

# Unit 4.2 Settling- thickening

## 1. INTRODUCTION

This Unit corresponds with Chapter 6 of the FSM book. It provides information on the design and ongoing operations and maintenance of settling-thickening tanks. Information is given on when settling-thickening tanks are adequate treatment technologies, the fundamental mechanisms of how they function, and their potential advantages and disadvantages. Information is provided on how to design a settling-thickening tank according to the desired treatment goal.

The Chapter was prepared by Pierre-Henri Dodane (independent consultant from France) and Magalie Bassan of EAWAG.

The key note is created by Mbaye Mbégueré (ONAS, Office National de l'Assainissement de Senegal), a true expert in the field of FSM, from Senegal. It combines the knowledge of Chapter 6, 7 and 8, on settling-thickening and drying beds.

## 2. LEARNING OBJECTIVES

The learning objectives for Unit 4.2 Overview of Treatment Technologies are to:

- Understand in what contexts settling-thickening tanks are an appropriate treatment technology.
- Understand the fundamental mechanisms of how settling-thickening tanks function.
- Have an overview of potential advantages and disadvantages of operating a settling thickening tank.
- Know the appropriate level of operations, maintenance and monitoring necessary to achieve solids-liquid separation in settling-thickening tanks.
- Be able to design a settling-thickening tank to achieve the desired treatment goal.

## 3. THINGS TO DO; PLACES TO GO

In order to complete this Unit successfully, please do the following:

- Watch the key note speech of Unit 4.2
- Go through the PowerPoint presentation of Unit 4.2
- Read Chapter 6 of the FSM book
- Check the Course page for any recommended reading materials or web pages
- Check the assignment list