

WATER POLLUTION CONTROL LEGISLATION AS IT AFFECTS INDUSTRY

EnviroCentre
Enterprise Ireland,
Glasnevin, Dublin 9, Ireland.

Telephone: 01 808 2000 Fax: 01 808 2259
Email: envirocentre@enterprise-ireland.com
Website: www.envirocentre.ie



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1.0 Water Pollution Act

In Ireland, in cases where Integrated Pollution Prevention Control (IPPC) is not applicable, the control of water pollution is exercised through the [Local Government \(Water Pollution\) Acts 1977-1990](#). The city and county councils are the licensing authorities. As far as industry is concerned, a discharge of wastewater (effluent) to waters (river, stream, lake, estuary etc. and groundwater) or to a municipal sewer can only take place if it is licensed.

1.1 Effluent discharge licences (Water Pollution Act)

It is the legal responsibility of the discharger to apply for a licence and all local authorities have two standard application forms for this purpose. The first is for discharges to municipal sewers and the second is for discharges to waters. The characteristics of the discharge must be fully described and the completed application form must be accompanied by scaled drawings showing the layout of the premises, the drainage systems (foul and storm) and the point of discharge. A prescribed fee must be paid. In the case of a discharge to waters, a notice must first be published in a newspaper circulating in the functional area of the Local Authority and a copy of the notice attached to the application form. The local authority must make a decision within two months unless it requires further information or clarification.

It is always advisable to consult with the local authority pollution control officers before making an application. This is to ensure, for example, that there is capacity in the local sewer to accept the discharge. It is important to realise that a local authority cannot grant a licence if subsequently there was likely to be a failure to meet a prescribed water quality standard. Local authorities must also respect any international agreements to which Ireland is a signatory and which limit the discharge of specified pollutants to the environment.

If the local authority decides to grant a licence it must be carefully examined on receipt as there are many cases on record where conditions imposed were impractical, unreasonable or prohibitively expensive to implement. The only means by which changes can be made is through an appeal to [An Bord Pleanála](#) within one month from the date of grant (or refusal). In the case of a discharge to waters, third parties may appeal. It is vital to realise that An Bord Pleanála adopts a very strict policy with regard to statutorily defined time periods.

All licences contain conditions typically specifying:-

- the standard of wastewater discharge permitted
- maximum allowable volume (per day and per hour)
- monitoring of wastewater quality and flow
- record keeping and reporting requirements
- pollution control equipment operation and maintenance
- spill prevention control measures
- annual charges to defray the local authority's costs for monitoring and inspections
- other relevant conditions depending on circumstances



The costs incurred by a local authority in treating a discharge to a sewer may also be recharged to the discharger. The charges are normally based on the volume of wastewater and the concentration of pollutants such as suspended solids and biochemical oxygen demand (BOD) present in the wastewater.

1.2 When is a licence needed ?

Sometimes there is confusion as to what is wastewater or effluent and whether a licence is needed or not. The Water Pollution Act (1977) defined a 'trade effluent' as an effluent, "which is discharged from premises used for carrying on any trade or industry (including mining) but does not include domestic sewage or storm water". All 'trade effluents' must be licensed.

Discharges of domestic-type wastewater (sewage) from commercial and industrial premises to municipal sewers is generally not subject to licence but a licence would be required if the discharge was to a surface water. A licence is not required for domestic sewage not exceeding a volume of 5m³ in any period of 24 hours that is discharged to an aquifer from a septic tank or other disposal unit by means of a percolation area, soakage pit or other method. A licence is required for discharge of domestic sewage from a septic tank where the discharge is direct to surface waters and, in all cases where the discharge exceeds 5m³ in 24 hours. Many industrial processes do not generate 'process wastewater' or effluent but there may be uncontaminated cooling water. This is regarded as wastewater since it is often hot and usually contains various treatment chemical additives and so a licence is required. The same applies to boiler blowdown and the discharge from any water treatment plant used to treat the boiler make-up water.

In general, the local authorities do not grant licences for discharges of uncontaminated storm water (rain water) to either municipal sewers or watercourses since such discharges are non-polluting. However, a local authority may decide that storm water from paved areas where there is a risk of pollution (e.g., loading or unloading of liquid materials or chemical substances) should be licensed.

1.3 Revised licences

Where "a material change" in a process has taken place or if a new process has been introduced, and the resulting wastewater discharge has changed, then any existing licence must be reviewed and, if necessary, a revised licence obtained. This is a formal process similar to making the original application. Local authorities themselves may initiate a review particularly if new water quality standards have been specified in national or EU regulations.

2.0 Integrated Pollution Prevention and Control



3.0 Water Framework Directive

The [Water Framework Directive \(2000/60/EC\)](#) is a [European Union](#) law which aims to protect and improve the quality of all waters throughout the European Union. It was agreed in October 2000 and published in the Official Journal on 22nd December 2000, hence it is operational i.e., Community law, from that date. The Directive represents a radical approach to the way the EU ‘manages’ the Community’s waters going forward. The subsidiarity principle, whereby policy administration decisions are made at the lowest competent level, rather than at higher levels (e.g., government department), is a key aspect of the Directive.

The core reason for the Water Framework Directive was that while there were many directives dealing with water quality, the fact remained that there was little or no integration and no overall coordinated policy for sustainable management of the resource. Furthermore, it was argued by some that despite all the directives, water quality was not improving and in some areas was actually deteriorating. The scope of the directive includes inland surface waters, coastal waters, transitional waters and groundwater. The latter is significant as it recognises the link between surface water and groundwater and how the quality of one often affects the other.

3.1 Main Objectives

The key objectives of the Directive are to:

- protect and enhance the status of aquatic ecosystems
- promote sustainable use of water
- provide for sufficient supply of good quality water
- provide enhanced protection and improvement of the aquatic environment
- contribute to mitigating the effects of floods and droughts
- protect territorial and marine waters
- establish a register of ‘protected areas’

3.2 Implementation

In Ireland, the [European Communities \(Water Policy\) Regulations 2003](#), S.I. No. 722 of 2003 transposed the Water Framework Directive (2000/60/EC) into Irish law. These Regulations require all public authorities to take measures appropriate to their functions to promote or achieve the implementation of this directive, while at national level, guidance and co-ordination is to be provided by the Minister for the Environment, Heritage and Local Government ([DoEHLG](#)) and the [Environmental Protection Agency](#) (EPA).

3.3 River Basin Districts

The basic means by which the core aims are to be achieved is by the River Basin District (RBD) concept and the development of a strategic management plan for each district. A district may contain more than one river basin. A total of eight RBDs have been established in relation to the island of Ireland. They are as follows;

- Eastern River Basin District
- South Eastern River Basin District



- South Western River Basin District
- Western River Basin District
- North Western International River Basin District
- North Eastern River Basin District
- Neagh Bann International River Basin District
- Shannon International River Basin District

In relation to each of the RBDs the Regulations specify a local authority which shall act as co-ordinator of all the relevant local authorities, for instance [Carlow County Council](#) is the co-ordinating local authority for the South Eastern RBD.

3.4 Characterisation of River Basin Districts

Characterisation of each of the river basin districts is the responsibility of the EPA and this was to be carried out in consultation with such persons it considered appropriate by the 22nd December 2004. This work involved mapping the location and boundaries of groundwater and surface water bodies and identifying each surface water body as a river, lake, transitional or coastal water, an artificial surface water body or a heavily modified surface water body. They also had to provide the typology for differentiating all surface waters within the RBDs and establish type-specific reference conditions for each type of surface water body. Once this task was complete, the information gathered should then be in a format that can be introduced into a geographical information system (GIS) and/or the geographical information system of the [European Commission](#) (GISCO).

By the same date, the relevant local authorities were to do the following in relation to an RBD; carry out an analysis of its characteristics, review the impact of human activity on the status of surface waters and groundwaters and carry out an economic analysis of water use. This information was to be provided in a summary report to the EPA not later than 22nd December 2004.

By the 22nd March 2005 the EPA had to send a summary report of the analyses and review carried out to the Minister and the European Commission. By the 22nd December 2013 and every six years thereafter both the EPA and the relevant local authorities in conjunction with the relevant public authorities shall review and if necessary update the information that was first gathered. It was also a requirement of the EPA, again by the 22nd December 2004 to establish a register of protected areas and to keep this register under review and up to date.

3.5 Classification System and Monitoring Programme

The EPA with the help of the relevant public authorities had to set up a classification system by the 22nd June 2006. The purpose of this was to establish the status of water bodies. By the same date the EPA had to establish a monitoring programme to determine water status and provide a coherent and comprehensive overview of each of the RBDs. This should specify the nature, frequency and extent of monitoring to be carried out by public authorities, specify the public authority with responsibility for carrying out the monitoring and provide that all monitoring measures necessary for compliance with the directive are established and operational not later than the 22nd December 2006. The



monitoring programme must establish the status of surfacewaters, groundwaters and protected areas in terms of certain criteria such as ecological, chemical or as additional matters that may be required. The Regulations specify the frequency and type of reporting on the monitoring programme that will be required to both the Minister and the European Commission and the timelines involved.

3.6 Environmental objectives and Programme of Measures

The Regulations require the relevant local authorities to establish environmental objectives in relation to each river basin district by the 22nd June 2009. This is to be carried out following consultation with the relevant public authorities. A programme of measures must also be established in order to achieve these objectives and this programme of measures must be subsequently published. The relevant local authority must also publish a draft programme of measures no later than 22nd June 2008. A further requirement of the local authority will be to review and update the programme of measures not later than the 22nd June 2015 and every six years thereafter.

3.7 River Basin Management Plan

By the 22nd June 2009 the relevant local authorities will be required to make a river basin management plan for each river basin district. This plan has to be published and copies sent to the relevant public authorities. The management plan must be prepared for each district through extensive consultation with interested bodies and public participation is to be encouraged. Dates are specified in terms of publishing timetables, work programmes and overviews of the significant water management issues identified. The local authority shall publish a notice in a daily newspaper inviting comments by any person and shall allow a period of at least six months for the provision of such comments.

The basic contents of the plan are prescribed in Annex VII of the Directive. The plan will contain information on the status of the waters within the District and, perhaps more importantly, the programme of measures considered necessary to achieve 'good' status (Article 11). Such measures might, for example, include the provision of new municipal wastewater treatment plants, changes in land-use practice, further protection for groundwater abstractions by restricting spreading of agricultural wastes on land, improved flow regulation etc. The programme of measures provides the link between achieving good water status and several important directives such as those concerning [Urban Wastewater Treatment \(91/271/EEC\)](#), [Drinking Water \(80/778/EEC as amended by 98/83/EC\)](#), [Nitrates \(91/676/EEC\)](#), and [Integrated Pollution Prevention Control \(96/61/EC\)](#).

The Regulations also specify for progress reports to be made within thirty months after a plan or an updated plan comes into effect and these reports should be sent to the EPA. The EPA shall then send an interim report describing progress in the implementation of the programme to the [European Commission](#).

3.8 River Basin District Advisory Council

The relevant local authorities must also establish a river basin district advisory council. The purpose of this is to consider matters relating to the preparation of the river basin management plan and other matters relevant to the protection and use of the aquatic



environment and water resources in the district. They can then advise and make recommendations on these matters to the relevant public authorities. An advisory council should be set up not later than the 22nd December 2004 and a new council shall be established every five years subsequent to the initial one. The composition and the requirements of the council are prescribed in the regulations.

3.9 Strategies against Water Pollution

The Directive (Article 16) continues the traditional strategy of limiting the concentrations of 'priority substances' in discharges, surface waters, sediments and biota. It also introduces the use of biological indicators for surface water ecological quality assessment. In essence, in the case of inland fresh waters, water that can support the 'insects' that game fish (salmon and trout) feed on will be of good quality. Various indicator organisms are used depending on the water type e.g. fresh water or salt water.

3.10 Environmental Quality Standards for Priority Substances

Within a period of six years specified in Article 16.8 of the directive, the EPA shall make recommendations to the Minister in relation to the establishment of environmental quality standards for substances included on the first list of priority substances. This is in relation to the standards which should be established in accordance with that article for all surface waters which are affected by discharges of such substances and such controls as are appropriate in relation to the principal sources of such substances.

For substances subsequently included in the list of priority substances the EPA will make recommendations to the Minister in relation to the standards which should be established in accordance with Article 16.8 of the Directive. In relation to the criteria for the assessment of groundwater, the EPA was required to make recommendations to the Minister by the 22nd September 2005 as to the criteria to be established for that purpose.

3.11 Dissemination of Information (websites)

The EPA and the relevant local authorities shall so far as is reasonably practicable provide on a website the documents and information used for the development of a draft river basin management plan.

3.12 Impact on industry

It is not anticipated that there will be any radical change in the way industrial emissions to waters will be regulated and controlled. In particular,

- the established effluent discharge licensing arrangements will continue.
- the river basin management plans will incorporate a consultative process and so it is essential that industry make appropriate inputs to protect legitimate interests. When the plans are finally adopted they will have a quasi-legal status and if an individual water quality standard is un-necessarily restrictive, it will be most difficult to get it changed, although there is provision for review of plans at six-yearly intervals.

- there is a requirement (Article 11(c)) for controls to be introduced for abstractions from both surface and groundwaters unless the abstraction has no significant impact on water status.
- Article 11(j) prohibits the direct discharge of pollutants into groundwater.
- A key requirement of the directive (Article 9) is the concept of charging for water services since this is widely recognised as the only effective means to guarantee efficient use of the resource. Again this will have little or no impact on industry since charging for water (and more recently discharges to municipal sewers) has long been practiced by the local authorities in the case of companies using the public water supply. It is not, however, clear what mechanism will be employed to encourage those industries that have private supplies (usually groundwater) to practice conservation.

3.13 Time Frame for Implementation of the Water Framework Directive

Year	Issue	Reference
2000	Directive entered into force	Article 25
2003	Transposition into national legislation	Article 23
	Identification of River Basin Districts and Authorities	Article 3
2004	Characterisation of river basin: pressures, impacts and economic analysis	Article 5
2006	Establishment of monitoring network	Article 8
	Start public consultation (at the latest)	Article 14
2008	Present draft river basin management plan	Article 13
2009	Adoption of river basin management plan including a programme of measures	Article 13 & 11
2010	Introduce pricing policies	Article 9
2012	Make operational programmes of measures	Article 11
2015	Meet environmental objectives	Article 4
2021	Second management cycle ends	Article 4 & 13
2027	Third management cycle ends	Article 4 & 13

Source: <http://www.waterframeworkdirective.wdd.moa.gov.cy/docs/pdf/faq.pdf>

Note: The relevant authorities have prepared a Characterisation Report for the Irish River Basin Districts (Article 5 of the Water Framework Directive) and this was submitted to Brussels in November 2004.

In June 2006 the EPA published the first draft of the Irish Framework Directive Monitoring Programme (Article 8) along with an update following public comment in October 2006. This monitoring programme came into operation on 22nd December 2006 and details of the monitoring programme design were sent to Brussels in March 2007.

3.14 Directives to be Repealed

Directive	Year
Directive 75/440/EEC 'Surface waters for abstraction'	2007
Directive 77/795/EEC 'Information exchange on the quality of surface freshwater'	2007
Directive 79/869/EEC 'Surface water analytical methods'	2007
Directive 78/659/EEC 'Freshwater fish protection'	2013
Directive 79/923/EEC 'Shellfish waters'	2013
Directive 80/68/EEC 'Groundwater'	2013
Directive 76/464/EEC 'Dangerous substances' (except for article 6 which was repealed on Dec 22, 2000)	2013

Note: Although the above directives will be repealed, Article 16 of the Water Framework Directive will provide for the continued setting of water quality standards and emission limit values for 'priority substances' to be identified by the Commission.

4.0 Additional Information

The Environmental Protection Agency

The Department of the Environment, Heritage and Local Government

Various Local Authorities

5.0 Disclaimer

This guidance note should not be considered as a legal document nor does it purport to provide legal advice on Water Pollution Control Legislation. In many situations it may be necessary to seek expert advice and assistance.