

---

STATUTORY INSTRUMENTS

---

**2000 No. 3184**

**The Water Supply (Water Quality) Regulations 2000**

**PART VII**

**WATER TREATMENT**

**Interpretation**

**25.** In this Part—

“regulation 29 requirements” means the requirements of paragraphs (2) and (4) of regulation 29;

“risk assessment”, in relation to a treatment works, means an assessment for that treatment works, to establish whether there is, or continues to be, a significant risk from cryptosporidium oocysts in water supplied from the works;

“significant risk from cryptosporidium”, in relation to water supplied from a treatment works, means a significant risk that the average number of cryptosporidium oocysts per 10 litres of water supplied from the works for regulation 4(1) purposes, if sampled and analysed in accordance with regulation 29(5) to (15), would at any time be one or more; and

“surface water” does not include water from a spring.

**Treatment of raw water**

**26.—**(1) In carrying out such of its functions under Chapter III as comprise the supply of water for regulation 4(1) purposes, a water undertaker shall not, subject to paragraph (2), supply water from any source which consists of or includes raw water unless the water has been disinfected and, in the case of surface water, subjected to at least such further treatment as is specified in paragraph (3).

(2) This paragraph shall not require a water undertaker to disinfect such groundwaters as are specified in an authorisation given by the Secretary of State for the purposes of this paragraph.

(3) The further treatment mentioned in paragraph (1) is such treatment as is required to secure compliance with Council Directive [75/440/EC](#) (quality required of surface water intended for the abstraction of drinking water)<sup>(1)</sup>; and for the purposes of this regulation, surface water shall be treated as falling within category A1 or A2 or A3 set out in Annex I to that Directive if it is abstracted from waters for which the classification to be currently satisfied in accordance with section 82(1) of the Water Resources Act 1991<sup>(2)</sup> is, as appropriate, DW1 or DW2 or DW3, as set out in the Surface Waters (Abstraction for Drinking Water) (Classification) Regulations 1996<sup>(3)</sup>.

(4) Except with the consent of the Secretary of State, water shall not be abstracted for supply for domestic purposes which include drinking except from waters to be treated as falling within category A1 or A2 or A3 in the Annex mentioned in paragraph (3).

---

(1) OJNo. L 194, 16.6.75, p. 26.

(2) 1991 c. 57.

(3) S.I. 1996/3001.

### **Risk assessment for cryptosporidium**

27.—(1) Where at any time before 1st January 2001 a water undertaker has been required to comply with regulation 23B of the 1989 Regulations(4) at a treatment works, it may on or after that date carry out a risk assessment.

(2) Where a risk assessment has not been submitted to the Secretary of State pursuant to regulation 23A(1) of the 1989 Regulations, in respect of any treatment works from which water was first supplied for regulation 4(1) purposes after 30th June 1999(5) and before 1st January 2001, the water undertaker operating that works shall carry out a risk assessment on or before 28th February 2001.

(3) Where, at any time after 31st December 2000, a water undertaker proposes to bring into operation a treatment works from which it intends to supply water for regulation 4(1) purposes, it shall carry out a risk assessment in respect of that works.

(4) Where a water undertaker becomes aware of any factors which make it likely that a risk assessment will establish that there is a significant risk from cryptosporidium it shall notify the Secretary of State in writing, specifying the relevant factors.

(5) The Secretary of State may at any time by notice in writing require a water undertaker to carry out a risk assessment by a date specified in the notice to establish whether there is a significant risk from cryptosporidium.

### **Procedure following risk assessment, and prohibition of supply**

28.—(1) Where a water undertaker carries out a risk assessment under any provision of regulation 27, it shall submit to the Secretary of State a report of the assessment.

(2) A report of a risk assessment shall set out the results of the assessment, including—

- (a) a statement that the assessment has established—
  - (i) that there is a significant risk from cryptosporidium; or
  - (ii) that there is no such risk; and
- (b) a description of the methods used to carry out the assessment.

(3) Where the Secretary of State considers that the assessment that is the subject of a report submitted to him in accordance with paragraph (1) has not been carried out satisfactorily, he shall serve a notice on the water undertaker which—

- (a) sets out his reasons for considering that the assessment has not been carried out satisfactorily; and
- (b) requires the water undertaker, by a date specified in the notice, to carry out a further risk assessment and submit to him a report of that assessment,

and the water undertaker shall comply with the requirement by the date specified.

(4) Where—

- (a) a report submitted to the Secretary of State in accordance with paragraph (1) includes a statement that the assessment has established that there is no significant risk from cryptosporidium; and
- (b) the Secretary of State is satisfied, on the basis of the report, that the risk assessment has been carried out satisfactorily,

he shall notify the water undertaker that he is so satisfied; and if at the time of the submission of the report the water undertaker was, or was treated as, required to comply with regulation 29

---

(4) Regulations 23A and 23B were inserted by S.I. 1999/1524.

(5) The date on which regulation 23A of the Water Supply (Water Quality) Regulations 1989 came into force.

requirements, it shall cease to be required to comply with them from the date on which it receives the notification.

(5) Where—

- (a) a report is submitted to the Secretary of State in accordance with paragraph (1);
- (b) the report includes a statement that the assessment has established that there is a significant risk from cryptosporidium; and
- (c) the Secretary of State is satisfied, on the basis of the report, that the risk assessment has been carried out satisfactorily,

the Secretary of State shall notify the water undertaker that he is so satisfied and shall require the water undertaker to provide him with an estimate of the earliest practicable date by which it can comply with regulation 29 requirements.

(6) A water undertaker which has received a notice under paragraph (5) shall provide the estimate required by the notice within three months of the receipt of the notice.

(7) Where the Secretary of State receives an estimate pursuant to a notice under paragraph (6) he shall give the water undertaker notice of the date which he considers to be the earliest practicable date by which the water undertaker can comply with regulation 29 requirements; and the water undertaker shall comply with those requirements from that date.

(8) Where a water undertaker is required to comply with regulation 29 requirements at a treatment works, it may at any time carry out a further risk assessment for that treatment works to establish whether there continues to be a significant risk from cryptosporidium.

(9) A water undertaker shall not supply water for regulation 4(1) purposes from any treatment works on or after 1st October 2001 unless—

- (a) it has received a notice under regulation 23A(9) of the 1989 Regulations or paragraph (4) above in respect of that works; or
- (b) where, pursuant to a notice given under paragraph (7) above, or regulation 23A(7) of the 1989 Regulations, it is required to comply with regulation 29 requirements or, in accordance with regulation 29(1), is treated as subject to those requirements, it is taking steps to comply with those requirements.

### **Treatment for cryptosporidium**

**29.**—(1) A water undertaker which, immediately before 1st January 2001, is subject to a requirement under regulation 23A of the 1989 Regulations to comply with the requirements of regulation 23B of those Regulations shall, for the purposes of the following provisions of this regulation and of regulation 28 of these Regulations, be treated on and after 1st January 2001 as subject to a requirement under regulation 28 to comply with regulation 29 requirements.

(2) A water undertaker which is, or is treated as, required under regulation 28 to comply with regulation 29 requirements shall, in carrying out such of its functions under Part III of the Act as relate to the supply of water for regulation 4(1) purposes, use a process for treating the water intended to be supplied which secures that the average number of cryptosporidium oocysts per 10 litres of water is less than one.

(3) For the purposes of paragraph (2), a process secures that the average number of cryptosporidium oocysts per 10 litres of water is less than one only if—

- (a) the water is sampled, and collection devices are analysed, in accordance with the following provisions of this regulation; and
- (b) each collection device, when analysed under paragraph (12) or (13), indicates that the water sampled has been treated so as to secure that the average number of cryptosporidium oocysts per 10 litres of water is less than one.

(4) A water undertaker which is, or is treated as, required under regulation 28 to comply with regulation 29 requirements shall, in using the process referred to in paragraph (2), monitor its effectiveness by securing compliance with the requirements of paragraphs (5) to (15).

(5) Subject to paragraph (6), a continuous sample of water, consisting of at least 40 litres per hour on average during each sampling period, shall be taken from each point at which water leaves the treatment works and steps shall be taken to ensure that the sample is not contaminated when being taken.

(6) Where water which is subjected to the same treatment at the same treatment facilities before it leaves a treatment works leaves the works from more than one point, paragraph (5) shall require a continuous sample to be taken at only one of those points.

(7) For the purposes of the requirement in paragraph (5) to take a continuous sample of water, no account shall be taken of—

- (a) an interruption in the taking of the sample of less than one hour due to the changing of a collection device in accordance with paragraph (9); or
- (b) an interruption in the taking of the sample during a period when water is not being supplied from the monitoring point.

(8) A sample of water taken pursuant to paragraph (5) shall, as it is taken and without any further treatment, be passed through an approved collection device contained in approved sampling equipment which records the volume of water sampled.

(9) Subject to paragraph (10), a water undertaker shall change the collection device through which water is being passed in accordance with paragraph (8) at least once a day by removing it in an approved manner from the relevant sampling equipment and replacing it in an approved manner with a clean collection device; and a record shall be made of the volume of water passed through the collection device which has been removed and that record shall be retained for a period of one year or such longer period as the Secretary of State may, by notice in writing to the water undertaker, require.

(10) Where, due to interruptions in the taking of a sample during periods when water is not being supplied from a monitoring point, the rate of water passed through a collection device is less than 200 litres per day, a water undertaker shall not be required to change the collection device in accordance with paragraph (9) until the day on which the total volume of water that has passed through the device equals or exceeds 200 litres.

(11) A collection device removed from sampling equipment shall, prior to being analysed, be maintained in an approved manner so as to secure that there is no material alteration of the state of the device which could affect the results of the analysis.

(12) A collection device shall, subject to paragraph (13), within three days of the date on which it is removed from the sampling equipment be analysed for the purposes of establishing whether it contains cryptosporidium oocysts at a level which indicates that the water sampled has not been treated so as to secure that the average number of cryptosporidium oocysts per 10 litres of water is less than one.

(13) Where—

- (a) there is a significant increase in the turbidity of water being sampled for the purpose of this regulation; or
- (b) some other indication that the number of cryptosporidium oocysts in the water may have increased,

a water undertaker shall immediately change the collection device through which the water is being passed, and the removed collection device shall be analysed as soon as practicable and in any case not later than the end of the day after that on which it was removed.

(14) The analysis of collection devices for the purposes of this regulation shall be carried out at an approved laboratory using approved equipment and approved analytical systems and methods.

(15) Following the analysis of a collection device for the purposes of this regulation, the person by whom or under whose supervision the analysis has been carried out shall, within the applicable time limit for the analysis set out in paragraph (12) or (13), certify the results of the analysis, setting out the average number of cryptosporidium oocysts per 10 litres of water contained in the water sampled, as indicated by the level of cryptosporidium oocysts contained in the collection device.

(16) In this regulation—

“approved” means approved by the Secretary of State for the purpose of this regulation; and

“day” means the period of 24 hours commencing immediately after midnight.

### **Contamination from pipes**

**30.**—(1) Where there is a risk (“the prescribed risk”) that water supplied by a water undertaker would, for the reason mentioned in paragraph (2), after leaving the undertaker’s pipes—

(a) contain a concentration of copper in excess of 2mg/litre; or

(b) contain a concentration of lead in excess of 10µg/litre,

the water undertaker shall, subject to paragraph (3), treat the water in such a way as will, in its opinion, eliminate the prescribed risk or reduce it to a minimum.

(2) The reason referred to in paragraph (1) is the presence in the water of a concentration of copper or lead which is attributable to the fact that copper or lead is the major component of such a pipe as is mentioned in section 68(3)(a) of the Act, or its associated fittings.

(3) Paragraph (1) shall not require an undertaker to treat water—

(a) if the treatment is unlikely to achieve a significant reduction in the concentration of copper or lead; or

(b) if treatment is not reasonably practicable.

(4) Where at any time in the period beginning with 25th December 2003 and ending immediately before 25th December 2013, a water undertaker—

(a) has reason to believe that water supplied by it for regulation 4 purposes from a pipe to which paragraph (5) applies contains, at the consumer’s tap, a concentration of lead which exceeds 10µg/l but does not exceed 25µg/l; and

(b) has received from the owner of premises to which water is so supplied notice in writing—

(i) of the owner’s intention to replace so much of the pipe as belongs to him; and

(ii) of his desire that the water undertaker replaces the remainder of the pipe,

the water undertaker shall modify or replace its part of the pipe.

(5) This paragraph applies to a pipe—

(a) of which the major component is lead;

(b) which is subject to water pressure from a water main or would be so subject but for the closing of some valve; and

(c) which belongs, as to part, to a water undertaker and, as to the remainder, to the owner of any premises to which the undertaker supplies water for regulation 4 purposes.

### **Application and introduction of substances and products**

**31.**—(1) In this regulation—

“the Directive” means Council Directive [89/106/EEC](#) on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products<sup>(6)</sup>;

“EEA State” means a State which is a contracting party to the agreement on the European Economic Area signed at Oporto on 2nd May 1992<sup>(7)</sup> as adjusted by the Protocol signed at Brussels on 17th March 1993<sup>(8)</sup>;

“European technical approval” means a favourable technical assessment of the fitness for use of a construction product for an intended use, issued for the purposes of the Directive by a body authorised by an EEA State to issue European technical approvals for those purposes and notified by that body to the European Commission; and

“harmonised standard” means a standard established as mentioned in the Directive by the European standards organisation on the basis of a mandate given by the European Commission and published by the Commission in the Official Journal of the European Communities.

(2) Subject to paragraph (3), a water undertaker shall not apply any substance or product to, or introduce any substance or product into, water which is to be supplied for regulation 4(1) purposes unless one of the requirements of paragraph (4) is satisfied.

(3) A substance or product which, at the time of its application or introduction, bears an appropriate CE marking in accordance with the Directive, or conforms to—

- (a) an appropriate harmonised standard or European technical approval; or
- (b) an appropriate British Standard or some other national standard of an EEA State which provides an equivalent level of protection and performance,

may be applied or introduced, notwithstanding that none of the requirements of paragraph (4) is satisfied; but any such application or introduction shall be subject to—

- (i) such national conditions of use restricting the dosing concentration as are for the time being in force in relation to such substances and products pursuant to a determination of the Secretary of State by an instrument in writing; and
- (ii) such other requirements, within the meaning of Council Directive [98/34/EC](#), as amended<sup>(9)</sup> (which lays down a procedure for the provision of information in the field of technical standards and regulations and of rules on information society services), in relation to such substances and products, as have been communicated to the Commission in the form of a draft technical regulation in accordance with Article 8 of that Directive, and whose adoption by a Member State has also been communicated to the Commission.

(4) The requirements of this paragraph are—

- (a) that the Secretary of State has for the time being approved the application or introduction of that substance or product and it is applied or introduced in accordance with any conditions attaching to that approval;
- (b) that the Secretary of State is satisfied that the substance or product either alone or in combination with any other substance or product in the water is unlikely to affect adversely the quality of the water supplied;
- (c) that the substance or product is to be applied or introduced solely for the purposes of testing or research, and the water undertaker has given to the Secretary of State not less than 3 months' notice in writing of its intention so to apply or introduce the substance or product.

(5) An application for such an approval as is mentioned in paragraph (4)(a) may be made by any person.

---

<sup>(6)</sup> O.J. No. L40, 11.2.89, p. 12.

<sup>(7)</sup> Cmnd 2073.

<sup>(8)</sup> Cmnd 2183.

<sup>(9)</sup> O.J. No. L 204, 21.7.98, p. 37, amended by Council Directive [98/48/EC](#) (O.J. No. L217, 5.8.98, p. 18).

(6) If the Secretary of State decides to issue an approval under paragraph (4)(a), he may include in the approval such conditions as he considers appropriate and, subject to paragraph (10), may at any time revoke or vary any approval he has previously given.

(7) Where substances or products are applied or introduced in any case in which the requirement mentioned in paragraph (4)(c) is satisfied, their application or introduction shall be discontinued within 12 months of the date on which they were first applied or introduced or, if the Secretary of State by notice given in writing to the water undertaker so directs, within such other period (whether longer or shorter) as may be specified in the notice.

(8) The Secretary of State may, by notice given in writing to any water undertaker, prohibit it from applying to, or introducing into, water intended to be supplied for regulation 4(1) purposes any substance or product which the undertaker would otherwise be authorised to apply or introduce by virtue of—

- (a) paragraph (2) and sub-paragraph (b) or (c) of paragraph (4); or
- (b) paragraph (3).

(9) A prohibition under paragraph (8) may be without limitation as to time or for such period as is specified in the notice.

(10) The Secretary of State may—

- (a) revoke by an instrument in writing any approval given by him under paragraph (4)(a);
- (b) modify any such approval by an instrument in writing by including conditions or varying existing conditions;
- (c) give any such notice as is mentioned in paragraph (8),

but, unless he is satisfied that it is necessary to do so in the interests of public health without notice, shall not do any of those things without giving all such persons as are, in his opinion, likely to be affected by the revocation or modification of the approval or by the giving of the notice at least 6 months' notice in writing of his intention.

(11) Notice shall be given forthwith by the Secretary of State to all persons likely to be affected by the making of such an instrument as is mentioned in paragraph (10)(a) or (b).

(12) At least once in each year beginning with the year 2004, the Secretary of State shall issue a list of all the substances and products in relation to which—

- (a) an approval under paragraph (4)(a) has been granted or refused;
- (b) such an approval has been revoked or modified;
- (c) a notice has been given under paragraph (8),

with particulars of the action taken.

### **Use of processes**

**32.**—(1) The Secretary of State may at any time by notice in writing given to a water undertaker require it to make an application to him for approval of the use of any process; and may prohibit it for such period as may be specified in the notice from using any such process in connection with the supply by it of water for regulation 4(1) purposes.

(2) The Secretary of State may refuse the application or impose on any approval given for the purposes of this regulation such conditions as he thinks fit and, subject to paragraph (3), may at any time by notice in writing to the water undertaker revoke an approval so given or modify or revoke any condition imposed by virtue of this paragraph.

(3) Subject to paragraph (4), the Secretary of State shall not—

- (a) revoke any approval given for the purposes of this regulation;

- (b) modify any condition imposed by virtue of paragraph (2); or
- (c) prohibit a water undertaker from using any process,

unless he has given to the water undertaker at least 6 months' notice in writing of his intention to revoke, modify or prohibit, as the case may be.

(4) Paragraph (3) shall not apply in any case in which the Secretary of State is of the opinion that the immediate revocation, modification or prohibition is necessary in the interests of public health.

(5) Paragraph (12) of regulation 31 shall apply for the purposes of this regulation as if—

- (a) for the reference to a substance or product there were substituted a reference to a process; and
- (b) for the reference to paragraph (4)(a) and paragraph (8) there were substituted a reference to this regulation and paragraph (1) of this regulation respectively.

### **Offences**

**33.**—(1) A water undertaker which contravenes regulation 28(9) or regulation 29(2) or (4) shall be guilty of an offence and liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum;
- (b) on conviction on indictment, to a fine.

(2) In any proceedings under paragraph (1) above for contravention of regulation 29(2), a copy of a certificate given pursuant to paragraph (15) of that regulation shall be admissible in evidence as to the number of cryptosporidium oocysts per 10 litres of water.

(3) A water undertaker which applies or introduces any substance or product in contravention of regulation 31(2) or a notice given under regulation 31(8), or uses any process in contravention of a prohibition imposed under regulation 32(1) or without complying with a condition imposed by virtue of regulation 32(2) shall be guilty of an offence and liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum;
- (b) on conviction on indictment, to a fine.

(4) In any proceedings against a water undertaker for an offence under paragraph (1) above it shall be a defence for that undertaker to show that it took all reasonable steps and exercised all due diligence to avoid the commission of the offence.

(5) If any person, in certifying the results of an analysis pursuant to regulation 29(15) or furnishing any information or making any application under regulation 31 or 32, makes any statement which he knows to be false in a material particular, or recklessly makes any statement which is false in a material particular, he shall be guilty of an offence and liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum;
- (b) on conviction on indictment, to a fine.

(6) Proceedings for an offence under paragraph (5) shall not be instituted except by or with the consent of the Secretary of State or the Director of Public Prosecutions.