

Technical Advisory Panel
SSTS Product Registration
Meeting: Thursday, July 22, 2021
10:00 a.m. to 2:30 p.m.
Minnesota Pollution Control Agency

Microsoft Teams

[Click here to join the meeting](#)

Call-in number: (651) 395-7448

Call-in code: 178 471 126#

Meeting Agenda

10:00 am: Welcome; review agenda

- TAP Introductions – Tyler Lampella, Adv. Inspector/Designer, St. Louis County

10:05 am: December 17, 2020 TAP Meeting Notes – Review and approve

10:10 am: Short Updates – Cody

- Status of Virtual and In-Person Meetings

10:15 am: Clarus Fusion Modification - Cody

- NSF Data
- B-2 to A-2

10:20 am: Infiltrator Arc 36 Chamber Modifications – Jeanne Allen

- Q & A with Manufacturer

10:45 am: New Product Registration – Aero-Stream – Joe Lucey, P.E.

- Product Overview
- MPCA Review
- TAP Discussion

12:30 pm am: Lunch

1:00 pm: HSW Proposal - Cody

- Final Draft Review
- Implementation Considerations

2:30 pm: Adjournment

Next TAP meeting:

Thursday, October 21, 2021 – MPCA St. Paul, LL South

**Subsurface Sewage Treatment Systems (SSTS)
Technical Advisory Panel (TAP) for Product Registration**

Meeting Notes – July 22, 2021
Virtual via Microsoft Teams

Meeting Attendees:

| Committee Members | Present virtually on July 22, 2021 | Guests | Present virtually on July 22, 2021 |
|--------------------------|---|---------------------------|---|
| Tom Espersen | | Jeanne Allen, Infiltrator | X |
| Mitch Johnson | | Joe Lucey, Aero-Stream | X |
| Pete Otterness | X | Karl Holt, Aero-Stream | X |
| Alex Pepin | X | | |
| Ben Hoyt | X | | |
| Sara Heger | X | | |
| Jon Olson | | | |
| Bob Whitmyer | X | | |
| Greg Halling | | | |
| Joe Enfield | | | |
| Chad Viland | X | | |
| Tyler Lampella | X | MPCA Staff | |
| | | Katie Dowling | |
| | | Cody Robinson | X |
| | | Aaron Jensen | X |
| | | Steve Oscarson | X |
| | | Brandon Montgomery | |
| | | Corey Hower | |

10:00 am: Welcome; Review agenda

The meeting called to order at 10:11 am. There were no changes to the agenda.

Everyone provided an introduction. Tyler Lampella introduced himself as a new member. He is an Advanced Inspector working for St. Louis County.

10:05 am: December 17, 2020 TAP Meeting Notes – Review and approve

No changes proposed to the previous meeting notes.

Call to vote to approve the minutes from the December 17, 2020 meeting. Seconded. Passed unanimously.

10:10 am: Short Updates – Cody

2021 Remaining Meeting Dates:

October 21st

December 16th

July 22, 2021: Technical Advisory Panel
Meeting Notes

Cody talked about how future TAP meetings and in what form they could be held. Would in person, online, or a blend be the preferred option for the group. One member explained that his trip is four hours and if there were a short agenda, it would be good to do those meeting online. He felt value in being in person, but if the agenda were short, then maybe an online option would be good. Hybrid was brought up as an option to allow people to attend in person and online. Aaron mentioned that sometimes the combination meetings get distracting with individual conversations happening with the in-person attendee's and that leaves out the online attendees. It is something we can try to see how it works. The plan would be to try to do the next meeting in person and we can explore other options as we progress.

10:15 am: Clarus Fusion Modification – Cody

Cody provided an overview of the agenda item. Request came in from Wes Combs with Clarus Environmental to discuss revisiting the Fusion system's assigned treatment level based on new data. MPCA provided preliminary review and determined the NSF report likely supports TL A-2.

Highest 30-day average CBOD5 – 13 mg/L

Highest 30-day average TSS – 13 mg/L

A TAP member asked if their manuals were up to date. Cody talked about manuals and that we need to do some more work on guidance process for manufacturers on manual submittal. Currently Clarus only has an owner's manual. This change would not necessarily trigger a manual update, but Cody will reach out to Clarus to get their manuals updated

Motion to update the Clarus Fusion registration to A-2. Seconded. Passed unanimously.

10:20 am: Infiltrator Arc 36 Chamber Modifications – Cody

Jeanne Allen from Infiltrator joined the call. Cody provided an overview of the agenda item. Jeanne explained that they are just changing the molds for the ARC product, since the current molds they use are wearing out and they are working to update those molds. No TAP members had any comments on the updated molds. One TAP member asked about soil intrusion and if this new mold would help with that issue. Jeanne explained that the louvers have been changed a bit from the old models and this has shown to reduce the soil intrusion. The new design should be better. No motion is needed, as this was more of an update. No further action is necessary.

10:45 am: New Product Registration – Aero-Stream – Joe Lucey, P.E.

Cody provided an overview of the new product to be registered. Cody asked if anyone had any questions on the product before the Aero-Stream folks joined the meeting. Cody pointed out some discrepancies in the data they provided. There was discussion on registering a product for just treatment level C. Currently there are no products registered for just level C. A member asked about the different testing levels at NSF class testing. Cody explained that we have not typically separated the different classifications at NSF. A member asked if they tested the higher flow models. It looks like they only tested the 450 model. Joe and Karl joined from Aero-Stream joined the meeting. Cody introduced them and offered them an opportunity to introduce the product. Karl provided an overview of the product. A member asked about the scale up. Cody explained that the registration listed on the NSF website would outline the scale up; there was also a supplemental report that explained the scale up in the NSF testing packet. Cody will check the NSF website and the supplemental report to confirm. A member asked about HSW and the parameters that were over the testing protocol standard. Joe explained that there were a few times when the data was above the threshold and those were removed from the test data. Cody looked at the NSF website and noted the scale ups are listed on their website. There was discussion on the scale-up and that fact that NSF only goes up to 1500 gpd and we have typically used the NSF website listing for the scale up and have been requesting a separate scale up for products over 1500 gpd. Cody talked about the review and the application. He asked if it could be dropped into a registered tank in MN. They said that they fit into most tanks. They will need to be MN registered. Cody went over the review form.

July 22, 2021: Technical Advisory Panel
Meeting Notes

There are some manuals missing and Cody is working with them to get the necessary manuals. Cody asked if they could expound on the design manual. Joe explained that the design information is included in the installation and O&M manual, so they do not have any other design manual. Joe asked if they needed to do an operating permit for each model. Cody explained that the one they provided would be enough. Cody asked about the design. Karl explained the design drawings are included in the manual. One member asked if someone wanted to use the product, how someone would go about appropriately choosing the correct model. Joe explained that their design is simply based on flows and treatment level. They will train their installers to select the correct treatment level for site. Cody talked about adding the design value information to the product registration letter. Cody went over the testing results and talked about the level of registration for the products. AS500-1 would be treatment level C and the AS500 2 & 3 would be able to meet treatment level C and B2. Karl asked if the AS500-1 would be able to be registered for treatment level C. Cody explained that it would be registered that way and it could be installed for residential with no reduction in size or separation. A member asked what the difference was between the single versus multiple chambers. Karl explained that there was a different amount of bio brush material for the different products. Aaron asked if there was any way they could add to their manual on design to help folks pick the right system and help LGUs review the system to verify that they have the right product. Karl explained that they are working on supplemental information to talk about design and outline what is required for each product. They will send a draft copy and the final draft once it is fully reviewed by NSF. Another member mentioned that there is table 2 that contained some information on the design but may be missing some of the other information. Cody explained that we have everything other than the supplemental information and could move forward. A member asked if we had a draft letter available yet. Cody will work on the draft letter and work with them to get that approved. Joe will work with Cody on the supplements.

Motion to approve the AS500-1 as TLC and the AS500-2 and AS500-3 as TLB-2 with a condition that they submit the additional supplemental information on system design. Seconded. Passed unanimously.

Cody asked if the information provided was sufficient and if there is anything, we can do to help convey new product registrations to the TAP panel. A clarification was brought up on the review for treatment level. Cody explained the red circle is what the manufacturer was asking for. A member asked about the standards on design manuals and if we could provide some more detail to applicants on what we need to see in the design standards for a submittal. There was much discussion on what we would or would not need to see in the design manual. Page numbers were very helpful. A member noted that design parameters are nice to have in a manual and noted that on their company website they talk about some DIY installs. Cody feels that the letter is a place to outline the design issues. A member stated that it is written as an approval and not necessarily meant to be design guidance. It would better to have a separate design manual. Aaron provided some more comments on his question to the manufacturer. We really need something that tells the designer and LGU what model to pick, why to pick it, and how to know as an LGU that the right model was chosen. Steve asked if the letter would or could be attached to the front of the manual that is posted to U of M website. Cody explained the process and talked about how that might be helpful to add to the manual and something that we have talked about in the past. A member mentioned possibly creating a new MPCA level certification process for advanced installer. A member talked about maybe another type of recognition or approval, and not necessary a new certification. Additionally, it was mentioned that a new certification gets a little more complicated to introduce and the thought of a test for this can be stressful for people. It was suggested that MOWA could help the training and the advanced installer approval.

12:30 pm: Lunch

1:00 pm: HSW Proposal - Cody

July 22, 2021: Technical Advisory Panel
Meeting Notes

Cody introduced the HSW agenda item. He went through the draft factsheet and explained the processes that manufacturers would need to follow to register for HSW. A member asked on the sampling and can the company collect their own samples. Another point made was that the testing would need to be by some sort of certified lab and not just any testing entity. Cody asked if certified labs are running one standard test or if they have different tests. It is recommended that we just say a certified lab. A member asked if the data is required on each facility. Cody said that the language is for every system installed. Cody asked about testing and how many of the systems. What is the right number to sample? Members felt that there should be a number specified because some could have many systems. There was discussion on cherry picking the best sites. Cody explained that we have the ability to say we need more testing. One member stated that the number of systems tested could be set specifically for each product by TAP. Another member said that it could be testing those that were installed over the last 3 years. Another member the manufacturer would probably not even know where all of their systems are installed. There was much discussion on what the right number would be, and that the NSF protocol process wasn't moving forward at this time. Cody explained that we have two different groups of registered products in this case. Those that are currently registered and those that would come in as a new registration. We would not want to create a scenario where the newly registered products were at a different level than existing registered products. A member talked about implementing a point system and assigning points based on number of systems and where they are installed could offer more points. Cody liked the thought of leaving it open ended and make it a decision of the TAP on how many systems need to be tested. Aaron suggested that we require maybe the last three years for both new and existing. Steve talked about some potential issues with having TAP discretion; and how that may get us in trouble by requiring different things for different manufacturers. A member agreed that some specific parameters should be set. Folks liked the idea of the last three years. A member felt that we need a minimum and maximum range for the number of products to become registered. In addition, he mentioned that we should indicate that tanks are not to be pumped 30 days prior to testing. Another asked if it would be good to have information on when the maintenance events happen or just a restriction on the 30 days prior. He stated that maybe both. More discussion included flow data and how the practicality on getting flow data. They felt that there would be data missing. Cody explained that we are not NSF and we are essentially trying to develop a protocol with little oversight, so we should be careful not to make it too complex and unobtainable. Simplicity would be something we need to consider, so folks could qualify. Cody said if this is something that is acceptable at this time with a few modifications that we could move forward. The group felt that the document was in a good place. There was some worry that this could limit the ability to use these products relative to the cost to the manufacturer to get the product registered. We should say that our goal is not to keep people sampling forever and have these products registered, but until we get the appropriate data, we would not be comfortable with registering those. There was discussion on the in-perpetuity language in the document and providing a cap on the number of systems. Cody asked if five was good. A member felt that 5 to 10 would be ok with good data that is loaded at least half of their design flow and above. There was discussion on which facilities that should be tested and at what design flow. A suggestion came in to add 5 at over 50% capacity and 10 at less than 50% capacity as a cap. Cody summarized the discussions that have taken place and he believes we should stay with "in perpetuity" at this time and get it in place and see how it goes. A member asked if there would be an effective date. Cody said we could take some time to line it up with December renewals. A member asked if we should run it past some manufacturers to see what they think about this process. Cody would like to move forward, and we can think about it more in the next few months to finalize the document. A member felt that moving ahead with not having manufacturer input would not be something that they would suggest. Cody suggested we could talk to manufacturers to get their feedback.

Motion to move forward with the document with the changes outlined above. Seconded. Passed unanimously.

2:30 pm: Adjournment

July 22, 2021: Technical Advisory Panel
Meeting Notes

Motion to adjourn the meeting. Seconded. Passed unanimously. Meeting adjourned at 12:51 pm.

Next TAP Meeting

Thursday, October 21, 2021 – MPCA St. Paul – LL South

Technical Advisory Panel
SSTS Product Registration
Meeting: Thursday, October 21, 2021
10:00 a.m. to 2:30 p.m.
Minnesota Pollution Control Agency

Microsoft Teams meeting

[Click here to join the meeting](#)

Call-in number: (651) 395-7448

Call-in code: 444 123 940#

Meeting Agenda

10:00 am: Welcome; review agenda

10:10 am: July 22, 2021 TAP Meeting Notes – Review and approve

10:15 am: Short Updates – Katie

- Status of Virtual and In-Person Meetings
- 2021 Product Renewal Surveys – LGUs and Service Providers
 - 12 Treatment Products
 - 4 Distribution Media Products

10:20 am: New Product Registration – White Knight HSW – Doug Nelson

- Product Overview
- MPCA Review
- TAP Discussion

12:00 pm: Manual Discussion – Katie

- Overview
- MPCA Proposal
- TAP Discussion

12:30 pm: Lunch

1:00 pm: HSW Proposal - Cody

- Manufacturer Feedback

2:30 pm: Adjournment

Next TAP meeting:

Thursday, December 16, 2021 – MPCA St. Paul, LL South

**Subsurface Sewage Treatment Systems (SSTS)
Technical Advisory Panel (TAP) for Product Registration**

Meeting Notes – October 21, 2021

Virtual via Microsoft Teams

Meeting Attendees:

| Committee Members | Present virtually on October 21, 2021 | Guests | Present virtually on October 21, 2021 |
|--------------------------|--|--------------------|--|
| Tom Espersen | | Doug Nelson | X |
| Mitch Johnson | | Mark Noga | X |
| Pete Otterness | X | | |
| Alex Pepin | | | |
| Ben Hoyt | | | |
| Sara Heger | | | |
| Jon Olson | | | |
| Bob Whitmyer | | | |
| Greg Halling | X | | |
| Joe Enfield | | | |
| Chad Viland | X | | |
| Tyler Lampella | X | MPCA Staff | |
| | | Katie Dowling | X |
| | | Cody Robinson | X |
| | | Aaron Jensen | X |
| | | Steve Oscarson | |
| | | Brandon Montgomery | X |
| | | Corey Hower | X |

10:00 am: Welcome; Review agenda

The meeting called to order at 10:00 am. There were no changes to the agenda.

10:10 am: July 22, 2021 TAP Meeting Notes – Review and approve

Call to vote to approve the minutes from the July 22, 2021 meeting with some minor grammatical changes. Seconded. Passed unanimously.

10:15 am: Short Updates – Katie

Katie provided an update on the COVID situation and that we will continue to meet virtually for the time being. A member asked if there could be some form of hybrid set up for those that cannot make a meeting in person. Katie talked about the options and some of the challenges presented by these. The group talked about if there is bad weather that it would be a benefit to have a virtual option in the future. Cody talked about some difficulty with doing meetings with the technology, but we could look to try that and see how it goes. Another member mentioned that most of their county meetings allow a hybrid situation and it can get difficult to juggle both

October 21, 2021: Technical Advisory Panel
Meeting Notes

options sometimes. However, it was noted that members being there virtually may be better than not attending at all. A member commented on the value of in person meetings.

Katie provided an update on product renewals coming up in December. There are 12 treatment products up for renewal and 4 distribution media products up for renewal. We will be sending out product renewal surveys to LGUs and service providers to gather their feedback. Katie will also be sending out renewal notice letters to manufacturers, so they are informed of the expectations.

There was discussion on recording future TAP meetings. Private information and confidentiality aspects were discussed. Aaron mentioned that all the data we gather is public and available to everyone, unless manufacturers indicate in their registration items that are confidential.

10:20 am: New Product Registration – White Knight HSW – Doug Nelson

Mark Noga, president of Knight Treatment Systems, and Doug Nelson joined the meeting. Doug is an engineer from the Milwaukee School of Engineering and has a stake in the product. He presented an overview of the product to the group with a slide show. He went over the product details and the philosophy of the product for remediation. Site evaluation is critical before putting the White Knight into use. Determining why the system is not working properly and that it is not associated with a mechanical failure, rather than a problem with the actual function of the system, is important. In addition to remediation, he talked about how this product is applicable for HSW applications. Doug went through a couple of case studies. The first was a HSW application and the second was a remediation application. Their goal is to solve wastewater issues effectively within regulatory requirements in a cost-effective manner. First Supply in Wisconsin is the supplier of the product and dealer training is critical. Ideally these products work best to have a downstream fixed bio reactor like a sand filter or peat filter, but it can be directly discharged into the distribution media.

Brandon asked if an effluent filter is required and Doug responded that it was. Mark stated that they can also use a pump filter as well and the concept that some sort of filter is present between the system and the distribution area is right. A member asked about the size of the systems. The system is scalable by adding additional units. The registration letter would show how things could be configured and how the scale up would happen. Cody talked about the types of registration that we use in Minnesota for Type IV systems; otherwise, a Type V engineered system is an option. A member asked how fast the product works and if it needs some time to start up. Doug explained that the startup is quick and you can see reductions in a couple of weeks. A member asked about remediation with a fixed distribution media. Doug talked about soil distribution media and how each system's circumstance is different and replacement of the distribution media may be necessary. Mark talked about the different types of distribution media and how this can be used. Cody talked again about the prescriptive guidance for Type IV systems established and how we register the product. It was stated that configurations with other media would be something that would be done under a Type V registration. A member asked about the design flow versus actual flow values listed in their table materials provided. Cody reiterated that the design flow is determined by MN rules. There was discussion on flow and sizing and the need for a more MN based approach for the flow tables. Cody indicated that this product has not gone through NSF 40 testing and would only be able to be registered as a HSW product. Cody talked about the new HSW proposal that we will be talking about later in the agenda. Doug has reviewed the HSW document and is excited to work through that process. A member talked about cutting a new access point into the tank for the product and if that would require an engineered sign off for that to be acceptable. Corey said that they would likely need to install a new tank and even if the tank is registered, cutting the tank cover would affect the rebar and the structural integrity of the tank. Cody talked about how we register tanks and that this product would have to be used in a MN registered tank. Mark asked what the manhole opening size was and Corey responded with 20 to 24 inches. Mark said the product is 16 inches so that can work. Corey talked about the center manhole and asked if manholes on the ends would work. Mark said that could work and they could direct it over to the center of the tank. Corey asked about filter plugging issues. Mark said that they have had a few issues with non-typical waste streams, but they are frequently not with a residential system. Mark showed a screen that is on top of the unit that helps filter unwanted things. There was a discussion on system maintenance and timelines in order to properly set up an operating permit. Cody talked about how the registration

October 21, 2021: Technical Advisory Panel
Meeting Notes

letter would outline the maintenance requirements and tying this to the draft operating permits. Mark asked that their proprietary reinoculation product be specifically called out in the registration letter. Katie suggested to work with the manufacturer to obtain the missing items needed for registration, which are the homeowner instructions and the draft-operating permit. The signed certification statement was received. It was discussed that a BOD loading requirement for the product is needed for drafting the registration letter. Doug explained that the loading rate can vary depending on the circumstances and the designer should work with the manufacturer on the loading rate. Cody explained that coming up with a BOD loading rate is needed to register the product, as well as the product would need to meet Treatment Level-C for all parameters. It was noted that TSS does exceed the maximum in some instances in the testing information provided by the manufacturer. Mark talked about some of the data that they provided and how one unordinary load can cause an issue with the TSS. Cody said we just need to note that this exists and that there can be differences in waste strength. A member asked that they have two separate applications for residential and high strength waste. Cody said that they can't qualify for residential since they don't have NSF testing. Cody talked about remediation and how this product could be registered and used in residential remediation situations. More discussion on how this would work would need to happen. Mark said that they have sites ready to go to in MN for remediation. Cody explained that with a PE and LGU approval, remediation use could be applied today under a Type V permit. Katie asked for any further questions and to decide on next steps. Cody said that we don't have a quorum at this time and we could talk about motions and do some sort of virtual vote. A member asked for a new application to be submitted to focus on the HSW option, and the material included would need to be revised to remove the residential items and instead focus more on HSW and BOD removal. A member suggested the manufacturer resubmit and be ready for the December meeting. Katie asked for any additional comments. Doug provided some additional comments on a study a student of his did and he would submit that additional information.

No motion.

12:40 pm: Lunch

1:15 pm: Manual Discussion – Katie

Katie provided an overview of this discussion item and wanted to discuss what the TAP panel expects for a complete design manual. Katie provided what we communicate in rule for product manuals. Katie explained the issues with rule not being very specific and wanting to be able to provide some better guidance to manufacturers in this area. Cody provided some of his thoughts on manuals, such as how he sees inspectors and designers using the information we have in the registration letter and the rest of the design standards are found in 7080. There was discussion about coming up with some items that we could develop on a form and we could give to manufacturers to provide for their registration. There was a comment that some manufacturers have provided a MN specific manual, and so why can't everybody. Brandon asked as an inspector what are you looking for in a manual and what that would look like. A member went over some of the details they use to inspect a system. The member stated they start with looking at the registration letter and that it's hard to pinpoint what we would clearly need in a manual. There was discussion about adding more information in the registrations letters that deal with the "how to" instructions, such as how to plumb this and what size trash tank would be best. Another member asked if there was a manual that could be used as a template. Katie wondered if we could pull the headings out of this manual and start there. The group mentioned that product differences would make a template difficult. Aaron stated that this has been an ongoing issue and requested if there is there something that we could come up with to help in this area. A member said that maybe starting with headings is a good place to start. Another member explained their experience in their county and being able to request updated manuals is important to know if new things have affected the product. Cody proposed we leave things as is and if we run into issues with product manuals as they come in we should address them at that time. Katie talked more about the rule requirements and what is specified in rule and how that could be interpreted. A member mentioned that the rule does say not limited to. Katie asked if we could hold them to a standard and not renew them if not meeting expectations and Cody replied that we would need to outline the requirements before we could be more firm. A member asked if we could ask LGUs about issues with design manuals. Katie mentioned possibly adding a question

October 21, 2021: Technical Advisory Panel
Meeting Notes

to the product renewal survey to get some more feedback from LGUs. A member asked if there could be feedback solicited at classes to see what others think about this issue. Aaron suggested a middle ground, like a punch list of things that should be in a manual, or we could go back to what we have currently done and keep moving on with it. Katie stated that she will keep pondering this issue and attempt to pull together some sort of guidance that lists items to be included in manuals and will present this to TAP when a draft is ready to be looked at.

1:00 pm: HSW Proposal - Cody

Cody started the discussion on the HSW proposal. An email was sent to manufacturers about the new HSW protocol and their feedback was solicited. One manufacturer asked for some clarifying information on sampling and where that would be, as well as a few other basic things. Another manufacturer had some comments surrounding concerns about the time to complete and the costs that would be incurred, specifically the cost for the end user was mentioned. A member asked if they could use their operating plan to gather some of this data. It was stated that quarterly measurements would be needed in the guidance and that might not align with the operating data. Another issue brought up was the sampling timeframe and how often systems would be tested. There was a discussion on testing and others thought that they should just get the information from the operating permit. Cody explained that operating permits typically don't do as much testing as we have outlined in this document and they also don't typically require influent data in operating permits which is required in the HSW document. There was discussion back and forth and we will continue to work to implement this procedure.

2:30 pm: Adjournment

Motion to adjourn the meeting. Seconded. Passed unanimously. Meeting adjourned at 2:18 pm.

Next TAP Meeting

Thursday, December 16, 2021 – MPCA St. Paul – Virtual MS Teams

Technical Advisory Panel
SSTS Product Registration
Meeting: Thursday, December 16, 2021
10:00 a.m. to 1:00 p.m.
Minnesota Pollution Control Agency

Microsoft Teams meeting

[Click here to join the meeting](#)

Call-in number: (651)-395-7448

Call-in code: 298 153 598#

Meeting Agenda

10:00 am: Welcome; Review Agenda

10:05 am: October 21, 2021 TAP Meeting Notes – Review and Approve

10:10 am: Short Updates – Katie

- 2022 TAP Meeting Schedule
- Aero-Stream Registration Complete
- Product Manual Housekeeping
- February TAP Meeting

10:20 am: Product Renewals (Distribution Media) – Katie

- Infiltrator Water Technologies Request to Join Meeting
- Overview of Renewal Submittals
- LGU Surveys

10:35 am: Product Renewals (Advanced Treatment Products) – Katie

- Overview of Renewal Submittals
- LGU Surveys

1:00 pm: Adjournment

Next TAP meeting:

Thursday, February 17, 2022 – MPCA St. Paul – Virtual MS Teams

**Subsurface Sewage Treatment Systems (SSTS)
Technical Advisory Panel (TAP) for Product Registration**

Meeting Notes – December 16, 2021

Virtual via Microsoft Teams

Meeting Attendees:

| Committee Members | Present virtually on December 16, 2021 | Guests | Present virtually on December 16, 2021 |
|--------------------------|---|--------------------------|---|
| Tom Espersen | | Travis Johnson | X |
| Mitch Johnson | X | Dick Bachelder | X |
| Pete Otterness | X | Jeanne Allen | X |
| Alex Pepin | X | | |
| Ben Hoyt | X | | |
| Sara Heger | X | | |
| Jon Olson | | | |
| Bob Whitmyer | X | | |
| Greg Halling | | | |
| Joe Enfield | X | | |
| Chad Viland | X | | |
| Tyler Lampella | X | MPCA Staff | |
| | | Katie Dowling | X |
| | | Cody Robinson | |
| | | Aaron Jensen | X |
| | | Steve Oscarson | X |
| | | Brandon Montgomery | X |
| | | Corey Hower | X |

10:00 am: Welcome; Review agenda

The meeting called to order at 10:04 am. There were no changes to the agenda.

10:05 am: October 21, 2021 TAP Meeting Notes – Review and approve

No changes

Motion to approve the minutes from the October 21, 2021 meeting. Passed unanimously.

10:10 am: Short Updates – Katie

Katie showed the 2022 meeting schedule. She talked about virtual vs in person meetings. A member let Katie know that they will not be able to attend the later parts of upcoming meetings due to a conflict. There was discussion on rescheduling the February and April TAP meetings to start at 9:00am to accommodate the TAP member's schedule. Katie stated that the Aero-Stream registration is complete, the registration letter is posted on the MPCA website, and the manuals will be posted soon on the UMN website. Katie talked broadly about product manuals and her plan to do some housekeeping to inventory and update the UMN website. A member suggested keeping the non-registered product information on the website to reference for product still being used. Aaron asked if we could have two

December 16, 2021: Technical Advisory Panel
Meeting Notes

categories of manuals for currently registered products and historic products. Other members agreed that it would be good to have those historic product manuals on the website. Katie will work with the U of M during this manual updating process. Katie said we will likely be having a February TAP meeting and went over the products that might be on the agenda.

10:20 am: Product Renewals (Distribution Media) – Katie

Katie went over the distribution media products up for renewal in 2021. She went through all the information provided from Infiltrator Water Technologies and local governmental units. Katie presented the issues with the Quick 4 series that the manufacturer submitted. Travis Johnson explained that the Quick4 product is the one used in MN the most, suggesting why these issues have been outlined. Katie asked for any comments on these known issues presented. A member asked if anything further has been developed to deal with the gopher issue other than chicken wire or chlorine tablets. Travis explained that he works directly with those sites on gopher issues in the part of the state that it happens and plans to do some extra education in that area to help those folks. Katie moved onto the LGU product renewal survey responses that were received. There was a question from a member regarding the issue identified by Dakota County for the EZflow product gumming up faster and how that relates nationally. Travis explained that this was an isolated issue and that they do not see issues on any EZflow system gumming up elsewhere. Travis spoke about the LGU comments on pipe sagging with the EZflow product and explained that this issue would not affect the system if the bed were level. A member asked about the 48" required separation comment and if the top of the bundle has to be in the original soil. Travis said that the six inches below the pipe needs native soil, and the top of the bundle can be mounded over, just like rock and pipe. Katie asked for any other comments. A member asked about soil intrusion other than gophers, and if there are ways they are addressing that. Travis talked about the issues with past chamber series and backfilling, in which soil enters the louvers. Travis stated they are not seeing that issue anymore with the new chambers.

Motion to Renew Infiltrator Water Technologies (Arc Chamber Series, BioDiffuser Chamber Series, EZflow Series, and Quick4 Chamber Series) products. Seconded. Passed unanimously

10:35 am: Product Renewals (Advanced Treatment Products) – Katie

Katie went over the treatment products up for renewal in 2021. She went through each product individually by presenting the renewal submittal from the manufacturer and supporting documentation submitted by LGUs. There was a discussion about how manuals were not submitted for SludgeHammer's renewal and if their registration should be contingent on receiving those. Katie explained that she asked SludgeHammer for the manuals and they responded that they were going send them by mail, but she has not received them yet. Brandon found manuals for SludgeHammer that were previously submitted, and Katie will get them posted to the UMN website. There was discussion on the influent and effluent values for the Nayadic product. A member suggested that it would be good to get more information on design flow and clarification on the influent or effluent data. Brandon said that based on the testing information provided, it appears that the Nayadic product is meeting the treatment levels. A member asked if we could get more of a data set for these products, instead of data for just for one point in time. Brandon explained that we receive what the operating permit data provides, which is usually a snapshot in time. Katie explained that Aqua Test's The Nibbler is the only product that did not submit for renewal, but they indicated that they would be doing it soon. It was suggested to plan to review that renewal at the February TAP meeting. Katie wrapped up her presentation on product renewals and asked for further discussion. It was suggested to renew all products except for The Nibbler product.

December 16, 2021: Technical Advisory Panel
Meeting Notes

Motion to renew all products up for product renewal that have submitted appropriate documentation – SludgeHammer Group - SludgeHammer (S400, S600), Eljen Corporation - Eljen GSF (A42, B43), Consolidated Treatment Systems, Inc. Multi-Flo (FTB0.5, FTB0.6, FTB0.75, FTB1.0, TB1.5), Consolidated Treatment Systems, Inc. - Nayadic (M6-A, M8-A, M1050-A, M1200-A, M2000-A), Consolidated Treatment Systems, Inc. Enviro-Guard (ENV-0.75, ENV-0.75M), Clarus Environmental/Zoeller Pump Company - Fusion Series (ZF-450, ZF-600, ZF-800), E-Z Treat Company - E-Z Treat (600, 750, 1200), BioMicrobics - NitriFAST (0.5, 0.75, 0.9, 1.5, 3.0, 4.5, 9.0) and ABC-N (0.5, 1.0, 2.0, 3.0, 4.5, and 9.0), BioMicrobics - MicroFAST (3.0, 4.5, 9.0) - ANUA - PuraSys SBR (PS1-4 through PS1-8, PS1-9 through PS1-14), AK Industries/AKHA Manufacturing - Hydro-Action (AP500, AP600, AP750, AP1000, AP1500) Excluding Aqua Test, Inc. - The Nibbler because they did not submit a request for renewal at the time of this meeting. Seconded. Passed unanimously

1:00 pm: Adjournment

Motion to adjourn the meeting. Seconded. Passed unanimously. Meeting adjourned at 11:35 am.

Next TAP Meeting

Thursday, February 17, 2022 – MPCA St. Paul – Virtual MS Teams