

**QUALITY OF PIPE-BORNE DRINKING WATER IN THE
GREATER COLOMBO AREA**

D.M. Perera, P. Illangovan, C Karunatileke
National Building Research Organisation, Colombo 05.

The water quality surveillance programme for the Greater Colombo Area was commenced by NBRO in May 1986, as a public health measure to assess the quality of pipe-borne drinking water. The programme covers the Greater Colombo network and the service reservoirs. Samples are collected from various points in the distribution system viz; standposts, households, public places and housing schemes. Samples are also collected from sumps/overhead tanks to check for bacterial contamination.

Tests are done for the faecal coliforms, total coliforms and faecal streptococci. Bacteriological examination offers the most sensitive test for the detection of recent, and therefore potentially dangerous faecal pollution, thereby providing a hygienic assessment of water quality with a sensitivity and specificity that is absent from routine chemical analysis. In addition some physico-chemical parameters are also determined.

The authors in the paper will discuss the outcome of the year long surveillance programme with respect to ;

- i) Contamination distribution in the different areas of the Greater Colombo network.
- ii) Residual chlorine levels in the distribution network.
- iii) The effectiveness of in-house storage measures.
- iv) Performances comparison with respect to SLSI Standards and WHO Guidelines.
- v) Organising similar programmes in other urban local authorities.

- References:
1. WHO Guidelines for Drinking Water Quality, Volumes 1-3, 1984.
 2. Surveillance of Drinking Water Quality, WHO Monograph Series No 63, 1976.
 3. National Building Research Organisation (1989) Water Quality Surveillance - Greater Colombo Area - Review Report.