

## INTRODUCTION

Equipment, pipes and valves are major components in a treatment plants. Equipment available in STP ranges from preliminary treatment to tertiary treatment. It involves various types of grit & grease, screens, pumps, aerators, blowers, diffuser and lots more. Pipes in STP are used to transport wastewater and chemical, while valves are used to regulate the flow of liquid by opening, closing or obstruct passageways. Valves are also used as safety purposes.

## **COURSE OBJECTIVES**

The course provides basic knowledge and understanding on type of equipments, pipes and valves in a sewage treatment plants (STP). The course highlights the basic working principles, installation and function, issues encountered and the health and safety concerns of the equipments, pipes and valves available in a sewerage treatment plants.

## COURSE CONTENT

- □ Introduction to Sewage Treatment
- Classification of Treatment System
- D Physical Description, Function and Installation of STP Equipment
  - Screen Mechanism
  - □ Conveyor
  - Grit & Grease System
  - Pumps
  - Aeration Device
  - Clarifier & Scrapper System
  - □ Sludge Thickeners
  - □ Mixer
  - □ Sludge Dewatering
  - Disinfection
  - Flow Measurement
  - Sewer Pipes
  - Penstock
  - Valves
- Other Treatment Process Equipment
- □ Issues with Equipment, Pipes and Valves

LEARNING OUTCOMES

On completion of this course, participants will be able to: Identify the types of STP equipment

- Understand the function and operating principles of equipment, pipes and valves in a sewage treatment plants
- □ Recognize the equipment, pipes and valves parts, accessories and application
- **Understand the common problems with the equipment, pipes and valves**
- Understand the health and safety issues and concern pertaining to the equipment, pipes and valves

## DURATION

2 days

METHODOLOGY AND ASSESSMENT

Course will be conducted through classroom lecture, discussion and site visit. Written assessment will be conducted at the end of the training session.

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This course is recommended for engineers, technicians, supervisors and selected operators.

COURSE FEE

RM800.00