

Manual of European Environmental Policy

The following pages are a section from the Manual of European Environmental Policy written by the Institute for European Environmental Policy.

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This section is the text of the Manual as published in 2012. It is therefore important to note the following:

- The contents have not been updated since 2012 and no guarantee is given of the accuracy of the contents given potential subsequent developments.
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Groundwater

Formal Reference	
80/68/EEC (OJ L20 26.1.80)	Directive on the protection of groundwater against pollution caused by certain dangerous substances
Proposed 24.1.78 – COM(78)3	
Legal base	Articles 115 TFEU (originally Article 100 EEC Treaty) and 352 TFEU (originally Article 235 EEC Treaty)
Binding Dates	
Notification date	19 December 1979
Formal compliance	19 December 1981
New discharges to be controlled	19 December 1981
Existing discharges to be controlled	19 December 1985
Formal Reference	
2006/118/EC (OJ L372 27.12.06)	Directive on the protection of groundwater against pollution and deterioration
Proposed 19.9.2003 – COM(2003)550	
Legal base	Article 192 TFEU (originally Article 175(1) TEC)
Binding Dates	
Notification date	27 December 2006
Formal compliance	16 January 2009
Establish threshold values	22 December 2008
Commission implementation report	22 December 2009 Note: Article 22(2) of the Water Framework Directive 2000/60/EC repeals Directive 80/68/EEC with effect from 22 December 2013.

Purpose of the Directives

Seventy per cent of the Community's drinking water is extracted from underground sources. In order to protect exploitable groundwater sources, which are very difficult to restore once polluted, both direct and indirect discharges of dangerous substances are to be prohibited or regulated.

Summary of Directive 80/68/EEC

Lists I and II of families and groups of dangerous substances are given in an Annex, those on List I being generally more dangerous than those on List II. The Annex makes it clear that only those individual substances within the limited groups and families that exhibit certain

specified characteristics are to be classed in the appropriate list. (The lists are not quite identical to Lists I and II of the Dangerous Substances Directive [2006/11/EC](#)).

Member States are to 'prevent' the introduction into groundwater of List I substances and to 'limit' the introduction of List II substances so as to avoid pollution. 'Pollution' is defined by reference to the effect of a substance rather than by its presence. 'Groundwater' is also defined.

The Directive does not apply to radioactive substances or to discharges of domestic effluents from isolated dwellings situated outside areas that are protected for the abstraction of drinking water. It also does not apply to discharges containing List I or List II substances in a quantity and concentration so small as to obviate any present or future danger.

All direct discharges (i.e. without percolation through the ground) of *List I* substances are to be prohibited (except in trace quantities) though if after investigation the groundwater is found unsuitable for other uses such discharges may be authorized. ReInjection into the same aquifer of water used for geothermal purposes, water pumped out of mines and quarries or water pumped out for civil engineering works may be authorized after investigation.

All direct discharges of *List II* substances are to be subjected to investigation before being authorized.

Any disposal on land of either List I or List II substances that might lead to indirect discharges is to be subject to investigation before being authorized. (Authorizations are also required under EU Waste Directives). Any other activity likely to lead to indirect discharges of List I substances is also to be controlled and the control measures in respect of List I substances are to be notified to the Commission. Artificial discharges for the purpose of groundwater management are to be specially authorized on a case-by-case basis, and only when there is no risk of polluting the groundwater. All the authorizations mentioned above may only be issued if the groundwater quality is undergoing the requisite surveillance.

The nature of the above-mentioned prior investigations is explained, and the particulars of the authorizations are set out. All authorizations may be granted only for a limited period and must be reviewed every four years. The competent authorities are to monitor compliance with authorizations and the effects of discharges on groundwater.

Existing discharges of List I and II substances were to be brought within the provisions of the Directive by 19 December 1985.

An inventory of authorizations is to be kept. The Commission may ask for information, on a case-by-case basis, about:

- Authorizations.
- The inventory.
- The prior investigations mentioned above.
- The results of monitoring.

The information acquired by the Commission must only be used for the purpose for which it was requested. This is not to prevent publication of general information or surveys that do not contain information relating to particular undertakings. Information is to be reported to the

Commission following the requirements of the Standardised Reporting Directive [91/692/EEC](#) and related Decision [92/446/EEC](#).

Where transfrontier groundwater is concerned, the competent authority of a Member State that intends to grant authorization for a discharge must first inform other Member States concerned. At the request of one of the Member States consultation must be held before an authorization is issued, and the Commission may participate.

Article 22(2) of the Water Framework Directive [2000/60/EC](#) repeals Directive 80/68/EEC with effect from 22 December 2013 by which time groundwater protection is to be achieved through integrated implementation of Directive 2000/60/EC and 2006/118/EC.

Summary of Directive 2006/118/EC

Directive 2006/118/EC is significantly different in its requirements from Directive 80/68/EEC in that these requirements are integrated into the implementation tasks of the Water Framework Directive [2000/60/EC](#). Thus the Directive requires:

- Groundwater ‘threshold values’ to be established by the end of 2008. The pollutants to be addressed (nationally or within river basin districts) are those that are identified under Directive 2000/60/EC as contributing to groundwater bodies being ‘at risk’. These threshold values are to be set out in the River Basin Management Plans developed under the water framework Directive.
- Pollution trend studies are to be carried out by using existing data and data that are required to be collected by Directive 2000/60/EC (referred to as ‘baseline level’ data obtained in 2007–2008).
- Pollution trends are to be reversed where there is ‘any significant and sustained upward trend’ so that environmental objectives are achieved by 2015 by using the programmes of measures set out in Directive 2000/60/EC. Thus details of how Member States are to tackle such trends are to be set out in the River Basin Management Plans developed under Directive 2000/60/EC.
- Measures to prevent or limit inputs of pollutants into groundwater are to be operational so that Directive 2000/60/EC environmental objectives can be achieved by 2015. This shall include the prevention of inputs of substances identified as hazardous under Directive 2000/60/EC and action on other pollutants so as to prevent deterioration in quality. However, Directive 2006/118/EC also provides exemptions to these requirements, such as in the event of technical limitations and of measures being ‘disproportionately costly’.
- Reviews of technical provisions of Directive 2006/118/EC are to be carried out in 2013 and every six years thereafter.

Development of Directive 80/68/EEC

Although the Directive was agreed within two years of being proposed – which was (and is) quite rapid for Community legislation – it underwent quite significant modification in the process. The European Parliament’s Environment Committee proposed many amendments in some respects making the Directive more stringent. The most important of these was that List I substances should not be indirectly discharged to groundwater even when subject to authorization, and a ban on all direct and indirect discharges in areas where the groundwater

is used, or could be used, for drinking. In the debate in the European Parliament (14 November 1978) Commissioner Natali welcomed the amendments but noted that the Commission ‘must expect serious objections from some Member States during the discussion at the Council of Ministers’. He was probably right because on the very same day the UK Parliament debated the proposal and amended the government's motion for a resolution to read ‘this House. . . cannot accept proposals that require a ban on all types of direct discharge, particularly those found acceptable in the United Kingdom’. This resolution, although apparently tying the Government's hands by forcing it to resist the proposed Directive as amended by the European Parliament, in practice did not really do so since the European Parliament had already proposed significant exceptions to allow traces of List I substances and to allow the practice of recharging aquifers from rivers which inevitably contain some List I substances. In the event, the European Parliament's proposed amendments were substantially modified, and the Directive as agreed was in effect an ‘extended ban’ with enough exemptions to overcome what the British Minister called ‘our basic dislike of outright banning’.

Development of Directive 2006/118/EC

Debate over revision of groundwater protection legislation has been taking place for some years. In 1982 Directorate-General XI (Environment, Consumer Protection and Nuclear Safety) (now DG Environment) carried out a major assessment of groundwater resources in the, then, nine Member States. It consisted of a general survey and individual reports from each Member State. This assessment mainly addressed groundwater quantity.

Participants at a Ministerial Seminar on groundwater held at The Hague in November 1991 recognized that:

- Groundwater is a natural resource with both ecological and economic value, which is of vital importance for sustaining life, health, agriculture and the integrity of ecosystems.
- Groundwater resources are limited and should therefore be managed and protected on a sustainable basis.
- It is essential to protect groundwater resources against over-exploitation and adverse changes in hydrological systems resulting from human activities and pollution.

The ministers noted the following threats to groundwater resources:

- Over-exploitation.
- Deterioration caused by saltwater intrusion.
- Pollution by fertilizers and pesticides.
- Pollution from industry, old industrial sites, waste, sewage sludge disposal.
- Accidental pollution.

The ministers also noted that the existing Community legislation (including Directive 80/68/EEC) was inadequate to protect groundwaters against many of the threats. They agreed that in order to ensure sustainable management, both corrective and preventive measures should be put in place. This led to a draft proposal for an Action Programme for Integrated Groundwater Protection and Management ([COM\(96\)315](#)), which required that an action programme be implemented at national and Community level. In 1992 and 1995 the Council

made recommendations for an action programme and a revision of Directive 80/68/EEC. The Commission then proposed a Decision on an action programme for Integrated Protection and Management of Groundwater, which stressed the need to establish procedures for the Regulation of abstraction of freshwater and for the monitoring of freshwater quality and quantity. These issues were then included within the proposal and eventually adopted text of the Water Framework Directive 2000/60/EC. However, during adoption, it was not possible for the Council and European Parliament to reach an agreement on all issues concerning groundwater protection. Hence, a Decision was taken to develop a 'daughter' Directive to address these issues and complete the replacement of Directive 80/68/EEC.

Directive 2000/60/EC requires Member States to undertake a number of measures with regard to the protection of groundwaters. These include to:

- Define groundwater bodies within River Basin Districts. These must be classified by analysing the pressures and impacts of human activity on the quality of groundwater.
- Establish registers of protected areas within each river basin districts for those groundwater areas or habitats and species directly dependent on water.
- Establish groundwater monitoring networks based on the results of the classification analysis so as to provide a comprehensive overview of groundwater chemical and quantitative status.
- Set up a River Basin Management Plan for each river basin district.
- Take into account by 2010 the principle of recovery of costs for water services.
- Establish by the end of 2009 a programme of measures for achieving environmental objectives (e.g. abstraction control, prevent or control pollution measures) that would be operational by the end of 2012.

The proposal for a new Directive was adopted by the Commission on 19 September 2003. The first Parliamentary reading was completed in April 2005. A political agreement was then reached at Council in June 2005, followed up by the adoption of a Council Common Position on 23 January 2006. The second reading was adopted by the Parliament on 13 June 2006, and the Council response to this was adopted on 29 September 2006. Final conciliation agreement was reached on 17 October 2006. Issues that required considerable deliberation included a proposal for non-deterioration of groundwater quality and the details of the interaction with the Nitrates Directive [91/676/EEC](#).

Implementation of the Directives

Information on the measures taken by the Member States to transpose Directive 80/68/EEC can be found in their national [execution measures](#). Information on the measures taken by the Member States to transpose Directive 2006/118/EC can be found in their national [execution measures](#) for this Directive.

There has been little published regarding an overview of implementation of Directive 80/68/EEC. Much of the information on implementation issues has arisen from cases brought before the European Court of Justice (see below). The European Environment Agency (EEA) published two reports in 1999¹ and 2000² on Europe's groundwaters, including comments on implementation of Directive 80/68/EEC. The 2000 report noted that significant threats to groundwater remained in place, including from the use of agricultural chemicals (fertilizers and pesticides), more localized contamination (industrial sites, landfills and poor storage

facilities) and over-abstraction for drinking water and other uses. It concluded that these pressures had led to a degradation of the quality and decrease in the quantity of water in many groundwater bodies and aquifers. With regard to Directive 80/68/EEC, the EEA noted that ‘although the Directive can be considered to have contributed to national groundwater policies and has made a significant contribution to protecting groundwater from many point sources, its implementation and application in some Member States has been slow, particularly with regard to diffuse sources of pollution’.

The EEA study surveyed the legislation and policies used for groundwater protection in the Member States. It noted that there was a range of different policy approaches, sometimes set in overall national strategies, including:

- Legislation (such as to reduce point or diffuse sources of pollution or to establish protection zones).
- Financial aid (e.g. to encourage the adoption of alternative crops or agricultural techniques).
- General or targeted education programmes, establishment of codes of good practice and provision of advisory and information services.

A report from the Commission ([C\(2010\)1096](#)) of 5 March 2010 reviews Member State action on the establishment of groundwater threshold values under Article 3.7 of Directive 2006/118/EC. 24 of the 25 Member States which provided information had established threshold values for substances, with the number of threshold values established by each Member State varying between zero (Portugal) and 62 (United Kingdom).

In order to assist the implementation of Directive 2006/118/EC, the following guidance has been developed under the Common Implementation Strategy of the Water Framework Directive 2000/60/EC.

CIS Guidance No. 15 – Groundwater Monitoring³.

This Guidance provides information on establishing groundwater monitoring programmes to meet the requirements of Directives 2000/60/EC and 2006/118/EC. It describes the design of a surveillance monitoring programme, operational programme and quantity monitoring (selection of determinants, monitoring sites and monitoring frequency), as well as drinking water protected area monitoring.

CIS Guidance No. 16 – Groundwater in Drinking Water Protected Areas⁴.

This guidance explains the obligations for protected areas that apply to groundwater, in particular the requirements for Drinking Water Protected Areas that are introduced under Article 7 of Directive 2000/60/EC. It does not cover the requirements of the source Directives under which individual protected areas are designated. It explains the relationship between the objectives for protected areas and other Directive 2000/60/EC objectives.

CIS Guidance No. 17 – Direct and Indirect Inputs in the Light of 2006/118/EC Directive⁵.

This document provides guidance regarding Directive 2000/60/EC obligations for preventing or limiting entry of pollutants into groundwater, as further developed in Directive 2006/118/EC. It clarifies the requirements regarding direct and indirect inputs and the relationship with other objectives of Directive 2000/60/EC.

This guidance has also been supported by technical studies:

- Technical Report No. 1: Groundwater Threats.
- Technical Report No. 2: Groundwater Characterization.
- Technical Report No. 3: Groundwater Monitoring.
- Technical Report No. 4: Groundwater Risk Assessment.
- Technical Report No. 5: Groundwater Management in the Mediterranean.

CIS Guidance No. 26 – Risk Assessment and the Use of Conceptual Models for Groundwater⁶

This guidance describes the elements of risk assessment, the use of conceptual models and their specific implementation for groundwater under Directive 2000/60/EC. It describes a coherent approach on how to assess risks caused by different pressures (such as diffuse and point source pollution and abstraction) at different scales ranging from site scale (local) up to the scale of a groundwater body.

Enforcement and court cases

There have been a number of cases decided in the European Court of Justice concerning Directive 80/68/EEC. Two cases concern the failure by Member States to ensure adequate transposition of one or both Directives:

- [C-183/97](#) 18/06/1998. This was a judgement against Portugal for failure to transpose Directive 80/68/EEC within the required time period.
- [C-230/00](#) 14/06/2001. This was a judgement against Belgium for failure to ensure sufficient transposition of Directive 80/68/EEC. Tacit authorization of activities was not considered to be acceptable. National authorities are required under the Directive to examine individually every request for authorization for discharge.

One case concerns the failure by a Member State to provide the necessary reporting to the Commission:

- [C-435/99](#) 12/12/2000. This was a judgement against Portugal for failure to provide the required reports to the Commission as set out in Article 16(1) of Directive 80/68/EEC.

A number of cases have concerned failures of practical implementation, including sufficient controls of discharges and failure to adopt plans for pollution control:

- [C-163/03](#) 14/04/2004. This was a judgement against Greece for failure, in the region of Thriassion Pedion, to adopt the measures necessary to prevent the introduction into groundwater of substances in List I of Directive 80/68/EEC, and to limit the introduction into groundwater of substances in List II; for failure to subject to prior investigation any disposal or tipping for the purpose of disposal of the substances in List I that might lead to indirect discharge; and to subject to prior investigation all direct discharge of substances in List II and the disposal or tipping for the purpose of disposal of those substances that might lead to indirect discharge.
- [C-248/05](#) 25/10/2007. This was a judgement against Ireland for failure to adopt all the measures necessary to comply with Articles 4, 5, 7 and 10 of Directive 80/68/EEC (as amended by Directive 91/692/EEC). The Directive requires that a complete investigation is required prior to authorization of discharges, but that Ireland failed to show that it followed the steps with regard to the municipal landfill at Ballymurtagh (County Wicklow).

The following case concerns the scope of Directive 80/68/EEC, where the Court concluded the limits of its applicability and its relationship to the Nitrates Directive 91/676/EEC:

- [C-416/02](#) 08/09/2005. The Commission sought a judgement against Spain for failure to carry out hydrogeological studies in an area affected by nitrate pollution around a pig farm in accordance with Articles 3(b), 5(1) and 7 of Directive 80/68/EEC. The Court, however, rejected this position of the Commission. It noted that the application of slurry was in accordance with good agricultural practice and that this was not ‘disposal or tipping for the purposes of disposal of these substances’ within the meaning of Article 5 of Directive 80/68. Also the Court stated that the system of protection of waters from pollution by livestock effluent is not based on Directive 80/68 but on Directive 91/676 (Nitrates Directive).

Related legislation

The protection of groundwaters and, therefore, the achievement of the legal objectives of Directives 80/68/EEC and 2006/118 is supported by the wider water management framework and the controls of specific pollution sources provided by the following Directives:

- Water Framework Directive ([2000/60/EC](#)).
- The Urban Waste Water Directive ([91/271/EEC](#)).
- The Bathing Water Directive ([76/160/EEC](#)).
- The Nitrates Directive ([91/676/EEC](#)).
- The Plant Protection Product Directive ([91/414/EEC](#)).
- The Integrated Pollution Prevention and Control Directive ([96/61/EC](#)).
- The Industrial Emissions Directive ([2010/75/EU](#)).
- The Landfill Directive ([99/31/EC](#)).
- The Construction Products Directive ([89/106/EEC](#)).

References

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- 3 CEC (2007) *CIS Guidance No 15 Groundwater Monitoring*,
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