



**ONLINE TRAINING**

# WATER AUDIT: A SYSTEMATIC TOOL FOR WATER CONSERVATION

**DATES: January 17<sup>th</sup> to January 30<sup>th</sup>, 2023**

**LAST DATE TO APPLY: 10 January 2023**

## BACKGROUND:

The world is facing enduring water risks with the demand-supply gap increasing at an alarming rate. The industry is an important stakeholder in water resource management and as a responsible member of the community, needs to be proactive in combating water risks. The increasing industrial production, especially in water-intensive industries (like thermal power plants, steel, pharmaceuticals, tanneries, pulp & paper, textiles, fertilizers, etc.) is already putting pressure on the limited freshwater resources in India and worldwide. This coupled with increased water demand from other sectors like infrastructure development, agriculture, domestic, etc. is leading to conflicts over water availability.

Sourcing water and managing wastewater is becoming increasingly difficult & expensive and hence is an important aspect of the sustainability of any industry. Industries that are heavily dependent on water have to cut down on their production at times due to scarcity of water mainly during the summer. Such scenarios have become more frequent in the past few years due to increasing water stress. Therefore, it is very critical that industries use water judiciously and

reduce their water footprint as much as possible in order to be sustainable in the future.

Water use optimization, improving water accounting systems, and identifying water losses and opportunities for water savings can serve as effective approaches for reducing water consumption. Also, efficient wastewater treatment technologies and recycling/reuse practices can further bring down consumption and effluent generation. Further, substantial costs which are associated with water & wastewater management like water sourcing, pumping, water treatment (chemicals), effluent treatment & disposal, etc. can be effectively reduced through better water and wastewater management and through periodic conduction of water audits.

Understanding the relevance of the subject, the Centre for Science and Environment (CSE) has developed a two-week online course with the aim of providing a wider understanding of the above aspects of water audit, wastewater management, and recycling. The course will be conducted online through technological learning tools such as recorded video presentations, discussions with experts, and reading material.

## KEY LEARNINGS

- Water audit – Introduction, Scope, and Methodology
- Preparing industry-specific water audit questionnaire
- Water audit instrumentation, metering, and accounting
- Preparing water circuit diagram and water balance with industry-specific case studies
- Specific water consumption & benchmarking
- Understanding water utilities basics - pumps and cooling towers
- New CGWA notification covering mandatory water audit
- Advanced water & wastewater treatment technologies with a focus on zero-discharge technologies
- Industry-specific case studies on opportunities identified for water savings through water audits
- Water and wastewater costing and cost-benefit analysis of water-saving schemes
- Case studies of different water-intensive sectors

## WHO CAN APPLY:

Industry professionals, EHS officials, Environmental Consultants, Environment Engineers, Environment Regulators, Environmental laboratories, Academic institutions, Students, Research scholars, and others aspiring to work in the field of water audit and wastewater management field.

## MODE OF TRAINING

The online course is self-paced wherein pre-recorded video sessions from experts, presentations, and other reading material will be uploaded on CSE's online training platform on daily basis. Additionally, 2-3 live online sessions will be organized over the weekend with all the experts for taking up queries. The course is designed in a manner to help participants in attending it along with their regular work and study the course material at their own convenience.

**DURATION: 3 hours per day**

## COURSE FEE AND FACILITIES:

₹ 3,500/- (Indian Participants)

US\$100 (Global Participants)

## COURSE COORDINATOR

**DIVYANSH UPADHYAY**

Senior Research Associate,  
Industry Unit, CSE

Email: divyansh.u@cseindia.org

Mobile: +91-8318629764

**PARTICIPANTS WILL RECEIVE AN E-CERTIFICATE AFTER COMPLETION OF THE COURSE**