



## OPERATING SEQUENCE BATCH REACTOR

### COURSE DESCRIPTION

Sequencing Batch Reactor (SBR) is a typical suspended growth aerobic biological treatment. In most SBR systems, the plant has two or more identical treatment tanks. The treatment for a particular batch of sewage is done sequentially in the same tank. To achieve the controlled and evenly distributed sewage across the tank, the entire mass of sewage inside the tank is churned and mixed thoroughly with aeration devices. The activated sludge already present in the tank provides the micro-organisms for the biological treatment of the sewage. The new batch of raw sewage is subjected to this biological treatment. Aeration Devices provide air for the growth and multiplying of bacteria inside the Reactor Tank. This helps to maintain the Dissolved Oxygen inside the tank within the required limits.

### COURSE OBJECTIVES

This training provides basic knowledge and understanding on the operating principles and maintenance of Sequencing Batch Reactor (SBR), issues and problems encountered with SBR. Most importantly, participants will understand how to perform basic maintenance of SBR

### COURSE CONTENT

- Overview of SBR
- SBR Operation
- Components of SBR
- Process Monitoring
- Process Control
- Process Problems
- Data acquisition and its interpretation for normal and abnormal plant conditions
- Maintenance & Troubleshooting
- Health and Safety



### LEARNING OUTCOMES

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

- ✓ Know and understand the process and the working principle of a SBR
- ✓ To operate, monitor and interpret the data collected from the SBR
- ✓ To inspect, observe, and differentiate normal / abnormal conditions of a SBR
- ✓ Be able to conduct the required monitoring of the SBR system
- ✓ To troubleshoot during abnormal conditions
- ✓ To carryout routine maintenance of a SBR
- ✓ To follow good health and safety practices

### DURATION

2 Days.

### COURSE FEE

RM800.00 per person

### WHO SHOULD ATTEND

This course is recommended for sewerage treatment personnel who are involved in the operation and maintenance of Sequencing Batch Reactor, namely supervisors, technicians, team leaders and operators.

### METHODOLOGY

Course will be conducted through classroom lecture, group discussion and practical field visits.