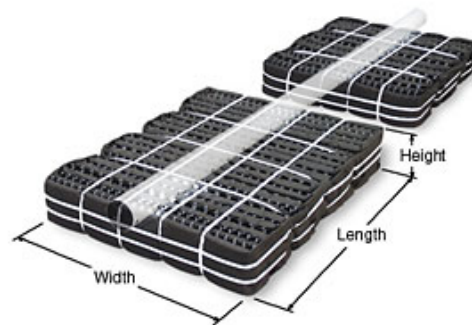
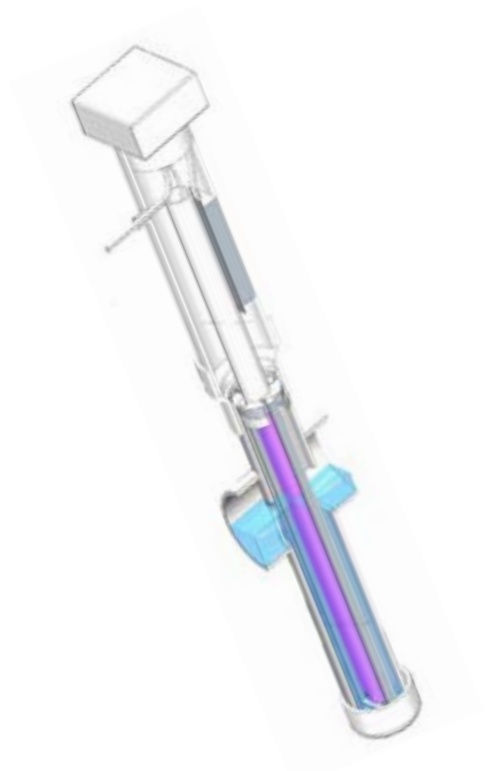




2012 ANNUAL REPORT of the

Sewage Treatment Systems Technical Advisory Committee



February 2013

Executive Summary

Section 3718.03 of the Ohio Revised Code (ORC) 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. Paragraph (G) of ORC 3718.03 requires the chairperson of the committee to prepare an annual report concerning the activities of the committee and submit the report to the general assembly. The purpose of this report is to fulfill that requirement.

TAC scheduled monthly meetings to review product applications received in 2012. During 2012, TAC reviewed four sewage treatment systems (STS) or components from three manufacturers. Of the four reviews, three were requests to modify previous approvals and one was a new request for approval of STS or components. One of the modification requests was subsequently withdrawn by the manufacturer. The request for new product approval was extended into 2013 to allow the manufacturer to address concerns identified by TAC. TAC also received a request to modify the special device approval for fines-free distribution products to allow for a change in configuration.

The systems and components recommended for approval in 2012 by TAC have provided product approval for constantly meeting the effluent quality standards outlined in the Ohio Environmental Protection Agency's (Ohio EPA) National Pollutant Discharge Elimination System (NPDES) General Permits for household STS.

Mark Stump (Ohio EPA) had been previously elected to the position of committee chairman and Mark Tumeo (academic representative) to the position of vice-chairman of the committee. On December 31, 2010, the terms of both Mr. Stump and Dr. Tumeo expired. Dr. Tumeo did not seek reappointment, and Mr. Stump had not yet been re-appointed to the committee. Rebecca Fugitt, Secretary, acted as chair of the committee in their absence for the February 14, 2012 meeting. By the August 14, 2012 meeting, some vacancies on the TAC had been filled and committee members elected Mark Stump (Ohio EPA) chair, and Scott Hetrick (manufacturing representative) as vice-chair of the TAC.

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 2012 were:

2012 TAC Member	Company	Representing	Appointed By
Rebecca Fugitt, MS, RS	Ohio Department of Health	Director of Health	Director of Health
Mark Stump	Ohio Environmental Protection Agency	Engineer, Ohio EPA	Governor
*		Academia	Governor
*		Township's Association	Governor
Linda Aller, RS	Bennett and Williams, Inc.	Public Member	Governor
Matt Deaton	Ohio Department of Natural Resources, Division of Soil and Water Resources	Soil Scientist, ODNR	Governor
Dan Lark	Lake County General Health District	OEHA Sanitarian	House
Zak Sherman	Infiltrator Systems, Inc.	Manufacturer	House
Raymond Saporito, MPH, RS	Ashtabula County Combined Health District	AOHC Health Commissioner	House
Walt Sandefur, PE	Sandefur Consulting	Professional Engineer	House
Charles Patterson, RS	Clark County Combined Health District	AOHC Health Commissioner	Senate
Joseph Keiser, PE	Streamkey	Designer	Senate
Mark Fehring	Fehring Services	System Installer	Senate
Scott Hetrick	Norweco, Inc.	Manufacturer	Senate

*The Academia and Public and Townships Association positions were not filled in 2012.

TAC scheduled monthly meetings to review products in 2012. When no products were scheduled for review, the meeting was canceled. TAC held four regular monthly meetings in 2012. Although a meeting was scheduled for January, weather and road conditions made travel for several committee members difficult and the meeting was canceled due to a lack of quorum. Regular scheduled meetings for April, May and June were also canceled due to lack of quorum. Regular scheduled meetings for March, July, October, and December were canceled because there were no product applications or product modification requests received for review.

A complete record of the meeting summaries for each monthly meeting and the recommended approvals that were made may be found on the Ohio Department of Health (ODH) website at:

<http://www.odh.ohio.gov/odhPrograms/eh/sewage/tac1.aspx>.

Sewage Treatment Systems and Components Reviewed by TAC

ORC 3718 Review includes an evaluation of detailed system and component information including: product specific technical information, any limitations on use, performance information supporting manufacturer, installation material, 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 reviewed four STS or components from three manufacturers. Of the four reviews, three were requests to modify previous product approvals and one application was a request for approval of a new STS or components. One of the requests for product modification was withdrawn by the manufacturer.

The committee recommended approval for modification of treatment trains designed to meet the effluent quality standards outlined in the Ohio EPA NPDES General Permits for household STS. These approvals provide a wider market of system choices for homeowners to maintain existing systems that discharge to surface water.

The request for a new product approval was extended at the request of the manufacturer to allow the manufacturer adequate time to address technical concerns raised by TAC members during review of the product. The manufacturer will continue to pursue approval of the product during 2013.

TAC also received a request to modify the special device approval for fines-free distribution products. This request was received from the manufacturer of approved fines-free distribution products to allow different configuration options for the products. At the time of the request, TAC members deferred the request to the STS Rules Advisory Committee (RAC) to determine if the proposed changes should be incorporated into the new STS rules that are being developed. The manufacturer withdrew the request and agreed to work with the rule advisory committee on the proposal.

2012 TAC Product Review Summary

Manufacturer	Product	Application Date	TAC Meeting	Approval Date (ODH Director)	Notes
Jet, Inc.	J-500 Aeration Treatment Unit	1/2/2012	2/14/2012	3/20/2012	Requested modification to a previous approval to allow a substitute component in an approved treatment train.
Consolidated Treatment Systems, Inc.	Multi-Flo and Enviro-Guard treatment trains	7/26/12	8/14/2012	-	Requested modification for previous approval to allow substitute devices in an approved treatment train. TAC requested additional information from manufacturer. Manufacturer withdrew request on 8/24/2012.
Eljen, Inc.	Eljen A-42 & B-43 Geotextile Sand Filter	8/14/2012	9/11/2012 11/13/2012	-	Requested new product approval for BOD/TSS standard and 10,000 cfu/100mL standard for demand-dosed, time-dosed, and gravity-fed product. TAC requested additional information. Manufacturer has requested extension to provide additional data.
Jet, Inc.	Jet 1500 series treatment trains	10/30/2012	11/13/2012	12/13/2012	Requested modification to previous approval to allow substitute devices in an approved treatment train.
Infiltrator Systems, Inc.	Fines-free distribution product special device approval	10/29/2012	11/13/2012	-	Requested modification to special device approval for fines-free distribution products. TAC deferred request to STS Rules Advisory Committee (RAC) for possible inclusion in rule development. Manufacturer withdrew request on 11/22/2012.

Other Products Reviewed

A request for modification of approval for the Jet 1500 Series Treatment Train to include the option to use Models J-500 PLT, J-750PLTm and J-800 PLT in place of the concrete treatment unit included in previous approvals was submitted in late March 2012. Because the TAC did not meet due to lack of quorum within the timeframe stipulated in 3718.04 of the Revised Code, the product was administratively reviewed and approved by the director, in accordance with Chapter 3718.04(B) of the Revised Code.

Other TAC Activities and Actions

Spray Irrigation Study

Section 3718.06 (B) of the Revised Code establishes the STS Innovation Fund, to fund new STS technology pilot projects through grants or other agreements. The law requires the director to deposit twenty-five percent of the state portion of permit fees into the fund for installation and evaluation of STS new technology. The statute requires that the director “consult with the sewage treatment system technical advisory committee” in the selection of pilot projects for funding.”

At the August 9, 2011 TAC meeting, Dr. Karen Mancl, with the Ohio State University submitted a proposal to research the quantity and quality of runoff from spray irrigation systems in Ohio. While studies on runoff from spray irrigation of treated wastewater have been completed in Virginia and Tennessee, winter conditions in these states are different from Ohio. Conducting a replicated, controlled field study may address the concerns of polluted runoff of this non-discharging wastewater management option in Ohio. After some discussion, TAC formally recommended funding of the Spray Irrigation Study to be conducted by The Ohio State University as outlined.

During 2012, ODH entered into a contract with the Ohio State University and spray and sampling equipment was installed during December 2012. Spray irrigation and subsequent sampling will continue through the winter of 2013. Dr. Mancl has provided monthly reports on the status of the project.

Challenges and Findings

Vacant TAC Positions

Amended Substitute Senate Bill 110 of the 128th General Assembly modified ORC 3718.03 to add three new positions on the committee beginning September 17, 2010. These positions include a representative of a statewide organization representing townships, a person with demonstrated experience in the design of sewage treatment systems, and a registered professional engineer with experience in sewage treatment systems. The bill also modified the requirement for the academic member to include a person who is active in teaching or research in the area of on-site systems.

During 2012, two of the fourteen TAC positions remained vacant. The term Dr. Mark Tumeo (Academic) expired on December 31, 2010. Dr. Tumeo did not seek re-appointment for his positions. The position designated for a statewide township organization has been vacant since it was created in late 2010.