

**Sewage Treatment Systems Technical Advisory Committee
MEETING MINUTES**

Date: Tuesday, February 12, 2019
Time: 10:00 a.m.
Place: BWC/OSOSH
13430 Yarmouth Drive
Pickerington, Ohio

TAC Members in Attendance:

Manufacturer Representative & Committee Chair: Chris Mandich
Manufacture Representative: Zak Sherman
ODH Director of Health Representative & TAC Secretary: Rachel Townsend
Designer: David Chronister
AOHC Health Commissioner: Julianne Nesbit, Clermont County Health Commissioner
Ohio EPA DSW Engineer: Brian Hall
Academic: Karen Mancl
Professional Engineer: Walt Sandefur
Installer/Service Provider: Chas Kaiser
Ohio Townships Association Representative: Gary Salmon
Public Representative: Christopher Schraff

Absent:

OEHA Registered Sanitarian & Vice Chair: Dan Lark, Lake County General Health District
ODA Soil Scientist: Matt Lane

Vacant:

AOHC Health Commissioner

Guests:

Don Carabin: Norweco Inc
Jesse Shamp: Frost Brown Todd
Dewey Conrad: Ecological Tanks Inc.
Adam Arnold: Tangent Company
James Conley: Hydro-Action
James & Rene Dye: Wastewater Solutions

Other ODH participants:

Dusten Gurney
Kyle Bianco
Mike Laubert
Audrey Blakeman
Bryce Kerr

Welcome and Introduction:

The meeting was called to order at 10:05 a.m. by Chairman Chris Mandich. Meeting attendees were introduced.

TAC Appointments Update

Kim Cupp has stepped down as one of the two AOHC representatives serving on the TAC due to an ongoing scheduling conflict. AOHC has been notified and will work to identify and nominate a replacement to fill the vacancy.

Approval/modification to the agenda

Chris Mandich asked if any modifications to the agenda needed to be made. It was noted that an incorrect date was referenced on the agenda regarding the January meeting minutes. Rachel wanted to add an agenda item to discuss the posting of proposed draft changes to Ohio Administrative Code 3701-29-13 for public comment. Chris Schraff motioned to modify the agenda, seconded by Zak Sherman, all in favor, motion approved.

Approval of January 9, 2019 Minutes

Chris asked for any comments regarding the draft minutes from the January meeting. Walt identified that the dates regarding the summer and winter ammonia effluent limits for the OEPA NPDES General HSTS were incorrect in addition to a couple grammatical errors. Chris Schraff made a motion to approve the minutes with the incorporated changes. Gary Salmon seconded the motion. All were in favor.

Tangent Company Update

Adam Arnold from Tangent Company presented before the TAC to provide an update on Tangent Company's activities and data collection from two installed prototype systems granted in 2017 by the Director's special device approval. Adam thanked the committee members for their time and began by providing a brief history of events since the prototype systems were installed. Adam highlighted Phase 1 of the project including dates, engineering change points, data collection, and additional items for the committee to help summarize and refresh activities that occurred for the time period from when the special device approval was granted up to the last update from Tangent Company. (December 2017 TAC meeting) Adam then briefly discussed phase 2 of the project, which commenced in October of 2018 and is still underway. Phase 2 includes additional data collection and simulating equipment failure and stress tests, imitating NSF 40 protocol, and sampling methods and protocol aligning with EPA's *Standard Methods for the Examination of Water and Wastewater*. Data collection will span 26 weeks (through February 2019) consisting of composite influent samples and grab effluent samples.

Additional details of the prototype treatment train were then discussed with committee members. The system originally consisted of 3 tanks; a 500-gallon primary tank, 1050-gallon equalization tank, and 500-gallon aeration/filtration tank. The equalization tank was reduced to a 500-gallon tank. Adam noted that the filter is housed in a separate compartment then where aeration occurs, and the equalization tank is intended to help with hydraulic retention. It was also noted that the water is sucked through the membrane filter via a low-pressure vacuum pump and that the UV light is a nonproprietary sterilizing unit. Currently the filter is being serviced (cleaned) about every 9 months, Tangent is working to increase servicing intervals to every 12 months. The proposed capacity (600 GPD) was designed based off feedback from the membrane manufacturer and additional research.

TAC Draft Annual Report

The annual report is required by Ohio Revised Code (ORC) 3718.03(G). TAC did not receive any complete formal applications in 2018. ODH program staff worked with multiple manufacturers and reviewed submitted applications, but none ever made it to TAC for review. Changes from the

January meeting were incorporated into the TAC draft Annual report. Julianne Nesbit motioned to approve the report, seconded by Walt Sandefur. All in favor.

Draft Calculating Spreadsheet for Product Data

Walt Sandefur and members of Ohio EPA have been working on a spreadsheet to help simplify and standardize the data submission portion of product applications. Walt specifically credited Dale White of OEPA, now retired, for helping progress the worksheet forward. This will allow a manufacturer to simply enter the raw data points into the spreadsheet where the incorporated functions of the spreadsheet could then analyze all submitted data with regard to the standard(s) being sought by the applicant. Currently, the spreadsheet is utilizing a 90% confidence interval for submissions with less than 96 data points. The spreadsheet also includes an influent sheet in case the TAC would like to include that later on.

A few minor modifications were made to the spreadsheet since the last TAC meeting and ODH reviewed and pilot tested the spreadsheet with a submitted data set. Initial feedback was given, and a few items of note were discussed. No dates are able to be entered because of the way the calculations are completed. It was discussed whether the date column should be hidden for now to try and help avoid confusion. Similarly, many of the intermediate steps and columns for the Fecal Coliform and E. coli tab could draw additional questions. It was noted that it may be beneficial to create a narrative/definition/acronym key to help define items on the spreadsheet in order to make the spreadsheet as easy to understand as possible. One final item of discussion revolved around data points below the detection limit and how they should be entered into the spreadsheet.

The spreadsheet will serve as a tool for product submission. Once the spreadsheet is finalized the formulas and cells of the document will be locked, instructions drafted, and it will be available for use.

Field Data Discussion

Examples of field data requirements from other states and municipalities gathered from the SORA listserv were forwarded to TAC members for review. Different approaches such as Colorado and the Chesapeake bay protocol were discussed. It was questioned whether the TAC should distinguish between a new approval versus renewal; field data would only be required for renewal applications. TAC members also conversed about the evolving standards and guidelines and how data is currently evaluated versus how early applications were evaluated and how it may affect renewal applications from previously approved products. TAC members were adamant that the goal is not to try and evaluate how well a homeowner is taking care of a system but how well the product is manufactured and if it is doing what it is supposed to be doing in the field versus a lab setting. In essence, does the system, when properly maintained, do what it is supposed to do, and can it be confirmed in the field? TAC members again were insistent that the more stringent data requirements and enforcement of O&M should be the focus for renewal applications.

Discussion then ensued around challenges with field data collection. Items included, but were not limited to: 1) Minimum numbers for renewal, 2) Testing in between components of a treatment train for different parameters, (i.e. after aeration for BOD/TSS and then disinfection for fecal coliform and/or E. coli) 3) Challenges with pump tanks and re-growth, 4) Homeowner agreement, 5) Costs & logistics, 6) Obtaining accurate information from service providers and local health districts (i.e. date of installation and service(s), addresses, manufacturer and model, Etc. TAC members questioned whether it is necessary for manufacturers to submit field data if they have obtained NSF 40 and NSF 245 within the last five years and what if a manufacturer just wanted to "start over" with a product

submission. Manufacturers that were present in the meeting discussed some of the challenges they have encountered in other states with field data verification, noting they would estimate that in order to get permission to field verify 6 systems they would have to talk to over 50 system owners and that homeowners are very reluctant to allow people onto their property.

Discussion of how to establish field sampling guidance for manufacturers seeking to renew a Director's product approval ensued. TAC members recognized that manufacturers would like to have the field sampling requirements clearly identified in the TAC Standards and Guidelines as soon as possible. Julianne Nesbit made a motion to create a workgroup to examine the models that have been used by other regulatory authorities, Zak Sherman seconded the motion. All in favor. Volunteers from the TAC to participate in the workgroup include: Chris Mandich, Chris Schraff, Brian Hall, David Chronister, Julianne Nesbit, ODH program staff will facilitate the meetings.

Ohio Administrative Code Rule 3701-29-13 Update

Rachel provided a brief update regarding the progress of the proposed rule changes. The proposed changes are posted for public comment. The comment period is open until 2/28/2019 12:00:00 AM. The proposed changes will stagger the renewal of products approved by the Director for use in sewage treatment systems in Ohio to create a more manageable and balanced workload for the Technical Advisory Committee.

Additional Updates

Chris Mandich asked for any additional updates. It was noted that one application was currently being reviewed for completeness by ODH program staff.

Next meeting:

The next TAC meeting is scheduled for March 12, 2019 at BWC/OCOSH.

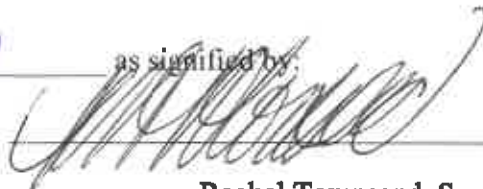
Adjourn:

Motion to adjourn was made by Chris Schraff and seconded by Gary Salmon. Motion carried, and the meeting was adjourned at 12:05 p.m.

Approved on

3/12/2019

as signified by:



Chris Mandich, TAC Chairperson
Dan Lark TAC Vice Chairperson

Rachel Townsend, Secretary