



# PROCESS OPTIMIZATION AND ENERGY CONSERVATION

## INTRODUCTION

This course provides an overview of processes, systems and methodologies in optimizing processes specific to Sewage Treatment Plants. Two components of the optimization process are introduced: Operations Management and Troubleshooting procedures.

## COURSE OBJECTIVES

This course builds on existing knowledge of operators in managing and optimizing the processes of Sewage Treatment Plants.

## COURSE CONTENT

- Main Parameters of Operation Management
  - Hydraulic Retention Time
  - BOD-SS Loading
  - Solids Retention Time
  - Excess sludge generation
  - Polymer dosing rate
  - Air Flow (Oxygen Supply) Volume
  - Treatment Condition (Nitrification /Denitrification)
  - Water Quality
  - Biota
- Equipment Management
- Measuring Items for Process Control
- Inspection and Maintenance of Measurement Facility
- Water Quality Management
- Key Points in Process Control



## LEARNING OUTCOMES

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

- Understand processes to optimize operations
- Understand troubleshooting techniques related to operations process control

## DURATION

1 day

## METHODOLOGY AND ASSESSMENT

Course will be conducted through classroom lecture and hands-on practical.

## WHO SHOULD ATTEND

All personnel involved in control and troubleshooting of sewage treatment process namely supervisors, team leaders, technicians, and operators.

## COURSE FEE

RM550.00