Unit 2.2 Treatment Mechanisms

1. INTRODUCTION

This Unit corresponds with Chapter 3 of the FSM book. It presents an overview of the mechanisms on which faecal sludge (FS) treatment processes are based. Even though many FS treatment technologies are based on those developed for treating wastewater, it is important to understand that these cannot be directly utilised for FS treatment. FS is very different from wastewater and even of digested sludge; these differences should be addressed adequately. This Unit highlights the physical, biological and chemical mechanisms for FS treatment and describes how each mechanism supports in the overall treatment of FS.

The Chapter was prepared by Magalie Bassan and Linda Strande of EAWAG-Swiss Federal Institute of Aquatic Science and Technology, and Pierre-Henri Dodane who is an Independent Consultant. There is no key note speech for this Unit; instead, there is an extended PowerPoint presentation.

2. LEARNING OBJECTIVES

The learning objectives for Unit 2.2 Treatment Mechanisms are to:

- Know the difference between physical, chemical and biological treatment mechanisms
- Understand how combinations of these treatment mechanisms are responsible for the overall FS treatment
- Obtain basic insight into how the different mechanisms affect operation and maintenance needs of treatment technologies
- Understand key parameters and how these can be controlled to obtain increased treatment efficiency and to meet treatment objectives

3. THINGS TO DO; PLACES TO GO

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

- Go through the PowerPoint presentation of Unit 2.2
- Read Chapter 3 of the FSM book
- Check the Course page for any recommended reading materials or web pages
- Check the assignment list