

# Operation of Trickling Filters & Related Processes

## FREE Zoom—Mentoring Session

Presents process variations for TFs, TF Solids Contact and related processes. Operational tools and recommended loading given.

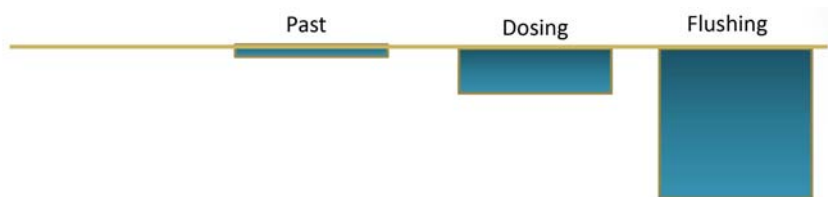
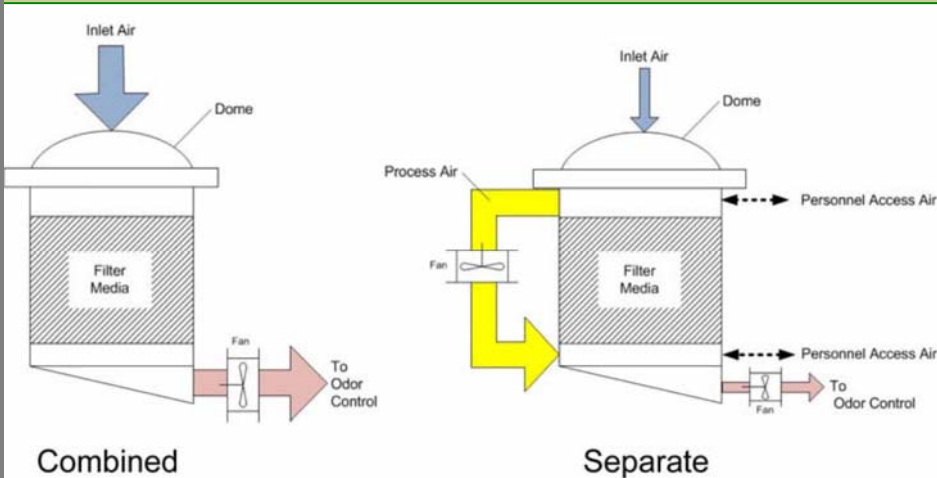
Includes: Operational control methods and load equations. Discusses media types, distribution methods and hydraulic flushing.

The effects of media choice on TF performance will be discussed. Recent advances in flushing techniques using hydraulic and mechanical drives are presented. Methods for calculating dosing/flushing rates are given. Case histories of plants successfully dealing with nuisance organisms and odor control are discussed. Operators of combined plants such as TF solids contact or TF activated sludge will learn the strength of each portion of their plant.

### Answer these Example Questions:

1. What are the differences between roughing, biofilters and trickling filters?
2. What are loading rates for various types of TF's and related processes?
3. How can sloughing of biofilters be controlled?
4. Describe how some facilities have coped with snails and redworms?
5. How can operations be sure that the hydraulic flushing of a filter is complete?
6. How much air circulation is necessary to assure aerobic conditions in a biotower?

### Example Slides: Air Ventilation and TF Flushing



Item	Past	Dosing	Flushing
IHL (in / pass)	1/8 to 1.2	1.6 to 4.0	8 to 24
RPM	3 - 0.3	0.25 - 0.10	0.05 - 0.016
MPR	0.3 - 3	4 - 10	8 - 24

Note: for THL = 1.0 gpm / sf

