be provided in writing by any person for a period not less than. six months, and have regard to any comments received
Section 12(10) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	Where the relevant LA in relation to a river basin district have not jointly established and published a programme of measures by 22 June 2009, the establishment of a programme of measures in relation to that district shall cease to be a reserved function and, accordingly, the establishment of a programme shall be an executive function and shall be carried out by the managers of the relevant authorities.
Section 12(12) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall not later than 22 June 2015 and every six years thereafter, review and update the programme of measures
Section 13(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall make a river basin management plan. By the 22 June 2009
Section 13(2) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall endeavour to produce a single river basin management plan in relation to the whole district in co-ordination with the competent authorities in Northern Ireland and where production of a single plan is not possible, the relevant local authorities shall produce a plan in relation to that part of the international river basin district lying within the State.
Section 13(12) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall, not later than 22 June 2015 and every six years thereafter, review and, if necessary, update their river basin management plan

Regulatory Power	Measure
Section 13(12) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall, not later than 22 June 2006 (and not less than three years before the period to which a river basin management plan relates) prepare a timetable and work programme for the production of a river basin management plan including a statement as to the consultation measures to be taken
Section 14(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall, not later than 22 June 2007 (and not less than two years before the period to which a river basin management plan relates) an overview of the significant water management issues identified in the river basin district, and
Section 14(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall not later than 22 June 2008 (and not less than one year before the period to which a river basin management plan relates) draft copies of the river basin management plan.
Section 14(2) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	On publication of the documents specified in article (1) the relevant local authorities shall, by notice published in a daily newspaper circulating in the river basin district, invite the provision of comments in writing by any person and shall allow a period of at least six months for the provision of such comments.
Section 15(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA shall, not later than thirty months after a plan or updated plan comes into effect, send to the EPA an interim report describing progress in the implementation of the programme of measures established for that river basin district
Section 16(1) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant local authorities shall establish in relation to each river basin district a river basin district advisory council (subsequently referred in this Article as "a council") to consider matters relating to the preparation of river basin management plans and other matters relevant to the protection and use of the aquatic environment and water resources in the district and to advise and make recommendations on these matters to the relevant public authorities.
Section 16(4) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The chairperson of a council shall be a member of a relevant LA.
Section 16(10) of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	An employee of a LA shall be assigned the duties of secretary of the council
Section 19 of European Communities (Water Policy) Regulations 2003(S.I. No. 722 of 2003)	The relevant LA and the EPA shall, as far as is practicable, provide for display on a website of the documents and maps required by these Regulations to be produced by, respectively, the relevant local authorities and the EPA, including the background documents and information used for the development of a draft river basin management plan.
Section 3 of European Communities (Water Policy) Regulations 2003 (S.I. No. 413 of 2005))	The relevant LA shall, , establish in relation to each RBD a council (to consider matters relating to the preparation of river basin management plans and other matters relevant to the protection and use of the aquatic environment and water resources in the RBD and to advise and make recommendations on these matters to the relevant public authorities
Section 3 of European Communities (Water Policy) Regulations 2003 (S.I. No. 413 of 2005))	Each relevant LA shall appoint as members of the council two persons each of whom shall be a member of the authority
Section 3 of European Communities (Water Policy) Regulations 2003 (S.I. No. 413 of 2005))	The chairperson of a council shall be a member of a relevant local authority
Section 3 of European Communities (Water Policy) Regulations 2003 (S.I. No. 413 of 2005))	An employee of a local authority shall be assigned the duties of secretary of the council

Part 2 - Emission Control Legislation

(i) Water Pollution

Regulatory Power	Measure
Section 4(1)(a) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A licence to discharge trade or sewage effluent to waters may be granted under this section
Section 4(4) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A local authority shall not grant a licence in respect of a discharge which would not comply with or result in the receiving waters not complying with any relevant standard.
Section 7(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A local authority may review a licence under section 4 at intervals of not less than three years from the date of issue of the licence or at any time with the consent of the person making, causing or permitting the discharge.
Section 12(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	In order to prevent or control pollution of waters the local authority may serve notice in writing on any person holding polluting matter
Section 13(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May take urgent measures to prevent, remove, or dispose of polluting matter and to mitigate or remedy the effects of pollution
Section 13(2) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May recover the costs of such urgent measures from the person whose act or omissions necessitated such steps (“Polluter Pays Principle”)
Section 15(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May and if directed by the Minister make a water quality management plan.
Section 16(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May refuse or grant a licence for the discharge of any trade effluent to a sewer. In considering any licence application the local authority will have regard to objectives contained in any relevant plan under section 15.
Section 16(13) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May serve notice on a person making, causing or permitting a discharge of trade effluent to a sewer without a licence
Section 16(14) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	May take and steps as it considered necessary to prevent, mitigate or remedy the effect of discharge and may recover the costs of such measures from the person whose act of omission necessitated such measures (“The Polluter Pays Principle”).
Section 17(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	A licence to discharge to sewer will be reviewed at intervals of not less than three years or at any time with the consent of the person making, causing or permitting the discharge.
Section 21(2)(1) of Local Government Water Pollution Act, 1977 (No. 1 of 1977)	Impose restrictions of the release of polluting matter including sewage on water borne craft on non-tidal waters.
Section 21(2)(a) of Local Government (Water Pollution) (Amendment) Act, 1990 (No. 21 of 1990)	Make bye-laws prohibiting or subjecting to controls, activities in relation to horticulture, agriculture and forestry whenever it is considered necessary for the purpose of preventing or eliminating the entry of polluting matter to waters.

Regulatory Power	Measure
Section 21A(1)(a) of Local Government (Water Pollution) (Amendment) Act, 1990 (No. 21 of 1990)	May serve notice on the owner occupier of land to prepare and furnish a nutrient management plan within 5 month of the serving of a notice (amended by the Waste Management Act, 1996)
Section 40(1) of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	A licence application in respect of sewage effluent or trade effluent containing a harmful substance which is discharged to an aquifer should be accompanied by results of a prior investigation unless the local authority is satisfied that the harmful substance is present in so small a quantity as to obviate deterioration in the quality of the water (S.I. No 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999)
Section 40(2)(a) of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	Take into account prior investigations when granting or refusing a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Section 43 of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	May specify conditions in a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer requiring a standard different to the quality standard prescribed in these Regulations (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Section 47(2) of Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	May attach conditions to a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	Review licences to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer at intervals of not more than four years (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	Carry out or arrange for monitoring to determine compliance with conditions attached to a licence to discharge sewage effluent or trade effluent containing a harmful substance to an aquifer and determine the effects of a discharge on water in an aquifer (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Local Government (Water Pollution) (Amendment) Regulations, 1999 (S.I. No. 42 of 1999)	May take steps to secure compliance with water quality standards for water in an aquifer in respect of a harmful substance (S.I. No. 271 of 1992 as amended by S.I. No. 184 of 1996 and S.I. No. 42 of 1999).
Section 3(2) of Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998)	Water quality in a river shall be maintained or improved so as to meet the relevant specified standard
Section 3(6) of Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998)	Water quality in a lake shall be maintained or improved to meet relevant standards
Section 19A(1) of Local Government (Water Pollution) (Amendment) Regulations 1996 (S.I. No. 184 of 1996)	Shall determine the application for a licence to discharge within two months provided all requirements of the application are complied with
Section 42A of Local Government (Water Pollution) (Amendment) Regulations 1996 (S.I. No. 184 of 1996)	If a harmful substance in sewage effluent or trade effluent is present in so small a quantity and concentration it will not affect the quality of water in the aquifer to which it is to be discharged no standards will be set.

(ii) Urban Waste Water

Regulatory Power	Measure
Section 3(1) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Provide a collecting system for urban waste water serving a population equivalent of 10,000 discharging into sensitive areas serving a population equivalent of 15,000 serving a population equivalent of between 2,000 and 15,000 by December 31 st 2005
Section 4(1) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Shall provide treatment plants that provide for secondary treatment or equivalent by 31 st December 2005 for population equivalents of 10,000 and 15,000. And discharges to freshwaters or estuaries for population equivalents of between 2,000 and 10,000
Section 4(2) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	More stringent treatment will be required for discharges from population equivalents of 10,000 into sensitive areas on the commencement of these regulations for sensitive areas listed under Schedule 1 and by 31 st May 2008 for sensitive areas listed under Schedule 2
Section 5 of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	More stringent treatment may be needed where receiving waters must satisfy any relevant Community Directives
Section 6 of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Identifies sensitive areas
Section 7 of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Ensure that waste water discharged to freshwaters and estuaries from a population equivalent of 2,000 and waste water discharged to coastal waters from population equivalents of 10,000 receive the appropriate treatment.
Section 8(1) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Ensure that treatment plants will operate under all climatic conditions and seasonal loads are taken into consideration
Section 8(3) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Design treatment plants so samples of incoming waste and treated effluent can be taken
Section 8(4) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Points of discharge are chosen so as to minimise the effects on the receiving environment
Section 10(1) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Shall carry out monitoring of discharges from treatment plants and of the receiving waters
Section 10(2) of Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)	Results of monitoring shall be returned to EPA

(iii) Nitrates

Regulatory Power	Measure
Section 17(5) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006))	A local authority may, in the case of any particular abstraction point and following consultation with the Agency, specify an alternative distance to that specified where, following prior investigations, the authority is satisfied that such other distance as may be specified by the authority is appropriate for the protection of waters being abstracted at that point.

Regulatory Power	Measure
Section 17(5) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	Where a local authority specifies an alternative distance in accordance the authority shall, as soon as may be notify the affected landowners and the Department of Agriculture and Food of the distance so specified, send to the Agency a summary of the report on the prior investigations carried for the purpose and the reasons for specifying the alternative distance, and make an entry in the register maintained.
Section 26(4) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A prosecution for an offence under these Regulations may be taken by a local authority or the Agency.
Section 26(5) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A prosecution for an offence may be taken by a local authority whether or not the offence is committed in the functional area of the authority
Section 29(4) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	The relevant local authorities shall provide the Agency with such information appropriate to their functions as may be requested by the Agency for the purposes of these Regulations.
Section 30(1) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A LA shall carry out, or cause to be carried out, such monitoring of surface waters and groundwaters at selected measuring points within its functional area as makes it possible to establish the extent of pollution in the waters from agricultural sources and to determine trends in the occurrence and extent of such pollution.
Section 30(2) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A local authority shall carry out or cause to be carried out such inspections of farm holdings as is necessary for the purposes of these Regulations and shall aim to co-ordinate its inspection activities with inspections carried out by other public authorities.
Section 30(3) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A local authority shall aim to develop co-ordination arrangements with other public authorities with a view to promoting consistency of approach in inspection procedures and administrative efficiencies between public authorities and to avoiding any unnecessary duplication of administrative procedures and shall have regard to any inspection protocol which may be developed by the Minister, following consultation with the Minister for Agriculture and Food
Section 30(4) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A local authority shall, in the exercise of its functions for the purposes of these Regulations with the Minister, the Minister for Agriculture and Food, the Agency, the co-ordinating local authority in the relevant river basin district and such other persons , and have regard to any recommendations made, and comply with any direction given, to the authority by the Agency
Section 30(5) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A local authority may furnish to the Department of Agriculture and Food and such other persons as it considers appropriate a report of an inspection or inspections carried out for the purposes of these Regulations
Section 30(6) of European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005. (S.I. No. 378 of 2006)	A local authority shall maintain a register of prior investigations carried out, and distances specified, for the purposes of Article 17(5).

(iv) Groundwater

Regulatory Power	Measure
Section 4(1) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LA shall not cause or permit the direct discharge to an aquifer of an effluent which contains a harmful substance unless under and in accordance with a licence granted by the EPA
Section 5(1) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LA may apply to the EPA for a licence to discharge effluent to an aquifer
Section 40(1) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LAs can request that any application for a licence to discharge sewage or trade effluent containing harmful substances will be accompanied by a prior investigation
Section 40(2)(a) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	The prior investigation can contain an assessment of the environmental impact associated with alternative methods of disposal
Section 43 of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LAs may attach conditions relating to the licence to discharge
Section 47(2) of Protection of Groundwater Regulations, 1999 (S.I. No. 41 of 1999)	LA may specify conditions in a licence requiring different standards from the quality standard prescribed in the regulations

(v) Dangerous Substances

Regulatory Power	Measure
Section 4(1) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	LA can determine the application for a licence to discharge trade or sewage effluent and for a licence to discharge to sewers on the basis of the specified standards as set out
Section 4(2) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	LA can determine a review of a licence to discharge trade or sewage effluent and for a licence to discharge to sewers to ensure the specified standards of dangerous substances are being met not later than 5 years after the commencement of these regulations
Section 7 Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	May allow for an extension, not exceeding five years, of the period for reviewing a licence to discharge trade or sewage effluent and for a licence to discharge to sewers to determine if the standards for dangerous substances are being met if the local authority is satisfied that at least the best available techniques are being used to treat any direct discharge affecting a water body.
Section 8(1)(a) Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	LA can take steps to ensure that, where the existing condition of a water body does not meet a specified standard in relation to a substance, there shall be no disimprovement.
Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	Take steps to secure compliance with the specified standards not later than 31 st December 2010.
Section 10(1) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	Submit a report to the Agency by 31 st July 2002 setting out the measures to be taken to secure compliance with the specified standards for Dangerous Substances.
Section 10(2) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	Submit to the Agency by the 31 st July 2004 (and at intervals not exceeding 2 years thereafter), a report on the progress made to secure compliance with the specified standards for Dangerous Substances.
Section 10(4) of Water Quality (Dangerous Substances) Regulations 2001 (S.I. No 12 of 2001)	The report will identify each water body and will specify the condition in relation to the specified standards, the reporting period and any circumstances as to why compliance would not be feasible

Regulatory Power	Measure
Section 3(1) of European Communities (Control of Water Pollution by Asbestos) Regulations 1990 (S.I. No. 31 of 1990)	Best available technology will be used to ensure the prevention, limitation or treatment of effluent discharges containing asbestos.
Section 6(2) of European Communities (Control of Water Pollution by Asbestos) Regulations 1990 (S.I. No. 31 of 1990)	Can specify conditions of a licence to discharge effluents containing asbestos to waters.
Section 10(1) of European Communities (Control of Water Pollution by Asbestos) Regulations 1990 (S.I. No. 31 of 1990)	Can carry out or arrange for the monitoring of discharges
Section 4(1) of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Sets quality standards in trade effluent discharged to waters
Section 7 of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Ensure best technical means are used to eliminate pollution from new plants
Section 8 of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Review a licence to discharge at least every 4 years
Section 9 of Local Government (Water Pollution) Act 1977 and 1990 (Control of ECD, TRI, PER, and TCB Discharges) Regulations, 1994 (S.I. No. 245 of 1994)	Ensure that the granting of a licence will not result in an increase in the pollution of soil or air
Section 4(1) of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Sets quality standards in trade effluent discharged to waters
Section 5 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Ensure best technical means are used to eliminate pollution from new plants
Section 6 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Review a licence to discharge at least every 4 years
Section 7 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Ensure that the granting of a licence will not result in an increase in the pollution of soil or air
Section 4(1) of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Sets quality standards for trade effluent discharged to waters
Section 6 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1994 (S.I. No. 43 of 1994)	Ensure Best available technology is used in new plants
Section 7 of Local Government (Water Pollution) Acts 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, HCB, HCBd and CHCl ₃ Discharges) Regulations, 1993 (S.I. No. 348 of 1993)	Review the licence to discharge every 4 years.
Section 5 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Sets quality standards for trade effluent discharged to waters
Section 6 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Ensure best available technology is used in new plants
Section 9 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Sets quality standards for trade effluent discharged to sewers

Regulatory Power	Measure
Section 10 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Ensure Best available technology is used in new plants
Section 11 of Local Government (Water Pollution) (Control of Cadmium Discharges) Regulations (S.I. No. 294 of 1985)	Review the licence to discharge to sewers every 4 years

Part 3 Water Sector Related Legislation

(i) Sewage Sludge

Regulatory Power	Measure
Section 3 of Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001 (S.I. No. 267 of 2001)	Ensure sludge is used and supplied in accordance with the Regulations with regard to nutrient needs, landuse, soil analysis, etc.
Section 6 of Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001 (S.I. No. 267 of 2001)	Sets limit values for amounts of heavy metals which may be added annually to agricultural land
Section 7(1) of Waste Management (Use of Sewage Sludge in Agriculture) (Amendment) Regulations, 2001 (S.I. No. 267 of 2001)	Soil of the land to which sludge is to be added shall be analysed
Section 8(2) Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998 to 2001 S.I. No. 148 of 1998 as amended by S.I. No. 267 of 2001	Establish and maintain a Sludge Register to record specified details regarding sludges (S.I. No. 148 of 1998 as amended by S.I. No. 267 of 2001)

(ii) Waste

Regulatory Power	Measure
Section 10(3) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Notify the Agency if an application for a waste collection permit involves the collection of hazardous waste
Section 10(4) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Have regard to any written submission received from the Agency before granting or refusing a waste collection permit application
Section 11(1) & 11(2) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Make documents relating to a waste collection permit application available for public inspection and purchase.
Section 15(1) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Give notice of decision in relation to a waste collection permit
Section 15(2) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Give notice of decision in relation to a waste collection permit
Section 15(4) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Make waste collection permits available for public inspection
Section 16, 17(1), & 18 Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Attach conditions to waste collection permits
Section 21(1) Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Review waste collection permits at least every two years
Section 24 Waste Management (Collection Permit) Regulations, 2001. S.I. No. 402 of 2001	Notify the Agency regarding the granting, amendment or revoking of permit
Section 4 Waste Management (Amendment) Act, 2001. S.I. No. 36 of 2001.	The making of a Waste Management Plan shall be an executive function.
Section 22(10)(d) Waste Management (Amendment) Act, 2001. S.I. No. 36 of 2001.	The review, variation or replacement of a waste management plan shall be a reserved function.
Section 22(10A) Waste Management (Amendment) Act, 2001. S.I. No. 36 of 2001.	The Development Plan shall be deemed to include the objectives contained in the Waste Management Plan
Section 4(1) Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	A waste licence is required for specified facilities for the disposal, recovery or composting of waste
Section 5 Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	Publish a notice of intention to apply to the Agency for a waste licence or the review of a waste licence
Section 11 Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	An application shall be submitted to the principal office of the Agency.
Section 12(3) Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	If applying for a review of a waste licence, state the grounds on which the application is made
Section 13(1) Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	If a development of a waste disposal or waste recovery activity specified in article 24 of the Environmental Impact Assessment Regulations, the application for a waste licence should be accompanied by an Environmental Impact Statement
Section 19(4) Waste Management (Licensing) Regulations, 2000. S.I. No. 185 of 2000.	Make waste licence application documents available for public inspection

(iii) Sea Pollution

Regulatory Power	Measure
Sea Pollution (Amendment) Act, 1999 (No. 18 of 1999)	Prepare and submit to the Minister a plan for the prevention and minimisation of damage arising out of an oil pollution incident occurring in a harbour or area of seashore within the functional area.
Sea Pollution (Amendment) Act, 1999 (No. 18 of 1999)	Have in place an oil pollution emergency plan in relation to harbours and areas of seashore to which the regulations apply.

(iv) Planning & Development

Regulatory Power	Measure
Section 3(b) of Local Government (Planning and Development) Regulations, 1996 (S.I. No. 100 of 1996)	Can request the production of an Environmental Impact Assessment for forestry developments of greater than 70 hectares. Local authorities shall also be consulted in relation to forestry developments of greater than 25 hectares.
Building Regulations, 1997 (S.I. No. 497 of 1997).	H2 Septic tanks will not pollute any water including groundwater used as a source of drinking water
Section 261(1) of Planning and Development Act, 2000 (No. 30 of 2000)	The owner or operator of a quarry to which this section applies shall provide the planning authority information relating to the operation of the quarry, and the planning authority shall enter it in the register.
261(3) of Planning and Development Act, 2000 (No. 30 of 2000)	A planning authority may require a person who has submitted information in accordance with this section to submit such further information as it may specify.
261(6)(a) of Planning and Development Act, 2000 (No. 30 of 2000)	Not later than 2 years from the registration of a quarry a planning authority may, in the interests of proper planning and sustainable development, and having regard to the development plan, impose conditions on the operation of that quarry
261(7)(a) of Planning and Development Act, 2000 (No. 30 of 2000)	Where the continued operation of a quarry would be likely to have significant effects on the environment a planning authority shall require the owner or operator of the quarry to apply for planning permission and to submit an environmental impact statement to the planning authority not later than 6 months from the date of service of the notice
261(12) Planning and Development Act, 2000 (No. 30 of 2000)	Have regard to any guidelines issued by the Minister

(v) **Local Government**

Regulatory Power	Measure
199 (1) Local Government Act, 2001 (37 of 2001)	May make a bye-law for or in relation to the use, operation, protection, regulation or management of any land, services, or any other matter provided by or under the control or management of the local authority, whether within or without its functional area or in relation to any connected matter
199 (4) (a) Local Government Act, 2001 (37 of 2001)	A local authority may amend any bye-law made by it.
199 (4) (b) Local Government Act, 2001 (37 of 2001)	A local authority may revoke any bye-law made by it
199 (6) Local Government Act, 2001 (37 of 2001)	The power of a local authority to make a bye-law in respect of its functional area includes a power to make a bye-law in respect of the foreshore and of coastal waters adjoining that functional area and with the agreement of any other local authority, of the coastal waters adjoining the functional area of that other local authority
202 (3) (a) Local Government Act, 2001 (37 of 2001)	The local authority shall keep a copy of the bye-law open for public inspection during ordinary office hours at the principal offices of the local authority and any person may apply for a copy of it.
202 (5) (a) Local Government Act, 2001 (37 of 2001)	Where a bye-law relates to the use, regulation or management of land provided by a local authority, a local authority shall endeavour to keep a notice displayed at or near such land that a bye-law applies to it.
Section 37(1) of Local Government Act 1994 (No. 8 of 1994)	Make bye-laws in relation to the use, operation, protection regulation or management of any land, services, or any other thing whatsoever provided by or under the control or management of the local authority or in relation to any other matter connected therewith
Section 37(2)(a) of Local Government Act 1994 (No. 8 of 1994)	Make a bye-law to control or regulate any activity or matter such that any nuisance can be controlled or suppressed if it is in the interests of the common good of the community.
Section 37(7) of Local Government Act 1994 (No. 8 of 1994)	Make bye-laws in respect of the foreshore and of coastal waters adjoining that functional area and with the agreement of any adjoining local authority of the coastal water adjoining the functional area of that local authority.

APPENDIX C

APPENDIX C COMPETENT AUTHORITIES

(i) Competent Authorities from European Communities (Water Policy) Regulations, 2003

The relevant public authorities to which article 2 refers in relation to a river basin district are

- the Geological Survey of Ireland
- the Environmental Protection Agency
- the relevant local authorities
- the regional authorities in the area
- the regional fisheries boards in the area
- the Geological Survey of Ireland
- Teagasc
- the Radiological Protection Institute of Ireland
- the Marine Institute
- the Central Fisheries Board
- the Electricity Supply Board
- Waterways Ireland
- Tourism Ireland
- the Heritage Council
- the Health and Safety Authority
- the Local Government Computer Services Board
- the Commissioners of Public Works
- the Minister for Enterprise, Trade and Employment
- the Minister for Communications, Marine and Natural Resources
- the Minister for Agriculture and Food

“Tourism Ireland” was substituted by “Failte Ireland, the National Tourism Development Authority” by S.I. No. 413 of 2005. European Communities (Water Policy) (Amendment) Regulations 2005.
