Creative Commons License





Sandec Sanitation, Water and Solid Waste for Development

This document is open content and licensed under the Creative Commons Attribution Works 4.0 International License.

To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0



You are free to:



Share – Copy and redistribute the material in any medium or format

Remix – Remix, transform, and build upon the material for any purpose, even commercially

Under the following conditions:

Attribution – You must give appropriate credit to CAWST and Eawag-Sandec, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests that CAWST and Eawag-Sandec endorses you or your use. Please include our website: www.cawst.org and www.sandec.ch.

CAWST and Eawag-Sandec will produce updated versions of this document periodically. For this reason, we do not recommend hosting this document to download from your website.

CAWST and Eawag-Sandec its directors, employees, contractors, and volunteers do not assume any responsibility for, and make no warranty with respect to, the results that may be obtained from the use of the information provided.





This presentation is used with Lesson Plan Operation and Maintenance in the Introduction to Faecal Sludge Management Trainer Manual

Available at www.cawst.org/resources and www.sandec.ch

Operation and Maintenance of Faecal Sludge Treatment Facilities

2016 JULY





Sandec

Sanitation, Water and Solid Waste for Development

Learning Outcomes

- Identify common operational challenges of faecal sludge treatment facilities.
- Discuss the importance of a monitoring plan to ensure a faecal sludge treatment facility is operating as designed.
- Discuss methods of ensuring that industrial sludge is not discharged at faecal sludge treatment facilities.



Treatment Failures

Yaoundé, Cameroon







Treatment Failures

Bangalore, India



(Credit: Eawag-Sandec)





Treatment Failures

Dar es Salaam, Tanzania



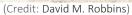
(Credit: Eawag-Sandec)





Collection and Transport Failures









Terminology

 Operation: All the activities that are required to ensure that a faecal sludge treatment facility delivers treatment services as designed.

 Maintenance: All the activities that ensure long-term operation of equipment and infrastructure.





Monitoring Program

Dakar, Senegal



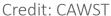


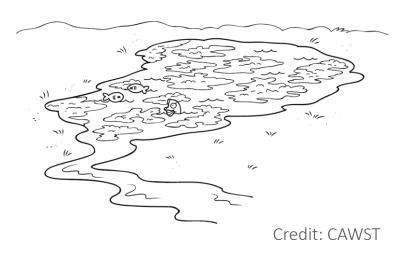


Key Treatment Parameters to Monitor

- <u>Dewatering:</u> Moisture and solids content
- <u>Stabilization</u>: Biological and chemical oxygen demand
- Nutrient management: Nutrient content
- Pathogen inactivation:
 Pathogen content (e.g., helminth eggs)











How we can support you!

Contact CAWST and Eawag-Sandec for support on using and adapting our education and training resources for your work.

- Opper 424 Aviation Rd NE, Calgary AB T2E 8H6, Canada
- + 1 403 243 3285
- support@cawst.org
- <u>www.cawst.org</u>



Visit <u>www.cawst.org/resources</u> and <u>www.sandec.ch</u> for:

- Latest updates to this document
- Other workshop & training related resources
 - © Überlandstrasse 133
 CH-8600 Dübendorf, Switzerland
 - +41 (0)58 765 55 11
 - info@sandec.ch
 - <u>www.sandec.ch</u>



SandecSanitation, Water and
Solid Waste for Development