OFFICIAL NOTICE AND AGENDA
of a meeting of a City Board, Commission, Department Committee, Agency, Corporation, Quasi-Municipal Corporation, or Sub-unit thereof.

A Meeting of **Wausau Water Works Commission** will be held in the **Council Chambers, 1st Floor City Hall, Wausau, WI 54403** at **10:30 a.m.** on **Monday, February 5, 2024.**

Members: Katie Rosenberg (President), Dawn Herbst, Jim Force, Joe Gehin, John Robinson

AGENDA

1. Approve Minutes of January 8, 2024 (Joint HR Committee/Wausau Water Works Commission) & January 9, 2024 Meetings.
2. Director's Report on Utility Operations
   - Update on Asset Management Software
   - Update on the CIP Contract and LSL Replacement Plan
   - Water Operator Recruitment Update
   - Water Distribution Maintainer Resignation
   - Wastewater Facility Construction Update
   - Wastewater Plant Continues to Discharge a Quality Effluent
   - Wastewater Lab Technician Position Filled Internally
   - Wastewater Operations Technician Vacancy
   - Greenwood Hills and Northwestern Lift Station Project Updates
3. Presentation on the Used Anion Exchange Gravel/Resin, PFAS Test Results, Regulations and Disposal Options.
4. Discussion and Possible Action on Disposal of the Used Anion Exchange Gravel/Resin.
5. Discussion on a Lead Service Line Replacement Ordinance.
6. Discussion on the Sanitary Survey Report and Notice of Noncompliance.
7. Discussion on the Wastewater PFAS Sampling Results from December 2023.
8. Discussion and Possible Action for Sole Sourcing of Magnesium Hydroxide.
9. Discussion and Possible Action on the Water Savvy Campaign Initiatives.
10. Discussion and Possible Action Approving the Rain Barrel Program and Associated Subsidy for Cost of the Rain Barrels.

Adjourn.

Next meeting scheduled for **March 5th at 1:30 P.M.*

Signed by: /s/ Katie Rosenberg, Mayor
Presiding Officer or Designee

THIS NOTICE POSTED AT CITY HALL AND EMAILED TO CITY PAGES AND DAILY HERALD: February 2, 2024 at 8:00 a.m.

This meeting is being held in person. Members of the public who do not wish to appear in person may view the meeting live over the internet, cable TV, Channel 981, and a video is available in its entirety and can be accessed at https://tinyurl.com/wausaucitycouncil. Any person wishing to offer public comment not appearing in person may e-mail michelle.weasler@ci.wausau.wi.us with "Water Commission Public Comment" in the subject line prior to the meeting start. All public comment, either by email or in person, will be limited to items on the agenda at this time. The messages related to agenda items received prior to the start of the meeting will be provided to the Chair.

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), the City of Wausau will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs or activities. If you need assistance or reasonable accommodations in participating in this meeting or event due to a disability as defined under the ADA, please call the ADA Coordinator at (715) 261-6622 or ADAServices@ci.wausau.wi.us to discuss your accessibility needs. We ask your request be provided a minimum of 72 hours before the scheduled event or meeting. If a request is made less than 72 hours before the event the City of Wausau will make a good faith effort to accommodate your request.

Minutes of January 8, 2024

A joint meeting of the Wausau Water Works Commission and Human Resources Committee was called to order at 4:45 p.m. in City Hall on Monday, January 8, 2024. In compliance with Wisconsin Statutes, this meeting was posted and receipted for by the Wausau Daily Herald on January 4, 2024.

Members Present: President Rosenberg, Commissioners, Robinson, Force, Gehin
Others Present: Becky McElhaney (C), Gary Gisselman, Dawn Herbst, Tom Kilian, Michael Martens, Scott Boers, Eric Lindman, Ben Brooks, Tegan Troutner, James Henderson, Anne Jacobson, Teagan Troutner, MaryAnne Groat.

1) **Discussion and Possible Action to Determine if Utilities Employees Should Have a Different Pay Rate and Scale Than Other City of Wausau Unrepresented Employees.**

Rosenberg explained as the utility has continued to discuss employee retention, rates, jobs, we've come to an uncomfortable situation where we are making decisions on behalf of the utility that affect the city, city employees and city operations. The rest of the council and policy body do not necessarily have the opportunity to weigh in on these decisions and the requests are becoming different in how we treat other employees. Rosenberg wanted everyone to have the discussion together as an HR and Utility Commission body so that we can set our expectations together, do what's best for the city, our employees, and the rate payers.

Lindman stated that for clarity, he was not involved with the agenda item itself. The discussion we've had with the Water Commission wasn't to have a different pay rate or pay scale. The Commission was very clear that we would always stay with the city, keep continuity with the city and use the pay structure that the city has. The staffing assessment that was done was a culmination of information from facilities plan when we were planning out the new Water and Wastewater facilities. As part of those plans, we always look at not only what the capital costs are, but potentially what our future operations and maintenance costs are, as well as what our maintenance needs are with staffing. Our engineers that had put that together had said that they feel that we need additional staff. When that information came to the commission it was determined that we would have a 3rd party prepare a staffing needs assessment for the utility once we started construction of those projects. Through the utility commission they approved a budget to move that forward and the utility hired Baker Tilly and that information was presented. Not only did they talk about what staff was needed with the new facilities and the additional operation and maintenance requirements, but they were also looking at potential budget impacts and what types of positions would be required, supervising positions, tech positions, etc. Baker Tilly had come up with some numbers on what that total budget impact would be. With those new positions, they looked at our pay scale and it was 8%-11% below market. When you look at the Gallagher pay study, one of their benchmark findings was that the pay scale was 8%-10% behind market. He believes the Gallagher study was much more in depth, but the numbers are very similar. When we look at the Commission and staffing, we've never proposed a separate rate case from the city. We wanted to look at what we feel we are behind market for the entire department. It's always been that every 5 years, a wage study is done. This past year was year 5,

the city did a market analysis and that is where and how the Gallagher information came about. The city council, during the budget process, approved a 3% market adjustment to the pay scale. He and staff would appreciate some clarity on how these discussions will happen moving forward.

Kilian questioned Lindman regarding the budget impact and whether he said that another rate case was never entertained or anticipated to occur. Lindman responded the Commission never entertained that, it was never part of the discussion. It was always to work within the budget that the utility had at this point in time. Kilian asked if that was in relation to what was deemed as kind of reclassification as well. Lindman stated yes and Ehlers has those numbers, but they have not provided us anything. The first thing they're looking at is what the potential is for adding staff.

Discussions continued regarding staffing, pay and budget impact.

Robinson stated the biggest concern to the commission is the inability to attract and retain talent at the utilities. The wage rates were having an impact on our ability to provide staffing and there were concerns. In addition, the Baker Tilly report came in and we've accepted it. He doesn't know that they've necessarily said that it needs to be implemented, they've not taken that action at a Commission level. He'd like to figure out what the cost would be and where are we relative to wage classification study and what would it cost to implement something that would get us at market rate. In addition, there's the discussion about where we go with the new positions and where does it fall into the overall budget. There hasn't been that comprehensive evaluation at the Commission level or at the HR Committee level. Robinson believes we need to try to segment these into separate issues. He asked if the HR Committee has looked at the Gallagher study and/or the Baker Tilly market analysis and come up with any estimates as to what the reclassification cost would be because he doesn't believe they've seen that at the Commission level. Then separate from that, what would it take to implement the Baker Tilly recommendations relative to the new positions to operate the utilities.

Henderson wanted to address the narrative that our employees are so underpaid. The Baker Tilly study did 4 cities, Oshkosh, Appleton, Manitowoc and Oak Creek. Oak Creek is a suburb of Milwaukee and is 3 hours away. Oshkosh and Appleton are 2 hours away. Those cities are double the size of Wausau and are not comparable. We keep using the staffing assessment and compensation study interchangeably and they're not. The compensation study looked at 16 cities and there is a reason for that. Statistically, a sample size of 4 cities is not large enough to have a statically correct compensation study, especially when those 4 cities look like they were hand-picked and those are not comparative to Wausau. He contacted Oshkosh, Appleton and Fond du Lac and we were right there with those cities. New hires come in with little to no experience, we train them. A lot of the comparisons that Baker Tilly made are with municipalities that have Water Operator's I's and II's complete with certifications. Even at that, what we're paying is not that far off from larger cities than Wausau.

Gehin said that we haven't even discussed what the agenda item actually states, and he would personally be opposed to that. He believes Department of Public Works (DPW) should be part of this discussion to some degree as well. It would be hard not to take care of all of the staff. He doesn't know how the true Union departments are treated, are they getting more than a 3 % adjustment? Henderson stated, again that is not a good comparison because DPW comes from the general fund whereas utilities come from an enterprise fund. Act 10 ended in 2011 and so many people just cannot let that go. We're not going to treat non-union people like they have a union, the state tells us we don't have to and we're not. Gehin stated that his point is that he doesn't care where the funding comes from, he is not convinced that our people are at market rate. He is trying to gather information to support his claim however, it's a slow process to get the information and it's difficult to interpret. All of our employees should be treated fairly. If he

needs to be part of any discussions, he would be happy to put his time forth to do that.

Robinson stated that he feels we are trying to deal with issues with an information void. The Gallagher report hasn't been shared with the commission and he thinks it would be worthwhile to have that discussion. The commission was reacting to having a difficult time attracting and retaining. I want to make sure we are competitive whether it's union or non-union, being union or nonunion doesn't necessarily help you with attraction or retention, it's where you are in market and how competitive you are in the work environment. How do we have an effective evaluation of where we are relative to current conditions, what that cost is and how would we go about paying for it.

Gisselman requested that we should be ready for a full wage study. The last Gallagher study was just a compensation plan. The plan was that every 5 years we do this full comprehensive report.

Henderson said we keep talking about these full studies and they are very expensive. Usually those are done every 8-10 years. He asked for job descriptions from every department, tell us what has changed, and he got an email from the Department of Public Works Director that said we're good, we'll do our own thing. Lindman responded that he was given 2 weeks to go through 42 job descriptions, that wasn't going to happen. The only thing that was done last year was a market analysis. The wage study was supposed to be done every 5 years, that's what the handbook says and that is what employees are expecting. We're in year 6 right now. The last wage study was done in 2018 and began implementation in 2019.

Rosenberg asked if there's an opportunity where the HR Committee, Council and the Water Commission can come together and look at the Gallagher and Baker Tilly reports, the rate case and understanding more about what that should be covering as we haven't even gone a full year with those new rates. We can have something like a task force, analyze and make recommendations on the employee pay scales, maybe even department by department but do utility first. Would that be acceptable and something that the members of these committees would be willing to commit to?

Kilian said in short, no. He explained that we need fiscal facts and as for District 3, there will be no more water rate increases.

Herbst stated that a 3% increase is an insult to the employees. She feels there are issues with our pay matrix. It's not competitive, the jobs are not grouped properly within the pay grades and the jobs within the utility are compressed within just a couple of grades, this leaves very little room for pay increases when employees take on extra roles or responsibilities.

Gissleman came back to the full 5-year wage study, that is what was promised by the city.

McElhaney stated that she has concerns about a full wage study as every time they are completed, people continually challenge the results, and they take a very long time to complete. Henderson said they take anywhere for 6-10 months. Gisselman said so be it, we need to initiate some kind of plan, if there's another way of doing it, that's fine but we need to bring equality to the city and trust the results.

Force said that he doesn't have adequate information to make a decision of any kind. He doesn't have adequate information regarding budget impact or the utility wages in other comparable cities. He does believe treating one group of employees different from another is bad policy. Utility employees and city employees should be treated equally. He also believes any further water rate increases is off the table and that a solution needs to be worked out without that being considered as a revenue source.

Rosenberg stated there seems to be a desire to understand the budget and the Gallagher/Baker Tilly reports that we already have. We're in 2024 and come July we'll have a full year at these rates to understand what exactly it's going to pay for. In the next few months, we should understand a little more about the funds we may get from any settlement related to

PFAS., If there are people that will commit to some sort of work group to analyze and make recommendations on this, she agrees that we should be looking at this from a wholistic employee standpoint, that's the only way to get it right. Does the Water Commission feel comfortable having the HR Committee lead this or should we have more regular meetings together?

Force responded that he believes that would be an acceptable path but does not feel that we can delay decisions that impact the salaries of utility employees. He would hope that whatever is being proposed would have a rapid timetable. We can't take 6, 9, 10 months, we need to come up with some solutions more quickly than that for the sake of the employees.

McElhaney, Kilian and Martens all agreed that more data and facts are necessary before any decisions can be made. Martens explained that it would make sense to use the Gallagher study as we use them for everything else.

Rosenberg asked if this is something that the HR committee could take on as a project and then we meet again as a joint committee to discuss some of things that they're finding and maybe recommendations? We'd still have to vote on it as a utility to make sure we're following that process.

Martens stated that he agrees and thinks this discussion belongs with the HR Committee first and then over to the Water Commission

Rosenberg finds that acceptable but wants to make sure that the Water Commission agrees.

Robinson moved to motion that the Water Commission requests the HR Committee to evaluate this issue and develop recommendations. Once those recommendations are developed, The Water Commission and HR Committee have a joint meeting to discuss implementation.

Motion Seconded by Force.

Gehin questioned if the motion fits the agenda item. Jacobsen confirmed it does.

Motion Carried 4-0.

2) Adjourn.

Robinson motioned to adjourn. Seconded by Gehin.

Motion Carried 4-0.

Minutes of January 9, 2024

A meeting of the Wausau Water Works Commission was called to order at 10:30 a.m. in City Hall on Tuesday, January 9, 2024. In compliance with Wisconsin Statutes, this meeting was posted and receipted for by the Wausau Daily Herald on January 5, 2024.

Members Present: President Rosenberg, Commissioners Herbst, Robinson, Force, Gehin
Others Present: Scott Boers, Eric Lindman, Ben Brooks, Anne Jacobson, MaryAnne Groat.

1) **Approve Minutes of December 5, 2023 Meeting.**

Gehin motioned to approve minutes. Seconded by Herbst.

Gehin asked about item #5 for the locates. We haven't done anything to beef up staff to do that. How do we get approval to add staff. Lindman stated that's correct and he thinks that's part of the process that was discussed at the Water Commission and Human Resource Committee joint meeting from January 8th. That conversation will start there just like we are going to do with the added staff that was recommended through our staffing assessment. Gehin asked if HR is the final authority or if it has to go to Council. Rosenberg confirmed it needs to go to Council. Gehin asked if they make a request, they can't be denied by staff, is that correct? Who has to sign the request, he can't remember the process. Rosenberg asked what type of request he is asking. Gehin stated for a staff person to be added. Rosenberg explained that if it's a new position it would go through HR, then council and then the hiring process would begin assuming it's approved.

Rosenberg wants to make sure we are staying on task as we were approving minutes.

Motion Carried 5-0.

2) **Director's Report on Utility Operations.**

Lindman stated that he gave an update on the Solar Array Task Force. It is on schedule, and it is proposed to wrap up this spring. The task force will provide some recommendations based on what they've discussed the last several months back to the commission. The commission approved a contract with Clark Dietz and we've been using their technical expertise with the task force to provide information. The task force continues to ask for more data and information. He wants to make sure that the commission is still okay with us utilizing some of the funding out of that contract because that's really the only funding source we have obligated for this work. So far, he believes it's been a few thousand dollars. Asking for more data may become a little more in depth. It could be approximately another $6k-$7k. Gehin stated he's not opposed to it but in light of where we are financially is it more of a nice thing or are we going to get enough pay back. Lindman responded that this is information that will be required regardless, so whether the commission asks for it in the future, or we do it now to help the task force make the recommendations. Eventually we're going to have to do it if we're to go ahead with the project.

Force noticed that it was mentioned that a neighborhood group meeting was planned for January ad we're already into January. Are we still planning on doing that this month. Lindman confirmed yes, that's the neighborhood group on the northwest side and that's scheduled at the

very end of the month, that's when they have their regular scheduled meetings.

Robinson explained that what will be presented are their array of alternatives and from that they can narrow it down, develop a recommendation and make sure there is a return on investment.

Director's Report Placed on File.

3) **Presentation on the Development of a Lead Service Line Replacement Ordinance and Associated PSC Requirements.**

Lindman stated that the state of Wisconsin was selected to work with the Lead Service Line accelerator program through the EPA. Wausau has been working with the consultant hired by the EPA. We've also had iterations of a proposed mandatory lead service line replacement. Part of that is some requirements moving forward, if we want to use user rates for funding. That's what Horsley Witten is here to speak about, give a presentation of work that's been done and then the benefit and the process for the lead service line replacement ordinance. See link to presentation and discussion @ 7min:30sec.

4) **Discussion on a Draft Lead Service Line Replacement Ordinance and Proposed Schedule.**

Force was interested in section 9 where it talks about financing, particularly parts C and D about the cost following a grant and what portion of the financing will fall on the property owner. How the property owner is eligible for assistance, what that assistance would be and what the property owner is more than likely going to be responsible for paying. There is reference to a 0% interest loan of up to 6 years provided by the Water Utility. Lindman responded that this is an option for the language and for other funding sources to come in, like the community development block grant, etc. Some people could be eligible for that. He knows CIP is also looking at other funding options. Loan programs are used throughout the city.

Force noticed that we continue to approximate the cost at $8k-$9k per private service line and he's heard estimates from $3k-$10k per line replacement. He would caution us to keep the individual property owner in mind when we make these broad, general statements. The message might get lost if we don't pay attention to each individual property owner.

Robinson asked if the 6-year loan repayment is based on the current reassessment policy. Lindman responded that he believes that timeframe was taken from another city's ordinance, they established that, and it wasn't specific to Wausau. Robinson asked if we know our repayment period is for the safe drinking water loan portion. Lindman said he believes it is typically 20 years. It could be less. Robinson asked what the market rate is. Lindman thinks the lead service line replacement funding is set at .5%. He can verify that.

Robinson thinks there's a need to define the commission in the ordinance as well as a need to tweak a few things as it relates to the loan and a few nuances in there that we need to do. Robinson is looking for policy vs ordinance. What is the timeline for the property owner to replace their side if the utility side is replaced. Robinson stated he is looking for a seamless approach.

Rosenberg stated this is an amalgamation of drafts.

Robinson brought up a concern on enforcement and the issue with the authority to discontinue service. From a health and wellness perspective we need to look at that carefully to make sure we aren't adopting something that would be challenged.

Gehin asked if in the presentation, did they say there might be federal regulations that if we change our side that the property owner side has to be done at the same time? Rosenberg said there was a recent announcement with the EPA that said they were condensing the replacement for all municipal utilities to 10 years, but she didn't remember a specific data point about a requirement for private side replacement if we do the utility side. Lindman

added that the Lead and Copper Rule Improvements (LCRI) states that there will be no partial replacements. The EPA has stated that there's a couple different scenarios for extending timelines but there's a time when things need to be done. The DNR will adopt that, so the DNR may make that more restrictive, to either not allow it or if the Utility side is replaced, they would only have so many days to replace the private side. The consensus is that there will be no partial replacements. Boers stated that initially they were going to tie that to 45 days between the replacement of the utility/private sides but there's been some challenges coming to that. There is nothing permanent yet but it's on the horizon.

5) Discussion on the Wastewater PFAS Sampling Results from November 2023.

Brooks began with the influent sampling results. Two of the PFAS chains that we are looking at are the PFOA and PFOS concentrations. On the influent we had PFOA of 4.8ng/L and PFOS of 8.91. On our effluent samples, PFOA was 7.73 and PFOS was 34.0. For the biosolids sludge, on the effluent, you're looking at the 2 chains separately but for the biosolids you're seeing the PFOA and PFOS chains combined. On the sludge we're looking at 8.341ng/G which is under the 16ng/G. On the influent, it's coming into the wastewater plant less than what it is going out and we are trying to figure out why. If it's what they call the biotransformation which happens within the treatment facility where the chains can change from a long to a short chain and vice versa. We are uncertain at this point. We will be looking at chemicals used and keep looking as to what's causing that.

Gehin asked for clarification on the sludge is it below the recommendation? Brooks explained that the sludge is deciphered on a tier type level. If it's less than 16ng/G there is no action that we need to take. If it's above 50ng/G there is intermediate action and if it's above 150ng/G, he believes you have to hold the sludge or it has to go to a certified landfill. We are under the 16ng/G.

Rosenberg asked if this is the first time we've tested the sludge. Brooks responded that we did a second sample in December, but we don't have the results back for that yet.

Force asked if we are testing every month so we might see a trend with the sludge PFAS number. Brooks responded that we will probably be sampling for 3-6 months, depending on what the commission would like to see. How long would the commission like them to continue the testing? With any testing, we have to report the numbers to the DNR. Force stated that 3-6 months should take us through different seasons, and he would defer that decision until they see the upcoming results.

Robinson stated that the whole issue of biosolids has been a sore spot with the DNR External Advisory Committee and we don't really know where it's going to go. Our results appear to be pretty well below any proposed standards that other states have developed. The biotransformation is common when you have different processes affecting some of the chains.

6) Discussion on Utility Financial Strategies and Key Performance Indexes.

Groat explained that Workday was implemented January 1, 2024. Workday has set up their system so that you basically have separate books, one for modified accrual, one for full accrual and then you can have others as well. A full accrual is what a utility would use to look at the overall organization's financial position, long term debt and what capacity there is in cash to fund new assets. A modified accrual looks at short term performance of the organization and eliminates non-cash transactions. Groat spoke about the utility based on a modified accrual. On the revenue side it looks at a short-term view of receivables. The financial statement they have is very preliminary and are missing the last month of service and allocation processes. The closing of the utilities books usually takes about 3 months. When you look at the budget, we expected to lose about $636,000.00. As of now, we are showing an

increase to so-called cash by about $1.6m for the sewer utility. There is a small amount of capital in there due to ARPA funding so there may be expense anomalies in this first year because of the new treatment facility. Interest rates have also helped us a bit, our rate of return has been higher. For the Water utility, the rates did not go into effect until July 1st. We had budgeted a loss of $2.1m but at this point we are showing a loss of $708,000. When you look at the capital outlay it is much higher that the sewer utility. They will look at that to will make sure that everything has been charged to the correct program and income source, such as ARPA. They will analyze the expenses that were over what was budgeted and make tweaks to the 2024 budget if necessary. There were large projects for the water utility such as the new treatment plant and GAC system. Next year she would expect that the outcome would be better as consumption plays a big part of our revenues each year, so we really don't know how 2024 is going to be based on future consumption.

Groat stated that the lead service line replacement is one thing that the city could potentially use tax increment financing. The common council just considered extending the life of TID 6 by one year and adopted a resolution in December. The law says you can use those funds for housing stock improvement, 75% for affordable housing and 25% for housing stock improvement. She had spoken with our bond counsel, and they felt that lead service line replacement would meet the eligibility of that one-year extension. We talked about it at the finance committee, council did adopt a resolution that excluded the lead service line replacement program. She spoke to the Wisconsin League of the Cities within the last year and half to specifically list that as an eligible cost for the TID districts. Right now, you can extend it for one year and thinks it might be appropriate for legislature to consider a second year just for lead service line replacement. It is something council could consider asking legislatures to consider. Lead service line replacement is an issue throughout Wisconsin, and we have very few resources to pay for that.

Robinson stated there is difference in opinion on how long to extend TIF's (tax increment financing). We are wrestling with the issue of what the implementation of the Baker Tilly recommendations would be relative to the compensation study and one of the issues that's missing in the water utility is the disposal of resin. When we start showing an expense over revenue, where do we make up that difference? Groat explained that the water is governed by the PSC, and they said no rate increase on construction until it's in place. So even though we were paying interest, we were not able to include any of that. We have always been restrained for the water utility on what we can recover. The only way to make it up is through good financial planning and looking at our capital plan. That's why she was encouraging us to use the ARPA funds for the water and sewer utility because she felt that is where we had our greatest need and ultimately impacts the rate payers. We do have some funds left so there are options for council to consider.

Gehin asked about the funding from the TIF's and if they can be used city wide. Groat said yes, we could do project plan amendments. If we have a TID that has extra capacity, we could do a project plan amendment and include lead service line replacement as part of the project plan within the district and within the half mile boundary. Normally these are commercial districts but given the half mile boundary we could recover some additional costs.

Gehin said the discussion about reducing the payment in lieu of tax, that still puts a burden back to the taxpayer and we're collecting money from nonprofits, schools. We've got to balance that out. Groat responded that it was reduced in 2022 and we've basically frozen it now. If we're going to have the conversation, anytime we're dealing with changes to our financials, if you can step into something with small changes over time, they do accumulate but don't have an impact on one specific year's budget.

Lindman said as we go through the year, he tries to bring capital budget updates to the

commission. The capital budget is approved 6 months before the following year and we're always adjusting for conflicting priorities. It may be more prevalent this year because our operations are completely unknown at this point. As we move forward and those priorities come up and if we have to defer projects and change the capital plan, we may see the capital 5-year plan come to the commission more often this year. It's important to keep an understanding of where those revenues are.

Gehin brought up monthly water billing and he thinks we need to think about that. Groat responded they can still pay monthly, there are a lot of people that do. There are more costs associated with monthly billing such as staff time, additional postage, etc. We can certainly consider it, but she isn't sure how long that would take.

7) Discussion and Possible Action Approving Principal Forgiveness and Loan Acceptance through the WDNR Environmental Loan Fund

Lindman said when he was putting this together, he put it on as an action item, but we don't necessarily need action. Staff has been working with our engineering firms to apply for projects to try to access some of the new infrastructure funding. These are the projects that were funded with principal forgiveness, some of them are significant, the GAC project is ongoing, and the lead service line replacement project is moving forward as well. There are some clean water projects such as the Stewart Avenue project which is a DOT project and bids start today or tomorrow. Having approval on these or approval to move forward is important because depending on the funding source, depends on the type of procurement we're going to need when we're bidding these projects. When we have DOT projects, who's doing the bidding for us, we need to let them know that we have to add additional provisions. For example, they use state prevailing wage rates and these funds use Davis Bacon so there are different requirements. There was conversation yesterday with Groat and Ehlers and we are trying to get a joint Water Commission and Finance Committee meeting together on February 13th to look at this and have Ehlers present. We can't take the principal forgiveness without taking the loan. We want to understand how the debt issuance affects us moving forward. It will also help council determine if additional ARPA should be put toward these projects. He feels overall we've done quite well with the principal forgiveness funding. This is an important consideration for us to move forward and get some projects done that are priorities for us and projects that are already ongoing.

No Action Taken.

8) Adjourn.

Robinson motioned to adjourn. Seconded by Herbst.

Force left the meeting during Agenda Item #6.

Motion Carried 4-0.

WAUSAU WATER WORKS
FOR YOU!

MEMORANDUM

TO: President Rosenberg
Commissioner Herbst
Commissioner Force
Commissioner Gehin
Commissioner Robinson

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

SUBJECT: Director's Report – February 2024

- Update on Asset Management Software Purchase and Asset Integration and Implementation Services: IT prepared an RFP for Asset management. Ongoing demo's are scheduled by 3-vendors and each are being ranked by both City and County Departments. Expect to have a recommendation prepared for the March meeting. It is still proposed that the utility will be the first to implement AM and the county has not timeline to initiate this software at this time. Currently the utility has $200,000 budgeted form 2023, and some additional funding will be required based on the proposals received.

WATER DIVISION

1. Update on the Community Infrastructure Partners Contract and LSL Replacement Plan: Contract was approved through the City Council a final language changes are being completed prior to signature. Inventory verification is ongoing through direct contact with homeowners in the Census Tracts approved for 2024 construction areas. CIP has set up their own website (Equi-Flow) and we are working to get that website directly linked to the City website. Bid documents are currently being prepared and are expected to be ready for bidding by February 15, 2024. Financing and loan closing discussion will be discussed at the Feb 13, 2024 joint Finance/WWWC meeting, along with possible other funded projects and adding staff at the water and sewer utility.

2. Operator Position Recruitment Update. Our first posting for this position yielded 10 applicants. Of those HR vetted and qualified 3 to be invited for interviews. Of those three invitations, one accepted the invite request. The candidate was interviewed, and an offer

made. The candidate didn't meet all the requirements of the job description but did have years of experience and would have been a good fit. Although market rate for this position is step 8, we initially offered step 10. The candidate countered at step 16 of the 17-step scale. We raised the offer to step 12, and the candidate declined. The position has been posted again.

3. Distribution Maintainer, Chris Wright, has given notice of resignation. His last day will be February 7th. Chris has accepted a position with Schofield, he cited better insurance and higher wages as reasons for the move.

WASTEWATER DIVISION

1. Wastewater Facility Construction Update: See attached.

2. The Wastewater Treatment Plant continues to discharge a quality effluent. Optimization throughout the plant continues to ensure a quality effluent is being discharged.

3. Wastewater Lab Technician: This position has been filled internally. Former Operations Technician Jason Schill has been promoted to Lab Technician. Congratulations Jason Schill!

4. Wastewater Operations Technician: A vacancy for this position occurred with the promotion of Jason Schill to Lab Technician. Advertising for this position commenced on January 24, 2024 and closes February 24, 2024. Interviews to fill the vacancy will follow.

5. Greenwood Hills Lift Station project commenced on January 29, 2024. The deadline for this lift station upgrade is April 1, 2024. Once the Greenwood Hills lift station is complete, Earth Inc. will move onto the Northwestern lift station for its upgrades.

Project Status Report

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

Donohue Project Number 13229

Period | December 3, 2023 – January 6, 2024

Invoice 79

Engineer Activities This Period

- The Project is currently in its Correction Period, where the finalized Project Close-out letter with the Contractor has transferred responsibility of maintaining the Warranty Items List to Owner.
- The Engineer's operations staff continues to develop final standard operating procedures (SOPs).
- Continued to assist Owner with WDNR Class A biosolids approval.

Engineer Near-Term Activities

- The Project is currently in its Correction Period, where the Project Close-out letter with the Contractor has transferred responsibility of maintaining the Warranty Items List to Owner.
- Provide final SOPs.
- Provide Record Drawings.
- Provide Final zero dollar pay application and closeout letter to Owner.
- Submit CWF final disbursement request(s).

Project Status Report

Wastewater Treatment Facility Improvements Project – Engineer During Construction

City of Wausau, Wisconsin

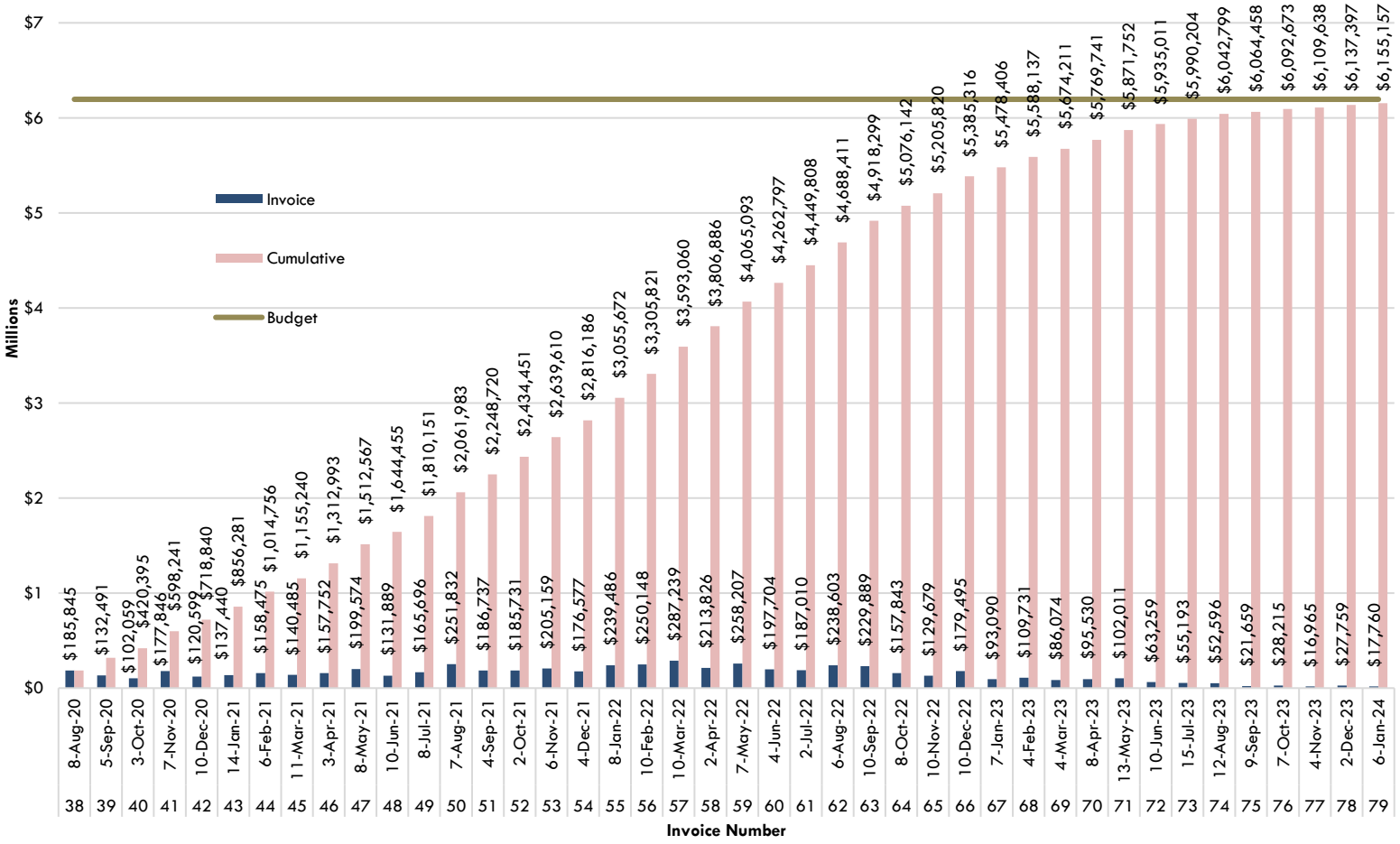
Donohue Project Number 13229

Period | December 3, 2023 – January 6, 2024

Invoice 79

Project Related Budget Snapshot

Construction Engineering Budget



Project Status Report

Wastewater Treatment Facility Improvements Project – Engineer During Construction

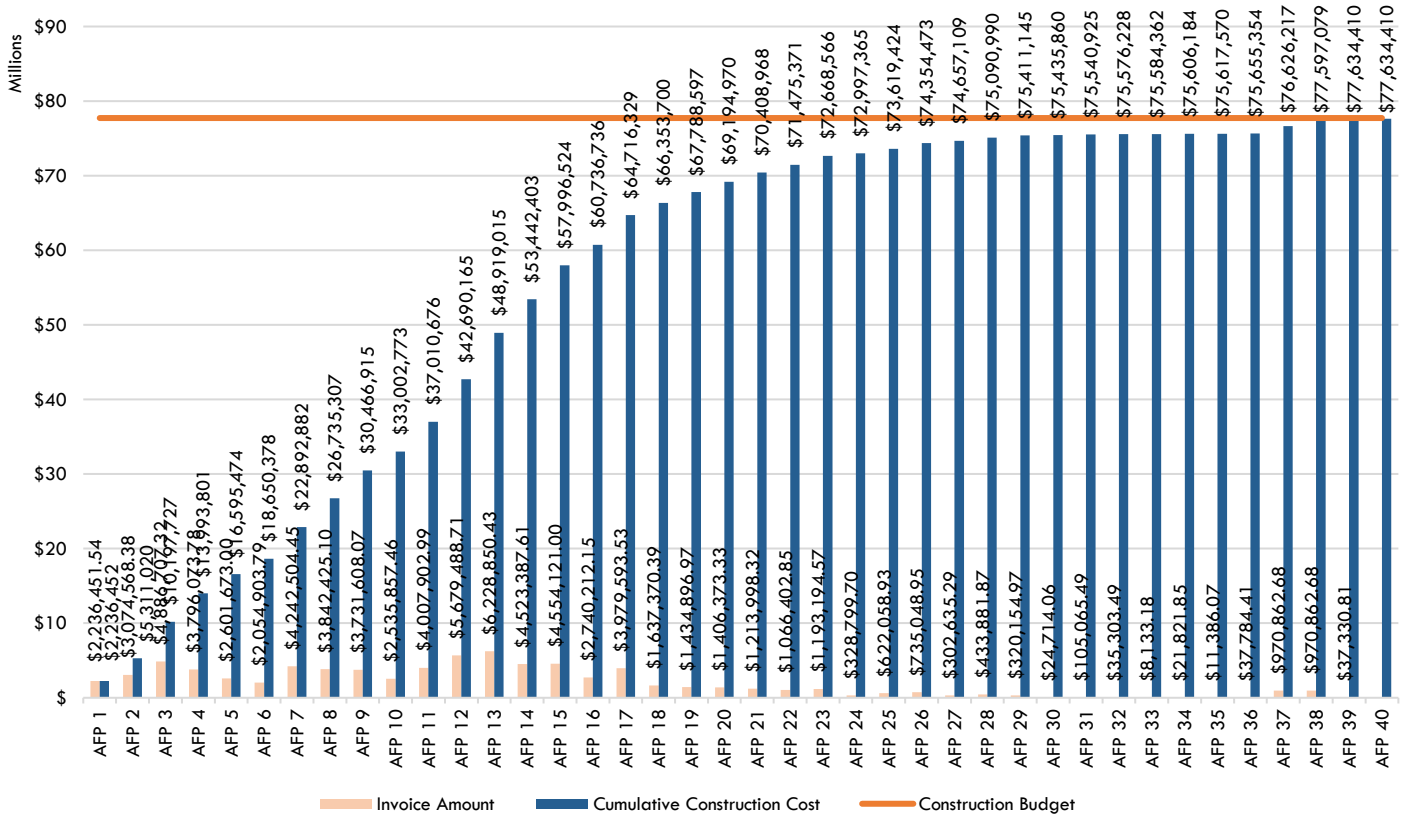
City of Wausau, Wisconsin

Donohue Project Number 13229

Period | December 3, 2023 – January 6, 2024

Invoice 79

Construction Budget: Pay Applications Approved by Engineer



Project Status Report

Wastewater Treatment Facility Improvements Project – Engineer During Construction

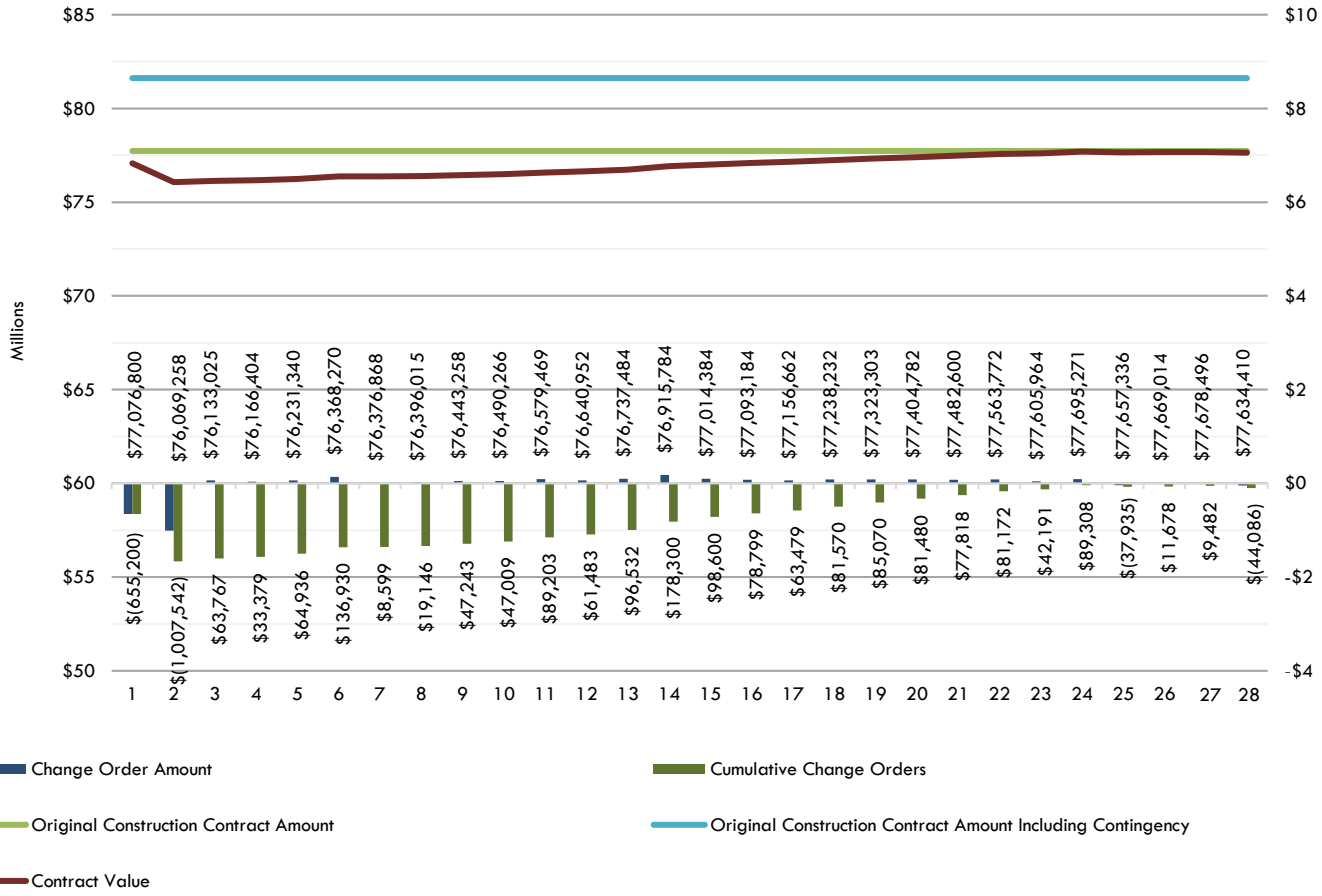
City of Wausau, Wisconsin

Donohue Project Number 13229

Period | December 3, 2023 – January 6, 2024

Invoice 79

Overall Project Budget



Budget Notes:

1. No budget issues at this time.

Remarks

1. Construction is complete except for punch list corrective work; therefore, construction photographs are no longer beneficial to document project progress.

INVOICE

DONOHUE

3311 Weeden Creek Road
Sheboygan, WI 53081
Phone: 920-208-0296
www.donohue-associates.com

Invoice To:

City of Wausau
Attn: Ben Brooks
407 Grant Street
Wausau, WI 54403

Invoice Date:	January 11, 2024
Donohue Project No.:	13229
Invoice No:	13229-79
Project Manager:	Mike Gerbitz
Terms:	Net 30 Days
Billing Period:	12/03/23 - 01/06/23

Project Description: Wastewater Facilities Plan & Design

Your Authorization:
Engineering Services Agreement, Signed 03/29/17
Amendment No. 1, Signed 06/28/18
Amendment No. 2, Signed 03/05/19
Amendment No. 3, Signed 01/27/20
Amendment No. 4, Signed 05/07/20
Permit Review Fees Payment Request, 02/27/20

Compensation:

Time and Expense		$	129,220.00
Time and Expense		$	984,565.00
Time and Expense		$	3,323,900.00
Time and Expense		$	4,351,831.00
Time and Expense		$	1,843,325.00
Permit Review Fees		$	12,534.50
	Total	$	10,645,375.50

Billing Summary:

Total Charges to Date		$	10,606,391.71
Charges Previously Billed		$	10,588,631.71
Current Charges		$	17,760.00

Summary of Current Charges

Labor (103.0 hours)		$	17,760.00
Reimbursable Expenses		$	-
Permit Review Fees		$	-
Subconsultants		$	-
	Total	$	17,760.00

Current Charges Due	**$**	**17,760.00**

Please Remit to:

Donohue & Associates, Inc.
3311 Weeden Creek Road
Sheboygan, WI 53081
Phone: 920-208-0296
Fax: 920-208-0402

Aged Receivables

Current	31 - 60 Days	61 - 90 Days	91 - 120 days	>120 days
$17,760.00	$27,759.19	$0.00	$0.00	$0.00

Drinking Water Treatment Plant

PFAS Treatment

Ion Exchange Resin Disposal

February 5, 2024

Available Guidance & Resources

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

https://dnr.wisconsin.gov/topic/pfas/waste

"There are no simple answers on how best to dispose of waste containing PFAS…

Current state and federal regulations do not prohibit disposal of PFAS-containing waste in a licensed solid waste or hazardous waste disposal facility, nor do they require a facility to accept PFAS-containing wastes…

The Department of Natural Resources recommends that anyone with questions regarding proper disposal…consult with an environmental and hazardous waste disposal contractor for current best available disposal options. Additional information is also available from the U.S. Environmental Protection Agency's *Interim Guidance on the Destruction and Disposal of PFAS and Materials Containing PFAS*."

EPA United States Environmental Protection Agency

Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances

INTERIM GUIDANCE FOR PUBLIC COMMENT
DECEMBER 18, 2020

Waste Disposal Contractors Consulted:

Clean Harbors

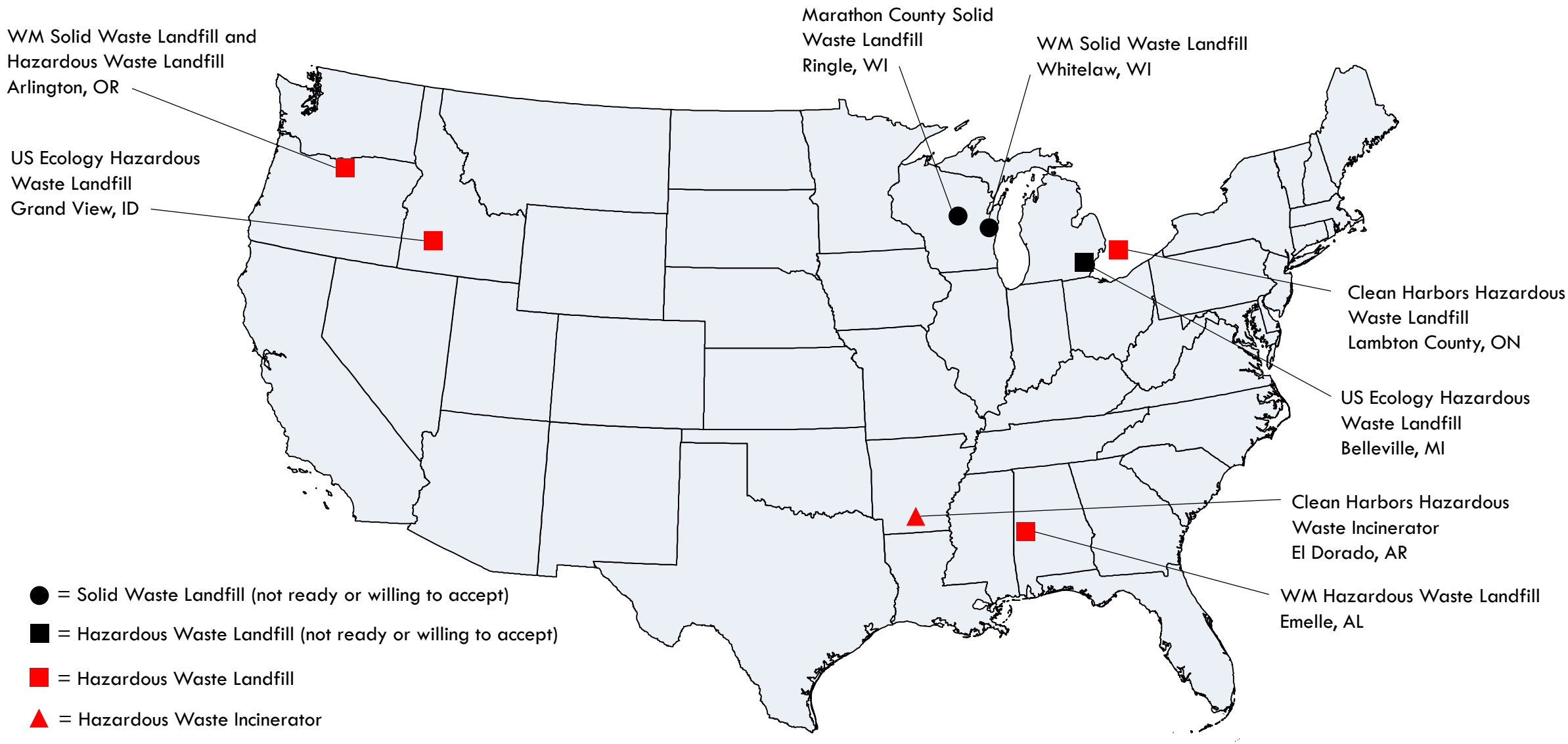
US ecology

WM

Options for Ion Exchange Waste Disposal

	Advantages	Disadvantages
Interim Storage	▪ More time to make a decision on disposal method/location	▪ Ongoing container rental costs ($3000/month) ▪ Potential liability for material while in City's and Contractor's possession ▪ Containers need to be returned by end of March (or purchased for $70,000)
Solid Waste Landfill (RCRA Subtitle D)	▪ Potential for lower transport and disposal costs relative to other options	▪ Regulatory uncertainty ▪ Landfills unready or unwilling to accept waste without more regulatory clarity ▪ City retains some liability as waste generator
Hazardous Waste Landfill (RCRA Subtitle C)	▪ Receiver assumes all liability ▪ Fewer environmental uncertainties (more controls in place for minimizing PFAS migration into environment) *per USEPA Guidance*	▪ More expensive (transport and disposal) relative to solid waste landfill
Hazardous Waste Incinerator	▪ (At least partial) PFAS destruction ▪ Receiver assumes all liability	▪ Highest cost ▪ More environmental uncertainties (combustion products, air emissions)

Options Investigated



Preliminary Overall Cost Comparison

Disposal Option	Clean Harbors Hazardous Waste Landfill	Waste Management (WM) Hazardous Waste Landfill	US Ecology Hazardous Waste Landfill	Clean Harbors Hazardous Waste Incinerator
Disposal Location	Lambton County, Ontario	Emelle, Alabama	Grand View, Idaho	El Dorado, Arkansas
Overall Probable Cost[1]	$100,000-130,000	$110,000-150,000	$130,000-180,000	$220,000-270,000
Effective Unit Cost ($/cu ft of material)	$31-40	$34-47	$40-56	$68-84

[1]Amount invoiced depends on actual weight and transportation costs at time of disposal; ranges provided are estimates for budgeting purposes

Advantages of working with Clean Harbors:

- Lowest costs for disposal and transportation (among currently available options)
- Fewest uncertainties related to cost structure, liability transfer, environmental controls for PFAS migration, and willingness and readiness to accept the waste
- Field service office in Wisconsin
- Also working with City on removing materials from former DWTF
- Additional reference materials available in packet

Disposal Budget Review & Next Steps

Budget for First Resin Changeout

Resin Replacement Item	Safe Drinking Water Costs Requested [4]	Contracted or Estimated Cost
Resin Changeout [1]	$85,800	$85,800
Replacement Resin [1]	727,000	720,000
Resin Disposal [2]	130,000	130,000
Contingency [3]	29,000	23,000
Total	**$971,800**	**$958,800**

[1] Contracted cost
[2] Assumes disposal with Clean Harbors
[3] Includes items such as on-site storage and testing
[4] Funding is 70% principal forgiveness up to $5 million

Next Steps:

1. Execute disposal contract with Clean Harbors (hazardous waste landfill).
2. City can continue exploring other options for next batch of spent material if desired.

WASTE DISPOSAL SERVICES

Lambton, Ontario Landfill Facility

The Lambton Landfill is located in southwestern Ontario approximately 15km southeast of the city of Sarnia. This facility is positioned to service customers in the Great Lakes Basin located in Canada and the United States.

The facility is permitted to manage a wide variety of hazardous waste excluding explosives, PCBs, radioactive and pathological waste. Waste is accepted at this facility directly from customers or from the Clean Harbors extensive network of service centers.

In October 2015, the facility received permit approval to allow a vertical landfill expansion that would provide more than 25 years of landfill capacity.

Permit

- Ontario of Ministry of the Environment Certificate of Approval #A031806

Waste Acceptance Criteria

- PCBs < 50 ppm
- No pathological/biological waste
- No radioactive waste
- No compressed gases
- No reactive (except Spent Pot Liner) or ignitable waste
- Total mercury < 260 mg/kg
- Total volatile organics < 2%
- Waste must exceed 15 psi compressive strength

FACILITY DESCRIPTION

1969 START-UP DATE | **300 AC.** FACILITY SIZE (ACRES) | **ON** STATE/PROVINCE

Services Provided:

- Secure Chemical Landfill Disposal
- Flexible Container Handling
- On-site Laboratory
- State-of-the-Art Treatment Process for Inorganic Waste

Typical Customers: Manufacturers, remediation, Fortune 500 companies, medium and small generators

Typical Waste Streams: PCB Contaminated Soilds (less than 50ppm), Hazardous and Non Haz Soils and Solids, Asbestos Waste, Hazardous Metal Bearing Filter Cakes, Plating Waste, PFAS/PFOA Investigation Derived Waste, PFAS/PFOA Remediation Waste, Spent Carbon, Spent Pot Liners, NORM Waste (approval pending), Hydrovac Waste, Hazardous Industrial Solids and debris

Treatment, Storage and Disposal Capabilities

- Total Capacity of Cell 18: 1.91 million cubic metres

CleanHarbors®

Clean Harbors • 4090 Telfer Road, R.R. #1, Corunna Ontario • 800.282.0058 • www.cleanharbors.com

ENVIRONMENTAL SERVICES

PFAS Treatments available at Lambton, Ontario, Facility

The family of compounds known as per- and polyflouroalkyl substances (PFAS) used in consumer and industrial manufacturing are persistent in the environment and are comprised of over 6,000 compounds. The most widely known compounds in this group are perflourooctanesulfonic acid (PFOS) and perflourooctanoic acid (PFOA). However, the list of compounds of interest is growing quickly as commercially available standards are developed. Clean Harbors is versed in the nomenclature, analysis methods, treatment and disposal of these compounds. We guide customers through the process of testing, treatment and final deposition and destruction of their materials and media.

PFAS Incineration

With nearly 70% of North America's incineration capacity, our incineration facilities in the U.S. and Canada, such as our Lambton location, ensure that we can meet any incineration requirement from our customers. Clean Harbors' kilns are capable of incinerating solids, liquids and sludge, and our thermal treatment systems' advanced technology can destroy 99.9999 percent of all hazardous constituents. We are well situated throughout the U.S. and Canada to manage all disposal requirements related to PFAS, to include incineration of Aqueous Film Forming Foam (AFFF), Investigation Derived Waste (IDW) or remediated and treated soils and waters.

PFAS Alternative Options (Thermal Desorption)

Another alternative to incineration would be our state-of-the-art Thermal Desorption Unit (TDU), also at Lambton. This unique facility has the capability to offer cost-effective disposal of PFAS-related streams through thermal treatment and on-site disposal. Our site operates a hazardous waste landfill, TDU and Liquid Injection Incinerator. Our Indirect Fired TDU runs at a temperature of 450 degrees Celsius, therefore thermally treating PFAS from contaminated solids. The PFAS from the solids would end up in the vapor and condensate in the unit. The vapor from the unit is cooled, scrubbed and re-condensed, which is then piped directly to our on-site hazardous waste incinerator where it, along with the condensate from the TDU, is destroyed. The ash from our incinerator is stabilized on site and placed directly into our on-site landfill, thereby eliminating any downstream liabilities.

70% of North America's incineration capacity

99.9999% of all hazardoU.S. materials destroyed

450°C thermal desorption

The landfill design includes a hydraulic control layer (i.e., drainage blanket) at the base of the waste cells, which is connected to a leachate collection trench along the landfill perimeter. The design incorporates the use of drainage stone, geotextile and geocomposites. It creates a pathway to facilitate the flow of leachate from the landfilled waste to the perimeter leachate collection trench. Sumps equipped with pumps are installed to withdraw leachate from the trench, and move the leachate, through a force main, to a leachate pumping station that in turn transfers the leachate to an above-ground leachate storage tank and/or the existing covered leachate storage ponds. The leachate is then disposed of through incineration at the on-site liquid hazardous waste incinerator. All leachate at the Clean Harbors Lambton site is incinerated; nothing is discharged or leaves the site.

CleanHarbors®

42 Longwater Drive • Norwell, Massachusetts 02061-9149 • 800.282.0058 • www.cleanharbors.com

Department of Public Works & Utilities

Eric Lindman, P.E.
Director of Public Works and Utilities

TO: Wausau Waterworks Commission

FROM: Eric Lindman, P.E.
Director of Public Works & Utilities

DATE: February 5, 2024

SUBJECT: Lead Service Line (LSL) Replacement Ordinance – Decision Points

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Based on previous commission meetings, there were several questions raised as to the rules and regulations required by the Environmental Protection Agency (EPA) and the Wisconsin Department of Natural Resources (DNR) as well as questions regarding the need for a mandatory Lead Service Line Replacement (LSLR) Ordinance.

LCR/LCRR/LCRI Requirements (related to possible ordinance language)

1. If a partial replacement is scheduled as part of a larger infrastructure project the utility must offer to replace the customer-owned portion at least 45-days prior to the partial replacement. The utility is not required to replace the private side LSL. The utility is required to replace customer side initiated LSLR within 45-days; this may be extended to 180-days.
2. EPA requires risk mitigation measures to take place immediately after a full or partial replacement. Pitcher filters or point-of-use device is required along with at least six months of filters.
3. Sample testing is required between 3 and 6 months after a full or partial replacement.
4. New sampling protocols will be both 1st and 5th liter samples, and the action level will be reduced from 15 ppb to 10 ppb. Currently the sampling is only on the 1st liter sample. Currently we train homeowners to take the samples, once the new sampling protocols are in place, we will need to complete the sampling with staff as it is much more complex to get the correct samples. This will require more time and resources. It is also proposed that sampling may be required twice per year rather than once per year.
5. During the planning of an LSL replacement project homeowners must be contacted at least 4-times in a meaningful way related to full LSL replacement. This effort is ongoing with door knocking and door hangers. Outreach will continue as we move toward construction.

Funding Requirements: As the EPA/DNR roll out the funding strategy and allocate funding to municipalities there are rules and regulatory requirements that are being considered. A couple of examples are as follows (these have direct relation to a mandatory LSL replacement ordinance):

1. The DNR is working to change their rules for LSL replacement loan funds so that the loans may be paid off early or at the discretion of the municipality. Currently the DNR requires a set payback for loans without the option for early pay back. This would be a good rule change to allow the loan to be paid back early with other funding.

2. Municipal Environmental group (MEG) has been working with Rep. Shae Sortwell on legislation to simplify the provision of private LSL replacement financial assistance. The proposed bill provides that a municipal water utility may administer a municipality's LSL replacement ordinance and financial assistance program without needing PSC approval provided the municipal utility is not using ratepayer dollars to provide LSL replacement grants or loans to private property owners. With the bill, a municipality could:
    a. Establish an LSL replacement financial assistance program,
    b. Receive SDWLP money (both principal forgiveness and loan proceeds) to fund the municipal program, and
    c. Request that the water utility administer the municipal program *without the water utility needing to obtain PSC approval under Wis. Stat. s. 196.372*.
    d. Is this a bill the Commission would support?
        i. If so, is the Commission willing to authorize staff to reach out to our Representative requesting co-sponsorship?

LSL Ordinance – Questions to be Answered

1. Does the Commission want to implement a Mandatory LSL Replacement Ordinance?

2. **Section 9 – Financing of Replacement - page 6**
    a. Does the Commission want to create grant and/or loan options to private side LSL replacement?
        i. Note: Using user rates as a grant may affect city wide user rates in future years. This would become an added capital expense to any rate cases in future years with the PSC and would then be considered an expense by the PSC when calculating rates. Also, the PSC, will require the use of these funds be consistent and equitable for all users.
        ii. Note: Finance has the capability of setting up a loan program for the payback of the LSL replacement by the homeowner. The loan can be zero interest or any other interest as determined and the payback period can be done over any period of time. The LSL loans through the DNR are at a 0.5% interest rate.
        iii. Note: The ordinance as written lays out the LSL replacement in a scenario where the homeowner is completing this work on their own. It references an application process and pre-qualified plumbers to complete the work. This is different than the DNR LSL replacement loans where the municipality contracts and manages the work to be completed.

    b. Does the Commission want there to be zero cost or some cost for private side LSL replacement to homeowners?
        i. Note: the level of funding from year to year is unknown. Thus, the commission would need to determine how the principal forgiveness loans would be distributed.
        ii. Community Development Block Grant (CDBG) funds are being considered to be used beginning in 2025. This would be up to an additional $300,000 for qualified homes, these funds could be used to help cover the private side LSL replacement. There may be a lot more qualified homes needing these funds than would be available. The amount that may be eligible for each home may be a percentage of the cost or just an allocation of a total dollar amount allocated for each home. This is yet to be determined and would likely be determined by how the Commission/Council determines how the DNR principal forgiveness loans are distributed.

iii. There are also housing improvement funds the city has with Community Development that may also be used to help with offsetting some of the homeowner side costs. How much and what would be allocated is yet to be determined. Is this something the Commission would support staff requesting through Community Development?

c. CIP is pursuing additional supplemental funding. As additional funding sources are identified they will be brought forward to the Commission.

3. **Section 10 Exceptions – page 10**
   a. Does the Commission want to allow for extensions of time under certain circumstances?
      i. The EPA prohibits partial LSL replacements with two exceptions:
         1. Emergency repair; OR
         2. In coordination with planned infrastructure work (water main replacement).
            a. EG street construction work.
      ii. I have not found anywhere in the LCR/LCRR/LCRI where the USEPA sets a time for a private side LSL to be replaced once a public side LSL is replaced. There are requirements for the utility to notify the owner and provide mitigation measures and education at least 45-days prior to the scheduled replacement.

4. **Section 14 Discontinuance of Service – page 9**
   a. Does the Commission want a provision where discontinuance of service could happen?
      i. To be accepted by the PSC, and most likely the DNR, this needs to be included. There can be different levels of appeals and time extensions, but there needs to be a defined time for the completion of work.
      ii. The Commission will need to determine what these time extensions and processes will be with the final step being discontinuance of service. So, what does the Commission want this to look like?

Without some direction from the commission on the points listed we will not be effective reaching out to the community and getting feedback and comments. Staff needs to be able to answer questions and set expectations to the public. Staff can propose options but we need some direction from the Commission related to expectations of funding, procedures for discontinuance of service, process for appeals and authority.

CITY OF WAUSAU, 407 Grant Street, Wausau, WI 54403

ORDINANCE OF THE WAUSAU WATERWORKS COMMISSION	
Creating Chapter 13.66 Lead and galvanized water service line replacement, Section 13.66.010 Intent and purpose, Section 13.66.020 Authorization, Section 13.66.030 Rules of construction and definitions, Section 13.66.040 Survey and self-inspections, Section 13.66.050 Partial or full service line material replacement; water utility or customer side, Section 13.66.060 Replacement priority, Section 13.66.070 Application and Scheduling, Section 13.66.080 Financing of replacement, Section 13.66.090 Exceptions, Section 13.66.100 Prohibitions, Section 13.66.110 Severability, Section 13.66.120 Penalties.	
Committee Action: Pending	**Ordinance Number:**
Fiscal Impact: 2024: Total Allocation- $5,790,028 (Principle Forgiveness - $3,641,078; Loan Amount - $2,148,950 (this should be at a rate of 0.5%)) 2025: Total Allocation - $15,000,000 (Estimated) (Principle Forgiveness - $9,750,000; Loan Amount - $5,250,000 (this should be at a rate of 0.5%)) 2026: Total Allocation - $15,000,000 (Estimated) (Principle Forgiveness - $9,750,000; Loan Amount - $5,250,000 (this should be at a rate of 0.5%)) 2027: Total Allocation - $15,000,000 (Estimated) (Principle Forgiveness - $7,500,000; Loan Amount - $7,500,000 (this should be at a rate of 0.5%)) 2028: Total Allocation - $15,000,000 (Estimated) (Principle Forgiveness - $7,500,000 (this should be at a rate of 0.5%))	
File Number:	**Date Introduced:**

The Common Council of the City of Wausau do ordain as follows:

Section 1. That Chapter 13.66 Lead and galvanized water service line replacement is hereby created and made up of the following Sections outlined below.

Section 2. That Section 13.66.010 Intent and purpose is hereby created to read as follows:

13.66.010 Intent and purpose.

Lead in drinking water poses a threat to the public health. Leaching of lead from lead service lines or from galvanized lines, that are or were downstream of lead, are sources of lead in drinking water. Additionally, aged water services including lead and galvanized lines can be a source of water loss and potential contamination. The Common Council of the City of Wausau therefore finds that it is in the public interest to establish a comprehensive program for the removal and replacement of lead and galvanized service lines in use within the Wausau Water Utility system, and to that end, declares the purposes of this chapter to be as follows:

(1) Continue to ensure that the water quality at every tap of Wausau Water Utility customers meets the water quality standards specified under the Federal Safe Drinking Water Act;
(2) Continue to reduce the level of lead in the City's drinking water to meet EPA standards in City drinking water for the health of City residents;
(3) Continue to meet the WDNR requirements for local compliance with the EPA's Lead and Copper Rule;
(4) Continue to affect the replacement of all high-risk lead and galvanized service lines within five years of their discovery and the replacement of all remaining lead and galvanized pipe water service lines in use in the City within seven years; and
(5) Limit costs by setting a service replacement schedule when federal, state, or local funding is available.

Section 3. That Section 13.66.020 Authorization is hereby created to read as follows:

13.66.020 Authorization.

This chapter is enacted pursuant to Wis. Stats. §§ 62.11(5), 281.12(5), 66.0627(8), and 196.372, and as mandated by 42 USC 300g of the Federal Safe Drinking Water Act, as amended, enforced by the EPA and the WDNR.

Section 4. That Section 13.66.030 Rules of construction and definitions is hereby created to read as follows:

13.66.030 Rules of construction and definitions.

This section and all rules and orders promulgated under this section shall be liberally construed so that the purposes enumerated in Section 13.66.010 may be accomplished. Words and phrases shall be construed and understood according to their common and usual meaning unless the contrary is clearly indicated. Within this chapter:

Childcare facility means any state-licensed or county-certified childcare facility including, but not limited to, licensed family childcare, licensed group centers, licensed day camps, certified school-age programs and Head State programs.

City means City of Wausau.

Confirmed water sample test means a tap water analysis, completed after a prior analysis that indicated lead levels at or above the EPA action level, and conducted in accordance with the Lead and Copper Rule, with Wis. Admin. Code § N 809.547, and with instructions provided by the Water Utility.

Customer-side water service line means the water conduit pipe running from the customer's meter to the curb stop which is the Water Utility shut-off valve usually located behind the curb on public property.

EPA means the U.S. Environmental Protection Agency.

EPA action level means a concentration of 10 or more parts per billion (PPB) of lead as measured at a customer's tap.

Federal Safe Drinking Water Act as codified as 42 USC §§ 300f - 300j-26.

Director means the Director of Public Works and Utilities.

High risk lead service means a lead and/or galvanized customer-side water service line identified in Section 13.66.050 and any lead and/or galvanized customer-side water service line where a confirmed water sample test of a customer's tap water reveals a lead concentration at or above the EPA action level.

Lead and Copper Rule means the rules created by the EPA and adopted by the WDNR in response to the passage of the Safe Drinking Water Act, which provides maximum containment level goals and national primary drinking water regulations (NPDWR) for controlling lead and copper in drinking water. NPDWR regarding approved treatment techniques include corrosion control treatment, source water treatment, lead and galvanized service line replacement and public education. The rules may be found in 56 FR 26460, 40 CFR 141.80—141.90, and Wis. Admin. Code §§ NR 809.541 through 809.55.

Lead service line means a service line made of lead and/or galvanized steel, and any lead pigtail, gooseneck or other fitting which is connected to such lead line. The term can apply to the customer-side service line and/or the public-side service line.

Licensed plumber means a person, firm, corporation or other entity licensed to perform plumbing work in the City by the State of Wisconsin.

~~*Occupant*~~ means person or persons in actual possession of and living at a property.

PPB means parts per billion.

Property means any possessory interest, legal or equitable, in real property, including an estate, trust, or lien, and any buildings, structures and improvements thereon.

Property owner means a person or legal entity having a possessory interest, legal or equitable, in property, which defined term includes an estate, trust, or lien.

Service replacement schedule means the schedule adopted by the Wausau Waterworks Commission for the replacement of lead and galvanized customer-side water service lines based on community resources; on availability of licensed plumbers and Water Utility resources to complete service line replacements; on physical location of properties with lead and/or galvanized customer-side water service lines; and on availability of federal, state, or local funding.

Public-side service line means the utility-owned portion of the water service line from the water main to the curb stop.

WDNR means the Wisconsin Department of Natural Resources.

Water Utility means the City of Wausau public water utility system, also known as Water Utility and/or Wausau Water Works.

Section 5. That Section 13.66.040 Survey and self-inspections is hereby created to read as follows:

13.66.040 Survey and self-inspections.

Upon notice from the Water Utility, any person who owns, manages or otherwise exercises control over a property within the Wausau Water Utility system shall allow the Water Utility to inspect the customer-side water service line or have the customer-side water service line inspected by a licensed plumber or other representative as authorized by the Director to determine whether the service line is lead, copper, cast iron, galvanized steel, plastic or other material.

Section 6. That Section 13.66.050 Partial or full-service line material replacement; water utility or customer side is hereby created to read as follows:

13.66.050 Partial or full-service line material replacement; water utility or customer side.

(a) All of the following service line material combinations are subject to partial or full replacement with copper, and/or plastic service lines under this division as identified:

SERVICE LINE MATERIAL REPLACEMENT

Public-Side	Customer-Side	Side Requiring Replacement
Lead	Lead	Both
Lead	Galvanized	Both
Lead	Copper	Water utility only
Lead	Plastic	Water utility only
Copper	Lead	Customer only
Copper	Galvanized	Customer only
Copper	Copper	Neither
Copper	Plastic	Neither
Plastic	Lead	Customer only

Plastic	Galvanized	Customer only
Plastic	Copper	Neither
Plastic	Plastic	Neither
Galvanized	Galvanized	Both
Galvanized	Copper	Water utility only
Galvanized	Plastic	Water utility only
Galvanized	Lead	Both

No other service line material combinations have been identified which require replacement under this division.

(b) All lead and galvanized water service lines must be replaced regardless of whether on the public-side or the customer-side. If either a customer-side or public-side lead or galvanized water service line is connected to each other, both lines must be replaced at the time the Water Utility or the customer is replacing its side of the lead or galvanized water service line per section 13.66.070. If a customer-side lead or galvanized water service line is connected to a public-side service that is not lead or galvanized, the replacement of the customer-side lead or galvanized water service line shall be completed under a schedule determined by the Water Utility. As of the effective date of the ordinance from which this Chapter is derived, no lead or galvanized service line will be allowed to connect to a Water Utility line once replaced.

Section 7. That Section 13.66.060 Replacement priority is hereby created to read as follows:

13.66.060 Replacement priority.

(a) Owners, managers or persons otherwise exercising control over properties within the Wausau Water Utility system with customer-side lead and/or galvanized water service lines shall be required to replace the customer-side water service lines according to the order of priority as outlined in the lead service line replacement plan and based on the replacement schedule established by the Wausau Waterworks Commission.

(b) Notwithstanding the schedules set forth herein and any limitations on funding sources which may be made available to either the Water Utility or the customer, all customer-side water service lines identified herein shall be replaced no later than seven years after the commencement of this program.

Section 8. That Section 13.66.070 Application and Scheduling is hereby created to read as follows:

13.66.070 Application and Scheduling.

Replacement of customer-side lead and/or galvanized pipes that are connected to a public-side lead and/or galvanized line must be completed at the time the public-side service line is replaced. The Water Utility shall notify customers of planned public-side lead and/or galvanized line replacements no less than 45 days prior to the replacement, as required by the Lead and Copper Rule Revisions (US EPA Dec. 2023). Scheduling of all such replacements for customer-side lead and/or galvanized pipes must be coordinated between the homeowner's contractor and the Water Utility within 30 days of receipt of notice that the public-side water service lines are scheduled to be replaced. Owners, managers or persons otherwise exercising control over properties shall obtain from and submit to the Water Utility, in accordance with its service rules, an Application for Water Service which states an intention to replace the customer-side lead and/or galvanized water service lines. Additional time to schedule the customer-side lead and/or galvanized pipe replacement may be granted by the Director for good cause.

The service replacement schedule for customer-side lead and/or galvanized pipes that are connected to a public-side service that is not lead and/or galvanized line shall be adopted by the Wausau Waterworks Commission based on community resources; availability of licensed plumbers and Water Utility resources to complete service line replacements; physical location of properties with lead and/or galvanized customer-side water service lines; and availability of federal, state, or local funding. Based on the above factors, customers will be assigned a time period within the schedule for replacing their lead and/or galvanized customer-side water service line. In no case shall a customer on this schedule have less than 30 days from the date of notification pursuant to Section 13.66.060 for the replacement of any lead and/or galvanized customer-side water service line.

If the Water Utility determines that a customer-side service line is constructed of lead and notifies the property owner in writing, the property owner must make arrangements described above to replace the lead service line within 36 months. Additional time to schedule the replacement may be granted by the Director for good cause.

Section 9. That Section 13.66.080 Financing of replacement is hereby created to read as follows:

13.66.080 Financing of replacement.

(a) In the event public funding is made available for replacing lead and/or galvanized service lines, the City authorizes the Wausau Water Works Commission, acting through the Water Utility, to implement and maintain a financial assistance program for the replacement of lead and galvanized service lines in accordance with the requirements of the Wisconsin Public Service Commission and Wis. Stat. § 196.372 (2023).

(b) If the Wausau Water Works Commission implements an approved financial assistance program in the event public funding is made available, the Water Utility may provide eligible property owners with a grant for up to 50 percent of the cost of the service line replacement, but not to exceed a maximum grant amount established by the Wausau Water Works Commission, which shall periodically review and adjust the maximum grant amount. All work must be done by a utility-approved plumbing contractor.

(c) The remainder of the lead service line replacement cost after the grant provided in subsection (b) shall either be paid for directly by the property owner or by a zero percent interest loan of up to six years provided by the water utility. A property owner shall repay the loan in equal monthly or quarterly installments. Loan repayments shall be included on the Water Utility's monthly or quarterly utility bills, or bill prepared separately by the Water Utility. Loan repayments that are past due may be placed on the property tax roll as provided in Wis. Stats. § 66.0809. Neither the Water Utility nor the City may forgive any LSL loan amount. Upon the sale of the property, the loan amount shall be paid in full prior to or on the sale date.

(d) A property owner is eligible for financial assistance for the purpose of replacing the customer-side service line if the property owner satisfies all of the following criteria:
    (1) The property owner alone, or collectively with others, owns the entire fee simple title property to the property served by the customer-side service line.
    (2) The property owner replaces the entire LSL, leaving no remnant of lead or galvanized material.
    (3) The replacement work is done by a pre-qualified plumbing contractor in compliance with this section.

(e) Written applications for financial assistance shall include the following:
    (1) A completed application on a form furnished by the Water Utility signed by the eligible property owner. The completed application form shall include a certification by the property owner who attests that all eligibility criteria listed in subsection (d) are met.
    (2) Copies of written quotes from at least two pre-qualified plumbing contractors for the replacement of the property owner's customer-side service line. A pre-qualified plumbing contractor is one who has completed and submitted proper forms and been placed on the water utility's pre-qualified plumbing contractor list.

(f) A property owner will be eligible for financial assistance based only on the lowest bid amount included in the written quotes received from pre-qualified plumbing contractors under subparagraph (e)(2) unless except in extraordinary circumstances and with the approval of the Director in his/her sole discretion. Except as provided herein, financial assistance amounts will strictly be determined pursuant to base bid pricing and will not include change orders. In extraordinary circumstances the Director may in his/her sole discretion, with approval of the property owner, approve a contractor-requested change order for inclusion in the financial assistance portion of the work.

(g) After a complete application is received, prior to the commencement of any replacement work, and subject to the availability of public funding, the Water Utility shall determine if the property owner is eligible for financial assistance available as a loan. Such determination shall be provided in writing to the applying property owner.

(h) Customer-side line replacement work must be accomplished in a workmanlike manner and be coordinated with any other utility work.

(i) Upon completion of the customer-side service line replacement, the property owner shall provide the Water Utility with a copy of the invoice from the plumbing contractor.

Upon proof of completion satisfactory to the Water Utility, the Water Utility shall directly pay the plumbing contractor the amount of money approved by the Water Utility for financial assistance for replacement of the customer-side service line. The Water Utility shall provide the property owner with documentation of such payment.

(j) The total amount of money provided by the Water Utility as financial assistance in the form of a grant and loan may not exceed the actual cost of replacement of the customer-side service line.

(k) The property owner shall, as a condition of participating in the grant or loan program described in this section, execute a temporary right of entry and construction easement authorizing the Water Utility and/or its contractors' access to the dwelling as needed.

(l) Disputes regarding eligibility for financial assistance may be appealed to the Wausau Water Works Commission. Any appeal must be made in writing and state the basis for the appeal. The appeal must be received by the City Clerk within 30 days of the denial.

Section 10. That Section 13.66.090 Exceptions is hereby created to read as follows:

13.66.090 Exceptions.

(a) The Water Utility may modify the inspection requirement set forth under 13.66.040 if the customer so requests and demonstrates a compelling need.

(b) Upon the demonstration of a compelling need, the owner of a single-family dwelling or a business to which the public has no access to tap water and with no more than five employees, may request a change of schedule or an extension of time for compliance with Sections 13.66.050 through 13.66.070.

(c) Guidelines for the consideration of requests under subsections (a) and (b) of this section will be established by the Wausau Waterworks Commission.

(d) Compliance deadlines will be calculated on a calendar year basis but may be deferred during the months of December through March on the basis of weather constraints.

Section 11. That Section 13.66.100 Prohibitions is hereby created to read as follows:

13.66.100 Prohibitions.

It shall be unlawful for any person to fail to comply with the applicable lead and/or galvanized customer-side water service line replacement requirements as set forth herein or to violate any other provision of this chapter.

Section 12. That Section 13.66.110 Severability is hereby created to read as follows:

13.66.110 Severability.

If any section or portion of this chapter is for any reason determined to be invalid or unconstitutional by the decision of a court of competent jurisdiction, that section or portion shall be deemed severable and shall not affect the validity of the remaining sections or portions of this chapter.

Section 13. That Section 13.66.120 Penalties is hereby created to read as follows:

13.66.120 Penalties.

Any person who violates any provision of this chapter may be subject to a forfeiture of no less than $50.00 and no more than $1,000.00. Each day a violation continues may be considered a separate offense.

Section 14. That section 13.66.130 Authority to Discontinue Service is hereby created to read as follow:

13.66.130 Authority to Discontinue Service.

As an alternative to any other methods provided for obtaining compliance with the requirements of this Code regarding replacement of illegal customer-side lead or galvanized service line, the Water Utility may, no sooner than 60 days after giving written notice and an opportunity for a hearing pursuant to Wis. Stats. Ch. 68 before the Wausau Water Works Commission, discontinue water service if the Water Utility determines that the illegal customer-side lead service line endangers public health, safety, or welfare, and requires immediate action.

Section 14. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 15. This ordinance shall be in full force and effect from and after its date of publication.

Adopted:

Approved:

Published:

Attest:

Approved:

Katie Rosenberg, Mayor

Attest:

Kaitlyn Bernarde, City Clerk

State of Wisconsin
2023 - 2024 LEGISLATURE

LRB-5334/P3
EHS&EVM:amn

PRELIMINARY DRAFT - NOT READY FOR INTRODUCTION

AN ACT ***to amend*** 196.372 (1) (b); and ***to create*** 66.0627 (8) (as) and 196.372 (4) of the statutes; **relating to:** assistance to replace customer-side water service lines containing lead.

Analysis by the Legislative Reference Bureau

Under current law, if approved by the Public Service Commission, a water public utility may provide financial assistance, defined as a grant, loan, or a combination thereof, to the owner of property to which water utility service is provided (water customer) for the purpose of assisting the water customer in replacing customer-side water service lines containing lead if 1) the city, town, or village has enacted an ordinance permitting the water public utility to do so and requiring water customers to replace any customer-side water service lines containing lead, and 2) the utility-side water service line and the water main pipe that are connected to the customer-side water service line do not contain lead or the lead-containing portion of that line or pipe is replaced at the same time as the customer-side water service line is replaced.

This bill specifies that "financial assistance" under this program is funded from utility rates. Also under the bill, a utility may, without PSC approval, administer a municipal program to assist water customers in complying with a city, village, or town ordinance requiring the replacement of customer-side water service lines containing lead and to provide municipal grants or loans to water customers for that purpose, provided the utility does not give financial assistance to water customers under the program.

Under the bill, if a political subdivision makes a loan to an owner of a premises for the purpose of replacing customer-side water service lines and collects the

amounts due under the loan as a special charge, the political subdivision must provide the owner of the premises with an annual notice that includes 1) the loan term, 2) the current year for which the property owner is paying the special charge and the amount owed for that year, and 3) the current loan balance.

For further information see the local fiscal estimate, which will be printed as an appendix to this bill.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. 66.0627 (8) (as) of the statutes is created to read:

66.0627 **(8)** (as) If a political subdivision makes a loan under par. (ag) and collects the loan repayments as a special charge under par. (am), the political subdivision shall provide the owner of the premises with an annual notice that includes all of the following:

1. The loan term.

2. The current year for which the owner of the premises is paying the special charge and the amount owed for that year.

3. The current loan balance.

SECTION 2. 196.372 (1) (b) of the statutes is amended to read:

196.372 **(1)** (b) "Financial assistance" means a grant, loan, or combination thereof <u>that is funded from utility rates</u>.

SECTION 3. 196.372 (4) of the statutes is created to read:

196.372 **(4)** MUNICIPAL ORDINANCE ASSISTANCE. (a) In this subsection, "water customer" means an owner of property to which a water public utility provides water utility service.

(b) Notwithstanding sub. (3), a water public utility may, without commission approval, administer a municipal program to assist water customers in complying with a city, village, or town ordinance requiring the replacement of customer–side

water service lines that contain lead and to provide municipal grants or loans to water customers for that purpose, provided the utility does not give financial assistance to water customers under the program.

(END)

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
473 Griffith Avenue
Wisconsin Rapids, WI 54494

Tony Evers, Governor
Adam Payne, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

~

January 16, 2024

Kaitlyn Bernarde, Clerk
City of Wausau
407 Grant Street
Wausau, WI 54403

PWS ID#: 73701023
Wausau Waterworks - MC
Wausau, WI
Marathon County

Subject: Sanitary Survey Report and Notice of Noncompliance

Dear Ms. Bernarde:

The purpose of a sanitary survey is to evaluate the City of Wausau water system's source, facilities, equipment, operation, maintenance, and management as they relate to providing safe drinking water. The sanitary survey is also an opportunity to update the Department's records, provide technical assistance, and identify potential risks that may adversely affect drinking water quality. As deficiencies are noted, this Sanitary Survey Report also serves as a Notice of Noncompliance.

On December 20, 2023, Kyle Priest conducted a sanitary survey of the Wausau Water Works water system. During the sanitary survey Scott Boers was present. City staff were briefed on the preliminary findings during the survey. This report outlines the final findings, discusses problems that need to be addressed, and timelines for corrective action where appropriate.

A response to this report and a plan for corrective action, including a work schedule, must be received by the department on or before **March 1, 2024**. The response shall include a notification that all deficiencies have been corrected or that you agree to correct the deficiencies by the due dates identified in this letter, or with alternative dates for correcting these deficiencies. Failure to respond to this letter by the deadline may result in enforcement activities. A corrective action plan and schedule is included below for your consideration. Depending on the type of corrective action you employ, you may need to obtain prior plan approval and submit additional plans to the department. Please also consider correcting the non-conforming features and recommendations discussed in this letter.

Significant Deficiencies

During the course of the sanitary survey, no significant deficiencies were identified. Significant deficiencies indicate noncompliance with one or more Wisconsin Administrative Codes and/or represent an immediate health risk to consumers. Deficiencies from previous sanitary surveys that have not been addressed by the next survey may also be considered significant deficiencies.

Deficiencies

During the course of the sanitary survey, three deficiencies were identified. Deficiencies are problems in the drinking water system that have the potential to cause serious health risks or represent long-term health risks to consumers. These deficiencies may indicate noncompliance with one or more Wisconsin Administrative Codes. Corrective action should be completed for these deficiencies as soon as possible. If there were any significant deficiencies identified above, those should undergo corrective action first.

Deficiency	Compliance Due Date	Code Citation
1. Air-vacuum relief valve discharge lines are not properly screened. During the inspection, the air-vacuum relief valve discharge line at Well 7 was missing a screen. **Provide a screen on the air-vacuum relief valve discharge lines and provide documentation to the department when completed.**	03-01-2024	NR 811.37(5)(a)
2. The valve exercising program is not adequate. Under s. NR 810.13(2)(a), Wis. Adm. Code, water system valves are required to be exercised every 2-5 years unless an alternate schedule is approved by the department. In a letter dated August 15, 2016, an alternate valve exercising schedule was approved, including exercising every valve on a 10-year rotation. A condition of the alternate valve schedule was that the City would perform unidirectional flushing (UDF) on an annual basis. During the survey it was noted that the valve exercising and UDF was not completed this year. City staff indicated that a lack of staffing in addition to the new water treatment plant operations contributed to not being able to complete these tasks. UDF provides many benefits for the water system that can improve water quality for customers including the removal of debris that builds up in pipes over time. Additionally, consistent UDF can provide corrosion control benefits due to the turnover of water in lower flow areas which in turn can provide improved disinfection residual and reduced biofilm growth. The valve exercising program is important for the maintenance of the distribution system. **Conduct valve exercising of at least 10 percent of the valves in the system (at least 600 valves) and unidirectional flushing in the distribution system in accordance with the 2016 letter and s. NR 810.13(2)(a), Wis. Adm. Code. Provide documentation to the department when completed.**	12-31-2024	NR 810.13(2)

Deficiency	Compliance Due Date	Code Citation
3. Water storage facilities are not inspected at least once every 5 years and/or are not documented. The West Development Court Elevated Tower was constructed in 2018 and is overdue for a 5-year inspection. **Complete the required 5-year inspection and provide DNR Form 3300-248 for documentation to the department.**	12-31-2024	NR 810.14

Recommendations

During the course of the sanitary survey, two recommendations were identified. Recommendations are problems in the water system that hinder your public water system from consistently providing safe drinking water to consumers.

Recommendation
1. There are several isolated service areas in the Wausau distribution system. Isolated service areas are areas with significant populations that are served by one water main. A water main break or other disruption of this water main will cause the area of service downstream to be without a means of -supply until the water main can be repaired. Isolated service areas can be prevented by looping the area back into the distribution system. The City should make efforts to provide looping in the distribution system as water main projects are completed.
2. During the survey, it was noted that water system emergency response procedures had not been practiced in recent years. All communities are required to maintain an emergency response plan (ERP) to prepare for, respond to, mitigate, and recover from all types of emergency situations, both natural and manmade. It is important to keep the ERP updated and staff trained in all aspects of the plan. The entire EOP should be practiced as a tabletop or situational exercise to ensure all aspects of the plan are tested. Many local fire and police departments are experienced in running practice scenarios, which could be easily adapted to involve the water system staff and other municipal staff and decision makers. This should be done at least every other year to insure everyone is familiar with the workings of the ERP. All the various parties involved should then get together to discuss what worked well, what did not work, and how the overall plan could be improved to handle the next emergency encountered. What measures can be taken ahead of time to save valuable time during the crisis period? How can communications be improved? What additional training would benefit various staff members? An emergency response plan needs to be a dynamic model constantly improving over time.

Non-conforming Features

During the course of the sanitary survey, three features that met code requirements at the time of your public water system's construction but would not be allowed in the current code were discovered. These are referred to as non-conforming features. Though this is not required to be immediately corrected, it will need to be corrected when any major work is done in the future.

Non-conforming Features	Code Citation
1. Well vents for wells with casings 10 inches in diameter or greater are now required to have a vent at least 2 inches in diameter. Well 10 has a 2-inch pipe in the pump base and a 2-inch well vent end fitting, but the piping between these is not 2-inch. The next time the pump is pulled for maintenance, the well vent piping will need to be upgraded to the larger diameter. Inadequate venting can cause a vacuum to be created in the casing resulting in air, that may carry contaminants, to be sucked into the casing through unprotected pathways.	NR 811.36(1)(a)
2. The floor drains at Well 3 currently is reported as discharging to a gravel pocket. Current code now requires pump house floor drains to be connected to a sanitary sewer, a holding tank or discharge to the surface of the ground at least 25 feet from the well building. The Well 3 floor drain will need to be upgraded the next time major work is done on the pump house.	NR 811.25(1)(h)
3. A sanitary sewer main is regarded as a potential source of contamination and wells are now required to have a minimum separation of 200 feet to a sanitary sewer main. Alternative criteria can be granted to have the well located within 50 feet, provided the sewer main is constructed to C900 DR18 pressure pipe standards. Wells 3, 6, 7, 9, and 11 are listed as having a sanitary sewer main located within 200 feet of the well. If these roads are scheduled for reconstruction, the sewer main should either be relocated at least 200 feet from the well, replaced with C900 DR18 pressure pipe or slip lined to water main specifications in those portions that are located within 200 feet of a well.	NR 811.12(5)(d)

System Summary

Wausau is located in Marathon County, at the intersections of Interstate 39, State Hwy. 51 and State Hwy. 29. The water supply is owned by the city and includes the following: 6 active wells, chemical addition equipment for the addition of permanganate, coagulant, chlorine, ammonia, sodium hydroxide, fluoride, and sodium silicate, air stripping for VOC removal from Well 3 and Well 6, aeration, a conventional filtration plant for iron and manganese removal, anion exchange treatment for TOC removal, enhanced disinfection with chlorine CT, clearwells, 3 elevated reservoirs, 3 ground reservoirs, and a distribution system. The original waterworks began operation in 1885. A filtration plant for iron removal was constructed in 1927 and was replaced with a lime softening plant in 1963. A solids separation/water recycle facility was added in 1975-76. A second river crossing and Well 10 were added in 1988 to provide additional transmission capacity. Well 11 was added in 2001 and seldom used Well's 4 and 8 were properly filled and sealed shortly thereafter. The lime softening plant was replaced with a conventional filtration plant in December 2022.

All six wells are routed through the water treatment plant. The treatment plant contains two treatment trains for redundancy. Wells 3 and 6 are first routed through air stripping towers to remove VOCs under a consent decree with EPA. The other wells are first routed through aerators for oxidation. Clarion 415 coagulant and sodium permanganate are injected at the rapid mix basins. There is an optional chlorine injection point at the rapid mix basin that is not normally used. The water travels through flocculation tanks then to plate settlers to remove solids. Sodium hydroxide is added pre-filters for pH adjustment. There is an optional sodium permanganate and chlorine injection point before the filters that is not normally used. Five gravity filters with anthracite and greensand are used for iron and manganese removal. The filters discharge to filtered water tanks which pump to the anion exchange units. The effluent of the anion exchange units is routed to the clearwells. Chemical addition upstream of the clearwells includes sodium hydroxide for pH adjustment, sodium silicate for corrosion control benefits, sodium hypochlorite for primary disinfection, and hydrofluosilicic acid for dental benefits. The clearwells provide enhanced disinfection through chlorine CT due to a history of bacteria issues in Well 11. The high service pumps pump from the clearwells to the distribution system. Post high service pump chemical addition includes ammonia for chloramine formation, optional sodium hypochlorite, and optional sodium hydroxide. The City is currently constructing a PFAS removal treatment system to address PFAS contamination in the wells.

The City uses chloramines for disinfection to help to reduce trihalomethane formation, which are a byproduct of chlorine and naturally occurring organic compounds. Silicates are added to reduce the natural corrosive tendencies of the groundwater found in this area. The City determined that corrosion control was also improved by maintaining a stable disinfection level throughout the distribution system; this is aided by more frequent flushing of low flow areas and an established annual unidirectional flushing program.

In 2009 and 2010 the City added a booster station to serve the Village of Brokaw and two additional booster stations to improve system pressure as the system continues to expand east and west. The Village of Brokaw booster station is now offline as the Village has its own water supply. The City has ten active pressure zones served either by booster stations or PRVs. The area served by the West Hill booster, has not yet been developed and this booster station remains offline. The newest booster station serves the West Development Court and feeds a 200,000-gallon spheroidal reservoir.

Groundwater contamination discovered in the early 80's resulted in Wells 3 and 6 being routed through packed tower aerators located at the water treatment plant. The ongoing groundwater cleanup still controls how the City of Wausau operates their well system. Well 6 is required to operate 24/7 during the week to essentially serve as an extraction well.

System Operations

The wells change operations based on demand in the system. Generally, wells 3, 7, and 11 and wells 6, 9, and 10 operate together. Well 3 and 6 are under a consent decree with the EPA for historic VOC contamination.

Auxiliary power is available at all the wells except Well 9, the entire water treatment plant operation is supported by auxiliary power, and all booster stations also have auxiliary power available. The auxiliary power units need to be exercised at least once each month and operated under load at least once each quarter, with the dates recorded in a written log.

Supply and Storage Capacity Analysis

A water supply and storage capacity analysis was conducted to determine the water system's capability to adequately provide water to its customers.

Supply Capacity

PSC demand data was compiled for the last 7 years to determine water usage in the system, as outlined in the table below. Bolded numbers were used as the demand in the capacity analysis calculations for their respective demand conditions.

Year	Average Day Pumpage	Maximum Day Pumpage	Date/Reason for Max
2022	**4,084,000 gal**	6,420,000 gal	07-17, hot weather
2021	3,976,000 gal	**6,820,000 gal**	06-14, hot weather
2020	3,681,000 gal	6,677,000 gal	09-03, hot weather and flushing
2019	4,301,000 gal	6,756,000 gal	08-19, hot weather and flushing
2018	4,110,000 gal	7,888,000 gal	06-25, hot weather and flushing
2017	3,815,000 gal	6,156,000 gal	07-20, hot weather
2016	3,944,000 gal	7,263,000 gal	08-08, hot weather and flushing

Approximate well capacities and their auxiliary power capabilities were provided by the City as outlined in the table below.

Supply	Pump Type	VFD Present	Operational Capacity	Auxiliary Power Available
Well 3	Vertical Turbine	No	1,160 gpm	Yes
Well 6	Vertical Turbine	Yes	1,770 gpm	Yes
Well 7	Vertical Turbine	Yes	1,860 gpm	Yes
Well 9	Vertical Turbine	Yes	850 gpm	No
Well 10	Vertical Turbine	Yes	3,000 gpm	Yes
Well 11	Vertical Turbine	Yes	3,000 gpm	Yes

As it is common for a well to be down due to maintenance or unforeseen problems, firm capacity is used to determine a system's ability to supply water reliably. Firm well capacity is the capacity available with the largest well out of service. Firm well capacity for the City of Wausau was determined to be approximately 8,640 gpm by taking either Well 10 or Well 11 offline. Auxiliary power capacity is useful in determining the capacity that the City has in the event of an extended power outage. Total well capacity, firm capacity, and auxiliary power capacity are summarized in the table below.

Condition	Capacity
Total Existing Capacity	**11,640 gpm**
Largest Existing Supply Unit	3,000 gpm
Total Existing Firm Capacity	**8,640 gpm**
Total Auxiliary Power Capacity	**10,790 gpm**

It is common engineering practice that public water systems have enough firm source capacity to supply the average day demand. Furthermore, the pumps should not run more than 12 hours to meet the average daily

demand, nor more than 18 hours per day for the maximum daily demand. Currently, the City of Wausau water system meets this requirement.

To meet the average day demand, the run time for the wells was 6 hours considering all wells and 8 hours with the largest pump out of service. If either value is over 12 hours on a consistent basis; the City should be in the process of obtaining additional capacity. To meet maximum day demand, the run time for the wells was 10 hours per day considering all wells and 13 hours per day with the largest well out of service. If either value is over 18 hours on a consistent basis; the City should be in the process of obtaining additional capacity.

Additionally, the system is able to provide average day demand and maximum day demand with only auxiliary powered wells while operating 6 hours daily and 11 hours daily, respectively. Municipal water systems are required to have auxiliary power for at least an average day demand if power is lost, must exercise it on a regular basis (ss. NR 811.27 and NR 810.13 Wis. Adm. Code), and maintain appropriate records indicating such. The table below summarizes the hours of operation under different scenarios.

Demand Condition	Daily Hours Operating Under Total Supply Capacity	Daily Hours Operating Under Firm Supply Capacity	Daily Hours Pumped Under Auxiliary Power Supply Capacity
Average Day	6 hours	8 hours	6 hours
Maximum Day	10 hours	13 hours	11 hours

Notes:
1. Durations over 24 hours indicate that the system cannot provide that condition.
2. The department considers a public water system to currently have adequate source capacity when both of the following two conditions are satisfied:
   a. The maximum daily demand can be met with the largest source out of service while pumping 18 hours per day or less and
   b. The average daily demand can be met with the largest source out of service while pumping 12 hours per day or less.

Storage Capacity

A total estimated finished water storage volume of 5,750,000 gallons was used for storage need calculations. During an average day and a maximum day, storage would last for approximately 1.4 days and 0.8 days, respectively, assuming no wells or the water treatment plant operating. It should be noted that tower levels may not be high enough maintain adequate pressures in this scenario.

Capacity Analysis Summary

Based on current data, the system supply capacity is adequate to meet the requirements for average day and maximum day demand. The available storage appears to be adequate for current conditions.

Note, the City of Wausau water supply contains many factors that are not considered in this analysis including treatment capacity, booster pumping capacity, and the ability to supply individual pressure zones.

The evaluation above is based on the best information available to the department at the time of the inspection. Operational changes should not occur based on the evaluation above, the City should conduct a detailed engineering study prior to making any changes.

Water Quality Monitoring and Reporting

Electronic Monthly Operating Reporting

The City has a good monitoring and reporting record. The monthly reports are completed and submitted on a timely basis using the Electronic Monthly Operating Report (EMOR) as required.

Monitoring Site Plan

Updated sampling site plans for disinfection by-products and bacteriological sampling are on file with the department as required. The lead and copper sampling site pool will need to be updated prior to the next round of sampling.

All compliance sampling must be done at the approved sites and the monitoring ID assigned to the sampling point must be recorded on the sampling forms. If monitoring sites are added or dropped from the list, the department must be notified to keep our records up to date.

Water Quality Monitoring

The water system is required to collect 40 coliform bacteria samples from the distribution system each month. In the past three years, no samples have been missed. In the past three years, there have been some distribution samples that have tested positive for coliform bacteria. The City has performed the require follow-up sampling and addressed the issues promptly.

The water system is also required to collect quarterly coliform bacteria samples from the wells. In the past three years, only one sample was collected late. Well 11 has a history of testing positive for total coliform and E-coli bacteria. The City of Wausau is required to treat for 4-log removal of viruses. Currently the City provides additional treatment for 3-log removal of Giardia and Cryptosporidium.

The most recent nitrate sample results were below 1 mg/L. All wells are below the nitrate MCL of 10 mg/L.

The water system is required to sample for disinfection byproducts each year in the summer. Disinfection byproducts form from the interaction of the chlorine and any natural organic matter in the water. Disinfection byproducts consist of Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). The results of all disinfection byproduct testing have met the requirements for drinking water.

Quarterly monitoring for PFAS is required due to periodic elevated levels of PFAS at the entry point to the water system.

Lead and Copper

Monitoring Site Selection

Currently all lead and copper sampling sites are classed as Tier 1 Sites. If there are any site classification changes, the City will need to re-evaluate their lead and copper sites and fill out the sampling pool of 60 sites, with Tier 1 sites taking priority. A Tier 1 site would be a single-family residence with lead goose necks or lead service lines supplying the home or a single-family residence constructed between January of 1983 and September of 1984 using copper with lead solder. A Tier 2 site would be any building with lead goose necks or lead service lines supplying the building or a building constructed between January of 1983 and September of 1984 using copper with lead solder. A Tier 3 site consists of copper plumbing with lead solder constructed before 1983.

The same sites should be used for all future lead and copper monitoring if possible. If any changes need to be made to these approved sites, changes must be submitted and approved by the department before the sites are sampled. Operators are encouraged to fill out the form with the existing sites to better document the characteristics of each site. Sample sites are tap specific so the correct sample tap must be used.

Historical Sampling

Lead and copper past historical compliance results are summarized in the table below.

Sample Date	Lead 90th Percentile (ug/l)	Copper 90th Percentile (ug/L)
July 2020	5.8	11
June 2019	5.69	38
June 2018	7.16	28.12
June 2017	13.2	127
June 2016	6.4	40
July 2015	11	36
April 2015	11	36
Aug 2014	**16**	58
Action Levels Copper: 1300 ug/L Lead: 15 ug/L		

Future Testing Requirements

The last compliance lead and copper sampling was conducted in 2020. The City is currently conducting a corrosion control study. The next sampling will be required once the study is completed.

Corrosion Control Practices

The City of Wausau currently adds sodium silicate at the water treatment plant primarily for corrosion control benefits.

The science of corrosion control has been evolving since the original lead and copper rule was developed. In addition, a greater focus on lead and lead exposure has revealed some gaps in the current rule. For instance, the original lead and copper rule focused on lead concentrations in the first liter of water drawn from the faucet as the worst case for lead. Studies have now shown that for those systems with lead service lines, lead concentrations can be 4 to 8 times higher when water sitting in the service line is tested. So even though a community may be passing their lead action levels on their first draw samples, the homeowner may be exposed to high levels of lead. Studies have also shown that pH control alone may not be enough to provide optimal corrosion control in those systems with lead service lines. The best way to determine if the corrosion control measures are adequate is to perform sequential sampling at locations with lead service lines to determine the concentrations of lead found between the sample faucet and the water main.

It is well known that there is no safe level for lead exposure and greater emphasis has been placed on removing as much lead from water systems as possible. Some communities have taken the step of adopting ordinances that require a homeowner to remove their portion of a lead service line if the City is replacing their public portion of the service. As the science continues to develop regarding corrosion control measures needed to control lead exposure, it becomes more evident that removing lead services may be the best solution in the long run.

The City has a lead service line replacement program with the goal of replacements being fully completed throughout the City in 5 years. The City is commended for its actions in removing lead service lines.

Service Line Inventory

The Federal Lead and Copper Rule Revisions (LCRR), which went into effect December 16, 2021, will require all public water systems to develop and submit to the Department a service line material inventory by October 16, 2024. The Department encourages water systems to prepare for this upcoming LCRR deadline by improving their current lead and copper materials inventory. A template for the materials inventory, developed by the DNR, was provided to the water system. LCRR compliant materials inventories shall include information for all service lines connected to the public water system distribution system, including residential and non-residential

customers. This means that inventories shall list both the public and private service line materials and categorized them as one of the following:

- Confirmed lead
- Confirmed non-lead
- Lead status unknown
- Galvanized requiring replacement (GRR) - private-side galvanized service lines must be assigned this category unless the public water system knows with certainty that the upstream utility service line material is not currently and was never previously lead

In addition to the above classification, the public water system must identify the source of the information used for every service connection to make the classification (record type, visual inspection, etc.) and provide a locational identifier. Public water systems shall need to review and track all relevant historical records for the water system prior to their initial 2024 inventory submittal.

After the initial deadline of October 16, 2024, public water systems must continue to improve their LCRR materials inventories and submit annual updates to the Department until all "lead status unknown" services are confirmed to be lead, non-lead, or GRR, and all lead and GRR lines have been replaced. Additionally, the LCRR materials inventory must be made publicly accessible.

Required Reports, Records, and Utility Programs

Cross Connection Control

The table below summarizes the cross-connection control program.

Inspection Type	Frequency	Completed By	Comments
Residential	20 year	City	Completed with meter change out, Sensus iPERL meters used
Commercial, Industrial, Public Authority, Multi-Family	2 and 10 year	HydroCorp	

Residential inspections are required to be performed at least once every ten years or on a schedule matching the meter replacement schedule. The City has been implementing a 20-year meter replacement schedule. In lieu of inspecting low hazard fixtures, public education materials need to be provided to residential customers at the time of inspection and every 3 years after.

All non-residential services must have a cross connection inspection on a 2-year schedule unless an alternate schedule is approved by this department. Non-residential services, equipped with only low hazard fixtures similar to a residential service, may be inspected on the same schedule as a residential service. The City is responsible to ensure that any violations discovered during the cross-connection surveys are brought back into compliance on a timely basis.

Private Wells

City records indicate that there are approximately 100 private wells located on properties that are connected to the municipal water system. The private well permits have been issued on time.

For records maintenance, the permit packet should include the following:

- Municipality private well permit
- Copy of the bacteria sampling result(s)
- Current well inspection report on DNR Form 3300-305

If any properties are annexed into the City that are currently using a private well, that well will either need to be properly abandoned or the homeowner may apply for an operational permit from the City. The private well ordinance contains the most up to date language.

Well Head Protection

The City has adopted a wellhead protection plan. The City also has wellhead protection outlined within its ordinances. To maintain safe water quality, the City should ensure that these ordinances are enforced. The Wellhead Protection Plan will need to be updated if a new well is constructed. The Wellhead Protection Plan is sensitive information and should not be publicly shared in order to protect the water supply.

Hydrant and Valve Exercising

The City has an alternate valve exercising program approved by the department in 2016. The agreement allows Wausau to operate 10 percent of the system valves if unidirectional flushing is conducted annually. Recently these maintenance activities have not been completed. City staff indicate this is due to short staffing and additional responsibilities with the new water treatment plant. The City should make efforts to improve these programs to ensure distribution system maintenance and customer water quality.

Records need to be maintained for hydrant and valve exercising in accordance with s. NR 810.13 Wis. Adm. Code.

Storage Maintenance Practices

The Wausau water system has nine water storage facilities. Storage tanks over 10,000 gallons require inspection by a professional tank inspection firm or by registered professional engineer. An inspection is required every 5 years and a complete drain down inspection is required every 10 years.

Annual inspection of tower vents, screens, hatches, and gaskets is also required for all water storage. All utilities will need to set up a process for completing and documenting this if not already set up. This is typically done in the spring after freeze thaw. The department may provide an example form for use if requested. The table below outlines the storage facilities in the Wausau water system that are on the 5-year inspection cycle.

Storage Facility	Const. Date	Annual Tower Vent and Screen Check	Interior Coating	Exterior Coating	Last Insp. and Type	Next Due Date and Type
WTP Clearwells (2x 500,000)	2022		2022	2022	2022 constructed	2027, partial drain down
WTP Filtered Water Tanks (2x 96,000)	2022		N/A	N/A	2022 constructed	2027, partial drain down
WTP Backwash reclaim tanks (2x 77,800)	2022		N/A	N/A	2022 constructed	2027, partial drain down
13th and Brown Elevated (500,000)	1958				10-08-2019, partial drain down	2024, complete drain down
Elm and 12th Standpipe (2,500,000)	1951				10-7-2019, partial drain down	2024, complete drain down
Industrial Park West Standpipe (1,000,000)	1985				10-7-2019, Diver by liquid engineering	2024, complete drain down

Storage Facility	Const. Date	Annual Tower Vent and Screen Check	Interior Coating	Exterior Coating	Last Insp. and Type	Next Due Date and Type
West Development Court Elevated (200,000)	2018				2018, complete drain down at construction	**2023, partial drain down**
West Wausau and 28th Ave Standpipe (300,000)	1985				10-7-2019, partial drain down	2024, complete drain down
West Wausau Ave Elevated (250,000)	2005				10-7-2019, partial drain down	2024, complete drain down

Any other closed pressure vessels, treatment devices, or tanks that can be opened, need to be inspected at a minimum of every 5 years and records must be kept. These inspections may be performed in-house based on City's comfort in doing the inspection. If uncomfortable or the City doesn't know what to look for, then these should be contracted out. The department generally recommends if the vessel is over 10,000 gallons that the device be inspected by a certified professional or inspection agent. Additionally, there is potential radon or radium/hot media concerns for iron filter inspections or other safety concerns if inspections are performed by the City. Below is a summary of other vessels.

Vessel	Const. Date	Comments	Last Inspection	Next Inspection
Air strippers	2022	Checked every 6 months, media cleaned.	At construction	2027
Filters (Media)	2022		At construction	2027
IX Vessels	2022	Checked more frequently than 5 yrs	At construction	2027

Certified Operator

Scott Boers is listed as the designated Operator in Charge for the Wausau water system. Currently, the Wausau water system requires that at least one operator be certified for each of the following classifications:

- Groundwater
- Distribution
- VOC Removal
- Iron Removal
- Zeolite and Resin Treatment

The classifications can be filled with multiple operators, one operator does not need to have all classifications. Operators are required to accumulate a minimum of 18 continuing education credits every three years to maintain their certifications.

Financial Capacity

It is important that water utilities have healthy financial practices and rate structures to ensure that the City has enough money to cover utility expenses, infrastructure construction and replacement costs and stay up to date with inflation.

Net operating income and net operating income as a percent of average net rate base are measures of the financial viability of a utility. Numbers according to PSC Reports are outlined in the table below.

Year	Net Operating Income	Net Operating Income as a percent of Average Net Rate Base
2022	1,459,525	3.02%
2021	1,660,114	6.11%
2020	1,442,036	5.31%
2019	786,843	3.10%
2018	877,731	3.87%
2017	729,061	3.44%
2016	837,579	4.16%

The PSC recommends that net operating income as a percent of average net rate based be maintained near 5 to 6 percent.

The utilities last rate increase was in 2023. The department recommends that utilities perform the 3% simplified rate increase every few years with a full rate case every 5 years. The Simplified Rate Case (SRC) is a simple and convenient means for municipal utilities to increase water and sewer rates. This is an inflationary type of increase that helps utilities maintain rates continually so that customers benefit from smaller, more frequent rate increases. This also requires less public notice requirements.

Water System Security

It is recommended that a daily security check be performed on the entire drinking water system to ensure doors are locked, windows are secured, and nothing has been tampered with. The City should continue to enhance the security of all their water supply facilities whenever possible. Special attention must be paid to the security of the remote operations capability built into the SCADA control systems. Access to SCADA control systems must remain secured and locked at all times.

The department recommends the City evaluate the existing cybersecurity practices and make improvements to reduce vulnerability to cyber-attacks. Consider using the following resources to determine if improvements can be made to the City's existing system.

- The U.S. EPA Water Cybersecurity Assessment Tool and Risk Mitigation Plan can be used to assess your existing cybersecurity practices and provides a risk mitigation plan.
- The U.S. EPA offers cybersecurity technical assistance for water utilities to help water systems improve their cybersecurity practices.
- Additional information and resources on water system cybersecurity can be found at the U.S. EPA Cybersecurity Webpage.

The following best management practices can be made to prevent a cybersecurity incident:

1. Update to the latest version of the operating system (e.g. Windows 10).
2. Use multiple-factor authentication to access critical applications.
3. Use strong passwords to protect remote access credentials.
4. Update user access lists to critical programs regularly (e.g. Employee retires)
5. Train users to identify and report attempts at social engineering. Identify and suspend access of users exhibiting unusual activity.
6. Ensure anti-virus, spam filters, and firewalls are up to date, properly configured and secure.
7. Audit network configurations and isolate computer systems that cannot be updated.
8. Only use secure networks and consider installing a virtual private network (VPN).
9. Restrict all remote connections to SCADA systems, specifically those that allow physical control and manipulation of devices within the SCADA network. One-way unidirectional monitoring devices are recommended to monitor SCADA systems remotely.

Well houses and treatment facilities are not recommended to be externally labeled with signs indicating what the facility is. This can provide information to a potential malicious parties looking to harm the water system.

The Emergency Response Plan should be practiced on a routine basis; this is especially important with newer water staff and administration.

Water staff may find benefit from taking Incident Command System (ICS) 100, 200 and 700 level training for emergency response preparedness. Management staff may want to build on this training by taking ICS 300, 400, and 800. Additional water and wastewater specific courses that may be useful are available through the Emergency Management Institute including 1024, 553, and 815. These courses may be available on-line through the county emergency management website or through the Wisconsin Emergency Management online portal.

Capacity Development Evaluation

This sanitary survey serves as an evaluation of the capabilities of your water system. This system has been determined to have adequate technical, financial, and managerial capacity to provide safe drinking water. The ability to plan for, achieve, and maintain compliance with applicable drinking water standards has been demonstrated.

The next sanitary survey of your system is scheduled to take place in 2026. You will be contacted prior to the survey to schedule a date that is convenient for you.

I would like to thank Scott for his time and cooperation during the sanitary survey. If there are any questions, please call my phone at 715-315-8094 or send me an e-mail at kyle.priest@wisconsin.gov. I also offer to attend a City Council meeting to discuss this report at our mutual convenience if requested.

Sincerely,

Kyle Priest
Water Supply Engineer

cc: Eric Lindman, P.E., Wausau
Scott Boers, Wausau
Greg Moeller, DNR Appleton
Wausau Facility File – Wisconsin Rapids

Wisconsin State Laboratory of Hygiene
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Laboratory Report

Environmental Health Division

WSLH Sample: 715784001

Report To:
BEN BROOKS
WAUSAU WWTP
430 ADRIAN ST
WAUSAU, WI 54401

Invoice To:
TONIRAYALA WAUSAU CITY CLERK
407 GRANT ST
WAUSAU, WI 54403

Customer ID: 358849

Field #: 26920009
Project No:
Collection End: 12/20/2023 12:42:00 PM
Collection Start:
Collected By: JASON SCHILL
Date Received: 12/21/2023
Date Reported: 1/24/2024
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: IF-INFLUENT (UNTREATED WW)
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

Sample Comments

Interference in PFPeA channel prevents reporting of result.
No 4:2 FTSA internal standard observed. Likely due to matrix suppression effect. No 4:2 FTSA result reported.

PFAS in Waste Water

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/11/24 12:00	Analysis Date: 01/17/24 11:09	Prep Method:			
PFBA (375-22-4)	WSLH PFAS in Waste Water	4.35	ng/L	1.16	3.89
Interference					
PFBS (375-73-5)	WSLH PFAS in Waste Water	46.2	ng/L	0.575	1.94
PFHxA (307-24-4)	WSLH PFAS in Waste Water	<0.660	ng/L	0.660	1.94
The internal standard QC limit has failed low.					
PFPeS (2706-91-4)	WSLH PFAS in Waste Water	<0.456	ng/L	0.456	0.972
HFPO-DA (13252-13-6)	WSLH PFAS in Waste Water	<0.667	ng/L	0.667	1.94
PFHpA (375-85-9)	WSLH PFAS in Waste Water	<0.657	ng/L	0.657	1.94
The internal standard QC limit has failed low.					

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Laboratory Report

Environmental Health Division

WSLH Sample: 715784001

PFAS in Waste Water

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/11/24 12:00	Analysis Date: 01/17/24 11:09	Prep Method:			
PFHxS (355-46-4)	WSLH PFAS in Waste Water	<0.697	ng/L	0.697	1.94
DONA (919005-14-4)	WSLH PFAS in Waste Water	<0.573	ng/L	0.573	1.94
The internal standard QC limit has failed low.					
6:2 FTSA (27619-97-2)	WSLH PFAS in Waste Water	0.672F	ng/L	0.654	1.94
PFOA (335-67-1)	WSLH PFAS in Waste Water	4.67	ng/L	0.584	1.94
PFHpS (375-92-8)	WSLH PFAS in Waste Water	<0.577	ng/L	0.577	1.94
PFOS (1763-23-1)	WSLH PFAS in Waste Water	6.36	ng/L	0.520	1.94
Interference in internal standard. Result is approximate.					
PFNA (375-95-1)	WSLH PFAS in Waste Water	<0.646	ng/L	0.646	1.94
9Cl-PF3ONS (756426-58-1)	WSLH PFAS in Waste Water	<0.610	ng/L	0.610	1.94
8:2 FTSA (39108-34-4)	WSLH PFAS in Waste Water	<0.817	ng/L	0.817	1.94
PFDA (335-76-2)	WSLH PFAS in Waste Water	<0.511	ng/L	0.511	1.94
PFNS (68259-12-1)	WSLH PFAS in Waste Water	<0.641	ng/L	0.641	1.94
N-MeFOSAA (2355-31-9)	WSLH PFAS in Waste Water	<1.94	ng/L	0.638	1.94
The internal standard QC limit has failed low.					
N-EtFOSAA (2991-50-6)	WSLH PFAS in Waste Water	4.29	ng/L	0.885	1.94
The internal standard QC limit has failed low.					
FOSA (754-91-6)	WSLH PFAS in Waste Water	<0.758	ng/L	0.758	1.94
The internal standard QC limit has failed low.					
PFUnA (2058-94-8)	WSLH PFAS in Waste Water	<0.621	ng/L	0.621	1.94
The internal standard QC limit has failed low.					
PFDS (335-77-3)	WSLH PFAS in Waste Water	<0.887	ng/L	0.887	1.94
11Cl-PF3OUdS (763051-92-9)	WSLH PFAS in Waste	<0.667	ng/L	0.667	1.94

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Environmental Health Division

WSLH Sample: 715784001

PFAS in Waste Water

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/11/24 12:00	Analysis Date: 01/17/24 11:09	Prep Method: Water			
PFDoA (307-55-1)	WSLH PFAS in Waste Water	<1.05	ng/L	1.05	3.89
The internal standard QC limit has failed low.					
PFDoS (79780-39-5)	WSLH PFAS in Waste Water	<1.31	ng/L	1.31	3.89
The internal standard QC limit has failed low.					
PFTrDA (72629-94-8)	WSLH PFAS in Waste Water	<1.17	ng/L	1.17	3.89
The internal standard QC limit has failed low.					
N-MeFOSA (31506-32-8)	WSLH PFAS in Waste Water	<0.599	ng/L	0.599	1.94
The internal standard QC limit has failed low.					
N-MeFOSE (24448-09-7)	WSLH PFAS in Waste Water	4.34	ng/L	0.607	1.94
Branched isomer peak area ratio not observed in analytical standard					
The internal standard QC limit has failed low.					
N-EtFOSA (4151-50-2)	WSLH PFAS in Waste Water	<0.444	ng/L	0.444	0.972
The internal standard QC limit has failed low.					
N-EtFOSE (1691-99-2)	WSLH PFAS in Waste Water	0.748F	ng/L	0.568	1.94
The internal standard QC limit has failed low.					
PFTeDA (376-06-7)	WSLH PFAS in Waste Water	<3.89	ng/L	1.00	3.89
Interference					
The internal standard QC limit has failed low.					

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

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Laboratory Report

Environmental Health Division

WSLH Sample: 715784001

WDNR LAB ID:113133790 NELAP LAB ID:2091 EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

List of Abbreviations:
LOD = Level of detection
LOQ = Level of quantification (for PFAS the LOQ = MRL)
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Responsible Party

Inorganic Chemistry: Graham Anderson, Supervisor 608-224-6281
Metals: Graham Anderson, Supervisor 608-224-6281
Organics: Erin Mani, Supervisor 608-224-6269
Environmental Toxicology: Dawn Perkins, Supervisor 608-224-6230
Water Microbiology: Martin Collins, Supervisor 608-224-6239
Radiochemistry: Jesse Wouters, Supervisor 608-224-6227

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Laboratory Report

Environmental Health Division

WSLH Sample: 715783001

Report To:
BEN BROOKS
WAUSAU WWTP
430 ADRIAN ST
WAUSAU, WI 54401

Invoice To:
TONIRAYALA WAUSAU CITY CLERK
407 GRANT ST
WAUSAU, WI 54403

Customer ID: 358849

Field #: VAF130323
Project No:
Collection End: 12/20/2023 1:20:00 PM
Collection Start:
Collected By: JASON SCHILL
Date Received: 12/21/2023
Date Reported: 1/24/2024
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: EF-EFFLUENT (TREATED WW)
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

PFAS in Water

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/05/24 11:00	Analysis Date: 01/17/24 00:33	Prep Method:			
PFBA (375-22-4)	WSLH PFAS in Water	14.7	ng/L	0.641	1.81
PFPeA (2706-90-3)	WSLH PFAS in Water	14.1	ng/L	0.256	0.905
PFBS (375-73-5)	WSLH PFAS in Water	95.1	ng/L	0.197	0.905
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.905
PFHxA (307-24-4)	WSLH PFAS in Water	17.0	ng/L	0.304	0.905
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.168	ng/L	0.168	0.905
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.204	ng/L	0.204	0.905
PFHpA (375-85-9)	WSLH PFAS in Water	3.17	ng/L	0.285	0.905
PFHxS (355-46-4)	WSLH PFAS in Water	2.65	ng/L	0.335	0.905
DONA (919005-14-4)	WSLH PFAS in Water	<0.268	ng/L	0.268	0.905
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	0.352F	ng/L	0.220	0.905
PFOA (335-67-1)	WSLH PFAS in Water	6.68	ng/L	0.222	0.905
PFHpS (375-92-8)	WSLH PFAS in Water	<0.198	ng/L	0.198	0.905
PFOS (1763-23-1)	WSLH PFAS in Water	6.74	ng/L	0.300	0.905

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Laboratory Report

Environmental Health Division

WSLH Sample: 715783001

PFAS in Water

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/05/24 11:00	Analysis Date: 01/17/24 00:33	Prep Method:			
Branched isomer peak area ratio not observed in analytical standard					
PFNA (375-95-1)	WSLH PFAS in Water	0.414F	ng/L	0.246	0.905
9Cl-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.905
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.395	ng/L	0.395	0.905
PFDA (335-76-2)	WSLH PFAS in Water	0.413F	ng/L	0.252	0.905
PFNS (68259-12-1)	WSLH PFAS in Water	<0.171	ng/L	0.171	0.905
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	1.32	ng/L	0.305	0.905
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	1.33	ng/L	0.180	0.905
FOSA (754-91-6)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.905
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.227	ng/L	0.227	0.905
PFDS (335-77-3)	WSLH PFAS in Water	<0.271	ng/L	0.271	0.905
11Cl-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.168	ng/L	0.168	0.905
PFDoA (307-55-1)	WSLH PFAS in Water	<0.231	ng/L	0.231	0.905
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.358	ng/L	0.358	0.905
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.352	ng/L	0.352	0.905
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.351	ng/L	0.351	0.905
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.212	ng/L	0.212	0.905
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.300	ng/L	0.300	0.905
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.332	ng/L	0.332	0.905
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.233	ng/L	0.233	0.905

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(800)442-4618 - Fax (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

Environmental Health Division

WSLH Sample: 715783001

WDNR LAB ID:113133790 NELAP LAB ID:2091 EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

List of Abbreviations:
LOD = Level of detection
LOQ = Level of quantification (for PFAS the LOQ = MRL)
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Responsible Party

Inorganic Chemistry: Graham Anderson, Supervisor 608-224-6281
Metals: Graham Anderson, Supervisor 608-224-6281
Organics: Erin Mani, Supervisor 608-224-6269
Environmental Toxicology: Dawn Perkins, Supervisor 608-224-6230
Water Microbiology: Martin Collins, Supervisor 608-224-6239
Radiochemistry: Jesse Wouters, Supervisor 608-224-6227

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Laboratory Report

Environmental Health Division

WSLH Sample: 715786001

Report To:
BEN BROOKS
WAUSAU WWTP
430 ADRIAN ST
WAUSAU, WI 54401

Invoice To:
TONIRAYALA WAUSAU CITY CLERK
407 GRANT ST
WAUSAU, WI 54403

Customer ID: 358849

Field #: J512873-2029
Project No:
Collection End: 12/20/2023 12:57:00 PM
Collection Start:
Collected By: JASON SCHILL
Date Received: 12/21/2023
Date Reported: 1/16/2024
Sample Reason:

ID#:
Sample Location:
Sample Description:
Sample Type: SL-SLUDGE
Waterbody:
Point or Outfall:
Sample Depth:
Program Code:
Region Code:
County:

Sample Comments

Due to the sample's composition, less than the default 10 grams were extracted. Sample results and limits have been adjusted accordingly.
Sample results are reported based on the dry weight of the sample. Results have been adjusted to account for the sample's moisture content.
EtFOSE internal standard not present; no result is available.

Dry Weight

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: No Prep Step	Analysis Date: 01/02/24 09:06	Prep Method:			
PERCENT SOLIDS	EPA 160.3	93.1	%	0.00200	0.00200

PFAS in Solids

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/03/24 08:50	Analysis Date: 01/05/24 01:07	Prep Method:			
PFBA (375-22-4)	WSLH PFAS in Solids	0.365	ng/g	0.0568	0.237
PFPeA (2706-90-3)	WSLH PFAS in Solids	<0.0331	ng/g	0.0331	0.0946
PFBS (375-73-5)	WSLH PFAS in Solids	1.13	ng/g	0.0284	0.0946

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Environmental Health Division

WSLH Sample: 715786001

PFAS in Solids

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/03/24 08:50	Analysis Date: 01/05/24 01:07	Prep Method:			
4:2 FTSA (757124-72-4)	WSLH PFAS in Solids	<0.0757	ng/g	0.0757	0.237
The internal standard QC limit has failed high.					
PFHxA (307-24-4)	WSLH PFAS in Solids	0.591	ng/g	0.0473	0.0946
PFPeS (2706-91-4)	WSLH PFAS in Solids	<0.0331	ng/g	0.0331	0.0946
HFPO-DA (13252-13-6)	WSLH PFAS in Solids	<0.0473	ng/g	0.0473	0.0946
PFHpA (375-85-9)	WSLH PFAS in Solids	<0.0615	ng/g	0.0615	0.237
PFHxS (355-46-4)	WSLH PFAS in Solids	0.0605F	ng/g	0.0284	0.0946
DONA (919005-14-4)	WSLH PFAS in Solids	<0.0331	ng/g	0.0331	0.0946
6:2 FTSA (27619-97-2)	WSLH PFAS in Solids	0.0506F	ng/g	0.0426	0.0946
The internal standard QC limit has failed high.					
PFOA (335-67-1)	WSLH PFAS in Solids	1.00	ng/g	0.0378	0.0946
Branched isomer peak area ratio not observed in analytical standard					
PFHpS (375-92-8)	WSLH PFAS in Solids	<0.0615	ng/g	0.0615	0.237
PFOS (1763-23-1)	WSLH PFAS in Solids	10.3	ng/g	0.0284	0.0946
PFNA (375-95-1)	WSLH PFAS in Solids	0.183	ng/g	0.0331	0.0946
9Cl-PF3ONS (756426-58-1)	WSLH PFAS in Solids	<0.0568	ng/g	0.0568	0.237
8:2 FTSA (39108-34-4)	WSLH PFAS in Solids	0.235	ng/g	0.0331	0.0946
The internal standard QC limit has failed high.					
PFDA (335-76-2)	WSLH PFAS in Solids	0.985	ng/g	0.0426	0.0946
PFNS (68259-12-1)	WSLH PFAS in Solids	<0.0378	ng/g	0.0378	0.0946
N-MeFOSAA (2355-31-9)	WSLH PFAS in Solids	4.21	ng/g	0.0378	0.0946
N-EtFOSAA (2991-50-6)	WSLH PFAS in Solids	5.10	ng/g	0.0473	0.0946
FOSA (754-91-6)	WSLH PFAS in Solids	1.02	ng/g	0.0426	0.0946
PFUnA (2058-94-8)	WSLH PFAS in Solids	0.478	ng/g	0.0710	0.237
PFDS (335-77-3)	WSLH PFAS in Solids	0.937	ng/g	0.0426	0.0946

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Laboratory Report

Environmental Health Division

WSLH Sample: 715786001

PFAS in Solids

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 01/03/24 08:50	Analysis Date: 01/05/24 01:07	Prep Method:			
Interference Transition Ion Ratio Failure. Confirmation result = 0.332 ng/g					
11Cl-PF3OUdS (763051-92-9)	WSLH PFAS in Solids	<0.0331	ng/g	0.0331	0.0946
PFDoA (307-55-1)	WSLH PFAS in Solids	0.698	ng/g	0.0473	0.0946
The internal standard QC limit has failed low.					
PFDoS (79780-39-5)	WSLH PFAS in Solids	<0.0615	ng/g	0.0615	0.237
PFTrDA (72629-94-8)	WSLH PFAS in Solids	0.355	ng/g	0.0378	0.0946
The internal standard QC limit has failed low.					
N-MeFOSA (31506-32-8)	WSLH PFAS in Solids	<0.0946	ng/g	0.0946	0.237
N-MeFOSE (24448-09-7)	WSLH PFAS in Solids	4.49	ng/g	0.109	0.237
N-EtFOSA (4151-50-2)	WSLH PFAS in Solids	0.477	ng/g	0.0568	0.237
Branched isomer peak area ratio not observed in analytical standard					
PFTeDA (376-06-7)	WSLH PFAS in Solids	0.331	ng/g	0.0426	0.0946

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Environmental Health Division

WSLH Sample: 715786001

WDNR LAB ID:113133790 NELAP LAB ID:2091 EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

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WAUSAU WASTEWATER: INFLUENT, EFFLUENT & BIOSOLIDS PFAS TESTING

			< 20 ng/L (ppt)= WDNR proposed limit	< 8 ng/L (ppt)= WDNR proposed limit			< 16 ng/g (ug/kg)= no further action required by WDNR	
Date:	**Influent PFOA: ng/L**	**Influent PFOS: ng/L**	**Effluent PFOA: ng/L**	**Effluent PFOS: ng/L**	**Biosolids PFOA: ng/g**	**Biosolids PFOS: ng/g**	**Biosolids Combined PFOA & PFOS: ng/g (ug/kg)**	**DRYER: ON/OFF**
1/5/2021	14.8	8.48						
10/24/2023	4.68	6.3	5.86	7.81	0.744	7.06	7.804	OFF
11/30/2023	4.8	8.91	7.73	34	0.561	7.78	8.341	ON
12/20/2023	4.67	6.36	6.68	6.74	1.00	10.3	11.3	OFF

CITY OF WAUSAU

SOLE SOURCE PURCHASE JUSTIFICATION

REQUIRED FORM PURCHASE OF GOODS OR SERVICES EXCEEDING $10,000

Purchase of goods or services for no more than $25,000 may be made without competition when it is agreed ***in advance*** between the Department Head and the Finance Director. Sole source purchasing allows for the procurement of goods and services from a single source without soliciting quotes or bids from multiple sources. Sole source procurement cannot be used to avoid competition, rather it is used in certain situations when it can be documented that a vendor or contractor holds a unique set of skills or expertise, that the services are highly specialized or unique in character or when alternate products are unavailable or unsuitable from any other source. Sole source purchasing should be avoided unless it is clearly necessary and justifiable. The justification must withstand public and legislative scrutiny. The Department Head is responsible for providing written documentation justifying the valid reason to purchase from one source or that only one source is available. Sole source purchasing criteria include: urgency due to public safety, serious injury financial or other, other unusual and compelling reasons, goods or service is available from only one source and no other good or service will satisfy the City's requirements, legal services provided by an attorney, lack of acceptable bids or quotes, an alternate product or manufacturer would not be compatible with current products resulting in additional operating or maintenance costs, standardization of a specific product or manufacturer will result in a more efficient or economical operation or aesthetics, or compatibility is an overriding consideration, the purchase is from another governmental body, continuity is achieved in a phased project, the supplier or service demonstrates a unique capability not found elsewhere, the purchase is more economical to the city on the basis of time and money of proposal development.

1. Sole source purchase under $10,000 shall be evaluated and determined by the Department Head.
2. Sole source purchase of $10,001 to $25,000 a formal written justification shall be forwarded to the Finance Director who will concur with the sole source or assist in locating additional competitive sources.
3. Sole source purchase exceeding $25,000 must be approved by the Finance Committee.

☒ **Ongoing Sole Source – 365 days** ☐ **One Time Sole Source Request**

1. Provide a detailed explanation of the good or service to be purchased and vendor.

   Magnesium Hydroxide in bulk delivery from Midwest Chemical. The Magnesium Hydroxide will be delivered via tanker load and stored at the wastewater treatment plant in the bulk storage tanks located in Structure 610.

2. Provide a brief description of the intended application for the service or goods to be purchased.
   Magnesium Hydroxide chemical will be used at the wastewater treatment facility to increase the alkalinity of the wastewater and stabilize pH levels of the effluent wastewater being discharged to the Wisconsin River. This chemical will be used for pH control to meet WPDES permit requirements as well as to increase over-all alkalinity that aides with buffering capacity.

3. State why other products or services that compete in the market will not or do not meet your needs or comply with your specifications. The Wastewater Treatment Facility has been using this chemical for approximately one year now achieving excellent results, reporting no pH violations to the WDNR. This chemical is water soluble making ease for clean-up whereas other vendors products gel up when water is added, causing clogging issues. If a different form of Mag-Lime was used the entire chemical system would need to be thoroughly cleaned and would involve a lot of man hours.

4. Describe your efforts to identify other vendors to furnish the product or services.
   Other Vendors do not offer the water-soluble Magnesium Hydroxide that Midwest Chemical does which makes clogging issues easy to resolve using flush water to unplug clogs.

5. How did you determine that the sole source vendor's price was reasonable?

The cost is reasonable in its nature. It does not exceed that which would be incurred by another Utility in the conduct of competitive business. This determination is based off historical data from previous year. As noted on the Midwest quote. Pricing will be honored from February 1, 2024 to February 28, 2025.

6. Which of the following best describes this sole source procurement? Select all that apply.

☒ Product or vendor is uniquely qualified with capability not found elsewhere.

☐ Urgency due to public safety, serious financial injury or other. (explain)

☐ The procurement is of such a specialized nature that by virtue of experience, expertise, proximity or ownership of intellectual property

☐ Lack of acceptable quotes or bids.

☒ Product compatibility or the standardization of a product.

☒ Continuation of a phased project.

☐ Proposal development is uneconomical.

Department: Wausau Water Works – Wastewater Treatment Facility

Preparer: Ben Brooks

Vendor Name: Midwest Chemical

Expected amount of purchase or contract: $252,000.00 (2024 Budgeted Amount)

Department Head Signature: ***Date:***

Finance Director Signature: ***Date:***

MIDWEST CHEMICAL & EQUIPMENT
TAKING WA$TE OUT OF WASTE WATER.

January 30, 2024

To: Ben Brooks

Re: Quote for Mag Hydroxide in bulk at Wausau Water Works

On behalf of Midwest Chemical & Equipment, below is our proposed pricing for your mag hydroxide needs from February 1, 2024 through February 28, 2025. Pricing and terms are as follows:

Product:	Mag Hydroxide	Pricing: $0.23 per lb delivered
		Based upon: 1.2 MM lbs annual usage; full bulk tanker deliveries
Terms:	Net 20 days	
Ordering:	David Olson@phone/text 920-615-2288 or email djolson@midwestce.com	

Sincerely,

Dave Olson

June 2023

Our company, Rain Water Solutions, is based in North Carolina and has made it our mission to work with government agencies and nonprofits to use rain barrels as an education / outreach tool for water conservation and water quality issues.

We run each program according to your specific needs and goals. Some agencies keep them in stock for ongoing sales while others choose single or multiple day pick ups. We cater the program to your community with no upfront cost!

Ivy, is made of 100% recycled regrind in Mayodan, NC and is designed to efficiently nest inside one another so we can fit 33 on a single 48x48 pallet and 858 on a full truck load. Ivy is made in the USA to exacting standards ensuring the highest quality and a very affordable price point. All of Ivy's components are made in the USA as well. Most programs sell the Ivy for $75 to $80, this includes delivery, the average retail price is $149.00 so the savings to your residents is substantial.
Our minimum order is 33 rain barrels/ 1 pallet.

The Ivy Rain Barrel has six great features every rain barrel should have:

1. Ivy is opaque to prevent algae growth. Translucent or light color barrels will grow algae.
2. It has a screened inlet, rain barrels must have proper screening to prevent unwanted pests such as mosquitoes.
3. Ivy comes with two overflow ports and comes with a 6' long overflow hose.
4. Linking connection included.
5. The lid comes off for easy cleaning yet locks down for safety.
6. The spigot is as low to the bottom as possible to allow full drainage.

You can look over the case studies and services we include with all programs at www.RainBarrelProgram.org.

Our rain barrel program includes the following:

- Create an online promotional website designated for your community's event.
- A free demo Ivy rain barrel .
- Take online orders/purchases and gather customer data.
- Send out email reminders 3 days prior to the event and an automated phone message to all customers 1 day prior to the event as a reminder to pick up their Ivy rain barrel(s).
- Provide the partnering agency with a spreadsheet of customers.
- Handle logistics and deliver all pre-purchased Ivy rain barrels to the designated event location that has a fork lift or loading dock. We can deliver with a lift gate, but need to know this to quote pricing.

The link below (pre-COVID) shows a great time lapse video distributing 330 rain barrels.
Thousand Oaks, CA Distribution video

You also have the option to include our 65 gallon backyard compost bin for a Barrel & Bin Program.

Features:

- 5-panels only - easy to assemble
- 65 gallons
- Assembled 26" x 26" x 30 3/4" H
- Packaged dim. 31"L x 26"W x 5"H
- Weight 20 pounds
- Complete set of composting instructions
- 4 removable access doors
- Ships 27 bins per pallet

RAIN WATER solutions

5809 Trinity Rd
Raleigh, NC 27607
919-835-1699
RainWaterSolutions.com

Certified B Corporation bcorporation.net

TYPE

50 gallon rain barrel

RECYCLABILITY

100% recycled plastic and is 100% recyclable

DESIGN

Easy to assemble, install and is stable when full

RAIN BARREL DIMENSIONS

Height:	42.5″
Top diameter:	22.5″
Bottom diameter:	18″

WEIGHT

Empty: 16 pounds
Full: 424 pounds

FUNCTION AND FEATURES

- Made in the USA!
- Locking lid with reusable zip ties
- All parts included, 3/4″ valve, mosquito screen, and overflow hose
- Barrels nest for easy storage
- Linking capability
- 2 overflow ports
- Meets EPA safety standards
- Opaque HDPE material & BPA free

**** Bonus - 3 Ivys will easily fit in the back seat of a mid size sedan**

Ivy, 50 gallon capacity rain barrel

Testimonials & Feedback

Agencies

RWS has been an invaluable partner for our organization's rainwater harvesting initiative. Their support and commitment have been a huge part of the success of our rain barrel program and I highly recommend them to any organization or municipality that wants to join the rainwater harvesting revolution sweeping across America. Their barrels are high quality, extremely user friendly and very popular with our program participants. I can't say enough about RWS and the great job they do.

-Nick S., Utah Rivers Council. May 2022 - 3,000+ Ivys sold

UTAH RIVERS COUNCIL

"It went really well today! You all are absolutely amazing!! It is almost unbelievable how organized you are! Thank you for making it so easy!! We really appreciate you!!"

Lauren, Broken Arrow, OK. June 2022 - 296 Ivys sold

CITY OF BROKEN ARROW
Where opportunity lives

Customers

We just returned from picking up our rain barrel in Garland & wanted to say thank you for such a smooth pick up! From the emails, reminder phone call and instructions all were clear and the pick up map was marked very well & easy to follow. Sometimes we fail to thank those people responsible for a job well done! So I say "Thank You" to you and all persons involved! Again, great job!!

-Judee H. in Garland TX

We have two Ivy rain barrels in our backyard in Plano. The barrels serve to water our container plants and to serve as baths for our son's dinos. We love Ivy!!!

-Bradley V. in Plano TX

Just wanted to thank you for an exceptionally well-run and organized event. Everyone was cheerful and friendly, with such a positive energy. Thanks!

-Shelly J. in San Diego County

RAIN WATER solutions

RAIN WATER solutions

Opaque Recycled Plas

100% recycled HDPE made in the USA! BPA
to prevent algae growth.

Wausau Rain Barrels

For a limited time and while supplies last, purchase your 50-gallon Ivy Rain Barrel at a discounted price!

Order today for pickup TBA for 2024

TBA for 2024

$50.00 - Wausau Resident

Limit of 2 per household, available while supplies last. Your address will be verified.

$75.00 - (*35% off retail*) Non-Resident

No limit for non-residents. You can also purchase at this price for a 3rd or 4th rain barrel.

Sold Out

Wausau Water Works is once again partnered with Rain Water Solutions to offer residents the opportunity to purchase barrels at discounted prices. Wausau Water Works Commission has approved subsidizing rain barrels for Wausau City Residents as part of their ongoing "Wauter Savvy" campaign. City of Wausau residents will be eligible to purchase two rain barrels at a subsidized price of $50 each. Non-City residents may also purchase rain barrels at a discounted price of $75 each.

Pickup: TBA 2024

Location: TBA 2024

Optional Gutter Diverters:

Please read the instructions before ordering. You can choose 2 sizes 2x3 and 3x4. *Measure your gutters before ordering!*

PRODUCT

~~Discounted Price LIMIT of 2 - 50 Gallon Rain Barrel~~ ~~Full Price- NO LIMIT- 50 Gallon Rain Barrel~~ ~~2x3 Gutter Diverter~~ ~~3x4 Gutter Diverter~~

Pickup and Purchasing FAQs +

Whats Included +

Specifications +

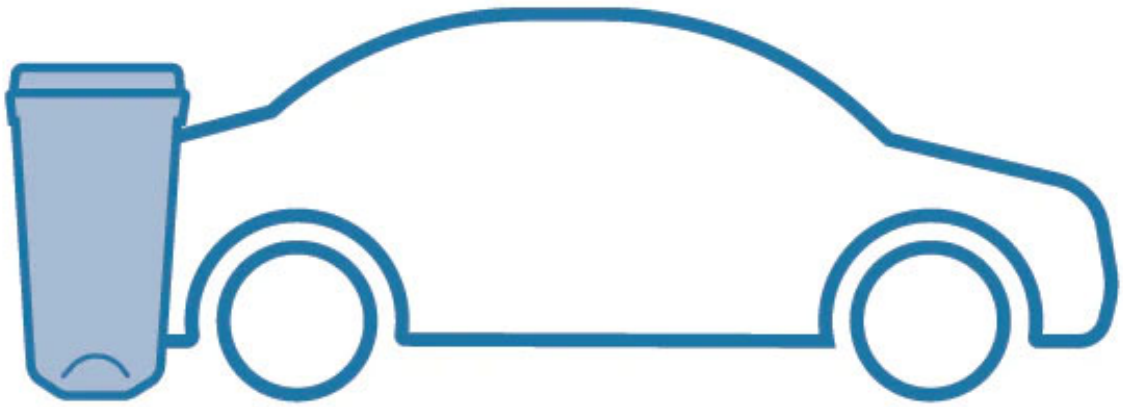
Click here to check out our YouTube page for more ways to use your rain barrel.

Sold out

How It Works

Place your order online

Mark the pickup date in your calendar



Pick up your items at the distribution event

Set up and treat your plants

How to Install Your Ivy Rain Barrel

Rain Water Solutions - How to Install Your Ivy Rain Barrel


Ivy


Certified
B
Corporation

Contact Us

PHONE:
919.835.1699

STORE HOURS:
Call ahead for hours and

product availability

MAILING ADDRESS:
Rain Water Solutions
5809 Trinity Road
Raleigh, NC 27607

Info

About Us
Municipalities
Nonprofits
Success Stories
Shop Rain Barrels
FAQs
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email@example.com

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