

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)⁷ 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.

⁷ 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)⁸.

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.

⁸ 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.