

**GOVERNMENT OF INDIA  
CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION  
LOK SABHA**

UNSTARRED QUESTION NO:1694  
ANSWERED ON:01.08.2003  
STREAMLINING OF BIS  
BHUMA NAGI REDDY

**Will the Minister of CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION be pleased to state:**

(a) whether the Government have streamlined the working of Bureau of Indian Standards which was found to be lenient in enforcing standards in the case of drinking (mineral) water in March, 2003; and

(b) if so, the details in this regard?

**Answer**

MINISTER OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION (SHRI SHARAD YADAV)

(a) & (b): Yes, Sir. In view of the Report of Centre for Science and Environment (CSE), a Non-Governmental organization, regarding presence of pesticide residues in the Bottled Water, the Government had constituted an Inquiry Committee under the Chairpersonship of Smt. Satwant Reddy, Additional Secretary in the Department of Consumer Affairs on 5th February, 2003. The Committee submitted its Report on 25th March, 2003. The major findings and recommendations of the Report in respect of functioning of Bureau of Indian Standards (BIS) are as per Annexure. The Government has accepted all the recommendations of the Inquiry Committee pertaining to BIS.

ANNEXURE

STATEMENT REFERRED TO IN PART (a) OF REPLY TO LOKSABHA UNSTARRED QUESTION NO. 1694 FOR 1/8/2003 REGARDING STREAMLINING OF BIS

The major findings and recommendations of the report are as under:

- BIS has an established system for developing and formulating standards by involving different sectors. Consensus is an essential procedural principle and a necessary condition for the preparation of Standards. Further BIS has adopted the International Organization for Standardization (ISO) Guide 7 – 1982 on the requirements suitable for product certification. The views expressed by the scientists, consumer organization and DGHS (PFA) on draft standards are taken into consideration. Overall, the prescribed procedure was followed while formulating these two standards for Packaged Drinking Water. The BIS Secretariat has carried out its assigned function of identifying appropriate Sectional Committees consulting the interested sectors, placement of comments before the Sectional Committee, and recording of the decisions related to each of the quality parameters. The standards have specified all those characteristics and requirements that are necessary, the required limiting values and also the test methods.
- BIS certification for Packaged Drinking Water and Packaged Natural Mineral Water was made mandatory under PFA by Ministry of Health and Family Welfare through two Notifications issued on 29th September, 2000. Before these Notifications were issued, the matter was discussed by experts in the Central Committee for Food Standards (CCFS), set up under Rule 3 of PFA Act. This Committee, under the chairmanship of Director General of Health Services considered the BIS standards and found them adequate for adoption under PFA. The specifications for pesticides residue under PFA standards as well as BIS standards are "below detectable limit".
- The Committee found that the standards for Packaged Drinking Water and Packaged Natural Mineral Water were adequate and the detection limits of pesticides residue in these two standards compare favorably with pesticide residues in other food items such as milk, fruits, vegetables and food grains, which account for a major portion of daily intake by human beings. For example existing test methods detect DDT in packaged water upto the level of 0.02 ppm, whereas in milk and milk products (on a fat basis), it is permitted upto 1.25 ppm under PFA.
- The two standards on Packaged Drinking Water were formulated by deriving assistance from Codex and WHO guidelines. At that time Codex had not yet agreed upon the relevant test method for detection and determination of pesticide residues. Hence the concerned Technical Committee of BIS decided to adopt the test method standard established by another technical committee of BIS, which were prescribed for pesticides residues in fruits, vegetables and soils. These standard test methods were not specifically meant for drinking water. Since an agreed Codex test method was not available at that time, no individual officer or organization can be held responsible for this weak link in the test method adopted.
- A pro-active approach towards keeping the standards dynamic and at par with international developments in related fields is necessary. This would ensure that BIS strives for continuous improvement of standards by providing for an in-built alert system, which would flag emerging problems before they assume threatening dimensions.

- BIS should have a Core Group of Scientists from various fields with the responsibility of keeping track of recent scientific and technical developments in critical areas. These scientists would alert the BIS management on the need to update and revise particular standards even before the review is due.
- Draft standards should be put on the Website of BIS in order to obtain comments from all interested individuals and groups. This should be brought to public notice by giving advertisements in the print and electronic media.
- The standard formulation is a voluntary activity and BIS does not pay anything, even in terms of TA/DA, for participation in meetings of the Technical Committees set up for standard formulation. As a result, at times, scientific organizations and consumer organizations are not able to participate in the meetings of Technical Committees. There is an urgent need to take remedial measures to get over this problem.
- The steps involved in the certification process as laid down in the BIS Act, Certification Regulations and Manual Operations etc. have been followed in licensing the manufacturing units. Surveillance inspections and picking up of samples from the factory and the market place for assessing their conformity to the requirements of standard in a recognized laboratory have also been carried out. Instances of action taken, including stoppage of marking when non-compliance was observed, indicate that supervision and monitoring, required under the scheme were carried out. However, some shortfall was observed in the targets set for frequency of surveillance inspections and testing of samples. It has also been observed that in addition to the existing demands for certification, about 750 licences for Packaged Drinking Water were added for which additional resources like manpower were not provided. Constraints of manpower available for the overall certification and enforcement activities of BIS might, therefore, have contributed to the shortfall noticed in the surveillance inspection. No single individual can be held responsible for this.
- When BIS certification for an item of mass consumption like packaged water is made mandatory, it increases the responsibility and answerability of BIS towards the consumers. BIS should have a complete in-house review of its resources before accepting this responsibility. Inadequacies of manpower and other resources should be identified and ways to fill up those gaps be explored before the challenge is accepted. But once BIS has accepted this responsibility, it must discharge it faithfully and not cite lack of manpower or resources as justification for non-adherence to the norms.
- BIS prepares one Scheme of Testing and Inspection (STI) for each product, after due consideration of the specifications in the relevant standard but this STI, once prepared becomes applicable to all licensees of that product. In the European directives, it is found that the frequency of sampling and analysis for water put into bottles or containers for sale varies according to the capacity of production. It is suggested that BIS may consider the desirability of linking the frequency of testing with the production. In other words instead of a single STI for all licensees, BIS may take into account the quality of raw water, the technology used for purifying and quantity of water produced in a day and develop a STI for that individual manufacturing unit.
- BIS may consider setting up product specific committees, as prevailing in AFNOR (French Standard body), having provision for outside expert participation at least for certification of mandatory items. This will enable BIS to involve the mandating body, say PFA of DGHS or its nominee to advise on the STI, choice of testing laboratories and overall implementation effectiveness of the scheme.
- In addition to BIS's Central Laboratory, Sahibabad, services of 13 other laboratories were made use of by BIS for testing of the samples drawn. It was necessary for evaluation of applications for grant of licence and for supervision. The recognition of the laboratories has been based on international standards regarding the competence of the testing laboratories. The laboratories have followed the testing methods specified in the standard and have submitted reports in time in properly designed format indicating the specified value and the values obtained for the samples submitted.
- The Bureau of Indian Standards, the National Standards Body of India, became functional as a statutory body under the Bureau of Indian Standards Act, 1986 with effect from 1 April, 1987 taking over the staff, assets and liabilities of Indian Standards Institution established in 1947. For over 50 years this institution has been successfully promoting and nurturing the standardization movement in the country. It has provided for the harmonious development of standardization, marking and quality certification of goods. However, there is now a need for BIS to revitalize its core competencies. The existing procedures of BIS formulated several years ago are somewhat shrouded in secrecy and confidentiality. Government is, however, committed to greater transparency. There is also a greater participation of people in decision making. The increased use of computers, the internet and websites has made it possible to reach out to people in a cost effective way. BIS should overhaul its procedures in the light of these developments and increase transparency in its operations. List of members of Technical Committees, draft standards, list of licensees and their present status may be put on its website and updated at monthly intervals. The possibility of placing test reports of samples drawn from factory or market on the web may also be considered.
- In the developed countries, there is only one standard for drinking water and countries are expected to ensure that all drinking water for human consumption, whether it is made available through the distribution network or in containers, conforms to those standards. It is time that the Government/Municipal machinery gears itself up to provide safe drinking water through its distribution network.
- There is also need to review the permissible limits of contaminants in other food products under PFA. This may also lead to a wider discussion regarding permissible levels of use of pesticides and fertilizers for agriculture and horticulture purposes. As long as pesticides and fertilizers are used for agriculture, they would have an adverse effect on food and water.
- A water re-charging system should be made mandatory for this industry. Some guidelines regarding selection of sites for installation of packaged drinking water industry are also required to ensure their location in pollution free areas.
- When BIS establishes a standard, it must specify the corresponding test methods. In the amended standards (Amendment No. 4 of February 2003) it has been stated that "the analysis shall be conducted by using internationally established test methods meeting the

residue limits specified". This is vague and has left the choice of method to laboratories, which will lead to confusion, as it will not permit comparison between the results of different laboratories. BIS should constitute a Committee of Experts from the leading research institutions like Central Pollution Control Board (CPCB), National Institute of Nutrition (NIN), Central Food Technology Research Institute (CFTRI), Central Food Laboratories, Indian Toxicological Research Centre (ITRC), Indian Institute of Technology (IIT), National Environmental Engineering Research Institute (NEERI) etc engaged in evaluation of water quality for a review of the standards specified in IS: 13492 and IS: 14543 in order to specify the test methods to be followed by the testing laboratories.