

**PUBLIC WORKS COMMITTEE  
CITY HALL CONFERENCE ROOM  
JANUARY 8, 2014  
5:00 P.M.**

**AGENDA**

- I. CALL TO ORDER
- II. CONSENT AGENDA
  - A. Minutes (page 1)
- III. NEW BUSINESS
  - A. Election of Officers (page 5)
  - B. Meeting Schedule (page 6)
- IV. OLD BUSINESS
  - A. Water Plant Rehab Project – Update
  - B. MPCA Former Mid Town Service Station – Update
  - C. Alley Between River St. & Augusta Ave. – Update
  - D. 2014 Improvement Project – Review Plans
- V. INFORMATIONAL
  - A. MN Department of Health – General Water Chemistry (page 7)
- VI. ADJOURN

**\*\*\* Please call or email Ron at 320-243-3714 ext. 230 or at [ron@paynesvillemn.com](mailto:ron@paynesvillemn.com) if you are not able to attend the meeting.\*\*\***

**Members:** Dave Peschong, Donovan Mayer, Melvin Schaefer, Keith Hemmesch, and Matt Quade – or his proxy.

**Advisory Members:** Chuck DeWolf, Ron Mergen, and Renee Eckerly

This agenda has been prepared to provide information regarding an upcoming meeting of the Paynesville Public Works Committee. This document does not claim to be complete and is subject to change.

**BARRIER FREE:** All Paynesville Public Works Committee meetings are accessible to the handicapped. Attempts will be made to accommodate any other individual need for special services. Please contact City Hall (320) 243-3714 early so necessary arrangements can be made.

**REQUEST FOR COMMITTEE/COUNCIL ACTION**

**COMMITTEE/COUNCIL NAME:** Public Works Committee

Committee/Council Meeting Date: January 8, 2014

Agenda Section: Consent

Originating Department:

Item Number: II - A

**ITEM DESCRIPTION:** Minutes

Prepared by: Staff

**COMMENTS:**

Please review the minutes of the December 11, 2013 Public Works Committee meeting.

**ADMINISTRATOR COMMENTS:**

**COMMITTEE/COUNCIL ACTION:**

Motion to approve the minutes of the December 11, 2013 Public Works Committee meeting.

**MINUTES  
PUBLIC WORKS COMMITTEE**

**DECEMBER 11, 2013**

The meeting was called to order by Mel Schaefer at 5:00 p.m. Members present were Dave Peschong, Keith Hemmesch, Donovan Mayer, and Matt Quade. Advisory members present were Ron Mergen, Public Works Director; and Chuck DeWolf, Bolton & Menk, Inc.

**Motion was made by Peschong to approve the minutes from the October 9, 2013 Public Works Committee meeting. Seconded by Quade and unanimously carried.**

**IRRIGATION FIELD NET**

The cost for a three year contract renewal was reviewed. The system has been utilized for the past 4 years and saves many hours and mileage on the vehicles. It was noted that the City had asked Automated System for a quote; however, they indicated that they are not familiar with the irrigation technology and it would be much more expensive than Field net. The four month versus a six month proposal was discussed noting the pivots are utilized over a six month period. After short discussion,

**Motion was made by Quade to approve a 3 year contract with coverage May – October each year and recommend such to the City Council. Seconded by Hemmesch and unanimously carried.**

**IRRIGATION CONTRACTS**

Members reviewed the contracts that are due to be renewed for the 2014 cropping season. The land on pivot 3 was discussed noting the City does not see a future need for it and it could be sold; however, the City is making \$231.00 per acre and having the larger parcel benefits the bid. After a short discussion, members all concurred to bid the property out for rent and not for sale.

Also discussed were the parcels rented to Steve Gottwald, Jack Hennen, and Jim Mages. It was suggested to negotiate a contract with these farmers due to these being our main sites for disposing of water. There is a need to work together with them. Members suggested continuing this practice.

**WATER SUPPLY PLAN**

The Plan was reviewed outlining three main parts:

1. Evaluation
2. Emergency Response
3. Water conservation

It was reported that the first Plan was completed in 1996, updated in 2007 – 2008, and will again be updated in 2016. On the evaluation the Plan reviewed the total water consumption versus capacity and peak demand. In the emergency response section the Committee reviewed what would trigger the City to have watering restrictions.

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In the water conservation section it was noted that the City needs to adopt water conservation rates for 2015. Members stated that this would discourage lawn sprinkling. It stated that since the City will be updating the Plan in a couple years staff should not spend a lot of time on it now.

**Motion was made by Hemmesch to approve the Water Supply Plan and recommend such to the City Council. Seconded by Peschong and unanimously carried.**

### **2015 PROJECT**

A letter from Bolton & Menk on the proposed realignment and reconstruction of Washburne Ave. north of the railroad tracks to Minnie St., Minnie St. to approximately 600' West of Industrial Loop West, and Lake Ave. south of the river was reviewed. The cost for the report would be \$8,900.00. Members discussed the area and scope of the project.

**Motion was made by Hemmesch to proceed with the project at the cost of \$8,900.00 for the 2015 project preliminary engineering report and recommend such to the City Council. Seconded by Quade and unanimously carried.**

### **WATER PLANT REHAB**

DeWolf reported on the construction progress, which due to the cold weather is slow.

### **WASTE WATER RE-SCOPING PROJECT**

Members were informed that there are funds remaining from the project and it is being proposed to expand the SCADA system to four of the City's lift stations in town. This would eliminate the need for local phone lines, dialer units in each lift station, reduce the operator rounds, and it will increase the reliability of the alarm systems. After a short discussion,

**Motion was made by Hemmesch to approve Change Order No. 1 to expand the SCADA system and recommended such to the City Council. Seconded by Peschong and unanimously carried.**

### **MPCA – FORMER MIDTOWN SERVICE STATION**

Members were informed that a meeting has been scheduled with MPCA and the Department of Health in regard to the monitoring wells being at grade. The Council is considering hiring a Consultant.

### **2014 STREET PROJECT**

DeWolf reported that they are proceeding with the design of the project and it will be ready to bid in February.

**ALLEY BETWEEN RIVER STREET AND AUGUSTA AVENUE**

It was reported that a meeting is scheduled for Friday, December 13, 2013 with AMPI to discuss the property.

**ALLEY APPROACH BY NUCARA ONTO BUSINESS HWY. 23**

It was reported that Eckerly is working with NuCara on the issue.

**ALLEY BETWEEN WASHBURNE AVE. AND KORONIS AVE. - EXIT TO BUSINESS 23**

This alley currently has a "no exit" sign on it. There has been a request to remove the no exit sign. Members noted the low volume of traffic in the alley and the reduced traffic volumes on Business 23 since the sign was installed. It was suggested to check with the Police Chief to see if he has any issues.

**Motion was made by Peschong to remove the "no exit" sign in the alley and recommend such to the City Council. Seconded by Quade and unanimously carried.**

There being no further business, the meeting was adjourned at 5:47 p.m.

**REQUEST FOR COMMITTEE/COUNCIL ACTION**

**COMMITTEE/COUNCIL NAME:** Public Works Committee

Committee/Council Meeting Date: January 11, 2014

Agenda Section: New Business

Originating Department:

Item Number: III - A

**ITEM DESCRIPTION:** Election of Officers

Prepared by: Staff

**COMMENTS:**

Nominations for Chairperson.

Nominations for Vice Chair.

Nominations for Secretary.

**ADMINISTRATOR COMMENTS:**

Current officers are:

Chair – Mel Schaefer

Vice Chair – Keith Hemmesch

Secretary – Ron Mergen

**COMMITTEE/COUNCIL ACTION:**

Motion to appoint \_\_\_\_\_ as Chairperson.

Motion to appoint \_\_\_\_\_ as Vice Chair.

Motion to appoint \_\_\_\_\_ as Secretary.

**REQUEST FOR COMMITTEE/COUNCIL ACTION**

**COMMITTEE/COUNCIL NAME:** Public Works Committee

Committee/Council Meeting Date: January 11, 2014

Agenda Section: New Business

Originating Department:

Item Number: III - B

**ITEM DESCRIPTION:** Meeting Schedule

Prepared by: Staff

**COMMENTS:**

Every year each Committee sets their meeting schedule. Currently the Public Works Committee meets on the second Wednesday of each month at 5:00 p.m.

**ADMINISTRATOR COMMENTS:**

**COMMITTEE/COUNCIL ACTION:**

A motion to set the Public Works Committee meeting schedule for \_\_\_\_\_.



Drinking Water Protection Section  
PO Box 64975  
St. Paul, MN 55164-0975  
651-201-4700

# General Water Chemistry Project

## What is the General Water Chemistry Project?

The Drinking Water Protection Section of MDH is collecting general water chemistry samples from all community public water systems in Minnesota. The results may be used by systems to more thoroughly understand the water quality from each aquifer and well depth, assess and maintain water quality at entry points and within the distribution system, and evaluate potential contamination events.

## What was analyzed?

At *sources, entry points and distribution system*, MDH is providing results for:

- Ammonia Nitrogen
- Total Phosphorus
- Total Organic Carbon
- Total Alkalinity
- Carbonate Alkalinity
- Bicarbonate Alkalinity
- Dissolved Oxygen
- Conductivity
- Total Dissolved Solids
- Oxidation Reduction Potential
- Temperature

MDH is providing additional results from *sources*:

- Arsenic
- Barium
- Bromide and Chloride
- Calcium
- Iron
- Potassium
- Sodium
- Sulfate
- Nitrite
- Magnesium
- Manganese
- Strontium

If treatment involves more than chemical addition, MDH will also provide results at *entry points* for:

- Calcium
- Magnesium
- Iron
- Manganese
- Nitrate+Nitrite
- Nitrite

Heterotrophic Plate Count Samples also may have been collected at sources, entry points and the distribution system. MDH recommends systems regularly monitor for the above-listed water quality parameters, and use the data as a tool to assess and maintain water quality throughout the water system.

## Who can I contact with questions about the results?

Please call the MDH Section of Drinking Water Protection at 651-201-4700 with questions about the General Water Chemistry Project results.



Drinking Water Protection Section  
Environmental Health Division  
Health.drinkingwater@state.mn.us  
651-201-4700

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Environmental Health Division  
P.O. Box 64975  
St. Paul, Minnesota 55164-0975  
651/201-4700  
[www.health.state.mn.us](http://www.health.state.mn.us)

## General Water Chemistry Project

### What is the General Water Chemistry Project?

The Drinking Water Protection Section of MDH will be collecting general water chemistry samples from community public water systems. These results may be used by all systems to more thoroughly understand the water quality from each aquifer and well depth, assess and maintain water quality at entry points and within the distribution system, and evaluate potential contamination events.

### Analytes

**Ammonia Nitrogen:** Ammonia in water can decrease the efficiency of disinfection treatment. Oxidation of ammonia will result in the formation of nitrite.

**Total Phosphorus:** Total phosphorus is the total measure of phosphorus in water. Phosphorus is often added to drinking water in the form of phosphates to sequester iron and manganese and also as a corrosion control method.

**Total Organic Carbon (TOC):** Total Organic Carbon is the measure of all organic carbon molecules in water. TOC can react with disinfectants to produce disinfection byproducts in the distribution system.

**Carbonate and Bicarbonate Alkalinity:** Alkalinity is the measure of the ability of the water to neutralize acid. This can be useful in assessing and optimizing corrosion control treatment.

**Dissolved Oxygen (DO):** High dissolved oxygen concentrations can increase the corrosion process within the distribution system. This can lead to contaminants such as lead and copper being introduced into the water supply and also reduce the lifetime of distribution piping and household plumbing materials.

**Conductivity:** Conductivity measures water's ability to conduct electrical current. Conductivity can be an indicator of water quality and can also help in assessing TDS.

**Total Dissolved Solids (TDS):** Total dissolved solids are the compounds in water that cannot be removed through conventional filtration. TDS are made up of compounds which dissociate in water to form ions. TDS is considered by USEPA to be a secondary contaminant with a secondary standard of 500 µg/L where taste and laxative properties can occur.  $TDS \approx \text{Conductivity } (\mu\text{S/cm}) \times 0.67$

**Oxidation Reduction Potential (ORP):** Oxidation Reduction Potential or Redox is the activity or strength of oxidizers and reducers in relation to their concentration. ORP is also affected by pH.

**Temperature:** Temperature can affect water chemistry and water quality.

**Arsenic:** Arsenic is a semi-metal element in the periodic table. It is odorless and tasteless. It enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. The EPA MCL for arsenic is 10 µg/l.

**Barium and Strontium:** Barium and strontium are minerals that naturally occur in water. They can be used as indicators of a water source (aquifer).

**Calcium and Magnesium:** Calcium and Magnesium are indicators of water hardness. These results are useful information for consumers that choose to reduce hardness in their tap water.

**Iron and Manganese:** Iron and Manganese are metals that are commonly found in water. The USEPA secondary standard for Iron and Manganese are 0.3 mg/L and 0.05 mg/L respectively. MDH Risk Assessment Advice for Manganese in water used to bottle feed infants is 0.1 mg/L.

**Potassium and Sodium:** Potassium and sodium can be naturally occurring in water or the result of chemicals being added to the water during the treatment process. Potassium and sodium may cause some health effects in susceptible individuals, however potassium and sodium intake from drinking water provided by Community Public Water Supplies is typically well below the level at which adverse health effects may occur.

**Bromide and Chloride:** The ratio of bromide to chloride in water can be an indicator of potential effects of surface activities on ground water. Absolute values of these two compounds are not as significant as the ratio between the two minerals. Bromide and chloride can also be used to evaluate a water source or aquifer.

**Sulfate:** Sulfate is considered a secondary contaminant by the USEPA. The USEPA secondary standard for sulfate is 250 mg/L at which taste and odor issues can occur.

**Nitrite:** Nitrites are nitrogen-oxygen chemical units which combine with various organic and inorganic compounds. The USEPA MCL for nitrite is 1 mg/L.

**Heterotrophic Plate Count (HPC):** HPC is an analytic method used to measure the variety of bacteria that are common in water. Heterotrophic bacteria occur in drinking water even after disinfection. Values greater than 500 CFU/mL can indicate poor microbiological quality. HPC greater than 10,000 CFU/mL can mask total coliform counts.

**Metals Scan:** The Public Health Lab will do a metals scan that will analyze for 67 different trace metals. This analysis is a rough test of what may or may not be present in the water. The values given are not accurate data, but general indicators of what could be in the water and what is normal in the system to compare against in the event of an emergency.

**When will the project start, and when can I get my results?** The MDH Section of Drinking Water Protection will be collecting samples from 2010 through 2013, and each system will receive a summary of the results once they are available. A complete set of state wide results will be published upon completion of this study.

If you have any questions regarding the General Water Chemistry Project, please call 651/201-4700.

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MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION



P.O. Box 64975 St. Paul MN 55164 - 0975  
625 Robert St. N. St. Paul MN 55155

Report of Analytical Results

Project Name: **General Water Chemistry Project**

System Name: **Paynesville**

PWSID: **1730018**

**ANALYSIS RESULTS -- SOURCES**

Date Collected: 07/12/2013

Date Received: 07/12/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>Well #5</u>	<u>Well #6</u>	<u>Well #7</u>	<u>MCL or Secondary Standard</u>
Ammonia Nitrogen, Total (mg/L)	.18	.1	1.03	
Dissolved Oxygen (mg/L)	1.54	5.09	.52	
Nitrite Nitrogen, Total (mg/L)	< .01	< .01	< .01	1
Oxidation Reduction Potential (mV)	117.9	113.7	120	
Specific Conductance (uS/cm)	741	719	640	
Temperature (deg C)	10.11	9.94	10.08	

<u>Constituent</u>	<u>Well #8</u>	<u>MCL or Secondary Standard</u>
Ammonia Nitrogen, Total (mg/L)	1	
Dissolved Oxygen (mg/L)	.57	
Nitrite Nitrogen, Total (mg/L)	< .01	1
Oxidation Reduction Potential (mV)	162	
Specific Conductance (uS/cm)	641	
Temperature (deg C)	10.06	

Date Collected: 07/12/2013

Date Received: 07/15/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>Well #5</u>	<u>Well #6</u>	<u>Well #7</u>	<u>MCL or Secondary Standard</u>
Alkalinity, Bicarbonate (mg/L)	270	260	310	
Alkalinity, Carbonate (mg/L)	3.2	3.1	4.9	
Alkalinity, Total (mg/L)	270	260	320	
Arsenic (ug/L)	< 1	< 1	1.56	10.4
Barium (ug/L)	128	86.1	127	2000
Bromide (mg/L)	.0635	.0449	.0225	
Ca as CaCO3 (mg/L)	230	230	180	

\*USEPA has established these concentrations as secondary (aesthetic) standards. The EPA recommends secondary standards to water systems but does not require systems to comply.

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MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION



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625 Robert St. N. St. Paul MN 55155

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**ANALYSIS RESULTS -- SOURCES**

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Collected by: Race, Isabelle

<u>Constituent</u>	<u>Well #5</u>	<u>Well #6</u>	<u>Well #7</u>	<u>MCL or Secondary Standard</u>
Chloride (mg/L)	46.7	48.7	4.16	250*
Iron (ug/L)	217	45.7	973	300*
Manganese (ug/L)	166	38.4	101	50*
Mg as CaCO3 (mg/L)	120	120	130	
pH (units)	8.1	8.1	8.2	6.5-8.5*
Phosphate, Total (mg/L)	.075	.044	.267	
Potassium (mg/L)	2.56	2.18	2.46	
Sodium (mg/L)	19.2	12.7	21.5	
Strontium (ug/L)	100	104	358	
Sulfate (mg/L)	37.3	27.7	22	250*
Total Organic Carbon (mg/L)	< 1	< 1	1.5	

<u>Constituent</u>	<u>Well #8</u>	<u>MCL or Secondary Standard</u>
Alkalinity, Bicarbonate (mg/L)	310	
Alkalinity, Carbonate (mg/L)	4.6	
Alkalinity, Total (mg/L)	320	
Arsenic (ug/L)	1.56	10.4
Barium (ug/L)	125	2000
Bromide (mg/L)	.0215	
Ca as CaCO3 (mg/L)	190	
Chloride (mg/L)	3.92	250*
Iron (ug/L)	1010	300*
Manganese (ug/L)	112	50*
Mg as CaCO3 (mg/L)	130	
pH (units)	8.2	6.5-8.5*
Phosphate, Total (mg/L)	.269	
Potassium (mg/L)	2.65	
Sodium (mg/L)	21.7	

\*USEPA has established these concentrations as secondary (aesthetic) standards. The EPA recommends secondary standards to water systems but does not require systems to comply.

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MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION



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System Name: **Paynesville**

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**ANALYSIS RESULTS -- SOURCES**

Date Collected: 07/12/2013

Date Received: 07/15/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>Well #8</u>	<u>MCL or Secondary Standard</u>
Strontium (ug/L)	360	
Sulfate (mg/L)	22.3	250*
Total Organic Carbon (mg/L)	1.4	

**ANALYSIS RESULTS -- ENTRY POINTS**

Date Collected: 07/12/2013

Date Received: 07/12/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>TREATMENT PLANT #1</u>	<u>MCL or Secondary Standard</u>
Ammonia Nitrogen, Total (mg/L)	.14	
Dissolved Oxygen (mg/L)	7.08	
Nitrite Nitrogen, Total (mg/L)	.68	1
Oxidation Reduction Potential (mV)	131.9	
Specific Conductance (uS/cm)	694	
Temperature (deg C)	10.33	

Date Collected: 07/12/2013

Date Received: 07/15/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>TREATMENT PLANT #1</u>	<u>MCL or Secondary Standard</u>
Alkalinity, Bicarbonate (mg/L)	270	
Alkalinity, Carbonate (mg/L)	2.7	
Alkalinity, Total (mg/L)	270	
Ca as CaCO3 (mg/L)	220	
Iron (ug/L)	< 42	300*

\*USEPA has established these concentrations as secondary (aesthetic) standards. The EPA recommends secondary standards to water systems but does not require systems to comply.

PAYNESVILLE WATER SUPERINTENDENT  
221 WASHBURNE  
PAYNESVILLE MN 56362

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**MINNESOTA DEPARTMENT OF HEALTH**  
**SECTION OF DRINKING WATER PROTECTION**



P.O. Box 64975 St. Paul MN 55164 - 0975  
 625 Robert St. N. St. Paul MN 55155

**Report of Analytical Results**

Project Name: **General Water Chemistry Project**

System Name: **Paynesville**

PWSID: **1730018**

**ANALYSIS RESULTS -- ENTRY POINTS**

Date Collected: 07/12/2013

Date Received: 07/15/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>TREATMENT PLANT #1</u>	<u>MCL or Secondary Standard</u>
Manganese (ug/L)	17.7	50*
Mg as CaCO3 (mg/L)	120	
Nitrate + Nitrite Nitrogen, Total (mg/L)	1.4	10.4
pH (units)	8	6.5-8.5*
Phosphate, Total (mg/L)	.051	
Total Organic Carbon (mg/L)	< 1	

**ANALYSIS RESULTS -- DISTRIBUTION**

Date Collected: 07/12/2013

Date Received: 07/12/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>Distribution</u>	<u>MCL or Secondary Standard</u>
Ammonia Nitrogen, Total (mg/L)	.1	
Dissolved Oxygen (mg/L)	6.68	
Oxidation Reduction Potential (mV)	112.2	
Specific Conductance (uS/cm)	698	
Temperature (deg C)	17.85	

Date Collected: 07/12/2013

Date Received: 07/15/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>Distribution</u>	<u>MCL or Secondary Standard</u>
Alkalinity, Bicarbonate (mg/L)	270	
Alkalinity, Carbonate (mg/L)	2.6	
Alkalinity, Total (mg/L)	270	

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PAYNESVILLE WATER SUPERINTENDENT  
 221 WASHBURNE  
 PAYNESVILLE MN 56362

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MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION



P.O. Box 64975 St. Paul MN 55164 - 0975  
625 Robert St. N. St. Paul MN 55155

Report of Analytical Results

Project Name: **General Water Chemistry Project**

System Name: **Paynesville**

PWSID: **1730018**

**ANALYSIS RESULTS -- DISTRIBUTION**

Date Collected: 07/12/2013

Date Received: 07/15/2013

Collected by: Race, Isabelle

<u>Constituent</u>	<u>Distribution</u>	<u>MCL or Secondary Standard</u>
pH (units)	8	6.5-8.5*
Phosphate, Total (mg/L)	.053	
Total Organic Carbon (mg/L)	< 1	

**COMMENTS:**

The Drinking Water Protection Section of the MDH recognizes that water systems are most likely aware of any constituent exceeding primary or secondary drinking water standards. If you have any questions about the General Water Chemistry Project, please contact your MDH district engineer or call 651-201-4700.

\*USEPA has established these concentrations as secondary (aesthetic) standards. The EPA recommends secondary standards to water systems but does not require systems to comply.

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