



## ENVIRONMENTAL WATER QUALITY MONITORING TRAINING



MTBM Group Sdn. Bhd. (1600656-M)

Level 8, MCT Tower, Sky Park, One City, Jalan USJ 25/1, 47650 Subang Jaya, Selangor

**Course Title:** Environmental Water Quality Monitoring Training

**Course Validity:** 2 Days

**Validity:** Not Applicable

**HRD Corp Scheme:** Claimable

## **INTRODUCTION**

This training provides participants with essential knowledge and practical skills to conduct environmental water quality monitoring in compliance with Malaysian environmental regulations and DOE guidelines. It covers surface water, groundwater, effluent, and industrial discharge parameters; sampling techniques; instrument handling; data interpretation; and reporting. Participants will learn how to plan and execute water quality monitoring programmes that support environmental compliance, pollution prevention and ISO 14001 environmental monitoring requirements.

## **OBJECTIVE(S):**

- Understand water quality fundamentals and key environmental parameters.
- Identify applicable legal requirements and DOE water quality standards.
- Apply correct sampling procedures for surface water, groundwater and effluent.
- Operate monitoring instruments and maintain sampling integrity.
- Interpret water quality results using national standards and guidelines.
- Prepare water monitoring reports for compliance and decision-making.
- Strengthen organisational capability in environmental monitoring.
- Support pollution control and environmental performance improvement.

**TARGET GROUP(S):**

- Environmental Officers and Executives
- Laboratory and Water Treatment Personnel
- Engineers, Technicians and Facility Personnel
- Safety, Health and Environmental Practitioners
- Quality and Compliance Team Members
- Operational and Maintenance Personnel
- Anyone involved in water monitoring or environmental compliance

**ENTRY REQUIREMENT(S):**

- Able to read, write and communicate verbally in Malay/English

**TOPIC(S):**

1. Introduction to Environmental Water Quality and Pollution Sources
2. Legal Requirements: EQA 1974, Environmental Regulations and DOE Standards
3. Water Quality Parameters (physical, chemical and biological)
4. Surface Water and Groundwater Monitoring Fundamentals
5. Effluent Monitoring Requirements and Industrial Discharge Standards
6. Sampling Techniques, Containers, Preservation and Chain-of-Custody
7. Field Instruments: pH, DO, turbidity, conductivity and multi-parameter meters
8. Data Validation, Interpretation and Compliance Assessment
9. Documentation, Reporting and Record-Keeping
10. Case Studies, Practical Demonstration and Monitoring Simulation

**LIST OF REFERENCE BOOK(S):**

- Environmental Quality Act 1974
- DOE Water Quality Monitoring Guidelines
- National Water Quality Standards (NWQS)
- Environmental Quality (Industrial Effluent) Regulations
- ISO 14001:2015 (Monitoring and Measurement Requirements)

**LIST OF TEACHING AID(S):**

- LCD projector
- Water sampling bottles and field sampling kits
- Multi-parameter meters (pH, DO, turbidity etc.)
- Case study worksheets
- Flip chart or whiteboard

**METHODOLOGY(S):**

- Interactive lecture
- Group discussion
- Case studies
- Demonstrations
- Field simulation and practical exercises

## TRAINING SCHEDULE

### Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration and Introduction
9:00 am – 10:15 am	Topic 1: Water Quality and Pollution Fundamentals
10:15 am – 10:30 am	<b>Morning Tea Break</b>
10:30 am – 12:30 pm	Topic 2–3: Legal Requirements and Water Quality Parameters
12:30 pm – 1:30 pm	<b>Lunch Break</b>
1:30 pm – 3:30 pm	Topic 4: Surface Water and Groundwater Monitoring
3:30 pm – 3:45 pm	<b>Afternoon Tea Break</b>
3:45 pm – 5:00 pm	Topic 5: Effluent Monitoring and Discharge Standards

## TRAINING SCHEDULE

### Day 2

Time	Activity / Topic
8:30 am – 9:00 am	Recap of Day 1
9:00 am – 10:15 am	Topic 6: Sampling Techniques and Chain-of-Custody
10:15 am – 10:30 am	<b>Morning Tea Break</b>
10:30 am – 12:30 pm	Topic 7–8: Field Instruments, Data Validation and Interpretation
12:30 pm – 1:30 pm	<b>Lunch Break</b>
1:30 pm – 3:30 pm	Topic 9: Documentation and Reporting Requirements
3:30 pm – 3:45 pm	<b>Afternoon Tea Break</b>
3:45 pm – 5:00 pm	Topic 10: Case Studies and Monitoring Simulation