



ONLINE TRAINING ON

"WATER AUDIT AND CONSERVATION IN INDUSTRIES"

COURSE DATE: July 19 – August 1, 2021 | **ONLINE COURSE DURATION:** 24 hours (12 hours per week)
LAST DATE TO APPLY: July 15, 2021 | **COURSE FEE:** INR 3,500/- (Indian participants) / USD 100 (Global participants)

BACKGROUND

Increasing industrial production especially in water intensive industries (like thermal power plants, pulp & paper, textiles, fertilisers, 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 major conflicts over water availability. Sourcing water and managing wastewater is becoming increasingly difficult & expensive and hence is an important aspect for sustainability of any industry. Industries which are heavily dependent on water for their production have to cut down on their production at times due to scarcity of water mainly during summer season. 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 its water footprint as much as possible in order to be sustainable in future.

Water use optimisation, improving water accounting systems, identifying water losses and opportunities for water savings can serve as an effective approach for reducing water consumption. Also, efficient wastewater treatment technologies and recycling and reuse practices can further bring down consumption and effluent generation. Further, substantial costs which are associated with water & wastewater management like water sourcing, cost of pumping, cost of water treatment (chemicals), cost of 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, Centre for Science and Environment (CSE) has developed a two week online course with the aim of providing a wider understanding on the above aspects of water audit, wastewater management and recycling.

The course will be conducted online through technological learning tools such as presentations, videos, discussion with experts and other audio and reading material. Upon completion of course, participants will receive e-certificate of completion.

WHO CAN APPLY?

Industry professionals, EHS officials, environmental consultants, environment engineers, environment regulators, environmental laboratories, academic institutions and others aspiring to work in water audit and wastewater management field.

MODE OF TRAINING

The online course is self-paced wherein 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 with all the experts for taking up queries over weekend. 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.

KEY LEARNINGS FROM THE PROGRAMME

- 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
- Water audit, wastewater recycling and reuse – Regulatory aspects
- New CGWA notification covering mandatory water audit
- Understanding water utilities basics - pumps and cooling towers
- 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/Assignments/Exercises

COURSE COORDINATOR

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