Course 246445: OPERATE A BIOLOGICAL TRICKLING FILTER

Do you have employees in your organisation working with water or wastewater? Do your employees operate biological trickling filters within this environment?

If so, this onsite group training course is for you!

Gain critical knowledge fast If you desire to expand the knowledge, improve the skills and enhance the careers of your employees, then practical education is essential.

The most professional, authoritative learning Created by renowned industry experts and designed in line with the latest NQF Unit Standards. This means that delegates will achieve nationally recognized credits which they may present towards achieving a whole qualification in their respective fields.

Content rich and comprehensive with customization This course can be customised to create a programme that suit the individual needs of your organisation whilst keeping the contents in-line with the NQF Unit Standards. All material used conforms to the relevant SABS/SANS standards.

Training method This course is highly interactive and workplace based with emphasis on hands-on learning. The theory component being addressed in the most practical manner and assessments conducted according to the OBE practices. This course comprises of both onsite facilitation (theory) as well as practical workplace based activities, observations and assessments – variable depending on the amount of delegates per course session.

Workplace Assessments, Consolidation of Portfolios of Evidence and National Skills Database Registration Assessment and moderation of assessment are overseen by the relevant ETQA according to the ETQA policies and guidelines. Upon successful completion of this course and assessments, each delegate will be registered on the ESETA Learner Registration Database reflecting the credits earned.

Presenter Our presenter for this course has a BSC Honours Degree in Water Utilization and is a certified NQF Level 5 Assessor, NQF Level 6 Moderator, NQF Level 7 Verifier and NQF Level 5 RPL Advisor. He has practiced as Water treatment practitioner for 8 years and was involved in writing some of the unit standards currently used in the learnships for Water and Waste Water Treatment. He has also delivered a paper on process controlling training at the ESETA and WISA conferences and served in the SGB for SETA. Our presenter is fully multi-lingual and proficient in most indigenous languages as well as English and Afrikaans.

CONTACT US TODAY to find out how we can attend to your training requirements!

1 Day Training, 1 Day Assessment  NQF LEVEL 2: 4 Credits

COURSE OVERVIEW

Four modules provide information you need to achieve a solid understanding of the operation of a biological trickling filter in water and wastewater treatment with 4 NQF Credits on Level 2.

MODULE 1: EXPLAIN THE OPERATION OF A BIOLOGICAL TRICKLING FILTER PROCESS

Educational Content: Key terminologies in relation to biological trickling filter process are identified and described in terms of their application. Terminologies refer but are not limited to zoogae, psycoda flies, media stones, ponding aerobic/an aerobic, nitrification, rotating arms and launders; A biological trickling filter is identified and described using schematic representation; Components of a biological trickling filter are labelled in accordance with their functions; Functions of biological trickling filter are explained using a schematic diagram or flow chart; Factors affecting biological trickling filter processes are identified and described in terms of their influences. Factors refer but are not limited to hydraulic and organic load; septicity, complexity, toxicity, malfunctioning of biological trickling filter.

MODULE 2: MONITOR AND CONTROL A BIOLOGICAL TRICKLING FILTER

Educational Content: Knowledge of organic and hydraulic load is demonstrated with examples; Knowledge of the recycling process is demonstrated with examples; Even distribution on filter media is checked to determine malfunctioning. Malfunctioning refers to blocked nozzles, air vent blockages and staywires; The significance of the dosing siphon is explained using a schematic diagram; The significance of a stable psychochoda fly population is explained with examples.

MODULE 3: APPLY METHODS TO MAINTAIN A BIOLOGICAL TRICKLING FILTER

Educational Content: The reasons of maintaining a biological trickling filter are explained with examples; Bonding on biological trickling filter is reported for corrective action; Methods of maintaining a biological trickling filter are identified and explained in accordance with work procedures. Methods refer but are not limited to flushing surface media, removing weeds and debris, cleaning and adjusting distribution arms and turning over of the surface media with hand tools; Malfunctioning of a biological trickling filter are identified and recorded for reporting purposes for corrective action. Malfunctioning includes but is not limited to equipment failure, blockages, leakages, distribution failure and short circuiting; Procedures for de-commissioning and re-commissioning are explained to ensure safe operation. Procedures include and are not limited to work permit and lockout procedures.

MODULE 4: COLLATE DATA FOR BIOLOGICAL TRICKLING FILTERS

Educational Content: Data to be collated is identified and described in terms of operational procedures. Data refers to but not limited to reading and recording the flow including recycle flow and pump amps and pumping hours; Log sheets are completed in accordance with working procedures.

For more information on other courses available, please visit our website [http://www.ositraining.co.za](http://www.ositraining.co.za) or contact Danie Booyse on 078 801 8400 or danie@osi.co.za.