

EFFLUENT TREATMENT & DISPOSAL

“Ensuring Environmental Compliance and Sustainable Wastewater Management”

Schedule

Date	Venue	Fees (Face-to-Face)
07 - 11 Sep 2026	Dubai, UAE	USD 3495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

With increasing global emphasis on environmental protection and regulatory compliance, effective effluent treatment and disposal has become a critical operational responsibility. This 5-day intensive training program provides in-depth knowledge of wastewater management, treatment technologies, regulatory standards, and sustainable disposal practices.

Participants will gain practical insights into the design, operation, and optimization of effluent treatment systems in industrial and municipal contexts. Through technical briefings, case studies, and workshops, attendees will be equipped to make informed decisions that align with environmental standards, reduce operational risks, and enhance sustainability.

Objectives

By the end of this course, participants will be able to:

- Understand wastewater composition, sources, and treatment principles
- Select appropriate effluent treatment technologies and processes
- Interpret national and international regulatory requirements
- Optimize treatment systems for performance, cost, and compliance
- Develop sustainable and environmentally responsible disposal strategies
- Monitor, analyze, and report effluent quality effectively

Why Attend

- Gain comprehensive technical knowledge of effluent treatment systems
- Ensure regulatory compliance and avoid environmental penalties
- Learn to reduce environmental impact and operational costs
- Strengthen your organization's sustainability and ESG credentials
- Access proven tools and templates for system analysis and improvement

Target Audience

This program is designed for:

- Environmental and wastewater engineers
- EHS, compliance, and sustainability officers
- Plant and utility managers in manufacturing and processing industries
- Facility managers and maintenance supervisors
- Consultants and regulatory inspectors involved in water and waste compliance

Individual Benefits

Key competencies that will be developed include:

- Technical understanding of treatment methods and technologies
- Ability to assess and improve treatment efficiency
- Skills in effluent analysis and interpretation of test results
- Regulatory knowledge for environmental compliance
- Strategic planning for sustainable disposal and reuse

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Improved environmental performance and legal compliance
- Reduced risk of penalties, incidents, and reputational damage
- Cost-effective effluent treatment through process optimization
- Enhanced reporting and stakeholder confidence in sustainability practices
- Support for ISO 14001 and other environmental management systems

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings - Overview of wastewater legislation, standards, and process fundamentals
- Case Studies - Examples of treatment plants, non-compliance cases, and successful reuse projects
- Workshops - System evaluations, troubleshooting exercises, and disposal planning
- Peer Exchange - Industry-specific discussions and experience sharing
- Tools - Effluent monitoring templates, process flow diagrams, compliance checklists, and reporting formats

MAWA EVENTS

Address: No. 857, Block A2, Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net



Course Outline

Detailed 5-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Fundamentals of Effluent Management

- Module 1: Introduction to Effluent Treatment (07:30 – 09:30)
- Sources and types of effluents (industrial, municipal, agricultural)
- Impact of untreated effluents on the environment
- Objectives and stages of treatment processes
- Module 2: Regulatory and Legal Frameworks (09:45 – 11:15)
- Global and local regulations (WHO, EPA, local laws)
- Discharge limits, permits, and compliance monitoring
- Legal implications of non-compliance
- Module 3: Water Quality Parameters and Testing (11:30 – 01:00)
- Physical, chemical, and biological indicators
- Sampling methods and laboratory testing
- Interpretation of analysis reports

Day 2: Treatment Process Design and Selection

- Module 4: Primary and Secondary Treatment (07:30 – 09:30)
- Sedimentation, screening, and clarification
- Biological treatment methods (aerobic and anaerobic)
- Activated sludge, trickling filters, and bio-reactors
- Module 5: Tertiary and Advanced Treatment (09:45 – 11:15)
- Filtration, disinfection, and nutrient removal
- Membrane technologies: UF, RO, MBR
- Sludge treatment and dewatering
- Module 6: System Design and Process Control (11:30 – 01:00)
- Key components and layout of treatment facilities
- Flow balancing and chemical dosing
- Instrumentation and SCADA for process control

Day 3: Operational Efficiency and Troubleshooting

- Module 7: Performance Monitoring and Optimization (07:30 – 09:30)
- KPIs for treatment plants
- Efficiency metrics and optimization strategies
- Energy and chemical use minimization
- Module 8: Troubleshooting and Emergency Handling (09:45 – 11:15)
- Common operational problems and root causes
- Managing system failures and environmental incidents
- Maintenance and contingency planning
- Module 9: Cost Management in Effluent Treatment (11:30 – 01:00)
- Cost breakdown: CapEx vs OpEx
- Budgeting for upgrades and retrofits
-

Cost-saving strategies in effluent handling

Day 4: Disposal, Reuse, and Sustainability

- Module 10: Effluent Disposal Techniques (07:30 – 09:30)
- Discharge to land, water bodies, and sewer systems
- Environmental risk assessments
- Legal documentation for disposal activities
- Module 11: Water Reuse and Zero Liquid Discharge (ZLD) (09:45 – 11:15)
- Reuse in industrial processes and irrigation
- ZLD system design and feasibility
- Case studies in water recycling
- Module 12: Environmental and Social Impact (11:30 – 01:00)
- Stakeholder impact and community concerns
- Sustainability reporting and ESG alignment
- Life cycle assessment of treatment systems

Day 5: Planning, Compliance, and Future Technologies

- Module 13: Effluent Management Planning (07:30 – 09:30)
- Creating an effluent treatment and disposal plan
- Aligning plans with EMS (ISO 14001)
- Risk and opportunity mapping
- Module 14: Reporting and Audit Preparation (09:45 – 11:15)
- Documentation for compliance audits
- Internal audits and continuous improvement
- Preparing for third-party inspections
- Module 15: Emerging Trends and Final Workshop (11:30 – 01:00)
- New technologies and innovations in treatment
- Digitalization and AI in wastewater management
- Final action plan development and Q&A

Certification

Participants will receive a Certificate of Completion in Effluent Treatment & Disposal, validating their expertise in designing, operating, and optimizing effluent management systems in accordance with international environmental standards and sustainability principles.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.