

MODULE: PROBLEM SOLVING & TROUBLESHOOTING COURSE (INTERMEDIATE)

Introduction

The Problem Solving & Troubleshooting course (Intermediate) will provide the skills and knowledge in advance understanding of the major M&E issues in equipment & systems at a Sewage Treatment Plant (STP) as well as troubleshooting techniques to mitigate the situation. Comprehensive course notes are provided.

Objective

Upon completion of this course, participants will be able to:

- Identify and understand the major problems/faults with M&E equipment and systems at a STP
- Understand steps and apply a systematic, logical approach to fault-finding and troubleshooting
- Practical experience in handling troubleshooting works related to M&E equipment and systems

Course Outline

Day 1 : Problem Solving & Trouble Shooting (Mechanical)

- Mechanical Equipment & Systems in STP
 - ❖ Pre-treatment system
 - ❖ Pumping System
 - ❖ Aeration System
 - ❖ Air Blower System
 - ❖ Surge Protection System
- Establish possible causes of Mechanical Equipment & Systems failures and Troubleshooting guides.
- Site visit to one STP for practical experience and guidance.

Day 2 : Problem Solving & Trouble Shooting (Electrical)

- Electrical Equipment & Systems in STP
 - ❖ Electrical Control Panel
 - ❖ Drives – VSD, Soft starters
 - ❖ Instrumentations – sensors, meters, HMIs
- Establish possible causes of Electrical Equipment & Systems failures and Troubleshooting guides.
- Site visit to one STP for practical experience and guidance.

Who Should Attend

This course is designed for Mechanical & Electrical services personnel who are involved in equipment maintenance works at Sewage Treatment Plant.

- Supervisors
- Technicians
- Operators

Duration

- Two days
- 9.00 am – 5.00 pm

Class Size

- 25 – 30 pax per session

Methodology

- Classroom lecture & practical session at selected STP