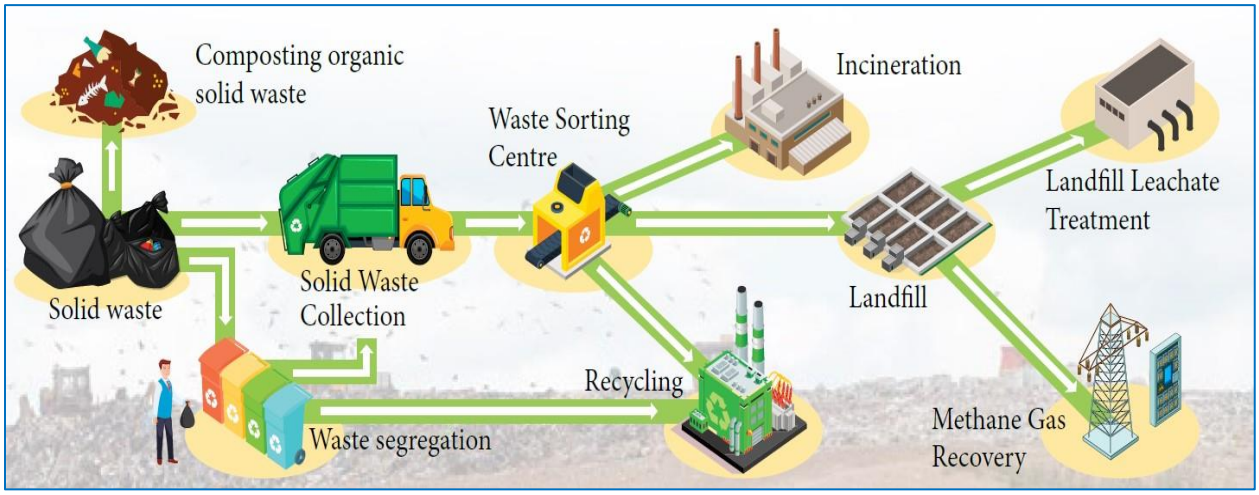


WE081:
Managing Industrial Wastewater and Solid Waste

Training Description:

This intensive training course will discuss the management, treatment and disposal of industrial wastewater, industrial wastes and hazardous wastes, Design of sustainable technologies for liquid & solid waste management: conventional domestic wastewater treatment plants, sanitary landfills & destruction processes for hazardous wastes; advanced reuse technologies, including wastewater nutrient removal, energy recovery from liquid & solid wastes; product recovery from oily wastes, solvents & abattoir wastes.

Training Objectives:

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

- ✓ Obtain and apply knowledge on managing of industrial wastewater and solid waste
- ✓ Evaluate the impacts of industrial wastewater discharges
- ✓ Make recommendations regarding those discharges
- ✓ Determine the difference and disposal options for various types of industrial wastes and hazardous wastes

Training Designed for:

This course is intended for Engineers, Technicians, Scientists, Managers, Transportation Managers, and anyone involved in industrial shipping and waste management. Participants are encouraged to bring questions and problems which can be discussed and problems which can be solved.

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."

Content, location and duration 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
- ❖ Definitions of Industrial Waste, Industrial Wastewater, and Hazardous Wastes
- ❖ Industrial Wastewater – What's in it
- ❖ Measurement of Impacts & Flows
- ❖ Flow metering, discharges & error analysis
- ❖ Quantities, strengths, characteristics by industry
- ❖ Environmental Consequences of wastewater discharges: The consequences of discharges
- ❖ Toxic Characteristics
- ❖ Treatment Techniques
  - Solids Removal
  - Clarification & Sedimentation & Precipitation
  - Filtration and Membrane Filtration

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- Aeration, Flotation, and Stripping
- Metals, Oils, and Organic Contaminants
- Residues
- Biological Wastes & Waste Treatment
- Importance of Disinfection

❖ Oily Wastes
❖ Spills & their treatment
❖ Examples of Environmental Problems with waste disposals
❖ Disposal of residues- are they hazardous wastes?

DAY TWO:

❖ Protecting our waters
❖ Protecting our groundwaters
❖ What is a waste?
❖ Difference between Hazardous Wastes and Non-Hazardous Wastes
❖ How to screen for a Hazardous Waste
❖ Personal Protective Equipment requirements
❖ What is a Hazardous Waste US & EU definitions Harmonized Definitions
❖ Toxicity, Flammability, Corrosivity, Ignitability, Reactivity, Radioactivity

DAY THREE:

❖ Transportation Requirements for Hazardous Wastes
❖ Storage Requirements for Hazardous Wastes
❖ Treatment and Disposal Techniques
- Landfilling, Design & description
- Land spreading Design and Practice
- Incineration & Thermal Systems Facility Considerations
- Encapsulation Techniques and Facilities & Practice
- Chemical Destruction & Facilities & Reactive Wastes
- Explosive wastes & their disposal
- Radioactive Waste Materials

DAY FOUR:

❖ Ground and Groundwater Considerations for Protection
❖ Groundwater Movement and Contaminants
❖ Exploration Techniques
❖ Permit Requirements and Prohibitions
❖ Planning and Emergency Response Operations
❖ Cleanup after an incident
❖ The rule of six P's
❖ Non- Hazardous Wastes Definitions
❖ What is a solid waste?
❖ Can a liquid be a solid waste?
❖ Safety requirements
❖ Recycling possibilities
❖ Composting

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DAY FIVE:

- Waste Facility Design
- Permitting, Location, and Environmental Considerations
- Landfill design & Landfill Operation
- Recap of Materials in this course
- Course Conclusion
- POST-ASSESSMENT and EVALUATION

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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