



Introduction to Biological Treatment Session 2

FREE Zoom—Training Session

Describes the biology and equipment associated with treatment using lagoons, activated sludge & trickling filter related processes.

Includes: Needs and effects of oxygen, temperature, solids and nutrients on treatment performance.

Discusses the evolution of biological wastewater treatment from lagoons to membrane biological reactors (MBRs). Covers fixed film reactors (trickling filters-TF's) and related processes. Simplified flow schematics and photographs of primary equipment are provided. Attendees will understand acceptable loading rates and limitations of commonly used biological treatment processes.

Answer these Example Questions:

1. What are the unique features of the activated sludge process that make it appealing?
2. Which types of filter media are used in trickling filters and what is best for use in a roughing filter?
3. What are common process modes for activated sludge?
4. What are acceptable loading rates for trickling filters?
5. How are lagoons classified and what equipment is commonly used?
6. What is the impact of not having primary clarification before the aeration basin?

Example Slide: Parts of Modern Activated Sludge Plant

