

### WASTEWATER TREATMENT TECHNIQUES

#### Information

<i>Target group:</i>	Process controllers
<i>Entry level:</i>	Vocational level
<i>Entry level description:</i>	Vocational education and having the certificate of course Basics of Wastewater Treatment
<i>Vakgebied:</i>	Wastewater treatment
<i>Participants:</i>	16
<i>Coördinator:</i>	Dutch experts or local professional trainers, certified by World Water Academy
<i>Duration:</i>	3 days

#### Learning targets

The treatment of wastewater is a complex process involving different process steps. Operators play a key role in the treatment of wastewater. Their decisions and actions have a major influence on the final treatment results.

In this course a short overview of the water and wastewater cycle and the different process steps is given. Mechanical, chemical, physical and biological treatment steps are discussed in detail. The nitrogen cycle is introduced and the performance of a plant in relation to nitrate and phosphate removal under different circumstances is explained. Additionally relevant regulations and legislations are taught.

#### Content

The course covers following topics:

- Mechanical separation techniques
- Chemical and physical treatment
- Biological treatment techniques
- The removal of nitrates & phosphates
- The removal of phosphates
- Relevant legislations and regulations

#### Outcome

After successfully completing this course, you understand how your activities in different treatment steps and under different circumstances affect the performance of the wastewater treatment plant.

#### Course material

Course book and hand-outs of the presentations

### *Training approach*

In addition to classroom presentations this course comprises interactive and innovative training methods, such as group work, discussions, practical exercises, demonstrations, presentations and role-plays. The training methods are tailored to the objectives of the training.

This course includes a field trip to a wastewater treatment plant.

### *Information*

This course is one of four modules of the overall course *Wastewater Treatment for Process Controllers*. After successfully completing the four modules, the participant will be awarded a diploma.