



**Ohio Department of Health**  
Bureau of Environmental Health  
and Radiation Protection  
Residential Water and  
Sewage Program

"To protect and improve the health of all Ohioans"

## Updated Systems as Defined in the Ohio EPA NPDES General Permit

July 2017

The Ohio Department of Health has approved manufacturers of sewage treatment system components and treatment trains for use as a discharging system in Ohio in compliance with Ohio Revised Code Chapter 3718 and the terms and conditions of the Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination Systems (NPDES) Household Sewage Treatment System (STS) General Permit. The [list of approved discharging systems](#) is posted on the Ohio Department of Health website.

The second installment of the General Permit became effective February 1, 2012 and included language allowing the "update" of existing household sewage treatment systems. The permit defines an updated system as:

*"Updated system" means any household sewage treatment system for an existing single family, two family or three family dwelling that was installed prior to January 1, 2007 that utilizes a system/ manufacturer model that has been approved by the Ohio Department of Health (ODH) to meet the conditions of this permit absent post aeration, disinfection and/or sampling mechanisms and can be updated to be an identical system to such approved by ODH by installing these additional components.*

Although many existing treatment units are identical to the treatment units utilized in ODH approved treatment trains for meeting the effluent standards outlined in the general permit, there are some existing units that look similar to the currently manufactured products that are structurally different and are not expected to function in the same manner as approved components. These units cannot be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.

The following table is provided as guidance to system owners, system designers, and local health districts to determine whether an existing sewage treatment system can be updated through the addition of required components to an NPDES discharging sewage treatment system in compliance with the general permit.

The system schematic and information contained in the following table should be reviewed and compared to the existing STS to determine if a system upgrade is feasible to meet the General Permit requirements and subsequently obtain coverage under the permit. Local health departments, homeowners and designers are strongly encouraged to contact the manufacturer with any questions regarding existing system component models.

Clear and detailed documentation of current system configurations and installed modifications including specific models and sizes disinfection, re-aeration, failsafe mechanism, and sampling port

shall be submitted to the Ohio EPA with the NPDES Notice of Intent. Updated systems must demonstrate maintenance contracts and sampling requirements.

### **Guidance for Updating Existing Systems by Manufacturer**

<p><b>Anua</b> Puraflo Type B Biofilter + Salcor Model 3G UV Disinfection + Re-aeration + failsafe mechanism</p>	<p>All existing Puraflo Type B Biofilters can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval. Type A filters are not watertight and cannot be used in the NPDES treatment train.</p>
<p><b>BioMicrobics</b> MicroFAST Models (0.5, 7.5, 0.9 and 1.5) with Salcor 3G Ultraviolet Disinfection + Re-aeration + pump lockout or telemetry</p>	<p>All existing MicroFAST units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Bionest Technologies</b> Bionest System + Sterilite SC-320 UV disinfection + Re-aeration + pump lockout failsafe</p>	
<p><b>Clearstream Wastewater Systems</b> 500N, 500NC, 500NC2, 500NC3, 500NCS, 500NU, 600N, 600NC, 600NC2, 600NC3, 600NU, 750N, 750NC, 750NC2, 800N, 800NC, 800 NC2, 1000N, 1000-B, 1000NC, 1000 NC-B, 1500N, 1500 N-B, 1500NC, 1500 NC-B with pretreatment tank, Salcor 3GUV, re-aeration and failsafe</p>	<p>All existing Clearstream units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Consolidated Treatment Systems</b> Enviro-Guard ENV or ENV-M + Salcor 3G UV Disinfection + Re-Aeration Device + pump lockout or telemetry</p>	<p>All existing Enviro-Guard units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Consolidated Treatment Systems</b> Multi-Flo FTB Models (0.5, 0.6, 0.75, 1.0 &amp; 1.5)+ Salcor 3G UV Disinfection + Re-Aeration Device + pump lockout or telemetry</p>	<p>All existing Multi-Flo units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Delta</b> DF Series ATU + Salcor 3G UV Disinfection + Re-aeration + Telemetry or Pump lock</p>	<p>All existing Delta DF units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval. The DF series was previously sold under the Whitewater brand name. These units are identical to the currently distributed Delta DF series units and can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Ecological Tanks</b> Aqua Safe AS Models(AS500, AS600, AS750, AS1000, AS1500) + Disinfector UV + Re-aeration + Telemetry or Pump lock Approval includes concrete models AS500-C, AS600-C, AS750C, AS1000-C, AS1500-C</p>	<p>All existing AquaSafe units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Hoot Aerobic Systems</b> Hoot H-NPDES Series (500, 750 and 1000) + Salcor 3G UV disinfection+ Re-aeration + telemetry or pump failsafe</p>	<p>All existing Hoot units and can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>

<p><b>HydroAction</b> AP or CLP Series+ Salcor 3G UV Disinfection + Re-Aeration Device + Telemetry or Pump Lockout (0-5-5 SNG-UV, 0-6-5 SNG-UV, 0-7-5 SNG-UV, 0-10-5 SNG-UV, 0-15-5 SNG-UV)</p>	<p>All existing HydroAction units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>
<p><b>Jet</b> 1500 Series BAT Media Plants (J-500, J-750, J-1000, J-1250 &amp; J-1500) + UV Disinfection (Salcor 3G or+ Jet 952) + Re-aeration + Telemetry or Pump lock</p>	<p><b>Not all Jet units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval. Please see the attached literature provided by the manufacturer that identifies specific models, sizes and dates of manufacture.</b></p>
<p><b>Norweco</b> Singulair Model TNT + AT 1500 UV Disinfection + Re-aeration (in separate pump basin or within Biokinetic System chamber)+ Service Pro Telemetry or Pump lock</p>	<p><b>Not all Norweco units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval. Please see the attached literature provided by the manufacturer that identifies specific models, sizes and dates of manufacture.</b></p>
<p><b>Orengo</b> AdvanTex AX20 or AX20-RT + UV Disinfection (Salcor 3G, Univirex 36, or Orengo) + Re-aeration + pump lock-out</p>	<p>All existing AdvanTex AX20 units can be updated to the approved NPDES treatment train by adding the additional components outlined in the approval.</p>

For more information and complete schematics of these systems visit the Ohio Department of Health [Sewage Treatment Systems program webpage](#) .

You may also contact the Ohio Department of Health sewage program at (614) 644-7551 or [BEH@odh.ohio.gov](mailto:BEH@odh.ohio.gov).

**Related Links:**

- [ODH NPDES Webpage](#)
- [NPDES Sampling Protocol:](#)

**Where can I get more information?**

Ohio Department of Health  
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246 N. High Street  
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