Performance Audit Report on the Participation of State Institutions in Connection with the Production and Distribution of Quality Drinking Water in Sri Lanka



Performance and Environment Audit Unit

Report No. YS/PE/BW/2015/5



Auditor General's Department



#### 1. Executive Summary

The rapidly increasing present trend among the people of this country, who were accustomed to use natural water as it is from distant past, for the use of bottled water is the result of heavy urbanization, industrialization, increase of population, changes in consumer demand and problems relating to finding domestic water for drinking. Bottling of water available in Sri Lanka and introducing to the market in a new style commenced about 20 years ago.

In this case, special attention was paid to the role of the Food Control Administration Unit of the Ministry of Health which is the State Institution assigned with the function for the grant of legal permits for maintaining the Bottled Water Manufacturing Institutions through the registration of such institutions and the Health Authorities of the region in which water source are situated.

In terms of the Food Act, No 26 of 1980, water is specified as a food. A study of the Safety Methodology introduced by the Food Administration Unit of the Ministry of Health to ensure whether the water is available in a condition fit for human consumption was carried out. Microbes scientific safety, chemical safety, physical safety and honest presentation were examined in this connection.

The main objective of this Performance Audit was the evaluation of this intervention of the State Institutions in the manufacture of quality bottled water in the light of the above requirements. The requirements of the Food Act, No.26 of 1980, Food (Bottled or Packaged Drinking Water) Regulations 2005, Food (Packing Materials) Regulations 2010 and Food (Labels and Publicity) Regulation 2005 were made the audit criteria.

This Audit was planned and implemented during the period from October 2012 to June 2013. Methodologies of collection of documentary evidence, field inspections, physical verification, discussion and testing of water samples through laboratories were used in this connection.

Lack of proper implementation of the existing laws and regulation relating to drinking water bottling industry, expiry of registration and failure to renew registration in time lack of adequate supervision, import of bottled water without valid registration, changes in the expected levels of the components of a quality bottle of water and lack of proper supervision of the imported bottles of water are the major audit findings in this connection.

The Ministry of Health should, through its Food Administration Unit, formulate the methods of production of bottled drinking water, approval of such industries and should carry out casual market surveys and regular follow up action. In addition action should be taken for introducing legal provisions for the suspension of the production activities of manufacturers who deviate from the present procedure until rectification and for imposing fines. The audit observations arising from the failure to comply with the requirements are discussed in detail in this report.

## 2. Introduction

Drinking water is an essential commodity for the existence of the mankind. It should be colorless, clear and odorless and lacking in any taste and form the most abundant compound out of the components available on earth, though only one per cent of the available water is fit for drinking.

Most people all over the word continue to search for water suitable for drinking purposes. Though water obtained from different sources many do not pay any attention to the condition of the drinking water. The use of such water not suitable for drinking obtained from different sources continues to be the reasons for the prevalence of deep-rooted and other diseases. The introduction of bottled drinking water, replacing the freely available natural sources is the result of increasing population, urbanization, industrialization and consumer preference.

Concurrently with the increasing demand for bottled water and in consideration of the need for manufacture under sanitary conditions, the Ministry of Health has introduced the Regulations on the Blotted or Packaged Drinking Water of 2005 under the Food Act No. 26 of 1980. Accordingly water is also considered as a food. The Director General of Health Service is also the Chief Food Authority of Sri Lanka as well as the Head of the Food Advisory Committee established for advising the Minister. The Food Control Administration Unit of the Ministry carries out the administration of implementation of the decisions of the Committee. The objectives of the Food Control Administration Unit are as follows.

## (a) Ensuring Human Safety and Health

- (i) Ensure supply of safe and wholesome food.
- (ii) Ensure availability of food standards, regulations.
- (iii) Deal with issues related to irradiation, genetic engineering.

# (b) Ensuring Proper and Good Hygienic Practices

- (i) Prevent microbiological/chemical contamination
- (ii) Prevent adulteration and fraudulent practices in sale of food.
- (iii) Rational use of chemical additives such as antioxidants, preservatives, emulsifiers, stabilizers, using colours, flavors
- (iv) Eliminate wrong practice, Using colours, flavours, preservatives to make stale/decayed food appear fresh or of good quality

# (c) Ensuring Adequate Public Health Controls

- (i) Food is grown and harvested from safe unpolluted areas
- (ii) Food is protected from insects, rodents and contaminants
- (iii) To control Zoo noses meat inspection and dairy services, sanitary slaughter houses
- (iv) Rational use of pesticides (Use of insecticides, fungicides and herbicides was increased at the rate of 11.2 per year)

# (d) Implementation of Food Control Programme

- (i) To protect export trade (Earn foreign exchange)
- (ii) To protect from imports of inferior / substandard or unfit food.

## 2.1 Scope of Audit

Attention was paid to the following matters.

- (a) Our scope was limited to the Colombo and Gampaha Districts in the Western Province and the Kurunegala District in the North Western Province.
- (b) The Audit was commenced on 12 October 2012 based on 69 manufacturers of bottled water registered with the Ministry of Health as at that date.
- (c) The evidence we considered as material and sufficient to arrive at a fair conclusion was collected.

The recommendations and conclusion that would be of benefit to this industry are based on the audit observation and findings.

## 2.2. Authority for Audit

The audit was carried out under my direction in pursuance of provisions in Article 154 of the Constitution of the Democratic Socialist Republic of Sri Lanka.

# 2.3 Reasons for Selection of the Subject for Audit

Apart from the air, among the essentials needed for the survival of mankind, water occupies the next but equal place in the hierarchy of the essentials needs. Water which is an abundantly available resource in Sri Lanka is introduced to the Market as a new commodity in the form of bottled water mainly due to high urbanisation increase in the population and changes in the consumption patterns. The rapid entry of businessmen into the bottled water industry, the need for paying attention to the quality of the products has become a necessity. Several problems relating to this industry were highlighted by the media recently. In view of the importance of water factor, the need for examining whether the Government institutions concerned had taken action in accordance with the laws and regulations in connection with the problems and taken action for further regulating the industry was felt. The above reasons led to the selection of the subject.

## 2.4 Audit Approach

The provisions in the, following Acts and Regulations were taken into consideration for the audit approach.

- The Food Act, No.26 of 1980 as amended by the Food (Amendment ) Act, No.20 of 1991 and the Food (Amendment ) Act,No.29 of 2011, the Food (Bottled or Packaged Water ) Regulations 2005, the Food (Label and Publicity) Regulation of 2005 and the Food (Packaging Materials) Regulations of 2010.
- Sri Lanka Standards Nos. 614 and 894
- Review of other relevant documents and enquires made from the officers concerned.

- Whether every individual or organization engaged in the Bottled Drinking Water Industry has obtained a Registration Certificate from the Chief Food Authority, for that purpose, in terms of Regulation No.3(4) of the Food (Bottled or Packaged Water) Regulations 2005.
- Whether there is compliance with the Form B 9 Schedule iv of the Food (Bottled and Packed Water) Regulations 2005, relating to physical, chemical and microbiological requirements.
- (iii) Whether the water is bottled or packaged in compliance with the requirements in Chapter 13 of Part iii of the Food (Bottled or Packaged Water) Regulations 2005.
- (iv) The number of inspection of the production plants of bottled water carried out by the authorized Regional Officers.
- (v) Whether action in terms of the provisions in the Food Act have been taken in connection with the import of mineral water.

## 2.5 Limitations

Efforts were made for the minimization of the limitation of the scope in planning the Audit. The physical inspections of the bottled water production plants which are private institutions, were carried out with the participation of Public Health Inspectors provided by the respective Medical Officers of Health. The limitation was affected by factors such as the need for carrying out surveys of industries and the market lack of adequate facilities with the Government Analyst for carrying out analysis of samples water obtained and forwarded for obtaining analysis reports, the need for obtaining information from the Public Health Inspectors whether the relevant reports on water sources had been obtained, limitation of staff and other resources, limiting the inspection of water sources and factories to a sample and non-receipt by audit the detailed information on the functions performed by the Consumer Services Authority with a view to ensuring consumer protection and creating a fair market competition.

# 3. Detailed Audit Findings, Recommendations and Comments by the Institution

## 3.1 Manufacture of Bottled Drinking Water without a Certificate of Registration

According Section 3(4) of the Food (Bottled or Packaged Water) Regulations - 2005, no person shall use any premises for the bottling or packaging of natural mineral water, unless such premises have been registered with the Chief Food Authority. The following matters were revealed during the course of an examination to ascertain whether the institutions at present engaged in the production of bottled water comply with these requirements.

- (a) The maximum periods of validity of a Certificate of Registration issued at present by the Food Control Unit of the Ministry of Health for maintaining a factory for the manufacturing of bottled drinking water is 3 years. The validity expired Certificate of Registration should be renewed for the continuous running of the business. In this connection, the list of registered manufactures of bottled water appearing in the web site of the Ministry of Health as at 12 October 2012 was examined and according to that, the number of registered manufactures (Water Sources) had been 69.
- (b) According to the Sri Lanka Standards Institution which is concurrently engaged in the Standardisation of food, the number of manufactures of bottled drinking water as at 28 December 2012 had been 59. A comparison of these licence holders registered as at that date with the Ministry of Health revealed that, 06 of those licenced bottled water manufactures did not have a valid registration with the Ministry of Health and that they had continued manufacturing activities by using the previously obtained registrations without renewing them.

It was observed that they had been carrying out manufacturing activities using the previously obtain registration under the particulars of this institutions, whose registration with the Ministry of Health had expired continuing manufacturing activities by obtaining certificates of registration (as at 28 December 2012) from in Sri Lanka Standard institution are as follows.

Number and Date of Registration with the	Period of Expiry of Registration (As at 12
Ministry of Health	December 2012)
	Year
CFA/BW/65/2007-04 of 24 April 2007	2 1/2
CFA/BW/75/2007-07 of 09 July 2007	02
CFA/BW/10/2006-07 of 28 July 2006	03
CFA/BW/43/2006-11 of 10 November 2006	03
CFA/BW/84/2007-10 of 03 October 2007	02
	~_
CFA/BW/14/2006-07 of 28 July 2006	03
C111/DW/17/2000-070120July 2000	05

- (c) It was observed that the number of manufactures of bottled drinking water who had been registered with the Ministry of Health in accordance with the Food (Bottled or Packaged Water) Regulators - 2005 published in the Gazettes Extraordinary No.1420/4 of 21 November 2005 and renamed registered by 23 April 2008 had been 97.
- (d) It was observed that, out of the registered manufactures and 23 April 2008, name did not appear in the list of manufactures who had obtained the valid registered as at 12 October 2012.
  It was observed that 08 out of those had continued to release their products to the market without a valid registration with the Ministry of Health.
- (e) The reasons which led to this continuation of manufacture without a valid registration, among others, included the failure of the manufactures to submitted applications with full requirement specified, failure to make applications before

the expiry of previous registration (before 06 months) delays in calling for information from the regional authorities and the delay on part of the officers in supplying such information. As such due to the delays of all the parties concerned and the weakness in the supervision by the officers responsible the manufactures of bottled water had been given in the opportunity to continue their business affairs without valid registration. (Annexes I and II)

(f) The methodology to be followed in the renewal of the registration at the end of the period of validity has not been set out in the Food (Bottled or Packaged Water) Regulations 2005. It was observed that the inclusion of that Section only in the Certificate of Registration of the premises for manufacture of bottled water is inadequate.

## Implication

- (i) Drinking such water could be a hazard to the public health.
- (ii) Adverse impact resulting from the inadequacy of attention paid to the laws and rules in force in the country by the manufactures of bottled drinking water as well as the officers concerned.
- (iii) Non-receipt of information required for the proper maintenance of the industry due to the inefficiencies in calling for reports from the regional officers as well as furnishing reports by such officers.
- (iv) Lack of efficient and effective co-ordinated action among the Ministry of Health, the Sri Lanka Standards Institution and the Consumer Affairs Authority which are legally empowered to ensure the quality of control of food production exercised by the Food Advisory Committee established in terms of the provision in the Food Act, No 26 of 1980 as amended by the Food. (Amendment) Act, No. 29 of 2011.

#### Recommendation

- Providing legal status to the conditions for application for renewal six month before the expiry of the registration included in the certificate of registration by incorporation of that requirement in the Food (Botted or Packaged Water) Regulations – 2005, determine a penalty per each month of delay and introduce a methodology for the collection.
- (ii) Action should be taken to inform the Regional Officers the manufactures whose registration periods had expired. If such manufactures have already made applications for the renewal of registration, their production and the water sources should be subjected to microbiological and chemical testing within a specified period to ascertain whether those conform to quality Standards (microbiological and chemical compliance)
- (iii) All relevant officers should be made aware of the need for speedy obtaining of such reports.

#### Comments of the Institution

- Paragraph 3.1 (a) "Updated information up to 2014.08.15 is available"
  - (b) "Needs correction. The following action was taken on the applications which were being considered at the time of audit, in accordance with the decision taken in connection with the request."

Registered NumberRegistration for the one year from 23CFA/BW/65/2012-04July 2013 was given on condition of

construction of a new water source. The application is being considered for giving registration for the new water Source.

CFA/BW/75/2007-07 Applications rejected. Manufacturing terminated.

CFA/BW/10/2006-07

(f)/(g)

Application rejected. Manufacturing terminated .

CFA/BW/03/2006-11 Registration given from 15 February 2013

CFA/BW/84/2007-10 Free issue only in the Hotel Premises permitted.

CFA/BW/14/2006-07 Application rejected. Manufacturing terminated.

Cannot be agreed but partly correct. Even though there are shortcomings in the regulation no action can be taken without complying with the legal frame work. Every citizen should obey the existing law.

- Recommendation 1. "Recovering a penalty for delay will not have an impact on the quality of water but it could have a strategic importance in controlling the quality."
- Recommendation2."Should be brought to the notice of the Sri<br/>Lanka Standards Institution."

## 3.2 Physical, Chemical and Microbiological Compliance

The basic tests which should be carried out to ensure the quality of bottled water should remain within the expected Standards of their composition. The observations made in that connection are as follows.

- (a) In the examination of the operation of the Food Control Administration Unit in relation to the physical, chemical and microbiological compliance of the bottled drinking water in accordance with the Food (Bottled or Packaged Water) Regulations – 2005 revealed that they should examine from the reports obtained from the Medical Research Institute and the Institute of Industrial Technology whether the water source complies with Sri Lanka Standard No.614 and that the final product complies with Sri Lanka Standard No.894.
- (b) Nevertheless, the files subjected to audit revealed instance in which they had not paid attention to the completion of the physical, chemical and microbiological compliance. It was observed that the Food Control Administration Unit does not carry out a direct supervision to ensure that the manufactures registered with the Ministry of Health are maintaining their manufacturing activities according to the specified quality and standards. The test checks revealed that in certain instances, no follow-up action had been taken on the non-compliance reported after the registration. Examples are given below.

Even though the period of registration of the bottled drinking water manufacturer registered under No. CEM/BW/75/2007-07 on 09 July 2007 had expired in July 2010 he had continuously manufactured bottled drinking water and released to the market. The Food Inspectors of the Colombo Municipal Council had submitted samples of such bottled drinking water available in the open market and the laboratory test reports on such water had revealed that the coliform level had been above the expected level. It was observed that such position is unfavourable to public health.

According to the laboratory test report, the water bottles (1,000 ml) submitted for testing had been manufactured on 25 September 2012 and the date of expiry had been 24 September 2013.

Thus it was revealed that despite the expiry of the validity of registration by the Ministry of Health, he had been continuously engaged in the manufacture of bottled drinking water and none of the parties responsible had paid any attention that connection. It was farther observer that the manufacture concerned had been a manufacturer licenced by the Sri Lanka Standards Institution by 16 November 2012.

- (c) Even though the Food Administration Unit of the Ministry of Health takes action for updating the list of valid registered manufactures of bottled drinking water through its website, discussions held on 26 October 2012 the officers of Central Food Control Unit of the Colombo Municipal Council situated in Maradana revealed that they did not have computer facilities and that they had not been made aware of the position by any other means.
- (d) Even though the pH value should be tested daily and records thereof should be maintained, there were instances in which such records had not been maintained. According to the quality control information, it was observed that physical test carried out revealed instances which were not within the relevant ranges. As revealed in the test carried out in March and April 2013, the pH value of three product under three trade names had been 5.7,5.5 and 5.5 as against the specified range between 6.5 and 8.5. That value of another manufacturing institution had not been tested during a period of three days.

#### Implication

Adverse conditions had arrisen due to the lack of efficiency in the work done mutually by the Food Administration Unit and the Regional Officers and the inadequacy of the quality control work done by the Regional Officers.

#### Recommendations

- (i) Inform all officers responsible that they should properly perform all their duties based on the requirements of the Act.
- (ii) Action should be taken to make available the updated list of manufactures of bottled drinking water to the Regional Officers at least once in 06 months.
- (iii) Prompt exchange of mutually important information among the institutions functioning within the Food Advisory Committee.

#### Comments of the Institutions

- Recommendation 1. "As there are other activities which should be given priority due to the limited facilities available it is necessary to strategically to identify the priorities by identifying the overall functions"
- Recommendation 2. The list update at least once in 3 months is published in the website. The list updated as at 2014.08.15 is annexed. (Annexure 1)

#### 3.3 Date of Expiry

An examination of the date of expiry of the validity of bottled water produced revealed that the manufactures have set a validity period of one year for their products (period between the date of manufacture and the validity expiry date) It was also observed that certain manufactures had set a longer period of validity.

The validity period of bottled water manufactured under a similar production process set in different ranges of six months,  $1 \frac{1}{2}$  years, 02 years ect. is a contentious issue. It was also observed that the Ministry of Health is not having a proper methodology for determining a beneficial validity period for bottled drinking water and that is determined at the discretion of the manufacturers.

The validity period determined without complying with a proper methodology or standard could be a threat to the health safeguards and the need for the Ministry of Health to pay more attention to this aspect was observed.

#### Implication

The release of bottled drinking water with the expiry date set without complying with Standards could result in problems for taking legal action in the event of quality deterioration.

#### Recommendation

Even though the present practice of allowing the manufacturers to determine the date of expiry of the validity of bottled drinking water is with the expectation of achieving control measures, the Ministry of Health should introduce a precise policy for the purpose.

## Comments of the Institutions

Paragraph 3. 3 "The manufacturer is responsible for the validity period of the product. Nevertheless, it is proposed to set a single validity period in the future"

## 3.4 Labelling according to the Regulations

The following matters were revealed during the course of the test check carried out in terms of provisions in Section 3 of the Food Act No.26 of 1980 and the Food (Labelling and Packaging) Regulations 2005.

- (a) The matters revealed at an examination of the labels submitted for approval to the Food Control Administration Unit by a manufacturing institution, are given below.
  - According to the labels submitted for 19 litre bottles, an encircled sentence "Supplier of best Bottled Water to the Nation" had been printed thereon, indicating an effort of the manufacturer to achieve value addition to this product, contrary to Section 3 of the Food Act,No.26 of 1980.
  - (ii) The label submitted for the bottles of 5,000 millilitres capacity included the words with a picture "Official Bottled water supplier to the South Asian Sports Festival" and that was also an effort made for achieving value addition to the product. It was observed that such matters should receive the attention of the Food Control Administration Unit of the Ministry of Health.
- (b) The following matters were further observed in the examination of the labels prepared for pasting during the course of physical inspection of an institution manufacturing bottled drinking water.
  - Two types of labels with pictures and structures had been prepared for bottles of 19 litre capacity.
    - For example, one label depicted upward spring of drops of water and the other depicted a structure of a whirlpool.
    - One label depicted clearly the water source and the other depicted that with another description.
    - One label depicted an office address while the other did not depicted that.
  - (ii) Even through the Ministry of Health had issued the registration No. CFA/BW/53/2013-03 with effect from March 2013, the dates of

manufacture and the date of expiry of validity had been depicted as 25 January 2013 and 25 January 2014 respectively. In addition, labels for bottles of 1,500 millilitres and 7,000 millilitres capacity with the dates of manufacture and the dates of expiry of validity depicted as 06 November 2012 and 26 November 2013 respectively were also observed. As such the manufacturer had been engaged in the manufacturing activities continuously long before the receipt of the valid registration for manufacture. Accordingly it was established that manufacturing had been done without conforming to the specified quality controls.

- (iii) The Sri Lanka National Flags had been depicted on the labels for bottles of 1,000 millilitres capacity, thus indicating an effort made to achieve value addition to the water.
- (iv) The Food (Bottled or Packaged Water) Regulations 2005 specifies that the name and the address of the manufacturers and the packer of the bottled water or the distributors should be printed on the label. Nevertheless, the manufacturers concerned had not indicated the names and addresses of the manufactures and the packers or the distributors on the labels printed for the bottles of 1000 millilitres and 1500 millilitres capacity.

#### Implication

Due to the inadequacy of the attention paid by the officers of the Food Administration Unit for the requirements specified in the relevant regulations could result in misleading the consumer in addition to being inconvenienced.

#### Recommendation

(i) In the issue of registration certificates to the manufacturers of bottled water or in the renewal of licences already issued, the Food Control Administration Unit of the Ministry of Health should satisfy themselves that the labels printed for pasting on all bottles of different capacities conform to the conditions laid down in the regulations and allow only labels which conform to the conditions laid down.

- (ii) To show the following particulars on the surface of the bottles in all three languages or one or more languages
  - Name and address of the manufacturers and the packers or the distributors in Sri Lanka.
  - Batch Number or Code Number or Secret Code
  - ✤ Registration Number.

# Comments of the Institution

Paragraph 3.4(i) observations not correct.

# 3.5 On site Inspections Carried out by Regional Authorized Officers

According to the provisions in the Food Act, No.26 of 1980, the Regional Authorized Officers should carry out inspections of the entire process from obtaining water from the water sources under hygienic conditions up to bottling and making ready for issue to the market to ensure that the process of bottling of water is carried out in accordance with the prescribed procedure and that the factories and the surrounding environment are maintained under hygienic conditions.

- (a) According to the matters revealed at the examination of the number of visits to the respective premises undertaken by the Regional Authorised Officers who are empowered to inspect food premises as well as other matters, the procedure to be adopted, in brief is as follows.
  - According to the process for grading of food introduced by the Ministry of Health, institutions which are in good condition should be given 'A' Grade and the institutions in satisfactory condition should be given 'B' Grade.

Institutions in unsatisfactory conditions should be given 'C' Grade while those in very unsatisfactory conditions should be given 'D' Grade.

- (ii) The active participation of the proprietor of the institution / Manager must be obtained for the grading process referred to above, thereby allowing the proprietor / Manager to get an understanding of the prevailing hygienic condition of the Institution. Therefore, the Form H-800 introduced by the Ministry of Health should be prepared in duplicate, and handover one copy to the proprietor / Manager with instructions to keep it in the institution safely and readily available at any time. The Public Health Inspector should keep the other copy filed appropriately in the relevant file in his office. The duplicate of the Form H-800 should be used in subsequent inspections and the Form should be prepared in duplicate as done previously. Instructions and technical assistance needed for the improvement of the institutions handling food should be noted in the separate section provided for the purpose.
- (iii) The institutions graded under C and D Grades in the grading process should be inspected at least once a month. Those graded under B should be inspected at least once in two months while those in A grade should be inspected at least once in three months. The observations made subsequently should be noted in the Form H-800.
- (b) The position revealed during the course of test checks of the above procedure is as follows.
  - Out of the 08 Factories manufacturing bottled drinking water inspected, the managers of all except one, failed to produce the Form H-800 and the staff of certain Factories were not aware of the Form.
  - (ii) Even in the case of the institution which produced the Form H-800, the Public Health Inspector had not visited the institution during the specified periods and noted his observations. As such it was observed that the

respective Medical Officers of Health and the Public Health Inspectors had not paid adequate attention to the Factories producing bottled drinking water.

(iii) The discussions held with the Public Health Inspectors revealed that the Public Health Inspectors are a category of officers engaged in their service with a dissatisfied mindset due to the prevailing problems in their service due to reasons such as the fuel allowance paid on reimbursement basis owing to the vast areas to be covered in the discharge of their duties. It was observed that such situation had resulted in the reversal of progress in carrying out supervision of institutions handling food.

# Implications

In view of the inadequacy of the supervision of institutions handling food by the Public Health Inspectors who are empowered to supervise such institutions and give instructions for the improvement of quality standards, the possibility of substandard bottled drinking water reaching the market has increased.

#### Recommendations

- Issue instructions to the Public Health Inspectors to include every manufacturer of bottled drinking water in the Food Grading Process in accordance with the instructions issued by the Ministry of Health.
- (ii) According to the grading of the institutions done by the Public Health Officers, the respective institutions should be subjected to compulsory supervision at specified periods and the Public Health Inspectors and the manufacturers should keep the Form H 800 in the files in support of such supervision.
- (iii) The number of inspections to be carried out according to the grading received by the institutions in the grading process should be carried out compulsorily within the specified period and instructions for upgrading the institutions should also be given.
- (iv) Attention should be paid to obtain the optimum service of the Public Health Inspectors for this purpose.

#### Comments of the Institution

#### 3.6 Inspections of Water Sources

The following observations are made in this connection.

- (a) The registration No. CFA/BW/15/2012-02 had been issued to the institution manufacturing bottled drinking water only up to 13 February 2013. Nevertheless, the institution concerned had been engaged in the manufacture of bottled drinking water and issuing to the market even up to 28 March 2013, the date of inspection.
- (b) The manufacturer of bottled drinking water under the registration No. CFA/BW/22/2012-01 was inspected along with the relevant Public Health Inspector. But the relevant documents such as the Food Registration Certificates, SLS Certificate and the Food Grading Certificate were not produced to audit.

It was observed that the institution was manufacturing largely the 19 litre capacity bottled water. The bottle washing inspection report required in this connection as well was not produced to audit. The log entries on the visits of the Public Health Inspector had also not been maintained.

- (c) The manufacturer of bottled drinking water under registration No. CFA/BW/53/2012/02 had obtained the Food Registration Certificate in the first instance in the year 2007 and that registration had lapsed in the year 2010. Thereafter the institution had obtained Food Registration Certificate only on 08 March 2013. During the interim period of over 02 years and 03 months the institution had manufactured bottled water and issued to the market.
- (d) Even though a representation that bottled water under registration No. CFA/BW/53/2012-02 is being issued to the market signed by a Public Health Inspector and a Medical Officer of Health dated 30 January 2013 had been sent to the Director, Environmental and Vocational Health Division, any documents on the action taken thereon were not available. Even though the officers of the

Environmental and Vocational Health had informed of the rectification of 5 observations for the renewal of registration on 26 December 2012, the registration certificate had been issued on 08 March 2013 despite the non-rectification of the following observations.

- Water Packaging Tap : Observations on action not taken to keep the tap in dry condition when not in use for packaging and the failure to carry out effective repairs to broken walltiles.
- (ii) Observations relating to the use of quality production activities such as the use of elbow tap, auto door closer, etc.,
- (iii) Water flowing out of the 19 litre bottles washing area directed to the soakage pit through a pipe.

In addition, the surrounding area of the factory was in an untidy condition while empty 19 litre bottles were kept haphazardly on the ground. Even though deficiencies such as the presence of cloth lines, non-removal of garbage of the factory stocking of bottles and digging of a pit for sockage of water disposed of from the bottle washing area had been indicated, those deficiencies had not been properly rectified. Other observations made indicated unclean new water tanks, several live frogs found in the water tanks, uncovered water storage tanks, water bottles rejected by the market being stored along with those produced, only one employee present in the premises at the time of inspection, employees not wearing uniforms, gloves and masks. Employees had not been properly instructed on the maintenance of hygienic condition. The employee engaged in the transport of bottling water had been deployed for bottling of water as well.





Bottom of a Water Storage Tank





Polythene Bags dumped in the surrounding premises



Immediate surroundings of the Bottled Water Factory

(e) The manufacturer of bottled water under the registration No. CFA/BW/65/2007-04 failed to produce to audit the business licence for the year 2012/13, reports of microbiological and chemical test analysis, environmental protection licence, washing inspection report (19 litre bottles), food registration certificate, SLS Certificate as well as the Hydro- Geological report.

On 09 April 2013, the date of inspection, two female employees had been deployed and 240 bottles of water of 1,500 mililitre capacity had been manufactured. There were only two employees for filling of water to bottles. All work relating to cleaning of bottles, filling of bottles, labeling capping of bottles and packing were being done by the two employees.

The equipment for bottling and the sites were coated with dust and the floor had not been washed and cleaned. Hand washing facility was placed outside near the entrance and water used for hand washing was diverted to the foot washing tank.

The other businesses run in the same premises are given below.

- i. Manufacture of equipment related to telecommunication lines.
- ii. Production of metal nails
- iii. Import of Telecommunication Electronics Equipment
- iv. Production of CD Antennas and Telephone Chargers
- v. Concrete posts for telecommunication lines

There were two chicken pens in the open yard and one bird was found dead inside the pen. A large kennel was found near the tube well and logs, metal pieces and telecommunication equipment were stacked in the surrounding area.

A private house is situated near the premises, the access to which is through a temporary gate in the premises. It was observed that the tank for storing pumped water had not been properly closed. There was an excavated well in the premises in addition to the two tube wells.

A record book for entering the visits of the Inspecting Officers was not available, thus indicating that the their supervision was not adequate.

(f) The Food Registration Certificate of the institution manufacturing bottled water under registration No. CFA/BW/102/2008-06, had expired after June 2011. Information on the written application made for the renewal of registration was not produced for audit. Even though Food Administration Unit had visited from time to time, records thereof had not been maintained.

According to the report dated 16 July 2010, it had been informed that according to the microbiological tests, the water from the water source was not in conformity with the Standards and instructions had been given to stop manufacture and start

again only after rectification to normal condition. But the manufacturing had been continued. It was observed on 08 April 2013 that manufacturing staff do not wear aprons.

The boundary of the premises had been secured by a barbed wire fence and cats were seen loitering the premises. Six months had elapsed after the construction of the tube well and it was expected to be used in place of the existing well. But the approval for that had not been received even up to 08 April 2013, the date of audit. The old well had been used for manufacturing. The reports on the new well had not been forwarded to the Ministry of Health. The Public Health Inspector was of the opinion that the cleanliness of the premises should be further improved.

(g) It was observed that 03 institutions manufacturing bottled drinking water subjected to physical inspection had been carrying out manufacturing in accordance with the Food Registration 2005 even on the dates of audit.

## Implication

The consumption of bottled drinking water not conforming to the standards by the consumers results in adverse impacts on the physical health of the community and the institutions are allowed to run their businesses which violate the laws and regulations in force in the country.

#### Recommendations

- (i) The officers of the Food Control Administration Unit should ensure during the course of granting approval for the manufacture of bottled drinking water at the inception as well as in the renewal of the approval whether the standards specified under the legal provisions are being complied with throughout by the industry.
- (ii) Expansion of supervision over the institutions manufacturing bottled drinking water without being registered or without complying with the Standards and take serious note of the manufacturers who violate the regulations.

- (iii) Expansion of the supervision by the Public Health Inspectors.
- (iv) Conduct of continuous raids of the market and take serious note of the manufacturers of bottled drinking water not conforming to standards or those who do not renew registration.
- (v) Improve laboratory facilities.

#### Comments of the Institution

Paragraph 3.6 : "The observation at (d)(i) is not correct. Registration done after the Regional Director of Health Services had reported that the deficiencies had been rectified"

# 3.7 Test Reports on Samples of Water obtained from the Government Analyst during the course of Audit

The matters observed in this connection are as follows.

Ten products (10 samples of water) under 10 Trade Names purchased from the open market for chemical analysis were handed over to the Department of Government Analyst for carrying out chemical tests. According to the report furnished by the Department, 07 of those samples do not fall under the expected pH value parameters of 6.5 - 8.5 as specified in the Food (Bottled or Packaged Water) Regulations – 2005. Details are as follows.

Registration Number	Batch Number	Prevailing pH Value	
CF/A/BW/148/2013-05	B101327	6.2	
CF/A/BW/07/2013-08	1350	6.2	
CF/A/BW/111/2012-08	JB-010413	5.2	

CF/A/BW/101/2013-04	0001934	6.1
CF/A/BW/133/2012-01	463	6.3
CF/A/BW/140/2012-05	1500.09	6.1
CF/A/BW/37/2011-05	250813	5.8

(b) According to Section 17 of the Food Act, No. 26 of 1980, and the Orders made thereunder the Government Analyst has been named as the approved analyst for the purposes of the Food Act. According to the reply to the letter dated 31 July 2013 addressed to the Government Analyst making enquiries of the capacity of the Department of Government Analyst to carry out the tests as specified in Section (B) of Regulation 13(1) of the Food (Bottled or Packaged Water) Regulations 2005, the Department is not having the facilities for testing of fluoride, mercury, aluminium, cyanide and phenolic compounds. The lack of full testing facilities for analysis with the Government Analyst commensurate with the powers vested in him by the Act was observed as a situation which would create legal problems as well as a limitation on obtaining reliable analyst reports.

#### Implication

Even though the chemical content of the samples of water had exceeded the expected limit according to the report of the Government Analyst, such water unsuitable for drinking had been released to the market.

#### Recommendations

- Pay greater attention to the chemical compounds of the water in the grant of approval for the manufacture of bottled water at the inception as well as in the renewal of registration.
- (ii) Creation of a methodology for referring samples for analysis with a view to obtaining systematic and reliable results on samples of water.
- (iii) Improve the facilities of the Department of Government Analyst for carrying out reliable tests of the samples of all items under the Food Act and improve the co-ordination with the Department.

# Comments of the Institution

# 3.8 Role of the Consumer Affairs Authority

The Consumer Affairs Authority which is the principal institution functioning in Sri Lanka for the protection of the rights of the consumers and the creation of a fair competitive market, performs functions for the protection of the rights of the consumers. But, in response to a request, for the detailed information on the role of the Authority in connection with the bottled water, information on the number of raids conducted in that connection only had been furnished. According to that information, 60 raids in the year 2012 and 100 raids in the year 2013 had been conducted.

As our test checks revealed various deficiencies existing in the water sources, factories and the market in relation to bottled water a request was made for such deficiencies revealed during the course of those raids.

Such detailed information on the raids conducted had not been furnished to audit and as such, any comments on the adequacy or otherwise of the checks carried out by that institution in connection of the manufacture of bottled water could not be made.

## Recommendation

- (i) Take follow-up action to ensure that the deficiencies detected during the course of raids have been rectified subsequently.
- (ii) Proper maintenance of documented information relating to raids.

## Comments of the Institution

## 3.9 Import of Mineral Water

The observations in this connection are as follows.

- (a) According to Section 3(1) of Part I General Provisions of the Food (Bottled or Packaged Water) Regulations 2005 made in consultation with Food Advisory Committee in terms of Section 32 of the Food Act, No. 26 of 1980 "no person should import and distribute bottled or packaged Natural Mineral Water or Drinking Water without a Certificate of Registration in that behalf from the Chief Food Authority.
- (b) Further, in terms of Section 4 of the Food (Bottled or Packaged Water) Regulations 2005, "no person shall sell, offer for sale, keep for sale, transport or advertise for sale, any Bottled or Packaged Natural Mineral Water or Bottled or Packaged Drinking Water, unless such product has been duly registered by the Chief Food Authority and a registration number in terms of the foregoing provisions of this regulation has been assigned to".
- (c) An examination of the list of Manufacturers of Bottled Water maintained by the Ministry of Health in order to check the compliance with these Regulation as well as ensuring whether there are importers who import drinking water to Sri Lanka, revealed that there were no such registered importers.
- (d) Nevertheless, it was revealed from the information obtained from the Sri Lanka Customs that various institutions in the Private and the Public Sectors and the Diplomatic Missions had imported 115,300; 207,447; 114,464 and 102,461 litres of bottled water into this country during the years 2009, 2010 and 2012 respectively, violating in aforesaid provisions in these regulation.

- (e) According to the provisions in the Food Act, No. 26 of 1980 as amended by the Food (Amendment) Act, No. 24 of 2011, the Director General of Customs or his representative should be included in the Food Advisory Committee chaired by the Director General of Health Services. But in view of the import of water without obtaining a Certificate of Registration from the Chief Food Authority indicates that the attention of the parties responsible for the control of water imported into the country had not been paid to that aspect.
- (f) In terms of Section 3(6) of the Food (Bottled or Packaged Water) Regulations 2005, the applicant should submit along with his application, a sample of the product along with a Certificate of Analysis from an accredited laboratory relating to the content of such sample to the Chief Food Authority and within a period of seven working days after the receipt of the application, forward the same along with the sample and the Certificate of Analysis to any Institute having the expertise in the required field, for obtaining a recommendation as to whether or not a registration could be granted.

Further, in terms of Section 3(7) of the Regulations, the Chief Food Authority shall not proceed to issue the Certificate of Registration, until a report of the technical opinion is issued by that institution.

(g) Nevertheless, it was observed that, Mineral Water is imported into Sri Lanka without following the procedure prescribed in the regulations as referred to in (f) above.

## Implication

- (i) Attention not being paid to laws and regulations in force in Sri Lanka.
- (ii) Possibility of the existence of a threat to public health.
- Lack of communications among the institutions functioning under the Food Advisory Committee.
- (iv) Unnecessary outflow of foreign exchange from the country.

# Recommendations

- (i) Identification of the importers engaged in the import of drinking water from the Customs information.
- (ii) The importers should be made aware of the requirements which should be fulfilled in terms of the Food (Bottled or Packaged Water) Regulations 2005, for the import of bottled water.
- (iii) Take appropriate action in cases of violating the provisions in Sections 18(1), 19(1) and 31(2) of the Food Act, No. 26 of 1980.
- (iv) Take action to ensure the prompt exchange of the mutually important information of the institutions functioning under the Food Advisory Committee.

# Comments of the Institution

The importer of bottled natural mineral water bearing No. CFM/NMW/06/2013-04 has obtained the licences continuously.

The importers of bottled natural mineral water bearing No. CFM/NMW/03/2011-07 and No. CFM/NMW/02/2011-02 had obtained import licences for one year periods from 14 March 2008 and from 14 February 2011 and this company is not importing natural mineral water at present.

A local airline company had imported bottled water on requests made by airline companies and the Food Advisory Committee released those on a mild policy. Those bottled water had not been issued to the Sri Lankan Consumers. This was done so as otherwise it could cause loss of foreign exchange.

Nevertheless, the company concerned has taken action to import in the future a container load or more by registering.

Bottled water imported for the Embassies and for the consumption of the foreign groups arriving in this country for constructors works were released without registration. In such instances water has to be released immediately and as such the regulations need amendment.

The 03 companies which had imported natural mineral water were informed that any future imports should be made after obtaining a Certificate of Registration and the matter has been brought to the notice of the Sri Lanka Customs and the Food Import Control Unit.

The Sri Lanka Customs was informed to introduce a more effective methodology for dealing with the bottled drinking water imported for the consumption within Sri Lanka.

#### 4. Audit Conclusion

Even though the Ministry of Health has, in consideration of the increase of the numbers entering the bottled or packaged water bottled industry due to its profitable nature and in view of the need for laying down standards for the manufacture of a better quality product, formulated the laws, due to the mild nature of such regulations, there are ways and means for the dishonest manufacturers to deviate from the legal frame work. The lack of formulation of a methodology for the renewal of registration and incorporation of that in the regulations was a noticeable feature.

It was observed that the field inspections of the Public Health Inspectors are not being carried out satisfactorily due to the very large areas of authority assigned. Nevertheless, it was observed that the services of these officers are highly important as that involves inspecting whether manufacturing is done in compliance with the laws, regulations and standards.

In view of the existing situation, the quality of the water manufactured by all the institutions subjected inspection by the audit raises a problematic issue. A course of action should be formulated within the existing methodology to ensure that the specified microbiological and chemical content of the drinking water is maintained within the Standard levels. The introduction of a formal methodology for renewal of registration within the existing regulations, the improvement of the laboratory facilities available with the Ministry of Health and the Department of Government Analyst, recruitment of adequate staff and improvement of the facilities of the staff are observed as essential steps for ensuring the health care of the consumers.

Annexe I

Manufactures who had not made applications for renewal of registration before the prescribed date, delays in calling for the relevant information from the Regional Officers and the delays in reporting information by the Regional Officers

Date of Application made for renewal of Registration	Due date for Applying for Registration	Date of calling for Information from Province (Director of Health Services)	Date of furnishing Information from the Province	Remarks
Diya Dahara 2010-05-24	Before 2009-08-22	2011-11-21	2012-12-05	Registration not given till 2012-12-18 (Revealed at the inspection that the registration was given on 2013-03-08)
Deep Rock 2009-07-15 New application made on 2012-03-23 (Application complete with all documents handed over on 2012-09-20)	Before 2009-01-28	2009-09-08	2009-11-14 Reply not sent up to 2012-12-18 the date of audit	Observed that action on this application after 2010-07-14 had not been taken

Cool Pal No further action taken on application dated 2009-09- 19 New application made on 2012-01-27	Before 2009-05-10	2012-01-27	2012-09-14	New Registration given or 2012-12-07 CFA/BW/44/2012-12
C and P (Captain)	Before 2009-05-10	2010-02-03	2010-03-17	Even though the Provincial Director of Health Services had recommended the renewal on 2010-03-17 it had not been so done. Any communication of information in this connection in the year 2011 is not available in the file.
C and P (Captain)	Letter of 2012-02-13 requested extension of registration for 01 year	2012-05-28	2012-11-28	DateofnewRegistrationis2013.02.15(after01year)
Sprout 2009-06-02	2009-01-28	2009-09-08	2009-11-05	Registration given on 2011-01-07
Express	Before 2009- 10-04	2012-01-12	2012-06-14	Not given up to 2012- 12-31

Annexe II

Time taken for obtaining a valid Certificate after the expiry of the period of validity

Reg	sistration Number	Date of Expiry	Date of obtaining	Period without a
		of Valid period	a valid certificate	valid certificate
1.	CFA/BW/01/2012-02	2009-07-28	2012-02-02	2 <sup>1</sup> / <sub>2</sub> Years
2.	CFA/BW/06/2012-10	2009-07-28	2012-10-08	3 Years 2 Months
3.	CFA/BW/08/2010-11	2009-07-28	2011-06-10	1 Years 10 Months
4.	CFA/BW/09/2011-01	2009-07-28	2012-11-07	3 Years 3 Months
5.	CFA/BW/11/2011-12	2009-07-28	2011-12-20	1 Year 5 Months
6.	CFA/BW/15/2012-02	2009-07-28	2012-12-21	2 Years 6 Months
7.	CFA/BW/17/2012-05	2009-07-28	2012-05-15	2 Years 9 Months
8.	CFA/BW/19/2011-11	2009-07-28	2012-11-11	2 Years 3 Months
9.	CFA/BW/21/2012-04	2009-07-28	2012-04-03	2 Years 3 Months
10.	CFA/BW/22/2012-01	2009-08-31	2012-01-09	2 Years 5 Months
11.	CFA/BW/28/2012-01	2009-08-31	2010-01-10	2 Years 4 Months
12.	CFA/BW/29/2010-11	2009-08-31	2010-11-03	1 Year 3 Months
13.	CFA/BW/35/2010-12	2009-08-28	2010-12-12	1 Year 3 Months
14.	CFA/BW/37/2011-02	2009-08-28	2011-02-22	1 Year 5 Months
15.	CFA/BW/40/2012-03	2009-10-12	2012-03-02	2 Years 5 Months
16.	CFA/BW/45/2012-02	2009-11-16	2012-02-01	2 Years 3 Months
17.	CFA/BW/46/2012-02	2009-11-16	2012-02-21	2 Years 3 Months
18.	CFA/BW/50/2011-11	2009-11-27	2011-11-21	3 Years
19.	CFA/BW/54/2007-02	2010-02-22	2012-04-19	2 Years
20.	CFA/BW/64/2012-05	2010-04-11	2012-05-10	2 Year
21.	CFA/BW/73/2012-04	2010-06-16	2012-04-25	1 Years 10 Months
22.	CFA/BW/81/2012-01	2010-08-08	2012-01-12	1 Year 5 Months
23.	CFA/BW/85/2012-05	2010-10-01	2012-05-23	1 Year 7 Months
24.	CFA/BW/88/2012-10	2010-11-01	2012-10-68	1 Years 11 Months
25.	CFA/BW/89/2012-01	2010-04-24	2012-01-17	1 Year 8 Months