

# codex alimentarius commission

FOOD AND AGRICULTURE  
ORGANIZATION  
OF THE UNITED NATIONS

WORLD HEALTH  
ORGANIZATION

---

JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel.: 57051 Telex: 625825 FAO I Email: codex@fao.org Facsimile: 39(06)5705.4593

**ALINORM 99/20**

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX ALIMENTARIUS COMMISSION**

**Twenty-third Session  
Rome, 28 June – 3 July 1999**

**REPORT OF THE SIXTH SESSION OF THE  
CODEX COMMITTEE ON NATURAL MINERAL WATERS**

**Bern, Switzerland  
19 - 21 November 1998**

**Note:** *This report incorporates Codex Circular Letter CL 1998/44-NMW.*

# codex alimentarius commission

FOOD AND AGRICULTURE  
ORGANIZATION  
OF THE UNITED NATIONS

WORLD HEALTH  
ORGANIZATION

JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel.: 57051 Telex: 625825-625853 FAO I Email: [codex@fao.org](mailto:codex@fao.org) Facsimile: 39 (06)5705.4593

**CX 5/40.2**

**CL 1998/44 - NMW**

**December 1998**

**TO:** - Codex Contact Points  
- Participants at the Sixth Session of the Codex Committee on Natural Mineral Waters  
- Interested International Organizations

**FROM:** Secretary, Codex Alimentarius Commission, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy

**SUBJECT: DISTRIBUTION OF THE REPORT OF THE SIXTH SESSION OF THE CODEX COMMITTEE ON NATURAL MINERAL WATERS (ALINORM 99/20)**

The report of the Sixth Session of the Codex Committee on Natural Mineral Waters (CCNMW) is attached. It will be considered by the Twenty-third Session of the Codex Alimentarius Commission to be held in Rome from 28 June to 3 July 1999.

## **REQUEST FOR COMMENTS AND INFORMATION**

### **1. Proposed Draft General Standard for Bottled/Packaged Drinking Waters (Other Than Natural Mineral Waters) at Step 3 (ALINORM 99/20, para. 43 and Appendix II)**

Governments and interested international organizations are invited to comment on the above standard and should do so in writing in conformity with the Uniform Procedure for the Elaboration of Codex Standards and Related Texts (see *Procedural Manual of the Codex Alimentarius Commission*, Tenth Edition, pages 20-21) to the Secretary, Codex Alimentarius Commission, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy, by fax: 39 06 570 54593 or email: [Codex@fao.org](mailto:Codex@fao.org) not later than 1 February 2000.

### **2. Inclusion of Definition on Mineral Water (ALINORM 99/20, paras 22-24)**

Governments and international organizations are invited to provide comments on the need of inclusion and a wording of definition on *Mineral water* as follows:

*“Mineral water is water derived from an approved water supply, tapped at one or more bore holes or springs, protected from contamination and containing the total dissolved solids (TDS) of such contents as are recognized satisfactory as mineral water in each country. The level and relative proportions of minerals and trace elements contained in mineral water have the consistency, though there are a certain range of natural fluctuations, which is specific to the source”*

Comments should be sent in writing to the Secretary, Codex Alimentarius Commission, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy, by fax: 39 06 570 54593 or email: [Codex@fao.org](mailto:Codex@fao.org) **not later than 1 February 2000.**

## SUMMARY AND CONCLUSIONS

The Sixth Session of the Codex Committee on Natural Mineral Waters reached the following conclusions:

### MATTERS OF INTEREST BY THE COMMISSION

#### The Committee:

- **agreed** to retain the Proposed Draft General Standard for Packaged (Bottled) Drinking Waters (Other Than Natural Mineral Waters) for further comments and consideration (para. 43 and Appendix II);
- **refer** the Health Related Substances to CCFAC for consideration (para. 32);
- **invite** governments and international organizations to provide comments on the need of inclusion in the Proposed Standard and wording of definition on *Mineral water* (paras 22 – 24);
- **decided** to forward the definition of *Commercial Sterility* to the Codex Committee on Food hygiene for the developing it in framework of the Draft Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other Than Natural Mineral Waters) (para. 26).

## TABLE OF CONTENTS

	PARAGRAPHS
OPENING OF THE SESSION	1
ADOPTION OF THE AGENDA	2
CONSIDERATION OF PROPOSED DRAFT GENERAL STANDARD FOR BOTTLED/PACKAGED DRINKING WATERS OTHER THAN NATURAL MINERAL WATERS AT STEP 4	3 - 43
OTHER BUSINESS AND FUTURE WORK	44
DATE AND PLACE OF THE NEXT SESSION	45

## LIST OF APPENDICES

	Page
<b>APPENDIX I</b> List of Participants	10
<b>APPENDIX II</b> Proposed Draft General Standard for Packaged (Bottled) Waters Other Than Natural Mineral Waters	19

**ALINORM 99/20****OPENING OF THE SESSION**

1. The Codex Committee on Natural Mineral Waters held its Sixth Session in Bern, Switzerland, from 19 to 21 November 1998, at the kind invitation of the Government of Switzerland. The Session was opened and chaired by Dr. phil. II Urs Klemm, Chair of the Swiss National Committee of the Codex Alimentarius, Vice-Director of Main Food and Consumer Safety Unit, Swiss Federal Office of Public Health. The Session was attended by 83 delegates and observers from 30 Member countries and 5 international organizations. The list of participants is attached to this Report as Appendix I.

**ADOPTION OF THE AGENDA (Agenda Item 1)**

2. The Committee **adopted** the Provisional Agenda as presented in CX/NMW 98/1.

**MATTERS REFERRED TO THE COMMITTEE (Agenda Item 2)**

3. The Committee received a brief oral report on the present situation of the elaboration of the Draft Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other than Natural Mineral Water) by the Codex Committee on Food Hygiene<sup>1</sup>. The Committee noted that the Draft Code would soon be circulated to Member governments and international organizations for comments and information, especially on the incomplete sections.

4. The Committee was also informed that the Codex Committee on Food Additives and Contaminants at its 30th Session agreed to append to its report Section 3.2 (Health-Related Limits for Certain Substances) of the Codex Standard for Natural Mineral Waters, which had been adopted by the Codex Alimentarius Commission at its 22nd Session (June 1997). Comment on this section was being sought by CL 1998/11-FAC.<sup>2</sup>

**CONSIDERATION OF PROPOSED DRAFT GENERAL STANDARD FOR BOTTLED/PACKAGED WATERS OTHER THAN NATURAL MINERAL WATERS AT STEP 4 (Agenda Item 3)<sup>3</sup>**

5. The Committee recalled that during the consideration of the Draft Standard for Natural Mineral Waters at its Fifth Session in October 1996, the Committee had recognized that bottled or otherwise packaged waters were internationally traded in volumes and therefore these products should be covered by an international standard. The Swiss Secretariat, after having several informal working group meetings, had prepared the Proposed Draft General Standard for consideration by the current Session of the Committee.

6. The Delegation of Canada emphasized that the objectives of the Codex Alimentarius Commission be kept in mind; namely, to protect the health of consumers and to ensure fair practices in food trade; and that the elaboration of health and safety aspects of Codex standards should be based on science-based objective criteria. Potential difficulties were recognized in the development of a standard that needed to reflect consumers expectations and perceptions and traditions that are

---

<sup>1</sup> ALINORM 99/13A (in preparation)

<sup>2</sup> ALINORM 99/12, paras.58-60 and Appendix XV.

<sup>3</sup> CX/NMW 98/2, CX/NMW 98/2-Add.1 (Comments from Australia, Czech Republic, Canada, Denmark, France, Hungary, Italy, Japan, Norway, USA, International Bottled Water Council (IBWA), International Soft Drink Council (ISDC), Groupement International des Sources d'Eaux Minerales Naturelles et des Eaux de Source (UNESEM-GISEMES), CRD 1 (Comments from Republic of South Africa), CRD 2 (Comments from Thailand), CRD 3 (Comments from Switzerland), CRD 4 (Comments from Canada), CRD 5 (Comments from Spain), CRD 6 (Comments from Cuba).

different in various countries or regions. The Delegation proposed that in order to facilitate discussion and to avoid premature argumentation, the Committee should agree on the structure and hierarchy of the Standard and start with general broad aspects of the products covered and then proceed toward the more detailed aspects. The proposed approach was supported by the Committee. Several delegations also stated that the Proposed Draft Standard as currently drafted was overly prescriptive and required more flexibility and simplification.

### **SCOPE**

7. The Committee generally agreed that the Scope of the Standard should be broadened to allow for flexibility. The Delegation of Canada offered a new text for discussion. The Committee agreed to amend the proposed text by making a specific reference to “natural mineral waters” for clarification. The Committee had a brief discussion on the need for a reference to the use of packaged waters as ingredients. It was noted that the Standard under discussion was being elaborated for packaged waters but not for “water as an ingredient” or “potable water”. The Committee decided not to include any reference to the use as ingredients as it was felt unnecessary. The Committee agreed to replace the original text of the Scope with the following:

*This Standard applies to all waters other than natural mineral waters defined in Codex Standard 108-1981 (Rev 1-1997), that are filled into containers and are suitable for human consumption.*

### **DESCRIPTION**

8. The Committee had an extensive discussion on the structure and hierarchy of the Standard, especially on the categories of packaged waters to be included in it. The Committee supported the idea of establishing hierarchy of the products covered by the Standard. It generally agreed that there should be a generic definition that would cover all packaged waters on the market. However, the Committee had a lengthy discussions on whether the number of categories should be three, ground waters, surface waters and processed/treated waters; or two, ground waters and surface waters with subcategories, processed and non-processed waters. An informal working group, formed specifically to consider this issue, proposed to the plenary to develop two categories of waters under the generic definition of Packaged Waters, namely, *Waters defined by origin* which includes *Ground waters and Surface waters*, and *Prepared waters*. The Committee accepted this proposal and decided to place “Waters defined by origin” in square bracket for comments on an appropriate term and development of its definition.

9. Several delegations stated that the original Proposed Draft Standard included too many definitions and some definitions were too detailed. While it was requested that simplification and flexibility of the definitions were necessary, it was stated that they should be clear enough for consumers to distinguish between various types of packaged waters.

### ***Packaged Waters***

10. The Committee considered a generic definition for packaged waters based on a proposal by the Delegation of Canada. The Committee agreed to insert the term “other than natural mineral waters” after “packaged waters” for clarify that natural mineral waters covered under the Codex Standard were outside of the scope of this Standard (see also para. 7).

11. The Committee also had an exchange of views on the addition of minerals for the purpose of changing the flavour. It was stated that it could be understood that if the addition of flavours was not permitted, minerals added to change the flavour of the water were not allowed either. It was noted that in certain developing countries, minerals were added as nutritional supplements and this possibility should not be excluded. It was pointed out that flavouring substances had been well

defined within the Codex and they did not include minerals and therefore addition of minerals for flavouring would not be excluded.

12. With an editorial amendment, the Committee agreed to include the following wording as the generic definition of “Packaged waters”:

*Packaged waters, other than natural mineral waters, are waters for human consumption and may contain minerals, naturally occurring or intentionally added; may contain carbon dioxide, naturally occurring or intentionally added; but shall not contain added sugars, sweeteners, flavourings or other foods.*

The Committee noted that other than packaged waters terms could be addressed in the labelling section.

### **Ground Waters**

#### Artesian Water

13. The Committee decided to delete the *Artesian well water* from the heading of the definition in section 2.1.1.1 (a) *Artesian water* in view of difficulties of interpretation especially in Portuguese speaking countries. The designation of this type of products should be considered for different languages and countries under the labelling provision. For example, the following sentence was proposed for future consideration for inclusion in the labelling provision:

*Artesian water may also be labelled with other names, such as artesian well water, as allowed by national legislation.*

14. The Committee also agreed to delete the second sentence from this definition as the first sentence sufficiently defined the product.

#### Spring water

15. The Committee had an extensive debate on the definition of spring water. Many delegations were opposed to the current text of the definition as being too restrictive and based on geological emergence and did not correspond to the definition currently used in other parts of the world. It was pointed out that the current definition covered only waters which flow naturally to the surface of the earth only by a natural force but in addition to natural force for emergence, collection of water by boring should also be permitted. The Delegation of the USA stated that the definition should be scientifically justified. In view of controversial opinions on this issue, especially on the geological definition vs. cultural and commercial definition, the Committee decided to include in the Standard the proposal of Canada, as an alternative, and to place both texts in square brackets for comments.

16. The Committee decided to delete the word “only” after the word “collected in the second sentence of the first paragraph of the original definition.

### **Surface Waters**

#### Glacial Waters

17. The Committee first decided to retain the definition since packaged glacial waters were being traded internationally. Then, the Committee agreed to replace the current definition with the following text, based on the proposal of the United States, to ensure that glacial water was derived from glacier ice and would not contain any non-glacial waters:

*Glacial (glacier) water is (1) the runoff directly from the natural melting of ice of a glacier; or (2) water obtained from the melting of glacier ice at a bottled water operation.*



The above text was placed in square brackets.

### ***Prepared Waters***

18. The Committee considered the wording of the definition of *prepared waters* on the basis of the proposal of the Delegation of Canada. The Committee agreed to clarify the outcome of the alteration by replacing the term “they have lost connection with the defined origin” with “their composition is no longer characteristics of the defined origins”. The Delegation of the United States proposed to delete the second sentence as the scope of the Standard already referred to waters suitable for human consumption; the passing through community water supply would not necessarily change the composition of the water; and there were waters fit for human consumption before treatments. The Committee agreed to place the following generic definition for Prepared Waters in square brackets:

*Prepared waters are waters that have been substantially altered so that their composition is no longer characteristics of the defined origins. They have been rendered fit for human consumption or have passed through community water supply or have had the composition significantly changed.*

19. The Committee had some discussions on the need for the definitions of *Purified/Demineralized water* (including *deionized water, distilled water and reverse osmosis water*) and *Sterile/Sterilized water*. Some delegations expressed the concern that the use of terms such as *Purified water* would mislead the consumer. A number of delegations stated that these waters were not intended for human consumption and therefore questioned the usefulness and legitimacy of their inclusion in the Standard. However, it was stated that these products were sold for human consumption in many countries. The Committee agreed to delete these definitions as these products would be covered by the definition of prepared waters; designation of these products could be addressed in the labelling provision; and these product names were self-explanatory.

### Water with added minerals, mineralized water or mineralized table water

20. The Committee discussed on the appropriate term(s) to be used as the name of the products. Although it was generally agreed that the name should be selected so as not to cause confusions among consumers, several delegations stated that the term “mineralized water” or “mineralized table water” more properly reflected the characteristics of the products while a number of others preferred “water with added minerals” as less confusing. Many delegations stated that the matter was rather on the designation than definition of the product and therefore could possibly dealt with in the labelling provision. The Committee agreed to maintain the definition in this section as it includes a reference to the Codex General Standard for Food Additives and to clarify it as follows:

*Water with added minerals, mineralized water or mineralized table water is prepared water with minerals added according to the provisions in the Codex General Standard for Food Additives (CODEX STAN 192-1995, Rev. 1-1997).*

The Committee also decided to amend the heading of the definition by adding *Mineralized water or mineralized table water* and place it in square brackets.

21. The Committee noted that the concern of the Delegation of United Arab Emirates as regards desalination and subsequent salts addition to the seawater was already addressed in Section 2.1.2 “Prepared waters”.

### Mineral Water

22. The Committee had an extensive debate on a possibility of including of a new definition of *Mineral Water* in the Proposed Draft Standard. Several delegations stressed the need and strongly

asserted the inclusion of this definition stating that there were waters with similar characteristics as those of natural mineral waters but they did not fall under “natural mineral waters” as defined in the Standard for Natural Mineral Waters due to the practice of disinfection and/or transportation, and therefore excluded from marketing as “natural mineral water”. The Delegation of Japan stated that mineral content was the most important criterion for quality of water and therefore the Proposed Draft Standard should include the definition for Mineral Waters. The Delegation of Japan supported by several delegations proposed the wording for the definition of Mineral Water as follows:

*Mineral water is water derived from an approved water supply, tapped at one or more bore holes or springs, protected from contamination and containing the total dissolved solids (TDS) of such contents as are recognized satisfactory as mineral water in each country. The level and relative proportions of minerals and trace elements contained in mineral water have the consistency, though there are a certain range of natural fluctuations, which is specific to the source.*

23. The Delegation of France supported by many other delegations and the Observer from EC argued that the inclusion of this term would lead to the confusion of consumers as the term “Mineral Water” was very similar to the term Natural Mineral Water and strongly opposed to the inclusion of this new definition in the Proposed Draft Standard. It was stated that either this type of water was named as Spring Water or the proposed definition could be added to that of Spring Water.

24. Due to divergent opinions, the Committee did not reach consensus on the inclusion of a definition in the Proposed Draft Standard. As a compromise, the Committee agreed to include the term *Mineral water* in square brackets in the Proposed Draft Standard without the text on definition. It was further agreed that by way of a Codex Circular Letter, comments would be invited from governments and international organizations on a need for such a definition and on the text of the above definition.

### ***Supplementary definitions***

25. Committee decided to delete the definitions of *Approved water supply*, *Water distribution system* and *Establishment* as they were either unnecessary or already addressed in the Draft Code of Hygienic practice for Bottled/Packaged Drinking Waters (Other Than Natural Mineral Waters).

26. On the request to include the definition on *Commercial sterility*, the Committee agreed that it would more properly developed by the Codex Committee on Food Hygiene within the framework of the Code of Hygienic Practice and therefore decided to forward the following text to that Committee for consideration for inclusion in the Code.

“Commercial Sterility means the condition achieved by the application of appropriate treatment to render the bottled water free from microorganisms capable of growing in the product at normal non-refrigerated conditions at which the product is likely to be held during distribution and storage and free of viable microorganisms (including spores) of public health significance. The absence of viable microorganisms shall be determined with appropriate microbiological tests.

## **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

### ***Treatment and Handling***

#### **COLLECTION OF GROUND WATERS**

27. The Committee agreed to replace the term “underground” with “ground” to be consistent with the heading of section 2.1.1.1, Ground water. The Committee also agreed to (1) keep the term “well water” as it is one of the defined terms in Section 2; and (2) insert the term “such” after

“ground water” to indicate that the products followed were examples and it was not meant to contain an exhaustive list of products.

#### Transportation

28. The Committee recognized that the provision, except for the first sentence, referred to hygiene. As hygienic aspects of the products covered under the standard would be dealt with in the Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other than Natural Mineral Water), the Committee agreed to delete the second sentence and to retain the first and third sentence, that refers to the above Code.

#### Forms of Treatment

29. The Committee noted that these treatments specified in this provision were optional but not mandatory. On the need for detailed description of the types of treatments and waters that could be treated, the Committee generally agreed that it was premature to get in detail pending decisions on Section 2.1 Definitions. In response to the concerns that a treatment which alters significantly the characteristics of water defined by origin should not be applied to this kind of water, the Committee agreed to add the following sentence at the end of the first paragraph for clarification:

“Any anti-microbial treatments applied to waters defined by origin (Section 2.1.1) shall not significantly alter the composition of the water in so far as this relates to the characteristics of its origin.”

30. The Committee replaced the term “underground” with “ground” as in the provision for collection of ground waters.

#### ***Health related limits for certain substances***

31. The Committee agreed to change the current maximum value for lead from 0.005mg/l to 0.01mg/l, that is in line with the current WHO Guideline value and the maximum level for natural mineral water.

32. The Committee agreed that the Health-Related limits be referred to the Codex Committee on Food Additives and Contaminants for consideration. It was noted that several delegations favored alignment of the levels to those being considered for Natural Mineral Waters.

33. The WHO Representative noted that the Draft Code of Hygienic Practice for Bottled (Packaged) Drinking Waters (other than Natural Mineral Waters) proposed that the chemical and physical safety criteria to be used for packaged water be those issued by WHO in its Guidelines for Drinking Water Quality<sup>4</sup> and pointed out that the proposed levels for arsenic, borate manganese and selenium presented in the Proposed Draft Standard substantially exceeded WHO guideline values and may present a public health concern. On the other hand the proposed value for nitrate was lower than WHO guideline value. Consistent with WHO’s precautionary policy regarding human exposure to food additives and contaminants, WHO would support the establishment of lower levels which would be feasible by the industry.

34. The WHO Representative emphasized that the primary aim of the WHO guidelines was the protection of public health and to serve as a basis for the development of national regulations that, if properly implemented, would ensure the safety of drinking water supplies through elimination or reduction to a minimum concentration, of constituents of water that was shown to be hazardous to health. The WHO Representative emphasized that the guideline values recommended were not

---

<sup>4</sup> Guidelines for Drinking Water Quality-Recommendations, Volume 1 (1993), and Addendum to vol. 1 (1998), World Health Organization, Geneva.

mandatory limits. In order to define such limits it was necessary to consider the guideline values in the context of national conditions.

35. The Committee recognized that the WHO guidelines were intended to apply primarily to public drinking water supply.

#### **HYGIENE**

36. The Committee agreed to align the wording of Subsections 4.1-4.2 to the new standard text<sup>5</sup> recommended by the Codex Committee on Food Hygiene to the Codex Alimentarius Commission for adoption.

37. In relation to the request to include microbiological requirements, the Committee was informed that microbiological criteria had been elaborated by the Codex Committee on Food Hygiene to be included in Appendix II of the Draft Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other than Natural Mineral Water) and that after the completion of the Code, that Committee would review the current Code of Hygienic Practice for the Collecting, Processing and Marketing of Natural Mineral Waters. It was also noted that microbiological criteria normally were included in Codes of Hygienic Practice rather than in standards. The Committee decided that microbiological criteria be developed by the Committee on Food Hygiene and in the future the standard and the code for natural mineral waters should be consistent with other standards on this subject.

#### ***Approval of the waters defined by origin***

38. The Committee discussed whether this section was necessary because of the Draft Code of Hygienic Practice for Bottled/Packaged Drinking Waters (Other Than Natural Mineral Waters) being developed by the Codex Committee on Food Hygiene. Several delegations pointed out that because some waters were defined by origin therefore an approval of water origin was needed. The Delegation of France stated that the approval of the water's origin should include all the elements to guarantee the identity and safety of the waters defined according to their origin. The Committee agreed to amend the heading of the section to read *Approval of the waters defined by origin* and that the safety matters would be dealt with by the Codex Committee on Food Hygiene. However, the Committee decided to put section 4.3 within square brackets as it was felt premature to make a decision pending a conclusion on a definition of "Waters defined by origin".

39. The Representative of WHO noted that the WHO microbiological guideline levels apply to bottled water intended for human consumption but not to natural mineral waters and were being revised to include process specifications, such as treatment and protection of source. He also noted that, at the request of the Codex Alimentarius Commission, WHO and FAO were in the process of convening an expert consultation on the microbiological risk assessment.

#### **PACKAGING**

40. The Committee decided to delete the second paragraph of the Section as it felt that the first paragraph sufficiently covered the necessary requirements and as the Codex Standard for Natural Mineral Waters did not contain this paragraph.

#### **LABELLING**

41. The Committee agreed to place Sections 6.1-6.3 in square brackets in view of the new structure of Section 2 Description and many product definitions placed in square brackets. The Committee confirmed that it would consider at its next Session a number of issues, such as the

---

<sup>5</sup> ALINORM 99/13, Appendix VI.

designation of “artesian well water”, “deionized water”, “demineralized water”, etc., which the Committee decided to discuss under the section of labelling (see paras 13 and 19).

#### **METHODS OF ANALYSIS AND SAMPLING**

42. The Committee noted that at the last session it could not review the methods of analysis and sampling provision of the Standard for Natural Mineral Waters and that one ISO Standard<sup>6</sup> endorsed for determination of *Pseudomonas aeruginosa* had been revoked by ISO. It might be necessary to consider for updating the provision in that standard at the same time as the development of the provision of methods of analysis and sampling in the Standard for Packaged (Bottled) Waters Other Than Natural Mineral Waters.

#### **Status of the Proposed Draft General Standard for Packaged (Bottled) Waters Other Than Natural Mineral Waters**

43. As many important issues in the text required further consideration, the Committee **agreed** to return the Proposed Draft Standard to Step 3 of the Procedure for comments. The amended text is attached to this Report as Appendix II.

#### **OTHER BUSINESS AND FUTURE WORK (Agenda Item 4)**

44. There was no other business proposed for discussion. The Committee would continue the work on the Proposed Draft General Standard for Packaged (Bottled) Waters Other Than Natural Mineral Waters.

#### **DATE AND PLACE OF THE NEXT SESSION (Agenda Item 5)**

45. The Committee was informed that the next Session of the Committee was tentatively scheduled to be held in the period of 2000-2001. The exact date and place would be determined between the Host government and Codex Secretariats.

---

<sup>6</sup> ISO 8360-2:1988.

## ANNEX I

## SUMMARY STATUS OF WORK

<b>Subject</b>	<b>Step</b>	<b>Action by</b>	<b>Reference in ALINORM 99/20</b>
Proposed Draft General Standard for Bottled/Packaged Drinking Waters Other Than Natural Mineral Waters	3	Governments, 7 <sup>th</sup> CCNMW	para. 43 and Appendix II
Health Related Limits		CCFAC	para. 32
Commercial Sterility		CCFH	para.26

## Appendix I

**LIST OF PARTICIPANTS**  
**LISTE DES PARTICIPANT**  
**LISTA DE PARTICIPANTES**

**Chairperson:** Urs Klemm, Dr.phil. II  
**Président:** President Swiss National Committee  
**Presidente:** of the Codex Alimentarius  
 Swiss Federal Office of Public Health  
 3003 Berne  
 Tel.: +41 31 322 95 72  
 Fax: +41 31 322 95 74  
 E-mail: [urs.klemm@bag.admin.ch](mailto:urs.klemm@bag.admin.ch)

**Assistant to the Chairperson:** Manfred Elsig  
**Assistant au Président:** Swiss Federal Office for Foreign Economic  
 Affairs  
**Assistente al Presidente:** 3003 Berne  
 Tel.: +41 31 324 08 47  
 Fax: +41 31 324 09 59  
 E-mail: [manfred.elsig@bawi.admin.ch](mailto:manfred.elsig@bawi.admin.ch)

**AUSTRALIA/AUSTRALIE**

Simon Brooke-Taylor  
 Program Manager Food Product Standards  
 Australia New Zealand Food Authority  
 (ANZFA)  
 PO Box 7186  
 Canberra Mail Centre  
 ACT 2610  
 Tel.: +612 6271 2225  
 Fax: +612 6271 2278  
 E-mail: [simon.brooke-taylor@anzfa.gov.au](mailto:simon.brooke-taylor@anzfa.gov.au)

**AUSTRIA/AUTRICHE**

Dieter Jenewein  
 Director  
 Bundesanstalt für Lebensmitteluntersuchung  
 In Innsbruck  
 Technikerstrasse 70  
 A-6020 Innsbruck  
 Tel.: +43 1 7 11 00  
 Fax: +43 1 1100 2934

**BELGIUM/BELGIQUE/BELGICA**

Charles Crémer  
 Chef de service  
 Ministère de la Santé Publique  
 Inspection des denrées alimentaires  
 Cité Administrative de l'Etat  
 Quartier Esplanade, 11ème étage  
 1010 Bruxelles  
 Tel.: +32 2 210 48 43  
 Fax: +32 2 210 48 16  
 E-mail: [charles.cremer@health.fgov.be](mailto:charles.cremer@health.fgov.be)

Karine Lambert  
 Secrétaire Générale  
 FIEB  
 51/5, ave du Général de Gaulle  
 1050 Bruxelles  
 Tel.: +32 2 649 12 86  
 Fax: +32 2 646 13 39  
 E-mail: [k.lambert@fieb.be](mailto:k.lambert@fieb.be)

José Bontemps  
 Conseiller scientifique  
 SPADEL  
 Rue Colonel Bourg, 103  
 1030 Bruxelles  
 Tel.: +32 2 702 38 11  
 Fax: +32 2 702 38 12

**BRAZIL/BRESIL/BRASIL**

Paulo Bozzi  
Counsellor  
Ministry of Foreign Relations  
Brazilian Embassy in Bern  
Monbijoustrasse 68  
3007 Bern  
Tel.: +41 31 371 85 15  
Fax: +41 31 371 85 27  
E-mail: [brazil@spectraweb.ch](mailto:brazil@spectraweb.ch)

**CANADA**

Peter Pauker (Head of Delegation)  
Trade Policy Officer  
Technical Barriers and Regulations Division  
(EAS)  
Foreign Affairs and International Trade of  
Canada  
125 Sussex Drive  
Ottawa, Ontario K1A 0G2  
Tel.: 613 992 0523  
Fax: 613 944 0756  
E-mail: [peter.pauker@extott23.x400.gc.ca](mailto:peter.pauker@extott23.x400.gc.ca)

Claudette Dalpé  
Manager, Food Regulatory Program  
Bureau of Food Regulatory, International  
and Interagency Affairs  
Food Directorate, Health Protection Branch,  
Health Canada  
Ottawa, Ontario K1A 0L2  
Tel.: 613 957 1750  
Fax: 613 941 3537  
E-mail: [claudette\\_dalpe@hc.sc.gc.ca](mailto:claudette_dalpe@hc.sc.gc.ca)

Elizabeth C. Griswold-Woodworth  
Executive Director  
Canadian Bottled Water Association  
70 East Beaver Creek Road, Suite 203-1  
Richmond Hill, Ontario L4B 3B7  
Tel.: +1 905 886 69 28  
Fax: +1 905 886 95 31  
E-mail: [ecgriswood@aol.com](mailto:ecgriswood@aol.com)

Luisa Crapigna  
Food Policy and Legislation Officer  
Canadian Food Inspection Agency  
59 Camelot Drive  
Nedean, Ontario KIA OY9  
Tel.: 613 225 23 42  
Fax: 613 228 66 11  
E-mail: [lcrapigna@em.agr.ca](mailto:lcrapigna@em.agr.ca)

Michel Lavallée  
Coordonnateur des autorisations des captages  
d'eau de source et d'eau minérale  
Ministère de l'Agriculture, des Pêcheries et de  
l'Alimentation du Québec  
5199 Est Rue Sherbrooke, Suite 4701  
Montréal, Québec H1T 3X3  
Tel.: 514 873 8878  
Fax: 514 873 8372  
E-mail: [michel.lavallee@mef.gouv.qc.ca](mailto:michel.lavallee@mef.gouv.qc.ca)

**COLOMBIA/COLOMBIE**

Elizabeth Herrera Neira  
Ingeniera de Alimentos  
Ministerio de Salud – Instituto Nacional de  
Vigilancia de Medicamentos y Alimentos –  
INVIMA  
Cra 15 # 58 – 59  
Santa Fe de Bogota  
Tel.: +211 59 51  
E-mail: [ossmajo@bogota.minsalud.gov.co](mailto:ossmajo@bogota.minsalud.gov.co)

**CROATIA/CROATIE**

Zeljko Dacic  
Croatian Institute of Public Health  
Water Research Division  
Rockefellerova 7  
10000 Zagreb  
Tel.: +385 1 468 30 09  
Fax: +365 1 468 30 09

**CZECH REPUBLIC/REPUBLIQUE  
TCHEQUE/REPUBLICA CHECA**

Borivoj Havlík  
Advisor  
Ministry of Health of the Czech Republic  
Palackého náměstí 4  
Praha 2, 128 01  
Tel.: +420 2 2497 2427  
Fax: +420 2 2491 5996 (6007)  
E-mail: [havlik@mzcr.cz](mailto:havlik@mzcr.cz)



**DENMARK/DANEMARK/DINAMARCA**

Dorthe Licht  
Cand. Scient. Ph.ch.  
Danish Veterinary and Food Administration  
Rolighedsvej 25  
1958 Frederiksberg C  
Tel.: 45 33 95 60 00  
Fax: +45 33 95 60 01  
E-mail: [dli@vfd.dk](mailto:dli@vfd.dk)

**FINLAND/FINLANDE/FINLANDIA**

Risto Aurola  
Government Counsellor  
Ministry of Health and Social Affairs  
Siltasaarenk. 18A  
00530 Helsinki  
Tel.: +398 9 1604128  
Fax: +358 9 1604120

**FRANCE/FRANCIA**

Bernard André (Head of Delegation)  
Direction Générale de la Concurrence, de la  
Consommation et de la Répression des  
Fraudes  
59, Boulevard Vincent Auriol  
75003 Paris Cedex 13  
Fax: +33 1 44 97 32 01  
Fax: +33 1 44 97 30 43

Roseline Lecourt  
Direction Générale de la Concurrence, de la  
Consommation et de la Répression des  
Fraudes  
59, Boulevard Vincent Auriol  
75003 Paris Cedex 13  
Fax: +33 1 44 97 34 70  
Fax: +33 1 44 97 30 37  
E-mail:  
[roseline.lecourt@dgccrf.finances.gouv.fr](mailto:roseline.lecourt@dgccrf.finances.gouv.fr)

Jean-François Roche  
Ministère de l'Agriculture et de la Pêche  
Direction Générale de l'Alimentation  
251, rue de Vaugirard  
75732 Paris cedex 15  
Tel.: +33 1 49 55 58 81  
Fax: +33 1 49 55 59 48  
E-mail: [reg2@wanadoo.fr](mailto:reg2@wanadoo.fr)

Vincent Ducasse  
Directeur Réglementation et Développement  
Scientifique  
Pole Expertise Eau  
Danone  
7, rue de Téhéran  
Paris  
Tel.: +33 1 44 35 26 24  
Fax: +33 1 44 35 24 27  
E. Mail: [vducasse@groupe.danone.com](mailto:vducasse@groupe.danone.com)

Denise Pepin  
Faculté de Pharmacie  
28, place H. Dunant  
B.P. 38  
63001 Clermont Cedex  
Tel.: +33 4 73 28 84 50  
Fax: +33 4 73 28 84 55

Olivier Pierre  
Direction Générale de la Concurrence, de la  
Consommation et de la Répression des  
Fraudes  
59, Boulevard Vincent Auriol  
75003 Paris Cedex 13  
Fax: +33 1 44 97 32 06  
Fax: +33 1 44 97 30 43  
E-mail: [olivier.pierre@dgccrf.finances.gouv.fr](mailto:olivier.pierre@dgccrf.finances.gouv.fr)

**GERMANY/ALLEMAGNE/ALEMANIA**

Hermann Brei  
Regierungsdirektor  
Bundesministerium für Gesundheit  
D-53108 Bonn  
Tel.: +49 228 941 4141  
Fax: +49 228 941 4947

Astrid Dross  
Wissenschaftliche Oberrätin  
Bundesinstitut für gesundheitlichen  
Verbraucherschutz und Veterinärmedizin  
Thielallee 88-92  
14195 Berlin  
Tel.: +49 30 8412 3461  
Fax: +49 30 8412 3685  
E-mail: [a.dross@bgvv.de](mailto:a.dross@bgvv.de)

Stefanie Bausch  
Food Chemist  
Nestlé Germany  
Lyonner Str. 23  
60523 Frankfurt/Main  
Tel.: +49 69 66 71 2689  
Fax: +49 69 66 71 3440

Arno Dopychai  
Referent/Advisor  
Verband Deutscher Mineralbrunnen  
Kennedyallee 28  
53229 Bonn  
Tel.: +49 228 95 99 00  
Fax: +49 228 95 99 023  
E-mail: vdm.bonn@t-online.de

Rolph Langlais  
Director scientific Regulatory Affairs  
Coca-Cola GmbH  
Frankenstr. 348  
45133 Essen  
Tel.: +49 201 821 1361  
Fax: +49 201 821 1773  
E-mail: dlanglais@eur.ko.com

#### **HUNGARY/HONGRIE//HUNGRIA**

Béla Borszéli  
President  
FAO/WHO Hungarian National Committee  
Mineral Water Working Committee  
Wesselényi Str. 16  
1075 Budapest  
Tel.: +361 358 9848  
Fax: +361 358 9848

Sandor Szabo  
Pepsi Cola Company and  
Mineral Water Working Committee  
Wesselényi Str. 16  
1075 Budapest  
Tel.: +361 267 88 07  
Fax: +361 267 88 08

#### **ITALY/ITALIE/ITALIA**

Brunella Lo Turco  
Segretario generale Comitato nazionale Codex  
Ministero per le politiche agricole  
Via XX Settembre 20  
Roma  
Tel.: +39 06 488 02 73  
Fax: +39 06 488 02 73  
E-mail: bloturco@ats.it

Pierangelo Grippo  
Comitato Italiano Codex  
Via delle Tre Madonne 12  
00197 Rome  
Tel.: 00 39 06 807 99 50  
Fax: 00 39 06 807 99 46

Laura Toti  
Researcher  
Istituto Superiore della Sanità  
Viale Regina Elena 299  
00189 Roma  
Tel.: 00 39 06 499 02 779

Stefano Terzi  
San Pellegrino  
Loc. Ruspino  
24016 San Pellegrino Terme BG  
Tel.: +39 03 45 29 256  
Fax: +39 03 45 29 230  
E-mail: terzi@spm.it

#### **JAPAN/JAPON**

Akihiko Nishiyama  
Ministry of Agriculture, Forestry and Fisheries  
Director for International Standardization  
Standards and Labelling Division  
Food and Marketing Bureau  
1-2-1 Kasumigaseki, Chiyoda-ku  
Tokyo 100-8950  
Tel.: +81 3 3507 8592  
Fax: +81 3 3502 0438  
E-mail: akihiko\_nishiyama@nm.maff.go.jp

Hayato Nakajima  
Ministry of Agriculture, Forestry and Fisheries  
1-2-1 Kasumigaseki, Chiyoda-Ku  
Tokyo 100-8950  
Tel.: +81 3 3501 3815  
Fax: +81 3 3502 0614  
E-mail: hayato\_nakajima@nm.maff.go.jp

Kenichi Nakano  
Technical Advisor  
National Association of Food Industries,  
Japan  
3-6-18 Kamimeguro, Meguro-ku  
Tokyo 153-0051  
Tel.: +81 3 3716 2639  
Fax: +81 3 3716 2700

Masahiko Fukuda  
Technical Advisor  
National Association of Food Industries,  
Japan  
3-6-18 Kamimeguro, Meguro-ku  
Tokyo 153-0051  
Tel.: +81 3 3716 2639  
Fax: +81 3 3716 6226

Yasuhiro Morimura  
Technical Advisor  
National Association of Food Industries,  
Japan  
3-6-18 Kamimeguro, Meguro-ku  
Tokyo 153-0051  
Tel.: +81 3 3716 2639  
Fax: +81 3 3716 2700

#### **KENYA**

Joseph Kimaru Keeru  
Head of Delegation  
Principal Standards Officer  
Kenya Bureau of Standards  
P.O. Box 54974  
Nairobi  
Tel.: +254 2 50 22 10-19  
Fax: +254 2 503293  
E-mail: [Kebs@users.africaonline.co.ke](mailto:Kebs@users.africaonline.co.ke)

Benjamin Malwa Langwen  
Chief Chemist  
City Council of Nairobi  
P.O. Box 30656  
Nairobi  
Tel.: +254 2 58 13 71

#### **NETHERLANDS/PAYS-BAS/PAISES BAJOS**

Joris Francken (Head of Delegation)  
Senior Policy Officer  
Ministry of Health, Welfare and Sport  
PO Box 20350  
2500 EJ Den Haag  
Tel.: +31 70 340 68 48  
Fax: +31 70 340 55 54  
E-mail: [jm.francken@minvws.nl](mailto:jm.francken@minvws.nl)

Jouke Schat  
NFI  
O Box 26155  
3002 ED Rotterdam  
Tel.: +31 10 477 40 33  
Fax: +31 10 425 90 25  
E-mail: [j.j.schat@bbm.nl](mailto:j.j.schat@bbm.nl)

#### **NORWAY/NORVEGE/NORUEGA**

John Race (Head of Delegation)  
Special Adviser, International Liaison  
Norwegian Food Control Authority  
P.O. Box 8187 Dep.  
0034 Oslo  
Tel.: +47 2 224 62 68  
Fax: +47 2 224 66 99  
E-mail: [john.race@snt.dep.telemax.no](mailto:john.race@snt.dep.telemax.no)

Paul Skjaker  
Senior executive Officer  
Norwegian Food Control Authority  
P.O. Box 8187 Dep.  
0034 Oslo  
Tel.: +47 2 224 61 60  
Fax: +47 2 224 66 99  
E-mail: [paul.skjaker@snt.dep.telemax.no](mailto:paul.skjaker@snt.dep.telemax.no)

#### **PORTUGAL**

Carlos Manuel Pimpão  
Assessor, engenheiro agrónomo  
Ministerio da Agricultura, Desenvolvimento  
rural e das Pescas  
Direcção-Geral de Fiscalização e Controlo da  
Qualidade Alimentar  
Av. Conde Valbom, 96/98  
1050 Lisboa  
Tel.: +351 1 798 37 48  
Fax: +351 1 798 38 34

Francisco Mendonça  
Secrétaire général APIAM  
Av. Miguel Bombarda 110 2 DT  
Lisboa  
Tel.: +351 1 794 05 74  
Fax: +351 1 793 82 33

**ROMANIA/ROUMANIE/RUMANIA**

Veronica Geamănu  
Societatea Națională a Apelor Minerale di  
România  
St. Mendeleev 36-38  
Bucarest  
Tel.: +40 1 540 77 11  
Fax: +40 1 650 34 87

**SENEGAL**

Gaston P. Toupane (Head of Delegation)  
Ingénieur en Génie de l'Environnement  
Chef de la Division Laboratoire du Service  
National de l'Hygiène  
Direction de l'Hygiène et de la Santé Publique  
Immeuble Vendôme  
BP 4024 Point E  
Dakar  
Tel.: +221 825 6139  
Fax: +221 824 7549

Faye Mame Diara Leye  
Chef section Denrées alimentaires  
Ministère de la santé publique  
Immeuble Vendôme  
BP 4024 Point E  
Dakar  
Tel.: +221 825 6139  
Fax: +221 824 7549

**SPAIN/ESPAGNE/ESPAÑA**

Maria Dolores Hernando Arranz  
Ministerio de Sanidad y Consumo  
Paseo del Prado 18-20  
28011 Madrid  
Tel.: +34 91 596 19 81  
Fax: +34 91 596 44 09

Irene Zafra  
Secretaria General  
Asociacion Nacional de Empresas de Aguas  
de Bebida Envasada ANEABE  
Serrano 76 – 5<sup>o</sup>  
28006 Madrid  
Tel.: +34 91 575 82 26  
Fax: +34 91 578 18 16

**SWEDEN/SUEDE/SUECIA**

Kerstin Jansson (Head of Delegation)  
Head of Section  
Ministry of Agriculture  
National Food Administration  
10333 Stockholm  
Tel.: +46 8 405 11 68  
Fax: +46 8 206 496  
E-mail: [kerstin.jansson@agriculture.ministry.se](mailto:kerstin.jansson@agriculture.ministry.se)

Bitte Erlandsson  
Head of Division  
National Food Administration  
Box 622  
75126 Uppsala  
Tel.: +46 18 17 55 00  
Fax: +46 18 10 58 48  
E-mail: [bier@slv.se](mailto:bier@slv.se)

**SWITZERLAND/SUISSE/SUIZA**

Eva Zbinden (Head of Delegation)  
Attorney at law  
Swiss Federal Office of Public Health  
Service of International Standards  
3003 Berne  
Tel.: +41 31 322 95 72  
Fax: +41 31 322 95 74  
E-mail: [eva.zbinden@bag.admin.ch](mailto:eva.zbinden@bag.admin.ch)

Irina Du Bois  
Nestec SA  
1800 Vevey  
Tel.: +41 21 924 22 61  
Fax: +41 21 924 45 47  
E-mail: [irina.dubois@nestle.com](mailto:irina.dubois@nestle.com)

Danielle Magnolato  
Regulatory Affairs Manager  
Nestec SA  
1800 Vevey  
Tel.: +41 21 924 44 41  
Fax: +41 21 924 45 47  
E-mail: [daniele.magnolato@nestle.com](mailto:daniele.magnolato@nestle.com)

Alexander Kuhn  
Generalsekretär  
Verband Schweiz. Mineralquellen und  
Bahnhofplatz 9  
Postfach 6325  
8023 Zürich  
Tel.: +41 1 221 21 84  
Fax: +41 1 211 62 06

**THAILAND/THAILANDE/TAILANDIA**

Chanin Charoenpong (Head of Delegation)  
Senior Expert in Food Standard  
Food and Drug Administration  
Ministry of Public Health  
Nonthaburi 11000  
Tel.: +622 590 70 30  
Fax: +622 591 84 60  
E-mail: chanin@fda.moph.go.th

Prathan Prasertvithiakarn  
Senior Pharmacist  
Consumer Protection Group  
Food and Drug Administration  
Ministry of Public Health  
Thivanon Rd.  
Nonthaburi 11000  
Tel.: +622 591 84 86  
Fax: +622 591 84 84

Supanee Pitikantithum  
Standards Officer  
Thai Industrial Standard Institute  
Ministry of Industry  
Rama VI Street  
Bangkok 10400  
Tel.: +662 202 34 37  
Fax: +662 248 79 87

Orawon Bundith  
Chief of Water and Quality Management  
Department  
Boon Rawd Brewery Co. Ltd.  
999 Samaen Road, Bangkrabue  
Bangkok 10300  
Tel.: +662 241 13 61-9, ext. 167, 248  
Fax: +662 243 17 40

**TUNISIA/TUNISIE/TUNEZ**

Fayçal Kolsi  
Ingénieur principal  
Office du Thermalisme  
Ministère du Tourisme et de l'Artisanat  
8, rue du Sénégal  
1002 Tunis le Belvédère  
Tel.: +2161 844 566  
Fax: +2161 791 868

**UNITED ARAB EMIRATES  
EMIRATS ARABES UNIS  
EMIRATOS ARABES UNIDOS**

Mutwakil Mohamed Ahmed  
Head Chemistry Department  
Food and Environment Control Centre  
Abu Dhabi Municipality UAE  
P.O. Box 3111  
Abu Dhabi  
Tel.: +9712 725007  
Fax: +9712 785961

**UNITED KINGDOM/ROYAUME-UNI  
REINO UNIDO**

Dorian Kennedy (Head of Delegation)  
Food Labelling and Standards Division  
Branch C  
Ministry of Agriculture, Fisheries and Food  
Room 316 Ergon House, c/o Nobel House  
17 Smith Square  
London SW1P 3JR  
Tel.: +44 171 238 5574  
Fax: +44 171 238 5782/6763  
E-mail: d.kennedy@fssg.maff.gov.uk

Gerald Goldwin  
Food Labelling and Standards Division  
Branch C  
Ministry of Agriculture, Fisheries and Food  
Room 323 Ergon House, c/o Nobel House  
17 Smith Square  
London SW1P 3JR  
Tel.: +44 171 238 5989  
Fax: +44 171 238 5782

**UNITED STATES OF AMERICA  
ETATS-UNIS D'AMERIQUE  
ESTADOS UNIDOS DE AMERICA**

Terry C. Troxell  
Director, Division of Programs and  
Enforcement Policy  
Food and Drug Administration  
200 C. Street, S.W.  
Washington, D.C. 20204  
Tel.: +1 202 205 5321  
Fax: +1 202 205 4422  
E-mail: [ttroxell@bangate.fda.gov](mailto:ttroxell@bangate.fda.gov)

Shellee A. Davis  
Consumer Safety Officer  
Office of Plant and Dairy Foods and  
Beverages  
Food and Drug Administration  
200 C. Street, S.W.  
Washington, D.C. 20204  
Tel.: +1 202 205 5023  
Fax: +1 202 205 4422  
E-mail: [sdavis@bangate.fda.gov](mailto:sdavis@bangate.fda.gov)

George J. Jackson  
Director/Microbiologist  
Food and Drug Administration  
200 C. Street, S.W.(HFS-500)  
Washington, D.C. 20204  
Tel.: +1 202 205 4051  
Fax: +1 202 401 7740  
E-mail: [gjackson@bangate.fda.gov](mailto:gjackson@bangate.fda.gov)

Charles W. Cooper  
Director, International Activities Staff  
Food and Drug Administration  
200 C. Street, S.W.(HFS-585)  
Washington, D.C. 20204  
Tel.: +1 202 205 5042  
Fax: +1 202 205 0165  
E-mail: [ccooper@bangate.fda.gov](mailto:ccooper@bangate.fda.gov)

Julia C. Howell  
Director, Regulatory Submissions  
The Coca-Cola Company  
One Coca-Cola Plaza  
P.O. Box Drawer 1734  
Atlanta, Georgia 30301  
Tel.: +1 404 676 4224  
Fax: +1 404 676 7166  
E-mail: [jhowell@na.ko.com](mailto:jhowell@na.ko.com)

Syed Amjad Ali  
U.S. Codex Office  
USDA/FSIS  
12th Independence Avenue, SW  
Room 4857 South Building  
Washington, DC 20250-3700  
Tel.: 202 205 0574  
Fax: 202 720 3157  
E-mail: [syed.ali@usda.gov](mailto:syed.ali@usda.gov)

Bill Miller  
Technical Director  
National Spring Water Association  
P.O. Drawer 668  
Robbinsville, NC 28771  
Tel.: +1 828 479 2659  
Fax: +1 828 479 2659  
E-mail: [bebo@gte.net](mailto:bebo@gte.net)

Janice Adair  
Director  
Environmental Health Alaska  
555 Cordona Str.  
Anchorage, AK 99501  
Alaska  
Tel.: +1 907 269 7644  
Fax: +1 907 269 7654  
E-mail: [jadair@environ.state.ak.us](mailto:jadair@environ.state.ak.us)

Jack C. West  
Director, Business Development  
U.S. Filter, Consumer Products Group  
88 Old Wagon Road  
Bedford Corners, New York 10549  
Tel.: +1 914-241-8441  
Fax: +1 914-666-6978  
E-mail: [jackwest@compuserve.com](mailto:jackwest@compuserve.com)

**INTERNATIONAL ORGANIZATIONS**

**COUNCIL OF THE EUROPEAN UNION/  
GENERAL SECRETARIAT**

Paul Reiderman  
Administrator  
Council of Ministers of the European Union  
Rue de la Loi 175  
B- 1048 Brussels  
Belgium  
Tel.: +32 2 285 8563  
Fax: +32 2 285 7928

**EUROPEAN COMMISSION**

Marie-Ange Balbinot (Head of Delegation)  
 Administrator  
 EC Codex Coordinator  
 European Commission  
 Directorate General III - Industry  
 Rue d'Arlon 88, 3/55  
 B-1049 Brussels  
 Belgium  
 Tel.: +32 2 295 07 63  
 Fax: +32 2 296 09 51  
 E-mail: Marie-ange.balbinot.dg3.cec.be

**(ISDC) INTERNATIONAL SOFT DRINK COUNCIL**

Alain Beaumont  
 Secretary General  
 UNESDA-CISDA  
 Boulevard St. Michel 77-79  
 B- 1040 Brussels  
 Belgium  
 Tel.: +32 2 743 40 50  
 Fax: +32 2 732 51 02  
 E-mail: mail@unesda-cisda.org

Michel Pépin  
 Scientific and Regulatory Affairs Manager  
 Coca-Cola France  
 11, rue Leblanc  
 B.P. 25  
 F-75513 Paris  
 France  
 Tel.: +33 1 40 60 27 25  
 Fax: +33 1 40 60 29 99  
 E-mail: mpepin@eur.ko.com

**UNION EUROPEENNE  
 ET GROUPEMENT INTERNATIONAL  
 DES INDUSTRIES DES EAUX  
 MINERALES NATURELLES ET DES  
 EAUX DE SOURCE (UNESSEM-  
 GISEMES)**

Françoise de Buttet  
 Secrétaire générale GISEMES  
 10, rue de La Trémoille  
 F- 75008 Paris  
 France  
 Tel.: 00 33 1 47 203110  
 Fax: 00 33 1 47 202762  
 E-mail: francoise.debuttet@wanadoo.fr

**WORLD HEALTH ORGANIZATION  
 (WHO)  
 ORGANISATION MONDIALE DE LA  
 SANTÉ (OMS)  
 ORGANIZACION MUNDIAL DE LA  
 SALUD (OMS)**

Gerald Moy  
 Food Safety Scientist  
 World Health Organization  
 CH- 1211 Geneva  
 Switzerland  
 Tel.: +41 22 791 36 98  
 Fax: +41 22 791 48 07  
 E-mail: [moyg@who.ch](mailto:moyg@who.ch)

James Bartram  
 Scientist  
 Water, Sanitation and Health Unit  
 World Health Organization  
 CH-1211 Geneva  
 Tel.: +41 22 791 35 37  
 Fax: +41 22 791 41 59  
 E-mail: [bartramj@who.ch](mailto:bartramj@who.ch)

**JOINT FAO/WHO SECRETARIAT**

Jeronimas Maskeliunas  
 Joint FAO/WHO Food Standards Programme  
 FAO  
 Viale delle Terme di Carcalla  
 00100 Rome, Italy  
 Tel.: +39 06 570 53 967  
 Fax: +39 06 570 54 593  
 E-mail: [jeronimas.maskeliunas@fao.org](mailto:jeronimas.maskeliunas@fao.org)

Yukiko Yamada  
 Joint FAO/WHO Food Standards Programme  
 FAO  
 Viale delle Terme di Carcalla  
 00100 Rome, Italy  
 Tel.: +39 06 570 55 443  
 Fax: +39 06 570 54 593  
 E-mail: [yukiko.yamada@fao.org](mailto:yukiko.yamada@fao.org)

## APPENDIX II

**PROPOSED DRAFT GENERAL STANDARD FOR PACKAGED (BOTTLED) WATERS  
OTHER THAN NATURAL MINERAL WATERS  
(Returned to step 3 of the Codex procedure)**

**1. SCOPE**

This standard applies to all waters other than natural mineral waters as defined in CODEX STAN 108-1981 (Rev. 1-1997), that are filled into containers and are suitable for human consumption.

**2. DESCRIPTION****2.1 PACKAGED WATERS**

Packaged waters, other than natural mineral waters, are waters for human consumption and may contain minerals, naturally occurring or intentionally added; may contain carbon dioxide, naturally occurring or intentionally added; but shall not contain added sugars, sweeteners, flavourings or other foods.

**2.1.1 [Waters Defined by Origin]**

[text to be developed if necessary]

**2.1.1.1 Ground Waters**

[text to be developed]

2.1.1.1.1 *Artesian water* is water from a well tapping a confined aquifer in which the water level stands at some height above the top of the aquifer.

2.1.1.1.2 [*Spring water* is water derived from an underground formation from which water flows naturally to the surface of the earth. Spring water shall be collected at the spring or through a bore hole tapping the underground formation feeding the spring. There shall be a natural force causing the water to flow to the surface through a natural orifice. The location of the spring shall be identifiable.

Spring water collected with the use of an external force shall be from the same underground stratum as the spring, as shown by a measurable hydraulic connection using a hydrogeologically valid method between the bore hole and the natural spring, and shall have all the physical properties, before treatment, and be of the same composition and quality, as the water that flows naturally to the surface of the earth. If spring water is collected with the use of an external force, water must continue to flow naturally to the surface of the earth through the spring's natural orifice. Bottled water plants shall demonstrate, on request, to appropriate regulatory officials, using a hydrogeologically valid method, that an appropriate hydraulic connection exists between the natural orifice of the spring and the bore hole.]

OR

[*Spring water* is water fit for human consumption derived from an underground formation and not from a public or private community water supply, from which water may flow naturally to the surface of the earth. Spring water may be collected at the spring or through a bore hole tapping the underground formation. There may be a natural force causing the water to flow to the surface through a natural orifice. The geographic location of the underground formation shall be identifiable. Spring water should have a total dissolved solids range of <500 ppm.



In those cases, where a natural orifice exists, but the spring water is collected through a bore hole, it shall be from the same underground stratum as the spring, as shown by having the same physical properties, before treatment, and be of having the same composition and quality as the water that flows naturally to the surface of the earth. If spring water is collected with the use of a bore hole and a natural orifice exists, water may continue to flow naturally to the surface of the earth through the spring's natural orifice.]

**Well water** is water from a hole bored, drilled, or otherwise constructed in the ground which taps the water of an aquifer.

[2.1.1.1.4 **Mineral water**]

[text to be developed if it is determined as necessary]

### Surface Waters

[text to be developed]

[2.1.1.2.1 **Glacial (Glacier) Water** is (1) the runoff directly from the natural melting of ice of a glacier; or (2) water obtained from the melting of glacier ice at a bottled water operation.]

### 2.1.1 Prepared Waters

[Prepared waters are waters that have been substantially altered so that their composition is no longer characteristics of the defined origins. They have been rendered fit for human consumption or have passed through community water supply or have had the composition significantly changed.]

**2.1.2.1 [Water with added minerals or mineralized table water]** is prepared water with minerals added according to the provisions in the Codex General Standard For Food Additives (CODEX STAN 192-1995, Rev.1-1997).

## 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 TREATMENT AND HANDLING

**3.1.1. Collection of ground waters:** The conditions in which ground waters such as artesian, spring and well water are collected must not modify the physical properties, composition or quality of the water prior to the treatments.

**3.1.2 Transportation:** Transportation of water from extraction or collection points to bottling facilities, if necessary, shall be conducted in a way that does not have any significant effect on the safety and the characteristic composition of the transported water. Relevant provisions of the [Draft] Code of Hygienic Practice for the Transport of Foodstuffs in Bulk and Semi-Packed Foodstuffs and [Draft] Code of Hygienic Practice for Packaged (Bottled) Drinking Waters (Other Than Natural Mineral Waters)<sup>7</sup> apply.

**3.1.3 Forms of treatment:** Safe and suitable chemical, physical, thermal, and anti-microbial treatments are permitted. These treatments can be used singly or in combination as multiple barriers. Any anti-microbial treatments applied to waters defined by origin (Section 2.1.1) shall not significantly alter the composition of the water in so far as this relates to the characteristics of its origin.

For ground water, protected from external influences as defined in the [Draft] Code of Hygienic Practice for Packaged (Bottled) Drinking Waters (Other than Natural Mineral Waters), the need for treatment, the type and degree, are defined in accordance with Section 5 (5.1) of the [Draft] Code.

---

<sup>7</sup> Being developed by the Codex Committee on Food Hygiene.

### 3.2 ADDITIONAL REQUIREMENTS FOR WATER DERIVED FROM GROUND FORMATION

Waters derived from ground formation (artesian, spring or well water) must not be under the direct influence of the surface water.

Some waters derived from ground formations (artesian, spring or well water), as extracted from their geological source, may contain high levels of some undesirable minerals as iron, sulphur compound and the substances listed in Section 3.3.

The water supply may be treated to selectively remove these undesirable elements.

### 3.3 HEALTH-RELATED LIMITS FOR CERTAIN SUBSTANCES

No bottled water shall contain any constituent in quantities that may be injurious to health. Bottled water shall not contain more than the following amounts of the substances indicated hereunder:

Substance	Maximum Limit
3.3.1 Antimony	0.005 mg/l
3.3.2 Arsenic	0.05 mg/l, calculated as total As
3.3.3 Barium	1 mg/l
3.3.4 Borate	5 mg/l, calculated as B
3.3.5 Cadmium	0.003 mg/l
3.3.6 Chromium	0.05 mg/l, calculated as total Cr
3.3.7 Copper	1 mg/l
3.3.8 Cyanide	0.07 mg/l
3.3.9 Fluoride	See Section 6.2.2
3.3.10 Lead	0.01 mg/l
3.3.11 Manganese	2 mg/l
3.3.12 Mercury	0.001 mg/l
3.3.13 Nickel	0.02 mg/l
3.3.14 Nitrate	50 mg/l, calculated as nitrate
3.3.15 Nitrite	0.02 mg/l as nitrite
3.3.16 Selenium	0.05 mg/l

**3.3.17** For any other chemical substances, the World Health Organization's most recent *Guidelines for Drinking Water Quality* may be used as a guide.

## 4. HYGIENE

**4.1** It is recommended that the products covered by the provisions of this standard shall be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev 3-1997) and the [Draft] Code of Hygienic Practice for Packaged (Bottled) Drinking Waters (Other Than Natural Mineral Waters).

**4.2** The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

#### [4.3 APPROVAL OF THE WATERS DEFINED BY ORIGIN

*Approval of the water origin* must be based upon a field inspection of the source and the recharge zone that shall demonstrate the integrity of the source and safety of the catchment operations consistent with the local regulatory requirements.]

#### 5. PACKAGING

The product shall be packed in sealed retail containers suitable for preventing the possible adulteration or contamination of water and shall be in accordance with the applicable sections of the [Draft] Code of Hygienic Practice for Packaged (Bottled) Drinking Waters (Other than Natural Mineral Waters)<sup>8</sup>.

#### 6. LABELLING REQUIREMENTS

In addition to the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991), the following provisions shall apply:

##### 6.1 THE NAME OF THE PRODUCT

[6.1.1 The name of the product shall be the appropriate term as defined in Section 2.1.

6.1.2 Water containing carbon dioxide that emerges from the source and is packaged directly with its entrapped gas or from which the gas is mechanically separated and later reintroduced at a level not higher than naturally occurring in the water, may bear on its label the words *naturally carbonated* or *naturally sparkling*.

6.1.3 Packaged water which contains carbon dioxide at levels than those naturally occurring in the source of the product shall be labelled with the words *carbonated, carbonation added, or sparkling*.

##### 6.2 ADDITIONAL LABELLING REQUIREMENTS

6.2.1 *Mineral content:* If the content of total dissolved substances of the water is below 500 ppm, or if it is greater than 1,500 ppm, the statement "Low mineral content", or a similar term or the statement "High mineral content", or a similar term respectively, may appear on the principal display panel following the statement of identity.

If labelling indicates the amount of specific minerals present in the product, the label shall describe the amount in mg/l.

6.2.2 *Fluoride:* Packaged water containing added fluoride shall be labelled "Fluoridated water". Any water that is called fluoridated water shall contain not less than 0.8 mg/l fluoride ion. If the product contains more than 1 mg/l of fluoride, the following term shall appear on the label as part of, or in close proximity to, the name of the product or in the otherwise prominent position : "Contains fluoride". In addition, the following sentence should be included on the label: "The product is not suitable for infants and children under the age of seven years" where the product contains more than 2 mg/l fluorides.

6.2.3 *Geographic location:* The geographic location may be indicated on the label for artesian, spring or well water.

6.2.4 *Water from water distribution system:* When drinking water is supplied by a public or private tap water distribution system, the wording "From a public or private distribution system" must appear along with the name of the product on the front of the main label.

---

<sup>8</sup> Being developed by the Codex Committee on Food Hygiene.

### **6.3 LABELLING PROHIBITIONS**

Claims concerning medical (preventive, alleviative, or curative) effects relating to the health of the consumer, in respect of the properties of the product covered by the standard, may be made only in accordance with the Codex General Standard for Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991), as amended.

The way in which labels on packaged water are presented must not cause confusion with other categories of water, particularly natural mineral water, as defined in the Standard for Natural Mineral Waters (CODEX STAN 108-1981, Rev. 1-1997).]

### **7. METHODS OF ANALYSIS AND SAMPLING**

To be developed for endorsement by the Codex Committee on Methods of Analysis and Sampling.