HANDS-ON LABORATORY TRAINING FOR WORKING PROFESSIONALS IN FECAL SLUDGE MANAGEMENT IN UTTAR PRADESH

Date: 18TH TO 22ND MARCH, 2024
Medium of training: ENGLISH
Venue: ANIL AGARWAL ENVIRONMENT TRAINING INSTITUTE (AAETI), NEEMLI, RAJASTHAN

ABOUT THE TRAINING
Management of the sanitation system has been a long-term challenge, especially for low- and middle-income countries like India. Uttar Pradesh, the most populous Indian state, has approximately 93 per cent of its cities and towns completely dependent on non-sewered sanitation systems. Faecal sludge management (FSM) refers to the storage, collection, transport, treatment, and safe end use or disposal of faecal sludge. FSM is an evolving field with continual development and improvement happening in research methodologies. As of February 2024, 59 faecal sludge and septage management (FSSM) plants are now ready in Uttar Pradesh. Therefore, skill development for testing the quality of faecal sludge and treated wastewater is essential to evaluate the performance of the FSTPs. The course provided by the Environment Monitoring Laboratory (EML) in the Centre for Science and Environment focuses on some of the basic techniques in the laboratory analysis of physico-chemical and biological parameters of faecal sludge and treated wastewater. This training is part of the Centre for Science and Environment and Bill Melinda Gates Foundation collaboration on FSM in India. In-house experts and lab scientists from EML will guide the working professionals in the sanitation sector (FSM/ wastewater) from Uttar Pradesh and help them learn faecal sludge analysis using state-of-the-art equipment and methods. The hands-on approach guarantees participants to perform the lab experiments on their own and can enhance their skills while working on some of the best equipment and protocols in their class. The training will be held in CSE’s residential campus in Neemli, near Alwar, Rajasthan.

WHAT YOU WILL LEARN
- Introduction to faecal sludge management and wastewater
- Faecal sludge treatment approaches and technologies
- Sample collection, storage, transportation and sample processing
- Safety measures to be taken during handling of faecal sludge and wastewater
- Physico-chemical (BOD, COD, solids content, TKN, AN) analysis of faecal sludge and wastewater
- Biological (Helminth eggs, faecal coliform, E. coli) analysis of faecal sludge and wastewater
- Analysis and interpretation of results
- Calibration of analytical instruments
- Good laboratory practices

METHODOLOGY
- Highly interactive hands-on training
- Interactive input presentations
- Field visit and exposure to technologies
- Hands-on exercises
- Analysis of physico-chemical parameters such as pH, Salinity content (TS, TSS, TDS, VSS), BOD (Biochemical oxygen demand), COD (Chemical oxygen demand), TKN (Total Kjeldahl nitrogen), Ammoniacal nitrogen, and Total phosphate
- Analysis of microbial parameters such as faecal coliform and E. coli in faecal sludge by multiple tube fermentation (MTF) techniques
- Enumeration of Helminth eggs in faecal sludge
- Analytical equipment calibration and method validation

REGISTER HERE

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BENEFITS
A certification on successful completion of training

COURSE FEE AND FACILITIES
Eligible professionals, who are working in the sanitation sector (FSM/Wastewater) in Uttar Pradesh will be provided with scholarships for this training by CSE. This support will cover the cost of travel, accommodation, food and training materials.

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