



August 31, 2018

Ms. Geisa Thielen
Wastewater Engineer- Water Quality Bureau /SE District
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr Dr.
Milwaukee, WI 53212

Subject: August 27, 2018 Sanitary Sewer Overflow Event Five-Day Notification Letter
WPDES Permit No. WI-0036820-03-1

Dear Ms. Thielen:

The following information is being provided in compliance with the terms and conditions listed in section 10.2.6 of the MMSD's (District) WPDES permit for unscheduled bypassing.

The bypass occurred as a result of heavy rain which began at 6:30 PM on August 26th. By 11:50 PM, 3.48 inches of rain was recorded at District rain gauge WS1224 located at 6985 N. River Road in the Village of River Hills. Due to this heavy rainfall, a WPDES permitted (SSO 263) District relief structure overflowed and discharged diluted wastewater.

The discharge began on August 27th at 12:10 AM and concluded by 2:40 AM for a total of 2.5 hours. The estimated discharge amount was 0.95 million gallons.

The Depth Duration Frequency Curves are attached with data from District rain gauge WS1224, using National Oceanic and Atmospheric Administration Atlas 14, Volume 8, Version 2. This reference shows that this rainfall event was representative of a 10-25 year storm.

The District actively pursues the elimination of excess inflow and infiltration by funding a \$58 million-dollar Private Property Inflow and Infiltration Reduction Program throughout our service area to further reduce the risk of basement backups and separate sewer overflows.

The following supporting documents are attached:

- Sanitary Sewerage Overflow Verification Notification Summary Report Form 3400-184
- Precipitation Map at District Rain Gauges for August 26, 2018
- Depth Duration Frequency Curve

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If you have any questions concerning this report, please contact me at (414) 277-6384.

Sincerely,

A handwritten signature in black ink that reads "Sharon K. Mertens". The signature is written in a cursive style with a large, stylized initial "S".

Sharon K. Mertens

Director, Water Quality Protection

Milwaukee Metropolitan Sewerage District

c: S. Anthony, MMSD
T. Nowicki, MMSD
S. Royer, Veolia Water Milwaukee

Notice: An overflow is defined as a release of wastewater from a sewage collection system (SSO) or from a location within a sewage treatment facility (TFO) other than a permitted outfall structure, directly to a water of the state or land surface. Pursuant to s. 283.55(1)(dm), Wis. Stats., s. NR 210.21(4)(5)(6) Wis. Adm. Code and in accordance with reporting requirements in your WPDES permit, permittees shall submit a written report form for each overflow. This record is used to administer the water quality program, and any personally identifiable information may be provided to requesters as required under the Wisconsin Open Records law (ss. 19.31–19.39, Wis. Stats.)."

- Sanitary Sewer Overflow (SSO)**
 Treatment Facility Overflow (TFO)

Use one form per SSO location. Submit within five calendar days to your Department wastewater representative. Attach additional information as necessary to explain or document each overflow occurrence. A single SSO may be more than one day if the circumstance causing the overflow results in discharge duration more than 24 hours. If there is a stop and restart of the overflow within 24 hours, but it's caused by the same circumstances, report it as one SSO. If the discharges are separated by more than 24 hours, they should be reported as separate SSOs.

Notifications

Department Notification

Permittee (Municipality or Facility Name) Milwaukee Metropolitan Sewerage District	Permit No. WI-0036820-03-1
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Person Who Contacted the DNR
Sharon K. Mertens

DNR Person Contacted Geisa Thielen	Date (mm/dd/yyyy) 08/27/2018	Time of Day 10:25	<input checked="" type="radio"/> am <input type="radio"/> pm	Within 24 hours? <input checked="" type="radio"/> Yes <input type="radio"/> No
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Public Notification

Date (mm/dd/yyyy) 08/27/2018	How the Public was Notified Posted on MMSD's (District) website and through Milwaukee Journal Sentinel
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Describe the actual or potential for human exposure or contact with overflowing wastewater

The diluted wastewater flows overland and drains into the Milwaukee River. There is potential for human exposure by walking through the area or through recreational use of the waterway.

Other Notifications (if applicable)	Drinking Water Intake Owner Cudahy, Milwaukee, North Shore, Oak Creek, & South Milw. Waterworks	Date (mm/dd/yyyy) 08/27/2018
	Regional Wastewater Treatment Facility NA	Date (mm/dd/yyyy)

(Satellite collection permittees are required to submit a copy of this report to the regional plant to which they discharge.)

Wet Weather Information (if applicable)

Was this overflow wet weather related? Yes No (skip this section)

Rainfall Start: 08/26/2018 6:30 am pm 3.5 inches
 Date (mm/dd/yyyy) Start Time Rainfall Amount

Rainfall End: 08/26/2018 11:50 am pm
 Date (mm/dd/yyyy) End Time

Soil is saturated with rainfall amounts to date for 2018 4+ inches over historical

Contributing Soil or Other Conditions (saturated, frozen, soil type, snowmelt, etc.): averages

Overflow Details

Location (Street Address)
6985 N. River Road - WPDES permitted SSO 263 Green Tree Road at Milwaukee River.

Location (GPS coordinates, WGS84 standard coordinate system)	Latitude: <u>43.143705</u> (e.g. 43.075350)	Longitude: <u>-87.926136</u> (e.g. -89.379770)
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Overflow Start: 08/27/2018 12:10 am pm
 Date (mm/dd/yyyy) Start Time

Overflow End: 08/27/2018 2:40 am pm
 Date (mm/dd/yyyy) End Time

2.5 hours 950,000 gallons
 Duration Volume

Cause: (select all that apply)

- Rain
- Snow Melt
- Flooding
- Power Outage
- Other—Explain: _____
- Plugged Pipe
- Broken Pipe
- Equipment Failure
- Contractor Related

Overflow Occurred From: (select only one)

- Lift Station – Name: _____
- Manhole – MH#: _____
- Gravity Sewer Pipe
- Pressure Sewer Pipe (Forcemain)
- River or Stream Crossing – Select one: Forcemain Siphon
- Permanent Overflow Structure
- Treatment Plant Unit or Pipe: _____
- Other: _____

Destination: (select all that apply)
 Ditch – Name of surface water it drains to: Milwaukee River
 Storm sewer – Name of surface water it goes to: _____
 Surface water – Name of waterbody: _____
 Ground – Seeps into soil: Seepage may occur because discharge flows overland to river.
 Other – Describe: _____

Overflow Explanation (This includes any information, whether the overflow was unavoidable to prevent loss of life, personal injury, or severe property damage and whether there were feasible alternatives to the overflow.)

The overflow occurred due to heavy rainfall. The permanent overflow structure operated as designed. When levels in the District's sanitary sewer system reached critical stage the overflow structure was inundated and the excess flows passively discharged. The overflow structure is designed to protect public health and safety as well as preventing basement backups/property damage.

Immediate Corrective Action and Steps Taken to Reduce this Overflow Volume and Impacts

The District actively pursues the elimination of excess inflow and infiltration by funding a \$58 million-dollar Private Property Inflow and Infiltration Reduction Program throughout our service area to further reduce the risk of basement backups and separate sewer overflows.

Long Term Plan to Reduce, Eliminate, Prevent Reoccurrence of this Overflow

The District is currently in the preliminary engineering phase of a project (C04010) to construct facilities to increase conveyance capacity in this area. Design is currently scheduled to begin January 2019. Construction is currently scheduled to begin in October 2021.

Building Backups


Number of building backups occurring during this time in Area of Overflow: 0

Locations of Building Backups: NA
(list each one)

Certification

Authorized Representative Name Sharon K. Mertens	Authorized Representative Title Water Quality Protection Division Director
Email Address smertens@mmsd.com	Phone Number (414) 277-6384

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Signature of Authorized Representative

08/31/18
Signed Date (mm/dd/yyyy)

Note: Submit this form to your DNR wastewater representative. Permittees who are required to submit monthly Discharge Monitoring Reports (DMRs) shall report this overflow on the DMR.






DNR Follow-Up Action (DNR Use Only)	
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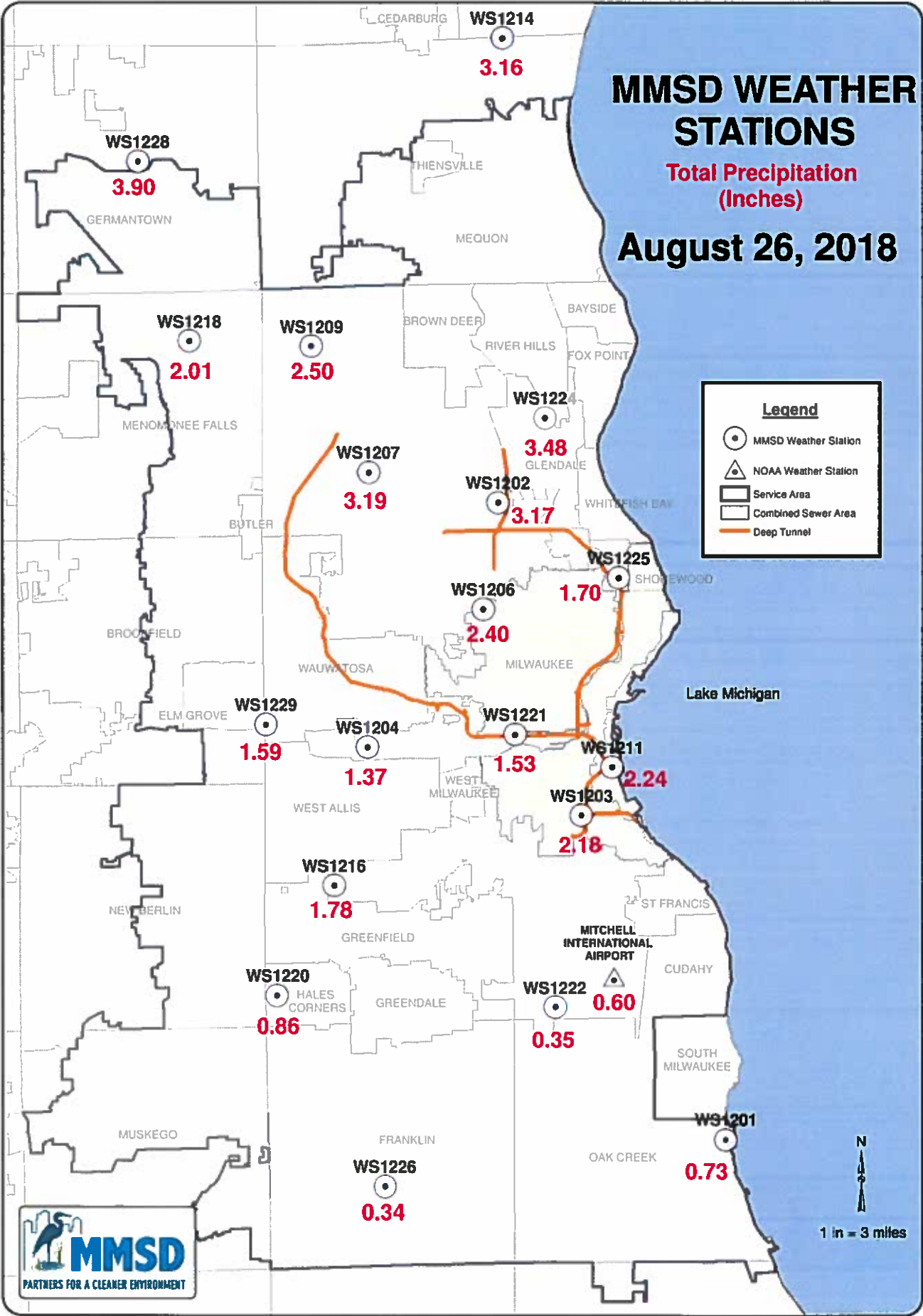
MMSD WEATHER STATIONS

Total Precipitation
(Inches)

August 26, 2018

Legend

-  MMSD Weather Station
-  NOAA Weather Station
-  Service Area
-  Combined Sewer Area
-  Deep Tunnel



1 in = 3 miles

Depth Duration Frequency Curve
Based on NOAA Atlas 14, Vol. 8, Ver. 2
With Rainfall Data from Gauge **WS1224** Reported to MMSD
August 26, 2018

