Tel No:+97126654546 | FaxNo:+97126654182 | Email: training@cmc-me.com | www.cmc-me.com



# WE032:
# Water Audit and Leakage Control

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## Training Description:

Water Audit of a water supply scheme can be defined as the assessment of the capacity of total water produced by the Water Supply Authority and the actual quantity of water distributed throughout the area of service of the Authority, thus leading to an estimation of the losses.

## Training Objectives:

The objective of water audit is to assess the following:

- ✓ Water produced
- ✓ Water used
- ✓ Losses both physical and non-physical
- ✓ To identify and priorities areas which need immediate attention for control

Further, the objective of **leakage control** is to diagnose how water loss is caused and to formulate and implement action to reduce it to technically and economically acceptable minimum. Specifically, the objectives are:

- ✓ To reduce losses to an acceptable minimum
- ✓ To meet additional demands with water made available from reduced losses thereby saving in cost of additional production and distribution
- ✓ To give consumer satisfaction
- ✓ To augment revenue from the sale of water saved

## Training Designed for:

This course is intended for Engineers who deal with customers and meter readers on a daily basis Senior and Middle Level Managers responsible for development of strategies for NRW reduction from water utilities and local/ municipal authorities/water service providers.

## Training Program:

*DAY ONE:*

- ❖ Causes of leakage in Water Distribution Systems
- ❖ What is a Water Audit
- ❖ What is Leak Detection
- ❖ Benefits of Water Audits & Leak detections
- ❖ How an Audit is conducted; Worksheet & Latest Water Audit Software Used
    - Types of Leaks:
        - Visible Leaks
        - Non-Visible Leaks

*DAY TWO:*

- ❖ Value of Recoverable Leakage
- ❖ Overview of Leak Detection Methods
    - Preparing for The Leak Detection Survey

*DAY THREE:*

- ❖ Leak Detection Procedures:
    - Initial Listening Survey

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- Problems Encountered with the Listening Procedures
- Relisting to Suspect Sounds
- Pinpointing Leaks

*DAY FOUR:*

- ❖ Measuring, Estimating Losses from Discovered Leaks & Water Loss Control Programs
- ❖ Leak Detection Equipment, Installation & Cost
- ❖ Leak Detectors Limitations
- ❖ Calculating Leak rates for small Leaks

*DAY FIVE:*

- ❖ Large Pipes & Warning Signs
- ❖ Determining Leak Detection Effectiveness
- ❖ Examples
- ❖ Review
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

## Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

## Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

## Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

## Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

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## Training Timings:

Daily Timings:

| | |
|---|---|
| 07:45 - 08:00 | Morning Coffee / Tea |
| 08:00 - 10:00 | First Session |
| 10:00 - 10:20 | Recess (Coffee/Tea/Snacks) |
| 10:20 - 12:20 | Second Session |
| 12:20 - 13:00 | Recess (Prayer Break & Lunch) |
| 13:00 - 14:00 | Last Session |

For training registrations or in-house enquiries, please contact:

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