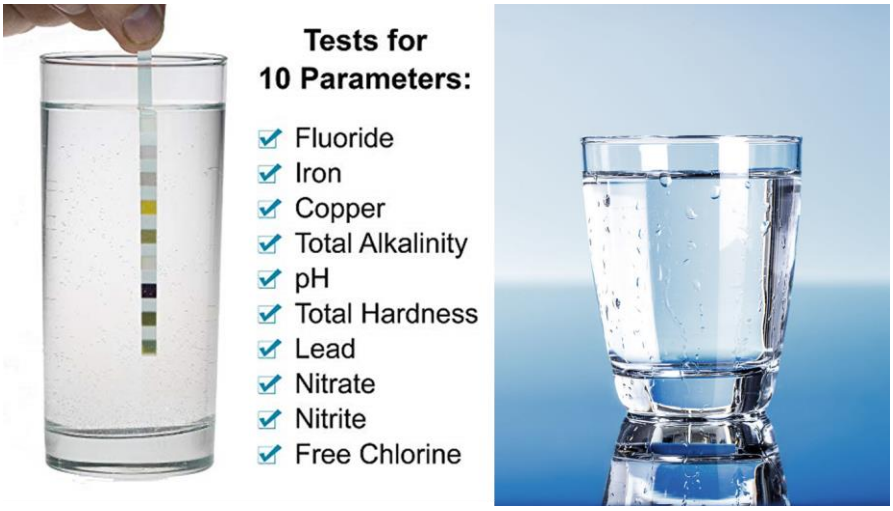
Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India

WATER RESOURCES DEVELOPMENT DIVISION



Continuing Professional Development Programme on

Water Quality Monitoring and Surveillance

04 – 06 December, 2019

(**An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution**)

Centre for Promotion of Professional Execellence

INTRODUCTION

Drinking water sources are under continuous threat of contamination with far-reaching consequences on health in general and of children in particular and it is also gravely effecting economic and social development of communities as well as nations. A wide range of human and natural processes affect the biological, chemical, and physical characteristics of water and thus impact water quality. Numerous human activities are responsible for water quality, including agriculture, industry, mining, disposal of human waste, population growth, urbanization, and climate change. Climate change and in particular increasing temperatures and changes in hydrological patterns such as droughts and floods influence water quality and exacerbate water pollution from sediments, nutrients, dissolved organic carbon, pathogens, pesticides, as well as thermal pollution.

Bureau of Indian Standards has brought out IS-10500-2012 which clearly specifies standards for drinking water. In rural areas generally more than 85% of drinking water sources are ground water based and chemical constituents in groundwater do not change overnight therefore testing of chemical contaminants once in an year is adequate. In case of surface water the testing procedures are more stringent and periodical.

An adequate supply of safe clean water is regarded as the most important precondition for sustaining human life, for maintaining ecosystems that support all life and for achieving sustainable development. Access to clean water is essential for addressing poverty and health problems. The quality of the water is increasingly threatened as human populations grow. Industrial and agricultural activities expand and influence of climate change threatens to cause major alterations of the hydrologic cycle. In general poor water quality threatens the health of people and ecosystems, reduces the availability of safe water for drinking and other uses further influencing the economic productivity and development opportunities.

Women, children and the economically disadvantaged are the most affected by poor water quality impact. Over 90 percent of those who die as a result of water related diseases are children under the age of five. Women are forced to travel long distances to fetch safe water.

Clean and safe water can only be guaranteed through effective water quality monitoring and surveillance programme. These are two distinct but closely related activities and are handled by different agencies, water quality monitoring is carried out by suppliers of water while surveillance is done by the regulatory agencies in the water sector.

Governments must be prepared to apportion sufficient funds to water quality monitoring and surveillance activities and such efforts would go a long way in ensuring clean water thereby reducing diseases and poverty resulting in sustainable development.

Water quality testing is critical for guiding water safety management and ensuring public health. Despite these established responsibilities for monitoring drinking water quality, water suppliers and surveillance agencies often do not meet regulatory requirements for testing procedures.

There is an emerging awareness of chemical pollutants such as arsenic and fluoride contamination of groundwater as a global phenomenon. This is combined with increased concern over chemical pollution of drinking water sources by pesticides, herbicides and other hydrocarbons, emphasising the paramount importance of water safety. New innovations in the water quality sector move away from exclusive reliance on testing of selected water quality parameters and towards a process of risk assessment and management associated with individual supplies.

Currently, interventions for improving water quality monitoring performance among water suppliers and surveillance agencies tend to emphasize hardware and knowledge inputs, including upgrading laboratories, supplying equipment, introducing mobile phone applications for data management and addressing capacity building initiatives.

OBJECTIVES

The proposed three day programme is aimed at updating the knowledge and upgrading the skills of all implementing stakeholders concerned with Drinking Water Supply in Govt., Semi Govt., NGOs.

COVERAGE

The Training programme broadly covers the following topics:

- Contamination of Water Sources
- Water Quality Monitoring
- Physical, Chemical and Bacteriological Contamination of Water
- Management Infrastructure for Water Quality Surveillance
- Drinking Water Standards (BIS specification)
- Disinfection Methods
- Visit to NABL Accredited Water Quality Testing Laboratory
- Design of Water Quality Network Systems for Surface and Ground Water
- Remote Sensing and GIS Application for Water Quality Data Management

METHODOLOGY

Methodology includes class room lectures with audio visuals, interactive sessions through group discussions, case studies etc. Emphasis would be laid on sharing of experiences of participants and active participation is solicited from participants. Medium of training is English.

TARGET PARTICIPANTS

Officers of Rural Water Supply and Sanitation Dept., Panchayat Raj and Rural Development, Municipal Corporations, Public Health Engg. Depts., Pollution Control Boards and allied Depts. of State and Central Governments, NGOs.

PROGRAMME VENUE

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, TS, India.

DATES

04 – 06 December, 2019

TIMINGS

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

COURSE DIRECTORs		**ADVISER**
G. Surender, M.Tech (WRE), MIE Sr. Faculty WRD Division	G. Naresh, M.Tech,(Ph.D), MIE Jr. Faculty W RD Division	M. Rama Mohan, B.Tech, FIE (Former Chief Engineer RWS&S Dept., Andhra Pradesh) Adviser, WRD Division

COURSE FEE

Residential Fee is Rs.15,000/- per participant. Residential fee includes course material, course kit, and twin-sharing AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

DISCOUNTS

Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants.

Group Discount: Additional 10% discount for three or more participants if sponsored by the same organization.

(All discounts are applicable only if fee is received at ESCI before the commencement of the programme)

GST @18% as applicable is to be paid extra over and above the training fee. **PAN Card No** AAATT3439Q**;** **GSTIN** 36AAATT3439Q1ZV under commercial training or coaching services.

Programme fee is to be paid in favour of **"IE(I)-Engineering Staff College of India"** in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI - SB A/c No. 10007111201 with The SBI, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004 by NEFT/ RTGS/ IFSC Code No. SBIN 0004159 – MICR No.500002075. **While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and programme title.**

REGISTRATION

Online registration shall be available on ESCI website. To register manually, please send your nominations giving details of name, designation, contact address, email address, mobile, telephone and fax numbers of the participant along with the details of mode of payment of fee, addressed to:

Head
Water Resources Development Division
Engineering Staff College of India
Gachi Bowli, Hyderabad – 500 032
Phone: 040 – 66304117 – 9 (Dir.) 23000465 (EPABX): Extn: 4117– 9
Fax: 040 - 23000336
E-Mail : wrd@escihyd.org
Url : www.escihyd.org

CERTIFICATE: A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INSTRUCTIONS

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation participants ESCI will facilitate pickup and drop from Airport / Railway Station/ Bus stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participants directly to the cab.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00Hrs) one day after conclusion (Check out at 12:00 hrs) of the programme duration.
- Overstay charges of @ Rs.990/- per day, per head will be charged.
- Well developed Information Centre and internet facilities are available to the participants.