



# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

*Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. T.S., India*



## ENVIRONMENT MANAGEMENT DIVISION

Continuing Professional Development Programme on  
**Recent Trends in Technologies of  
Sewerage Systems and Sewage Treatment  
(as per New CPHEEO Manual)**  
20 – 24 February, 2017



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence**

## **Introduction:**

As per Census 2001, 30.66 million urban households which form 35.49% of the urban households suffer from inadequate access to sanitation. According to the Report of the Central Pollution Control Board (2009), the estimated sewage generation from Class - I Cities and Class - II Towns is 38254.82 million liters per day (MLD) out of which only 17787.38 MLD (35%) is being treated and the remaining is disposed of into the water bodies without any treatment, due to which three-fourths of surface water resources are polluted. The Ministry of Urban Development conducted a rating of class I cities on sanitation-related parameters in 2009-10. Out of 423 cities, only four were in the blue category scoring more than 66 points out of 100. No city achieved the distinction of being a green city i.e. a city scoring more than 90 out of 100.

According to the Constitution of India, water supply and sanitation is a State subject and the States are vested with the responsibility for planning and implementation of water supply and sanitation schemes including O&M and cost recovery. The 74th amendment envisages transfer of this function to the Urban Local Bodies. However, the Govt. of India supplements the efforts of the States in various ways – sanction of funds for the implementation of projects, technical guidance, capacity building etc. As on date, 111 sewerage schemes at a total estimated cost of Rs. 14,834.14 crores have been sanctioned under the UIG component of JNNURM. 96 sewerage schemes at an estimated cost of Rs. 2862.29 crore have been approved under UIDSSMT component of JNNURM. In recognition of the need for a special focus on sanitation, the National Urban Sanitation Policy was adopted in October 2008 with a focus on elimination of open defecation, integrated city-wide sanitation, proper Operation & Maintenance of all sanitary installations etc. The initiatives under the Policy include rating of cities, awareness generation and support to cities for preparation of city sanitation plans. In 2015, JnNURM was replaced by AMRUT Schemes, which gives importance on “Sewage Systems and Sewage Treatment Plants”.

The CPHEEO has brought out a detailed Manual in 2013 on the various aspects of Sewerage & Sewage Treatment.

## **Objective:**

To improve & adopt service level benchmarks for the water and sanitation sector with a view to shifting the focus of urban development projects from infrastructure creation to improvement of service levels in municipalities and municipal corporations and innovate and explore new technologies as well as PPP models without compromising on the basic safeguards, both technical and financial, and select appropriate technologies in respect of Sewage collection and Sewage Treatment system and its implementation.

## **Course Coverage:**

This programme is designed to cover broadly the following topics.

- **CPHEEO Manual Guidelines - Engineering, Operation & Maintenance and Management aspects on Sewerage & Sewage Treatment**
- **AMRUT Mission and Guidelines**
- **Materials and economics of gravity sewer systems**
- **Sewage pumping systems**
- **How to plan a sewage treatment plant and reuse system**
- **Design, O&M of STP**
- **Trouble shooting in the O&M**
- **PPP Models**
- **Detailed Project Report (DPR)**
- **Sewerage Network Designing using Software Applications**
- **Field Visits to STPs**
- **Group Discussion**

## Methodology:

Methodology of the programme includes class room Sessions with Lectures/discussions, with audio visual aid; bench - marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive, demanding active participation from all the participants.

## Target Participants:

The course is meant for Engineers/ Managers / Commissioners at all levels working in Metropolitan Water Supply & Sewerage Boards, Sanitation Boards, Public Health Engineering Departments, Municipal Corporations, Municipal Administration Departments, Urban Development Authorities, ULBs, Industrial Townships, Industrial Development Corporations, Consultancy Organizations, Implementing agencies and interested professionals / individuals.

## Faculty:

Apart from core internal faculty, experts from industry, consulting firms, government organizations, academic and research institutions etc. will share the lecture sessions.

## Programme Venue, Dates & Timings:

### Venue:

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachibowli, Hyderabad-500032. Telangana, India.

### Dates:

**20 – 24 February, 2017**

### Timings:

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

## Course Director

M. Subha  
Faculty & Head I/c  
Environment Management Division, ESCI

## Course Fee:

**Rs. 25,000/- (Rupees Twenty Five Thousand only) Residential Fee** per participant. Fee includes course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

## 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.)**

**Service Tax as applicable @ 15%** is to be paid extra over and above the training fee, as training is also brought under the purview of Service Tax. **PAN Card No AAATT3439Q; Service Tax Registration No AAATT3439QST008** (under commercial training or coaching services – clause 65(105) (ZC) of Finance act – 1994).

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.

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 nos, telephone and fax number of the participant along with the details of payment of fee, addressed to:

M. Subha  
Faculty & Head I/c  
Environment Management Division,  
Engineering Staff College of India,  
Old Bombay Road, Gachi Bowli, Hyderabad 500 032  
Phone: Direct 040 6630 4120 to 4122 Fax : 040-23000336  
Email : em@escihyd.org/esci\_emd@yahoo.co.in

**Certificate:**

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

**General Information:**

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received atleast 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well developed Information Centre and Internet facilities are available to the participants.