



شركة ميرك العربية السعودية
MEIRC Saudi Arabia

Effective Waste Water Treatment

Duration:5 Days

Course Overview:

Waste water and waste water treatment technology is considered now one of the main concerns in most organizations and industrial sectors. The operation, maintenance and installation of equipment are of the major concerns in addition to the used techniques in testing and measurements.

Course Objectives:

Upon successful completion of this course, the participant would be able to

- Explain fundamental principles of the waste treatment process
- Identify the major equipment used in the plant
- Explain typical operating procedures of Biomass plant
- Develop troubleshooting techniques for avoiding bacteria killing during operation
- Describe the importance of K-EPA regulation
- Safety interlocks functions and to maintain their reliability
- Cooling tower corrosion control
- How to identify the on lone passing valves to flare.
- Best practices in flare reduction

Who Should Attend?

Engineers and technicians in charge of a waste water treatment plant

Course Outlines:

Day 1

- Trainees background and needs
- Sources of Water Supply
- Surface Water
- Underground Waters
- Definition of Chemical Terms
- Impurities in Water
- Hardness
- Iron
- Silica
- Oil
- Dissolved Gasses
- Microbiological Material
- Suspended Matter

Day 2

- Water – Associated Operating Problems
- Corrosion
- Deposition
- Microbiological Growth
- Analysis of Oilfield Waters
- Sump pumps trouble shooting to enhance reliability.
- Dosing Chemicals optimization for ETF and Cooling Tower

Day 3

- Bio sludge centrifuge and screw conveyor trouble shooting



- Dewatering of Wet slop for reprocess in units
- Harmful chemical for bacteria
- How to maintain the reliability of Effluent Treatment Facility?
- Oil skimmers operation and reliability

Day 4

- Odor management in ETF/ WASTE WATER
- Main Sources of Pollution
 - At the Production
 - During Transportation
 - During Refining
- General Pollution Criteria
 - General Criteria
 - Specific Criteria
- Case Study and Practical issues

Day 5

- Interpretation of Pollution and Treatability
- De – Oiling of Water
- Purpose of De – Oiling
- API Interceptor
- Parallel Plate Interceptor (PPI) and Corrugated Plate Interceptor (CPI)
- Flotation Units
- Flocculation Units
- Case Studies
- Course Recap