Model Bottled Water Code

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* Yellow highlights indicate change since last Model Code
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[Indicates “The Food Safety Enhancement Program” terminology, if different]

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Disclaimer

The CBWA Model Code has been written and updated by industry experts and the Technical Committee of the Canadian Bottled Water Association.

Adopting the standards and recommendations contained within the Code does not guarantee that a bottler’s quality and food safety programs will meet all regulatory and industry standards. Ongoing assessment and management of legal and regulatory requirements, and food safety risks are the responsibilities of the individual plants.

To the full extent allowed by law, the CBWA excludes liability for any loss arising through adoption or implementation of provisions in the CBWA Model Code.

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Introduction

The **Canadian Bottled Water Association** (CBWA) is the trade association for the bottled water industry in Canada. CBWA member companies produce and distribute about 85 percent of the bottled water sold in Canada.

The CBWA is also the Canadian chapter of the International Council of Bottled Water Associations.

**Mission**
The CBWA supports and promotes bottled water as a healthy, safe, and convenient food product. CBWA members are committed to environmentally responsible practices.

**Objective**
The CBWA and its members educate, inform, and encourage dialogue between the industry, government, consumers, and other stakeholders.

**Members**
The CBWA members are Canadian bottled water companies, and equipment manufacturers, distributors, suppliers, and others who wish to join the association. There are four categories of members:

1. Bottler
2. Distributor
3. Supplier
4. Associate

As a condition of membership, all bottler members must undergo an **annual, unannounced** plant inspection by an independent, internationally recognized third-party organization. The inspections cover all areas of plant operations from source to finished product, and they ensure that CBWA bottler members meet both the federal and the association’s strict requirements for the production and sale of bottled water.

The Model Code covers Canadian federal regulations and CBWA industry standards. For details on provincial or territorial regulations, we recommend visiting their website and/or contact a provincial or territorial representative.

Should your company wish to become a member, please contact CBWA as listed below:

**For more information, contact:**

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CBWA Model Code

The Canadian Bottled Water Association, its membership, Board of Directors, and Technical Committee have prepared this Model Code for Bottled Water. It is designed to be used as a model for “regulation” or “legislation” of the Canadian Bottled Water Association.

The CBWA Model Code is a living document and under ongoing revisions. This document may not reflect the most recent update. Contact the CBWA office to receive the most recent Model Code. Regulations and standards are subject to change between Model Code revisions. All information is current as of [INSERT DATE]. It is up to each company to ensure compliance to regulations within the market product is to be sold.

The Model Code is intended to provide the reader with a brief overview of the various regulatory requirements and industry best practices for bottled water production in Canada.

Note: The CBWA technical documents are based on FSEP. Items within FSEP that do not apply to the bottled water industry, have been removed from all technical documents including (1) Model Code, (2) CPO Program, (3) Audit Handbook, and (4) Bottled Water Food Safety Practices. (See Appendix D)

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The CBWA has also developed supporting programs to assist bottlers in the compliance to the CBWA Model Code and to improve the safety and quality of bottled water manufactured and sold in Canada. These programs include:

- CBWA Food Safety Practices
- CBWA Certified Plant Operator (CPO) Training
- CBWA Plant Audit Handbook

For questions about the Model Code, please contact:

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1. Definitions and Product Designations

Bottled water is water sold to consumers in sealed containers. It must, therefore, be sealed in a sanitary container and must meet all applicable federal and provincial regulations for drinking water.

Bottled water cannot contain sweeteners or chemical additives and must be calorie and sugar free.

There are many different types of bottled water. The CBWA offers the following definitions to help you in your selection and to guide you on how the words or terms listed below are used within this document. Other definitions may appear in other CBWA documents and are based on the content of each specific document.

TIP – Reference the CBWA Food Safety Starter’s Guide for more definitions.

1.1. "Accredited Laboratory": means a laboratory that holds a valid accreditation certificate to prove it has been recognized to be proficient in the use of methodologies for the analysis of drinking water, as determined by criteria established by government agencies or third-party laboratory certification agencies using ISO 17025 standards for good laboratory practice.

1.2. "Approved Source": when used in reference to a bottled water plant’s product water or water used in the plant’s operations, means the water source has been inspected and the water sampled, analysed, and found of a safe and sanitary quality with or without treatment. Approval shall be obtained and maintained in accordance with section 4.2 and 4.11. The bottler shall maintain in the plant a current certification or notification of approval from the applicable provincial agency which shall constitute approval of the source, and which shall be available for inspection by the applicable provincial agency, and a copy of which shall be made available to consumers upon request.

1.3. "Approved Supplier Program": a set of procedures implemented by the facility to assure the safety and quality of incoming goods and services. It may be based on safety risk presented by the raw material or based on historical performance or prior history of the supplier.

1.4. “Blended Waters”: packaged waters from more than one geographic location of source may be blended.

1.4.1. Mineral water and spring water from different sources are permitted to be blended “Mineral Water / Eau minerale” and “Spring Water / Eau de source” may be used as part of the common name provided that:

1.4.1.1. Common name indicates the product is a blend,

1.4.1.2. The mineral water or spring water meet the standards as prescribed in Division 12 (B.12.001) of the Food and Drug Regulation prior to blending and the product is not subsequently been subjected to modifications or treatments not permitted by the standard,

1.4.1.3. The quantity of mineral water and spring water are presented in a way that would not mislead the consumer about the composition. For example, by using an accompanying statement declaring the amount of mineral or spring water in the product.

1.5. "Bottled Water": means water that is packaged in a sealed container and is offered for sale for human consumption.

1.6. "Bottled Water Plant": means any place or establishment in which bottled water is prepared for sale.
1.7. “Certified Plant Operator (CPO)”: a CBWA food safety and quality control technical training program offered to member companies. This program is designed to ensure that each bottling facility has at least one operator that has received the adequate training and qualification to safely operate a bottled water facility. Refer to Appendix D.

1.8. “Conveyance or equipment” The FSEP phrase “conveyance or equipment” is not specifically defined in the Safe Food for Canadians Act nor in the Safe Food for Canadians Regulations (SFCR). In general terms, “conveyance or equipment “ when used in Part 4 – Preventive Controls of the SFCR, refers to anything that is used within the establishment to transport or manufacture, prepare, store, package, or label food.

1.9. “Critical Control Point (CCP)”: is a point, step or procedure at which control can be applied and a food safety hazard can be prevented, eliminated, or reduced to acceptable levels.

1.10. “Facility” means a building, place or location used for manufacturing of bottled water.

1.11. “Food and Drugs Act (FDA)”: Canadian federal government enforceable regulations that deal with health, safety and economic fraud with respect to food, drugs, cosmetics and medical devices. Health Canada is responsible for establishing standards for the safety and nutritional quality of all foods sold in Canada. The department exercises this mandate under the authority of the Food and Drugs Act and pursues its regulatory mandate under the Food and Drug Regulations.

1.12. “Food and Drug Regulations (FDR)”: set out requirements for the manufacture, packaging, labelling, storage, importation, distribution and sale of foods, and prescription and non-prescription drugs in Canada. All health and safety standards under the Food and Drug Regulations are enforced by the Canadian Food Inspection Agency (CFIA). The Agency is also responsible for the administration of non-health and safety regulations concerning food packaging, labelling and advertising.

1.13. “Food Safety Enhancement Program (FSEP)”: The FSEP is the Canadian Food Inspection Agency’s approach to support the development, implementation, and maintenance of HACCP systems. An FSEP is one example of a Preventive Control Plan (PCP) and, if developed prior to the SFCR it needs to be reviewed against the preventive control requirements of the SFCR. A second example of a PCP is the CBWA Food Safety Practices program (see Note below).

Note: The CBWA technical documents were originally based on FSEP. Items within FSEP that do not apply to the bottled water industry, have been removed from all technical documents including (1) CBWA Bottled Water Model Code, (2) CBWA CPO Program, (3) CBWA Audit Handbook, and (4) CBWA Bottled Water Food Safety Practices.

1.14. “Good Manufacturing Practices (GMP)”: These are practices that prevent and minimize the biological, chemical, and physical contamination of bottled water during treatment, packing, storage and transportation.

1.15. “Ground Water”: means water from a subsurface saturated zone that is under a pressure equal to or greater than atmospheric pressure. Ground water must not be under the direct influence of surface water.

1.16. “Hazard Analysis Critical Control Points (HACCP)”: is a risk-based system that identifies, evaluates and controls hazards that are significant for food safety. It establishes control systems that focus on prevention rather than relying mainly on end-product testing.

1.17. “May”: is generally used to indicate a permissive provision, ordinarily implying some degree of discretion.
1.18. **“Natural Water”**: shall be water obtained from an underground or approved natural source or sources.

1.18.1. Shall, at the time of bottling, maintain the same general composition and characteristics as that of the water at the point(s) of collection.

1.18.2. Shall not be obtained from a public community water system.

1.18.3. May have been treated with ozone or other acceptable and suitable disinfection processes.

1.18.4. May have been treated to remove or reduce the concentration of dissolved gases or undissolved solids.

1.18.5. May have been treated to remove or reduce the concentration of unstable and undesirable substances.

1.18.6. Shall be free, at emergence without treatment, from exogenous organisms or harmful substances.

1.18.7. Shall comply, at emergence without treatment, with Maximum Allowable Concentrations as defined in the Guidelines for Canadian Drinking Water Quality.

1.18.8. Shall, in the case of underground sources, have at emergence without treatment, a stable concentration, due account being taken of the cycles of natural fluctuations, of the major minerals.

1.18.9. Permitted “Standard of Identity” for natural waters shall be labelled as one of the following categories as applicable:

1.18.9.1. **Glacial or Glacier Water**

   1.18.9.1.1. Shall be water collected from glacial melt water, and

   1.18.9.1.2. Shall maintain the same consistent composition of the major minerals and characteristics as that of the proglacial stream at the point of emergence.

1.18.9.2. **Spring Water**

   1.18.9.2.1. Shall be water collected from an underground source from which water may flow naturally to the surface of the earth. Spring water may be collected at natural emergence or with the use of a borehole.

   1.18.9.2.2. May have a Total Dissolved Solids (TDS) content at any level.

1.18.9.3. **Mineral Water**

   1.18.9.3.1. Shall be water collected from an underground source from which water may flow naturally to the surface of the earth. Mineral water may be collected either at a natural emergence or with the use of a borehole.

   1.18.9.3.2. Shall have a minimum content of 250mg/L Total Dissolved Solids (TDS)
1.18.10. Shall be additionally labelled with the following qualifiers where applicable:

1.18.10.1. “Natural” – When the water has met the conditions of items 1.18.1. – 1.18.9.

1.18.10.2. “Carbonated” or “Sparkling” - When the original carbonation level has been supplemented to make the water effervescent.

1.18.10.3. “Naturally Carbonated” or “Naturally Sparkling” – When the water contains at the time of bottling the same level of carbon dioxide as that which naturally occurs at emergence.

1.19. “Operator” means any person who operates a bottled water plant and has completed the CBWA Certified Plant Operator (CPO) program (see definition of Certified Plant Operator)

1.20. “Packaged Water Other Than Natural Waters”:

1.20.1. Shall be water obtained from an approved source or sources.

1.20.2. May be obtained from a public community water system.

1.20.3. May be significantly modified in its composition or characteristics through safe and suitable processes.

1.20.4. Processing may include ozone, or chlorine and any safe and suitable antimicrobial agents or processes.

1.20.5. Processing may include reduction or removal of dissolved gasses or undissolved solids.

1.20.6. Processing may include reduction or removal of unstable substances.

1.20.7. Shall, as packaged, comply with Maximum Allowable Concentrations as defined in the Guidelines for Canadian Drinking Water Quality, as required within the CBWA Bottled Water Model Code.

1.20.8. Permitted “Standard of Identity” for Packaged Water other than natural waters shall be labelled as one of the following categories as applicable within the CFIA Labelling Requirements for Prepackaged Water and Ice.

1.20.8.1. Demineralized Water

Treatment used can be processed, such as: reverse osmosis, deionization, and any other approved treatment.

1.20.8.2. Distilled Water

Treatment includes vaporisation and condensation. Can be called “Demineralized”, or “Distilled”.

1.20.8.3. Re-mineralized Water

May have a total dissolved solids (TDS) content at any level.
1.20.8.4. “Drinking”
Optional qualifier in front of “water” in the common name (e.g., “distilled drinking water”, “demineralized drinking water”. “Drinking” does not add or distract from consumer understanding.

1.20.9. Shall be additionally labelled with the following qualifiers where applicable, as required by Labelling Requirements for Prepackaged Water and Ice:

1.20.9.1. “Carbonated” or “Sparkling” – when carbon dioxide has been added to make the water effervescent.

1.20.9.2. Fluoridated Water

Shall have a content of added fluoride not to exceed 1.0 mg/L.

1.21. "Plant Operator": means any person who operates a bottled water plant, and who meets the requirements of section 3.1.2 and 3.1.3.

1.22. “Prerequisite Programs”: basic conditions and activities that are necessary to maintain a hygienic environment and good manufacturing practices throughout the establishment.

1.23. “Preventive Control Plan (PCP)”: Written document that demonstrates how hazards and risks to food products are identified and eliminated or reduced to an acceptable level. Includes GMPs and PRPs in addition to HACCP. A PCP is the government's new terminology for a Food Safety Plan. FSEP and the CBWA's Food Safety Practices program are examples of a PCP. You are responsible for ensuring that your written PCP meets the requirements of the SFCR.

1.24. “Process Water”: water used during the manufacture of bottled water for bottle rinsing, sanitation, or other routine activities.

1.24.1. Backflow preventer is required to prevent service water from contaminating the product water.

1.25. “Safe Food for Canadians Act (SFCA)”: the purpose is to make food safer for Canadians. The Canadian Food Inspection Agency (CFIA) that oversees food safety was originally created under the Food and Drug Act.

1.26. “Safe Food for Canadians Regulations (SFCR)”: generally applies to food for human consumption (including ingredients) that is imported, exported, or inter-provincially traded for commercial purposes. Some of the traceability, labelling and advertising, and grading provisions also apply to intra-provincially traded foods.

1.27. “Service Water” means any water supply or source other than product water.

1.28. “Shall” means an imperative command, usually indicating that certain actions are mandatory, and not permissive.

1.29 “Standard of Quality (SOQ)”: means is based on the standards applicable to bottled water as set out by the Guidelines for Canadian Drinking Water Quality.
1.30. **“Significant Processes”:** processes that change the basic make-up of the water.

   1.30.1. Reverse Osmosis
   1.30.2. Distillation
   1.30.3. Nanofiltration
   1.30.4. Ultrafiltration
   1.30.5. Deionization
   1.30.6. Water Softening
   1.30.7. Coagulation
   1.30.8. Mineralization *(includes change of pH)*
   1.30.9. Granular Activated Alumina Filtration (Zeolite Treatment)
   1.30.10. Including future approved technical processes

1.31. **“Unannounced Plant Inspection”:** means a minimum notice of 5 business days of facility inspection to ensure all required staff are available.
2. General Operation Requirements for Water Bottling Plants

[General & Program Responsibilities]

A summary of the food safety and operational requirements for a bottled water facility is given in this section.

The requirements described below are intended to provide a high-level overview of the requirements for operating a bottled water facility. The requirements outlined in this document are not inclusive of all operational requirements. More detailed information regarding operational requirements may be found in the CBWA CPO Training documents. The CPO Training program is designed to ensure that each bottling facility has at least one operator that has received the adequate training and qualification to safely operate a bottled water facility. See Appendix D- II.

The CBWA Plant Audit Handbook has been developed to assist bottlers in preparation for the annual CBWA plant audit. The Plant Audit Handbook also details operational requirements for a bottled water facility. See Appendix D- III.

The CBWA in its continuous pursuit for progress in the area of food safety in the product produced by its members, has adapted a HACCP (Hazard Analysis and Critical Control Points) system as the focus to increase food safety of bottled water sold in Canada. The "CBWA Food Safety Practices" has been developed by the CBWA through the Technical Documents Working Group is comprised of industry experts.

Note: The CBWA technical documents were originally based on FSEP. Items within FSEP that do not apply to the bottled water industry, have been removed from all technical documents including (1) Model Code, (2) CPO Program, (3) Audit Handbook, and (4) Food Safety Practices.

There is also a requirement for the development and implementation of a facility-specific FSEP (See Section 2.1. – 2.5.). The requirements for a complete FSEP are described in detail with the “CBWA Food Safety Practices” and the CBWA HACCP Plan Model”. Note: Reference this document for more guidance on how to develop and implement.

2.1. When a bottled water plant is utilizing a treatment technology in order to reduce the level of any constituent in its source water below the Guidelines for Canadian Drinking Water Quality and the Food and Drug Act Division 12 - Pre-packaged Water and Ice, or to prevent a contaminant from entering the product water in amounts that exceed the Guidelines for Canadian Drinking Water Quality and the Food and Drug Act Division 12 - Pre-packaged Water and Ice, said treatment shall be operated in accordance with good manufacturing practices as set out by each provincial jurisdiction and the Canadian Food Inspection Agency, whichever is more stringent, and shall be properly maintained with supporting records (which shall be kept at the plant for five years) in accordance with the requirements and schedule of the Operation and Maintenance Plan. All bottled water shall be packaged and stored in accordance with the Canadian Food Inspection Agency good manufacturing practices and any other GMP regulations prescribed by the applicable provincial laws.

2.2. If, and when an applicable provincial or federal program is established, no person shall operate a bottled water plant or bottled water for the purpose of sale or distribution without first obtaining a permit demonstrating that the source, bottling facility, treatment and bottling practices, and product water meet the requirements of this law and regulations adopted there under.

2.3. All establishments bottling water for export or intra-provincial trade need to obtain a license through the CFIA as required by the SFCR. This license authorizes the business to conduct the identified activities and enables CFIA to know who the persons are and communicate directly with them, to ensure compliance with the PCP requirements under the SFCR.
2.4. For bottled water imported from outside Canada, the establishment must also obtain a license through the CFIA as required by the SFCR. Any bottled water that is imported must have been manufactured, prepared, stored, packaged, and labelled in a manner and under conditions that provide at least the same level of protection as that provided by section 47 to 81 of the SFCR.

2.5. As a condition of CBWA membership and annually thereafter, the bottler shall receive a plant inspection each calendar year demonstrating compliance with the Good Manufacturing Practices, HACCP programs, and Operational Requirements of this Model Code. Said inspection shall be conducted by a third-party inspection organization approved by the CBWA while meeting current Federal and Provincial regulations. The bottler shall provide to CBWA corrective actions for any non-conformances identified during said inspection.

Also refer to:
● CBWA CPO Online Program
● Plant Audit Handbook
3. Preventative Control Plan Elements [Preventative Controls]

3.1. Prerequisite Programs

The CBWA Bottled Water Model Code incorporated all FSEP items that apply to bottled water food safety manufacturing. All items that do not apply to bottled water have been removed. Items in [brackets with blue text] refers to specific areas and terminology used within the FSEP manual, “The Food Safety Enhancement Program approach to a preventive control plan”. If more details are required for your facility-specific bottled water operation, please refer to the FSEP manual.

The Prerequisite Programs include the following:

3.1.1. Premises

3.1.1.1. Buildings and surroundings are designed, constructed, and maintained in a manner to prevent conditions that may result in the contamination of bottled water.

“Premises” includes all elements in the building and building surroundings: the outside property, roadways, drainage, building design (construction and maintenance), lighting, ventilation, product flow, sanitary facilities (employee facilities and hand washing stations), and water quality, protection, and supply.

3.1.1.2. The bottled water product is bottled in an enclosed filling room/chamber that is under positive pressure of filtered air; and using facilities and Good Manufacturing Practices as outlined by the Canadian Food Inspection Agency Guidelines that comply with the requirements of Health Canada and the applicable Provincial Health authorities.

Also refer to:
- Source Water Quality Monitoring – Section 4
- The CBWA Food Safety Practices – Prerequisite Program (A) Premises
- CBWA CPO Online Program
- Plant Audit Handbook

3.1.2. Transportation, Purchasing, Receiving, Shipping and Storage [FSEP: Food Conveyances, Purchasing, Receiving, and Storage]

3.1.2.1. The establishment ensures that incoming materials (raw materials, ingredients, packaging materials, food, and non-food chemicals) are from approved suppliers. Material shall be transported, received, stored, and handled in a manner to prevent chemical, physical, or microbiological contamination. Once received, effective measures are taken by the establishment to prevent contamination of materials. Where required, the establishment obtains certificates of analysis and/or letters of guarantee to ensure that its purchasing specifications are being met and that the incoming material shall not be the source of contamination.

3.1.2.2. Raw (source) water shall not be transported or stored in bulk tanks used for any non-food product.
3.1.2.3. **Bulk Water**

Bulk water shall refer to water intended for potable uses which is transported via tanker truck or equivalent means from one area to another for the purpose of treatment, packaging, and human consumption.

Bulk water sources shall be approved by the provincial agency having local jurisdiction and maintained for sanitary quality at all times. Bulk water shall be loaded, transported, and unloaded in a sanitary manner to ensure the overall safety and quality of the bottled water product.

Other requirements for bulk water include, but are not limited to:

3.1.2.3.1. Use of materials that are food-grade, smooth, non-absorbent, and easily cleanable (such as stainless steel).

3.1.2.3.2. Use of dedicated tankers and equipment.

3.1.2.3.3. Proper cleaning and disinfection capacity.

3.1.2.3.4. Securing openings with appropriate filters (e.g., use of manhole cover gaskets and safety seals)

3.1.2.3.5. Water sampling and testing ports.

3.1.2.3.6. Record keeping

Also refer to:

- The **CBWA Food Safety Practices - Prerequisite Program (B) Transportation, Purchasing, Receiving and Storage** [*FSEP: Food Conveyances, Purchasing, Receiving, and Storage*]
- CBWA CPO Online Program
- Plant Audit Handbook

### 3.1.3. **Equipment** [*Conveyances and Equipment in the Establishment*]

3.1.3.1. Equipment used in the establishment are designed, constructed, and installed so as to ensure that they can be adequately cleaned, disinfected, and maintained to avoid the contamination of product. The establishment has a documented equipment maintenance program and calibration program.

3.1.3.2. Dedicated Equipment

Bottled water shall not be processed or bottled through equipment or lines used for any non-food product.

3.1.3.3. Multi-Food Equipment

In order to minimize the potential for microbiological contamination of the finished product, bottled water shall not be transported, stored, processed, or bottled in or through lines or equipment through which has passed milk, fruit juice, or other food products likely to contribute nutrients for microbial growth, unless said lines, equipment, or holding tanks have been cleaned in accordance with the following.
Bottled water may be processed through lines or equipment used also for other food products under conditions including, but not limited to equipment cleaning and sanitizing procedures.

Any alternate cleaning, rinsing, or sanitizing operations or processes shall be consistent with the guidelines of the Canadian Food Inspection Agency Guidelines.

Also refer to:
- Sanitation – Section 3.1.5.
- The CBWA Food Safety Practices - Prerequisite Program
- CBWA CPO Online Program
- Plant Audit Handbook

3.1.4. Personnel

3.1.4.1. The personnel program ensures that employees follow safe food handling and hygiene practices. The establishment has and, implements a documented:

3.1.4.1.1. Technical Training Program which includes, but is not limited to:

a. Prerequisite Programs
b. HACCP
c. CBWA Certified Plant Operator (CPO)

3.1.4.1.2. General Food Hygiene Program which includes, but is not limited to:

a. Good Manufacturing Practices, and
b. Procedures for visitors and contractors,

3.1.4.2. A bottled water plant shall be operated under the supervision of a competent person qualified by experience, education, and training to operate and maintain the plant's facilities. Said person shall hold a CBWA Certified Plant Operator (CPO) certificate. See Appendix D.

Also refer to:
- The CBWA Food Safety Practices - Prerequisite Program (D) Personnel
- CBWA CPO Online Program
- Plant Audit Handbook

3.1.5. Sanitation & Pest Control

3.1.5.1. The objective of the sanitation and pest control program is to ensure that the facilities and equipment are clean and that pests are prevented and excluded from the establishment. The establishment has and implements a documented sanitation program and pest control program.

3.1.5.2. Sanitation activities may include, but are not limited to:

3.1.5.2.1. Cleaning and sanitizing procedures.
3.1.5.2.2. Housekeeping and sanitation procedures required during operations.

3.1.5.2.3. Pre-operational inspection procedures.

3.1.5.2.4. Environmental monitoring (e.g.: air, contact surface).

3.1.5.2.5. Corrective actions to be taken for non-compliant situations. The sanitation schedule/frequency for all equipment, and for all areas that, if not kept in a clean/sanitary condition, would have a negative effect on food safety within the establishment.

Records to be kept:

3.1.5.2. Pest control activities may include, but are not limited to:

3.1.5.2.1. Controlling pest control substances

3.1.5.2.2. Licensing of personnel

3.1.5.2.3. Training and direction of pest control operators

3.1.5.2.4. Approved baits and chemicals

3.1.5.2.5. Documentation of pest control activities

3.1.5.2.6. Managing pest control devices

3.1.5.2.7. Corrective actions to be taken for non-compliant situations.

Records to be kept:

3.1.5.3. Procedures and records for the sanitation and pest control activities for coolers are required. This includes, but is not limited to:

3.1.5.3.1. Procedures or detailed records and documenting the process each cooler undergoes during refurbishing and sanitizing.

3.1.5.3.2. Fumigating, inspecting each unit for pests prior to entry into the plant.

Records of inspections for pests.

Also refer to:
- Source Water Quality Monitoring – Section 4
- The CBWA Food Safety Practices - Prerequisite Program (E) Sanitation & Pest Control
- CBWA CPO Online Program
- Plant Audit Handbook
3.1.6. **Product Traceability & Recall**

3.1.6.1. The recall program outlines the procedures that the establishment must implement in the event of a recall. The objective of the establishment's written recall program is to ensure that, once a food product has been identified as unsafe, it is rapidly and efficiently removed from distribution. The establishment has and implements a documented traceability program which includes, but is not limited to, product coding, labelling, raw and packaging material usage logs. The recall and traceability program must be tested periodically to validate its effectiveness (e.g.: mock recall). The establishment must be capable of tracing the product one step back to the immediate supplier and one step forward to the immediate customer.

3.1.6.2. Recall and Traceability activities include, but are not limited to:

3.1.6.2.1. Development of recall and trace procedures

3.1.6.2.2. Appointment of a recall team

3.1.6.2.3. Development of procedures for product coding and labelling

3.1.6.2.4. Raw (source) and packaging material usage logs

3.1.6.2.5. Conducting mock recalls and trace exercises to test the effectiveness of the recall plan.

3.1.6.3. Each bottled water plant operator shall develop and maintain procedures for the notification of the applicable provincial agency CBWA, and consumer notification regarding product recall, and shall implement any said procedure as necessary with respect to any product for which the operator or applicable provincial agency or Health Canada knows or has reason to believe circumstances exist that may adversely affect its safety for the consumer. In order to facilitate product identification or recall, each bottled water product shall contain a code that is designed to remain affixed to the container or (non-removable) closure during use and which contains either the date of manufacture, or a lot or batch number.

3.1.6.4. If the applicable provincial and/or federal agency determines, based upon representative samples, risk analysis, information provided by the bottled water supplier, and other information available to the applicable provincial or federal agency, that the circumstances present an imminent hazard to the public health and that a form of consumer notice or product recall can effectively avoid or significantly minimize the threat to public health, the applicable provincial or federal agency may order the water supplier to initiate a level of product recall approved by the applicable provincial or federal agency or, if appropriate, issue a form of notification to customers. The bottled water supplier shall be responsible for disseminating the notice in a manner designed to inform customers who may be affected by the problem. Product recalls shall conform to the procedures and policies of the appropriate provincial agency and Health Canada.

Also refer to:
- Labelling Requirements – Section 3.3.1.
- The CBWA Food Safety Practices - Prerequisite Program (F) Recall
- CBWA CPO Online Program
- Plant Audit Handbook

3.1.7. **Operational Prerequisite Programs**
3.1.7.1. Allergens, Food Additives, Processing Aids

3.1.7.1.1. Unlike microbial hazards, there is no lethality or post processing step that will reduce or eliminate the presence of undeclared allergens in food products. Allergen hazard control is dependent on prevention throughout the process as well as appropriate product labelling to ensure full disclosure of a product’s contents.

In deciding whether a requirement for allergen control is necessary or appropriate, an establishment must conduct a risk assessment and the result of the assessment must be recorded.

3.1.7.1.2. Where the allergen risk assessment has identified the presence of an allergen, management activities shall include, but are not limited to:

a. Appointment of an allergen control team

b. Development of an allergen control program

3.1.7.1.3. Food additives are regulated in Canada under the Food and Drug Regulations. All permitted food additives and their conditions of use are listed in the tables in Division 16 of the Regulations. Each authorized food additive has been rigorously evaluated by scientists from Health Canada. The authorized food additives do not pose a hazard to the health of the consumers if used according to the regulations.

The addition of vitamins and minerals to food in Canada is controlled by the Food and Drug Regulations and on food fortified with certain nutrients, and to levels specified in the Regulations, may be sold in Canada. The food manufacturers must control the addition of vitamins and minerals to ensure that consumers receive the nutrients they need but are not exposed to levels that are dangerously high.

3.1.7.1.4. The food chemicals considered as processing aids are evaluated and approved by Health Canada. These food chemicals do not pose a hazard to the health of consumers if used according to the conditions of use approved by Health Canada. The food manufacturers are responsible to ensure that the conditions of use are respected.

Also refer to:
- The CBWA Food Safety Practices - Prerequisite Program (G) Allergen Control Program
- CBWA CPO Online Program
- Plant Audit Handbook
3.1.7.2. Foreign Material Control Program

To prevent the contamination of your product with foreign materials the establishments need to have procedures on:

3.1.7.2.1. design and construction criteria for all equipment, overhead structures, and the facility to mitigate potential hazardous extraneous materials from contaminating the product

3.1.7.2.2. handling and control of glass, brittle plastic, and or other similar materials which present a risk of breakage

3.1.7.2.3. visual inspections of empty bottles

3.1.7.2.4. the use of wood where wood cannot be avoided (exp. pallet inspection program)

3.1.7.2.5. the maintenance and inspection of monitoring equipment (such as filters, sieves, screens, etc.) used to detect and remove foreign materials which describes: the mesh and/or gauge size of the filters, sieves or screens, and how the tasks are performed and their frequency.

3.1.7.2.6. when filters, sieves or screens are found to be defective, the potential for contamination of products shall be assessed and appropriate action taken.

3.2. HACCP Plan

All bottled water plants shall develop and implement a plant specific HACCP plan. This plan shall:

- Follow the “CBWA HACCP Plan Model” or equivalent.
- Require that an active HACCP team be developed and maintained; and
- Be reviewed at least annually.

The requirements for a complete food safety program are described in detail in the “CBWA Food Safety Practices” and the “CBWA HACCP Plan Model”.

The CBWA HACCP Plan Model analyses water and materials for potential food safety hazards in two ways:

3.2.1. Product Ingredients and Materials

Water, packaging material and processing ingredients necessary for bottled water.

3.2.2. Process Steps

Each step in the process is reviewed for potential food safety hazards. A process step is any operation such as receiving, storing, filtering, ozonation, bottle washing and filling. The overall process starts at receiving of material and ends at shipping. A process flow diagram is used to identify each step in the process and guide the hazard analysis.
Health Canada has introduced the Safe Food for Canadian Regulations. There may be additional programs required at your facility under this act. Ensure to review the program and what will apply to your manufacturing and distribution systems. Included may be licensing, preventative controls, exporting food etc.

The CBWA HACCP Plan Model is a generic document. Each facility must develop and implement a HACCP plan specific to their operations.

**Note:** Reference the CBWA Food Safety Practices for more guidelines on how to develop and implement a food safety program.

Also refer to:
- The CBWA Food Safety Practices
- CBWA CPO Training Material
- Plant Audit Handbook

### 3.3. Market Fairness Requirements

The SFCA, section 89(1)(a) and (b) require description on the measures applied to meeting consumer protection requirements that apply to bottled water for:

- Labelling
- Packaging
- Grading
- Standards of Identity
- Net Quantity

Measures ensure the labels applied to bottled water are accurate, legible, and not misleading. These measurements are required in a PCP to meet applicable market fairness provision of the Safe Food for Canadians Regulations which are the food labelling, standards, and grades requirement. Refer to CFIA’s Labelling, Standards of Identity and Grades website page for addition information and the Industry Labelling Tool.

#### 3.3.1. Labelling Requirements

**3.3.1.1.** CBWA requires all members to comply with all requirements of the Canadian Food Inspection Agency on Labelling Requirements for Prepackaged Water and Ice.

**3.3.1.1.1.** Non-refillable Containers or refillable containers of less than 11 L capacity:

The following information shall appear in conspicuous and prominent type size and colour on the container:

- **a.** Commercial Name (Brand Name)
- **b.** Product Designation (Common Name) as defined in Section 1.
3.3.1.1.2. The following information shall appear in conspicuous and prominent type size and colour on any part of the container, but not on the closure on the container.

a. If a Glacial Water, Spring Water, or Mineral Water, the geographical location of the source or sources if a blended water.

b. The name and address of the bottler or of the entity responsible for the sale or distribution of the product.

3.3.1.1.3. The following information shall appear in legible type and colour on any part of the container, but not on the closure on the container.

a. The lot number, which indicates at minimum date, time, and line of production.

3.3.1.2. Refillable Containers of 11 L capacity or more:

3.3.1.2.1. The following information shall appear in legible type and colour on any part of the container, but not on the closure on the container.

a. The Commercial Name (Brand Name)

3.1.1.2.2. The following information shall appear in conspicuous and prominent type size on any part of the container (including solely on the closure):

a. Net Volume (in metric value)

b. Product Designation as defined in Section 1.

c. If a Glacial Water, Spring Water, or Mineral Water, the geographical location of the source.

d. Name and address of the bottler or of the entity responsible for the sale or distribution of the product.

e. Total Dissolved Solids content.

f. Total Fluoride content

g. The lot number shall appear in any part of the container including the side of the closure and shall indicate at minimum: date, time, and line of production.

Note: For lot code applications on the side of the caps, only laser jet print or ink-jet approved for direct food contact shall be used.
3.3.1.3. Nutrition Labelling

33.1.3.1. Mineral water, spring water and water are exempt from Nutrition Facts tables when all the required core nutritional information be declared as zero.

   a. This exemption may not apply in all cases due to sodium, potassium, or mineral content of some water.

   b. Nutrition labelling exemption may be lost in certain situations, such as when a voluntary claim (e.g., “sodium-free”) is made on the label.

33.1.3.2. Common names such as “Demineralized Water”, “Mineral Water” or the presence of other information required by Labelling Requirements for Prepackaged Water and Ice (such as the declaration of Total Fluoride content) do not cause a loss of exemption from nutrition labelling.

**Note:** Refer to Safe Food for Canadians Regulations for updates.

3.3.1.4. Principal Display Panel

It is acceptable for the cap/lid to be used as the principal display panel for large bottles of water, such as 11 L bottles, that are displayed on their side.

3.3.1.5. Additional Labelling Provisions

33.1.5.1. Front of Package Nutrition Labelling

   A front-of-package nutrition symbol is required on foods that are high in one or more of these nutrients:

   a. Sodium

   b. Sugars

   c. Saturated fat

   The food industry has been given until January 1, 2026, to make this change. However, you may start seeing the front-of-package nutrition symbol earlier.

Additional labelling provisions must also be observed as regulated by the Canadian regulation and other applicable regulations that apply. Also refer to Section 3.7. Traceability & Recall.

**Note:** Reference the CBWA Food Safety Practices for more guidelines on how to develop and implement a food safety program.

Also refer to:
- The CBWA Food Safety Practices
- CBWA CPO Online Program
- Plant Audit Handbook
3.3.1.6. Packaging Requirements

Package must be clean, and suitable for its intended use, and free from odours that might affect the food. It is the responsibility of the food seller (manufacturer, distributor) to ensure the safety of packaging material and compliance with the regulations.

Letters expressing favourable opinions called "no objection letters" can be used by the recipients to assure their prospective customers that the products they are selling have been evaluated by the Food Directorate and deemed acceptable, from a chemical safety standpoint, for use in specified food packaging applications. However, it is important to note that such letters do not constitute approvals in a legal sense and do not relieve the food sellers of their responsibilities under Section B.23.001 of the Food and Drug Regulations.
4. **Source Water Quality and Monitoring**

4.1. **Approved Source Water**

4.1.1. All bottled water shall be from an approved source and should meet the standard of quality prescribed by the CBWA Model Code Appendix A, which is based on the Guidelines for Canadian Drinking Water Quality.

**Note:** Select undesirable components can be removed to improve the quality without affecting the standard of identity. (See section 1.18.9.)

4.2. **Source Water Monitoring**

Approval of the source water product derived from a source other than a public water supply must be based upon a field inspection of the source and a review of information prepared by a professionally qualified hydrogeologist that shall demonstrate the integrity of the source and safety of the catchments operations and that report shall include:

4.2.1. An evaluation of the chemical, physical, microbiological, and radiological characteristics of the source.

4.2.1.1. Annual analysis of chemical and physical parameters

4.2.1.2. Radiological characteristics every 4 years.

4.2.1.3. Microbiological testing frequency: refer to Water Testing Frequency Summary Table in Section 5.

4.2.2. A report on the regional geology surrounding the site and the specific site geology. A description of the vertical and horizontal extent of the source aquifer using existing data. The information will be used to define the recharge area of the aquifer, or in the case of regional aquifers, the zone of influence of the subject source.

4.2.3. A report detailing the development of the source; the method of construction including spring design, well installation, surface catchments, and intake structures; and transmission facilities as appropriate.

4.2.4. A watershed survey of the recharge area or zone of influence of the subject source that identifies and evaluates actual and potential sources of contamination, and which shall be updated every three years, including any reported discharge that may affect the source. See item 6.4.

4.2.5. Based on the findings in item 4.2.4., a plan for special monitoring of any significant contaminant source and for taking restrictive preventive or corrective measures as appropriate to protect the source water.

4.2.6. The bottler shall have available a hydrogeological survey of the source (based on the hydrogeological report specified in item 4.1. of this section) and shall update the survey as required by provincial or other regulations. Surveys shall be prepared by a professionally qualified hydrogeologist demonstrating the integrity of the source, which shall include:

4.2.6.1. Watershed surveillance consists of an inspection of portions of the drainage area necessary to identify and evaluate actual and probable sources of contamination.
4.2.6.2. Evaluation of source construction and protection, and where appropriate, intake structures, and transmission facilities.

4.2.7. The facility shall be responsible for sampling and analysis of all approved non-municipal sources for the contaminants specified in item 4.2. of this section. Such monitoring of non-municipal sources shall be performed at least annually by an accredited laboratory.

4.2.8. In lieu of annual source monitoring required by this section, a plant operator using a public water system as its source may obtain and display a certificate from said system demonstrating that the public water system conducts the monitoring required by this section.

4.2.9. Where a bottled water plant operator or regulatory agency knows or has reason to believe that a contaminant not otherwise monitored is present in the source water because of a spill, release of a hazardous substance, or otherwise, and its presence would create a potential health hazard to consumers, the plant operator upon receipt of such information shall monitor the source water for said contaminant and conduct applicable action(s) as necessary.

4.2.10. Detection of contaminant(s) in source monitoring required pursuant to this section shall be followed immediately by a program of periodic monitoring to confirm its presence. If such listed regulated contaminant(s) is confirmed to be present in the source water at a concentration that exceeds Appendix A of the Model Code, or applicable provincial regulations for drinking water, the facility shall employ appropriate treatment techniques to remove or to reduce the contaminant as listed in Appendix A and shall employ a program of periodic monitoring until the source water complies.

4.2.11. Total coliform analysis of source water (including municipal sources used as source water) shall be performed at least once per week by an approved laboratory.

4.2.12. Total coliform analysis of source water (including municipal sources used as source water) shall be performed daily in-house by qualified plant personnel.

4.2.13. Total coliform analysis process water shall be performed in-house at least once per week by qualified plant personnel.

4.2.14. Total coliform analysis of bulk water transported via tanker truck or equivalent means shall be performed in-house at least once per week by a qualified plant personnel.

4.2.15. Records of the sampling and analysis shall be maintained on file at the plant for not less than five years and shall be available for official review upon request of the applicable provincial or federal agency.

4.2.16. Bottled water, originating from a source not protected from surface contamination, shall be subjected to ozonation, filtration rated at one micron “absolute”, or another effective process, which removes or inactivates the cysts of the parasites *Giardia* and *Cryptosporidium*.

Also refer to:
- Section 3.1.1. – Premises
- CBWA CPO Online Program
- Plant Audit Handbook
5. **Finished Product Quality and Monitoring**

5.1. **Product Quality**

5.1.1. All bottled water products shall meet the CBWA chemical, physical, and microbiological standard of quality prescribed by this Model Code attached as Appendix A.

5.1.2. All bottled water products shall be free of coliform bacteria, including *E. coli*. If any laboratory results indicate the presence of coliform organisms, the bottler shall immediately implement and comply with the confirmation and response procedure described in Appendix B of this Model Code.

5.2. **Finished Product Monitoring**

To assure that bottled water complies with item 5.1 Product Quality (above), the following product monitoring, using representative samples from each lot derived from the bottled product, shall be performed:

5.2.1. For microbiological contaminants (i.e., total coliform) a representative sample from a batch or segment of a continuous production for each type of bottled water produced by the plant (e.g., spring water, distilled water) shall be collected and analysed. Such analyses shall be performed daily in-house by qualified personnel and weekly by an approved laboratory.

*Note:* Include most recent microbiological testing results in the annual analysis report.

5.2.2. For chemical, physical, and radiological contaminants, a representative sample from a batch or segment of continuous production run for each type of bottled drinking water produced by the plant shall be collected and analysed annually.

5.2.3. Product water other than demineralized water or non-ozonated water shall be analysed for Bromate on a quarterly basis.

5.2.4. All require quarterly and annual product water analysis shall be performed by an accredited laboratory.

5.3. Records of required sampling and analysis shall be maintained at the plant not less than five years and shall be available for official review upon request of the applicable provincial agency.

5.4. A bottler who knows that the Standard of Quality has been exceeded or has reason to believe that circumstances exist which may adversely affect the safety of bottled water, including but not limited to source contamination, spills, accidents, natural disasters, or breakdowns in treatment, shall notify the applicable provincial and federal agency promptly.

5.5. Where the Standard of Quality has been exceeded but circumstances, including risk analysis and representative samples, indicate that the violation of the Standard of Quality has been promptly corrected and that already-distributed product will not cause illness and presents no significant health risk, a recall and media notification of consumers may [may not] be necessary. In such circumstances where a recall or media notification is unnecessary but where there may be significant consumer complaints of product taste or odour, the applicable provincial or federal agency may order the bottler to communicate the exceedance of the Standard of Quality and the implementation of corrective measures by direct mailings to affected customers.
## Water Testing Frequency Summary Table

<table>
<thead>
<tr>
<th>Water Type and Sample Location</th>
<th>TEST TYPE &amp; FREQUENCY</th>
<th><em>HPC</em></th>
<th>Chemical &amp; Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source water (natural)</td>
<td>Daily in house AND weekly at accredited laboratory (4.2.9. &amp; 4.2.10.)</td>
<td>** N/A</td>
<td>Annual, accredited laboratory (1.1.)</td>
</tr>
<tr>
<td>Source water (municipal)</td>
<td>Daily in house AND weekly at accredited laboratory (4.2.8. &amp; 4.2.9.)</td>
<td>** N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Process water</td>
<td>Weekly in house (4.2.10.)</td>
<td>** N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tanker delivery</td>
<td>Weekly in house (4.2.12.)</td>
<td>Weekly in house</td>
<td>N/A</td>
</tr>
<tr>
<td>Raw and product water storage tanks</td>
<td>Weekly in house</td>
<td>Weekly in house</td>
<td>N/A</td>
</tr>
<tr>
<td>Finished product</td>
<td>Daily in house AND weekly at accredited lab (5.2.1)</td>
<td>** N/A</td>
<td>Annual, accredited laboratory (5.2.2)</td>
</tr>
<tr>
<td>Finished product (other than demineralized)</td>
<td>Daily in house AND weekly at accredited lab (5.2.1)</td>
<td>** N/A</td>
<td>Bromate, quarterly testing (5.2.5)</td>
</tr>
<tr>
<td>Containers (immediately prior to filling) and closures (immediately prior to application)</td>
<td>Quarterly (CBWA Plant Audit Handbook)</td>
<td>** N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Dispensing equipment (refurbishing)</td>
<td>Quarterly (CBWA Plant Audit Handbook)</td>
<td>** N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*- HPC: Heterotrophic Plate Count
** - No specified limits. Results are typically used for trending and indication purposes only.
## Appendix A

### Monitoring Matrix

**CBWA Model Code Monitoring Requirements**

(All results in mg/L except as noted)

<table>
<thead>
<tr>
<th>Monitoring Parameter Group</th>
<th>Monitoring Frequency</th>
<th>SOQs, MACs, IMACs, and Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inorganic Chemicals (IOCs)</strong> (3)</td>
<td>Annually</td>
<td>FDA SOQ</td>
</tr>
<tr>
<td>Antimony</td>
<td>(Produce &amp; Source)</td>
<td>0.006</td>
</tr>
<tr>
<td>Arsenic</td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td>Barium</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Beryllium</td>
<td></td>
<td>0.004</td>
</tr>
<tr>
<td>Cadmium</td>
<td></td>
<td>0.005</td>
</tr>
<tr>
<td>Bromate (1)</td>
<td>For items with footnote (1), see D/DBP Rule Monitoring Requirements</td>
<td>0.01</td>
</tr>
<tr>
<td>Chlorine (Total Residual) (1)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chloramine (1)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chlorine dioxide (1)</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Chlorite (1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chlorate (1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chromium</td>
<td>0.1</td>
<td>0.05</td>
</tr>
<tr>
<td>Cyanide</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Fluoride</td>
<td>1.5 (2)</td>
<td>1.0</td>
</tr>
<tr>
<td>Lead</td>
<td>0.005</td>
<td>0.05 (5)</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Nickel</td>
<td></td>
<td>0.1</td>
</tr>
<tr>
<td>Nitrat (as nitrogen-N)</td>
<td>10</td>
<td>10 (6)</td>
</tr>
<tr>
<td>Nitrite (as nitrogen-N)</td>
<td>1</td>
<td>1 (6)</td>
</tr>
<tr>
<td>Total Nitrate + Nitrite</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Selenium</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Thallium</td>
<td></td>
<td>0.002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Inorganic Parameters</th>
<th>Annually</th>
<th>FDA SOQ</th>
<th>CDWG MAC</th>
<th>CBWA SOQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>(Produce &amp; Source)</td>
<td>NR</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Bicarbonate (as HCO3)</td>
<td>(Required in Quebec)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boron</td>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Bromide</td>
<td></td>
<td>see D/DBP Rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloride</td>
<td>NR AP&lt;250</td>
<td>250**</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>1</td>
<td>1**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>None</td>
<td>0.3**</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Manganese</td>
<td>(Required in Quebec)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td></td>
<td>NR</td>
<td>0.025</td>
<td>0.025</td>
</tr>
<tr>
<td>Sodium</td>
<td>Specific Conductance</td>
<td>µS/cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulphate</td>
<td>None</td>
<td>250** (7)</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>None</td>
<td>500**</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>SP&lt;5</td>
<td>5**</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix A

### Monitoring Matrix

**CBWA Model Code Monitoring Requirements**

(All results in mg/L except as noted)

<table>
<thead>
<tr>
<th>Monitoring Parameter Group</th>
<th>Monitoring Frequency</th>
<th>SOQs, MACs, IMACs, and Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volatile Organic Chemicals (VOCs)</strong></td>
<td>Annually</td>
<td>FDA SOQ</td>
</tr>
<tr>
<td>1,1,1-Trichloroethane (Produce &amp; Source)</td>
<td>0.2</td>
<td>0.03</td>
</tr>
<tr>
<td>1,1,2-Trichloroethane</td>
<td>0.005</td>
<td>0.003</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>0.007</td>
<td>0.014</td>
</tr>
<tr>
<td>1,1-Dichloroethylene</td>
<td>0.07</td>
<td>0.009</td>
</tr>
<tr>
<td>1,2,4-Trichlorobenzene</td>
<td>0.005</td>
<td>0.005*</td>
</tr>
<tr>
<td>1,2-Dichloroethane</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Azinphos-methyl</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>Benzene</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>Carbon tetrachloride (tetra chloromethane)</td>
<td>0.002</td>
<td>0.005</td>
</tr>
<tr>
<td>Chlorobenzene</td>
<td>0.005</td>
<td>0.002</td>
</tr>
<tr>
<td>Cis-1,2-Dichloroethylene</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>trans-1,2-Dichloroethylene</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.14**</td>
<td>0.0024</td>
</tr>
<tr>
<td>Methyl tert-Butyl Ether (MTBE)</td>
<td>0.015 (AO)</td>
<td>0.015 (AO)</td>
</tr>
<tr>
<td>Methylene chloride (Dichloromethane)</td>
<td>0.005</td>
<td>0.05</td>
</tr>
<tr>
<td>Monochlorobenzene</td>
<td>0.1</td>
<td>0.08</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>0.6</td>
<td>0.20 (8)</td>
</tr>
<tr>
<td>p-Dichlorobenzene</td>
<td>0.075</td>
<td>0.005 (8)</td>
</tr>
<tr>
<td>Haloacetic Acids (HAAs) (1)</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>Styrene</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Tetrachloroethylene (PCE)</td>
<td>0.005</td>
<td>0.01</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.024**</td>
<td>0.024</td>
</tr>
<tr>
<td>Trichloroethylene (TCE)</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>Vinyl chloride</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>Xylenes (total)</td>
<td>For items with footnote</td>
<td>0.02AO**</td>
</tr>
<tr>
<td>m,p-Xylenes</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>o-Xylene</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Chlorodibromomethane</td>
<td>(1) see D/DBP Rule</td>
<td>Monitoring Requirements</td>
</tr>
<tr>
<td>Chloroform (Trichlorometname)</td>
<td></td>
<td>Page 33</td>
</tr>
<tr>
<td>Bromoform</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes (1)</td>
<td>0.08</td>
<td>0.1 (10)</td>
</tr>
<tr>
<td>Bromodichloromethane (BDCM)(1)</td>
<td>0.01</td>
<td>0.01</td>
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<table>
<thead>
<tr>
<th>Semi volatile Organic Chemicals (SVOCs)</th>
<th>Annually</th>
<th>FDA SOQ</th>
<th>CDWG MAC</th>
<th>CBWA SOQ</th>
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<tr>
<td>Benzo(a)pyrene (Product &amp; Source)</td>
<td>0.0002</td>
<td>0.00004</td>
<td>0.0004</td>
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<tr>
<td>Hexachlorobenzene</td>
<td>0.001</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hexachlorocyclopentadiene</td>
<td>0.0003</td>
<td>0.00004</td>
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<tr>
<td>Hexafluoropropylene oxied dimer acid (HFPO-DA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfluorooctanesulfonic acid (PFOS)</td>
<td>0.0006</td>
<td>0.0006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfluorooctanoic acid (PFOA)</td>
<td>0.0002</td>
<td>0.0002</td>
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<tr>
<td>Perfluorobutanesulfonic acid (PFBS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-Nitrosodimethylamine (NDMA)</td>
<td>Test every 5 years</td>
<td>0.00004</td>
<td>0.00004</td>
<td></td>
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</tbody>
</table>
## Appendix A
### Monitoring Matrix
#### CBWA Model Code Monitoring Requirements

(All results in mg/L except as noted)

### Synthetic Organic Chemicals (SOCs)

<table>
<thead>
<tr>
<th>Monitoring Parameter Group</th>
<th>Individual Group Analyses</th>
<th>Monitoring Frequency</th>
<th>SOQs, MACs, IMACs, and Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Annually</td>
<td>FDA SOQ</td>
</tr>
<tr>
<td>2,4,5-TP (Silver) (Product &amp; Source)</td>
<td></td>
<td></td>
<td>0.05</td>
</tr>
<tr>
<td>2,4-D (Dichlorophenoxy acetic acid)</td>
<td></td>
<td></td>
<td>0.07</td>
</tr>
<tr>
<td>Alachlor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aldicarb (Temik)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aldicarb total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aldicarb sulfone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aldicarb sulfoxide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aldrin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atrazine</td>
<td></td>
<td></td>
<td>0.003</td>
</tr>
<tr>
<td>Azinphos-methyl</td>
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<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Carbaryl</td>
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<td></td>
<td>0.09</td>
</tr>
<tr>
<td>Carbofuran</td>
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<td></td>
<td>0.04</td>
</tr>
<tr>
<td>Chlordane</td>
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<td></td>
<td>0.002</td>
</tr>
<tr>
<td>Chlorpyrifos</td>
<td></td>
<td></td>
<td>0.09</td>
</tr>
<tr>
<td>Cyanobacterial toxins</td>
<td>Risk assessment to determine testing frequency</td>
<td></td>
<td>0.0015</td>
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<tr>
<td>Dalapon</td>
<td></td>
<td></td>
<td>0.2</td>
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<tr>
<td>Di-(2-ethylhexyl)phthalate</td>
<td>(Known Lab Contaminant)</td>
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<td>0.006</td>
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<tr>
<td>Di-2-ethylhexyl)adipate</td>
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<td></td>
<td>0.4</td>
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<tr>
<td>Diazinon</td>
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<tr>
<td>Dibromochloropropane (DBCP)</td>
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<td>0.0002</td>
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<tr>
<td>Dicamba</td>
<td></td>
<td></td>
<td>0.12</td>
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<tr>
<td>Dieldrin</td>
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</tr>
<tr>
<td>Dimethoate</td>
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<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Dinosene</td>
<td></td>
<td></td>
<td>0.007</td>
</tr>
<tr>
<td>Endrin</td>
<td></td>
<td></td>
<td>0.002</td>
</tr>
<tr>
<td>Ethylene dibromide (EDB)</td>
<td></td>
<td></td>
<td>0.00005</td>
</tr>
<tr>
<td>Heptachlor</td>
<td></td>
<td></td>
<td>0.0004</td>
</tr>
<tr>
<td>Heptachlor epoxide</td>
<td></td>
<td></td>
<td>0.0002</td>
</tr>
<tr>
<td>Lindane (gamma-BHC)</td>
<td></td>
<td></td>
<td>0.0002</td>
</tr>
<tr>
<td>Malathion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methoxychlor</td>
<td></td>
<td></td>
<td>0.04</td>
</tr>
<tr>
<td>Metolachlor</td>
<td></td>
<td></td>
<td>0.05*</td>
</tr>
<tr>
<td>Metribuzin</td>
<td></td>
<td></td>
<td>0.08</td>
</tr>
<tr>
<td>Oxamyl</td>
<td></td>
<td></td>
<td>0.2</td>
</tr>
<tr>
<td>Paraquat</td>
<td></td>
<td></td>
<td>0.007</td>
</tr>
<tr>
<td>Parathion</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pentachlorophenol</td>
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<td>Plicloram</td>
<td></td>
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<td>0.5</td>
</tr>
<tr>
<td>Simazine</td>
<td></td>
<td></td>
<td>0.004</td>
</tr>
<tr>
<td>Toxaphene</td>
<td></td>
<td></td>
<td>0.003</td>
</tr>
<tr>
<td>Trifluralin</td>
<td></td>
<td></td>
<td>0.045</td>
</tr>
<tr>
<td>Dioxin (2,3,7,8-Tetrachlorodibenzo-p-dioxin “TCDD”)</td>
<td></td>
<td></td>
<td>3x10^4</td>
</tr>
<tr>
<td>Diquat</td>
<td></td>
<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Endothall</td>
<td></td>
<td></td>
<td>0.1</td>
</tr>
<tr>
<td>Glyphosate</td>
<td></td>
<td></td>
<td>0.7</td>
</tr>
<tr>
<td>Bromoxynil</td>
<td>Public Water Supply (PWS) used, test every 5 years</td>
<td></td>
<td>0.005</td>
</tr>
</tbody>
</table>
## Appendix A

### Monitoring Matrix

**CBWA Model Code Monitoring Requirements**

(All results in mg/L except as noted)

<table>
<thead>
<tr>
<th>Monitoring Parameter Group</th>
<th>Monitoring Frequency</th>
<th>SOQs, MACs, IMACs, and Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>GUIDELINE</td>
</tr>
<tr>
<td><strong>Water Properties</strong></td>
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<td></td>
</tr>
<tr>
<td>Individual Group Analyses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>Annually</td>
<td>5 Units</td>
</tr>
<tr>
<td>(Product and Source)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbidity</td>
<td></td>
<td>0.5 NTU</td>
</tr>
<tr>
<td>Odour</td>
<td></td>
<td>Inoffensive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Radiological Contaminants</strong></td>
<td></td>
<td>FDA SOQ</td>
</tr>
<tr>
<td>Gross Alpha ---------------</td>
<td></td>
<td>15 pCi/L (0.55 Bq/L)</td>
</tr>
<tr>
<td>Gross Beta</td>
<td></td>
<td>50 pCi/L (1.85 Bq/L)</td>
</tr>
<tr>
<td>Radium 226</td>
<td>When Gross Alpha</td>
<td>5 pCi/L (0.22 Bq/L)</td>
</tr>
<tr>
<td></td>
<td>Exceeds 0.22 Bq/L</td>
<td></td>
</tr>
<tr>
<td>Radium 228</td>
<td>When Gross Alpha</td>
<td>5 pCi/L (0.19 Bq/L)</td>
</tr>
<tr>
<td></td>
<td>Exceeds 0.19 Bq/L</td>
<td></td>
</tr>
<tr>
<td>Strontium-90</td>
<td>When Gross Alpha</td>
<td>8 pCi/L (0.3 Bq/L)</td>
</tr>
<tr>
<td></td>
<td>Exceeds 0.3 Bq/L</td>
<td></td>
</tr>
<tr>
<td>Radium 228</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When Gross Alpha</td>
<td>8 pCi/L (0.3 Bq/L)</td>
</tr>
<tr>
<td></td>
<td>Exceeds 0.3 Bq/L</td>
<td></td>
</tr>
<tr>
<td>Cesium-137</td>
<td>When Gross Alpha</td>
<td>8 pCi/L (0.3 Bq/L)</td>
</tr>
<tr>
<td></td>
<td>Exceeds 0.3 Bq/L</td>
<td></td>
</tr>
<tr>
<td>Iodine-131</td>
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<td></td>
</tr>
<tr>
<td>Lead-210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tritium</td>
<td>When Gross Alpha</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exceeds 1.0 Bq/L</td>
<td></td>
</tr>
<tr>
<td><strong>Microbiological Contaminants</strong></td>
<td></td>
<td>FDA SOQ</td>
</tr>
<tr>
<td>Total Coliform</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absence</td>
<td></td>
<td>Total Coliform: Zero organisms per 100 ml but no sample should contain more than 10 cfu. 1 out 10 with coliform OK but not consecutive samples. E. Coli: or thermoderlan t coliforms: zero</td>
</tr>
<tr>
<td>E. coli</td>
<td></td>
<td>MPN: &lt;2.2 / 100 mL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MF: &lt;4 ctu / 100 mL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No Escherichia coli detectable in a 100 ml portion/sample</td>
</tr>
</tbody>
</table>
Appendix A
Monitoring Matrix
CBWA Model Code Monitoring Requirements

Glossary of Acronyms:
FDA: US Food and Drug Administration
CDWG: Canadian Drinking Water Guidelines
SOQ: Standard of Quality
MCL: Maximum Contaminant Limit
MAC: Maximum Acceptable Concentrations
IMAC: Interim Maximum Acceptable Concentration
AO: Aesthetic Objective
mg/L: Milligrams per Litre
µg/L: Micrograms per Litre
ppm: Parts per Million
ppb: Parts per Billion
Example: 0.08 mg/L = 0.08 ppm = 80 µg/L = 80 ppb
TCU: True Colour Units
NTU: Nephelometric Turbidity Unit
pCi/L: Picocuries per Litre
Bq/L: Becquerel per Litre. A Becquerel (Bq) is the unit of activity of a radioactive substance, or the rate at which transformations occur in the substance. One Becquerel is equal to one transformation per second and is approximately equal to 27 picocuries (pCi).
MPN: Most Probable Number
MF: Membrane Filtration
CFU: Colony Forming Unit
D/DBP: Disinfectants/Disinfection By-Products

Footnotes:
(*) Indicates the Standard of Quality is an IMAC. (Interim Maximum Acceptable Concentration).
(**) Indicates the Standard of Quality is an AO. (Aesthetic Objective).
(1) Included in D/DBP rule. See D/DBP monitoring requirements on page 34, Appendix A for details.
(2) Fluoride, naturally occurring and/or added shall not exceed 1.0 mg/L SOR/80-633, s 3; SOR/82-768, s 35.
(3) 2° IECs are guidelines that are classified by the USEPA as Secondary Drinking Water Contaminants, i.e., aesthetic, not health-related, and non-enforceable.
(4) A health-based guideline for aluminium in drinking water has not been established. However, water treatment plants using aluminium-based coagulants should optimise their operations to reduce residual aluminium levels in treated water to the lowest extent possible as a precautionary measure. Operational guidance values of less than 100 µg/L total aluminium for conventional treatment plants and less than 200 µg/L total aluminium for other types of treatment systems are recommended. Any attempt to minimise aluminium residuals must not compromise the effectiveness of disinfection processes or interfere with the removal of disinfection by-product precursors.
(5) Because first-drawn water may contain higher concentrations of metals than are found in running water after flushing, faucets should be thoroughly flushed before water is taken for consumption or analysis.
(6) Equivalent to 10 mg/L as nitrate–nitrogen. Where nitrate and nitrite are determined separately, levels of nitrite should not exceed 3.2 mg/L.
(7) There may be a laxative effect in some individuals when sulphate levels exceed 500 mg/L.
(8) In cases where total dichlorobenzenes are measured and concentrations exceed the most stringent value (0.005 mg/L), the concentrations of the individual isomers should be established.
(9) The MAC for trihalomethane is expressed as a running annual average. It is based on the risk associated with chloroform, the trihalomethane most often present and in the greatest concentration in drinking water. The MAC is designated as interim until such time as the risks from other disinfection by-products are ascertained. The preferred method of controlling disinfection by-products is precursor removal; however, any method of control employed must not compromise the effectiveness of water disinfection.
(10) May contain added Fluoride ion to a maximum level of 1.0 mg/L.

Information current as of date of last revision listed
Appendix A
Monitoring Matrix
CBWA Model Code Monitoring Requirements
D/DBP Rule Monitoring Requirements

“Packaged Water other than Natural Waters” (PWNW) Sources

If current PWNW D/DBP data is available, no source water analysis is required.

If current PWNW D/DBP data is NOT available, ANNUAL testing for the following is required:

- Disinfectants: Chlorine, Chloramine, Chlorine dioxide
- Disinfection By-products: Bromate, Chlorite, Chlorate, Haloacetic acids (HAAs) and Total Trihalomethanes (TTHMs).

“Natural Water” Sources

If no disinfection is applied at source, including use in bulk water hauling, no source water analysis is required.

If disinfection is applied at the source, including use in bulk water hauling, ANNUAL testing for the following is required:

- The residual disinfectant used (Chlorine, Chloramine, Chlorine dioxide)
- Ozone: Bromate, Bromide, Haloacetic acids (HAAs) and Total Trihalomethanes (TTHMs).
- Chlorine-based disinfectants (chlorine, chloramine, or chlorine dioxide): Haloacetic acids (HAAs) and Total Trihalomethanes (TTHMs).

All Final Products

Testing on an annual basis is required for ALL of the following in each final product type:

- Chlorine
- Chloramine
- Chlorine dioxide
- Bromate
- Chlorite
- Chlorate
- Haloacetic acids (HAAs)
- Total Trihalomethanes (TTHMs)

QUARTERLY testing is required in each final product type for (except for demineralized water):

- Bromate
Appendix A
Monitoring Matrix
CBWA Model Code Monitoring Requirements
Emerging Contaminants

The CBWA recognizes the government of Canada’s ongoing review of emerging contaminants in water sources. For information only purposes, we recommend periodic review of the government of Canada’s official website for details on this topic of interest. (Links are provided below)

Water Quality Issues: Substances of Emerging Concern


Over the last few decades, new substances used in industrial processes and for the fabrication of consumer and pharmaceutical products are increasingly being detected in the environment. Among others, they can disrupt endocrine functions in wildlife. Environment and Climate Change Canada’s Water Quality Monitoring and Surveillance program assess the presence of various emerging substances and their levels in selected ecosystems.

Government of Canada: Latest news about the Chemicals Management Plan


Note: Testing for emerging contaminants is now a requirement as part of the CBWA Model Code (2022). PFOA, PFOS, PFBS, and HFPO-DA have been added to GCDWQ and shall be monitored annually by bottlers to confirm its absence from source/product water.
Appendix B

Escherichia coli (E. coli) and Total Coliform Standard and Policy

CBWA Standard of Product Quality

- No *Escherichia coli* detectable in a 100 ml portion/sample. No validated total coliform detectable in a 100 ml portion/sample as substantiated by retesting.

Procedure for Response to Coliform and *Escherichia coli* Testing Results

A representative unit of production for each package size shall be tested for total coliform (which includes *E. coli* in this group) during each daily production lot. If positive for total coliform, an *E. coli* determination is performed from that test. When a unit of production results in a positive result for coliform organisms by a total coliform method in an approved edition of *Standard Methods for the Examination of Water and Wastewater*, the following policy and procedure should be employed:

1. Immediately analyse 4 additional samples from the same production lot for total coliform. Also examine the original sample for presence of *Escherichia coli* (*E. coli*) by a method in Standard Methods.

2. Review sampling and analytical procedures to determine if the original sample contamination may have occurred due to sampling or laboratory error. If the review of sampling and analytical procedures demonstrates a source of contamination, such as contaminated media or analyst error, INVALIDATE results and proceed with total coliform analysis of five additional samples from the same lot using uncontaminated media and proper technique.

3. Company plant personnel should use the following guidelines for decisions on the disposition of the lot:
   a. If the original sample contained *E. coli*, conduct follow up actions pursuant to the company’s recall plan.
   b. If the re-sampling does not show *E. coli* or total coliform, consider the first sample an invalid result.
   c. If the original sample AND any of the additional four samples collected are positive for total coliforms or *E. coli*, consider the results valid and conduct follow up actions pursuant to the company’s recall plan.
Appendix C
CBWA Code of Environmental Stewardship

1) CBWA bottler members will respect the sustainability and durability of the aquifer from which they take water.

2) CBWA bottlers pledge, insofar as possible, to take part in the growth of the communities surrounding their water taking sites.

3) CBWA bottlers will cooperate with municipal authorities and neighbouring communities by sharing their expertise and knowledge of aquifer management.

4) CBWA bottlers scrupulously follow all environmental standards dictated by governmental authorities.

5) CBWA bottlers give as much importance to responsible management of the water resource as to responsible and consistent management of surface activities.

6) CBWA bottlers are responsible for managing their containers by refilling and/or ensuring they are recycled through cooperation with local recycling stewardship agencies.

7) CBWA bottlers use packaging that is high quality and recyclable.

8) CBWA bottlers will ensure that necessary plastics packaging is reusable, recyclable, or compostable, and to help keep all plastic items circulating in the economy and out of the natural environment.

9) CBWA bottlers will ensure an average of at least 30% recycled content across all plastic packaging (by weight) by 2025. Refillable, reusable PC packaging does not require recycled content.

10) CBWA bottlers will encourage alignment throughout the plastics value chain on effective policies and standards that will lead to a consistent regulatory environment.

11) CBWA bottlers will educate and encourage consumers to actively support a circular economy for plastics packaging to have them enthusiastically participate in recycling, reuse, and refill programs that have become both easy and ubiquitous.
The CBWA has developed supporting programs to assist bottlers in the compliance to the CBWA Model Code and to improve the safety and quality of bottled water manufactured and sold in Canada. These programs include:

I. CBWA Food Safety Practices

II. CBWA Certified Plant Operator (CPO)

III. CBWA Plant Audit Handbook

How they work together:
I. CBWA Food Safety Practices

The CBWA has produced CBWA Food Safety Practices documents, which include Generic Prerequisite Programs (including Good Manufacturing Practices) and a Generic HACCP Plan Model for the Canadian bottled water industry. The CBWA Food Safety documents are:

- **CBWA Food Safety Starter’s Guide**
  - Provides general guidance and high-level summary on food safety and the intended use of the CBWA documents.

- **CBWA Generic Prerequisite Programs**
  - Provides details on the requirements for Prerequisite Programs (Good Manufacturing Practices) and guidance on how to meet the requirements.

- **CBWA Generic HACCP Plan Model**
  - Provides a detailed example of completed HACCP Forms based on the bottled water process.

- **CBWA Prerequisite Programs Workbook**
  - May be used as a template or guideline to develop internal programs.

- **CBWA HACCP Workbook**
  - Provides guidelines on how to develop a plant specific HACCP Plan.

- **CBWA Facility Self-Assessment Checklists**
  - Checklists that may be used to identify the gaps between the generally accepted Prerequisite Programs (including Good Manufacturing Practices) & HACCP Plan requirements established by the CBWA and the current practices at the bottled water facility.

- **CBWA Food Safety Program Validation & Maintenance**
  - Provides guidelines on how to maintain and reassess internal programs and HACCP Plan(s).

- **CBWA Example Documents (SOP’s, Forms, Checklists)**
  - May be used as a template or guideline to develop internal procedures, forms, checklist, etc.

- **CBWA Optional Best in Class Programs**
  - These files may be used as templates or guidelines to develop programs currently required by internationally recognized food safety and quality programs as good business practices. These are not traditional prerequisite programs. However, these business practices provide support for the food safety program.
  - These are **optional** programs and are not required for compliance with the food safety program.
  - These programs are **not** within the scope of the CBWA Audit.
  - These programs provide guidelines to bottlers on current best in class business practices.
The “generic models” that are generalised food safety programs and HACCP plans designed specifically for bottled water facilities, based on realistic but hypothetical examples. The CBWA Generic models may be used as an example or guideline for developing a plant specific food safety program or HACCP plan. Food safety programs and HACCP plans must be developed with specific details appropriate to each facility and process. Therefore, the CBWA generic model should only be used as a guide when developing a food safety program or HACCP plan.

The CBWA Workbooks provide flexible templates for creating a Prerequisite Program and HACCP Plan for a water bottling plant. If there is an existing Bottled Water Safety Program or HACCP Plan, the workbooks may be used as a supplement or as a comparison document. The Workbooks are designed to be used along with the CBWA Generic Prerequisite Program and Generic HACCP Plan Model.

II. CBWA Certified Plant Operator (CPO) Training Program

The CBWA requires, as a condition of membership, that each bottler member have at least one full time employee that directs work at the facility, has obtained recognition by the CBWA as a Certified Plant Operator (CPO). The CBWA CPO Online Program has been developed to assist bottlers in preparation for the CBWA CPO exam. This online program is designed to ensure that each bottling facility has at least one operator that has received the adequate training and qualification to safely operate a bottled water facility. The CBWA CPO Online Program consists of 25 study modules, each with a short quiz to ensure the study material is understood. Once the modules are completed, an 80 questions final exam is required. Each participant will receive a Certified Plant Operator certificate following the final exam. The 25 modules cover:

Module 1: Introduction to CBWA Online CPO Program
Module 2: Certified Plant Operator (CPO) Training and Audit Program
Module 3: Bottled Water Regulations
Module 4: Standard of Identities, and Terms & Definitions
Module 5: Water Chemistry
Module 6: Water Microbiology
Module 7: Testing Methods
Module 8: Filtration
Module 9: Water Softening
Module 10: Deionization
Module 11: Reverse Osmosis (RO)
Module 12: Distillation
Module 13: Mineral Addition
Module 14: Disinfection
Module 15: Prerequisite Programs
Module 16: Premises
Module 17: Transportation, Receiving & Storage
Module 18: Bottled Water Equipment
Module 19: Bottled Water Facility Personnel
Module 20: Bottled Water Facility Sanitation & Pest Control (Part 1 & 2)
Module 21: Labelling and Recall
Module 22: Operational Prerequisite Programs
Module 23: Introduction to HACCP
Module 24: HACCP Plan
Module 25: Final Exam

The CBWA CPO Program includes training in the specific areas listed in the CPO training materials (Modules 1 - 25). Each CPO is required to maintain 18 Continuing Education Units (CEU) every three years to maintain their CPO status.
III. CBWA Plant Audit Handbook

The CBWA requires as a condition of membership that bottlers submit to an annual audit of their facilities. The Plant Audit Handbook has been developed to assist bottlers in preparation for their plant’s annual audit. The CBWA also provides the PAH to its audit contractor to assist them in interpreting the federal and CBWA requirements and their application to CBWA member bottled water plants.

The Plant Audit Handbook also serves to provide bottler members with the means to conduct a self-audit, an important part of any plant’s HACCP program, as well as a useful tool in preparing for annual inspections by customers and regulatory agencies.
Appendix E
Additional Resources
Bottled Water Information and Research Links

Note: Website content and address are subject to change.

Agriculture and Agri-Food Canada – Bottled Water Market

Canadian Food Inspection Agency (CFIA)
https://www.inspection.gc.ca/

Canadian Drinking Water Guidelines

CFIA – Food Safety Enhancement Program (FSEP)

CFIA – Industry Labelling Tool
https://inspection.canada.ca/food-label-requirements/labelling/industry/eng/1383607266489/1383607344939

CFIA – Labelling Requirements for Prepackaged Water and Ice
https://www.inspection.gc.ca/food-label-requirements/labelling/industry/prepackaged-water-and-ice/eng/1392050209634/1392050277168?chap=0

CFIA – Labelling, Standards of Identity and Grades
https://inspection.canada.ca/food-label-requirements/labelling/eng/1299879892810/1299879939872

CFIA - FSEP Food Requirements and Guidance (Preventive Control Plans)

Consumer Packaging and Labelling Act
https://laws.justice.gc.ca/eng/acts/C-38/

Consumer Packaging and Labelling Regulations

Federal-Provincial-Territorial Committee on Drinking Water (CDW) – Health Canada

Food and Drug Regulations

Food and Drugs Act

Government of Canada – Food, Nutrition, Safety, Bottled Water

Health Canada - Bottled Water, Making It Clear
Email CBWA (griswold@cbwa.ca) for an electronic copy. Health Canada archived the original file.

Health Canada Food and Drug Regulations

Health Canada – Frequently Asked Questions about Bottled Water

Health Canada Front of Package Nutrition Labelling

Safe Food for Canadians Act
Safe Food for Canadians Regulations

The Safety of Bottled Water, Health Canada (It’s your health)

Understanding the Safe Food for Canadians Regulations
6. Contact CBWA

For further information on how to obtain copies of CBWA documents, please contact CBWA at:

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Suite 617
Markham, Ontario, Canada L3R 6L3
Telephone: (416) 618-1763
Email: griswold@cbwa.ca
Website: www.cbwa.ca

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