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

WE012:
Oily Water Treatment Technology

Training Description:

This practical and highly interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

Billions of gallons of wastewaters containing oils and particulates are produced each year by metallurgical plants, ships, petroleum and gas operations, industrial washing operations, and other processes. Traditional technologies, such as gravity separators, air or gas flotation, chemical flocculation, plate coalesces, and hydro clones, are generally able to produce effluents containing as little as 30 ppm dispersed oil and particulates. However, these treatment technologies perform poorly on chemically stabilized suspensions and emulsions, very small particles and droplets (G-10 um in diameter), and soluble components. Moreover, effluents with less than 10 ppm impurities are desired, because of the potential toxic effects of the contaminants and their tendency to foul reverse-osmosis membranes and downstream processing equipment.

Microfiltration and ultrafiltration membranes are able to remove particulates, microorganisms and oils from water, if the membrane material and pore sizes are chosen appropriately. However, they are subject to fouling, which often reduces the permeate flux (volume of water passing through the membrane per surface area per time) below acceptable levels.

Water systems have long tended to be one of the neglected areas of the process plant. However, this situation is changing rapidly as environmental legislation tightens. This training course is uniquely placed to assist process plants in meeting these challenges, offering unrivalled expertise in water systems and the problems associated with treatment of oily water. Much of the technology discussed in this course has been developed to meet the challenges faced in the North Sea; oil producers there face some of the toughest environmental controls in the oil industry.

This intensive training course will cover all stages of oily water treatment from receiving waste oil and oily water to delivering cleaned water that meets the environmentally safe standards.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Apply systematic techniques in the treatment of oily water
- ✓ Discuss the sources of oily water in oil production fields, refining and steam cracking and explain the environmental imperative standards & legislations pertaining to the discharge of oil water
- ✓ Describe the layout of treatments, stages of general effluent treatment, the pretreatment of sour condensates, principles of preliminary oil separation and the physicochemical purification of effluents from preliminary oil separators
- ✓ Monitor purification plants such as measurement of hydrocarbons and organic matter, pH meters and performance of WTP equipment
- ✓ Discuss new technology such as membrane biological reactors (MBR), rotating biological contractors (RBC), sequence batch reactor (SBR) as well as sludge pumping and flowmeters for mass balances

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Training Designed for:

This course is intended for all environmental and HSE Professionals and Engineers, Oily Water Treatment Staff, Design Engineers and Sewage Operators, Municipal Planners and Engineers, plant and Maintenance Engineers, Mechanical Engineers and other Technical Staff. Further, this course is suitable for process Engineers, operation, maintenance, inspection and Production Managers, Supervisors, Foremen and anyone responsible for managing and operating waste water treatment facilities.

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 Program:

DAY ONE:

- Introduction and Scope of Organizational Roles and Responsibilities
- Quality Systems
- Control of Quality Documents
- Review of Requests, Tenders and Contracts

DAY TWO:

- Subcontracting of Tests
- Purchasing Services and Supplies
- Service to the Client
- Complaints

DAY THREE:

- Control on Nonconforming Work
- Improvement
- Corrective Action
- Preventative Measures

DAY FOUR:

- Control of Records
- Audits and Management Review
- Personnel, Training and Data Integrity
- Test Methods and Method Validation

DAY FIVE:

- Equipment and Calibrations
- Measurement Traceability
- Sample Management
- Quality of Test Results 23 Reporting of Results
- Course Conclusion
- POST-ASSESSMENT and EVALUATION

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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.

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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