



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

SUBJECT: CLEAN WATER ACT INSPECTION REPORT
Union Township Wastewater Treatment Plant (WWTP)

FROM: Jason Hewitt
Water Enforcement Branch, Section 1

**JASON
HEWITT**

Digitally signed by JASON
HEWITT
Date: 2023.11.17
16:01:12 -06'00'

THRU: Molly Smith, Section Supervisor
Water Enforcement Branch, Section 1

**MOLLY
SMITH**

Digitally signed by
MOLLY SMITH
Date: 2023.11.17
15:13:41 -06'00'

BASIC INFORMATION

Facility Name: Union Township Wastewater Treatment Plant (WWTP) (facility)

Facility Location: 4511 East River Rd, Mt. Pleasant, Michigan

NPDES Permit Number: MI0055808

Facility Type: Wastewater Treatment Plant

Date of Inspection: 9/13/2023

EPA Inspector(s):

1. Jason Hewitt, EPA Region 5
2. Jennifer Bush, EPA Region 5

Other Attendees:

1. Kim Smith, Union Township
2. Michael Dearing, Union Township

Contact Email Address: ksmith@uniontownshipmi.com

Inspection Type: NPDES

Facility Notification:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

Regulations Relevant to Inspection: NPDES permit requirements

Arrival Time: 9:00 a.m. EST

Departure Time: 10:25 a.m. EST

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☐ Provided Small Business Resource Information Sheet
- ☒ Small Business Resource Information Sheet not provided. Reason: Not a small business
- ☒ Provided CBI warning to facility

The following information was obtained from the permit, permit application, or verbally from Kim Smith and Michael Dearing unless otherwise noted.

Process Description:

The Union Township WWTP serves a community of approximately 10,000 (1,900 connections), which includes the Central Michigan University (CMU) campus and dormitories. Nineteen pump stations send influent to the treatment facility, which passes through screening for grit removal, and then flows to oxidation ditches for biological treatment. Chemicals for phosphorus removal are added after the oxidation ditches and then wastewater flows to clarifiers for settling. After clarification, the water flows through a tertiary filter for polishing followed by ultraviolet light disinfection, then discharges to Grews Drain, which flows into the Chippewa River. Sludge is processed through aerobic digesters and then land applied at agronomic rates. The treatment facility has a design capacity of 2.4 million gallons per day (MGD) of wastewater but sees an average flow of 1.3 MGD.

Staff Interview(s):

EPA staff interviewed Kim Smith, Public Service Director, and Michael Dearing, WWTP Superintendent during the opening conference from 9:00 a.m. to 9:25 a.m. EST. The following is relevant information relating to the operation and discharges of the facility:

- The WWTP employs 4 operators (including the Superintendent), with class A, B, and D licenses, and is in the process of adding an additional operator;
- While the WWTP was originally constructed in 2001, many major components are still original. Asset Management in Union Township has identified that major improvements will be required in the near future;
- There are no Significant Industrial Users discharging to the facility, but Union Township keeps a line item for an industrial pretreatment program (IPP) within their budget;

- The WWTP does routine permit required sampling in-house, and contracts out sampling for metals, PFAS, and mercury to a nearby lab; and
- Obtaining funding has not been difficult for the WWTP, and they have focused on preventative maintenance in the short term and full-scale replacements in the long term.

Facility Walk-Through Occurred: Yes

Data Collected and Observations:

- Union Township calculates daily flow by hand and via their Supervisory Control and Data Acquisition (SCADA) System, it was unclear which measurement was recorded for Discharge Monitoring Reports or how differences were rectified; and
- Available Discharge Monitoring Report Data shows DMR non-report for June and July 2022 for selenium monitoring.

Photos and/or Videos: were taken during the inspection.

See Attachment A: Photo Log

Field Measurements: were not taken during this inspection.

Records Review:

EPA requested, received, and reviewed the following records in advance of the inspection:

1. Electronic

EPA requested the following records to be available during the inspection or sent electronically following the inspection:

1. A copy of the current Permit MI0055808-5.
2. Electronic copy of the current Operations and Maintenance Status Report (March 2023).
3. Electronic copies of the last 4 quarters of Wastewater Discharge Monitoring Reports (July 2023, April 2023, January 2023, October 2022).
4. Electronic copy of the most recent Pollutant Minimization Program for Mercury Status Report (March 2023).
5. Electronic copy of the most recent Monitoring Reports for Volatile Organic Compounds and Whole Effluent Toxicity Testing (March 2023).
6. Electronic copy of the most recent Annual Sludge Discharge Monitoring Report (February 2023).
7. Copies of the last 3 years of Wastewater Discharge Monitoring Reports.
8. Copies of the last 3 years of Sludge Discharge Monitoring Reports.
9. A list of all Significant Industrial Users discharging to the WWTP.
10. Copies of the last 3 years of any Significant Industrial User Reports.
11. An electronic or hard copy system map.

12. Copies of any required training records over the last 3 years.

CLOSING CONFERENCE

- ☒ Provided EPA point of contact to the facility
- ☒ Confirm CBI status at end of closing conference

Areas of Concern:

None

APPENDICES AND ATTACHMENTS

1. Attachment A: Photolog