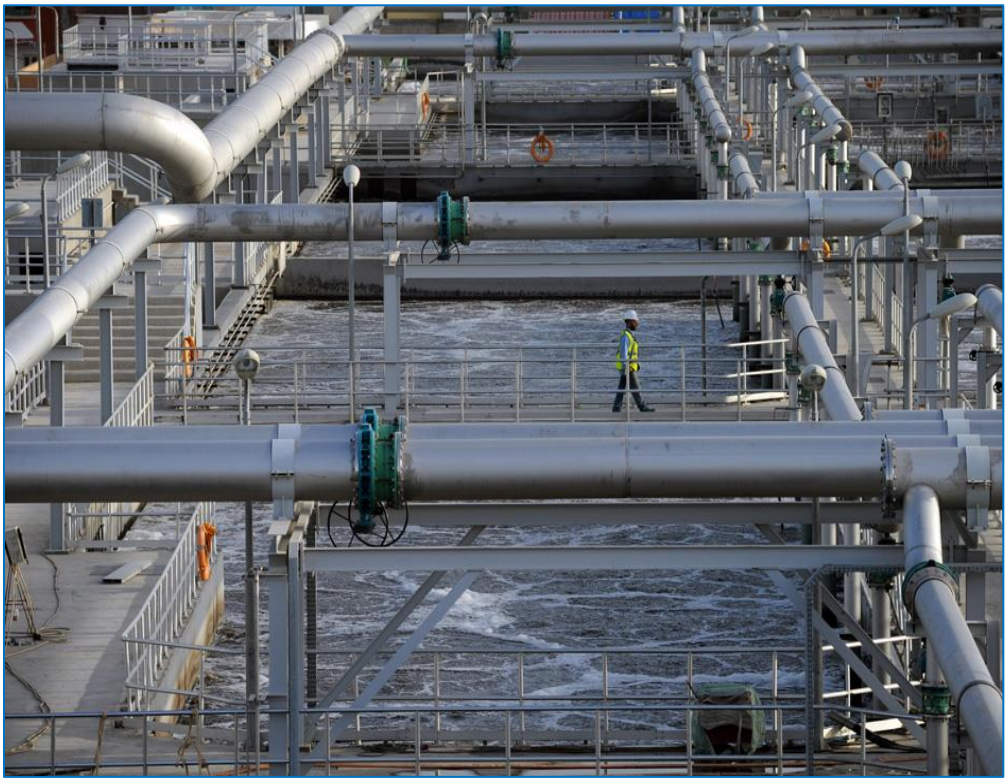
Tel No:+97126654546 | FaxNo:+97126654182 | Email: training@cmc-me.com | www.cmc-me.com



WE049:
Optimization & Rehabilitation of Water Treatment Plants

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

Training Description:

This course is about rehabilitation of water treatment plants. The course covers three types of treatment plants: conventional, thermal desalination; and membrane desalination. Many of the elements in each type of plant are similar.

Training Objectives:

Upon successful completion of this course, participants will be able to: analyze and understand the workings of each type of treatment plant, and plan for the elements for rehabilitation of each type of plant.

Training Designed for:

This course is intended for Engineers, Technicians, and Managers who are facing the issue of needing to rehabilitate an ageing water treatment plant.

Training Program:

DAY ONE:

- PRE-TEST
- Introduction
- Important elements of water chemistry and properties for rehabilitation that are common to all types of systems
- Differences between Fresh, Brackish, and Salt Waters
- Removal of muds, silts, grit, and debris
- Screens, grit chambers, and intake structures
- Pumps & Properties – salt water and fresh water pumping
- Valves and equipment selections- properties and corrosion

DAY TWO:

- Coagulation, chemistry, and fine particle removals
- Removal of objectionable metals and compounds chemical precipitation & solubility
- Aeration and Mass Transfer
- Water Softening and carbonate chemistry
- Coagulation chemistry and sedimentation theory and practice
- Clarifiers Design, Operations, and Rehabilitations

DAY THREE:

- Filtration theory, design, and operation
- Membrane Filtration
- Bacterial and viral control and deactivation
- Bacterial Control and disinfection, chlorine, UV, ozone, chlorine dioxide, chloramines, and others including peroxyacetic acid (PAA)
- The complete water treatment plant

DAY FOUR:

- Complete Analysis of the Theory, Operation, and Design of a thermal desalination plant
- Thermodynamics and heat balances, Pretreatment requirements, post conditioning
- Langalier Index and Corrosion Considerations
- Sludge Disposal

DAY FIVE:

- Complete Analysis of Theory and Operation, and Design of Membrane Desalination Systems
- Large vs. small scale Membrane Systems.
- Pretreatment requirements, Maintenance Requirements, Performance
- Sludge treatment and disposal
- 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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