



Comments, Questions, and Answers Summary

Topic: MPCA's PFAS Monitoring Plan

Question 1: It sounds like MCES will have five sites that will be doing two PFAS test grabs of your influent in the first half of 2023. Would you then potentially be pushing these PFAS testing requirements on to other companies that have industrial waste permits with you or how will that work down the line?

Answers:

- At this point, we're still crafting our strategy.
- The first half of 2023 we will be taking samples of our influent. It's two grab samples: One grab will be in the first quarter of 2023 and the other grab will be in the second quarter of 2023. These sample grabs will be taken out of the influent of the required five plants (Blue Lake, East Bethel, Hastings, Rogers, and Seneca).
- We will then give that data to the MPCA. They'll be developing the response thresholds, grouping facilities in different priority buckets, and having them work on source reduction.
- At this point I really can't say when it will roll out to other industrial waste permit holders. I imagine that industrial users might be asked to sample for PFAS at some point, but I think we're way out from that.

Comment:

- There are some current permits with companies who are already required by their permit to sample for PFAS. This is mostly for companies who use PFAS in their chrome plating and fume suppression or landfill leachates.

Question 2: What are the most common sources of PFAS?

Answer:

- PFAS is in a lot of applications. Historically it's been in chrome plating and was used in their fume suppression baths. It's also in firefighting foam. It's used in a lot of consumer goods and that's why we see it in landfill leachate. There are a lot of coatings on printed items and it's also in your bedding and textiles as well as carpet.

Comments:

PFAS are used in many industrial and consumer processes to make everyday items non-stick, or water-, oil-, or stain-resistant.

- Food packaging - fast food containers, lunch meat paper, disposable plates and bowls, and oil-, water- and grease-resistant coatings on food packaging
- Commercial household products - non-stick coated cookware (Teflon), cleaning products, waxes, polishes, and adhesives
- Clothing and fabric textiles - stain- and water-resistant carpeting and upholstery, water repellant clothing, tents, umbrellas, shoes, and leather goods
- Cosmetics and personal care products - shampoos, conditioners, sunscreens, cosmetics, and dental floss
- Building and exterior use products - paints and sealants
- Industrial use - metal plating and finishing, wire coatings, automotive fluids, and the manufacture of artificial turf
- Firefighting foam - aqueous film-forming foam (AFFF)

Topic: MCES Budget and Rates

Question 3: What were the impacts of COVID on MCES finances?

Answers:

- The short answer is next to none – minimal impact.
- In March 2020 when we created the budget for 2021, there were dire predictions that cities would go bankrupt and there would be no sales tax and terrible things would happen. So, we built a 2% rate increase to be sensitive that it might be difficult times for our customers. None of the cities have missed a payment and our industrial revenues did not decline.
 - The longer-term impact is that means that's a year that we only charged two percent. So we will not be repeating whatever money we collected in 2021 in future years. So that's another part of the reason why we're going to have to go a little higher with our municipal wastewater charge this year because we need to collect some of that money back. This is what's partially driving our 6% increase for 2023 because we need to get some of that money back when we only increased 2% when we really needed 4%.

Topic: COVID Monitoring in Wastewater

Question 4: Do you track RNA that is used in vaccinations?

Answer: No. As we understand it, that doesn't really make it through a person's system. So, no we don't see that. We just see what's coming from somebody's infection.

Question 5: You mentioned that you meet with the Minnesota Department of Health bi-weekly and give them your data. What do they do with your data?

Answers:

- You don't really know what another agency is necessarily doing, but initially they were very interested in the variant data back last summer when we were first talking with them. They were very interested in the different variants circulating.
- Over time and now as recent cases have been very low and testing has been low, the testing data is going away. They are interested in seeing the total load coming into the Plant as an indicator of whether things are starting to increase again. So, they are using the data along with modeling data now to really track what's happening when testing numbers are much lower than they were.

Question 6: Can your procedures also identify new variants or just those that we are already aware of?

Answers:

- This procedure requires us to know something about the variant of concern that we're looking for. We need to know what the distinguishing mutation is as we need to develop an assay and then we look for that particular mutation. Companies like Thermo Fisher or Bio Rad are producing these types of mutation assays as things pop up.
- No, we can't see something that hasn't been seen anywhere else. But if you think about it, the odds of the next big variant of concern showing up in Minnesota and St Paul are pretty small. When omicron blew up in South Africa we immediately got on the job and said how can we distinguish omicron. We found the right assay to look for the mutation. In that case we were ready but no we can't see things that haven't already been seen elsewhere.

Question 7: What disposal methods are used for the equipment and byproducts that are used in the extraction process of the wastewater?

Answer: In the extraction process, that just goes down the drain. These are basic lab chemicals. Wash buffer is just kind of a salt solution and the lysis buffer has some guanidinium thiocyanate in it. These are things that are easily biodegraded so they just go down the drain.

Topic: MCES' Capital Program & New Hastings Plant

Question 8: During your presentation you mentioned that the new plant site consists of 221 acres and you showed 10 acres would be required for the new treatment plant. So what does MCES plan to do with the rest of their property?

Answers:

- Most of the area is north of the railroad tracks and on the opposite side of where our treatment plant is.
- The plan is to keep that area in a natural state. We're going to develop what's called a natural resources plan for the area. Possibly collaborate with some local agencies or government agencies on maintaining that land in a natural state.
- It's up in the air right now exactly how we're going to do that. It'll be determined before we start construction.

Question 9: Why is there such a large increase in capital programs?

Answers:

- We're seeing an increase in these next five years or so due to our larger capital projects that we need to get done. Obviously, we only do work that's needed to get done but those larger projects were I-32, construction of this [Hastings] wastewater treatment plant, construction of the Crow River wastewater treatment plant, and a fourth incinerator at the metro plant.
- When we look at that capital program, we can also see that we've kind of balanced those expenditures, so we're trying to keep them even. So, you do see it jump up but we're trying to keep it as even as possible through the next five years and we've done that by scheduling those projects to occur at different times so the expenditures aren't all hitting us all at once.

Topic: Collection System Issues – FOG and Rags

Question 10: If FOG does get down your drain, is there something that you can suggest for safely cleaning it up?

Answers:

- In the house, if you dump a little bit down your drain, it's not going to be enough to affect our system. Your primary concern is just to make sure your drains don't clog up. In that case, I would just say flush it down with a bunch of hot water.
- At an industry let's say you've got a 500-gallon tank of vegetable oil. If that were to rupture and somehow get to the sewer, then you need to call the spill duty officer (651-649-5451). Then the city and/or we can respond and try to recover that from the sewer.
- Everything in between these situations is a little bit iffy because generally FOG is a thing where it's going to enter the sewer from cleanup operations. So, it's not really something you see as an accidental discharge a lot.

Question 11: How much of the rag debris is washed in through storm systems?

Answer: Our collection system is completely independent of any local stormwater systems. Many years ago, sanitary and storm water were combined but that has since been separated for quite a long time. So, there should not be anything rag related in our system from a storm water system.

Question 12: Which plants are having the most issues with treating the water with the increased FOG and is there something we can put into the pre-treatment system to help this?

Answers:

- Well, I do know those pictures I used were from the Hastings plant. Not to single anyone out, but there has been increased FOG showing up in isolated incidences where the plant will get inundated with a large amount of FOG at certain times.
- Blue Lake down in Shakopee has had instances like that too. Those are the two that come to mind first. We have a lift station in that same collection system basin where we see a lot of it so that makes sense.
- Then the second part of the question was about what can be put in place for the pre-treatment to help prevent FOG? The main way you keep FOG out of the sewer is with a grease trap or grease interceptor piece of equipment. Now generally that's not something you put in on a whim. It's a fairly significant piece

of equipment and generally those are in a fast-food restaurant, and you will put it in when it's built. They can obviously be retrofitted to any situation but it's going to be something to be reserved for an industry or a business that's producing FOG on an ongoing basis or food preparation.

- As mentioned, we typically see more grease in areas with a lot of restaurants. I will mention that grease traps are great and that's what they're designed to do, take FOG out or prevent FOG from getting into our system. But they mean nothing if they are not maintained correctly or on a scheduled basis. That's where we really run into a lot of problems, is how do we educate people to come up with a maintenance program for those grease traps.

Topic: Regional Benefits of MCES Water Efficiency Grants & Legacy Funding

Question 13: Could you touch on the different ways that the region benefits from having MnTAP summer interns work for local businesses?

Answers:

- The training of the next generation of engineers and scientists to focus on water and energy efficiency is a really great thing that does benefit the region in the long run. A lot of these students end up working in the metro area in their careers and by participating in a program they have a background in water efficiency that they may not have had.
- The water savings are a real thing and so are the energy savings as well. They also sometimes have savings in sewer charges depending on how much water efficiency they realize and depending on how the concentration and/or loading changes in their sewage.
- Another benefit is the connection that we get with these industries. It's another way that MCES can be of benefit to these industries and commercial establishments in the metro area. They see that there's another thing that we can do to help them. It allows us to funnel some of these clean water land legacy amendment funds their way to help them do something that they may not have enough time to do on their own. The financial help is a nice thing for them in terms of helping to fund the student's presence in their facility for the summer.

Topic: MnTAP Services and Projects

Question 14: Are there any industrial permit holder networking opportunities available for the exchange of ideas, solutions, and experiences?

Answers:

- One of the forefront networking opportunities that comes to my mind would be the intern symposium that happens at the end of every summer. That's a really nice way to showcase some of the work that different MCES customers are doing. It has been virtual for the past couple years although hopefully we might be trending to more of an in-person format. That's one way to see what ongoing activities are happening and some of the best practices that interns are making.

Comments in chat:

- Before you go, please take less than 5 minutes to complete our short survey: <https://forms.office.com/g/E1BHqx3MZa>
- Please feel free to contact us with any questions or comments you may have: iwpp@metc.state.mn.us or 651-602-4703
- If interested in watching our recording or passing it along to others, [here is a link to the recorded IW Customer Workshop](#).