



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 1:30 p.m. on
Tuesday, January 7, 2020.

AGENDA

1. Approve Minutes of December 3, 2019 Meeting.
2. Director's Report on Utility Operations
 - Letter drafted to EPA and WDNR.
 - Hydro Corp Cross Connection Compliance Services
 - LSL funding update.
 - Proposed revised lead and copper rule by the EPA
 - Running water calls.
 - Wastewater on track to meet permit limits.
 - Siphon line from Memorial Park to the Wastewater Plant.
 - South primary digester cover project update.
 - SCADA issues.
 - WDNR extension request for the Wastewater Facility Plans.
 - Upcoming meeting with Donohue to review plant upgrade.
 - Ken Rye retirement.
 - Record Review article regarding Leachate.
3. Discussion and Possible Action on Approving the Method for Procurement Related to Programming/Integration at the WWTF & DWTF.

Adjourn.

Signed by: /s/ Robert B. Mielke
Presiding Officer or Designee

** Next Water Commission Meeting Scheduled for February 4, 2020.*

THIS NOTICE POSTED AT CITY HALL AND EMAILED TO CITY PAGES AND DAILY HERALD: January 3, 2020 at 12:00pm.

In accordance with the requirements of Title II of the Americans with Disabilities Act (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 Michelle Weasler/Wausau Water Works at (715) 261-7289 or the City's ADA Coordinator at (715) 261-6620 or e-mail clerk@ci.wausau.wi.us at least 48 hours prior to the scheduled meeting or event to request an accommodation.



Minutes of December 3, 2019

A meeting of the Wausau Water Works Commission was called to order at 1:30 p.m. in City Hall on December 3, 2019. In compliance with Wisconsin Statutes, this meeting was posted and receipted for by the Wausau Daily Herald on November 27, 2019.

Members present: President Mielke, Commissioners Force, Gehin, Miller, Herbst.

Others present: Eric Lindman, Dave Erickson, Scott Boers, Valerie Swanborg, Steve Opatik/Becher Hoppe, Tonia Westphal/Clark Dietz, Mike Gerbitz/Donohue.

1) Approve Minutes of the November 5, 2019 Meeting.

Miller moved to approve the minutes of the November 5, 2019 meeting. Seconded by Gehin and the motion carried 5-0.

2) Director's Report on Utility Operations.

Force asked what the conclusion was with Bluestem Energy. Lindman responded that the city entered into a contract with Bluestem at no cost to us for them to evaluate our systems. They looked at the meters throughout the city and there wasn't anything that they felt was going to have a decent payback or would work economically. Force asked for clarification, does that mean operating our meters on solar? Lindman advised it would include our electric meters and the energy consumption at our significant facilities, Water and Wastewater would be the biggest users. What they normally do is build the infrastructure and then sell us the energy at a reduced cost but the capital costs it would take for them to build it would require a long term payback. In that type of scenario nothing really worked for the City of Wausau. This is the 3rd company that we've had look at this. We've asked them to go back and reevaluate if the city just built it, owned it and generated supplemental power. Without any incentives, it came out to be about a \$500,000.00 cost at a 14-16 year payback. Lindman advised at some point we need to make a decision whether we move forward. They are setting up another meeting with Northwinds Solar which is more local, they did meet with them about a year and a half ago.

Mielke added that this is something they've been pushing over the past few years as far as renewable energy. Unfortunately a lot of our infrastructure is older so it can't support it. There needs to be a return on investment but we'll keep trying and see what happens with other projects coming up.

Gehin asked about Focus on Energy and if there will be any incentives associated with that. Lindman advised they did meet with them and they are going to send us what those rebates will be going into 2020. Mielke added that some of the incentives available now may not be available in 2020.

Gehin inquired on the pumping of the water into the system and being down 2-3 million gallons. What is it at right now? Boers advised we are running just over 4 million a day during the week and dropping down to 2-3 ½ on the weekends. We ended up with a 3.6 average for the month and that is average for this time of year.

Director's Report placed on file.

3) Request Approval of Two Year Extension for Cross Connection Inspection Services from Hydro Corp.

Lindman advised this would be our 3rd renewal of this contract with Hydro Corp. for the cross connection control program.

Boer's added that we can't do what they do for us at the cost they charge. We're looking at a little over a \$4 per inspection increase going into the next contract. The estimates running rough numbers were about \$136,000.00 for us to do the same thing that they do for us. That would also require us to hire 2 more people.

Gehin mentioned that the \$94,464.00 cost is for 2 years. Boers confirmed that is correct. Gehin asked if we have record of issues they've found through their inspections. Boers advised we do have record of that. They have their own software which is on the internet for us and we can look up any account. They send us notifications of anyone that is out of compliance and how many inspections they've had. They send out the letters and do the follow up inspections.

Gehin requested a summary of their actual activity to be included in a future director's report. Boers confirmed he can do that.

Force wanted to clarify the cost for us to do it. Boers advised it would cost us another 50% annually for us to do it ourselves. Force asked if the \$94,464.00 is already in the budget. Boers confirmed it is budgeted.

Motion by Force to approve the contract. Seconded by Herbst. Motion carried 5-0.

4) Discussion and Possible Action on Repealing Section 2.60.100 Water commission, amending Sections 2.60.110 Sewerage commission, 3.24.090 Determination of assessment cost for sanitary sewer, lift station, water main construction and booster stations, and amending numerous sections in Title 13 beginning with Section 13.04.010 Created through Section 13.64.020 Basis for charges.

Lindman advised this is a portion of the ordinance that governs our costs, assessments and numerous other things. This hasn't been updated for a significant number of years. We initially went in to update some of the charges but after getting into it the needed changes seemed pervasive and there were some discrepancies throughout the document. This was updated with the PSC tariffs and the attorney's office assisted me to determine who is responsible for what, as well as certain clarifications that needed to be updated to meet the PSC requirements and other sections of the code.

Force advised he sees numerous references as to a change in the cost of reconnection. It goes from \$3.00 in the old document to \$60.00 in the new document. Beyond that, are there any significant financial changes that are in the revised ordinance? Lindman advised not financial. Our pretreatment program is governed under this as well so we had to change those with our rate increase that the commission approved. Some of the changes were titles such as superintendent rather than supervisor, language cleanup, clarifications on any damage to the system and emergency discontinuance. Force responded, so this brings the document in line with what we are currently doing. Lindman advised that is correct.

Gehin said it can be easy to forget to update the ordinance, would it make sense to do it by reference? Lindman said they talked about that and thought about just putting it in the fee schedule so we look at it every year but not all of these costs are referenced in the PSC. This is

the way they've elected to do it.

Motion by Gehin to adopt these changes. Seconded by Miller. Motion carried 5-0.

5) Discussion and Possible Action Implementing an Annual Tool Allowance for the Wastewater Plant Mechanics and the Water Treatment Plant Technicians.

Lindman advised this past spring we implemented an annual tool allowance for our motor pool staff. They maintain their own tool boxes and their tools. If they break or wear out, they are responsible for purchasing their own. We came up with a \$500 annual tool allowance. At that time, he was not aware that the plant mechanics and technicians owned and used their own tools as well. They should have been included in this. We would propose to add the sewer plant mechanics and water plant technicians to the language in the handbook.

Motion by Gehin to adopt the allowance for the utility mechanics and technicians. Seconded by Herbst. Motion carried 5-0.

Force asked if this is common practice. Lindman advised it can go either way. There are some municipalities that purchase all of the tools but some mechanics prefer to use their own tools.

6) Discussion and Possible Action on Approving an Amended Engineering Agreement with Becher Hoppe & Associates for Providing Construction Representative Services of the DWTF Relocation.

Gehin removed himself from the meeting for Agenda items 6 and 7 and refrained from voting.

Force asked whether this is budgeted or if these are additional funds that will be spent. Lindman responded that these are budgeted within the project cost estimates. Force asked if we would anticipate additional services. Lindman advised he did have a conversation with Donohue and in the agreements, if there were time extensions or other things and how that is addressed. From the utilities standpoint, the expectation is that there would be no additional professional services costs for that. His understanding is that this will be the costs through construction unless there is an extensive scope change.

Motion by Miller to approve the amendment. Seconded by Force. Motion carried 4-0.

7) Discussion and Possible Action on Approving an Amended Engineering Agreement with Donohue & Associates for Providing Construction Representative Services of the WWTF Upgrade.

Lindman advised this would be similar to Agenda item #6 except for the wastewater plant.

Force asked for clarification once again that we would not anticipate any additional costs unless there were exceptional circumstances. Lindman advised that is correct.

Motion by Force to approve the amendment. Seconded by Herbst. Motion carried 4-0.

Gehin returned to the meeting.

8) Discussion and Possible Action on Pursuing an Option to Discontinue Using Well 3 for Supplying the New DWTF.

Lindman advised he prepared a memo and broke this out into 2 different agenda items. The memo he prepared is under Agenda item #9 but is related to both of these. Well #3 is part of the Superfund Site to remove the VOC's from the groundwater. We strip that water to remove

those before it is treated. One of the ideas that was brought up to the EPA was to discontinue using this well however, shutting it down is probably not an option at this point. They did seem open to considering not using it at the treatment plant but still stripping it and discharging it to storm water. We would have to make a formal request from the city so we wouldn't have to bring that water across the river to the new treatment plant. Part of this would be to amend or change the consent order if the EPA determines that would be required.

Force asked what the water volume is out of that well compared to our overall use. Boers responded it's about 1400 gallons a minute when it's at full operation. Right now it's running at about 1265-1290. It's hard to say what percentage that is of our usage because we're under orders to run well 3 continuously each Friday, Saturday and Sunday. As part of the Superfund Site, well 3 and 6 are to be run a specific number of gallons per year to get the ground water removed. Force asked what it costs for the air stripping. Boers explained that would just be the cost of power for the fan. Right now, Marathon Electric and Wausau Chemical pick up those costs for stripping that water that runs through the towers.

Force added that if we are just going to strip that water and put it down the storm drain, it must not be a significant factor, we don't need it. Boers explained that with the new water plant, across the river there is 24" water line that serves all of the wells that don't have VOC's in them. The other is an 18" concrete water line from the late 1950's. To run the water back to the plant or run the finished water from the new plant to where the plant site is now, we wanted to use that 24" line to run finished water through it. That line is just over \$3 million if we were going to replace it. So the idea is to keep that line in service to run finished water. We could run well 3 water back using the concrete line but it is old and reaching the end of its useful life. Well 3 is insulated with asbestos, the auxiliary motor is old, the original motor is also from the 1950's-1960's, the pump has been updated couple of times but is still original, it has a French drain which is no longer legal and there's no storm drain to tie it into or run water to waste. There are a lot of concerns with this well.

Gehin added that he knows in the consent decree the city was identified as a potential responsible party but he doesn't understand why, he feels we were just part of the solution. We did need wells 3 and 6 at that time but at this point, we certainly don't need well 3. To run it back across the river, we'd have to change the motor and bowl assembly.

Boers added that well 3 has the worst water quality with the highest iron and manganese and is the most expensive water to treat.

Opatik explained that the main points have been captured. His understanding as to why well 3 is in the consent decree and needs to run a large portion of each week is that if you draw a line between wells 3 & 6, it is a rough delineation between where the majority of the contamination is and the city's primary well field to the north. Those 2 wells are running to prevent anything from running north and protecting the water supply wells. That is the benefit of running it. They are in agreement that it is difficult water to treat and will need to do a complete redo of the well house and controls if we do keep it as a water supply well.

Gehin expressed that he thinks we should formulate a letter in our best interests.

Motion by Gehin to pursue discontinuing use of well 3 and formulating a letter to the EPA. Seconded by Herbst. Motion carried 5-0.

Force questioned the last sentence of the memo included in the packet. "This would be the initial step, discharging the water to the storm sewer, and we would continue to move toward eventually shutting down this well". Is that the language that will be contained in the letter to the EPA? Lindman explained that we would work with GHD (environmental consultant), but the idea is to explain what our ultimate goal is. Eventually we would like to shut this well down and abandon it.

9) Discussion and Possible Action on Preparing a Letter to the EPA Requesting a Possible Change to the Consent Order for Well #3.

This item has been discussed under Agenda item #8.

Motion by Force to approve. Seconded by Gehin. Motion carried 5-0.

10) Discussion and Possible Action Regarding Accepting Leachate from the Marathon County Landfill at the Wausau Wastewater Treatment Facility.

Erickson explained that Marathon County is looking for alternative places where they can take the leachate from their landfill. We've agreed in the past that they could bring it to our wastewater plant but they had worked out a better deal with the paper mill. They are looking to discontinue doing that. They need to add another cell to their landfill so they need additional sites approved to take the leachate and the paper mill doesn't want the leachate anymore. The wastewater plant took a number of loads in spring and it didn't seem to cause any significant problems but there are concerns. If we end up having problems and can't work those out they'll need to find another place for the leachate. He included a spreadsheet in the packet with the charges based on municipal code chapter 13 but there are numbers missing and they still need to provide those, such as how much phosphorus, aluminum and other heavy metals. They're looking at meeting in December, hopefully have that data and come to an agreement.

Force asked if this is corrosive and what it would do to our phosphorus emissions. Erickson responded that some with high PH could be corrosive. Phosphorus is a number he's concerned about but he doesn't have a number yet. We charge for Phosphorus so they'd be paying us for it. With our new treatment plant we shouldn't have a problem handling it but there may be extra costs and we have to evaluate that.

Motion by Force with approval to continue negotiating with the county and bring a more thorough report with additional details to the next meeting. Seconded by Gehin. Motion carried 5-0.

Miller stated that he attended the informational meeting on November 20th and wanted to offer commendation and thanks to Lindman and the presenters. They did an amazing job of bringing the community up to speed on what is happening with the 2 projects. He got the feeling that a lot of information was given, received and accepted. The city has provided open and honest communication throughout this entire process.

Force had a question about recent information from Lindman regarding rates. Are we going to go over that at a future meeting? There were numbers that caught his attention based on the amount of revenue/usage and what the residents are paying vs. commercial enterprises, public utilities, etc. He sees some issues there that he would like to see addressed. Lindman advised he will need to work with some rate experts. Force would like to see that on a future agenda.

Gehin advised that the water rates are set by the PSC and they do a thorough analysis of the rate structure. He would think if something were amiss, they would address that. This would be a good point to raise with them. Lindman advised he will raise these concerns with Ehlers and see what questions we need to ask.

Force asked Boers if we could get numbers at a future meeting on funds spent and still available to remediate lead line replacements and how many we've remediated to date. Boers confirmed he will do that.

11) Adjourn.

There being no further business to discuss, motion was made by Herbst to adjourn the meeting. Seconded by Gehin. Motion carried 5-0.



January 3, 2020

MEMORANDUM

TO: President Mielke
Commissioner Herbst
Commissioner Force
Commissioner Gehin
Commissioner Miller

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

SUBJECT: Director's Report – December 2019

DRINKING WATER DIVISION

1. A letter requesting guidance and assistance from the United States Environmental Protection Agency and Wisconsin Department of Natural Resources to get approval for a modification of the Record of Decision has been drafted and submitted to those agencies.
2. Hydro Corp performs cross connection compliance services as it relates to all of our non-residential accounts. All communications, inspections, documentation and reporting is included within the scope of services. The executive summary from their services proposal is attached.
3. Private Side Lead Line Funding Update, please see attached spreadsheet.
4. Proposed Revised Lead and Copper Rule by the USEPA is now posted on the Federal Register and open for comment until January 13th. The new rule will have many implications for the utility. Please see the attached table which compares the current requirements of the LCR and the proposed changes to the Revised LCR.
5. Since November 23rd, staff has repaired 9 water main breaks and 1 utility side service leak. Due to the warmer than normal temperatures and precipitation, they've also responded to 12 water running complaints which have all turned out to be ground water.

WASTEWATER DIVISION

1. The Wastewater plant is on track to meet permit limits for December.
2. The sewer interceptor line under Contract 4 for the siphon replacement project is in place and the new siphon from Memorial Park to the plant was put into service on December 26th. We are coordinating the removal of some tree branches and the power installation for the flow monitoring station with WPS. The final grading and paving will be completed next spring.
3. The south primary digester cover project is essentially complete, we have filled it with sludge, and we are bringing it up to temperature. We need to update our SCADA system to finalize the operational controls.
4. The County Highway O lift station is operating. We are still resolving the communication and SCADA issues.
5. The WDNR requested a 30 day extension for review of the Wastewater Facility Plans, which we approved.
6. We have scheduled a meeting with Donohue for January 7th to review miscellaneous details regarding the plant upgrade project.
7. Ken Rye turned in his notice for retirement and his last day will be March 2, 2020. Ken has done a great job of managing the sewer collection system and will be sorely missed.
8. The attached Record Review article from December 11, 2019 provides background information on the Marathon County Landfill issues with leachate disposal



January 2, 2020

Reference No. 003978

Sheri Bianchin
Remedial Project Manager
EPA Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3590

Matt Thompson
Hydrogeologist
Wisconsin Department of Natural Resources
1300 W. Clairemont Avenue
Eau Claire, Wisconsin 54701

Dear Ms. Bianchin and Mr. Thompson:

**Re: City of Wausau New Drinking Water Treatment Facility
and Changes to the Treatment of City Well CW-3
Wausau Water Supply NPL Site
Wausau, Wisconsin**

As presented to you during the Site inspection on October 29, 2019, the City of Wausau (City) is building a new Drinking Water Treatment Facility (DWTF) on the west side of the Wisconsin River. City water supply well CW-3 is the only City well on the east side of the river and it will no longer be practical to operate it for water supply. Since CW-3 is a component of the remedy for the Wausau Water Supply National Priorities List (NPL) Site, the City is requesting guidance and assistance from the United States Environmental Protection Agency (EPA) and Wisconsin Department of Natural Resources (DNR) to get approval for a modification of the Record of Decision (ROD). The City is proposing to continue remedial operation of CW-3 and discharge to the Wisconsin River via the storm sewer. Given the very low concentrations of Site contaminants in the CW-3 influent, continued treatment, via air stripping, is not needed.

Additional background information, current CW-3 data, proposed future operation of CW-3, and the City's schedule for completion of the new DWTF are presented below.

1. Background

In 2017 the DNR issued a mandate requiring the City to address several deficiencies at their DWTF by December 31, 2022. Most notably the City must relocate the clearwell, the tank that holds treated water, above the water table.

The costs for addressing the mandated deficiencies are substantial. Thus, the City completed a planning process to consider what other improvements should be made and to explore potential alternatives. Given the age of the current DWTF, it became apparent that the costs to rehabilitate the entire facility would be very large, prompting the City to seriously consider the alternative of relocating the DWTF. Relocation of the DWTF has the additional benefits of moving the water treatment facility away from the riverbank (the plant is currently located in the Wisconsin River 500-year floodplain) and nearby riverbank recreational improvements (River Front Development).

In early 2019 the City Council voted to relocate the DWTF to a parcel of property approximately 1 mile north of the existing DWTF and on the west side of the river. The new facility will be located very close to most of the West Bank Wellfield water supply wells. Design is underway and construction of the new



facility is scheduled to start in 2020. Figure 1 presents the locations of the City supply wells, existing DWTF, and the new DWTF.

Well CW-3 will be isolated from the rest of the well field and the new DWTF. CW-3 is approximately 58 years old, with most equipment original to the installation, and is among the most difficult to maintain. Thus, in order to remain a viable drinking water supply well, it would require very extensive renovations and modifications. The City does not need CW-3 to meet its water supply capacity requirements and the raw water supplied is among the most challenging to treat due to naturally occurring iron, manganese, and organic carbon.

The recommended pumping rate for CW3 was established in an August 4, 1995 letter from EPA. In accordance with the letter, pumping of CW3 was to be maintained between 65 hours per week at 1,200 gallons per minute (gpm) to 100 hours per week at 1,100 gpm. This equates to a minimum of 4,680,000 gallons per week.

2. CW-3 Data Evaluation

CW-3 is approximately 1,000 feet northeast of the principal contaminant source area on the East Bank (former Wausau Chemical Corporation at 2001 N. River Drive). The contaminants of concern on the East Bank portion of the NPL Site are chlorinated volatile organic compounds (VOCs), specifically, tetrachloroethene (PCE) and its degradation products – trichloroethene (TCE), cis-1,2-dichloroethene (c12DCE), and vinyl chloride (VC). The Site cleanup criteria for these VOCs are the EPA and DNR drinking water criteria listed below:

- Tetrachloroethene 5 µg/L
- Trichloroethene 5 µg/L
- cis-1,2-Dichloroethene 70 µg/L
- Vinyl chloride 0.2 µg/L

When operating, CW-3 pumps at a rate of approximately 1,250 gpm, creating a large zone of capture in the alluvial aquifer on the east side of the river that captures and removes the East Bank contaminant plume. CW-3 influent samples for VOC analysis have been collected at least annually as part of the Site's long-term monitoring program since 1993. Figure 2 shows the VOC concentrations at CW-3 since 1998. As indicated by the chart, VOC concentrations have decreased to very low levels and vinyl chloride has not been detected since 2010. In the most recent, 2019, sampling event, no individual VOC exceeded 1.0 µg/L. TCE has not exceeded its cleanup criteria since 1999, and neither PCE nor c12DCE exceeded their respective cleanup criteria over the last 20 years.

In 2009, source area groundwater concentrations at monitoring well WC-3B spiked temporarily to over 1,000 µg/L of PCE due to construction and increased infiltration of precipitation at the property. However, this did not significantly affect the influent concentrations at CW-3, as there was only a minor increase in PCE concentrations at CW-3 over the following two to three years (increased from 2.0 µg/L in 2009 to



2.5 µg/L in 2012— see Figure 2).¹ Thus, although small “hot spots” may remain in the source area, the remaining contaminant mass is small and potential future source area spikes would not cause significant increases in the CW-3 influent.

3. Proposed Future Operation of CW-3

Given the fact that the CW-3 influent VOC concentrations do not exceed drinking water standards, continued treatment of the water is not necessary. After the new DWTF becomes operational in 2022, the current DWTF will no longer be available to treat the water from CW-3 and the City will discontinue the use of CW-3 for water supply purposes. Thus, in order to continue using CW-3 as a remediation well, the City is proposing to discharge the pumped water to the storm sewer, which would subsequently discharge to the Wisconsin River. The pumping rate will be maintained to meet the EPA-recommended volume of 4,680,000 gallons per week. The enclosed figure, provided by the City, shows the force main from CW-3 to the proposed sewer tie-in and river discharge points. It is anticipated that the discharge to the river will have to meet the substantive requirements of a Wisconsin Pollution Discharge Elimination System (WPDES) general permit.

This proposed change remains protective of human health and the environment and continues to meet Applicable or Relevant and Appropriate Requirements (ARARs). As required by the ROD, CW-3 would continue to operate as a component of the approved remedy. Since this is not a fundamental change to the remedy, it is our opinion that this modification to the ROD can be administered through an Explanation of Significant Differences (ESD).

4. Schedule

In order to provide some flexibility in the construction schedule, the City is hoping that an approved ESD can be completed as soon as possible, or by the end of 2020 at the latest. Thus, the City intends to initiate the ESD approval process immediately, with guidance and assistance from the EPA and DNR. We will be contacting you to schedule a conference call to answer any initial questions and begin the approval process.

We appreciate your prompt attention to this matter and look forward to working with you to complete this project.

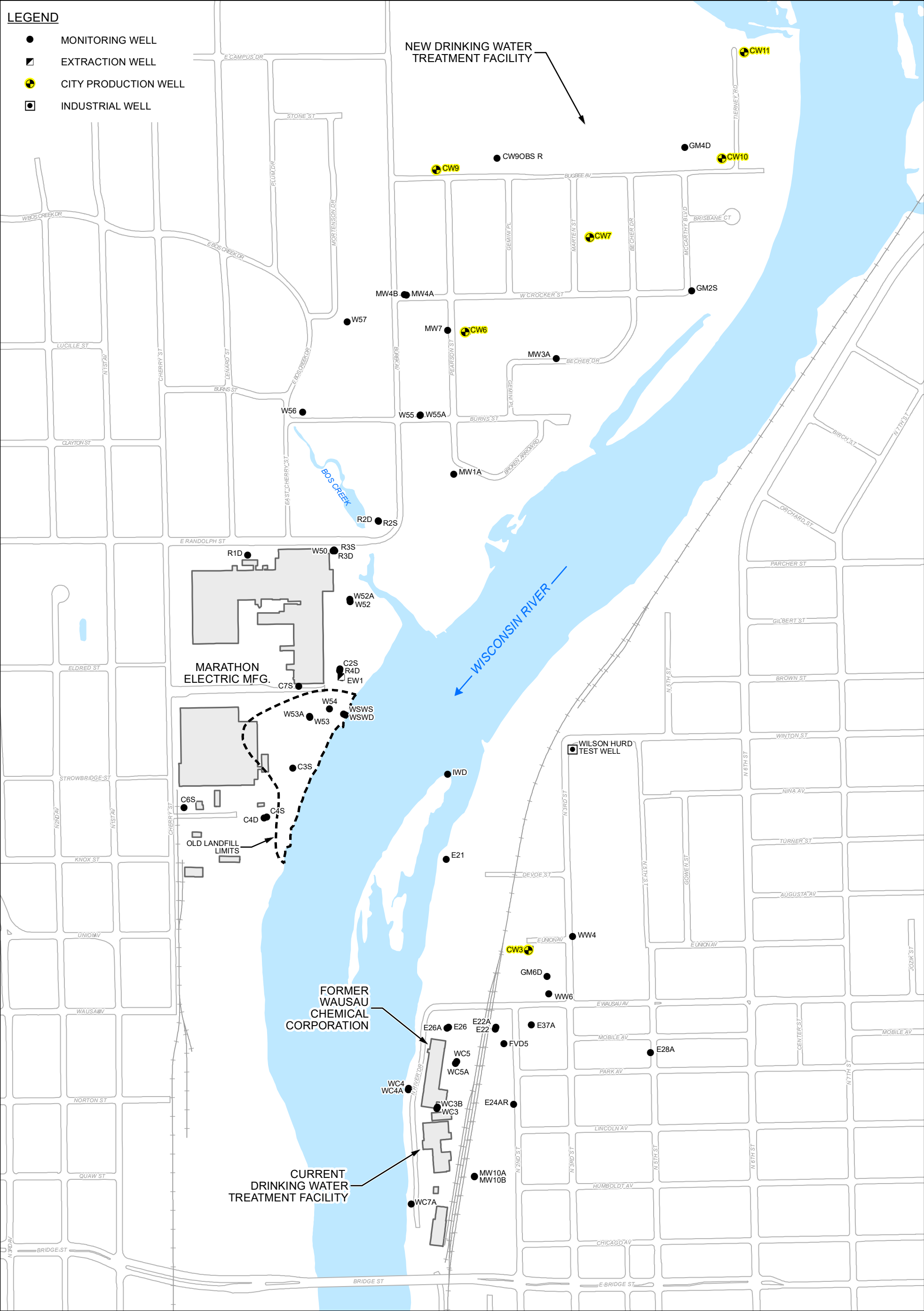
If you have any questions, please contact me at (651) 639-0913.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles Ahrens".

Charles Ahrens
CA/sb/40
Encl.

¹ The groundwater travel time from the source area to CW-3 is estimated to be 1.5 to 2 years.



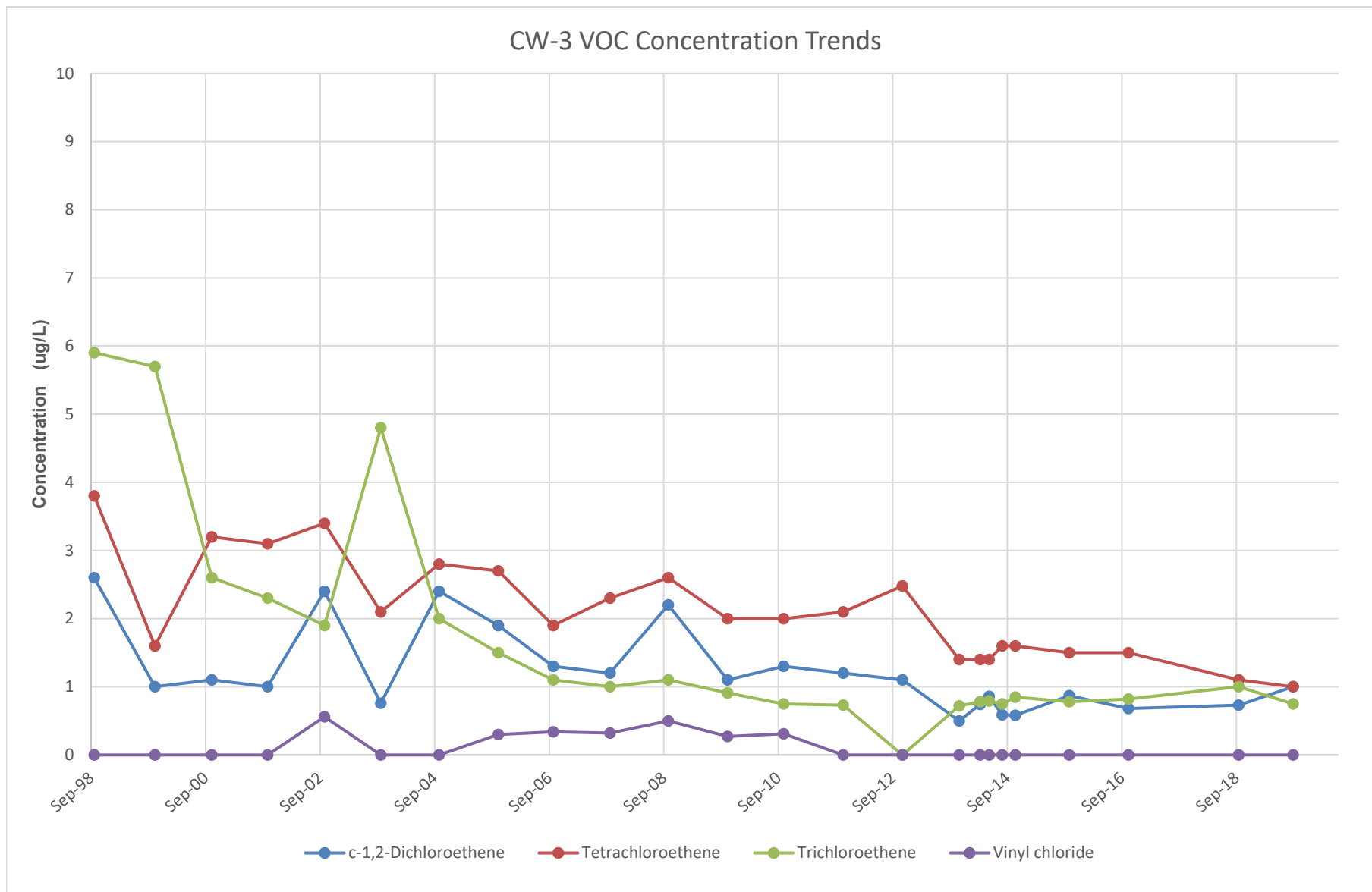
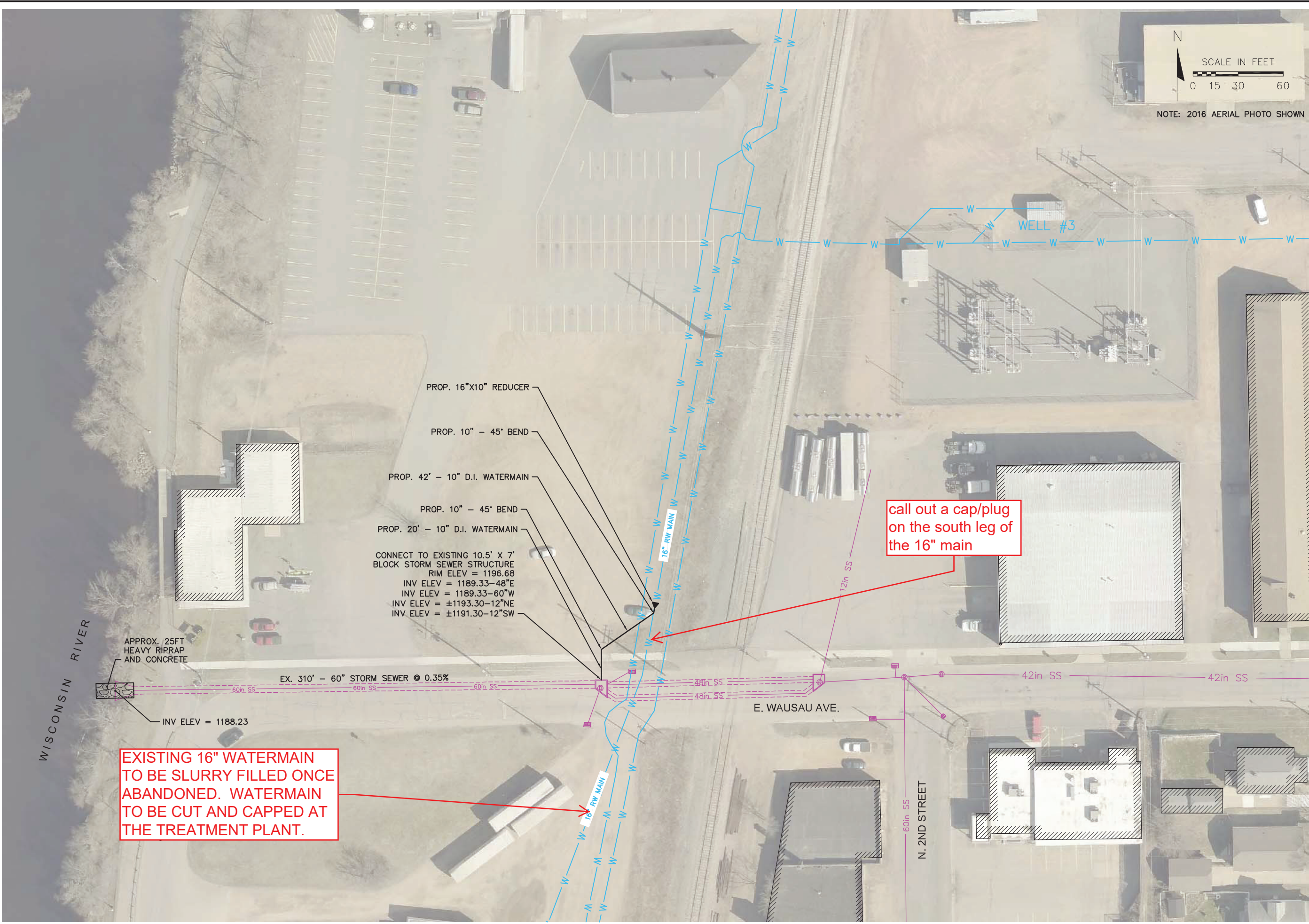


FIGURE 2

CITY WATER SUPPLY WELL CW-3 VOC CONCENTRATION TREND

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

DWG FILE NAME: O:\Engineering\Josh\WellNo3_StormwaterDischarge\WellNo3_StormwaterDischarge.dwg, 12/30/2019 8:00:25 AM, City of Wausau - Engineering Department, Plotted by: J.D. VanBoxel



CITY OF WAUSAU Engineering Department 407 GRANT STREET WAUSAU, WI 54403-4783 (715) 261-6740 FAX (715) 261-6759	
E. WAUSAU AVENUE N. 2ND ST RR TRACKS TO WISCONSIN RIVER WELL NO.3 STORMWATER CONNECTION PLAN	
SHEET NO. 1	
OF 1 SHEETS	
FILE NUMBER	
19-12-20	
ISSUED FOR	REVISIONS
PRELIMINARY	J.D.VANBOXEL
REVIEW/APPROVAL	
BIDDING/CONST.	
REC. REF. DWG.	
OFFICE USE	
DATE	12/20/2019
SURVEYED BY: ENG. DEPT.	FIELD BOOK NO. PG.
DESIGNED BY: T.J.NIKSICH	
DRAWN BY: J.D.VANBOXEL	
APPROVED BY: ERIC LINDMAN	
POINT FILE:	



5. EXECUTIVE SUMMARY, PROJECT FEES/COST

Based on your current program, HydroCorp™ will provide the following services to the **City of Wausau**. This project is a continued effort for an ongoing Cross-Connection Control Program and will provide the **City of Wausau** with the necessary data and information to maintain compliance with the Wisconsin Department of Natural Resources (DNR) Water Bureau Cross Connection Control Regulations. Once this project has been approved and accepted by the **City of Wausau** and HydroCorp, you may expect completion of the following elements within a two (2) year period. The components of the project include:

- A. Perform inspections of up to 808 Non-Residential water services within the City served by the public water supply for cross-connections. Compliance follow up visits shall be completed by HydroCorp and are included in the total inspections.
- B. Inspections will be conducted in accordance with the DNR Water Bureau Cross Connection Control regulations. Inspectors will survey exposed piping and utilize Isolation/Point of Use inventory method of surveying as supported by the State of Wisconsin Plumbing Code – SPS 382.41.
- C. HydroCorp will document existing backflow prevention devices and assemblies and verify proper installation and/or suggest corrective actions if devices and/or assemblies need to be installed to prevent cross-connections. Documentation to include make, model, size, manufacturer, serial number, location and regulated object number if applicable. In lieu of surveying residential kitchens and bathrooms, an educational brochure will be provided as allowed by DNR regulation NR 810.15.
- D. Notify each building owner prior to each inspection via postal letter with opportunity to schedule a specific time of inspection via the Hydro Designs Inc. Provide ongoing support for water customer scheduling and questions via the Hydro Designs Inc. WI office toll free 800# phone line, fax, or email.
- E. Provide Water Utility and building owner with a detailed corrective action report for each non-compliant facility, in most cases, water utility personnel can perform effective follow up compliance inspections.
- F. Perform administrative functions including: answering water user telephone calls, scheduling of inspections, mailing of all notices, verification of corrective action(s) requirements, and general customer service and program education inquiries by an individual trained in Cross-Connection Control Program Management.
- G. Generate and document the required program data and compliance status using proprietary Software Data Management Program. Submit comprehensive management reports on a quarterly basis and prepare the State of Wisconsin, DNR Water Bureau Annual Cross Connection Control Program Activity Report.
- H. Conduct an annual review meeting to discuss overall program status and recommendations.
- I. Assist the City with a community wide public relations program including general awareness brochures and web site cross connection control program overview content and resources.
- J. Provide ongoing support via phone, fax, internet, text or email.

RESIDENTIAL LSL PROGRAM TOTALS

2017	Eligible	Replaced	
LSL Grant			\$300,000.00 Loan Balance
2nd St	9	7	\$17,696.00
Washington St	23	14	\$37,263.00
Thomas St	8	4	\$11,607.00
Leaks & Renewals	12	6	\$18,000.00
	52	31	\$84,566.00 Total Spent
2018	Eligible	Replaced	\$215,434.00 Loan Balance
Callon St	13	3	\$9,000.00
Pardee St	2	1	\$3,000.00
Roosevelt St	61	39	\$107,091.00
Leaks & Renewals	18	10	\$30,000.00
	94	53	\$149,091.00 Total Spent
2019			\$66,343.00 Loan Balance
LSL Grant	Eligible	Replaced	\$300,000.00
Thomas St	12	4	\$9,000.00
Town Line	43	12	\$34,790.00
1st Ave	48	10	\$29,527.00 2 that could be submitted yet
S 7th Ave	1	1	\$3,000.00
Sturgeon Eddy	6	1	\$2,989.50
Leaks & Renewals	23	10	\$29,250.00
	133	38	\$108,556.50 Total Spent
2020	Eligible	Replaced	\$257,786.50 Loan Balance
Sturgeon Eddy	6	3	\$9,000.00 already approved waiting for spring
Cedar St	49	49	\$147,000.00 Letters mailed 11/8/19
Kickbusch St	48	48	\$144,000.00 Letters mailed 11/8/19
Leaks & Renewals	10	10	\$30,000.00 Estimate # based on past years
	113	110	\$330,000.00 Estimated Total Spent
			-\$72,213.50 Loan Balance

quality declines; enhanced water quality parameter WQP) monitoring; establishment of a “find-and-fix” provision to evaluate and remediate elevated lead at a site where the individual tap sample exceeds the lead action level requiring water systems to create an LSL inventory to ensure tap sampling pools are targeted to the sites with elevated lead, and making consumers aware of the presence of a LSL, if applicable, and to facilitate replacement of LSLs. The LCR proposed revisions are expected to improve tap sampling by better targeting higher risk sites for lead contamination, *i.e.*, sites

with lead service lines or lead containing plumbing materials and improving the sampling protocol. The EPA also proposes revisions to the LCR PE and Consumer Confidence Report (CCR) requirements to improve communication with consumers. In addition, this proposal includes requirements for community water systems (CWSs) to conduct lead in drinking water testing and PE in schools and child care facilities.

Together, these proposed revisions to the framework and specific requirements of the current LCR would result in greater public health protection at all sizes CWSs and non-transient non-

community water systems (NTNCWSs). Implementation of the proposed revisions would better identify when and where lead contamination occurs, or has the potential to occur, and require systems to take actions to address it more effectively and sooner than required under the current rule.

The following table compares the major differences between the current Lead and Copper Rule (LCR) and proposed Lead and Copper Rule revisions (LCRR). In general, requirements that are unchanged are not listed. Comparison of current LCR and proposed LCR revisions (LCRR).

Current LCR	Proposed LCRR
Action Level (AL) and Trigger Level (TL)	
90th percentile (P90) level above lead AL of 15 µg/L or copper AL of 1.3 mg/L requires additional actions.	90th percentile (P90) level above lead AL of 15 µg/L or copper AL of 1.3 mg/L requires more actions than the current rule. - Defines trigger level (TL) of P90 >10 and ≤15 µg/L that triggers additional planning, monitoring, and treatment requirements.
Lead and Copper Tap Monitoring	
<i>Sample Site Selection:</i> - Prioritizes collection of samples from sites with sources of lead in contact with drinking water. - Highest priority given to sites served by copper pipes with lead solder installed after 1982 but before the State ban on lead pipes and/or lead service lines (LSLs). - Systems must collect 50% of samples from LSLs, if available. <i>Collection Procedure:</i> - Requires collection of a one liter sample after water has sat stagnant for a minimum of 6 hours. <i>Monitoring Frequency:</i> - Samples are analyzed for both lead and copper. - Systems must collect standard number of samples, based on population; semi-annually unless they qualify for reduced monitoring. - Systems can qualify for annual or triennial monitoring at reduced number of sites. Schedule based on number of consecutive years meeting the following criteria: - Serves ≤50,000 people and ≤ lead & copper ALs. - Serves any population size, meets State-specified optimal water quality parameters (OWQPs), and ≤ lead AL. - Triennial monitoring also applies to any system with lead and copper 90th percentile levels ≤0.005 mg/L and ≤0.65 mg/L, respectively, for 2 consecutive 6-month monitoring periods. 9-year monitoring waiver available to systems serving ≤3,300.	<i>Sample Site Selection:</i> - Changes priorities for collection of samples with a greater focus on lead service lines. - Prioritizes collecting samples from sites served by LSLs. - No distinction in prioritization of copper pipes with lead solder by installation date. - Systems must collect all samples from sites served by LSLs, if available. <i>Collection Procedure:</i> - Adds requirement that samples must be collected in wide-mouth bottles. - Prohibits sampling instructions that include recommendations for aerator cleaning/removal and pre-stagnation flushing prior to sample collection. <i>Monitoring Frequency:</i> - Some samples may be analyzed for lead only when lead monitoring is conducted more frequently than copper. - Copper follows the same criteria as the current rule. - Lead monitoring schedule is based on P90 level for all systems as follows: - P90 >15 µg/L: Semi-annually at the standard number of sites. - P90 >10 to 15 µg/L: Annually at the standard number of sites. - P90 ≤10 µg/L: - Annually and triennially at reduced number of sites using same criteria as current rule except copper 90th percentile level is not considered. - Every 9 years based on current rule requirements for a 9-year monitoring waiver.
Corrosion Control Treatment (CCT) and Water Quality Parameters (WQPs)	
<i>CCT:</i> - Systems serving >50,000 people were required to install treatment by January 1, 1997 with limited exception. - Systems serving ≤50,000 that exceed lead and/or copper AL are subject to CCT requirements (<i>e.g.</i>, CCT recommendation, study if required by Primacy Agency, CCT installation). They can discontinue CCT steps if no longer exceed both ALs for two consecutive 6-month monitoring periods. - Systems must operate CCT to meet any Primacy Agency-designated OWQPs that define optimal CCT. - There is no requirement for systems to re-optimize.	<i>CCT:</i> - Specifies CCT requirements for systems with P90 level >10 to ≤15 µg/L: <i>No CCT:</i> Must conduct a CCT study if required by Primacy Agency. <i>With CCT:</i> Must follow the steps for re-optimizing CCT, as specified in the rule. - Systems with P90 level >15 µg/L: <i>No CCT:</i> Must complete CCT installation regardless of their subsequent P90 levels. <i>With CCT:</i> Must re-optimize CCT.

Current LCR	Proposed LCRR
<i>CCT Options:</i> Includes alkalinity and pH adjustment, calcium hardness adjustment, and phosphate or silicate-based corrosion inhibitor. <i>Regulated WQPs:</i> • <i>No CCT:</i> pH, alkalinity, calcium, conductivity, temperature, orthophosphate (if phosphate-based inhibitor is used), silica (if silica-based inhibitor is used). • <i>With CCT:</i> pH, alkalinity, and based on type of CCT either orthophosphate, silica, or calcium. <i>WQP Monitoring:</i> • Systems serving $\geq 50,000$ people must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving $\leq 50,000$ people conduct monitoring only in those periods $>$ lead or copper AL. • Contains provisions to sample at reduced number of sites in distribution system less frequency for all systems meeting their OWQPs. <i>Sanitary Survey Review:</i> • Treatment must be reviewed during sanitary surveys; no specific requirement to assess CCT or WQPs. <i>Find and Fix:</i> No required follow-up samples or additional actions if an individual sample exceeds 15 $\mu\text{g/L}$.	• Community water systems (CWSs) serving $\leq 10,000$ people and non-transient water systems (NTNCWSs) can select an option other than CCT to address lead. <i>See Small System Flexibility.</i> <i>CCT Options:</i> Removes calcium hardness as an option and specifies any phosphate inhibitor must be orthophosphate. <i>Regulated WQPs:</i> • Eliminates WQPs related to calcium hardness (<i>i.e.</i>, calcium, conductivity, and temperature). <i>WQP Monitoring:</i> • Systems serving $\geq 50,000$ people must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving $\leq 50,000$ people must continue WQP monitoring until they no longer $>$ lead and/or copper AL for two consecutive 6-month monitoring periods. • To qualify for reduced WQP distribution monitoring, P90 must be $\leq 10 \mu\text{g/L}$ and the system must meet its OWQPs. <i>Sanitary Survey Review:</i> • CCT and WQP data must be reviewed during sanitary surveys against most recent CCT guidance issued by EPA. <i>Find and Fix:</i> If individual tap sample $> 15 \mu\text{g/L}$, systems must: • Collect a follow-up sample at each location $> 15 \mu\text{g/L}$. • Conduct WQP monitoring at or near the site $> 15 \mu\text{g/L}$. • Perform needed corrective action.
LSL Inventory and LSLR Plan	
<i>Initial LSL Program Activities:</i> • Systems were required to complete a materials evaluation by the time of initial sampling. No requirement to update materials evaluation. • No LSLR plan is required. <i>LSLR:</i> • Systems with LSLs with P90 $> 15 \mu\text{g/L}$ after CCT installation must annually replace $\geq 7\%$ of number of LSLs in their distribution system when the lead action level is first exceeded. • Systems must replace the LSL portion they own and offer to replace the private portion at the owner's expense. • Full LSLR, partial LSLR, and LSLs with lead sample results $\leq 15 \mu\text{g/L}$ ("test-outs") count toward the 7% replacement rate. • Systems can discontinue LSLR after 2 consecutive 6-month monitoring periods $\leq$ lead AL. <i>LSL-Related Outreach:</i> • When water system plans to replace the portion it owns, it must offer to replace customer-owned portion at owner's expense. • If system replaces its portion only: ○ Provide notification to affected residences within 45 days prior to replacement on possible elevated short-term lead levels and measures to minimize exposure. ○ Include offer to collect lead tap sample within 72 hours of replacement. ○ Provide test results within 3 business days after receiving results.	<i>Initial LSL Program Activities:</i> • All systems must develop an LSL inventory or demonstrate absence of LSLs within first 3 years of final rule publication. • LSL inventory must be updated annually. • All systems with known or possible LSLs must develop an LSLR plan. <i>LSLR:</i> • Rule specifies replacement programs based on P90 level for CWSs serving $> 10,000$ people: ○ If P90 $> 15 \mu\text{g/L}$: Must fully replace 3% of LSLs per year (mandatory replacement) for 4 consecutive 6-month monitoring periods. ○ If P90 > 10 to $15 \mu\text{g/L}$: Implement an LSLR program with replacement goals in consultation with the Primacy Agency for 2 consecutive 1-year monitoring periods. • Small CWSs and NTNCWSs that select LSLR as their compliance option must complete LSLR within 15 years if P90 $> 15 \mu\text{g/L}$. <i>See Small System Flexibility.</i> • Annual LSLR rate is based on number of LSLs when the system first exceeds the action level plus the current number of service lines of unknown materials. • Only full LSLR (both customer-owned and system-owned portion) count toward mandatory rate or goal-based rate. • All systems must replace their portion of an LSL if notified by consumer of private side replacement within 3 months of the private replacement. • Following each LSLR, systems must: ○ Provide pitcher filters/cartridges to each customer for 3 months after replacement. Must be provided within 24 hours for full and partial LSLRs. ○ Collect a lead tap sample at locations served by replaced line within 3 to 6 months after replacement. <i>LSL-Related Outreach:</i> • Inform consumers annually that they are served by LSL or service line of unknown material. • Systems subject to goal-based program must: ○ Conduct targeted outreach that encourages consumers with LSLs to participate in the LSLR program. ○ Conduct an additional outreach activity if they fail to meet their goal. • Systems subject to mandatory LSLR include information on LSLR program in public education (PE) materials that are provided in response to P90 $>$ AL.

Current LCR	Proposed LCRR
Small System Flexibility	
No provisions for systems to elect an alternative treatment approach but sets specific requirements for CCT and LSLR.	Allows CWSs serving $\leq 10,000$ people and all NTNCWSs with P90 > 10 $\mu\text{g/L}$ to elect their approach to address lead with Primacy Agency approval: • Systems can choose CCT, LSLR, or provision and maintenance of point-of-use devices. • NTNCWSs can also elect to replace all lead-bearing materials.
Public Education and Outreach	
• All CWSs must provide education material in the annual Consumer Confidence Report (CCR). • Systems with P90 $> \text{AL}$ must provide PE to customers about lead sources, health effects, measures to reduce lead exposure, and additional information sources • Systems must provide lead consumer notice to individuals served at tested taps within 30 days of learning results.	• CWSs must provide updated health effects language and information regarding LSLR program in the CCR. • If P90 $> \text{AL}$: ○ Current PE requirements apply. ○ Systems must notify customers of P90 $> \text{AL}$ within 24 hours. • In addition, CWSs must: ○ Improve public access to lead information including LSL locations and respond to requests for LSL information. ○ Deliver notice and educational materials to customers during water-related work that could disturb LSLs. ○ Provide increased information to healthcare providers. ○ Provide lead consumer notice to customers whose individual tap sample is > 15 $\mu\text{g/L}$ within 24 hours. • Also see <i>LSL-Related Outreach</i> in <i>LSLR</i> section of table.
Change in Source or Treatment	
Systems on a reduced tap monitoring schedule must obtain prior Primacy Agency approval before changing their source or treatment.	Systems on any tap monitoring schedule must obtain prior Primacy Agency approval before changing their source or treatment.
Source Water Monitoring and Treatment	
• Periodic source water monitoring is required for systems with: ○ Source water treatment; or ○ P90 $> \text{AL}$ and no source water treatment.	• Primacy Agencies can waive continued source water monitoring if the: ○ System has already conducted source water monitoring for a previous P90 $> \text{AL}$; ○ Primacy Agency has determined that source water treatment is not required; <i>and</i> ○ System has not added any new water sources.
Lead in Drinking Water at Schools and Child Care Facilities	
• Does not include separate testing and education program for CWSs at schools and child care facilities. • Schools and child cares that are classified as NTNCWSs must sample for lead and copper.	• CWSs must conduct lead in drinking water testing and PE at 20% of K–12 schools and licensed child cares in service area every year. • Sample results and PE must be provided to each sampled school/child care, Primacy Agency and local or State health department. • Excludes facilities built after January 1, 2014.
Primacy Agency Reporting	
Primacy Agencies must report information to EPA that includes but is not limited to: • All P90 levels for systems serving $> 3,300$ people, and only levels > 15 $\mu\text{g/L}$ for smaller systems. • Systems that are required to initiate LSLR and the date replacement must begin. • Systems for which optimal corrosion control treatment (OCCT) has been designated.	Expands current requirements to include: • All P90 values for all system sizes. • The current number of LSLs and service lines of unknown material for every water system. • OCCT status of all systems including Primacy Agency-specified OWQPs.

B. Does this action apply to me?

Entities that could potentially be affected include the following:

Category	Examples of potentially affected entities
Public water systems	Community water systems (CWSs) (a public water system that (A) serves at least 15 service connections used by year-round residents of the area served by the system; or (B) regularly serves at least 25 year-round residents).

Landfill loses leachate treatment

The director of the Marathon County Solid Waste Department told the Environmental Resources Committee on Thursday she may need an additional \$1.5 million extra each year to process leachate generated by the Ringle landfill



Meleesa Johnson

now that Domtar Paper Co., Rothschild, has declined to accept the liquid at its wastewater treatment plant, citing concerns over PFAs (polyfluoroalkyl substances). Meleesa Johnson said the county has enjoyed "a great relationship" with Domtar where, in the past, the county trucked its leachate to the company's plant to be treated along with papermaking sludge.

The company, she said, fearful over a PFA lawsuit, will no longer accept the county's leachate.

The county, if it cannot find an alternative sewage treatment plant, will need to construct and operate its own wastewater facility, Johnson said. The county generates 15 million gallons of leachate yearly.

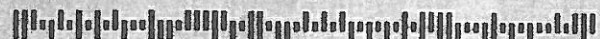
"I have been working on this for like six months," she told committee members.

PFAs are a family of up to 8,000 chemicals developed starting in the 1930's that are resistant to water, grease and heat. These "miracle" surfactant chemicals are found in a



Debi Gust-Bo

See **LANDFILL**/ page 5



WAUSAU WI 54403-5417

Just-Boerema's mother continues to make every Christmas special.

Landfill

Continued from page 1

whole host of products, including fire fighting foams, Scotchgard stain resistant coatings on clothing and carpet, paints, dental floss, varnishes, non-stick cookware and fast food paper wrappers. The chemicals, which do not break down in the environment, are feared to cause reproductive and developmental harm to people, as well as cancerous tumors.

Johnson said landfills don't generate any PFAs, but, as a repository for garbage, may be required to keep the chemicals from spreading further into the environment. She said EPA has issued a 70 parts per trillion PFA health advisory and the Wisconsin Department of Health Services has issued a 20 parts per trillion limit on PFAs in groundwater.

"That's of the same magnitude as 20 seconds in 32,000 years," she said. Johnson said letters sent to 120

wastewater treatment plants in Wisconsin suggest the need for a 2 parts per trillion cap on PFAs in sewer plant effluent.

The solid waste director said PFAs are nearly everywhere in the environment, including in the blood of polar bears.

She said American manufacturers, such as 3M, have stopped making older generation PFAs but that foreign manufacturers, including those in countries like Vietnam, continue to use and sell products containing these older style chemicals.

Johnson said the "logical solution" to the PFA problem is simply to stop making the chemicals, like industry did with ozone-depleting PFCs several years ago.

"This is not settled," she said. "This will be a huge issue. The best solution is banning PFAs."

County gets staff grant for Fenwood project

The Marathon County Environmental Resources Committee agreed on Thursday to hire a grant-funded staff person to try and persuade farmers in the Fenwood Subwatershed Project to use more environmentally friendly methods.

Paul Daigle, county land and water director, said he was "tickled pink" the county received a Natural Resources

Conservation Service grant good for three years to have a staff person promote managed grazing, longer hay rotations, cover crops, no till cropping and other "superior farming" techniques to minimize erosion, soil loss and phosphorus pollution of local creeks.

Daigle said a county and state effort to clean-up the Fenwood Subwater-

shed, which is part of the larger Eau Claire Watershed, has been hampered by a lack of staffing.

"Now we have a dedicated person," he said.

Daigle said there was a good chance the position could be extended for an additional two years.



TO: Wausau Waterworks Commission

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

DATE: January 3, 2020

SUBJECT: Electrical Control Set-up & Programming – WWTF & DWTF

Each of the proposed treatment facility projects will be provided with new updated automation and control systems. These are the control systems that allow each of these plants to run on their own and eliminates the need for having to staff the plant 24/7. Programming of this software will be a critical part of the project to ensure all items are communicating properly, proper and necessary information is saved and tracked and this information is readily accessible to the operators of the facilities. The information provided by this software is the data we will use to make decisions related to treatment processes to ensure drinking water is safe and wastewater meets regulation requirements.

During the design process Donohue, on behalf of the utility, requested 4 separate Statement of Qualifications (SOQ's) from system programmers/integrators who may be interested in bidding the programming/integration work. Donohue also has the capability to complete this work and also to provide ongoing support for this work after the project.

Staff has begun discussions to determine if it is in the best interest of the utility to have Donohue complete this work since they have prepared all of the specifications, design and have the firsthand knowledge of how the utility wants these facilities to operate. This would also keep all responsibility for both the design and programming/integration on one entity. There would be two separate options moving forward for this type of work:

1. Prepare a separate contract for the programming/integration and have the 4 separate integrators prepare proposals. This will add an additional contract for administration and coordination.
2. Work with Donohue directly to have them complete the programming/integration as an amendment to their professional services agreement.