



## **Bottled Drinking Waters other than Natural Mineral Water Certification Scheme**

(In accordance with MS 699:2004 Bottled drinking waters other than natural mineral water – Specification)

### **1) Introduction**

This product certification Scheme for bottled drinking water based on MS 699:2004 was developed by Malawi Bureau of Standards (MBS) Certification and Inspectorate Division (CID).

The MBS CID is therefore deemed the scheme owner in terms of ISO/IEC 17067 "Conformity assessment - Fundamentals of product certification and guidelines for product certifications schemes"

This product certification scheme was approved by the MBS management and reflects type 5 product certification scheme as described in ISO/IEC 17067:2013. It includes the following functions, activities and elements.

a) Selection including:

- 1) specified requirements for the products covered by the scope of the scheme,
- 2) elements of the production process to be assessed and of the management system to be audited,
- 3) determination activities, and the basis on which those activities be undertaken
- 4) sampling methods and frequency
- 5) requirements which the applicant/certified client has to fulfil in order to gain and maintain certification of the product and
- 6) any other certification requirements.

b) Determination: this certification scheme includes:

- 1) evaluation of the product,
- 2) assessment of the production process and audit of other elements of the client's management system critical to managing product conformity through document review and onsite assessment;
  - c) Review of the evaluation results, decision on certification and attestation of conformity
- d) Certification and control of the mark including:
  - 1) mark of conformity,
  - 2) publicity to applicants/certified clients,

- 3) misuse of certification and marks of conformity;
- e) Surveillance: this certification scheme includes:
  - 1) testing and inspection of product samples,
  - 2) assessment of the production process and audit of management system(s);
  - f) suspending and withdrawing a certification and
  - g) managing changes affecting certification

## **2) Requirements for product**

The requirements for the product specified in this product certification scheme are given in the Malawi Standard No. 699 of 2004 (MS 699:2004)- *Bottled drinking waters other than natural mineral water – Specification*

## **3) Scope**

This product certification scheme covers bottled drinking waters other than natural mineral water in accordance with MS 699:2004 and includes:

- 3.1 Pre-Requirements;
- 3.2 Application;
- 3.3 Assessment of the production processes;
- 3.4 Testing or inspection of samples of the product from the production facility;
- 3.5 Audit of the management system supporting the production processes; and
- 3.6 Surveillance procedures.

## **4) Pre-requirements:**

### **4.1 Registration**

An organization that intends to be certified on the MBS CID bottled drinking waters other than natural mineral water certification scheme shall have completed the compulsory registration process with the MBS in line with MS 699 under the Certification Marks Regulations of 2016.

### **4.2 Verification**

MBS CID reserves the right to verify the authenticity of any documents of certification submitted by an applicant.

## **5) Conformance/Compliance**

Before making application, and on an ongoing basis, the organization shall ensure that it meets the requirements of this product certification scheme.

## **6) Application**

MBS CID shall provide the applicant with all information necessary to understand and follow the rules for this certification scheme. These rules shall be publicly available. Application for certification shall be made on the prescribed form **MBS-CID-PR7.2-FM-01**

## **7) Application Review**

Once the application is received from the applicant, MBS CID shall confirm that the information provided by the applicant is clear and sufficient and, if not, shall request the applicant client for the necessary clarification or additional information. MBS CID shall also confirm that the applicant is registered and approved under the MBS compulsory scheme. If this has been satisfactorily

achieved, the applicant shall be subjected to the MBS CID certification processes which shall involve evaluation of the bottled water and auditing of the quality and production system of the applicant. In the event that MBS-CID has rejected the client application, MBS-CID shall formally communicate to the client stating the reasons.

## **8) Evaluation**

### **8.1. Evaluation plan**

8.1.1 From the information provided in the application, MBS CID shall confirm that it has the competence and capability to undertake the certification activities.

8.1.2 MBS CID shall prepare an evaluation plan setting out:

- a) confirmation of the product for which certification is sought– i.e. bottled drinking waters other than natural mineral water;
- b) confirmation of the requirements standard i.e. MS 699:2004;
- c) evaluation methods and procedures to be used where these are not specified in the standards;
- d) product samples and/or the sampling procedures required for evaluation;
- e) methods and procedures to be used when assessing the production process;
- f) coverage and the extent of the auditing of the management system;
- g) personnel and other resources, including outsourcing, to be used for the evaluation.

8.1.3 MBS CID shall advise the client of the plan, including any financial and timescale aspects required by the scheme, and ensure that the client has undertaken to complete the MBS-CID Certification Agreement **Form MBS-CID-PR4.1-01-FM-01**.

8.1.4 After confirmation of the acceptance of the application, MBS CID shall make the necessary arrangements with the applicant for the initial assessment in accordance with the evaluation plan.

8.1.5 Under this certification scheme, the following determination activities are used:

- a) initial testing and examination of the product;
- b) assessment of the production process; and
- c) audit of the elements of the management system that are critical to product conformity.

8.1.6 The certification body (MBS CID) shall be responsible for all actions included in the certification scheme, including sampling, testing, assessment of the production process, auditing of the management system, and surveillance of the certified product.

### **8.2 Initial product evaluation**

8.2.1 Product evaluation shall be carried out by MBS CID in accordance with the methods specified in MS 699:2004 and with the procedures specified by this scheme.

8.2.2 MBS CID testing facilities used in product evaluation shall meet the technical requirements of ISO/IEC 17025:2005 for the product being certified.

### **8.3 Assessment of the production processes**

8.3.1 The applicant shall designate a responsible person as the main contact with the certification body; and a person(s) with management responsibility for the technical performance of the production processes and management system. Note: This could be the same person.

8.3.2 The initial assessment of the production process shall include assessment through direct observation and examination of the production line and communicating with production personnel to demonstrate:

a) that the applicant has the necessary facilities, equipment, personnel and procedures for carrying out the tasks associated with producing bottled drinking waters other than natural mineral water in accordance with the requirements of MS 699:2004 and this product certification scheme. The applicant shall have or have access to a laboratory suitably equipped and staffed, where those tests given in MS 699:2004 shall be carried out in accordance with the methods given in the standard.

b) Records of tests and inspection shall be kept. Copies of any records and other connected documents that may be required by MBS CID shall be made available at any time on request.

c) that the applicant shall have the capability and competence to monitor, measure and test the product during and after production so as to assure conformity with the specific product requirements of MS 699:2004 and this product certification scheme;

d) that the applicant sampling and testing (whether it be in-house or outsourced) is undertaken in accordance with the requirements of MS 699:2004 and this product certification scheme;

e) All the testing equipment shall be periodically checked by client for continued suitability and records of calibration/ verification or both shall be maintained.

f) awareness of taking of samples by MBS CID and subsequent verification of test results or inspection reports by the certification body;

g) quality control of the product through the production process in accordance with the requirements of MS 699:2004 and this product certification scheme, from the receipt of inputs, through all transformation processes, through to dispatch of the completed products; and

h) the ability of the applicant to identify and quarantine nonconforming product and to maintain product traceability.

#### **8.3.3 Specific requirements for product and production processes**

a) Raw water - The water used in production of bottled drinking waters other than natural mineral water shall be initially tested for compliance with all chemical and biological requirements given in MS 214, for drinking water. When raw water is to be transported from its source to bottling or container filling facility, the transportation shall be conducted in hygienic manner that will prevent any contamination.

b) The untreated water to be used in the final product shall be tested for the constituents and parameters listed in column 1, at frequencies given in column 3 of table 1. Where the untreated water is received from a source of portable water (for example from municipal supply), the manufacturer shall not be

required to perform the tests provided the manufacturer is satisfied that its source can consistently deliver portable water.

c) When untreated water is tested in accordance with MS 677: Water quality – Microbiological methods, viable clostridium spores shall be absent.

d) Microbial tests shall be carried out within 24 hours of sampling of samples having been kept at less than 4°C for the period prior to testing.

e) if an initial survey indicated that the possibility of contamination of the source of water is high, the source of water shall be tested for the suggested contamination given in column 1 of table 2 of MS 699:2004 to check if the suitability of the source of water, using methods given in MS 677.

f) Hygienic conditions - The applicant/certified client shall follow the requirements of MS 21 *Food and food processing Units-Code of hygienic conditions*.

g) Permissible treatment- Safe and appropriate chemical, physical, and antimicrobial treatments shall be permitted. These treatments could be used singly or in combination.

h) The applicant shall conduct the tests/analysis on each lot of bottled water for chemical, physical and microbial constituents as per requirements of 5.2, 5.3 and 5.4 of MS 699:2004.

i) The sampling shall be done as per Annex B of MS 699:2004.

j) Bottles and Containers-Bottles and other containers including their handling shall comply with provisions of clause 6 of MS 699:2004

## **8.4 Packing**

8.4.1 Packaging of bottled water shall be done in accordance with clause 7.1 of MS 699:2004. Packed product shall be stored away from direct sunlight. Bottled water shall not be packaged in secondary (used) containers.

8.4.2 Packaged bottled water shall be held for 48 hours before dispatch so as to ensure that it conforms to all the requirements applicable for "each lot".

## **8.5 Marking**

7.5.1 Marking shall be done in accordance with MS 19: *Labeling of prepacked foods- General standard* and clause 7.2 of MS 699:2004 including;

a) Name of the product "Natural mineral water" including its brand name

b) Net contents by volume

c) Lot identification

d) Best before date

e) Name and address of the manufacturer

f) Country of origin

g) Instruction for Storage

h) Chemical composition

i) Carbonation

## **8.6. Standard mark**

The MBS-CID product certification logo shall be used as given in MBS-CID-PR4.1-02, Procedure for use of license, certificate and mark of conformity. The standard number (ie MS 699) shall be inscribed below the MBS CID logo. (Only after certification approval). Misuse of MBS CID Certification logo shall be handled as

per MBS-CID-PR4.1-02, Procedure for use of license, certificate and mark of conformity.

**8.7 Lot** – For the purpose of this Scheme, the quantity of packaged drinking water treated/processed from same raw water source and filled/packed in one day shall constitute a lot or batch. The decision regarding conformity or otherwise of the lot/batch to the given requirement shall be made based on the basis of tests and analysis the test results.

**8.8 Nonconforming product** –The applicant or client shall maintain a separate record providing detailed information regarding nonconforming lots and mode of their disposal. Such product shall in no case be stored together with conforming product.

**8.9 Microbiological Requirements** - When a failure is noticed in any of the microbiological requirements in a lot during in-process quality control, the lot shall not be dispatched. Any previous lots available in stock shall be dispatched into the market only after rechecking. The applicant/certificate holder shall reject the entire previous defective stock if the stock is found noncompliant.

8.10 Whenever, the quality of processed water is found not meeting the requirements in Tables 1,2, and microbial requirements as per clause 5.4 of MS 699:2004, the source of water shall be retested for such parameters for which failure is observed in order to determine the necessary controls to be exercised for conformance of quality of processed water to MS 699:2004. If the retest results are not meeting the requirements, the lot shall be handled as a nonconforming product.

8.11 The certificate holder shall take immediate corrective actions, which involve complete investigation of the reasons for contamination and nonconformity. The manufacturer shall re-start marking the Quality Mark and dispatch the products only after the completion of satisfactory corrective actions and availability of satisfactory results of all microbiological tests as applicable for each control unit, for next three consecutive lots. The original frequency of dispatch after 48 hours shall be restored, if all the three lots are found conforming to the microbiological requirements. The manufacturer shall keep complete records of such instances for review by MBS-CID.

7.12 Subsequently, the quality of the water may be regularly assessed at least once in three months through in-house testing for Colour, Odour, Taste, and Turbidity, pH, Total Dissolved Solids and Microbiological requirements. In addition, any other requirements as considered necessary for process control, are to be tested where the incidence of their presence in higher levels has been detected during the previous tests.

## **9 Management system**

9.1 Elements of a management system covered in an audit shall be the elements of the management system critical for product conformity and shall include review of:

- a) procedures covering production processes, including quality control, production resources and personnel competence that can affect product conformity;
- b) documents and records control in relation to production processes and product conformity;
- c) existing management system certifications and associated audit reports;
- d) internal audits and management reviews;
- e) procedures and records associated with product non-conformance, corrective and preventive actions;
- f) the identification, marking, and marketing of conforming products in accordance with certification requirements and certificate agreements;
- g) those management system processes that are carried out by the client as part of the product certification scheme; and
- h) that the client has the necessary planned arrangements to ensure that the management system processes will continue to be effectively implemented and maintained.

9.2 It is recommended that, as far as possible, Statistical Quality Control (SQC) methods be used for controlling the quality of the product during production as envisaged in this scheme. In addition, efforts should be made to gradually introduce a Management System in accordance with ISO/MS 9001 or ISO/MS 22000.

## **10. Surveillance**

10.1 MBS CID shall develop a surveillance plan for the certificate holders and shall conduct surveillance in order to provide confidence that products manufactured after the initial certification fulfil the specified requirements.

10.2 Surveillance activities shall cover all sites where manufacturing takes place and shall include the following:

- a) Inspection of product samples taken either from the point of production, or from the market, or from both for conformity with the certified type;
- b) Testing of product samples taken either from the point of production, or from the market, or from both to check that they fulfil the specified requirements;
- c) Assessment of the production processes and auditing of the management system, including examination of the client's quality records relating to the production process.
- d) MBS CID shall carry out characteristics routine tests as per tables 1,2 and microbial requirements as per clause 5.4 of MS 699:2004 at least every 6 months. In the event that the certified products fail, the testing frequency shall be increased to monthly. The frequency shall be reverted to every 4 months if the 4 monthly consecutive test results are found to be meeting the standard requirements.
- e) MBS CID shall carry out tests on characteristics (not done in routine and periodic analysis) as occasional analysis. The occasional analysis shall be done at least once in 1 year or as per request by the relevant authorities.

## **11 Other requirements**

11.1 If there is change in source of raw water, the certificate holder shall formally advise MBS CID.

11.2 Treated water shall be analyzed at laboratories recognized by the MBS-CID and commissioning of the new source for production and marking shall only be done after MBS CID has formally approved the new source.

## **12 Complaints**

12.1 Whenever a complaint is received soon after the products with MBS CID Mark have been purchased and used, and if there is adequate evidence that the products have not been misused and the complaint is proved to be genuine and the warranty period (where applicable) has not expired, the defective products shall be replaced free of cost by the certificate holder. The final authority to judge conformity of the product to the Malawi standard shall be with MBS CID. The certificate holder shall also have its own complaint investigation system and shall formally inform MBS CID of any complaint received and the investigations and resolutions made.

12.2 In the event of any damages caused by the products bearing the certification mark, or claim being filed by the consumer against MBS CID Mark and not "conforming to" the relevant Malawi Standards, entire liability arising out of such nonconforming products shall be of certificate holder and MBS CID shall not in any way be responsible in such case(s).

## **13 Stop marking**

Marking of a product shall be stopped under instruction of MBS CID if, at any time, there is problem in maintaining the conformity of the product to the specification, or the certificate holder testing equipment goes out of order. The marking may be resumed as soon as the defects are removed under formal approval by MBS CID. The marking of the product shall be stopped immediately if directed so by MBS CID for any reason as provided in certification agreement and procedure for use of license, certificate and mark of conformity. The marking may then be resumed only after permission is given by MBS CID. Information regarding resumption of markings shall also be sent to MBS-CID

## **14 Production data**

The Certificate holder shall send to MBS CID, a statement of the quantity produced, marked and dispatched and the trade value thereof during the half year ending 30 June and 31 December. This statement shall be forwarded to MBS CID on or before the 31<sup>st</sup> day of July and 31<sup>st</sup> day of January for the proceeding half-year.

**14 Certification fees:** Certification fees to be paid shall be as stipulated in Form **MBS-CID-PR7.1-01-FM-03** (Fee Schedule for product certification). Fees shall be on cash upfront unless the client/certificate holder has been approved for a credit by MBS Finance and Administration Department. The initial certification (cost of product evaluation, production facility auditing and certificate fees) shall be as given on the MBS CID fee schedule. Upon attaining certification, the certified organisation shall continue to meet the charges for testing, production facility audit and certificate fees.