MTBM

AIR POLLUTION CONTROL SYSTEM (APCS) TRAINING

MTBM Group Sdn. Bhd. (1600656-M)

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Course Title: Air Pollution Control System (APCS) Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This training provides participants with essential knowledge on air pollution fundamentals, types of emissions, and the design, operation and maintenance of Air Pollution Control Systems (APCS). The programme covers Malaysian legal requirements under the Environmental Quality Act (EQA) 1974 & Clean Air Regulations 2014, types of APCS technologies, stack monitoring, performance optimisation and troubleshooting. Participants will learn how to ensure compliance, reduce emissions, and improve environmental performance through effective APCS management.

OBJECTIVE(S):

- Understand principles of air pollution and emission behaviour.
- Identify types of pollutants and common industrial emission sources.
- Learn APCS technologies (cyclone, bag filter, scrubber, ESP, catalytic systems).
- Operate and maintain APCS components effectively.
- Monitor APCS performance and ensure regulatory compliance.
- Understand EQA 1974, CAR 2014 and DOE requirements.
- Perform basic troubleshooting for APCS and stack monitoring systems.
- Strengthen environmental control and prevention culture.

TARGET GROUP(S):

- Environmental Officers / Executives
- Facilities, Maintenance & Engineering Personnel
- Production & Process Technicians
- OSH Practitioners (SHO/SSS)
- Supervisors, Managers & Sustainability Personnel
- Any employee involved in APCS operation or emission compliance

ENTRY REQUIREMENT(S):

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

TOPIC(S):

1. Introduction to Air Pollution & Industrial Emissions
2. Legal Requirements: EQA 1974, CAR 2014 & DOE Monitoring Rules
3. Types of Air Pollutants (PM, VOC, SOx, NOx, Hazardous Air Pollutants)
4. Overview of APCS Technologies & Operating Principles
5. Particulate Control Systems (Cyclone, Bag Filter, ESP)
6. Gas/Vapour Control Systems (Scrubber, Carbon Adsorption, Catalytic Converter)
7. APCS Operation, Monitoring & Preventive Maintenance
8. Stack Emission Sampling, CEMS & Reporting Requirements
9. APCS Troubleshooting & Performance Optimisation
10. Case Studies, APCS Failure Prevention & Practical Exercises

LIST OF REFERENCE BOOK(S):

- Environmental Quality Act 1974
- Environmental Quality (Clean Air) Regulations 2014
- DOE Guidelines on Stack Monitoring & APCS Requirements
- ISO 14001:2015 (Environmental Control Requirements)
- APCS Technology & Engineering Manuals

LIST OF TEACHING AID(S):

- LCD projector
- APCS system diagrams
- Stack monitoring forms & samples
- Case study sheets
- Flip chart / whiteboard

METHODOLOGY(S):

- Interactive lecture
- Group discussion
- Case studies
- Demonstrations
- Scenario-based activities

TRAINING SCHEDULE

Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration & Introduction
9:00 am – 10:15 am	Topic 1: Introduction to Air Pollution & Industrial Emissions
10:15 am – 10:30 am	**Morning Tea Break**
10:30 am – 12:30 pm	Topic 2–3: Legal Requirements & Types of Pollutants
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 3:30 pm	Topic 4: APCS Technologies & Operating Principles
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Topic 5: Particulate Control Systems (Cyclone, Bag Filter, ESP)

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: Gas & Vapour Control Systems (Scrubber, Carbon, Catalytic)
10:15 am – 10:30 am	**Morning Tea Break**
10:30 am – 12:30 pm	Topic 7–8: APCS Operation, Maintenance & Stack Monitoring
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 3:30 pm	Topic 9: Troubleshooting & Performance Optimisation
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Topic 10: Case Studies & Practical Exercises