Introduction

Population of urban India is increasing at an alarming rate, creating huge stress on the exiting natural resources including water. As per report of World Resource Institute, 2015, 54% of India's total area is facing high to extremely high water stress, almost 600 million people are at higher risk of surface water supply disruptions. 54% of India’s groundwater wells are decreasing. The onus is on authorities to not only deal with solving water crises but also to efficiently treat the wastewater generated and explore other means and modes to recycle & reuse the treated wastewater for various non-potable applications like industries, agriculture, horticulture, farm forestry, toilet flushing, groundwater recharge, augmenting primary water sources, fish culture, commercial uses etc. so as to reduce the burden on fresh water. In order to encourage all the cities to adopt recycle and reuse of treated wastewater CPHEEO prepared COMpendium of RECYCLE AND REUSE OF WASTEWATER which will be useful for all State Governments/ULBs/PHEDs/ Jal Nigam etc., for scaling-up their wastewater recycling facilities in order to aid Circular Economy & achieve Sustainable Development Goals. In this process, ESCI feels privileged to announce the 3 days Training Programme on Recycle and reuse of treated wastewater to benefit the related stakeholders for various non-potable applications.

Objectives

The objective of this training programme is to upgrade the skills of the participants in the area of Transformation of Recycle and Reuse options of treated water. Participants will be able to understand the following actions: reduction - prevent wastewater generation in the first place by the reduction of water usage and pollution reduction at source; reclamation (removal) - an application of effective technologies for the removal of pollutants from water and wastewater; reuse - reuse of wastewater as an alternative source of water supply (non-potable usage), recycling - recovery of water from wastewater for potable usage; recovery - recovery of resources such as nutrients and energy from water-based waste, and rethink - rethinking how to use resources to create a sustainable economy, which is free of waste and emissions.

Course Coverage

- Outline of Recycle and Reuse of Waste Water, Circular Water Economy and related SDGs.
- Guidelines on Recycle and reuse of Treated water
- Various Measures for Reuse of Treated Wastewater & Timeline
- Unlocking the self sustaining biological system
- Recycle and Reuse of Waste Water and its sale to industrial customers
- Revenue from sale of secondary treated wastewater can cover operation and maintenance costs of STPs.
- Maximize value from toilet resources
- Major sources of the Waste Water Treatment system and adoption of circular model
- Different waste water treatment technologies
- Best practice case studies of 32 cities practicing recycle and reuse of treated wastewater
Methodology

Methodology of the programme includes classroom 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

This course is useful for engineers and managers working in the areas of project formulation including Environment and Forest clearances in Public and Private Sectors, Government Departments (undertaking Development Projects), Regulatory Boards, Consultancy firms, R&D & Educational Institutions, NGOs etc. Engineers & Executives involved in Water Pollution Monitoring and Modeling from different sectors can also attend the programme.

Programme Dates, Code & Timings

Dates: 12-14 December (EM 6095) & Timings: 10:00 AM onwards.

Course Director

Ms. Anita Aggarwal
Faculty & Head I/c.
Environment Management Division,
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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 (Residential) 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 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. **Kindly provide your organization GSTIN and TAN No. along with your nominations**

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** (or) Contact us at: Mr. GNM. Rao (Prog. Manager) – 9866431555.

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