

THE NATURAL MINERAL WATER, SPRING WATER AND BOTTLED DRINKING WATER (ENGLAND) REGULATIONS 2007 (AS AMENDED)

GUIDANCE TO THE LEGISLATION

Revision No.	Revision date	Purpose of revision	Revised by
1	July 2010	To update references to legislation and to make some corrections	Richard Burden (FSA)

Table 1 Summary of changes made to the guidance

Section	Changes made
Important Note	Altered text as a result of the Anderson review of guidance
Interpretation of the Legislation	Removed caveat to reflect recommendations made in the Anderson review
Scope of Guidance	Updated references to European Directives
Principal Provisions	Updated references to Regulations currently in force
Paragraph 19	Advertising withdrawal/name change in London Edinburgh or Belfast Gazette
Paragraph 23	Reference to activated alumina treatment
Paragraph 27	Corrected wording as a result of 2009 amendment
Paragraph 29	Updated references to European Directives
Paragraph 32	Corrected wording as a result of 2009 amendment
Paragraph 35	Corrected tankering date for spring water
Paragraph 40	Reference to activated alumina treatment
Paragraph 54	Changed reference for sampling of spring water
Paragraph 55	Corrected wording in Defences section
Paragraph 57	Updated references to Regulations currently in force
Annex I Paragraph 1	Updated references to European Directives
Annex I Paragraph 8	Corrected constituents that can be removed by ozone- enriched air treatment
Annex I Paragraph 8	Reference to activated alumina treatment

Important Note

These notes have been produced with the aim of providing informal, non-statutory guidance on the production and labelling requirements, for natural mineral water, spring water and bottled drinking water and should be read in conjunction with the relevant legislation and other Guidance Notes where appropriate (see "Scope of Legislation" section). This Guidance aims to facilitate uniform application and enforcement of legislation relating to natural mineral water, spring water and bottled drinking water with specific reference to those provisions which ensure that the correct processes for exploitation and consumers are presented with meaningful and accurately labelled products which meet the production requirements. However, it is the responsibility of individual businesses to ensure their compliance with the law. The reader with specific queries is advised to seek further advice from their local enforcement agency, which in most cases will usually be their Local Authority Trading Standards or Environmental Health Department as appropriate.

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Interpretation of the Legislation

- i. These guidance notes have been produced to provide advice on the legal requirements of the Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007 (as amended) and best practice in this area. The guidance notes on legal requirements cannot cover every situation and you may need to consider the relevant legislation itself to see how it applies in your circumstances. If you do follow the guidance notes they will help you to comply with the law.
- ii. Following the process of devolution, food legislation is now commonly made on a separate basis in England, Scotland, Wales and Northern Ireland. This is the case with the four separate sets of natural mineral water, spring water and bottled drinking water Regulations. Therefore the England Regulations only apply in England; the Scotland Regulations only apply in Scotland, and so on. However, the four sets of Regulations are similar in their terms.

Scope of Guidance

- iii. This Guidance Note relates to the provisions of the following legislation:

<p style="text-align: center;">The Natural Mineral Water Spring Water and Bottled Drinking Water (England) Regulations 2007 (as amended)</p>
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- iv. These implement European Directives 2009/54/EC, 98/83/EC and 2003/40/EC, and Commission Regulation (EU) No 115/2010
- v. In addition, all products covered by the Regulations must also comply with food law which is of general application, such as, for example:
 - The Food Safety Act 1990 (as amended);
 - The General Food Regulations 2004 (Regulation (EC) No. 178/2002);
 - The Food Hygiene (England) Regulations 2006; and
 - The Food Labelling Regulations 1996 (as amended).

Note: This is not an exhaustive list.

- vi. The Agency has produced Guidance Notes for a number of UK Regulations that provide further detail on some of the above legislation. These can be obtained via the Agency's website [<http://www.food.gov.uk/foodindustry/guidancenotes/>] or via the Helpline [020 7276 8829 Email: helpline@foodstandards.gsi.gov.uk]

The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007

Introduction

The 2007 Regulations are arranged into five parts, with eight schedules supporting and expanding on the main provisions which they contain.

1. Part 1 (Introductory)

- (a) contains the title and commencement date of the regulations
- (b) all interpretations (i.e. definition of terms), and the general exemptions which apply

2. Part 2 (Natural mineral water)

- (a) sets out the requirements for recognition as a natural mineral water
- (b) states the prohibition on sale of water which is not natural mineral water
- (c) sets out the exploitation requirements for natural mineral water springs
- (d) lists the permitted treatments and additions
- (e) sets out the rules governing colony count and organoleptic defects
- (f) gives a bottling offences provision for natural mineral water
- (g) describes the manner in which natural mineral water should be marked or labelled and advertised
- (h) prohibits sale of incorrectly bottled or labelled natural mineral water

3. Part 3 (Spring water)

- (a) exploitation and bottling of spring water
- (b) labelling and advertisement of spring water
- (c) sale of spring water

4. Part 4 (Bottled drinking water)

- (a) bottling of drinking water
- (b) labelling and advertisement of bottled drinking water
- (c) sale of bottled drinking water

5. Part 5 (miscellaneous and supplemental provisions)

- (a) details of enforcement requirements

- (b) requirements for sample analysis, including secondary analysis by the Government Chemist
- (c) details of offences which may be committed under the provisions of these Regulations and relevant penalties
- (d) provides defences which may be offered in certain circumstances in the event of prosecution;
- (e) prescribes authorities responsible for the enforcement of the Regulations
- (f) details provisions of the Food Safety Act which are to apply to the operation of these Regulations
- (g) details of the measures revoked by these Regulations

Principal provisions

6. The principal provisions of the Regulations:

Natural mineral water

- (a) prescribe the conditions for recognition of natural mineral water (regulation 4) and the processes for the withdrawal (self imposed or otherwise) of the recognition
- (b) prohibit the exploitation of water for the purposes of selling it as 'natural mineral water' when it is not natural mineral water (regulation 5)
- (c) prohibit the addition to or treatment of natural mineral water (other than those specified) and allows the use of ozone-enriched air treatment only as prescribed by the regulations (regulation 6)
- (d) prohibit the bottling and sale of natural mineral water other than in a specified type of container and imposes maximum limits for various parameters in natural mineral waters (regulation 7)
- (e) prohibit the use of certain descriptions or indications on labels which may mislead the consumer as to the nature of the product and imposes marking, labelling and advertising requirements for natural mineral waters (regulation 8).
- (f) prohibit the sale of incorrectly bottled/labelled natural mineral water and imposes restrictions on the microbiological content of natural mineral water (regulation 9)

Spring water

- (a) prohibit the bottling of spring water unless certain requirements for extraction, exploitation and bottling, and prescribed concentrations/values for various parameters are met (regulation 10)
- (b) prohibit the use of certain descriptions or indications on labels which may mislead the consumer as to the nature of the product and imposes

marking, labelling and advertising requirements for spring waters (regulation 11).

- (c) Prohibit the sale of incorrectly bottled/labelled spring water (regulation 12)

Bottled drinking water

- (a) prohibit the bottling of drinking water unless certain requirements for concentration/values for various parameters are met (regulation 13)
- (b) prohibit the use of descriptors associated with natural mineral water (regulation 14).
- (c) prohibits the sale of incorrectly bottled/labelled drinking water (regulation 15)

Miscellaneous and supplemental

- (a) make provision for enforcement, sampling arrangements and analysis (regulations 16 to 19)
- (b) provide for offences and prescribe penalties (regulation 20)
- (c) provide specific defences in relation to imports from European Economic Area (EEA) countries and water bottled and labelled before the Regulations come into force (regulation 21)
- (d) apply provisions of the Food Safety Act 1990 (including the defence of due diligence) and the Food Labelling Regulations 1996 (regulation 22) in the operation of these Regulations
- (e) revoke The Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations 1999 (as amended) (regulation 23)

7. The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007 came into force on 31st October 2007; equivalent Regulations are in force in devolved administrations:

- (a) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Wales) Regulations 2007
- (b) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Scotland) (No.2) Regulations 2007
- (c) The Natural Mineral Water, Spring Water And Bottled Drinking Water Regulations (Northern Ireland) 2007

The 2009 amendment to the regulations (The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) (Amendment) Regulations 2009 (S.I.1598)) came into force on 16th July 2009; equivalent regulations are in force in the devolved administrations:

- (d) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Wales) (Amendment) Regulations 2009
- (e) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Scotland) Amendment Regulations 2009

- (f) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Amendment) Regulations (Northern Ireland) 2009

The 2010 amendment to the regulations (The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) (Amendment) Regulations 2010 (S.I. 433) came into force on 9th April 2010; equivalent regulations are in force in the devolved administrations:

- (g) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Wales) (Amendment) Regulations 2010
- (h) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Scotland) Amendment Regulations 2010
- (i) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Amendment) Regulations (Northern Ireland) 2010

The 2010 No. 2 amendment to the regulations (The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) (Amendment) (No. 2) Regulations 2010 (S.I. 896)) came into force on 8th April 2010 to correct some errors in S.I. 433; equivalent regulations are in force in the Scotland and Northern Ireland:

- (j) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Scotland) Amendment (No.2) Regulations 2010
- (k) The Natural Mineral Water, Spring Water And Bottled Drinking Water (Amendment) (No. 2) Regulations (Northern Ireland) 2010

Definition and meaning of terms (interpretation)

8.	What is natural mineral water?	Regulation 2
8.1	Natural mineral water is water originating in an underground water table, deposit or aquifer, which emerges or is extracted from a source tapped at one or more natural or bore exits. It must come from an officially recognised spring, be microbiologically wholesome (i.e. free of parasitic, pathogenic harmful micro-organisms) and have been protected from all risk of pollution.	
8.2	Water must be bottled at source, i.e. must not be transported in containers other than those authorised for distribution to the ultimate consumer (not tankered – unless certain exemptions apply as detailed in Schedule 4; see also Section 25 of this Guide).	
8.3	Natural mineral water is characterised by its chemical and microbiological composition, which distinguishes it from drinking water, and may not be treated in any way that alters these properties. Disinfection of natural mineral water is not permitted. The composition, temperature and other essential characteristics must remain stable over time (further detail on this can be found in Annex 1). The	

natural mineral water at source and when bottled must not be polluted in any way (chemical or microbiological) and it must meet the limits for constituents found in Schedule 6.

9.	What is spring water?	Regulation 10
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- 9.1 Water can only be labelled with the description “spring water” if it originates in an underground water source, is bottled at source (see 8.2 above, and Section 35) and satisfies most of the exploitation conditions, microbiological criteria and some of the labelling requirements that apply to natural mineral water. Spring water must also comply with limits laid down in Schedule 2 for physical, chemical and microbiological parameters. Unlike natural mineral water, water that is labelled as spring water does not have to be officially recognised.

10.	What is bottled drinking water?	Regulation 2
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- 10.1 Bottled drinking water means drinking water which is bottled, and is neither described as ‘spring water’ or a recognised natural mineral water. It can come from a variety of sources, including municipal supplies. Bottled drinking water must also comply with limits laid down in Schedule 2 for physical, chemical and microbiological parameters.

11.	What does the word “spring” mean?	
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- 11.1 For natural mineral water and spring water, a spring is a body of ground water that emerges at some point. It can be tapped at one or more natural or bore exits. Ponds and adits (i.e. horizontal collecting galleries used to increase well yield) are not covered by the term ‘spring’.

12.	How do spring and source differ?	
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- 12.1 The term ‘source’ is often applied in reference to natural mineral water. ‘Source’ is not defined within these regulations but can be considered as being both the body of ground water and the point of emergence (i.e. the latter being synonymous with the term spring).

13.	What is a borehole/bore exit?	
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- 13.1 A borehole is an artificially produced exit for water emerging from a source originating in an underground water table or deposit.

Exemptions

14.	Do these Regulations apply to all bottled waters?	Regulation 3
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The Regulations do not apply to waters which:

- Are products that have a licence or authorisation for medicinal use, or veterinary use;
- Are used for curative purposes in thermal or hydro-thermal establishments;
- Are not intended for sale for human consumption;
- Are natural mineral waters exported to a country other than an EU or EEA State; and

The Regulations do not apply to packaged ice, when used to cool other foods.

PART 2: NATURAL MINERAL WATER

Recognition of natural mineral water

15.	What is the procedure for achieving natural mineral water recognition for water extracted from an underground source?	Regulation 4 and Schedule 3.
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Natural mineral waters from sources in England

- 15.1 Before water can be officially recognised as natural mineral water, certain information about the source and the water itself must be supplied to the relevant authority. This includes a hydrogeological description of the source, the physical and chemical characteristics of the water, microbiological analyses and analyses for toxic substances. It must be demonstrated that the source is protected from all risk of pollution and that the composition, temperature and other essential characteristics of the water remain stable. To establish stability it is necessary to collect data over a sufficiently long period (see Annex 1) to demonstrate the extent to which the composition varies. The conditions that are attached to the exploitation of natural mineral waters are designed to ensure that the physical and chemical characteristics, safety and microbiological purity of the water at source remain unchanged during exploitation. Routine quality control is the responsibility of the exploiter, but periodic checks should be made by the recognition authority.
- 15.2 Schedule 3 Part 3 of the Regulations and Annex 1 of these Guidance Notes set out in more detail what information is required, including suggested sampling frequencies and period of collection.
- 15.3 In the case of waters originating in England, the relevant authority responsible for granting official recognition is the District Council or London Borough Council.
- 15.4 The relevant authority is responsible for publishing an announcement of recognition in the London Gazette. Such an announcement should include,

amongst other things, the trade name (if known at time of recognition), name of the spring and the place of exploitation to allow these details to be reported in the Official Journal of the European Communities. Copies of such announcements should be sent to the Food Standards Agency (FSA), [Aviation House, 125 Kingsway, London, WC2B 6NH] who will arrange publication of the recognition in the Official Journal of the European Communities. The FSA has a register of all natural mineral waters recognised in the UK, which is available on the FSA website (see also Annex 1).

Natural Mineral Waters from other EU Member States and EEA States

- 15.5 Water originating in any other Member State of the European Union (EU) or European Economic Area (EEA) may only be sold as a natural mineral water in the UK if it has been officially recognised by the responsible authority of that Member State. The publication in the Official Journal of the European Communities of the name of any waters recognised as natural mineral water shall be conclusive proof that the water has been recognised.

Natural mineral waters from outside the EU and EEA States

- 15.6 Waters originating in a third country (outside the EU and EEA) must be recognised by one of the Member States of the EU before being sold as a natural mineral water in that, or any other Member State. In the UK, the recognition authority is the FSA.
- 15.7 The recognition procedure is described in Part 2 of Schedule 3 of the Regulations. To apply for recognition, all of the information required by paragraphs 1-5 of Part 1 of Schedule 3 and paragraphs 1-6 of Part 2 of Schedule 3 must be provided. The information is best set out in the same order as it appears in the Schedule and placed under the same headings. In addition, under paragraph 4 of Part 2 of Schedule 3 of the Regulations, certification from the responsible authority (normally a government department or local authority) in the importing country must be provided, stating that:
- it is satisfied the water meets the requirements set out in Part 2 of Schedule 3; and
 - regular checks are made on compliance with Part 2 of Schedule 3.
- 15.8 Certification that water meets national requirements of the country of origin is not sufficient.
- 15.9 Recognition of third country natural mineral water will lapse after a period of 5 years unless the responsible authority in the country of origin has produced a certificate stating that it is satisfied that the water continues to meet the requirements of the Regulations.
- 15.10 Applications for the recognition of third country natural mineral waters should be sent to the FSA.
- 15.11 The costs involved in obtaining recognition of a natural mineral water are to be borne by the exploiter of the water.

16.	What can be done if recognition is not granted or is withdrawn by the local authority or the FSA?	Regulation 4(2),(3),(4)
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- 16.1 A review of the decision can be obtained. The Agency will undertake an inquiry and either confirm the decision or restore the recognition.

17.	Who can apply for withdrawal of recognition?	Regulation 4(5)
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- 17.1 The exploiter can withdraw recognition by informing the local authority/district council or the Agency. The local authority or FSA can withdraw recognition on the grounds that the requirements for recognition of the source as a natural mineral water are not being met.

18.	Can recognition be withdrawn or names be changed?	Regulation 4(2), 4(5) and 4(6)
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- 18.1 Recognition can be withdrawn because the producer no longer wants to produce natural mineral water, or because the water extracted no longer meets the microbiological or other specifications laid down in Schedule 3, Part 3.
- 18.2 The name of a natural mineral water can be changed. However it is not permitted to market water from a single source under more than one trade description (regulation 9(4)). Where a change of product name may breach this requirement we would recommend that a suitable handling strategy be agreed with the appropriate enforcement body.

19.	What action is required if a change in recognition (e.g. a name change) occurs or recognition is withdrawn?	Regulation 4(6)
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- 19.1 If the recognition is withdrawn/name changed then the Local Authority is required to immediately inform the Agency in writing.
- 19.2 Local authorities may also consider advertising the withdrawal/name change in the London, Edinburgh or Belfast Gazette

20.	How can a natural mineral water be identified?	Regulation 4(8) and Schedule 3
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- 20.1 A list of recognised mineral waters is periodically published in the Official Journal of the European Communities.

- 20.2 Recently recognised natural mineral waters from the UK can be identified by the publication of their names in the London, Edinburgh or Belfast Gazette as appropriate.
- 20.3 The FSA holds a list of recognised waters which can be accessed through the FSA website: www.food.gov.uk.

Exploitation of natural mineral water sources

21.	What can be called a natural mineral water?	Regulation 5 and 9
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- 21.1 Only water recognised as a natural mineral water can be labelled and sold as 'natural mineral water'.

22.	When can a natural mineral water be exploited?	Regulation 5
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- 22.1 A natural mineral water can only be exploited after permission is granted and the requirements of Schedule 4 are met.

23.	Which treatments are permitted for natural mineral waters?	Regulation 6
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- 23.1 Only specified treatments are permitted. Oxygenation to assist flocculation of unstable elements is permitted. The removal of unstable elements (such as iron, manganese and sulphur) by filtration/decanting is also permitted, thus preventing the precipitation of highly unsightly sediments in the bottle on storage. Ozone enriched air treatment to remove iron, manganese, sulphur compounds and arsenic is permitted, given certain provisions. Activated alumina treatment is permitted to remove fluoride given certain provisions. The addition or removal of carbon dioxide is permitted so as to render a natural mineral water sparkling or still.
- 23.2 Disinfection treatments by whatever means or the addition of biostatic elements which are likely to alter the viable colony count of natural mineral water are prohibited. The Agency considers that filters of less than 1µm (micron) are likely to reduce the microbiological load. Where filters are used, then it must be demonstrated that the total viable count (TVC) is not altered. This can be done by comparing TVC at source (i.e. pre filtration) to TVC post filtration. Further details on treatments of natural mineral waters can be found in Annex 1.

Bottling of natural mineral water

24.	Are there any maximum limits for certain substances in natural mineral water?	Regulation 7, Schedule 6
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- 24.1 Any contamination of natural mineral water is prohibited. Maximum levels of certain substances naturally present in the water must not be exceeded at time of bottling. If the levels are exceeded, sales of these products are not allowed. Although no specific methods of analysis are laid down in the Regulations, Schedule 7 does make provisions for the performance characteristics of the analytical methods used.

25.	Is tankering of natural mineral water permitted?	Regulation 7(3) and Schedule 4
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- 25.1 Natural mineral water cannot be tankered from source to the bottling plant unless this practice had begun on or before 17th July 1980.
- 25.2 The transport of water from the source to the bottling plant must be in a closed pipeline made of suitable material (i.e. that which will not alter the characteristic properties of the natural mineral water or cause the water to become contaminated). Equipment used in the filling system must ensure that there is no contamination or alteration of the water prior to closure.

Labelling of natural mineral water

26.	What is meant by 'sales description' and 'trade description'?	Regulation 8
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- 26.1 The term 'sales description' describes the name of the product as permitted by the regulations, for example 'natural mineral water', 'carbonated natural mineral water', etc.
- 26.2 A trade description is the description under which the natural mineral water is sold, and may include brand names, trade marks and other descriptors.
- 26.3 If the name of the source or the name of the place of exploitation is not part of the trade description then either of these must appear on the label in letters at least one and a half times larger than the letters used for the trade description. If the name of the source is used as the trade description, it is not permitted to also (simultaneously) use the name of the place of exploitation as a trade description.

27.	What are the mandatory labelling requirements for natural mineral waters?	Regulation 8(1) and 8(2)
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27.1 The label must show:

- A statement of the analytical composition indicating the characteristic constituents of the water;
- The name of the spring; and
- The place of its exploitation.

And where applicable:

27.3 Indication of partial/total elimination of free carbon dioxide; regulation 8(2)(c)

27.4 Indication of the use of authorised ozone-enriched air oxidation techniques should be placed on the label in proximity to the statement of analytical composition. Specific requirements for this text are given in regulation 8(2)(d)

27.5 Specific requirements for fluoride concentrations > 1.5 mg/l, including the statement “contains more than 1.5 mg/l of fluoride; not suitable for regular consumption by infants and children under 7 years of age” and the presentation of actual fluoride content. Specific requirements for this text are given in regulation 8(2)(e).

27.6 Bottled water from a natural mineral water source can only be marked with the following sales descriptions:

- natural mineral water (non-effervescent natural mineral waters only);
- naturally carbonated natural mineral water (i.e. water whose content of carbon dioxide from the spring after decanting, if any, and bottling is the same as at source, taking into account where appropriate the reintroduction of a quantity of carbon dioxide from the same water table or deposit equivalent to that released in the course of those operations and subject to the usual technical tolerances);
- natural mineral water fortified with gas from the spring (i.e. water whose content of carbon dioxide from the same water table or same deposit after decanting, if any, and bottling is greater than that established at source); or
- carbonated natural mineral water (i.e. means water to which has been added carbon dioxide of an origin other than the water table or deposit from which the water comes).

28.	Can a natural mineral water also be sold as spring water or a drinking water?	Regulation 8
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28.1 A recognised natural mineral water can be marketed within the European Union only as a natural mineral water. It cannot be marked as a spring or bottled drinking water. The Regulations also contain a requirement stating that the wording of the

trade description must not be misleading as to the nature of the water and the place of exploitation of the spring.

29.	Which indications are permitted on the label of natural mineral waters?	Regulation 8(1)(d)-(g), Schedule 8
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29.1 The indications ‘may be diuretic’, ‘may be laxative’, ‘stimulates digestion’ and ‘may facilitate hepato-biliary functions’ are permitted if the natural mineral water has been assessed by physico-chemical analysis, and appropriate pharmacological, physiological or clinical examination, as possessing the property attributed by the indication. The indications listed in Schedule 8 are authorised provided they meet the relevant criteria listed in that Schedule.

29.2 Regulation (EC) 1924/2006 applies rules on nutrition and health claims to all food, including bottled waters and has applied since 1 July 2007. It operates "without prejudice" to Directive 2009/54/EC on natural mineral waters. This means that where that specific legislation controls claims (as described in 29.1 above), it takes precedence over Regulation (EC) 1924/2006; where it does not, Regulation (EC) 1924/2006 applies.

30.	Can natural mineral water be used as an ingredient in a soft drink, and does the name and place of exploitation need to be listed on the bottle?	Regulation 6(2)
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30.1 Regulation 6(2) permits the use of natural mineral water in the manufacture of soft drinks. The labelling provisions of Regulation 8 confine the use of “natural mineral water” as the name of the product and hence are not intended to affect the use of those words in relation to ingredients. Therefore, if a beverage is being sold as a soft drink containing natural mineral water, there is no requirement to state the name of the natural mineral water source or place of exploitation on the soft drink label. However, it is permitted to state the name of the natural mineral water source.

31.	Are there any other considerations that should be taken into account when labelling a natural mineral water?	Regulation 8(1)(c)
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31.1 It must not be suggested that the natural mineral water has any characteristic that is not accurate – this may include origin, analysis result, authorisation for exploitation whether in the text or by any other means of representation.

Sale of natural mineral water

32.	What microbiological tests are required for natural mineral water to comply with the regulations?	Regulation 9(2) and Schedule 4
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- 32.1 Both at source and during its marketing, natural mineral waters must be free from parasites and pathogenic micro-organisms, *E. coli* and other coliforms and faecal streptococci in any 250 ml sample examined, sporulated sulphite-reducing anaerobes in any 50 ml sample examined and *Pseudomonas aeruginosa* in a 250 ml sample.
- 32.2 Schedule 4: (Paras 6 and 7) The revivable total colony count of the water at source shall conform to the normal viable colony count of that water and must not show that the source of that water is contaminated. For the period of 12 hours following bottling, the total colony count must not exceed 100 per ml at 20 to 22 °C in 72 hours on agar-agar or an agar-gelatine mixture and 20 per ml at 37 °C in 24 hours on agar-agar and water shall be maintained at a temperature of 4 °C ± 1 °C.

33.	What is an organoleptic defect?	Regulation 9(2)(d)
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- 33.1 An organoleptic defect is a taste or odour which has been imparted to the water after its emergence from the source. It is not intended to include a particular taste or odour it had at source. Precautions against risks of pollution and contamination during exploitation should ensure that the natural mineral water or spring water does not suffer from such a defect.

34.	Can natural mineral water extracted via more than 1 borehole tapping into a single aquifer be sold under separate trade descriptions i.e. one brand name per borehole?	Regulation 9(4)
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- 34.1 Under Regulation 9(4) it is prohibited to sell natural mineral water from one and the same spring under more than one trade description. The chemical composition of the natural mineral water defines its characteristics. Examples of different scenarios are given below. These are examples and where the case for the same source/different sources needs to be made then a suitably qualified person (e.g. a professional hydrogeologist) should be consulted during the preparation of the recognition dossier.

- Example 1: The chemical composition of the water from each borehole is different indicating different sources are being exploited. Each source would have to be recognised separately and can be sold under different trade descriptions.

- Example 2: Water from two boreholes has the same or similar composition; the water in each borehole comes from the same rock strata; and the boreholes are linked hydraulically (pumping in one affects the other) indicating a single spring is being tapped and the water from each borehole must be sold under one trade description.
- Example 3: Water abstracted from two boreholes several kilometres apart has similar composition. The catchment areas do not overlap and there is no hydraulic link between the boreholes. Each source would have to be recognised separately and can be sold under different trade descriptions.
- Example 4: Water is abstracted from two boreholes close together (e.g. only metres apart) but to different depths and tapping a fissured aquifer. The chemical composition of the water from each borehole is different. Each borehole taps a separate source, each of which would have to be recognised separately and can be sold under different trade descriptions.

PART 3: SPRING WATER

Bottling of spring water

35.	Does spring water have to be bottled at source?	Regulation 10(1)(b); Schedule 4
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- 35.1 Water labelled 'spring water' must be bottled at source. It cannot be tankered to the bottling plant unless this was the practice on or before 13th December 1996. The right to tanker is linked to the spring, not the bottler.

36.	What microbiological tests are required for spring water and with what frequency?	Regulation 10; Schedules 2 and 4
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- 36.1 Spring water must also comply with the requirements in Schedule 2 (Part 2; Table C) and Schedule 4. For the period of 12 hours following bottling, the total colony count shall not exceed 100 per ml at 20 to 22 °C in 72 hours on agar-agar or an agar-gelatine mixture and 20 per ml at 37 °C in 24 hours on agar-agar and water shall be maintained at a temperature of 4 °C ± 1 °C.
- 36.2 At the time of sale, the total viable count (TVC) should not be greater than that normally expected.

- 36.3 The frequency of testing and periodic checking is a matter for enforcement authorities. The Regulations do, however, specify that spring waters should be periodically checked in accordance with the minimum sampling frequencies laid down in Annex II of Directive 98/83/EC for water put into bottles or containers intended for sale.

37.	Is spring water required to have a stable composition and to be protected against all risk of pollution?	Regulation 10; Schedule 4
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- 37.1 The term 'spring water' is reserved for water which is extracted from a spring, bottled at source and meets the exploitation and bottling requirements of Schedule 4, as if it were a natural mineral water. For example, the spring or outlet must be protected against all the risks of pollution, the catchment, pipes and reservoirs must be of materials suitable to contain potable water and built to prevent any chemical, physico-chemical or microbiological alteration of the water. However, unlike natural mineral water, spring water does not have to be stable in composition.

38.	Are there any maximum limits for certain constituents of spring water?	Schedule 2
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- 38.1 Schedule 2 lays down the requirements for spring water (and drinking water) including properties, elements, substances and organisms contained within it.

39.	Is there a recognition process for spring waters?	
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- 39.1 There is no requirement for spring waters to be recognised.

40.	Which treatments are permitted for spring waters?	Regulation 10, Schedule 1
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- 40.1 The UK has taken the opinion that some treatment methods are allowed for spring water. The Agency understands that in general these are usually disinfection treatments (e.g. UV or micro filtration). It should be demonstrated that the treatment methods do not render the waters unfit for human consumption, e.g. by leaving harmful residues.
- 40.2 As with natural mineral waters treatment of spring water with ozone enriched air and activated alumina is regulated (see Annex 1; Para. 8; p.30).

Labelling of spring water

41.	For spring waters, what does 'consumption in its natural state' mean?	Regulation 11(1)(b)
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- 41.1 Regulation 11 states that water can only be marked and labelled as 'spring water' if, when bottled at source, it is intended for consumption without further treatment by the consumer (i.e. can be drunk straight from the bottle).

42.	What are the labelling requirements for spring waters?	Regulation 11
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- 42.1 Spring waters are required to state the name of the spring and the place of its exploitation on the label.
- 42.2 If the trade description is different from the name of the source or the place of exploitation, the place or name must be displayed in letters at least one and a half times larger than the height and width of the letters used for the trade description.
- 42.3 The Regulations also contain a requirement stating that the wording of the trade description must not be misleading as to the nature of the water and the place of exploitation of the spring.

43.	If the water has been treated – should I declare this on the label?	Regulation 11(3)(c)
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- 43.1 Where the water has undergone authorised ozone-enriched air oxidation, specific text is provided in the Regulations.

Sale of spring water

44.	Can spring water be bottled and sold as spring water under more than one trade description?	Regulation 11 and 12(2)
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- 44.1 Essentially, the requirement is that spring water from a single spring must not be sold under more than one trade description.
- 44.2 If the name of the source or the name of the place of exploitation is not the trade description then either of these must appear on the label in letters at least one and a half times larger than the text of the trade description.
- 44.3 'Spring water' (from a single source) sold using two different trade descriptions (e.g. the place of exploitation and spring name) would not be permitted.

PART 4: BOTTLED DRINKING WATER

Bottling of bottled drinking water

45.	Are there any restrictions on treatments of bottled drinking water?	Regulation 13
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- 45.1 There are no restrictions on treatments of bottled drinking water provided that they do not make the water unsafe. Bottled drinking water must satisfy the requirements of Schedule 2 (prescribed concentrations or parameter values) of the Regulations, which implement the provisions of Directive 98/83/EC relating to the quality of water intended for human consumption.

Labelling of bottled drinking water

46.	Can bottled drinking water (e.g. table water) be sold under more than one trade description?	Regulation 14
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- 46.1 There are no restrictions on the selling of bottled drinking water under more than one trade description. However, these descriptions should not mislead the consumer to believe that the product is a spring or natural mineral water. The labels must also comply with The Food Labelling Regulations 1996 (as amended).

47.	Can the term 'natural' be used to label bottled drinking water?	Regulation 14
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- 47.1 The FSA has issued Food Advisory Committee Guidelines on the use of the word 'natural' in food labelling. Although these guidelines do not have statutory force they do suggest circumstances under which it is reasonable to use the term 'natural'. It is an offence under the Food Safety Act 1990 for any food to be falsely labelled or labelled in such a way which is likely to mislead the consumer as to the food's nature, substance or quality. Furthermore, EC Regulation 178/2002 requires that food should not be labelled, advertised or presented in a manner which misleads consumers. However, use of the word 'natural' to incorrectly imply bottled drinking water is natural mineral water is prohibited by Regulation 14.

Flavoured waters

48.	Are flavoured waters subject to the Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations?	
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- 48.1 Flavoured waters are not covered by these Regulations, as these beverages are considered to be soft drinks.

49.	Does flavoured spring water need to be bottled at source?	
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- 49.1 Once spring water is mixed with other ingredients it ceases to be spring water and is classified as a soft drink.

50.	Can 'spring water' be used as an ingredient in a soft drink, having different trade descriptions?	
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- 50.1 The use of the words 'spring water' is confined to the name of the product and hence is not intended to apply to a soft drink. However, if the trade description of a spring water is used in the ingredients list, another trade description of the same spring water cannot be used in the ingredients list of a different product.

Miscellaneous

51.	Can a company produce natural mineral water, spring water and bottled drinking water from the same source and label each water type using different trade descriptions?	Regulation 8 and regulation 12(2)
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- 51.1 This regulation allows only natural mineral water to be marked with the sales description 'natural mineral water', 'naturally carbonated natural mineral water', 'natural mineral water carbonated with gas from a spring' and 'carbonated natural mineral water'. Therefore, the labelling of natural mineral water from the same source as spring water and bottled drinking water using different trade descriptions is not permitted.
- 51.2 Labelling regulations for spring waters state that spring water from a single source can only be sold under a single trade description.
- 51.3 There are no regulations that prevent the sale of one type of bottled drinking water under two or more separate trade descriptions.
- 51.4 It is permitted to sell water extracted from a spring and sold as spring water under a different trade description as bottled drinking water from the same source, provided that this is not misleading to the consumer. Great care must be taken however to clearly distinguish the bottled drinking water from the spring water, as there is a significant risk of the Courts considering two such products on sale misleading.

52.	Must all bottled water meet the minimum hardness requirement?	Regulations 10 and 13; and Schedule 2
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- 52.1 The requirement is intended to ensure that the beneficial health effects of water hardness are not lost. Where spring water or bottled drinking water has been softened or desalinated (essentially any scenario where hardness is removed from the water) they must meet the minimum hardness requirement. The calcium concentration is there as an indicator of the hardness level present in the water. The minimum hardness may be met, for example, by remineralisation or blending with hard water.
Natural mineral water cannot be treated in this way (See Section 23).

53.	Can I produce spring water and natural mineral water ice cubes	Regulation 3
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- 53.1 Ice cubes intended for cooling foods are not covered by these Regulations. However, if such products were labelled as “spring water ice-cubes” or “natural mineral water ice cubes” then under the Food Labelling Regulations we would expect the water to meet with the requirements of these regulations before freezing, e.g. natural mineral water ice cubes must be produced using water from a recognised source.

Enforcement

54.	What is the monitoring frequency for natural mineral waters, spring waters and bottled drinking waters?	
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- 54.1 Natural Mineral Water. The relevant Local Authority has a responsibility to carry out periodic checks to ensure the water still meets requirements for recognition of natural mineral water. Local Authorities are empowered to enter premises for this purpose. The frequency of the checks is at the discretion of the local authorised officer; however it is recommended that this be at least once every year. Recognition may be withdrawn if the water fails, at any time, to meet these requirements.
- 54.2 If the water is being exploited, the exploiter should arrange for a quality control laboratory to carry out routine microbiological, chemical and physical analysis of the water in agreement with their Local Authority. The exploiter should also notify the Local Authority when the bottling of the water for sale as natural mineral water begins.
- 54.3 Spring waters and bottled drinking waters. For spring water and bottled drinking water originating from a private water supply, it is the responsibility of the relevant Local Authority to determine when water samples are to be taken from the supply for their official analysis. The minimum sampling frequency and parameters for analysis

are specified in The Natural Mineral Water, Spring Water and Bottled Drinking Water Regulations 2007 (as amended).

Generally, producers would be expected to carry out only basic analysis on a daily basis, e.g. pH, taste, temperature, conductivity in order to confirm consistency. Frequency of full chemical analysis would depend on volume and may be less frequent when the consistency of the source had been established. The exploiter of the source would be expected to exercise due diligence (Food Safety Act 1990, Section 21) by also checking samples of spring water by analysis. Producers are advised to discuss an appropriate testing regime for their water source with their local authority.

Defences

55.	Is there a transitional period?	Regulation 21
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55.1 There is no transitional period specified. However, in any proceedings for an offence the following shall be a defence for the person charged:

- If the product was bottled, marked or labelled before these Regulations came into force; and no offence would have been committed under the pre-existing legislation.

55.2 In any proceedings for an offence where it is alleged that the water does not meet the requirements in paragraph 1(c) of Part 1 of Schedule 2, it shall be a defence for the person charged:

- If the water was bottled or sold in an EEA State, other than the UK; and the water complied with the law in that EEA State when it was bottled or sold.

Application of other provisions

56.	Do the Regulations apply to water supplied in bottles or other containers as a temporary alternative to mains water supplies?	Regulation 22
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56.1 All bottled water that is sold to mains water providers for use in the case of emergencies (i.e. providing drinking water to customers when tap water is not available) must meet the requirements of the regulations.

56.2 Promotional bottled waters are covered by these regulations, as they come under the extended definition of sale.

General

57.	When did the Regulations come into force?	
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57.1 The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations came into force on 31st October 2007.

The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) (Amendment) Regulations 2009 came into force on 16th July 2009

The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) (Amendment) Regulations 2010 came into force on 9th April 2010

The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) (Amendment) (No. 2) Regulations 2010 came into force on 8th April 2010

ANNEX I - RECOGNITION AND EXPLOITATION OF NATURAL MINERAL WATERS

1. INTRODUCTION

- 1.1. The Natural Mineral Water, Spring Water and Bottled Drinking Water (England) Regulations 2007 control the exploitation and marketing of natural mineral waters throughout England. These Regulations consolidate the requirements of SI 1999/1540, 2003/666 and 2004/656 that implement provisions for natural mineral waters as laid down in parent Directives 2009/54/EC and 2003/40/EC and Commission Regulation (EU) 115/2010. There are separate but similar Regulations in Northern Ireland, Scotland and Wales.
- 1.2. All natural mineral waters in England must be officially recognised (i.e. approved) by the relevant authority before they are marketed. The recognition process may take some time. The purpose of recognition is to show that the water is protected by the hydrogeology of the source from pollution, microbiological and chemical. In pursuing recognition of a source an exploiter will develop an understanding of source and catchment area which will help maintain a low level of risk in what is essentially an untreated product.
- 1.3. It is important to consider what distinguishes a natural mineral water from other bottled waters. First, detailed information about the natural mineral water source and the water itself must be supplied to the responsible authority. Second, natural mineral water must meet certain microbiological purity criteria both before recognition and during exploitation. Third, it must be demonstrated that a natural mineral water is protected from all risk of pollution, and fourth, the composition of the water must be stable.
- 1.4. The conditions within and surrounding a catchment area can change over time. These changes may affect the composition of the water. Both producers and recognition authorities should be aware of any potential impacts/risks and monitor the factors affecting recognition.

2. GEOLOGICAL AND HYDROGEOLOGICAL DESCRIPTION

2.1. Location of source

The map should be sufficiently detailed to locate accurately the exact site of the catchment and source and to distinguish it from other nearby buildings and geographical features.

2.2. The geological description

This should include the origin and nature of the terrain and the stratigraphy of the hydrological layer.

2.3. The hydrogeological description

Ground water flow paths must be assessed, and related to travel time from catchment to source. The exclusion of surface and near surface water should be demonstrated (e.g. by demonstrating the provenance and age of water).

The surface water and groundwater catchments should be defined, the existing and likely future land use assessed, and the mechanisms by which groundwater is replenished should be described. The inorganic chemistry of the source water should be related to the rock strata.

2.4. Description of the Equipment for Water Abstraction

It is not necessary for bottling or packaging equipment to be in place, but the abstraction equipment itself and its housing must be installed before recognition is granted, and this equipment must be described in the application. Pipes, valves, filters, tanks, and, where appropriate, pumps should be included. If the source is a borehole, then its exact nature should be described, i.e. depth, inclination of the bore, lining material, and the hydrostatic head. A scale diagram of the source site and a flow diagram of the water abstraction equipment should accompany this description.

2.5. Description of the Source

Information necessary for the assessment of the protection of the source against microbiological and chemical pollution should be supplied. The physical construction housing the abstraction or collection equipment should be described. There should be an indication of how the area surrounding the source has been demarcated, i.e. fences, walls or other barriers, and other steps which have been taken to protect the source against vandalism and contamination from agricultural, industrial, animal or other sources, including measures to prevent ingress of dust or surface water and to reduce or eliminate ingress of water arriving by short term groundwater flow. An appropriate map or plan indicating those features should be supplied.

3. PHYSICAL AND CHEMICAL CHARACTERISTICS

This section is concerned with the chemical constituents and physical properties, which characterise the water from the source. The Regulations do not prescribe particular methods of analysis.

Detailed information on methods of analysis can be found in scientific publications, e.g.:

- Methods for the Examination of Waters and Associated Materials Series (published as Blue Books), Standing Committee of Analysts, [<http://www.environment-agency.gov.uk/commercial/1075004/399393/401849/>]
- Official Methods of Analysis of AOAC International, 18th Edition

3.1. Rate of Flow

If the water emerges from the source under its own pressure, the flow rate of the water must be measured. The variation of the flow from the ground water body should also be given. There may be seasonal variations in the flow rate and therefore it is recommended that in general the minimum period of measurement should be over two years, with measurements taken at least every month. When the water is pumped from a borehole the normal and maximum volume to be pumped should also be specified.

3.2. The Temperature of the Water at Source

If the water does not emerge at constant temperature, the variation in temperature of the water should be measured at least every month for two years, and given to the nearest 0.1 °C.

3.2. Nature of the Terrain and Inorganic Constituents of the Water

A general description of how the chemical composition of the water is related to the hydrogeology of the source should be given. It should indicate any geographical or geological features which influence the composition of the water. If it is intended to emphasise a particular constituent or feature of the water in its marketing (e.g. a low mineral content), an explanation of the origin of this feature should be given, if known.

3.3. Dry Residues at 180 and 260°C

The results for the two temperatures should be expressed in mg/litre of water.

3.4. Electrical Conductivity and Hydrogen Ion Concentration

The conductivity should be quoted in suitable units (normally TS/cm or mS/cm), and the temperature at which the determination was made must be added. The pH value should be given to the nearest 0.1.

3.5. Concentration of Anions and Cations

The table below lists details of particular anions and cations that should be determined (in milligrams per litre – mg/l) as part of the recognition process

Ion	
Anions	
Borate	BO_3^-
Carbonate	CO_3^{2-}
Chloride	Cl^-
Fluoride	F^-
Hydrogen Carbonate	HCO_3^-
Nitrate	NO_3^-
Nitrite	NO_2^-
Phosphate	PO_4^{3-}
Silicate	SiO_2
Sulphate	SO_4^{2-}

Sulphide	S ²⁻
Cations	
Aluminium	Al
Ammonium	NH ₄ ⁺
Calcium	Ca
Magnesium	Mg
Potassium	K
Sodium	Na

Note: If the hydrogeological report indicates the presence of other ions, these also should be measured.

3.6. Non-Ionised Compounds

The table below lists details of non-ionised compounds that should be determined (in milligrams per litre – mg/l) as part of the recognition process

Non-ionised compound	
Total organic carbon	C
Free carbon dioxide	CO ₂
Silica	SiO ₂

Note: If the hydrogeological report indicates the presence of other non-ionised compounds, these also should be measured.

3.7. Trace Elements

The table below lists details of trace elements that should be determined (in micrograms per litre – µg/l) as part of the recognition process

Trace Element	
Barium	Ba
Bromine (total)	Br
Cobalt	Co
Copper	Cu
Iodine (total)	I
Iron	Fe
Lithium	Li
Manganese	Mn
Molybdenum	Mo
Strontium	Sr
Zinc	Zn

Note: If the hydrogeological report indicates the presence of other trace elements, these should also be reported.

3.8. **Radioactivity**

The radioactivity of the water at source should be measured, specifying gross alpha and gross beta activity in Becquerel per litre (Bq/l) or milli-Becquerel per litre (mBq/l).

3.9. **Isotopes**

Measurements of appropriate isotopes are required where necessary e.g. if it is intended to sell the water as having particular levels or ratios of isotopes. The isotopes referred to in the Regulations which are specifically related to water i.e. O^{16} , O^{18} , H^1 (protium), H^2 (deuterium) and H^3 (tritium).

4. **MICROBIOLOGICAL ANALYSES**

4.1. **These analyses must include:**

- a demonstration of the absence of parasites and pathogenic organisms;
- quantitative determination of the indicators of faecal contamination, showing absence of:
 - *Escherichia coli* and other coliforms in 250 ml;
 - faecal streptococci in 250 ml;
 - sporulated sulphite-reducing anaerobes in 50 ml; and
 - *Pseudomonas aeruginosa* in 250 ml.
- determination of total viable colony count per millilitre of water-
 - at 20-22 °C in 72 hours on agar-agar or agar-gelatine mixture; and
 - at 37 °C in 24 hours on agar-agar.

4.2. These guidelines recommend an analytical regime at equal intervals over two years. The characteristics of the hydrogeology and the level of local knowledge may indicate that a shorter time is realistic, in which case the same number of analyses are recommended but over the reduced period. In addition, if there is concern that the source may be vulnerable to incursion of surface water, intense monitoring of total viable counts (TVC) and faecal indicators over periods of rainfall will be needed (typically daily).

4.3. Quantitative determination of the indicators of faecal contamination (*E. coli* and other coliforms) should be carried out at least 24 times during the assessment period. The total viable count should be measured at the same time and should be no higher than normally observed (i.e. there should be no evidence of occasional contamination). It may also be necessary to carry out analysis of parasites (*Giardia*, *Cryptosporidium*, *parasitic helminths*, *amoebae*) and pathogens (*Salmonella spp.*, *Shigella spp.*, *Aeromonas hydrophila spp.* and *Vibrio spp.*) in specified volumes of water at not less than six-monthly intervals over two years if a risk to the water

source is suspected (e.g. via incursion of contaminated waters) and to confirm absence.

5. MAXIMUM LIMITS FOR CERTAIN CONSTITUENTS

- 5.1. The Regulations require that analyses must be carried out for certain constituents of natural mineral water that are naturally present (i.e. not as a result of pollution) and where they are present above these levels may be hazardous to human health. If the water contains any of these substances at a concentration above that indicated, then it cannot be recognised. Result of these analyses should be expressed in at least the same significant figures as expressed for the maximum level.

Constituent	Expressed as	Max limit (mg/l)
Antimony	Sb	0.0050
Arsenic	As	0.010 (as total)*
Barium	Ba	1.0
Cadmium	Cd	0.003
Chromium	Cr	0.050
Copper	Cu	1.0
Cyanide	CN	0.070
Fluoride	F	5.0
Lead	Pb	0.010
Manganese	Mn	0.50
Mercury	Hg	0.0010
Nickel	Ni	0.020
Nitrate	NO ₃	50
Nitrite	NO ₂	0.1
Selenium	Se	0.010

** Note: Total arsenic, including inorganic and organic arsenic*

- 5.2. The methods of analysis to be used for these toxic substances are not prescribed by the Regulations. However, performance characteristics for analysing the toxic substances are given (including the definition of the detection limit).

Substance	Accuracy of parametric value in %	Precision of parametric	Detection limit of parametric value in %
Antimony	25	25	25
Arsenic	10	10	10
Barium	25	25	25
Cadmium	10	10	10
Chromium	10	10	10
Copper	10	10	10

Cyanides (total in all its forms)	10	10	10
Fluorides	10	10	10
Lead	10	10	10
Manganese	10	10	10
Mercury	20	20	20
Nickel	10	10	10
Nitrate	10	10	10
Nitrite	10	10	10
Selenium	10	10	10

- 5.3. The substances named above (Section 5.1 of this Annex) may only be present (below the prescribed limits) if they are naturally occurring, i.e. as a result of the local geology. If substances are present which may not reasonably be attributed to the geology (i.e. are not naturally occurring) then the possibility of contamination should be investigated.

6. FREEDOM FROM POLLUTION

- 6.1. The assessment should be based both upon the hydrogeological description submitted by the applicant and other information held or available (e.g. historical use of catchment area, presence of pollutants). The hydrogeological description provided by the applicant should be submitted to a suitably qualified person (e.g. hydro-geologist, environmental risk assessor or other professional person with experience of catchments area dynamics and risk assessment) who will consider whether the hydrogeological conditions are such that the source is likely to be free from microbiological and chemical pollution. The relevant factors are the nature of the formation from which the water is drawn, its depth, the nature and extent of the groundwater catchment and the land use within it, the nature of the groundwater recharge, and potential pollution factors.
- 6.2. Examples of pollutants which may be present in the source water as a result of previous activity in the catchment area are listed below. These, and other pollutants should be absent at the limit of detection:
- Surfactants
 - Phenols
 - Pesticides
 - Polychlorinated biphenyls
 - Polynuclear aromatic hydrocarbons
 - Chlorinated and brominated hydrocarbons
- 6.2. The number of possible pesticide analyses is large, so it is recommended that the water be analysed for the pesticides known to be used in the catchment area. Where pesticide use is not known, a larger number of pesticide analyses will need

to be carried out. It is recommended that the analyses be carried out at three-monthly intervals over two years.

7. STABILITY

- 7.1. The composition of natural mineral waters should be inherently stable. It is recognised that some variation will inevitably occur in all waters, but the permissible degree of variation is not laid down in these Regulations. The hydrogeological assessment should give a reasonable idea of how stable the composition of a particular source will be. To establish stability, it is necessary to collect information over a sufficiently long period to demonstrate the extent to which the composition varies. These guidelines recommend an analytical regime for a number of parameters over a period of two years. The characteristics of the hydrogeology and the level of local knowledge may indicate that a shorter time is realistic, in which case the same number of analyses is recommended but over the reduced period. It is recommended that the variation of results should be within the following limits.

<i>Characteristic</i>	<i>Frequency</i>	<i>Acceptable Variation</i>
Mineral content, determined as dry residue and electrical Conductivity	Monthly	± 20 % (of mean)
Individual anions, cations, and non-ionised compounds	Three monthly	± 20 % (of mean)

- 7.2. The acceptable variation of $\pm 20\%$ is a guidance value and in many cases variation will be below this level. In certain circumstances a higher degree of variation may be observed that does not necessarily reflect instability of the source (e.g. when the concentration is approaching the limit for detection for the method of analysis used). Where a water source is identified as being unstable, then the data should be examined for outliers and the reasons for the outlier investigated.

8. TREATMENTS

- 8.1. Only certain authorised treatments are permitted for natural mineral waters.
- 8.2. Disinfection of natural mineral water, by any means, is not permitted.
- 8.3. The separation of unstable elements, such as iron and sulphur compounds, by filtration or decanting (provided they remove sediments which would separate in the bottle on storage). These processes may possibly be preceded by oxygenation (e.g. to assist flocculation). The treatment must not alter the composition of the water as regards the essential constituents which give it its properties.

8.4. The separation of iron, manganese, sulphur compounds and arsenic from certain natural mineral waters by treatment with ozone-enriched air must comply with the following requirements:

- The physicochemical composition of the water in terms of its characteristics constituents is not altered
- The treatment does not have a disinfection action
- The treatment does not leave residues in the water which would pose a risk to public health, or have levels above:

<i>Treatment residue</i>	<i>Maximum limit (µg/l)</i>
Dissolved ozone	50
Bromate	3
Bromoform	1

- Residue levels in excess of the maximum limits cannot be reduced using other unauthorized treatment methods.
- The process must be authorised by the relevant authority within whose area the water is extracted.

8.5 Activated alumina treatment is permitted given certain provisions. (See S.I. 433 and Commission Regulation (EU) No 115/2010.)

9. RECOGNITION PROCEDURE

- 9.1. On granting recognition of a natural mineral water the Local Authority must arrange the publication of the recognition, and the grounds on which it has been granted (including the name and location of the source) in the London Gazette.
- 9.2. If the trade name is unknown at the time that recognition is granted, then the company should inform the relevant authority immediately once the trade name is known.
- 9.3. Copies of such announcements should be sent to the Food Law Policy Branch, Room 5C, Aviation House, 125 Kingsway, London WC2B 6NH, who will arrange publication of the recognition in the Official Journal of the European Communities. Details of the trade name should also be supplied to the Agency as this information is required for the Official List of recognised natural mineral waters.
- 9.4. The FSA has compiled a register of natural mineral waters recognised in the UK, which is open to the public for inspection via the Agency website (food.gov.uk)

10. COSTS

The costs involved in obtaining recognition and subsequent routine checking should be borne by the exploiter of the water.

11. EXPLOITATION

- 11.1. The conditions attached to the exploitation of natural mineral waters are designed to ensure that the chemical and physical characteristics, safety and microbiological purity of the water at source are maintained unchanged during exploitation. The Regulations charge Local Authorities with the responsibility of making periodic checks at source to ascertain whether the water still meets the requirements of recognition. Local Authorities are empowered to enter premises for this purpose. If the water is being exploited a quality control laboratory should be carrying out daily microbiological, chemical and physical analyses of the water. The exploiter should also notify the Local Authority when the bottling of the water for sale as natural mineral water begins.
- 11.2. The frequency of the checks should be at least every year, but are otherwise at the discretion of the local authorised officer. Recognition may be withdrawn if the equipment for exploiting the water at any time fails to meet the requirements of Schedule 3. The exploiters are responsible for routine checks on the quality of the water as part of their due diligence. An appropriate testing regime may be agreed with the recognising authority. Typically only basic analysis is needed on a daily basis to confirm consistency of source. However, the testing regime should be such that it would pick up any problems within the source or the exploitation and bottling facilities.