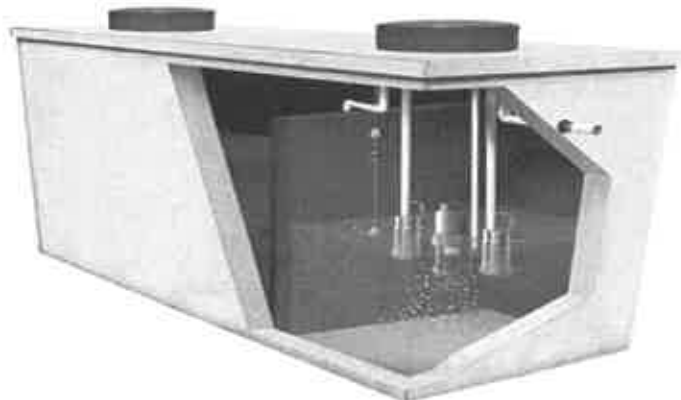




Ohio
Department of Health

2018 ANNUAL REPORT of the
Sewage Treatment Systems
Technical Advisory Committee



Executive Summary

Section 3718.03 of the Ohio Revised Code (O.R.C.) creates the Sewage Treatment Systems (STS) Technical Advisory Committee (TAC), outlines its membership, identifies individuals granted the authority to appoint committee members, and provides guidelines concerning the committee's responsibilities and procedures. O.R.C. 3718.03(G) requires the chairperson of the committee to prepare an annual report concerning the activities of the committee and submit the report to the Ohio General Assembly. The purpose of this report is to fulfill that requirement.

TAC scheduled monthly meetings to discuss updates to the Standards and Guidelines used to review sewage treatment system product applications. During 2018, TAC did not review any applications from manufacturers of sewage treatment systems (STS) or components. Prior to an application being forwarded to the TAC for review they are reviewed for completeness by the Ohio Department of Health's (ODH) program staff. Fifteen applications were submitted for completeness review. Three applications were formally withdrawn by the manufacturer prior to TAC review, and twelve applications were deemed incomplete.

Pretreatment components not subject to review and approval under section 3718.04 of the Revised Code are submitted to the Ohio Department of Health for administrative review and subsequent approval or disapproval by the Director. Certification with appropriate third-party testing protocols constitutes sufficient proof of compliance with the Five Day Carbonaceous Biochemical Oxygen Demand/Total Suspended Solids (CBOD₅/TSS) reduction standard. Three applications received by ODH demonstrated sufficient proof of compliance with third party testing along with additional system component information required and are pending approval with the Director.

Systems and components can be recommended for approval by TAC that provide for the use of nutrient reductions, soil depth credits to reduce the thickness of soil required below a soil absorption system, meeting treatment standards for the discharging and spray irrigation of highly pretreated effluent, pretreatment tank reconfigurations, and allowance for more design options to address varying site and operational issues across the state.

Other activities and actions of the committee included the continued discussion of standards for review and approval of tertiary treatment devices, developing updated product standards, guidelines, and procedures for data collection and submission. The TAC also discussed strategies for implementing and staggering the required five-year product approval process that will begin in 2020.

TAC will continue to work with system manufacturers to review and recommend approval or disapproval of new technologies to the Director of Health, and will actively pursue the research, development, and timely approval of innovative and cost-effective, alternative technologies as required under section 3718.03 (F)(4) of the Ohio Revised Code.

Sewage Treatment Systems Technical Advisory Committee Membership and Meetings

The Sewage Treatment Systems Technical Advisory Committee (TAC) membership and appointment authority is outlined in Section 3718.03 of the Ohio Revised Code.

The members of TAC during 2018 were:

<u>2018 TAC Member</u>	<u>Company</u>	<u>Representing</u>	<u>Appointed By</u>
Rachel Townsend, RS	Ohio Department of Health	Director of Health	Director of Health
Brian Hall, PE	Ohio Environmental Protection Agency	Engineer, Ohio EPA	Governor
Dr. Karen Mancl	The Ohio State University	Academia	Governor
VACANT*		Ohio Township Association	Governor
Christopher Schraff	Porter Wright	Public Member	Governor
Matt Lane	Ohio Department of Agriculture	Soil Scientist, Division of Soil and Water Conservation	Governor
Dan Lark, RS	Lake County General Health District	OEHA Sanitarian	House
Zak Sherman	Infiltrator Systems, Inc.	Manufacturer	House
Julianne Nesbit, RS, MPH	Clermont County Health District	AOHC Health Commissioner	House
Walt Sandefur, PE	Sandefur Consulting	Professional Engineer	House
Kim Cupp, RS, MPH	Fulton County Health Department	AOHC Health Commissioner	Senate
David Chronister	Onsite Design Solutions	Designer	Senate
Chas Kaiser	CDK Structures	System Installer	Senate
Chris Mandich (Chair)	Jet, Inc.	Manufacturer	Senate

*Previously appointed trustee's term ended December 31, 2017.

TAC scheduled monthly meetings to review products and discuss revisions to the Standards and Guidelines for product applications in 2018. TAC held three regular monthly meetings in 2018. Nine meetings were canceled due to lack of products and applications to review.

A complete record of the meetings is located on the Ohio Department of Health's (ODH) website at:

<https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/sewage-treatment-systems/Resources-and-Education/>

Sewage Treatment Systems and Components Reviewed by TAC

Sewage treatment system review required by ORC Chapter 3718 includes an evaluation of detailed system and component information including: product specific technical information, any limitations on use, performance information supporting the manufacturer's request, installation and sizing requirements, installation procedures, materials, and operation and maintenance information including estimates of operation costs and expected service life. In reviewing performance information, the TAC studies raw data and statistical analyses of the sample data (mean and standard deviation for normally distributed data and geometric mean and geometric standard deviation for microbial data) to determine the operational range of the product and its relationship to the documented performance standards. TAC reviews the environmental conditions of the collected data and related confidence intervals to determine if sufficient sample points have been submitted to conclude that the submitted data can be used to predict the products' operation in the range of environmental conditions the product will be exposed to across the state of Ohio.

TAC did not review any product applications in 2018 as no applications were deemed complete and forwarded for review. ODH program staff reviewed fifteen product applications. Three applications were formally withdrawn prior to review by the TAC and twelve applications were deemed incomplete and not submitted to the TAC for review. Three product applications reviewed administratively for proof of compliance with the Five Day Carbonaceous Biochemical Oxygen Demand/Total Suspended Solids (CBOD5/TSS) reduction standard and are pending the Director's approval. If approved, the products would be able to be used for a soil absorption area sizing reduction.

2018 Product Review Summary

Manufacturer	Product	Approval Date (ODH Director)	Notes
ANUA	Purasys SBR PS-1 through PS-14	Pending Approval	Seeking approval for CBOD ₅ /TSS sizing reduction
FUJI CLEAN USA	CE Series	Pending Approval	Seeking approval for CBOD ₅ /TSS sizing reduction
FUJI CLEAN USA	CEN Series	Pending Approval	Seeking approval for CBOD ₅ /TSS sizing reduction

Other TAC Activities and Actions

Standards, Guidelines, and Protocols for ORC 3718.04

The Sewage Treatment Systems Technical Advisory Committee worked to update the Standards, Guidelines, and Protocols for product review. Members of the TAC worked with the Ohio Department of Health staff to update the guidance in the Standards, Guidelines and Protocols for statistical analysis. In addition, the TAC is working with Ohio EPA and ODH to develop a spreadsheet that can serve as a statistical instrument for the product standards, guidelines, protocols, and appendices. This should streamline the application process for manufacturers and provide consistency in how the required statistical analysis of data is performed to evaluate product performance in support of a product approval application.