MTBM

ENVIRONMENTAL INDUSTRIAL EFFLUENT MONITORING TRAINING

MTBM Group Sdn. Bhd. (1600656-M)

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Course Title: Environmental Industrial Effluent Monitoring Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This training provides participants with essential knowledge and practical skills for monitoring industrial effluent in compliance with Malaysian environmental laws. It covers effluent characteristics, sampling methods, monitoring schedules, analytical requirements, reporting obligations and DOE enforcement expectations. Participants will learn how to conduct industrial effluent monitoring that aligns with the Environmental Quality Act (EQA) 1974, Environmental Quality (Industrial Effluent) Regulations, and ISO 14001 environmental monitoring requirements.

OBJECTIVE(S):

- Understand industrial effluent characteristics and pollutant categories.
- Identify legal requirements for effluent discharge and compliance.
- Apply correct sampling procedures for grab and composite sampling.
- Operate field instruments and maintain sample integrity.
- Interpret laboratory results and assess compliance with DOE standards.
- Prepare monitoring reports and maintain accurate documentation.
- Strengthen organisational capability in effluent control and pollution prevention.
- Support environmental performance improvement and regulatory compliance.

TARGET GROUP(S):

- Environmental Officers and Executives
- Wastewater Treatment Plant (WWTP) Operators
- Engineers, Technicians and Facility Personnel
- Laboratory Analysts and Water Quality Teams
- Safety, Health and Environmental Practitioners
- Quality and Compliance Personnel
- Anyone involved in effluent monitoring or discharge compliance

ENTRY REQUIREMENT(S):

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

TOPIC(S):

1. Introduction to Industrial Effluent and Pollution Sources
2. Legal Requirements: EQA 1974 and Industrial Effluent Regulations
3. Effluent Parameters (physical, chemical and biological)
4. Sampling Techniques: Grab, Composite and Flow-Proportional Sampling
5. Sampling Containers, Preservation and Chain-of-Custody
6. Field Instruments: pH, DO, temperature, conductivity and turbidity meters
7. Analytical Methods and Laboratory Coordination
8. Data Interpretation, Compliance Limits and DOE Standards
9. Documentation, Reporting and Record-Keeping
10. Case Studies, Practical Demonstration and Monitoring Simulation

LIST OF REFERENCE BOOK(S):

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

LIST OF TEACHING AID(S):

- LCD projector
- Effluent 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: Industrial Effluent and Pollution Fundamentals
10:15 am – 10:30 am	**Morning Tea Break**
10:30 am – 12:30 pm	Topic 2–3: Legal Requirements and Effluent Parameters
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 3:30 pm	Topic 4: Effluent Sampling Techniques
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Topic 5: Sampling Containers and Chain-of-Custody

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: Field Instruments and Field Measurements
10:15 am – 10:30 am	**Morning Tea Break**
10:30 am – 12:30 pm	Topic 7–8: Analytical Methods, Data Interpretation and Compliance
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 3:30 pm	Topic 9: Documentation and Reporting Requirements
3:45 pm – 5:00 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Topic 10: Case Studies and Monitoring Simulation