CAMBRIDGE WATER, SEWER AND STORMWATER COMMITTEE
200 SPRING ST. - COMMUNITY ROOM
AGENDA
AUGUST 17, 2021 6:30 pm.

PER THE CDC, DANE COUNTY HAS BEEN CONSIDERED SUBSTANTIAL OR HIGH-RISK TRANSMISSION AREA FOR THE DELTA VARIANT OF COVID. THIS IS AN IN-PERSON MEETING: HOWEVER, TO MAXIMIZE PROTECTION WE RECOMMEND WEARING OF MASKS INDOORS IN PUBLIC SPACES. THE MEETING ROOM WILL BE SET UP FOR SOCIAL DISTANCING. THANK YOU!

1. **Call to Order/Roll Call**

2. **Proof of Posting**

3. **Approval of Consent Agenda**
   a. Meeting minutes from July 20, 2021

4. **Approval of Bills**

5. **Reports**
   a. Utility Clerk
   b. Director of Public Works

6. **Old Business/ Discussion and Possible Action Regarding**
   a. Water System Maintenance/Water Quality
   b. Media Replacement
   c. WRWA Annual Conference in La Crosse

7. **New Business/ Discussion and Possible Action Regarding**
   a. Swalheim water usage at 309 E. North St./faulty meter
   b. Warren water usage at 602 Woodhaven Court
   c. Back up generator for well #2
   d. Resident requesting sewer credit
   e. Review Deduct meter letter for new home builds/existing homes
   f. DNR Permit

8. **Public Comment**

9. **Questions, Referrals to Staff or Future Agenda Items**

10. **Adjournment**

CAMBRIDGE WATER, SEWER AND STORMWATER COMMITTEE
200 SPRING ST. - COMMUNITY ROOM
MINUTES
JULY 20, 2021 6:30 pm.

THIS IS AN IN-PERSON MEETING: IT'S NOT REQUIRED; HOWEVER, IT IS RECOMMENDED THAT UNVACCINATED PEOPLE CONTINUE TO WEAR MASKS TO PREVENT THE SPREAD OF COVID-19. THE COMMUNITY ROOM WILL BE SET UP FOR SOCIAL DISTANCING THANK YOU!

1. **Call to Order/Roll Call:** Ted Kumbier called the meeting to order at 6:30. Members present: Larry Gunseor, Kris Breunig, and Ted Kumbier. Others present: Mike Reiber from Dancing Goat Distillery, Dave Magnasun from MSA, and Mark McNally Village President. Village Staff: Jeff Wright, Chrissie Brynwood and Vicki Redford.

2. **Proof of Posting:** Agendas were posted in the upper and lower levels of the Amundson Community Center, Hometown Bank, Cambridge Post Office, and the Village website.

3. **Approval of Consent Agenda**
   a. Meeting minutes from June 15, 2021

Breunig made a motion to accept the consent agenda as presented. Gunseor seconded the motion. Motion carried on a 3-0 vote.

4. **Approval of Bills:**

Breunig made a motion to accept the bills in the amount of $79,456.48. Gunseor seconded the motion. Motion carried on a 3-0 roll call vote.

5. **Reports**
   a. Utility Clerk: Mary Behling has approved the agreement for well #3. I have been doing daily, weekly, monthly duties for the Water & Sewer Department as well as the Village. I am entering several new accounts for the new homes in the Village.
   b. Director of Public Works: Wright told the committee that they have been working on the daily, weekly, and monthly testing. He said that he and Derek Schroedl took the Groundwater and Distribution exams. Schroedl passed both exams and Wright will retake the Groundwater exam. Wright said that they are working on developing the maintenance plan for well #2. LW Allen pulled the pump at Westside Park lift station to do an inspection. Everything looked good. The report will come soon.
   Wright ordered the automatic hydrant flusher. This will be moved around the Village and run at 1:00am. so it will not bother residents.

The street sweeper is back up and running. Dale Schroedl (Derek Schroedl's dad) did the repair. Wright received one quote from a contractor for the media replacement on the two softener tanks. He found out the batch meters were not working on the softeners. Wright ordered two new meters and will set up a service call from Tonka to fix them. There was a bad batch of MXU'S that we found after the last meter reading. These have been replaced. Wright said he has been doing some extra testing of the iron filter to make sure it is performing properly. Wright told the committee that it is recommended that we upgrade our testing kit.

6. **Old Business/ Discussion and Possible Action Regarding:**
   a. Water System Maintenance/Water Quality: Director Wright said there were some issues at well #2. He did extra hardness testing. The hardness has been between 80-85 right where it should be. He is setting up a time for Tonka to come and work on batch meters. Reiber from the Dancing Goat Distillery said he can tell when there are variations in the water because of the large drawing of water that they do. Wright and Reiber will coordinate auto-flushing placement when put out by the Dancing Goat Distillery.
   b. Media replacement quote: Joe DeYoung is working with WQI to get a quote for media replacement. Wright got one quote from August Winter for $95,000. The breakdown is $94,105 media replacement, $5,250 for support gravel, $6,200 brine distribution There was discussion about media not being available. The committee discussed Wright and Dave Magnussen from MSA reaching out to other contractors for bids.
   c. Street Sweeper update: Wright said the street sweeper is up and running. Dale Schroedl Dereks dad, did a compression test and it passed. He replaced injectors and synced them. The sweeper is now working. We may want to look into getting a new one for next year.

7. **New Business/ Discussion and Possible Action Regarding:**
   a. Water Testing Kit – purchase: Wright told the committee that our water testing kit needs to be updated. He has a bid from USA Bluebook for $1,527.00. After discussion,

Breunig made a motion to purchase the updated water testing equipment not to exceed $1600.00. Gunseor seconded the motion. Motion carried on a 3-0 roll call vote.

   b. Dancing Goat - Deduct Meter: Mike Reiber from the Dancing Goat started by saying that the Dancing Goat is installing a 400 ton evaporator tower. They expect to use 750,000 gallons of water per year. He thinks this will require a 2" meter. The Dancing Goat would like a deduct meter since the water will not be going through the sewer system. Reiber will let Wright know so they can work together on a deduct meter.

8. **Public Comment:** Mark McNally told the committee that he is looking for two more members to join Water & Sewer Committee. Mark asked Director Wright to fix his curb stop cover at his house. McNally asked Utility Clerk Redford if all meters are accounted for in the Village, they are.

9. **Questions, Referrals to Staff or Future Agenda Items:**
   1. WRWA Convention Plover end of August for Director Wright/public works
   2. Media Replacement
   3. Water system maintenance/water quality

10. Adjournment: *Breunig made a motion to adjourn the meeting. Gunseor seconded the motion. Kumbier adjourned the meeting at 7:42pm.*

Vicki Redford
Utility Clerk

HOMETOWN BANK GENERAL OPERATING

Dated From: 8/17/2021 From Account:
Thru: 8/17/2021 Thru Account:

Voucher Nbr	Check Date	Payee	Amount
	8/17/2021	ABT Mailcom AUGUST BILLS	480.71
	8/17/2021	CAMBRIDGE ACE HARDWARE ACE	218.26
	8/17/2021	Cambridge Gas GAS	201.50
	8/17/2021	CARGILL INC KD CRSE BULK SALT/100011143	2,273.56
	8/17/2021	Core & Main 510 S/POINT M2 WIRED SP HR & LD	6,149.11
	8/17/2021	FARRAR, LEE STATE LABS/ MILAGE	53.76
	8/17/2021	I90 ENTERPRISES KANKOOK DYNAPRO AT2/H2020188	828.68
	8/17/2021	L. W. ALLEN LLC SVC LABOR-INSPECT LIFT STATION/MILLEAGE	741.60
	8/17/2021	MARTELLE WATER TREATMENT SODIUM HYPOCHLORITE BULK/HYDROFLUOSILICI	325.20
	8/17/2021	MID-AMERICAN RESEARCH CHEMICAL MINT POWER OFF QT	104.59
	8/17/2021	MIDWEST METER INC. BMPFT4E/PFT4-E SCALED PULSE TURBO GAL.	964.42
	8/17/2021	MSA PROFESSIONAL SERVICES WATER EVALUATION/DAN GREVE	14,268.52
	8/17/2021	NAPA AUTO PARTS WELL #2	87.13
	8/17/2021	PAYNE & DOLAN, INC. WATER MAIN BREAK/PINECREST ST.	4,925.75
	8/17/2021	USA BLUE BOOK NEW TEST KIT	2,122.49
	8/17/2021	WATER QUALITY INVESTIGATIONS PROJECT MANAGER/ENGINEER,GEOLOGIST	862.50
	8/17/2021	WISCONSIN STATE LABORATORY OF HYGIENE FLUORIDE/FLDFLUOR	26.00
		Grand Total	34,633.78

Dated From: 8/17/2021 From Account:
Thru: 8/17/2021 Thru Account:

	Amount
Total Expenditure from Fund # 500 - WATER UTILITY	33,777.55
Total Expenditure from Fund # 600 - SEWER UTILITY	695.99
Total Expenditure from Fund # 800 - STORMWATER UTILITY	160.24
Total Expenditure from all Funds	34,633.78

VILLAGE OF CAMBRIDGE WATER AND SEWER UTILITY

P.O. BOX 99

CAMBRIDGE, WISCONSIN 53523

Water and Sewer Committee Meeting

Operators Report

August 17th, 2021

Work completed since last W/S meeting

1. Monthly/Daily standard testing of water system
2. Dancing Goat Distillery Developer's Agreement testing – July 27th
3. We are making a lot of progress on developing a maintenance plan for Well 2 and the equipment there.
4. Had LW Allen come and look at the issue with the batch meters at Well 2. They found the problem and have ordered parts. Waiting on parts. Batch meters are currently working with a jumper wire.
5. We have the automatic hydrant flusher in use. We have moved it around the village and it is working good. We have been recording the usage daily.
6. Meter reading went well this time
7. We have purchased a new test kit for our daily testing. It is working great. Now able to use one tester for most of our test instead of 3 different out of date kits.
8. We sent out RFP packets to 6 different contractors for the media replacement. They will be turned in on Monday, August 16th by 1PM.
9. We had a brine pump at Well 2 go down. We ordered a new one. Waiting for it to ship out.

Water Quality/Water System Maintenance

Our water system has been running pretty smooth since the last meeting. The iron filter has been performing very well. The softeners are performing good still also. We had LW Allen send a tech out to look into the issue with the batch meters. We found a part that was bad in the panel. We have ordered

the part and waiting for it to come in so they can install it. The tech hooked up a jumper wire temporally so the batch meters are working currently.

On Friday August 6th we had a brine pump go down at Well 2. There is 2 brine pumps so the softeners are still getting brine when they go into a regen. I have been monitoring the hardness daily. We had 3 days where the hardness was climbing higher than normal but I did a manual regen on softener 1 and now it is all back to normal. The brine pump should be here soon.

I have been moving the automatic hydrant flusher around the village. It has been in 4 different locations so far, each spot for 5 days in a row. The first week I had it set for an hour run time but after that I set it 30 minutes. At the last location, which was at the end of Park st, which is a dead end water main, the chlorine free residual was .78 before we started and after 5 days it was .92. So it didn't change much but it has changed for the better. I will keep moving it around the village till the fall. It should help.

Village of Cambridge

Automatic Hydrant Flusher

Started 7/16/2021

Jeff Wright

Director of Public Works

Location: Winery Way Cul da Sac Hydrant

7/17/2021 10900 gallons flushed

7/18/2021 10800 gallons flushed

7/19/2021 11000 gallons flushed

7/20/2021 10900 gallons flushed

7/21/2021 10800 gallons flushed

7/22/2021 10800 gallons flushed

7/23/2021 Moved to east end of South St by the church and changed the duration time to 30 minutes

7/24/2021 36689 meter 5700 gallons flushed

7/25/2021 36746 meter 5700 gallons flushed

7/26/2021 36804 meter 5800 gallons flushed

7/27/2021 36860 meter 5600 gallons flushed

7/28/2021 36916 meter 5600 gallons flushed

7/29/2021 36973 meter 5700 gallons flushed

7/30/2021 37029 meter 5600 gallons flushed

Moved to Waverly and Oriole on Friday 7/30/2021

7/31/2021 37087 meter 5800 gallons flushed

8/1/2021 37144 meter 5700 gallons flushed

8/2/2021 37200 meter 5600 gallons flushed

8/3/2021 37256 meter 5600 gallons flushed

8/4/2021 37313 meter 5700 gallons flushed

8/5/2021 37369 meter 5600 gallons flushed

8/6/2021 37429 meter 6000 gallons flushed

8/9/2021 Moved Flusher to end of Park St by Cunninghams

8/10/2021 37501 meter 7100 gallons flushed

8/11/2021 37565 meter 6400 gallons flushed

8/12/2021 37629 meter 6400 gallons flushed

MONTH AUGUST 21

Flouride mg/l	Chlorine, Free mg/l	Total	Iron Entry Point mg/l	Iron Raw mg/l	Hardness Entry Point mg/l	Hardness Raw mg/l	Comments
0.80							
0.64	1.25	1.23	0.02		85		JW
0.77					80		
0.80	1.13	1.14	0.01		77		
0.77					77		
0.91	0.95	0.99	0.00		71		
0.77							
0.75							
0.75	0.88	0.86			188		
0.72			0.00	0.58	191	305	
0.64	0.86	0.98			282		
0.87					77		
0.99	0.86	0.92	0.02		210		

Cambridge

200 Spring Street
Cambridge, WI 53523

SUBJECT: Andrew Swalheim

FROM: Vicki Redford, Utility Clerk

MEETING DATE: August 17, 2021

BACKGROUND/ANALYSIS: Andy Swalheim called the Village Office and talked to me about the water usage at 309 E. North St. He noticed there has been much larger usage in the past couple of years. And only his dad is living there. I had the Water Department check the meter reading a couple of times and followed up with calls to Andy. He told me he had a plumber come and check out the house and everything seemed ok. After the reading in July, it was decided that we would send the meter in to make sure it was working properly. The Water Department sent the meter in to be tested and it came back faulty. The usage changed in January of 2020 and have increased since. Andy is looking for a credit for the sewer portion that he was over-charged for the past two years.

ACTION REQUIRED: Committee decision for a sewer credit.

Vicki Redford
Utility Clerk

From: Account Nbr: 010-0197-00 Route/Seq Nbr: Pressure Zone Cd:
Thru: 010-0197-00

Account Nbr: 010-0197-00 Customer Name: SWALHEIM, ANDREW
Service Address: 309 E. NORTH STREET
PSC Classification: Residential

Meter Nbr: 90184674 Rate Type: 5/8" OR 3/4" Install Date: 7/27/2021
Route/Seq Nbr: 00-1197 Location: Pressure Zone Cd: 00
ROM Serial Nbr: ROM Install Date:
Register ID: 90184674 MXU/MIU ID: 17132565
Utilities: SEWER WATER
Memos: 1st:
2nd:
3rd:

Read Date	Reading	Consumption	Comment
7/27/2021	0	0	New Meter
7/27/2021	392000	7000	
6/30/2021	385000	7000	Remote Reading
6/03/2021	378000	8000	Remote Reading
5/03/2021	370000	7000	Remote Reading
4/01/2021	363000	6000	Remote Reading
3/01/2021	357000	5000	Remote Reading
2/01/2021	352000	5000	Remote Reading
1/04/2021	347000	6000	Remote Reading
12/01/2020	341000	5000	Remote Reading
11/03/2020	336000	6000	Remote Reading
9/30/2020	330000	5000	Remote Reading
9/01/2020	325000	5000	Remote Reading
7/30/2020	320000	5000	Remote Reading
7/01/2020	315000	5000	Remote Reading
6/01/2020	310000	5000	Remote Reading
4/29/2020	305000	4000	Remote Reading
3/31/2020	301000	3000	Remote Reading
3/02/2020	298000	3000	Remote Reading
1/30/2020	295000	5000	Remote Reading
1/02/2020	290000	5000	Remote Reading
12/02/2019	285000	3000	Remote Reading
10/31/2019	282000	1000	Remote Reading
9/30/2019	281000	2000	Remote Reading
9/03/2019	279000	1000	Remote Reading
7/31/2019	278000	2000	Remote Reading
7/01/2019	276000	2000	Remote Reading
5/30/2019	274000	1000	Remote Reading

From: Account Nbr: 010-2002-00 Route/Seq Nbr: Pressure Zone Cd:
Thru: 010-2002-00

Account Nbr: 010-2002-00 Customer Name: WARREN, ROB & WENDY
Service Address: 602 WOODHAVEN COURT
PSC Classification: Residential

Meter Nbr: 76761494 Rate Type: 5/8" OR 3/4" Install Date: 2/08/2014
Route/Seq Nbr: 00-2002 Location: Pressure Zone Cd: 00
ROM Serial Nbr: ROM Install Date:
Register ID: 76761494 MXU/MIU ID: 18236442
Utilities: SEWER WATER
Memos: 1st:
2nd:
3rd:

Read Date	Reading	Consumption	Comment
8/02/2021	258000	11000	Remote Reading
6/30/2021	247000	3000	Remote Reading
6/03/2021	244000	3000	Remote Reading
5/03/2021	241000	2000	Remote Reading
4/01/2021	239000	4000	Remote Reading
3/01/2021	235000	2000	Remote Reading
2/01/2021	233000	2000	Remote Reading
1/04/2021	231000	2000	Remote Reading
12/01/2020	229000	2000	Remote Reading
11/03/2020	227000	3000	Remote Reading
9/30/2020	224000	2000	Remote Reading
9/01/2020	222000	2000	Remote Reading
7/30/2020	220000	2000	Remote Reading
7/01/2020	218000	5000	Remote Reading
6/01/2020	213000	4000	Remote Reading
4/29/2020	209000	2000	Remote Reading
3/31/2020	207000	2000	Remote Reading
3/02/2020	205000	3000	Remote Reading
1/30/2020	202000	4000	Remote Reading
1/02/2020	198000	2000	Remote Reading
12/02/2019	196000	2000	Remote Reading
10/31/2019	194000	2000	Remote Reading
9/30/2019	192000	2000	Remote Reading
9/03/2019	190000	3000	Remote Reading
7/31/2019	187000	3000	Remote Reading
7/01/2019	184000	4000	Remote Reading
5/30/2019	180000	2000	Remote Reading
5/02/2019	178000	3000	Remote Reading

DEDUCT WATER METER INFORMATION

VILLAGE OF CAMBRIDGE WATER AND SEWER UTILTY

P.O. BOX 99
CAMBRIDGE, WISCONSIN 53523

Dear Residential Utility Customer,

The Village of Cambridge Water and Sewer Utility quantifies water and sewage usage by use of a water meter. This standard meter installed in your home tracks all water usage and bills water and sewer rates accordingly. If you plan to use a lot of outdoor water that will not discharge to the sanitary sewer system you may want to consider installing an additional deduct meter.

A deduct meter is a separate meter that measures the amount of water used for items such as lawns, outdoor plant watering, washing vehicles, washing exterior surfaces, filling pools, etc.; water that does not go into the sanitary sewer system. The amount that goes through the deduct meter is then subtracted from the Sewer Usage and therefore no sewer charges are assessed. A separate meter is the only way to accurately measure the water used exclusively from the outside faucets that is not flowing into the sewer system.

The steps that need to be taken are as follows:

- Purchase the Deduct meter from the Utility Clerk for $375.00.
- Resident hires a plumber to reconfigure plumbing to the outside lines and install an additional #2-meter horn one the service line after the primary water meter.
- Have your plumber install the Deduct Meter, then contact the DPW Director-Jeff Wright (608)501-8944 to have personnel inspect the work to ensure the deduct meter plumbing is in the correct location, and that it only serves the outside hose bibs and does not serve any water fixture that leads to a drain in the home.

The volume of water measured each month from the deduct meter is only subtracted from the sewer portion of the bill. An example of monthly usage as follows in gallons.

Without Deduct Meter (per thousand gallons)		**With Deduct Meter (Deduct meter reads 7,000)**	
Water Usage	10,000 gallons used	Water Usage	10,000 gallons used
1st 8,333 @	$6.18 = $51.50	1st 8,333 @	$6.18 = $51.50
2nd 1,667 @	$5.92 = $5.92	2nd 1,667 @	$5.92 =$5.92
Sewer Usage-10,000 @	$15.93= $159.30	Sewer Usage- 3,000 @	$15.93= $47.79
Water Flat	5/8" = $14.42	Water Flat	5/8" = $14.42
Sewer Flat	5/8" = $31.50	Sewer Flat	5/8" = $31.50
	$262.64		**$151.13**

If you have further questions or would like clarification of any information presented herein, please feel free to contact the Water and Sewer Department at 608-423-3712.

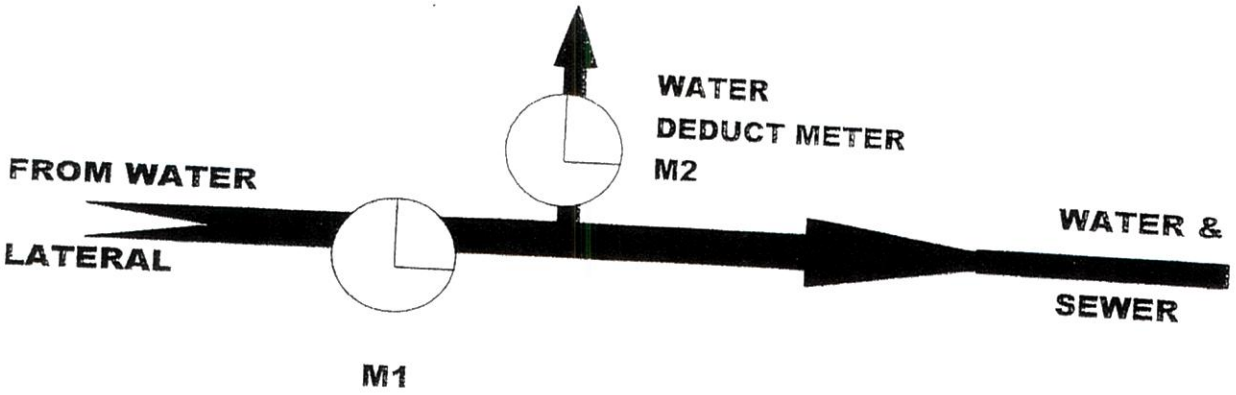
Sincerely,

Vicki Redford

Utility Clerk
Village of Cambridge
Updated 8.2021

DEDUCT METER INSTALLATION INSTRUCTIONS FOR PLUMBERS

DEDUCT METHOD



WATER BILLING: Water service is billed at Schedule MG-1 Rates based on the M1 Meter size and the recorded consumption.

If M2 is owned by the Water Utility: Add M2 Meter rental charge per schedule AM-1

SEWER BILLING: Sewer service bill is based on the M1 Meter size and the billable sewer volume. The billable sewer = (M1 – M2) readings.

NOTE: *M1 Meter must be owned by the Cambridge Water Utility. The M2 Meter may be owned by either the Water Utility or the Sewer Utility.*

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Oshkosh Service Center
625 E County Rd Y STE 700
Oshkosh WI 54901-9731

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 71

July 27, 2021

LISA MOEN
VILLAGE OF CAMBRIDGE
PO BOX 99
CAMBRIDGE, WI 53523

SUBJECT: Reissuance of WPDES General Permit No. WI-B057681-05-0
Permittee Name: Village of Cambridge
Facility Name: Cambridge WATERWORKS
Facility Site Address: Cambridge, WI
Site ID (FIN):
FID: 113007400

Dear Permittee:

This is notification that the Wisconsin Department of Natural Resources (hereafter Department) has made a final determination to reissue the *Operation and Maintenance of Municipal Water Systems* Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit No. WI-B057681-05-0. The reissued WPDES general permit will become effective on **August 1, 2021**. The reissued general permit and fact sheet are available on the Department website here: http://dnr.wi.gov/topic/wastewater/GeneralPermits.html.

The Department has determined that the discharges from scheduled and unscheduled fire hydrant flushing of the water distribution system to a water of the state from your facility operations are eligible for municipal-wide coverage and are hereby authorized under the reissued *Operation and Maintenance of Municipal Water Systems* WPDES General Permit No. WI-B057681-05-0 in accordance with Section 2.2.1 of the general permit and s. NR 205.08, Wis. Adm. Code, subject to the following general permit conditions:

1. Coverage Effective Date: Coverage at the facility will become effective under this permit on **August 1, 2021** until permit termination, revoke and reissuance, or reissuance of the general permit. This permit applies only to the discharge activities and sites applicable to this general permit for the above referenced facility.

2. Regional General Permit Contact: Updated list of the general permit contacts with counties of responsibility are posted to the "Contacts" tab on the wastewater general permits webpage here: https://dnr.wi.gov/topic/wastewater/GeneralPermits.html.

3. Sampling: The permittee shall sample the discharge from fire hydrant flushing of the water distribution system following treatment (if necessary) at the end of pipe or prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to a water of the state for all the parameters listed below for Outfall 001 from Section 3.2.1 and Section 3.2.2 of the permit. The permittee shall take representative samples of the discharge that consists solely of the water before mixing with any other water. The permittee is only required to collect samples when there is a

discharge to a water of the state; if there are no discharges within the reporting frequency the permittee shall report no discharge consistent with Sections 5.1 and 5.2.

Outfall 001 – Fire Hydrant Flushing

Monitoring Requirements and Effluent Limitations						
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Reporting Frequency**	**Notes**
Volume		gpd	Annual	Estimated	Total Annual	
Chlorine, Total Residual	Daily Max	19 µg/L	Annual	Grab	Annual	See Section 3.2.2.1

4. Volume Monitoring: The permittee shall estimate the total annual discharge volume of all fire hydrants flushed each year. This estimate includes scheduled and unscheduled fire hydrant flushing that may occur in a year. The permittee shall control the flow rate to minimize the erosion of the stream bank, resuspension of sediment, downstream flooding, or property damage.

5. Best Management Practices for Hydrant Flushing in Lieu of Monitoring for Total Residual Chlorine: For fire hydrant flushing under Outfall 001, the permittee may demonstrate compliance with the total residual chlorine monitoring and limitations in Section 3.2.2 if the permittee meets the requirements of Section 3.2.2.1.3. The permittee is not required to monitor for total residual chlorine for fire hydrant flushing discharges within the municipality if the permittee complies with the conditions in Section 3.2.2.1.3 of the permit.

6. Total Residual Chlorine Limitation to High Flow Streams: Under Section 3.2.2.1.1, the permittee may request upon the effective date of this general permit, a daily maximum total residual chlorine limit of 38 µg/L if the receiving water of the flushed water has an average low streamflow to average volume discharged greater than or equal to 2:1 or the discharge is to a lake or impoundment.

7. Sampling Protocol for Fire Hydrant Flushing Discharges: If opting or required to take samples for total residual chlorine, the permittee shall comply with the sampling protocol of fire hydrant flushing discharges in Section 3.2.3 of the permit. When a limitation for total residual chlorine in this permit is less than the limit of detection (LOD) for an approved test method, the permittee shall comply with the conditions of Section 3.3.2.2.2 to demonstrate compliance with the total residual chlorine limit.

8. Reporting: The permit requires all monitoring data be submitted on an electronic discharge monitoring report (eDMR) form. The eDMR form is available through the Switchboard (https://dnr.wisconsin.gov/topic/Switchboard/). The report for the year of 2021 is due by January 21, 2022. **The eDMR form shall be submitted to the department regardless of whether or not there is a discharge during any year. For years with no flow, the flow rate shall be reported as "0" on the annual eDMR form.**

   In order to access the eDMR forms, you must have or create a Wisconsin Web Access Management System (WAMS) ID and request access for each facility for which you intend to submit data. The Switchboard can be used to create a WAMS ID and register with your contact information and user roles. If you already have a WAMS ID, then you do not need to recreate one but still must request access to the facility. Additional registration information can be found in the following document: https://dnr.wisconsin.gov/sites/default/files/topic/Switchboard/HowToGuide.pdf.

9. Notification of Other Discharges: You may choose to have other water system discharges (i.e. water tower flushing or hydrostatic testing of water mains) to a water of the state covered under this general permit or allow other entities who work with municipal water systems to apply for coverage under this general permit separately. So, a contractor may apply for this general permit separately if they are performing a one-time discharge and plan on discharging to a water of state. The department recommends that you include in the contract or specifications that the contractor or consultant apply for coverage under this general permit for the discharge activity. If you do wish to be responsible for the other water system discharges to a water of the state and have them covered under this general permit, please contact the Department via the planned change requirements under Section 8.3.3 of the permit. The Department will then transmit a revised coverage letter stating that the discharge is granted coverage under this general permit with new sampling and reporting requirements for the new outfall.

10. Notification of Planned Changes: If you will change the quality of the finished water supply water which may result in discharge of different pollutants (i.e. phosphorus) being flushed, please notify the department via the planned change requirements under Section 8.3.3 of the permit. The Department will then transmit a revised coverage letter stating that the new sampling requirements from Section 3.2.2 of the general permit.

11. Change of Authorized Representative: If you plan on changing the authorized representative contact for the facility or you want to assign a new person to be a duly authorized representative to submit specific permit documents on your behalf, please complete and submit a Delegation of Signature Authority (Form 3400-220) to the Department available at http://dnr.wi.gov/topic/wastewater/GeneralPermits.html.

12. Compliance with Permit Conditions: You are responsible for compliance with the general permit requirements and conditions listed above and all other applicable requirements and conditions contained in the general permit. **To assure you remain in compliance and avoid any enforcement action, please read the general permit over carefully.**

The notice of final determination to reissue the general permit is attached to this letter. This notice summarizes the significant public comments received during the public notice period on the proposed reissuance and the Department responses to those comments.

Additional information regarding the Department's legal authority in this matter and your rights of appeal are shown below. Please contact me by phone: (920) 410-5192 or by email: Trevor.Moen@Wisconsin.gov if you have any questions regarding this letter.

Regards,

Trevor Moen

Trevor Moen
Wastewater Engineer
Bureau of Water Quality

EC: Permit File(s)

LEGAL AUTHORITIES AND APPEAL RIGHTS

Section 283.35(1), Wis. Stats., authorizes the Department to issue a general permit applicable to a designated area of the state authorizing discharges from specified categories or classes of point sources located within that area. Upon the request of the owner or operator of a point source, the Department shall withdraw the point source from the coverage of a general permit and issue an individual Wisconsin Pollutant Discharge Elimination System (WPDES) permit for that source in accordance with s. 283.35(2), Wis. Stats. Additionally, the Department may withdraw a point source from the coverage of a general permit and issue an individual WPDES permit if that source meets any of the factors listed in s. 283.35(3), Wis. Stats. Issuance of such an individual permit will provide for a public comment period, and potentially a public informational hearing and/or an adjudicatory hearing. In lieu of general permit withdrawal, the Department may refer any violation of a general permit to the Department of Justice for enforcement under s. 283.91, Wis. Stats., pursuant to s. 283.89, Wis. Stats. In order to remain in compliance and avoid any enforcement action, **please read your permit carefully**.

To challenge the reasonableness of or necessity for any term or condition of an issued, reissued, or modified general permit, s. 283.63, Wis. Stats., and ch. NR 203, Wis. Adm. Code, require that you file a verified petition for review with the Secretary of the Department of Natural Resources within 60 days after notice of the permit decision was issued by the Department. For other permit-related decisions, such as the decision to confer general permit coverage to your facility, that are not reviewable pursuant to s. 283.63, Wis. Stats., it may be possible for permittees or other persons to obtain an administrative review pursuant to s. 227.42, Wis. Stats., and s. NR 2.05(5), Wis. Adm. Code, or a judicial review pursuant to s. 227.52, Wis. Stats. If you choose to pursue one of these options, you should know that Wisconsin Statutes and Administrative Code establish time periods within which requests to review Department decisions must be filed.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NOTICE OF FINAL DETERMINATION TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) GENERAL PERMIT NO. WI-B057681-05-0

General Permit Name: Operation and Maintenance of Municipal Water Systems

Receiving Water and Location: Point source discharges to waters of the state of Wisconsin.

Brief Description of Facilities Covered under General Permit: This general permit is applicable to short-term point source discharges of pollutants to a water of the state from operational and maintenance activities of municipal water systems. Discharges from operational and maintenance activities include: flushing water from cleaning, disinfecting, and/or flushing water distribution and storage systems; hydrostatic test water from hydrostatic testing of water distribution and storage systems; well development water from the development, installation, and/or purging water supply wells; and pigging/swabbing water from the pigging/swabbing water distribution systems to groundwater.

Permit Drafter's Name, Address, Phone and Email: Trevor J. Moen, DNR, 625 E County Rd Y STE 700, Oshkosh WI 54904-9731, phone: (920) 410-5192 and email: Trevor.Moen@Wisconsin.gov.

Date Permit Signed/Issued: July 14, 2021
Date of Effectiveness: August 1, 2021
Date of Expiration: July 31, 2026

Following the public notice period, the department has made a final determination to reissue the WPDES General Permit No. WI-B057681-05-0. The information from the WPDES permit file, comments received on the proposed permit and applicable Wis. Adm. Codes were used as a basis for this final determination.

The department has the authority to issue, modify, suspend, revoke and reissue or terminate WPDES permits and to establish effluent limitations and permit conditions under ch. 283, Wis. Stats.

Any minor corrections to typographical errors, updating page numbers and headers/footers, adding and updating the Table of Contents and titles, correcting formatting, renumbering headings, and web links are not included in this summary document. The following is a summary of significant comments and any significant changes which have been made in the terms and conditions set forth in the draft permit:

Comments Received from the Applicants, Individuals or Groups

Pervious Permit Exemption for Fire Hydrant Flushing with No Net Addition of Chlorine: The department received public comments requesting that the new permit retain an exemption for fire flushing discharges from the previous permit, applicable in situations where there is no net additional of chlorine or TSS.

Department Response: An exemption was previously codified in ch. NR 106, Wis. Adm. Code, which allowed permits to exempt monitoring for discharges that only contained water supply water treated to meet safe drinking water standards. However, the U.S. Environmental Protection Agency (EPA) determined that this code exemption violated the Clean Water Act. The department therefore revised ch. NR 106, Wis. Adm. Code to remove this exemption. To accommodate concerns from commenters, the department has included conditions under Section 3.2.2.1 in the permit applicable to fire hydrant flushing activities that allow the discharger to request a higher total residual chlorine limit of 38 ug/L if a discharge will be a high-flowing stream under Section 3.2.2.1.1, or the permittee may elect to utilize best management practices in lieu of monitoring for total residual chlorine under Section 3.2.2.1.3. For Section 3.2.2.1.3, the permittee must still report to the department a certification statement that they utilized BMPs each year to reduce or remove total chlorine at each fire hydrant.

Opposed to TSS Monitoring and Limits for Fire Hydrant Flushing: The department received public comments opposed to requiring TSS monitoring and limits for discharges from fire hydrant flushing of water distribution systems.

Department Response: The TSS monitoring and limits do not apply to scheduled and unscheduled fire hydrant flushing discharges from water distribution systems under Outfall 001. The TSS monitoring and limits apply to other water system maintenance discharges like water tower flushing, public water supply well development, or hydrostatic testing of water mains.

Treated Drinking Water is Not a Discharge of Pollutants: The department received public comments questioning how public drinking water treated to safe drinking water standards could be considered a discharge of pollutants under the Clean Water Act.

Department Response: Section 283.31, Wis. Stats, states the discharge of any pollutant into any waters of the state by any person is unlawful unless such discharge is done under a permit issued by the department. The flushed water may still contain pollutants like total residual chlorine. Also, some pollutant levels in the flushed water may exceed surface water quality standards under chs. NR 102, NR 103, NR 104, and NR 106, Wis. Adm. Code. There is no permit exemption in Chapter 283, Wisconsin Statutes or under the Clean Water Act for discharges treated to meet safe drinking water standards. It is important to note that standards which apply to public water supplies ("maximum contaminant levels," or MCLs) are different than those that apply within waterbodies ("water quality standards"). This difference is because MCLs are protective of human health via water ingestion, whereas water quality standards protect aquatic life as well as human health. Chlorine can be harmful to aquatic life at concentrations lower than concentrations typically found in public water supplies.

Not a Direct Discharge to Waters of the State and Meaning of Discharge: The department received public comments wanting to know the meaning of "Discharge" and that water flushed from mains and fire hydrants should not be treated as if it were a direct discharge into a water of the state under the Clean Water Act. The Clean Water Act applies to the discharge of a pollutant into any waters of the United States. Wisconsin's adoption of the Clean Water Act applies to the discharge of any pollutant into any waters of the State of Wisconsin. Water flushed from mains and fire hydrants is rarely discharged directly into a surface water or the groundwater.

Department Response: The department requires a WPDES permit for any discharge of pollutants to waters of the state. Pursuant to federal law, a "direct discharge" means a "discharge of a pollutant." See 40 CFR 122.2.

A "discharge of a pollutant" or "discharge of pollutants" means any addition of any pollutant to the waters of this state from any point source pursuant to s. 283.01(5), Wis. Stats. This definition includes a "point source" which means a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants may be discharged either into the waters of the state or into a publicly owned treatment works except for a conveyance that conveys only storm water. This term does not include agricultural storm water discharges and return flows from irrigated agriculture pursuant to s. 283.01(12)(a), Wis. Adm. Code. See 40 CFR 122.2. This is differentiated from an "indirect discharger" which means a nondomestic discharger introducing pollutants to a publicly owned treatment works. See 40 CFR 122.2. Therefore, the department considers any water flushed from a water system to be a direct discharge to waters of the state and requires a WPDES permit because they are conveyed through point sources and are not directed to a wastewater treatment plant.

Discharges into Storm Water Systems Already Regulated in Many Communities. The department received a public comment stating in many communities, discharges from the municipal storm water system are already regulated through an MS4 Permit. If a community discharges water from its drinking water system into a municipal storm water system that is already subject to an MS4 Permit, a community should not also be subject to the draft General Permit. Public drinking water is already tested more often and for more contaminates than any other discharge to the municipal storm sewer system.

Department Response: Discharges from municipal water system to municipal separate storm sewer systems (MS4) are not regulated under any general or individual MS4 WPDES permit. These permits regulate storm water runoff from municipal separate storm sewer systems. Some MS4 permits may authorize discharge of "uncontaminated" water in certain instances as well, but chlorine and other pollutants regulated under this general permit are considered contaminants that must be removed. In other words, discharges with reasonable potential to cause or contribute to an exceedance of water quality standards is considered contaminated for purposes of the WPDES program. Discharges for which this general permit is applicable are regulated under this general permit rather than an MS4 permit.

Chlorine Limit is Unreasonably Low and Replace Chlorine Testing Requirement with Best Practices Management Requirements: The department received many public comments opposed to the chlorine limit of 19 ug/L applicable to fire hydrant flushing as water leaving a fire hydrant nozzle is not a representative sample of the total chlorine residual that will be discharged into the receiving water outfall and requiring dechlorination for each hydrant when some hydrants do not go straight into a surface water of the state. These requirements would be burdensome and costly for municipal water systems. The public comments also requested that the chlorine monitoring and limits for

fire hydrant flushing be replaced with best management practices that would allow for the discharge of treated water to locations that will facilitate this reduction of chlorine before the discharged water reaches the receiving stream. This change will address the concerns above regarding testing and unnecessary dechlorination.

Department Response: The department has promulgated acute and chronic water quality standards for total residual chlorine listed in Table 1 and Table 5 of s. NR 105.06, Wis. Adm. Code. The department must ensure that WPDES permits prescribe conditions that are compliance with and protective of water quality standards pursuant to s. 283.31(4), Wis. Stats. Additionally, this general permit must ensure that water quality standards are protected in the most conservative discharge scenarios, such as a discharge containing total residual chlorine to a low-flow stream. Therefore, the department has included a daily maximum total residual chlorine limit to be protective of and ensure compliance with the chlorine water quality standards. The chronic water quality standard for total residual chlorine was not considered due to the intermittent nature of the discharges covered by this general permit. Nevertheless, the department has included conditions under Section 3.2.2.1 in the permit for fire hydrant flushing activities that allow the discharger to request a higher total residual chlorine limit of 38 ug/L if a discharge will be a high-flowing stream under Section 3.2.2.1.1. Additionally, the department has updated the draft permit so that the permittee may elect to utilize best management practices (BMPs) in lieu of monitoring for total residual chlorine under Section 3.2.2.1.3, where the discharge is made to surface waters via storm sewers. For Section 3.2.2.1.3, the permittee must still report to the department a certification statement that they utilized BMPs each year to reduce or remove total chlorine at each fire hydrant.

Also, the department has revised total residual chlorine monitoring waiver conditions under Section 3.3.2.2.3 for other water system discharges to include all types of storm water conveyance systems, storm water pond systems (e.g. municipal regional storm water ponds), or combination of both to be used to demonstrate that the total residual chlorine levels will be dissipated below the chlorine limits prior to entering the surface water.

Chlorine Field Testing Equipment Does Not Have a Sufficiently Sensitive LOD: The department received public comments stating that many total residual field testing equipment do not have a sensitive enough limit of detection (LOD) below the total residual chlorine limits proposed in the permit.

Department Response: The department is also aware that some approved field or laboratory test methods for total residual chlorine may not have a sensitive enough limit of detection (LOD) below the total residual chlorine effluent limit. Therefore, permit includes Sections 3.2.2.1.2 and 3.3.2.2.2 that explains how the permittee can demonstrate compliance with total residual chlorine limits if the limit is below the LOD for the approved chlorine test method used by the permittee.

Sampling Location for Fire Hydrant Flushing Discharges: The department received public comments about the sampling location for fire hydrant flushing discharge and questions on the meaning of "end of the pipe" under Section 3.1 of the general permit.

Department Response: The permittee shall sample the flushing water from fire hydrant flushing of water distribution systems following treatment (if applicable) at the end of pipe or prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to surface water or wetlands via Outfall 001. The permittee shall take representative samples of the discharge that consists solely of the water before mixing with any other water.

This means that the permit allows the permittee to take a sample at the "end of pipe," which is the point where the discharge enters the receiving water, if there are no other dilutionary sources entering the pipe prior to discharge. Alternatively, if "the end of pipe" is not accessible or feasible to collect a representative sample, then a sample may be taken from the point of discharge which is the fire hydrant nozzle. By collecting samples at the point of discharge, the permittee is ensuring that all permit effluent limits, and monitoring will be meet before reaching the receiving water.

Meaning of Continuous Discharge: The department received public comments requesting clarification on the meaning of "Continuous Discharge," as continuous discharges at a single site are not applicable under Section 1.2 of the general permit.

Department Responses: Continuous discharge means a facility that discharges 24 hours per day on a year–round basis except for temporary shutdowns for maintenance or other similar activities pursuant to s. NR 205.03(9g), Wis. Adm. Code. The department considers many of the discharges covered by this general permit to be either intermittent, temporary, or recurring and not continuous.

Eliminate Phosphorus Testing or Reporting of Dosage Rate of Phosphorus: The department received public comments requesting the removal of total phosphorus monitoring from the permit for fire hydrant flushing discharges. Some public comments also requested that monitoring frequency be reduced to annual and/or replaced with reporting the dosage rate of total phosphorus added to the finished water supply system water.

Department Response: The department has revised the total phosphorus monitoring under Sections 3.2.2 and 3.2.2.2 for fire hydrant flushing activities to allow the permittee to either collect a sample of the discharge for total phosphorus or calculate concentration estimated in the discharge based on source water concentrations and the dosage rate of phosphate chemicals added to the finished water supply system water.

Require Only Annual Sampling and Reporting for Fire Hydrant Flushing Discharges: The department received public comments requesting that all monitoring requirements for fire hydrant flushing discharges under Sections 3.2.1. and 3.2.2 be reduced to annual sampling and reporting. Volumes are generally monitored and reported yearly for non-revenue water. This may be an easier, less costly route to take for this reporting. Also, there are additional labor costs that will be incurred to report more frequently.

Department Response: The department has reduced the sampling and reporting for all parameters under Section 3.2.1 and 3.2.2 to annual. The permittee shall estimate the total annual discharge volume of all hydrants flushed each year. This estimate includes scheduled and unscheduled hydrant flushing that may occur in a year. The department also included a condition under Section 3.3.3 to allow permittees to reduce the sampling and reporting frequency based on the schedule for recurring other water system discharges (e.g. water tower flushing, storage tank flushing) at single site for the permittee.

Applicable Outfall Identification: The department received comments requesting clarification on the meaning of "for each applicable outfall at the facility site" under Sections 3.2.2 and 3.3. given that water system operations are occurring at different locations in the municipality most every municipal storm outlet will get some of that flow.

Department Response: Under Section 3.2.3, if multiple hydrant flushing discharges occur in one year within the municipality, the permittee only needs to take a sample from one hydrant that is been flushed for the parameters in Sections 3.2.1 and/or 3.2.2. However, the permittee must ensure that the monitoring requirements and limitations under Section 3.2.1 and 3.2.2 are being met for each hydrant being flushing within the municipal water system each year. Sections 3.2 and 3.2.2 have been revised to remove "each applicable outfall" and replace with "for each hydrant being flushed within the municipal water system" to make it clearer for fire hydrant flushing discharges under Outfall 001.

For Sections 3.3.1 and 3.3.2, "for each applicable outfall at the facility site" means that the monitoring requirements and limits apply to each location where other water system maintenance discharge to surface water may occur within the municipality. So, a municipality may have multiple sampling points if different applicable discharges to surface water occur within the municipality. For instance, a municipality may have three different outfalls for hydrostatic testing if three hydrostatic testing projects were occurring at three different locations with discharges to surface water within the municipality, so the permittee would be required to take samples in compliance with this general permit at each of those locations. Sections 3.2 and 3.2.2 have been revised to remove "each applicable outfall at the facility site" and replace with "for each hydrant being flushed within the municipal water system" to make it clearer for other water system maintenance discharges under Outfall 002. The department also revised Section 4.2.1 to remove "each applicable outfall at the facility site" and replace with "for each other water system maintenance discharge to groundwater that may occur within the municipal water system" to make it clearer for other water system maintenance discharges under Outfall 003.

Multiple Watersheds: The department received public comments requesting clarification on how utility discharges into two different watersheds should monitor and report discharges.

Department Response: If a municipal water system will have fire hydrant flushing discharges to multiple watersheds where different permit conditions may apply, the permittee may work with department to set up multiple outfalls for each watershed and report all fire hydrant flushing discharges for each watershed separately. Otherwise, the department will consider the most restrictive conditions for reporting all fire hydrant flushing discharges under one outfall. Water system maintenance discharges for activities other than hydrant flushing will have separate outfalls for each discharge that occurs within the municipal water system, so multiple watersheds will not be factor.

Emergency Situation Discharges. The department received questions asking whether the permit and monitoring requirements would apply to discharges from emergency situations like water main breaks, firefighting, and other emergency and after-hours situations.

Department Response: Under Section 1.2.11, this general permit is not applicable to discharges of water from any fire emergency, accidental or uncontrolled release, spill, leak, or overflow. The department has revised Section 1.2.11 to make this clear. However, the permittee shall follow the standard procedures for reporting accidental and uncontrolled releases from emergency situations.

Unscheduled Flushing: The department received public comments requesting clarification on which activities are considered hydrant flushing discharges subject to the requirements of Outfall 001 and how the sampling and reporting requirements for fire hydrant flushing would apply to any unscheduled flushing. For example, if the utility received a complaint about rusty water and needing to flush a hydrant, would the discharge be covered under Outfall 001?

Department Response: Outfall 001 is applicable to any scheduled and/or any unscheduled fire hydrant flushing discharge from a water distribution system to a surface water or wetland. Outfall 002 and Outfall 003 are applicable to other water system maintenance discharges (e.g. water storage tank flushing, water tower flushing, hydrostatic testing of water mains, development of municipal water supply wells) to surface water or groundwater.

The reporting of total annual volume now includes an estimate for total volume flushed from scheduled and unscheduled hydrant flushing that may occur in a year under Section 3.2.1.1. Unscheduled hydrant flushing may include fire flow testing, flushing to improve clarity for a residence, or opening of a hydrant to flush the line due to a water main break.

Other Water Supply System Discharges and Staffing Impacts: The department received public comments requesting that the general permit should allow contractors who work with municipal water system with the ability to apply for coverage under the general permit as it may be difficult for some municipalities with limited staffing to be responsible for contractors that may perform and operate other temporary water system discharges (i.e. hydrostatic testing of water mains or well development).

Department Response: This general permit may cover recurring hydrant flushing discharges of the entire water distribution system for a municipality under one blanket municipal-wide coverage. For other water system discharges, municipalities (municipal water system owners) may choose to have those discharges covered under their general permit coverage or allow other non-municipal entities working on behalf of municipal water system owners to apply for coverage under this general permit separately. So, a contractor may apply for this general permit separately if they are performing a one-time discharge and plan on discharging to a water of state. The department recommends that municipalities include the contract or specifications that the non-municipal entities apply for coverage under this general permit for the discharge activity. Section 1.1 of the general permit has been updated to explain how this general permit may apply to municipalities and non-municipal entities.

Advised of Additional Sampling Requirements: The department received public comments asking how municipal water systems will be advised of any additional sampling requirements like oil and grease and dissolved oxygen that apply to their discharges.

Department Response: The department will transmit a reissuance letter via mail addressed to all municipal water systems stating that the scheduled and/or unscheduled hydrant flushing of their distribution systems is granted coverage under this general permit and will include monitoring requirements Sections 3.2.1 and 3.2.2. If a permittee will have other temporary discharges associated with their water system (e.g. storage tank flushing, water tower flushing or hydrostatic testing of water mains) under Sections 3.3.1, 3.3.2 or 4.2.1 each year, they shall either contact the department via the planned change requirements under Section 8.3.3 of the permit to get that discharge covered under the general permit or have the contractor apply for this general permit separately if the contractor will be responsible for the discharge and plans on discharging to a water of state. The coverage letter issued by the department will specify which additional sampling requirements apply based on the site-specific situation of each discharger.

Food Grade Oil and Grease: The department received public comments to clarify whether food grade oil and grease fall under Oil and Grease (Hexane).

Department Response: Food grade oil and grease is considered under the sampling for oil and grease (hexane). Oil and grease testing determines the amount of non-volatile hydrocarbons (i.e. petroleum derivatives), vegetable oils, animal fats, waxes, soaps, greases and related material in a sample.

Permit Application Attachments for Municipal Water Systems: The department received public comment that the notice of intent attachments under Section 2.1.4 to be revised for municipal water systems given that this permit covers the entire system.

Department Response: The department has revised Section 2.1.4 to make it clearer what attachments apply only to fire hydrant flushing discharges since these discharges are covered for the entire municipal water system.

Request Higher Total Residual Chlorine Limits: The department received a public comment asking whether higher total residual chlorine limits under Sections 3.2.2.1.1 and 3.3.2.2.1 can be requested right away upon reissuance of this general permit.

Department Response: Yes, for fire hydrant flushing if a municipal water system chooses to perform sampling for total residual chlorine under Section 3.2.2.1.3, then the permittee may request a higher total residual limit for hydrant flushing discharges under Section 3.2.2.1.1 upon receiving the coverage letter.

For other water system maintenance discharges, the permittee may request a higher total residual chlorine limit after notifying the department of other water system maintenance discharges that the municipality wants covered under the general permit. The permittee may allow a contractor to obtain coverage under this general permit separately for the one-time discharge.

Request for Higher pH Limit: The department received a public comment that permit include a condition to allow municipal water systems to request a higher pH limit if they use lime softening processes that result in finished water supply system water with a higher pH.

Department Response: The department has included a condition under Section 3.3.1.3 for municipalities with finished water supply water from lime softening treatment processes, the department may determine upon the effective date of this general permit or at the time of the submittal of the Notice of Intent (NOI), a daily maximum pH limit of 11 s.u. if the receiving water flow (7–day flow that occurs once in 10 years) to average effluent flow ratio is greater than or equal to 2:1. Those discharges that do not have enough mixing and dilution will have to meet a daily maximum pH limit of 9.0 s.u. at the end of the pipe. The permittee may request a higher pH limit for other water system maintenance discharges after notifying the department of other water system maintenance discharges that the municipality wants covered under the general permit.

TSS Monitoring Waiver: The department received a public comment requesting that the department consider allowing TSS monitoring waivers for other water system discharges except for well development water.

Department Response: The department has added Section 3.3.3 to allow the permittee to request a sampling and reporting reduction for all parameters in Sections 3.3.1, 3.3.2, and/or 4.2.1 based on the schedule for recurring other water system discharges at single site for the permittee. However, the department retains the TSS monitoring and limits for other water system maintenance discharges. TSS and pH monitoring and limits are base parameters to ensure other water system maintenance discharges comply with numeric and narrative surface water quality standards.

Total Residual Chlorine Monitoring Waiver: The department received a public comment stating that it may be difficult for any municipality to meet Condition #1 under Section 3.3.2.2.3 when applying for a total residual chlorine waiver for other water system discharges.

Department Response: The department has revised Condition #1 of Section 3.3.2.2.3 for other water system discharges so that it now includes all types of storm water conveyance systems, storm water pond systems (e.g. municipal regional storm water ponds), or combination of both to be used to demonstrate that the total residual chlorine levels will be dissipated below the chlorine limits prior to entering the surface water.

Dissolved Oxygen Monitoring and Lab Certification: The department received a public comment asserting that unless the discharge is straight (without any other conveyance) into a receiving body (stream or lake), meeting the dissolved oxygen monitoring and limits is unrealistic and it is unclear whether lab accreditation is required for dissolved oxygen.

Department Response: The revised Section 3.3.2.3 for DO monitoring that DO monitoring and limits are only required if the permittee adds chemicals prior to discharge that are known to scavenge or remove oxygen and does not discharge to a vegetative swale system, storm water pond system or combination of storm water conveyance system and storm water pond system that will convey the water to a surface water or wetland. The department believes that discharging to a vegetative swale system, storm water pond system or combination of storm water conveyance system and storm water pond system will provide natural aeration where DO levels are expected to be within acceptable levels. The department does not require that DO samples be tested and analyzed by a laboratory certified or registered under ch. NR 149, Wis. Adm. Code. The department has revised Section 8.2.13 to include dissolved oxygen.

Maintenance of Private Fire Hydrants within our water system: The department received a public comment asking whether the municipal water system is responsible for flushing of private fire hydrants.

Department Response: This general permit only applies to operation and maintenance discharges from municipal water systems. Commercial/industrial entities would need to apply for a WPDES permit separately for those discharges. The Operation and Maintenance of Industrial Potable and Non-Potable Water Systems and Hydrostatic Testing of Petroleum Systems WPDES General Permit No. WI-A057681-05-0 may be applicable to those discharges.

Discharge of water to/from adjoining water system: The department received a public comment asking who is responsible for sampling and reporting under the general permit if flushed water enters a nearby community's storm sewer system.

Department Response: The municipality that owns the hydrant being flushed is responsible for taking samples in compliance with this general permit regardless of what storm sewer system it may enter.

Wavier for Smaller Municipal Water Systems: The department received a public comment asking whether there could be a waiver for smaller municipal water systems.

Department Response: The general permit does not have a waiver for municipal water systems from the general permit requirements based on their size. However, the department has reduced the sampling and reporting for all parameters under Section 3.2.1 and 3.2.2 to annual in order to reduce administrative burden. The permittee shall estimate the total annual discharge volume of all hydrants flushed each year. This estimate includes scheduled and unscheduled hydrant flushing that may occur in a year.

Sampling for Other Water System Discharges: The department received public comments asking whether total residual chlorine and total phosphorus tests are required for other water system discharges (i.e. hydrostatic testing of water mains or water tower flushing).

Department Response: Yes, this general permit would apply and sampling and reporting will be required for the discharge from those other projects. However, the sampling parameters are dependent upon the discharge location (see Sections 3.3.1, 3.3.2, and 4.2.1). Once these other projects are completed, the sampling and reporting can be inactivated or discontinued by notification. For other water system discharges, municipalities may choose to have those discharges covered under the general permit or allow other entities who work with municipal water systems to apply for coverage under this general permit separately. So, a contractor may apply for this general permit separately if they are performing a one-time discharge and plan on discharging to a water of state. The department recommends that municipalities include the contract or specifications that the contractor or consultant apply for coverage under this general permit for the discharge activity. If the other projects will be discharged to the sanitary sewer system, then the permit will not apply.

Sampling and reporting for hydrant flushing is limited to volume, total residual chlorine, and/or total phosphorus under Sections 3.2.1 and 3.2.2. Total phosphorus monitoring is only necessary for systems that add phosphates for corrosion control or sequestering. Alternatively, the permittee shall either collect a sample of the discharge for total phosphorus or calculate concentration estimated in the discharge based on the dosage rate of phosphate chemicals added to the finished water supply system water under Section 3.2.2.2. For total residual chlorine, the permittee may elect to utilize best management practices in lieu of monitoring under Section 3.2.2.1.3. For Section 3.2.2.1.3, the permittee must still report to the department a certification statement that they utilized BMPs each year to reduce or remove total residual chlorine at each fire hydrant.

Dechlorination Required: The department received a comment asking whether dechlorination will be required for all discharges covered under this general permit.

Department Response: Dechlorination is only necessary if the total residual limits cannot be met or the permittee selects to use dechlorination devices as a best management practice in lieu of monitoring for total residual chlorine under Section 3.2.2.1.3 for fire hydrant flushing. The permit does have conditions that recognize that field test methods may not be able to reach a limit of detection sensitive enough to meet the limit. In these cases, any level of total residual chlorine reported less than the LOD is in compliance with the permit and limit. Also, the department has included total residual chlorine monitoring waiver conditions for other water system discharges where it can be demonstrated that the total residual chlorine levels will be dissipated below the chlorine limits prior to reaching the surface water.

Comments Received from EPA or Other Government Agencies

The department received the following comments from the United States Environmental Protection Agency (EPA) on the draft permit.

Reporting of Sampling: EPA requested that the department revise the sampling point language in Section 3.1 and 4.1 of permit as there may be periods of no discharge during a reporting period to: "the permittee is only required to collect samples when there is a discharge to surface water [and groundwater]; if there are no discharges within the sampling frequency the permittee should report no discharge."

Department Response: The department has revised the sampling point descriptions in Section 3.1 and 4.1 as suggested by EPA.

Petitions for Individual Permit: EPA requested that the department include the individual permit petition language from 40 CFR § 122.28(b)(3)(i) in the general permit.

Department Response: The department does not believe that this is an appropriate permit term or condition, therefore, the department has decided not to make any changes to the permit. The department primarily includes terms and conditions in permits to assure compliance with water quality standards, groundwater protection standards, effluent limitations, and/or technology-based effluent limits. Any person or discharger still maintains the right to petition the department pursuant to ss. NR 205.08 (4) and (5), Wis. Adm. Code and 40 CFR §122.28(b)(3)(i) regardless if it is in the permit.

Standard Conditions: EPA requested that the department revise the standard requirements of general permit to include all the language from s. NR 205.07(1)(j), Wis. Adm. Code for proper operation and maintenance and bypassing from s. NR 205.07(1)(u), Wis. Adm. Code.

Department Response: The department has revised Section 8.2.7 as suggested for the proper operation and maintenance to be consistent with federal and state rules. The department has added the bypassing requirements under Section 8.2.18.

As provided by s. 283.63, Wis. Stats., and ch. 203, Wis. Adm. Code, persons desiring further adjudicative review of this final determination may request a public adjudicatory hearing. A request shall be made by filing a verified petition for review with the Secretary of the Department of Natural Resources within 60 days of the date the permit was signed (see permit signature date above). Further information regarding the conduct and nature of public adjudicatory hearings may be found by reviewing ch. NR 203, Wis. Adm. Code, s. 283.63, Wis. Stats., and other applicable law, including s. 227.42, Wis. Stats.

Information on file for this permit action, including the draft permit and fact sheet may be reviewed on the internet at the above web link or may be inspected and copied at the permit drafter's office during office hours. Information on this permit may also be obtained by calling the permit drafter or by writing to the department. Reasonable costs (usually 20 cents per page) will be charged for copies of information in the file other than the public notice, permit and fact sheet. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.