

Engineering Staff College of India

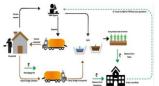
Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana, India



Environment Management Division

CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME

Faecal Sludge and Septage Management



23-25 July 2024

Interactive Sessions | Digital Learning | Assessments | 24/7 Experts Online/Offline Support

Introduction

India's urban areas produce 120,000 tonnes of faecal sludge on a daily basis, but an estimated two-thirds of the country's households with toilets aren't connected to the sewer system. 60% of this human waste is dumped in open water and on open land - contaminating drinking water and harming other food sources.

As part of the Swachh Bharat Mission, with a goal of achieving total sanitation in line and with 475 cities certified Open Defecation Free, all states are now gearing to move towards ODF++ which includes waste water management and treatment of faecal sludge and septage. At present, more than 45% of urban Indian households are dependent on On-Site Sanitation (OSS) systems. Thus, it is felt that faecal sludge output needs to be managed in an environmentally safe and sustainable manner using complementary and alternative methods of treatment.

To comprehensively establish improved sanitation practices and systems, India has decided to set up Faecal Sludge Treatment Plant (the "FSTP") in each of the Urban Local Bodies to tackle the health and environmental hazard caused when human excreta is disposed in open areas and water bodies due to lack of treatment facilities. Considering this , the Ministry of Urban Development has provided an enabling national policy framework for addressing the growing challenge of safe handling and treatment of septage, through the launch of the National Urban Faecal Sludge and Septage Management (FSSM) Policy, Capacity building and training as core components of the policy. As per the policy, considering the importance of FSM, ULBs uncovered with sewer networks are planning to construct FSTP and Detailed Project Reports are being prepared for the same.

In view of this, to strengthen the knowledge and skill level of the participants and the organization, ESCI is planning to create Sanitation Capacity Building Platform (SCBP) for all stakeholders which includes three days training programme of decentralized FSSM treatment solutions, design, construction, monitoring and O&M of Faecal Sludge and Septage. The aim of this training programme is to develop a cadre of practitioners with knowledge, skills and attitude for mainstreaming sustainable FSSM in each ULB.

Objectives

The objective of this 3-day programme is to provide information on

- ✓ Understanding on Faecal Sludge and septage for achieving city wide sanitation
- ✓ Sensitization on preparation of City Sanitation Plans
- ✓ Developing skills to plan, design and implement septage collection and treatment system including decentralised wastewater treatment and local (re)use- collection, transport and treatment options to the final end use or disposal of treated sludge.
- ✓ Updation on existing and upcoming policies/guidelines on FSM and the way forward.
- ✓ To get acquainted with issues and challenges relating to planning and implementing Faecal Sludge and Septage Management in a city.
- ✓ Planning and designing of co-composting of dried faecal sludge with organic municipal solid waste.
- √ To understand various examples of resource recovery from reuse of bio-solids from Faecal Sludge Treatment.
- ✓ Peer to peer learning through experience sharing on implementing FSM in cities by officials/practitioners.
- ✓ Providing guidance on how to make a city-level faecal sludge management plan with the involvement of all the stakeholders and showcase of current business models.

Course Coverage

- √ Introduction, Objective, Policies, Guidelines and key Sanitation facts as per MoUD advisory module -Faecal Sludge & Septage
- ✓ Design, Construction and O& M of FSM-Methodology and Implementation
- ✓ FSM and Septage management activities related to Infrastructure creation

- Assessment of existing toilets and septic tanks through surveys and creation of database
- Design and construction / refurbishment of septic tanks
- Desludging of septic tanks
- Scheduled septic tank emptying services o Treatment of faecal sludge / septage
- Treatment options of Septage
- ✓ Planning and Design of co-composting of dried faecal sludge with organic municipal solid waste.
- ✓ Institutional and governance aspects in Septage Management Plan: Regulations, Awareness generation and capacity building activities, Record-keeping, reporting (MIS), monitoring and feedback systems, Sources of revenues for septage management
- ✓ PSP (Private sector participation) options for Septage Management
- ✓ Case Study, Group Discussion, etc.

Methodology

Methodology of the programme includes lectures by expert faculties, case studies and practical demonstration and also Digital Learning through LMS Platform, Online Video Interactive sessions with Hand-on Practical, Lecture / Discussion with audio visual aid, bench marked video shows, chalk & talk sessions, online case studies, debates, sharing of experiences etc. All the sessions will be interactive, demanding active participation from all the members.

Target Participants

This course is designed in consideration with the Engineers, managers who are involved in planning, designing, analysing, and optimizing their sewerage and wastewater collection systems, Sewerage Schemes implementators and in charge of design, monitoring, O&M of Sewage Treatment Plants from Metro Boards, Public Health Engineering Departments, Municipal Corporations, Municipal Administration Departments, Development Authorities, Townships and other Govt. PSU departments etc.

Main target group for this training is middle level engineers/sanitary inspectors/ managers from ULBs, Water Supply and Sewerage Boards, PHED, UITs and officials of Project Implementation Units (PIU) or Project Management Units (PMU) and Elected Representatives of the ULBs.

Programme Dates, Code & Timings

Dates: 23-25 July 2024 (EM 6074)

Timings: 10:00 AM Onwards. After Registration Participant can access ESCI LMS platform for digital Learning.

Course Director

Ms. Anita Aggarwal

Faculty & Head I/c. Environment Management Division, Phone: Direct 040 6630 4120, 4122 / Fax: 040-66304163

Email: em@escihyd.org

Or Contact us at: Mr. GNM. Rao (Prog. Manager) - 9866431555

Faculty/Speaker Details

Apart from the core internal faculty, Experienced Professionals/Faculties/Sector experts will be delivering the lively lecture with practical knowledge & case study.

Course Fee

- ➤ Course Fee Rs. 16,000/- (Rupees Sixteen Thousand only) 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. 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)
- Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants
- > Group Incentive: 10% discount on course fee for five or more participants, if sponsored by the same Organization

GST @18% is to be paid extra over and above the training fee. **PAN Card No.** AAATT3439Q. **GST No: 36AAATT3439Q1ZV**, **HS No.: 999293** (under commercial training or coaching services – clause 65(105) (ZZC) of Finance act – 1994).

Programme fee is to be paid in in favour of "THE INSTITUTION OF ENGINEERS (INDIA) – 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. PAN Card No AAATT3439Q; GSTIN No. 36AAATT3439Q1ZV. While using EFT method of payment, please ensure to communicate us your company name, Contact details, our invoice reference and programme title.

Registration

Online registration shall be available on ESCI web portal:- www.escihyd.org

To register manually please send your nominations giving details of name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to: Course Director

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