

Session Descriptions

2025 Service Provider Training at the Mega-Conference

October 20-21, 2025

Updated 6/27/25

ODH Program Updates and Service Provider Information

ODH would like to present on program updates and provide information on the service provider requirements in the state of Ohio. The purpose of this presentation is to update the audience on current happenings within the sewage program at ODH. ODH will also present on the requirements of OAC for service providers. OAC 3701-29-03(G) When the registered service provider performs the duties of a service provider on only the registrant's personal residence, the service provider shall be exempt from paragraphs (C)(4), and (C)(6) of this rule and the board of health may waive paragraphs (C)(1) and (C)(5) of this rule, or require continuing education applicable to the product as specified by the manufacturer. A registered service provider that performs the duties of a service provider on only the registrant's personal residence shall be subject to paragraph (J) of this rule.

Overview of O&M of Wastewater Treatment Tanks

During this presentation, we will first go over the different types of tanks used in sewage treatment systems along with their designs and functions. This will include septic, pump, aerobic treatment and gravity grease interceptor tanks. Ohio specific tank sizing and units will be covered. We will go through the maintenance process step by step including tank and operational condition assessment. We will evaluate how to inspect the tank to assess is structural and operational condition. We will examine how to properly inspect and evaluate components such as baffles, pumps and filters, and also how to measure sludge and scum levels in the tank. We will also discuss how to properly record O&M data and results. Whether attendees are new to the industry or seasoned veterans, this presentation will provide valuable information, tips and guidance on O&M of a sewage treatment system, which will enhance their ability to maximize efficiency and resilience of the systems they service.

Whitewater DF Series & More: Wastewater Treatment Facts, Functions, and Myths

This presentation will provide an overview of the Whitewater Aerobic Treatment System, which meets NSF/ANSI 40. The session will provide an overview of the DF series as well as address common myths about wastewater treatment to help industry professionals to install, operate and maintain system.

Overview of O&M of Aerobic Treatment Units

This presentation will describe the various types of aerobic treatments units (ATU) approved in Ohio along with the similarities and differences among the various types. The treatment process used in ATU where microbes transform solids into gases, cell mass and non-degradable material will be covered. An overview of the operation and maintenance checklist for ATU will be covered, but troubleshooting of effluent problems with surface discharging systems, particularly ammonia. The settle-ability test for determining sludge wasting will be covered.

Hydro-Action Wastewater Treatment Systems - Operation & Maintenance

This presentation, provides a comprehensive guide for servicing on-lot and off-lot Hydro-Action wastewater treatment systems, designed for residential properties with varying land sizes and soil conditions. Off-lot systems, ideal for smaller plots or low-permeability soils, utilize aerobic treatment units with components like trash tanks, aerators, UV disinfection, and pump tanks to treat and discharge effluent. On-lot systems, suited for larger properties, incorporate trash tanks, aerators, and absorption fields (e.g., mounds, leach fields, or spray systems). The training details routine maintenance procedures, including sludge level checks, air compressor filter cleaning, UV bulb maintenance, and float inspections, alongside common repairs like replacing air compressors, UV bulbs, or lift pumps. It emphasizes adherence to manufacturer standards, timely alarm response, and proper recordkeeping for county compliance. Warranty procedures for Hydro-Action systems are outlined, covering a two-year initial period and pro-rated claims up to five years with continuous maintenance. This training equips service providers with the knowledge and tools to ensure system functionality and regulatory compliance.

Aqua Safe and Aqua Aire Aerobic Units - the Operation, Installation and Maintenance

This presentation will discuss the required O&M for Aqua Safe and Aqua Aire Systems.

Biomicobics FAST Wastewater Treatment Systems O&M

A brief review of the BioMicrobics FAST wastewater treatment systems including the basic principles of operation, regular maintenance tasks, and some troubleshooting.

Hoot Service Provider Training

Hoot Service Provider Training for Hoot's H Series Aerobic Treatment Units covering both installation practices, service provider training on all aspects of the H series unit, covering sizing, mechanical, electrical, troubleshooting and homeowner's dos and don'ts.

Norweco O&M

This presentation will include an overview of the Norweco Singulair and Singulair Green wastewater treatment systems including installation, principles of operation and maintenance essentials. It will conclude with review of ultraviolet and chemical disinfection of wastewater.

SludgeHammer ABG Technology Maintenance

This session discusses the history of the Aerobic Bacterial Generator and its use in leach field bioremediation. Emphasis will be on identifying sites that will benefit from the technology, installation of the device into a wide range of existing systems, maintenance of the systems, operating expenses and general benefits achieved through the use of the technology.

Control Panel Diagnostics

This presentation will cover common troubleshooting and repair issues with control panels in the sewage treatment system in Ohio. The presentation will include information regarding relays, contactors, float switches, current sensors, transformers, and other frequently found panel devices. Testing with FLUKE t600 or similar meter and hands-on will be included. The attendees will be able to see multi-dimensional images illustrating how components work. This in-depth data allows for the attendees to see clearly how to diagnose once a deeper understanding of the operation is established.

Troubleshooting an Aerobic Treatment Unit for Effective Oxygen Delivery

Aerobic treatment requires oxygen delivery to the liquid for microbial treatment to occur. The treatment system must have effective air exchange with the atmosphere to support air oxygen delivery. Oxygen in air must diffuse into the liquid. Aerobic treatment units use multiple methods to promote diffusion of oxygen into the liquid. Oxygen delivery methods will be discussed. Pressure gauges and air flow meters are used to troubleshoot air delivery to treatment systems. Troubleshooting methods are discussed for evaluating air exchange in the ATUs. Air delivery measurement methods are discussed for collection of operational data. Normal operational values are discussed. Potential problems are presented relative to operational values outside of normal accepted ranges. Service providers using these evaluation methods can identify the root cause of treatment issues in aerobic treatment units.

SeptiTech's STAAR O&M

People have been asking for O&M information specific to the artificial unsaturated media filter STAAR system. STAAR is an acronym that means Smart Trickling Anaerobic Aerobic recirculating system. STAAR's O&M procedures are a Visual Inspection of all System Components, including tanks, pumps, float switches, control panel, telemetry and audio/visual alarms. Visual inspection of electrical splices and contacts, check/record amperage and voltage readings. Make a visual inspection of filter media surface. Exercise all mechanical valves. Do a sensory examination of treated effluent for clarity, odor, oily sheen, foaming or any other unusual characteristics. Download flow data - 90 days of flow data is stored in the control panel. Maintain inspection log with entries for all service activities, observations, and field test readings

Anua Media Filter Service

Media filters require maintenance. Different media perform differently and require different dose volumes, frequencies and different rest periods between doses. Multiple maintenance items require maintenance prior to the media. Different media require different maintenance up to and including replacing media in the containers. This presentation will cover Anua's Puraflo peat, Puraflo coir, Aerocell and Biocoir.

Orenco Residential Treatment O&M

A 30 minute presentation on residential Advantex O&M. We will key in on the major differences between Orenco's AX20 and AXRT series treatment systems and give a basic overview of how they are serviced. This training is intended to be a stepping stone to further training, which will be provided by Orenco's partners in the state of Ohio. It is not intended to certify an individual or company to perform O&M on Orenco equipment. Information on how to obtain full certification will be provided.

Troubleshooting and Enhancing Onsite Wastewater Systems with Case Studies

In this presentation, we will explore a series of case studies on advanced onsite wastewater treatment systems for both residential and commercial sewage treatment systems. Drawing from real-world examples, the discussion will highlight several key challenges faced by service providers, including the lack of owner knowledge and understanding of their systems, as well as instances where systems were either improperly designed or installed to handle specific waste streams. We will also dive into the complexities of maintaining privately owned septic systems and the pitfalls of improper system use. By examining various treatment technologies and their associated issues, this session will provide valuable insights into the practical challenges service providers encounter and offer strategies for improving system performance,

sustainability, and owner compliance. Whether you're troubleshooting existing systems or designing new ones, this presentation will equip you with a deeper understanding of how to navigate these complexities and enhance the overall effectiveness of advanced wastewater treatment solutions.

System Troubleshooting Based Upon Wastewater Characteristics

A sewage treatment system is designed to remove contaminants from water before the water is dispersed into the receiving environment. Trouble shooting requires a solid understanding of wastewater contaminants, how contaminants are removed in a treatment system and what laboratory measurements of these contaminants represent. Related requirements for sampling in Ohio will be included. The contaminants are discussed using analogies to foster better communication of concepts to owners. Contaminant removal in treatment components is described, impact of contaminant loading rates and the associated maintenance activities resulting from the contaminant removal. The laboratory methods used to determine the concentration of the contaminants provide clues when troubleshooting treatment component performance. An expanded knowledge of these topics improved the troubleshooting skills of the service provider. The discussion is presented in a manner to enhance a service providers knowledge and ability to communicate technical topics to owners.

Panel Discussion

Speakers and company representatives will discuss challenges and solutions related to O&M in Ohio.