

# SLUDGE TREATMENT AND BIOSOLIDS MANAGEMENT

## Course Description

Treatment of the sludge generated by the treatment plants is as crucial as the wastewater treatment itself, as it contains the same pathogenic microorganisms and pollutants present in wastewater. Sludge treatment process goes through the thickening, stabilisation and dewatering phases by using a variety of technologies and methods.



This training course covers the diverse methods and technologies used for the sludge treatment, by addressing the issues related to the operation, maintenance and control of each of them. In addition, this course will also cover the disposal and reuse methods of the treated sludge.

## Target Group

This training course is developed for professionals of water supply and sewerage utilities, and it is especially useful for engineers, technicians and specialists working in a wastewater treatment plant.

## Objectives of the Training Course

At the end of this training course, the participants will be able to:

- Understand the importance of proper sludge treatment and explain the various methods used for this purpose;
- Explain the treatment principle of the commonly used sludge thickening methods, such as gravity, dissolved air flotation and centrifuge thickeners;

- Operate and troubleshoot the sludge thickening methods;
- Explain the treatment principle of the anaerobic and aerobic digesters;
- Properly start up, operate, shut down, and maintain anaerobic digesters;
- Recognize factors that indicate that anaerobic and aerobic digesters are not performing properly then identify the source of the problems and take corrective actions;
- Explain the treatment principle of operation of the commonly used sludge dewatering methods such as drying beds, belt filter presses, dewatering centrifuges, and vacuum and pressure filters;
- Operate and troubleshoot the sludge dewatering methods;
- Comprehend the different options of the sludge and use;

## Training Method

The training is based on lectures presented in PowerPoint, combined with discussions and case studies. In addition to lectures and discussions, participants will analyse specific case studies.

## Training Course Materials

The participants of this training course will be provided with the Training Manual "Sludge Treatment and Biosolids Management". In addition, the participants will receive certificate of attendance.

## Registration Fee

Members of SHUKALB/SHUKOS: 22,000

ALL/person

Non-members: 25,000 ALL/person

This fee includes course materials, coffee breaks and lunch breaks.