Policy Committee Meeting Agenda
Clean Water Council
June 26, 2020
9:30 a.m. – 12:30 p.m.
WebEx Only

2019-2020 Policy Committee members: John Barten (Chair), Pam Blixt, Warren Formo, Bob Hoefert, Raj Rajan, Rylee Main, Phil Sterner, Rep. Patty Acomb; and Victoria Reinhardt (Vice Chair)

9:30  Regular Business
   • Approve today’s agenda
   • Chair and staff update

9:45  Review of Draft Policy Statements
   • Chloride Reduction: De-Icers
   • Chloride Reduction: Water Softening
     o Public Comments: Minnesota Water Quality Association
     o Public Comments: Coalition of Greater Minnesota Cities
   • Well test at time of sale
     o Public Comments: Minnesota Realtors Association

10:45 Review of Draft Comments to MPCA on General Feedlot Permit

11:30  Ideas for PFAS Speakers for the Fall

12:00  Nitrate Leaching Modeling in Support of Nitrogen Fertilizer Management Plan/Groundwater Protection Rule
   • Minnesota Department of Agriculture

12:30  Adjourn
Committee Members present: Rep. Patty Acomb, John Barten (Chair), Warren Formo, Rylee Main, Raj Rajan, Victoria Reinhardt (Vice Chair), and Phil Sterner

Members absent: Pam Blixt and Bob Hoefert

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Regular Business

• Approve the April 24, 2020 agenda and February 14, 2020 meeting summary, motion by Victoria Reinhardt, seconded by Raj Rajan, motion approved.

• Chair and staff update
  o The Minnesota Pollution Control Agency (MPCA) has a request for $1.4 million for testing bio solids for PFAS from the Environment and Natural Resources Trust Fund through the Legislative-Citizen Commission on Minnesota Resources (LCCMR). The LCCMR did not make formal recommendations but some waste water treatment funds were inserted by the Senate. The House did not agree, and the Senate now says it will not pass an LCCMR bill. Rep. Hanson has added a few items related to COVID-19, including research proposal that would look at septic systems and wastewater. Another item of interest: HF 3657 includes language on vintage groundwater, which would address proposals in Dakota County to pump deeper groundwater and export it out of the state. There are some provision in there that say the DNR cannot issue a permit unless they can insure that non-vintage groundwater will not mix with the vintage groundwater.

MPCA Overview of Land Application of Manure by George Schwint, Principal Engineer, MPCA Feedlot Program (Webex 00:07:30)

• Minnesota feedlot rules have five categories: general information such as definitions; registration program; permit program for operation or construction of a feedlot; delegated county program; and standards for discharge, design, construction, operation and closure, which includes locational restrictions (floodplains, shoreland), technical criteria for manure storage, and the rules for the land application of manure. The rules use animal units, which are defined by weight (rolling scale), and are used for thresholds for rule and permit requirements.

• For land application of manure, the goal is to avoid pollution of waters of the state through no discharge during the application process. Requirements include applying the correct agronomic rates, testing the manure for nutrient content, keeping records of the application, test soil phosphorus levels, and developing a manure management plan (MMP).

• There are established nutrient needs for different types of crops.

• Besides managing the application of manure, there are also sensitive features. This includes lakes or public waters and wetlands. This is to limit the transfer of the manure to these sensitive features.

• There are several requirements for larger sites.
  o There are annual manure nutrient testing requirements.
  o For winter application, there is no surface application of liquid manure (unless able to incorporate/inject, or in emergency application).
  o There are also restrictions for solid applications (no rain forecast, no active snowmelt, six percent slope, and there should be a low phosphorus runoff risk.
  o In addition, if there are coarse textured soils, there is only late fall application for manure.

• The current federal NPDES permit expires on January 31, 2021. Therefore, there is a new permit being developed at this time. There have been public meetings for feedback. The potential changes are focused on how people apply for coverage (online system), the permit format, what the applicant will receive upon approval of coverage, and the permit requirements for land application. There would be a change for the September manure applications; they would require the use of a cover crop (no restrictions on type of cover). There would be restrictions for October manure applications such as requiring nitrogen best management practices (BMPs). For the winter manure applications, there would be restrictions for no solid manure application in February or March. In addition, there
would be a provision for a temporary stockpile at the facility (to apply when the time is right). These changes are still being processed and reviewed. They are looking at early June for the public comment notice.

- For records of manure application, this is for farms with 100 or more animal units. They must be kept for at least three years, and for any special protection areas it is six years. Items recorded depend on the amount of animal units. An MPCA manure management plan form online demonstration was provided.

Questions:
- Are there special rules for the karst regions of Minnesota? Answer: Yes. They are based on how close they are to bedrock and karst features, such as sinkholes. There are also restrictions on the types of liners for manure storage.
- How often is MPCA’s program evaluated? Answer: There have been a few reports on evaluations on the MPCA program, as well as a progress report on the delegated county program. There are some that can be located for anyone interested. They are annually evaluated by the federal Environmental Protection Agency (EPA).
- How do the Watershed Restoration and Protection Strategies (WRAPS) and comprehensive watershed management plans take manure management plans into account? Answer: The WRAPS do not get to that level of looking at manure management plans. They look more at the overall sources.

Comment: It would be interesting to know how these manure management plans are affected by the closure of meat processing facilities due to COVID-19, with the livestock numbers backing up. Response: That will be interesting, but the animals are being fed a different feed to keep their weight maintained. That will impact the nutrient content of that manure. In that situation, we would expect them to test that manure again.

- When will you need the public comments submitted, if we were to submit our Policy Committee comments? Answer: That would be for the general NPDES permit and the 45 day public comment period should begin in early June.

Minnesota Agricultural Diversification Steering Council Update aka “Continuous Living Cover for Clean Water: The Forever Green Partnership and the Drinking Water Protection Program” by Erin Meier - Director, Green Lands Blue Waters; Dr. Nick Jordan - Department of Agronomy and Plant Genetics, University of Minnesota; Constance Carlson - Market Opportunity Development Specialist, University of Minnesota; Trevor Russell - Water Program Director, Friends of the Mississippi River (Webex 01:08:00)

- They work with many different partners, which have come together to do the work of the Forever Green Partnership. This is designed to engage many different areas impacted by this work. They are all working to move continuous living cover onto the landscape and into the markets.
- The Forever Green is working to create market-driven pathways to clean water. There are new winter annual and perennial corps to diversify the food and agricultural system and provide new food and feed products, new economic opportunities, and also ecosystem services. For the market opportunities, they include oils, fiber, protein, and phytonutrients. There is a range of economic opportunities by virtue of the commodities they provide. These crops also provide environmental benefits like soil health, clean water, nutrient management, pollinator habitat, carbon sequestration, and soil protection. There are emerging markets due to the environmental benefits as well, so it has become prominent in our work as well.
- The basic structure involves a few key components. There is a public/private/non-profit partnership that advances a common interest in continuous living cover. There is a research and development core working to connect all of these groups in play with the best products. There is a steering council, which includes one part time staff member. Then, there is the Forever Green Partnership Network, which also includes on part time staff member. There are fifteen different teams focused on the different plants. The research and development teams involve collaboration across disciplines in both public and private area. The funding received in 2020 has been allocated to 13 projects. The results from these plants are impressive in the soil nitrate level reductions compared to annual cropping systems.
- They are working to scale up to commercialization. This process involves bridging all of the research and development efforts. The pilots involve cluster planting to get them to markets nearby. They involve a share of risk as well. This allows them to assess and learn more about both the cropping systems and the commercialization markets. It is a multi-level partnership. It is intended to bring together the best top-down and bottom-up approaches, involving experimentation, learning, and focused investments. There is a key interaction between the network group and the steering council, communicating the process and directions to move forward. The result should be a rapid scaling up of the living cover, followed by measurable outcomes (water quality, agronomics, genomics, and end-use).
• The Forever Green Initiative Commercialization team was formed to accelerate commercialization and support the implementation of Forever Green through:
  o Comprehensive identification and analysis of supply chain gaps and assets, market opportunities, and stakeholder partnerships;
  o Facilitation and evaluations of strategic pilot projects and product research and development;
  o Robust strategic communication and network leadership building.
• The first Kernza variety was released in September 2019 (Clearwater). They have created a protocol to grow the crop successfully. They are going to be distributing more seed this fall, looking for an additional thousand acres. There have not been any delays from the pandemic, but it is an unfolding situation that may have impacts later. Regarding the supply chain, they are working directly with distributors (Minnesota Native Landscapes and Sprowt Labs). The pilot implementation program is going well, and it will help reduce the risks for growers. This work is growing and moving forward. There is also more work on the end-use research (malting, brewing, sprouting, puffing, etc.). There is a lot of attention to the products being made (crackers and Kernza beers).
• The Forever Green Initiative has been able to leverage many funds. They are looking for further funding (with modest increase) this next round.
• New proposal: Drinking Water Protection Funding (Webex 01:53:00)
  o This is a separate funding ask, but these programs are compatible. Every Minnesota deserves access to safe, clean, drinking water. Recent data suggests that many communities are at risk for elevated nitrates in their community wells. This program would help the protection efforts in this area, starting at the highest risk community wells.
  o These Drinking Water Supply Management Areas (DWSMAs) involve 360,000 acres in Minnesota. About 118,000 are highly vulnerable acres currently in row crop production. They do not provide as much cover, and are prone to leaching nitrate into community water supplies. The best protection for these DWSMA acres is year round vegetative cover, as known as continuous living cover.
  o They would like to propose that there be funding for promoting market based continuous living covers (perennial crops and winter hardy annual crops) which can be harvested and sold into current DWSMA cropland rotations to protect the drinking water without taking the land out of economic production. It is the most affordable and scalable method of protecting the drinking water, while maintaining farm prosperity in these at risk communities.
  o This new program builds from the 2018 Board of Water and Soil Resources (BWSR) “Working Lands Watershed Restoration Feasibility Study Program Plan” provided to the Minnesota Legislature. They found that market-based perennial crops and winter annuals can boost the agricultural economy while greaty improving water quality. As these markets for these crops mature, they have the potential to become self-supporting. Thus, this program would not need to keep going once these markets are established. Some initial work is needed to just start this program. There is a need to “de-risk” new crops by ensuring profits that are at least comparable with the existing crops during the pilot phase of work. Second, there is a need for technical assistance, for the participating growers. This would be from the University of Minnesota Forever Green Initiative and other familiar with the producing of emerging continuous living cover crops.
  o The program would request four million dollars in funding. The lead agency would be BWSR, coordinating with the Minnesota Department of Agriculture (MDA), Minnesota Department of Health (MDH), and MPCA. Agronomic and technical assistance for participating growers from experts at the University of Minnesota Forever Green Initiative and other familiar with the production of emerging continuous living cover crops. That would include: planting rate and techniques, crop management strategies, and the harvest and processing guidance.

Questions/Discussion:
• This new program would need to be brought in front of the full Council, probably in the implementation programs presentations on May 18.
• From the Policy Committee perspective, there is a policy to encourage permanent protective cover on the vulnerable wellhead acres. This would be more appropriate to the Budget and Outcomes Committee (BOC) and full Council in terms of funding for this new program proposed.
The Chloride policy statement is an expansion of the current statement. It would include information on water softeners and municipal treatment systems that would help to eliminate the need for water softeners in homes. It also includes the labeling requirements and liability protection for the Smart Salting program. This would need to be agreed upon to be included in the current recommendations. Therefore, there is some time to discuss and adapt if needed.

Questions/Discussion:

- As a cautionary reminder, centralized softening systems can be a change to water chemistry. It can lead to bacteria growing in the distribution system, or lead exceedances at the tap. There is a complicated balance that needs to be monitored.
- Regarding the labeling requirements, often manufacturers point out that they are selling across state lines and having their labels uniform is important. A stakeholder group would be important to do regarding this area. There are other networks that may help make this a larger effort. There is a cost creating a stakeholder group. So the Council could do part of this work since we meet already? Perhaps over the next year, this could be something to do.
- There is a need to be sensitive about the legal implications surrounding this area and think about the impacts on the distribution system.
- With the caution of the impacts on the water chemistry, perhaps this needs another look. There would need to be more information before moving forward to approve this at this time. However, the labeling for the de-icer could be approved today.
- The timed water softeners part could also be approved today.
- I think it is a good idea to move forward with the parts that can be done. It is about feasibility and moving forward with the information that we have at this time. Other parts could be continued with more work and more information.
- I think we should add language on other options for soft water distribution. We could include the consequences of soft water distribution. Then, it can be left open, avoiding some of those specifics.
- It would be good to follow up with Brooke Asleson at the MPCA and Jeff Freeman at the Public Facilities Authority, to see if there is more information and motivation for cities to switch to centralized water softening. There would be some follow up on this topic.
- Regarding further input for the labeling, should that be some more follow up as well on the across state lines item? Response: Yes, that seems like a good idea to follow up on.
- Regarding the well testing at point of sale, Paul will research some of the language on the testing involving realtors. There could be more context and thoroughness on this item. Dakota County has some language on this topic as well, and it could be something to look into, to add to this policy.
- Regarding the nutrient item, there is a lot of information. It is a broad category. It sounds like the state is doing a lot already with some nutrient items, which stakeholders would be interested in learning about. However, there should be greater direction on this area before composing a policy.
- For nutrients, perhaps a policy on the new manure application process in the works may be a good idea.
- I agree, I think the manure application process should be reviewed again. I would have concerns about any prohibition of it, but perhaps situations of setbacks. I think they are looking at these items, but it is something we should look at more.
- Perhaps the Policy Committee could make comments on the new permit process. Response: I think that would be a good approach. The public notice is in May or June, and it would be a thirty day comment period. Therefore, we could complete this task. Response: Instead of a policy statement, we should have draft comments on this item. Then, bring them forward to the full Council meeting.
- There are a lot of policy items. I think we should focus on what we can get done with the time we have.
- Regarding PFAS, Paul has followed up with some groups on this item. He will keep working on it, so there may be items to present on this topic at the next meeting. There was a suggestion to have a task force for
this area, and there may be a possibility for the Council to be an entity to hear about these issues to help locate the gaps in the work required. *Response:* This is a good idea to pursue.

- Paul Gardner will divide the chloride policy statement draft in two, creating one for de-icers and one for water softeners. He will also follow-up with Brooke Asleson at MPCA about whether agencies are recommending central water softening or if they are recommending getting rid of residential softeners only IF cities go to central softening.

**Adjournment (Webex 02:47:17)**
Committee Members present: John Barten (Chair), Pam Blixt, Warren Formo, Bob Hoefert, Rylee Main, Raj Rajan, Victoria Reinhardt (Vice Chair), and Phil Sterner


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Regular Business (Webex)

- Approve the May 22, 2020 agenda, motion by Victoria Reinhardt, seconded by Raj Rajan, motion approved.
- Chair and staff update
  - There will be a special session probably on June 12. The Governor decides if there is a special session, and the legislators decide when to end it. It could be a few days or longer. So, it is unknown at this time. There are a few items Paul will be tracking.
  - June 15 full Council meeting will now be a virtual field tour at the University of Minnesota (UMN) Forever Green Initiative program locations, showing the different cover crops being researched. They will be going to the different sites with about ten different researchers talking about these crops.

Review of Draft Policy Statements (Webex 00:11:30)

- Chloride Reduction: De-Icers
  - The Council already has a chloride de-icing policy. It is included in the draft revised policy. There are two additional policy item to review at this time. This may be an entirely new policy created, or perhaps a revision of this original policy. The draft shows that water softening and de-icers have been separated into two parts. The estimates have also been updated. Links to the strategic plan have also been added.
  - For the Minnesota Pollution Control Agency (MPCA) does not have the authority to charge a fee for any Smart Salting training. If there was a fee, it would defray some of the costs of the program. This ability to charge a fee would have to come from the legislature.
  - Could the MPCA serve more people if they could charge a fee? Answer: One of the reasons for the increase in cost from the original program estimate was for twenty classes. Additional funds were able to be used this year (from 319 grants), which opened up more classes and allowed staff to see the demand. They did 61 classes total, with good attendance. With the ability to charge a fee, they would be able to offer the classes to meet the demand. They could offer private classes as well, for companies to bring the training to their shop to get all their staff trained. It would be more feasible to do that as well. Charging a fee would allow us to expand and train more people. It would need to be a combination, to help keep the fee as low as possible. It is a voluntary training program. As funds run out we are limited to what we can do.
  - Paul reported that in 2009 during a budget crunch, the Legislature looked at fees as a way to defray a drain on the general fund, so in the upcoming biennium legislators may be more amenable to fees than they have been in the past especially with something that is not required.
  - Could there be language included in the policy statement to approve charging a fee? Response: I think that would be a good approach, keeping that in the policy. With this fee, then the Clean Water Funds (CWFs) would not need to fully support it (but support a portion). So, perhaps eliminate the word “fully” from the policy statement for the Smart Salting applicator training and certification program.
  - The fifth (adopt local chloride reduction ordinances) and sixth (de-icing product labeling requirements) items were added in. There were no issues with these additions from the policy committee.
    - Comment: As noted, for the sixth item there would need to be some outside consulting, for third party certification requirements for any statements about the products’ environmental, and pet and human safety information. In addition, draft up certain documents required for this process.
  - How many different manufacturers and suppliers are there that would be impacted by this? Answer: There would be a significant number, possibly over thirty companies. One company has placed their ingredients on the
label and was willing to connect more (i.e., toxicology testing to verify it is safe for pets). There is some interest in this area from a few companies, and opportunities for collaboration. Other state organizations have some interest as well; multi-state effort may make it easier to pass at the legislature as well.

- Add “revised” to title and move forward with the updated draft.

• Chloride Reduction: Water Softening (Webex 00:36:00)
  - This is new and specifically linked to water softening. There are two parts. One to help link assistance to municipalities. The other to update the state plumbing code to prohibit the installation of new water softeners in Minnesota that use timers rather than on-demand systems by 2021. The new language addresses some of the issues that we concerned about.

  Questions/Discussion:
  - Update to the language in the first bullet to be “Provides financial support and technical assistance to municipalities to reduce chloride discharges from water treatment systems.”
    - There will be some follow up with municipalities regarding the language. There may be information that may be limiting to the municipalities. There will be an update on this item at the next meeting.
  - Regarding the second bullet, the 2021 is unrealistic, which makes it a weaker policy statement. It can be taken out. In addition, add the word “regeneration” before systems.
    - A potential future idea would be for a program would be to provide some kind of rebate for Minnesotans upgrading to an on-demand water softener.
    - Research the benefit of investing in this kind of program could be a good step.
    - A third bullet could be added to pursue research options to get people to switch their system. It would leave it flexible.
    - It would also be good to know if there are sales data on these water softening systems are the on-demand water softeners. Maybe a survey could be done to see if this movement is already happening. The industry has those numbers, so that would be important to review.
    - Looking at the cost difference as well, which is a good incentive to homeowners (as they are spending less on purchasing salt for the softener).
    - Some further investigation into this area can be followed up at the next meeting.

• Well test at time of sale (Webex 00:01:07)
  - There is new language added. It is recommending that sellers of real estate property test their drinking water for bacteria, nitrate, arsenic, manganese, and lead, to inform buyers and renters of the test results. Dakota County is already doing this work. Feedback from some realtors reveal that many think it is a good idea. It is enough of a problem, that it should be addressed.

  Questions/Discussion:
  - Wasn’t something like this defeated at the legislature because the realtor groups did not support it? It added to the cost and timing of the sale transaction of the property. Answer: There was a bill introduced, possibly only in the House, and it did not receive a hearing. The Realtors Association did express interest in this item for today’s meeting. They thought it was an appropriate point down the road and may offer some written comments. It is up to the Council, how meticulous the wording should be for this item.
  - I like that renters are included. However, should it just be during a sale or when renters are signing a lease? Answer: This would be up to the Council.
    - I think it can be taken in steps. If it includes renters it may not move forward.
  - The time of the testing is a concern, because it mentions “by the time the property is sold”, but this should be available before the property is sold. That wording needs to be changed to make it clear that the water is tested at time of sale.
    - I think this is the area that the realtors should weigh in on, with this timeline. In addition, disclosing high levels of a certain item (i.e., manganese) does mean the water is above the standards, but if that property also includes a water treatment system, then it is safe to consume. It just is not safe coming out of the ground.
    - This is about disclosing if there is an issue. It does not mean there is a problem.
    - In the Dakota County ordinance, the testing is required. However, if the results for nitrates exceed the safe drinking water standards in new constructions, the owner must install a treatment system. For property transfers, they would need to disclose a treatment device with testing passing water samples.
• There is work to training realtors for this testing at property transfer. It would help them be informed if the results are outside of the standards, to reassure individuals of water treatment systems to eliminate the drinking water concern.
  ▪ This is about a disclosure, and leaving the flexibility to the buyer or seller. The most important is informing the people that will be living there about the drinking water results.
  ▪ The testing and disclosure should be early, and relatively close to the date that the point of sale is happening (not test results from ten years ago when it was last tested).
  ▪ If the test results are not within the standard drinking levels, mitigation could be provided with the Minnesota Department of Health’s (MDH) website links.
  ▪ It may be helpful to talk with the water treatment people (Dakota County Works) to help identify the key barriers or issues.
• Paul will follow up with this information

Review of Draft Comments to MPCA on General Feedlot Permit (Webex 01:33:00)
• At the end of the April meeting, there was an interest in drafting some comments to the MPCA on the agency’s NPDES general feedlot permits. There is a public comment period that will be open in June.
• Comments from the Committee members included support for vegetative cover and cover crops for October and September. There is an ability to give input on setbacks relative to slope. Lastly, no manure should be allowed on snow at any time.
  o Kelly Gribauval-Hites experience with manure runoff: Their neighbor spread manure over the snow, on top of drain tile intakes, and even within their yard acreage. They contacted the MPCA multiple times. Last March they encountered the liquid manure had flowed under snow and onto their land (high enough that it could get into their rubber boots). This was the runoff from the neighbor’s field. The MPCA was contacted again (three more times). As the snow began to melt the manure continued to run off the neighbor’s field. It was a tremendous smell. It was within 120 feet of their well, which is on the opposite side of their land away from this neighbor. It was wrapping around their home, driveway, and towards their well. They called the MDH, the MPCA again, as well as the UMN training of feedlot inspectors program to get a response from someone. They continued to try to get someone to come out and see their property to do something. An MPCA inspector did come out about two weeks later after contacting the MDH and UMN, and this inspector was very professional, but they were from the Brainerd MPCA office (while Gribauval-Hites lives in Pine County). The inspector informed them that it was the first time that inspector had physically been to that farm. This experience with manure runoff should not happen. It should be easier to report this kind of incident and get someone to inspect the issue faster. The only reason the MPCA sent a letter of warning to this neighbor was because manure went into a ditch, which flows into the Snake River close to joining the St. Croix River. This farmer also did not have a manure management plan. The ditch was never cleaned up. The 2019 manure management plan for this place was completed in February of 2020. How many other people have had this happen? There was a lot of work to get an answer. There needs to be something for an average person to connect when manure flows onto their property.
  o Response: Thank you for sharing your story. Do you have any comments for the general NPDES general feedlot permits?
    ▪ Comments: There is a disconnect. The inspector we worked with came out to the property twice and was very good, but there are not enough feedlot inspectors. There are not enough points in the work that the inspector tried to carry out, but there is not enough enforcement capability. Basically, the neighbor farmer is getting away with this behavior. The inspector could not actually do anything, except send a letter about the manure getting into the ditch. There should be no manure coverage on snow. There should be no liquid dairy manure covered on snow. If there is something that is going on, there should be a way to report it. There are only twelve feedlot inspectors for the state.
    ▪ Glenn Skuta from MPCA: We are very sorry for the circumstance; it sounds like a horrible experience. Just to be clear on the June re-issuance, it is for permitted facilities. It talks about how the program operates and what the areas are of the MPCA authority. The general permit is a five-year permit that applies to the larger sites (over 1,000 animal unit size). The draft permit will be on public notice for comments. This new general permit will be put in place, but only for those permitted facilities. The smaller facilities are not under general permits. Instead they have to register. They do have to follow rules, but they are not under the same
permitting requirements. The feedlot inspection program is very lean on staff. There are about twenty staff total for the state. There is also the other permitting program, where there are fifty counties that have accepted the delegation of authority, where they extend the coverage of the regulatory nature of the program. Pine County is not a county that has this accepted delegation authority. Of the delegated counties, they oversee the smaller facilities and they are able to respond quicker than the state can, because they are local.

- Regarding this issue that was brought up, was that under a permit or non-permitted facility? Answer: It is a non-permitted facility because they are under the 1,000 animal unit size. Comment: It is an extremely large facility, and they are around 900 animal units.
- Perhaps we can provide comments on this general permit. Then, also address the other management facilities over feedlots overall across the state. Perhaps, we could have a policy piece that could help address some of the other feedlots. We should not be allowing any manure application on snow, regardless of how many animals people have. Perhaps we can submit comments independently of these other comments.
  - There is a time crunch for the general feedlot comments (opens June 8 with a 45 day comment period). An additional statement as it relates to feed lots overall would not be an immediate concern. It could be reviewed and composed at a later date.
  - I recommend we start that overall conversation later. There may be people who are divided.
  - I agree that it should be at a later date. This has happened to someone, and it is a serious issue. The formal process should play out. We do not have enough information yet for any overall permitting concerns.
  - Working with agricultural groups across the state, the vast majority are conscientious and they work very closely with the MPCA and the feedlot folks. One situation is too many, but most farmers are doing the best they can and avoid these kind of consequences. We should talk about this item. We will hear from farmers and they will talk about the good practices they are doing. Most are following the rules and permit requirements. A more complete discussion is in order. Focusing on these general permit updates would be good right now, to see what updates have occurred.
  - Let’s wait and follow up on comments for this permit process when the language comes out. Let’s also schedule follow up for this other issue in the next few months.

Ideas for PFAS (Webex 02:11:00)
- There are a lot of ideas and activities at the legislature. Feedback from legislatures and interested stakeholders suggests an overview of current state activities on Per- and Polyfluoroalkyl Substances (PFAS) would be the best first step.

Comments/Discussion:
- At the national level, this is a high priority. It is complicated and there is a lot of activity, both federal and state levels. I think it should be on our radar. We should follow the updates. If there is a point for it to makes sense for this committee to be ready for this issue. If we step into this right now, the timing is not right yet. There will be a point where we will want to be a part of the discussion. This helps us be ready.
- I agree. It feels like it is a moving target right now. We might be best to step back and observe right now, until the issues are settled further before we jump into it.
- The timing to wait may be good. The MPCA is doing a statewide inventory, searching for the areas of PFAS across the state. It will provide a better understanding once that is complete. From a drinking water perspective, that report will help target the community water supplies to sample. There may be other parts of the state that have challenges, which now will need help to provide follow up work.
- The MPCA is working on a statewide inventory. The first phase is a pilot in a few counties. The MPCA also just hired a PFAS coordinator, and they will work for the rest of the year to provide more information on what has been done and where there are gaps and opportunities. This can help create a plan moving forward. I would anticipate it is available towards the end of the year, before the next legislative session.
- It sounds like we do not know enough to create a policy right now. It sounds like a lot of work in currently ongoing. We are interested in learning more of these results before moving ahead with any kind of policy. Once the MPCA has information ready, they can present to the Policy Committee their ongoing findings.

Adjournment (Webex 02:25:27)
Chloride Reduction: De-Icer

Revised Policy Statement
The Clean Water Council recommends that the State of Minnesota support the following to reduce chloride in Minnesota surface and groundwater:

- Fully fund the Smart Salting applicator training and certification program, and the MPCA’s chloride reduction budget to support the development and maintenance of tools, resources, policies, trainings and assistance programs to reduce chloride pollution.
- Provide liability protection for the Smart Salting program certified private winter de-icing applicators for reduced salt applications.
- Provide research funds to develop new technology and alternatives to chloride-containing de-icing chemicals, and best management practices.
- Encourage and support the adoption of the MPCA’s Chloride Reduction Model Ordinance Language by local governmental entities.
- Have the MPCA should convene and lead a stakeholder process to develop recommendations for new labelling requirements on bags of de-icing chemicals sold in Minnesota.
- Request that the Legislature give the MPCA the authority to charge a fee for chloride training to non-state entities.

Problem
Chloride is a naturally occurring ion found in low levels in Minnesota surface and groundwater. Salt used for winter de-icing and water softening contain chloride. Chloride is not toxic in small concentrations. However, above 230 mg per liter (about one teaspoon in 5 gallons of water), chloride becomes toxic to freshwater fish and other aquatic life under long-term exposure. Once chloride enters our surface water (lakes, streams, and wetlands) and groundwater, it is not feasible and extremely expensive to remove it.

Winter de-icing salts are among the primary sources of chloride in Minnesota waters.

In the Twin Cities Metro Area (TCMA) winter maintenance activities use approximately 365,000 tons of chloride de-icer per year. The de-icing salts eventually wash into nearby lakes, streams and wetlands. Recent monitoring shows increasing chloride concentrations in surface water and shallow groundwater. Since it is very difficult and expensive to remove chloride from our surface and groundwater once it gets into water, reducing chloride at the source is necessary.

- Inconsistent labeling for de-icers creates confusion for consumers. De-icers can be labeled as “eco-friendly” or as an alternative to salt, but they may pose other problems for water quality. Currently there is not a standard for labeling de-icers for their potential threats to water quality.
Links to Clean Water Council Strategic Plan
Goal 3: Surface waters are swimmable and fishable throughout the state

- Prevent and reduce impairments in surface waters
- Maintain and improve the health of aquatic ecosystems
- Invest in activities and research that can accelerate improvement in water quality through new approaches (e.g., perennial crops and other “landscape drivers”, chloride management or alternatives, etc.).

Solution

1. **Training and Certification.** Continue the Smart Salting applicator training and certification program: The MPCA has a training program for private and public salt applicators, such as snow removal contractors and snowplow drivers. This has been a very successful program and has assisted winter maintenance programs in reducing salt application rates by 30% to 70%, without compromising public safety. The TCMA Chloride Management Plan and Statewide Chloride Management Plan include the Smart Salting training program as the top implementation strategy to reduce salt use in the winter. In the past, MPCA conducted this training with federal funds, but those funds are temporary. The estimated operating cost for the training program in FY22 is $228,000 - 350,000/year. Currently the MPCA does not have the authority to charge a fee for the training that would defray some of the cost. To qualify for the liability protection to private salt applicators, the applicator must complete Smart Salting training program to be certified.

2. **Chloride Reduction Program.** The State should continue to provide adequate funding to the MPCA’s Chloride Reduction budget to support the development and maintenance of tools, resources, policies, trainings and assistance programs like MnTAP to assist communities in their effort to reduce chloride pollution.

3. **Liability Protection.** Provide liability protection to certified private salt applicators against slip and fall lawsuits: The notion here is that private applicators certified through the Smart Salting program would be able to apply for liability protection. The private applicator industry and local stakeholders strongly support this proposal. Various groups introduced bills to this effect in the last two-three legislative sessions and it has passed several committees and one house; however, none was enacted into law.

4. **Research Funding for Alternatives.** Make research funds available to develop new technology and alternatives to chloride-containing de-icing chemicals. Research on new technologies and alternative de-icing solutions may allow for a shift in snow and ice management that protect water resources while maintaining public safety. A full list of needed research areas can be found in Section 5 of the TCMA Chloride Management Plan.

5. **Adopt Local Chloride Reduction Ordinances.** Encourage and support the adoption of the MPCA’s Chloride Reduction Model Ordinance Language by local governmental entities. The model ordinances provide guidance for creating and implementing ordinances that will assist with reducing chloride pollution. The proposed new municipal stormwater general permit for the State (also known as the MS4 general permit) would require adoption of several of these ideas. The four focus areas in the guidance include:
   a. Occupational Licensure for Winter Maintenance Professionals
   b. Deicer Bulk Storage Facility Regulations
c. Land Disturbance Activities

d. Parking Lot, Sidewalk and Private Road Sweeping Requirements

6. **De-icing product labeling requirements.** The MPCA should convene and lead a stakeholder process to develop recommendations for new labeling requirements on bags of de-icing chemicals sold in Minnesota. The goal of this effort will be to convene a knowledgeable group of stakeholders from a variety of sectors to create language that will ensure that consumers are provided accurate and necessary information about the de-icing products they are purchasing and applying to Minnesota’s environment. Some key areas that should be evaluated include, but would not be limited to:

- Require complete ingredients list with percentages provided
- Third party certification requirements for any statements about the products’ environmental, pet and human safety
- Provide “practical” temperature ranges (not temperature ranges that can only be achieved in a lab setting or over a time period of weeks for melting to occur)
- Report possible negative impacts of the product on surfaces, vegetation, water quality, and other
- Safety protocols for handling the products
- Guidance for proper application that includes:
  - Snow and Ice removal prior to application
  - Application rates that are based on research
  - Suggested equipment for proper application and proper spread patterns
  - Conditions in which product will not be effective or may create unsafe surfaces
Chloride Reduction: Water Softening

Policy Statement

The Clean Water Council recommends that the State establish do the following to reduce chloride in Minnesota surface and groundwater:

- Provide financial support and technical assistance to municipalities to reduce chloride discharges, including centralized softening at water plants and upgrades or removal of home softening systems and allow flexibility for how municipalities achieve these reductions.
- Update the state plumbing code to effectively prohibit the installation of new water softeners in Minnesota that use timers rather than on-demand regeneration systems by 2021.
- Examine the possibility of a rebate program to encourage homeowners to switch from water softeners that use a timer to those that have on-demand regeneration.

Problem

Chloride is a naturally occurring ion found in low levels in Minnesota surface and groundwater. Salt used for winter de-icing and water softening contain chloride. Chloride is not toxic in small concentrations. However, above 230 mg per liter (about one teaspoon in 5 gallons of water), chloride becomes toxic to freshwater fish and other aquatic life under long-term exposure. Once chloride enters our surface water (lakes, streams, and wetlands) and groundwater, it is not feasible and extremely expensive to remove it.

Residential water softeners among the primary sources of chloride in Minnesota waters.

The discharge of chloride from residential water softeners can end up in surface waters even after wastewater treatment. Reducing the need for chlorides in water treatment is a priority in Minnesota. However, there are obstacles to achieving chloride reduction.

- Timer water softeners are still available. Newer water softeners are generally more efficient than older models because they add salt when water demand requires it. However, water softeners are still on the market in Minnesota with a timer that will use salt at regular intervals whether the water requires it or not to remove hardness.
- If public water suppliers upgrade to central softening of water, excessive wastewater discharges of chloride may persist due to continued use of residential water softeners when they are no longer necessary to reduce hardness.
- Public water suppliers can upgrade to central softening of water. If a municipal water treatment plant can remove hardness, a city can encourage or require the removal of residential water softeners. This would reduce chloride discharges to surface waters substantially.

Links to Clean Water Council Strategic Plan

Goal 3: Surface waters are swimmable and fishable throughout the state

- Prevent and reduce impairments in surface waters
- Maintain and improve the health of aquatic ecosystems
- Invest in activities and research that can accelerate improvement in water quality through new approaches (e.g., perennial crops and other “landscape drivers”, chloride management or alternatives, etc.).
Solution

**Support municipal efforts to reduce chloride.** The State should provide adequate funding to provide municipalities financial resources to reduce chloride discharges. This includes funding programs offered through the Minnesota Public Facilities Authority and the Minnesota Pollution Control Agency’s water softening grant program.

**Update the Plumbing Code.** The plumbing code would effectively prohibit the installation of new water softeners that use a timer using one of two options.

1. Ion Exchange water softeners used primarily for water hardness reduction that, during regeneration, discharge a brine solution shall be of a demand initiated regeneration type equipped with a water meter or a sensor [based on a Wisconsin model]; or

2. All water softening or conditioning appliances installed must meet the following criteria [based on a California model]:
   - a. The appliance activates regeneration by demand control.

3. An appliance installed on or after January 1, 2021 [insert desired year], shall be certified by a third party rating organization using industry standards to have a salt efficiency rating of no less than 4,000 grains of hardness removed per pound of salt used in regeneration. (This is the recommendation that MPCA suggests in Property Management training and in the Statewide Chloride Management Plan.)

**Consider a rebate program** that would encourage homeowners to upgrade their timer water softener to an on-demand regeneration model. There are several water utilities in the U.S. that offer a rebate, and they appear to be focused on reducing chlorides in treated wastewater because this wastewater may be part of a groundwater recharge system in arid locations. A rebate program would be best focused in municipalities that need to reduce chloride discharges in wastewater to comply with their permits, and possibly administered by MPCA through a grant program.

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Disclosure of Well Water Quality at Time of Sale

Policy Statement
The Clean Water Council recommends that the Legislature require all sellers of real property to test drinking water from wells for bacteria, nitrate, arsenic, manganese, and lead; and inform buyers and renters of the test results; and direct buyers and renters to mitigation guidance from the Minnesota Department of Health.

Problem
Currently, about 1.2 million Minnesotans get their drinking water from groundwater through a private well. While the State plays a role in protecting drinking water sources, testing well water is generally treated as the responsibility of the property owner, and the Minnesota Department of Health (MDH) recommends that it be done regularly (annually for bacteria; bi-annually for nitrate; at least once for arsenic and lead; and before a baby drinks the water for manganese). In limited cases, such as the Township Testing program of the Minnesota Department of Agriculture, the State provides the funding. However, many private well owners do not test their water. A 2016 Minnesota Department of Health (MDH) survey of private well owners found less than 20% of respondents had tested their well water at the frequency MDH recommends.

Once a well owner tests their water and gets the results, they are better able to know what steps they may need to take to ensure safe drinking water. However, currently owners are under no obligation to inform buyers of their property of any high contaminant levels in private drinking water supply system. Education is useful, but some mandates are necessary to increase testing, reporting, and protect the health of private well users. Minnesota Statutes 103I.235 requires sellers of real property to disclose the existence of a well but not water quality results.

Some lenders and loan programs already require testing
In a 2019 MDH survey of 243 real estate professionals, 46% of respondents said that the mortgage companies they work with always or usually require well water testing. Respondents explained that the following loan programs require well testing, but the testing parameters vary on what is tested. Veterans Affairs Home Loan, Federal Housing Administration, and USDA Home Loans. A statewide policy would bring consistency to testing requirements at property transfer.

Dakota County has required well testing at property transfer since 1998
Dakota County Ordinance number 114 \(^2\) requires testing a private well for bacteria, nitrate, arsenic, and manganese (added in 2019) within 12 months prior to a real estate transfer. The ordinance updates in 2019 also require that water quality issues are addressed through treatment or well replacement prior to sale.

Cost considerations
On average, it costs about $125 to test for all five recommended contaminants.

There are home water treatment options to address water quality issues. The price for treatment varies based on the type of treatment and who installs it. Point-of-use reverse osmosis is an effective way to treat for all five contaminants and costs about $300 if you install it yourself or $1500 to have a water treatment system installed.

\(^2\) See Appendix for Dakota County ordinance language.
treatment professional install it. Annual maintenance is about $100. There are additional treatment
options that range in price and application.

Links to Clean Water Council Strategic Plan

- **Vision:** Drinking water sources statewide will be protected, and drinking water at the tap for
both public water system users and private well owners will be available and safe for all
Minnesotans.
- **Goal 1: Drinking Water Is Safe for Everyone, Everywhere in Minnesota**
  - Ensure that private well users have safe water.
- **Strategies to Achieve Goal 1:** Support widespread and routine testing of private well water and
  help private well owners achieve safe limits at the tap, beginning with a pilot project in FY2020-2021.

**Solution**
The Council recommends legislation to require property owners to have their well water tested by the
time the property is sold and to notify potential buyers of the test results. The Clean Water Council
made the following policy recommendation in FY16-17:

- **Property Transfers:** Notify the buyers of the potential existence of lead pipes between the
  water main and taps, and provide informational material to mitigate risks.
- **Renters:** Notify the renters, the potential existence of lead pipes between the water main and
taps and provide informational material to mitigate risks.

In 2020, the Legislature introduced the following bill in the House and Senate, but at this time it is did not get to the House floor still in committee. It received a hearing in the House and was amended to include lead as follows:

**House File 3950 (Lippert)/Senate File SF3951 (Wiger) - Real property sales well testing disclosure requirement.** The current version (1st engrossment as of 3/23/2020) includes lead and is presented here.

Minnesota Statutes 2018, section 103I.235, subdivision 1 is amended to read [new language is underlined]:

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Disclosure of wells to buyer.

(a) Before signing an agreement to sell or transfer real property, the seller must disclose in writing to the buyer information about the status and location of all known wells on the property, by delivering to the buyer either a statement by the seller that the seller does not know of any wells on the property, or a disclosure statement indicating the legal description and county, and a map drawn from available information showing the location of each well to the extent practicable. In the disclosure statement, the seller must indicate, for each well, whether the well is in use, not in use, or sealed....

(2) for each well that provides potable water to the real property, the results of a water analysis for bacteria, nitrate, arsenic, and lead conducted by a laboratory certified under section 144.98 within the previous six months.
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Clean Water Council 22 May 2020 26 June 2020
The Council would support this language, and would suggest the addition of testing for manganese and information to be provided to renters about lead as outlined in the Council’s FY16-17 recommendations.

SECTION 4.00 STANDARDS

4.01 STANDARDS ADOPTED

Minn. Stat. ch. 103I and Minn. R. ch. 4725 and all other referenced laws and rules, as may be amended, are adopted by reference and made a part of this ordinance.

4.02 HIGHER STANDARDS PREVAIL

Where the conditions imposed by any provision of this ordinance are either more restrictive or less restrictive than comparable conditions imposed by any other provision of this ordinance or any other applicable law, ordinance, rule, and regulation, the provision that establishes the higher standards for the promotion and protection of the public health, safety, and general welfare shall prevail and shall be deemed the minimum standard for purposes of this ordinance.

4.03 CONSTRUCTION STANDARDS

Well construction, reconstruction, repair, permanent sealing, and annual maintenance permitting, including registered use or unused wells, shall meet the standards of this ordinance and Minn. R. ch. 4725.

A. POTABLE WATER. For a potable water supply, the only acceptable type of well construction shall be a cased and grouted well or, where allowed by this ordinance, only a cased well, provided that the construction protects the water supply and the groundwater from contamination or resource depletion.

B. NONPOTABLE WATER. For a nonpotable water supply, construction standards shall be utilized which afford the greatest protection to groundwater quality and quantity. A well constructed as a nonpotable water supply shall not be converted for use to a potable water supply unless it is reconstructed to conform to the construction standards for a potable water supply and is approved by the department.

C. METAL IDENTIFICATION TAG WITH STAMPED UNIQUE WELL NUMBER. A metal identification tag with stamped unique well number shall be affixed to the well’s sanitary well seal, exposed well casing, riser pipe, or other readily visible and permanent location as approved by the Minnesota Department of Health and the department.

D. ADDITIONAL REQUIREMENTS. The department may impose additional construction standards consistent with the intent of this ordinance for the purpose of protecting groundwater and the environment and to promote the public health, safety, and welfare.

4.04 WATER QUALITY STANDARDS

A. QUALITY STANDARDS ADOPTED. The maximum contaminant levels (MCL) established for public community and non-community water supplies, health risk limits (HRL), or other criteria adopted by the Minnesota Department of Health, as may be amended, shall apply to applicable wells and their potable water supplies for the contaminants discussed in sections 4.04(B) and (C) below. These standards shall also apply to non-potable water supply wells when the department deems it necessary to protect the groundwater and the environment and to promote the public health, safety, and welfare.

B. TEST METHODS.

1. The biological analysis of water samples and related specimens shall be conducted in accordance with acceptable methods including standard methods or other approved testing methods. For the microbiological testing of fecal indicator and pathogenic bacteria and other microbes, the testing laboratory and laboratory personnel performing the test shall be currently certified, if required, by the Minnesota Department of Health.
2. The physical, chemical, and radiological analysis of water samples and related specimens shall be conducted in accordance with acceptable standard methods, Environmental Protection Agency methods, or other approved testing methods. The testing laboratory must be certified by the Minnesota Department of Health for the parameters analyzed.

3. Approved field test methods and instruments may be utilized for the purpose of obtaining an onsite evaluation of water quality for well construction, repair and sealing activities, and inspections, surveys, and investigations by the department. When deemed appropriate by the department or as otherwise required by this ordinance, test results so obtained shall be verified by approved laboratory test methods pursuant to sections 4.04(B)(1) and (2) above.

C. WATER TESTING REQUIRED. For a newly constructed or reconstructed potable water supply, the contractor shall follow the water testing requirements in Mnn. R. ch. 4725.6650, as may be amended. The water sample must be analyzed for total coliform bacteria, arsenic, nitrate-nitrogen, and manganese. The department may require testing for additional contaminants of concern if determined necessary to ensure public health and safety.

1. The water sample must be free of coliform bacteria in the untreated portion of the water supply.

2. Prior to completing the construction or reconstruction of a well, the contractor shall arrange for the timely testing of the water for nitrate. The sample must be taken pre-grout when the grout is neat cement. The contractor shall not allow an incompletely constructed or reconstructed well that has no protective casing or grout to provide a pathway for surface or subsurface contaminants to migrate and degrade groundwater for the purpose of complying with this provision. If the nitrate-nitrogen concentration exceeds the adopted standard, the contractor must alter the well construction or take corrective actions to meet the adopted standard, or the property owner must agree to install a water treatment system as described in 4.04(D).

3. The contractor must communicate to the well owner the water sample results with the department-provided information sheet identifying potential health effects from consumption.

4. The department may require the collection of a duplicate sample to be submitted to a laboratory of its choice for analysis.

D. WATER TREATMENT REQUIRED. If the nitrate-nitrogen concentration or the arsenic concentration of the completed well water sample exceeds the adopted standard, the property owner must install a water treatment system for the primary drinking and cooking water.

1. Water treatment systems must be certified by the National Science Foundation International, Water Quality Association, or Underwriters Laboratory for nitrate-nitrogen or arsenic removal, as applicable, to levels below the adopted standard. The water treatment system must be designed for its intended use and must be installed in accordance with manufacturer instructions and intentions for treatment methods and devices. Acceptable systems may include:
   a) A point-of-entry treatment system that provides treatment for all water that travels to faucets and fixtures inside the building; or
   b) A point-of-use treatment system installed at primary drinking water and cooking water locations, such as the kitchen sink, bar sink, and refrigerator water/ice dispenser(s).

2. The water treatment system must be installed and functional prior to consumption of the water.

3. The well owner is responsible for maintaining all water treatment equipment and filters in accordance with manufacturer guidance.
4. Within 30 days of installation of the water treatment system, the well owner must contact the department to arrange a final inspection and treated water test. The well owner is responsible for all expenses associated with water sample collection and testing. If the installed water treatment system fails to reduce nitrate-nitrogen concentrations or arsenic concentrations below the adopted standard, the department may require a new treatment system or that the well be sealed or labeled non-potable and disconnected from potable connections.

SECTION 5.00 ADMINISTRATION

5.01 DUTIES OF THE DEPARTMENT

The department shall be responsible for the administration and enforcement of this ordinance. The department's duties shall include, but shall not be limited to, the following:

A. To review and consider all well permit applications, including design plans and specifications.

B. To issue permits required by this ordinance.

C. To inspect the construction, reconstruction, annual maintenance and sealing of wells to determine compliance with Minn. Stat. ch 103I, Minn. R. ch. 4725, and this ordinance and to determine if the well contractor or limited well contractor performing the work is licensed in accordance with Minn. Stat. ch. 103I and Minn. R. ch. 4725.

D. To investigate the status of wells when wells are disclosed on a well disclosure certificate as “not in use,” “sealed,” and no sealing record is on file or when the status of wells is not reported or not clear.

E. To test, measure, and evaluate water quality and quantity.

F. To investigate complaints, identify violations of this ordinance, and undertake any enforcement actions as deemed necessary.

G. To recommend, when necessary, to the Dakota County Attorney’s Office, that legal proceedings be initiated to compel compliance with the provisions of this ordinance or to terminate the operation of the same.

H. To determine compliance with this ordinance, sanitary codes and practices, safe drinking water maximum contaminant levels, and health risk limits.

I. To provide guidance to property owners and well contractors, when appropriate, for a State variance from Minn. R. ch. 4725.

J. To provide comments to the State on any variance request from Minn. R. ch. 4725.

K. To maintain all necessary records and complete all required reports.

L. To advise, consult, and cooperate with other governmental agencies in the furtherance of the purposes of this ordinance.

M. To establish policies, procedures, criteria and standards, and technical guidance for the regulation of well construction, repair, and sealing.

N. To provide technical assistance and education to the public related to this ordinance.

O. To study and interpret information and data to improve knowledge and protection of groundwater resources and supplies.
SECTION 8.00       PROPERTY SALE AND WELL DISCLOSURE

8.01 PROPERTY TRANSFER/SALE REQUIREMENTS

Prior to the sale or transfer of real property, the owner or other person acting with legal authority on behalf of the owner of real property must meet the following requirements:

A. The seller/transferor must test any existing potable well water supply and disclose to the buyer/transferee the results of said testing and any corrective measures necessary to bring the water supply into conformance with this ordinance. The department may waive this testing requirement if the water supply well was tested in accordance with this ordinance within 12 months prior to the date of the sale/transfer of real property. The department may waive the requirement for arsenic testing if the well has been tested for arsenic at least one time, more than six-months after the well was brought into use, and the testing was done in accordance with the requirements of this Ordinance. The department may waive the requirement for manganese testing if the well has been tested for manganese at least one time in accordance with the requirements of this Ordinance.

B. The testing must be conducted by a State certified laboratory. Samples must be collected by an independent third party using appropriate sample collection procedures.

C. The seller/transferor must disclose to the buyer/transferee the use of a treatment device or method. In the case of water treatment required by section 4.04, samples for testing must be collected from the treated and untreated portions of the water supply.

D. Potable water supply wells must meet applicable drinking water standards as defined in the Ordinance (Section 4.04) or have water treatment as required in Section 4.04.

E. The seller/transferor must complete and provide the disclosure when required by Minn. Stat. ch. 103I.235.

8.02 UNUSED WELLS

If an unused well is disclosed during the sale or transfer of real property, the unused well must be permanently sealed in accordance with section 11.00, permitted in accordance with section 6.00, or brought back into working condition and used in accordance with this ordinance. Unused wells must be brought into compliance with this Ordinance within one year of the disclosure.
At a previous meeting, the Policy Committee asked for draft policy statements for four topics: chloride; well testing disclosure at the time of a property sale; nutrients; and PFAS. Chloride and well testing disclosure draft statements are in a separate document. The committee decided in April to delay a nutrients statement in favor of more immediate comments to the MPCA on its draft general feedlot permit. This memo covers the PFAS issue.

Outreach to several legislators, state agency staff, and interested stakeholders suggested that an overview of current state activities on PFAS would be the best first step. A future meeting could include presentations that could form the basis for a policy recommendation.

There are a lot of activities going on in Minnesota on PFAS—Per- and polyfluoroalkyl substances. The Minnesota Department of Health describes PFAS this way:

PFAS are a family of manmade chemicals that were used for decades to make products that resist heat, oil, stains, grease, and water. PFAS are extremely stable and do not breakdown in the environment. Common uses of PFAS include 1) nonstick cookware, stain-resistant carpets and fabrics, 2) coatings on some food packaging (especially microwave popcorn bags and fast food wrappers), 3) components of fire-fighting foam, and 4) many industrial applications.

The PFAS family of compounds has around 5000 different members, but the current methods being used to detect PFAS only find a very few – ranging from 13 compounds to 33 compounds.

The state’s response to PFAS falls in several categories

- **Legal action**: The state settled with 3M for environmental damage in Minnesota. A biennial report sums up activities related to the settlement.
- **Detection**:
  - PFAS was discovered coming from disposal sites in the east metro, resulting in a lot of data collection in the area. The state has sampled 3,000 wells in the east metro.
  - Recent sampling found PFAS above health-based values in the “Project 1007” stormwater drainage system in Lake Elmo and West Lakeland Township, which migrated to private wells.
  - PFAS related to firefighting foam has been detected in Bemidji and Duluth.
  - MPCA has monitored its full ambient groundwater monitoring network for PFAS twice – in 2013 and 2019.
  - DNR is seeking support from the Clean Water Fund for FY22-23 to look for PFAS in fish tissue in addition to PCBs and mercury.
    - The interagency fish contaminant monitoring program has been looking at PFAS in fish since the early 2000s; we have collected over 6000 fish from Minnesota water bodies for analysis of PFAS. This information supports assessment of the
safety of fish for human consumption and will support development of water quality standards, and also has been used as a primary investigative tool.

- MPCA has requested $1.4 million from the LCCMR to sample wastewater biosolids for PFAS. That funding is currently in limbo after an omnibus environmental finance bill didn’t pass in time during the legislative session.
- MPCA has detected PFAS at many compost sites handling both food waste and yard waste.
- The LCCMR recommended funding for detecting PFAS in raptors.

### Drinking Water Protection

According to MDH, “there are currently five community public water supplies in the East Metro that have individual wells above the MDH health-based guidance values: Oakdale, Lake Elmo, Woodbury, Cottage Grove, and St. Paul Park. All of these cities put in place interim measures to manage their public water supply systems to provide drinking water with PFAS levels that are as low as possible. These measures include shutting off the most highly contaminated wells and relying on wells that are clean or have lower levels of PFAS.” The City of Bemidji is also affected. MDH has an informative summary on PFAS and Health, which includes information on fish consumption advice.

### Mitigation

A proposal by the company Dem-Con (which owns a construction waste landfill and recycling facility in Shakopee) sought LCCMR funding for demonstration of a new technology to eliminate PFAS from point-source discharges. This request was included in the omnibus House and Senate environmental finance bills, but there was no reconciliation between the bills by adjournment on May 17th.

### Setting standards:

- There is no federal drinking water standard for PFAS, so states have been setting maximum contamination limits.
- The Minnesota Department of Health has set and then reduced health-based guidance values for PFAS compounds as new data emerges.
- The MPCA is working on site-specific criteria for PFOS in fish tissue, primarily to provide goals for remedial action in the East Metro.

### Multi-Agency Collaboration:

- The MPCA and MDH have developed a PFAS lateral team to discuss issues that cross MPCA programs and multiple agencies; DNR is also involved in the team.
  - The lateral team is breaking into smaller work groups and will report about ongoing work, gaps and opportunities for future research, and an action plan.
- The MPCA has established a new position of a PFAS Coordinator, filled as of May 6, to coordinate the lateral team and cross-agency PFAS work.

### Legislation

Legislators introduced several bills in 2019-2020 related to PFAS. As of adjournment on May 17th, none of them have become law.

- **PFAS Task Force** (HF3268/SF3674): Creates a PFAS Task Force and appropriates $150,000 from the general fund. Creates reduction goals.
- Perfluoroalkyl and polyfluoroalkyl substances (PFAS) reduction in wastewater funding provided, and money appropriated. (HF3922): Appropriates $500,000 from general fund to reduce PFAS in wastewater by 50 percent in 2025 and 90 percent in 2030.
- **PFAS (perfluoroalkyl and polyfluoroalkyl substance) reduction initiative funding provided, and money appropriated. (H3638/SF3414): Appropriates $500K from general fund in FY21 for initiative to reduce PFAS**
- **Defining perfluorochemicals as hazardous substance** under Minnesota Environmental Response and Liability Act (HF3182/SF3081): Adds perfluorochemicals to list of hazardous substances in M.S. 115B.02

- **Water quality standards for perfluoroalkyl and polyfluoroalkyl substances** funding provided, rulemaking authorized, and money appropriated. (HF3423/SF3401): Blank appropriation from Clean Water Fund in FY21 to adopt rules on water quality standards for PFOA and PFOS. This bill made it into the environment and natural resources finance bill which did not become law as of the May 17th adjournment, and would have appropriated $492,000 from the environmental fund rather than the Clean Water Fund.

- Requiring the commissioner of health to **amend the health risk limit for perfluorooctane sulfonate [PFOS]**; appropriating money (HF3013/SF3222): Blank appropriation from Clean Water Fund in FY22-23 for MDH to amend HRL for PFOS to no higher than 0.015 ppm.
Monitoring PFAS in Community Public Water Systems

DRINKING WATER PROTECTION SECTION

Background

The Minnesota Department of Health (MDH) is responsible for ensuring safe drinking water for all Minnesotans. As the primacy agency for the federal Safe Drinking Water Act (SDWA), MDH protects drinking water through regular testing of community public water systems (CPWSs or “systems”) for contaminants. CPWSs serve at least 25 people or 15 service connections (i.e. 15 buildings served) year-round. CPWSs include municipalities (cities) as well as some manufactured home parks, college campuses, prisons, and long-term care facilities.

MDH has been assessing the potential health impacts of perfluoroalkyl substances (PFAS) in groundwater in Minnesota since 2002. MDH and the Minnesota Pollution Control Agency (MPCA) have a long history of working with people in the East Metro to protect them from the health effects of PFAS in their groundwater. MDH began sampling community public water systems for PFAS in 2006. Much of this sampling has taken place in the East Metro and in areas where aqueous film-forming foam (AFFF) was used, such as airports and military bases.

Our approach to PFAS monitoring

MDH has taken a strategic approach to PFAS monitoring in drinking water. This approach focuses on: addressing potential public health risks near sites known to have nearby sources or disposal of PFAS; understanding how PFAS moves through the environment; and characterizing drinking water vulnerability to PFAS. MDH uses past monitoring results and current scientific evidence to inform this monitoring approach. This approach allows MDH to use its resources efficiently and target areas with public health risk.

MDH has conducted PFAS monitoring through several activities, as described below.
PFAS MONITORING IN CPWSs

Investigatory PFAS Monitoring (2006-present)
MDH has been monitoring systems with PFAS detections since 2006. MDH has conducted ongoing sampling at 13 CPWSs in the East Metro and near AFFF sites. Sampling at these CPWSs takes place on a quarterly to biennial basis, depending on detections and levels of PFAS. MDH normally collects samples at the entry point (the point where water enters the distribution system; usually the treatment plant but sometimes a well). MDH sometimes also collects samples after each treatment filter to monitor filter performance. Overall, approximately 250 samples are collected each year at these 13 CPWSs through ongoing sampling.

Additionally, MDH has sampled 37 other CPWSs for PFAS which are not in the East Metro or near AFFF sites. These CPWSs are sampled for PFAS in conjunction with their routine monitoring schedules.

Every five years, the U.S. Environmental Protection Agency (EPA) implements the Unregulated Contaminant Monitoring Rule (UCMR). The purpose of UCMR is to collect data from across the country on contaminants that may be present in drinking water. EPA uses this data to decide if the contaminants occur at frequencies and concentrations high enough to be regulated in the future.

The third round of UCMR, UCMR 3, required monitoring for 21 contaminants, including six PFAS compounds, between 2013 and 2015.

UCMR 3 included all CPWSs serving more than 10,000 people and some systems serving 10,000 or fewer people. In Minnesota, 84 CPWSs were sampled; 55 of these were sampled for PFAS for the first time. MDH detected PFAS compounds at five CPWSs: Oakdale, Bemidji, Hastings,
Woodbury, and Cottage Grove. Following the detections, MDH worked with these CPWSs to conduct additional monitoring and discuss options for treatment.

Perfluorobutanoate (PFBA) was not included in UCMR 3 sampling. PFBA is the most commonly detected PFAS compound. The number of systems with PFAS detections in UCMR 3 may have been higher if PFBA had been one of the included contaminants.

**Unregulated Contaminant Monitoring Project (UCMP) (2019)**

In this project, MDH tested for unregulated contaminants in drinking water sources across the state. The contaminants in this project were selected based on detection in previous monitoring studies and public health interest. The project was funded by the Environment and Natural Resources Trust Fund (ENRTF) and received additional funding from the Clean Water Fund.

MDH collected PFAS samples from 46 CPWSs that were either using surface water as a drinking water source or were potentially impacted by wastewater. Samples were analyzed for 30 PFAS compounds. Through this project, we collected samples from 30 systems that had not been previously monitored for PFAS.

**Statewide PFAS Monitoring (2020-2021)**

Funding from the U.S. Environmental Protection Agency (EPA) and Clean Water Fund will allow MDH to conduct PFAS sampling in 2020-2021.

In 2020, MDH will sample for PFAS at randomly selected CPWSs across the state. More samples will be collected in urban areas and vulnerable geologic settings. Approximately 125 CPWSs will be sampled, 97 of which have not been previously sampled for PFAS.

MDH will resample approximately 15 CPWSs near AFFF sites. MDH has previously collected PFAS samples at these PWSs, but improved analytical methods will allow MDH to detect lower levels of PFAS than was previously possible.

In 2021, MDH will collect samples from CPWSs with PFAS detections or with wells that may be vulnerable to nearby sources of PFAS. MDH will conduct follow-up monitoring based on detections in the previous year and in MPCA source inventory investigations.

**Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) (2023-2025)**

The fifth round of UCMR, UCMR 5, is expected to include PFAS compounds. EPA analytical method 533 will be used, which includes 25 PFAS compounds, including PFBA. Additionally, current analysis methods have lower reporting limits than were possible in earlier monitoring activities.

UCMR 5 will include all CPWSs serving more than 10,000 people. Systems serving populations between 3,300-10,000 will also participate if there is sufficient funding and lab capacity. Depending on funding and capacity, approximately 180 CPWSs will be included in UCMR 5. Of these 180 CPWSs, 58 will be sampled for PFAS for the first time.
Table 1. About monitoring activities for PFAS in drinking water.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Years</th>
<th>Number of CPWSs newly sampled for PFAS(^1)</th>
<th>Number of PFAS compounds included</th>
<th>CPWSs sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigatory PFAS Monitoring</td>
<td>2006-2025</td>
<td>50</td>
<td>7</td>
<td>CPWSs with known nearby sources or disposal of PFAS</td>
</tr>
<tr>
<td>UCMR 3</td>
<td>2013-2015</td>
<td>55</td>
<td>6</td>
<td>All CPWSs serving more than 10,000 people Some CPWSs serving 10,000 or fewer</td>
</tr>
<tr>
<td>UCMP</td>
<td>2019</td>
<td>30</td>
<td>30</td>
<td>CPWSs using surface water CPWSs potentially impacted by wastewater discharge</td>
</tr>
<tr>
<td>Statewide PFAS Monitoring</td>
<td>2020-2021</td>
<td>97</td>
<td>23</td>
<td>Randomized selection of CPWSs statewide</td>
</tr>
<tr>
<td>UCMR 5</td>
<td>2023-2025</td>
<td>58</td>
<td>25</td>
<td>All CPWSs serving more than 10,000 people All CPWSs serving 3,300-10,000 if there is sufficient capacity and appropriations</td>
</tr>
<tr>
<td>Total CPWSs sampled for PFAS</td>
<td>2006-2025</td>
<td>290</td>
<td>Varied</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Number of systems that were not sampled for PFAS under previous sampling activities

Summary of PFAS monitoring scope

By 2025, MDH will have sampled approximately 290 of the 964 total CPWSs in Minnesota. This includes the CPWSs with the largest populations served, including Minneapolis, St. Paul, Rochester, Duluth, and Bloomington. Approximately 4 million people, or 92% of the population served by CPWSs, will be covered under MDH's PFAS monitoring program by 2025.
Figure 2. CPWSs and customers covered under PFAS monitoring projects

Percentages reflect cumulative systems and customers over time

After 2025, 674 CPWSs will be remaining for PFAS sampling. These 674 CPWSs provide drinking water to 8% of the population served by CPWSs. When we evaluate these CPWSs under MDH’s strategic approach to PFAS monitoring, we expect that they have a lower risk of PFAS contamination. These CPWSs are less vulnerable to PFAS contamination based on their geology, nearby land use, and nearby industrial activities.

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