

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**Purpose:** CD monitoring inspection

**Facilities:** City of Toledo Bayview Water Reclamation Facility (Bayview WRF), 3900 North Summit Street, Toledo, Ohio, sanitary/combined collection system and related facilities

**National Pollutant Discharge Elimination System (NPDES) Permit Number:** OH0027740

**Dates of Inspection:** September 26-28, 2022

**EPA Representatives:**

William Jones, Wet Weather Program Manager, 312-886-6058  
Anne Marie Vincent, Life Scientist, 440-250-1720

**Ohio Environmental Protection Agency (OEPA) Representatives:**

David Brumbaugh, Wet Weather Technical Lead, 614-644-2138  
Ryan Gierhart, Environmental Specialist III, 419-373-3053  
Ashley Ward, Assistant Chief

**Main Facility Representatives:**

Mike Elling, Senior Engineer  
Jocelyn Jones, Plant Engineer  
Michael Schreidah, Administrator Water, City of Toledo  
David Selhorst, Administrator, Toledo Waterways Initiative, City of Toledo

**Report Prepared by:** William Jones, Wet Weather Program Manager, 312-886-6058  
Anne Marie Vincent, Life Scientist

**Report Date:** same as approver signature and date below

**Inspector's Signatures:**

WILLIAM JONES Digitally signed by WILLIAM JONES  
Date: 2022.12.05 11:18:28 -06'00' ANNE VINCENT Digitally signed by ANNE VINCENT  
Date: 2022.12.05 12:26:48 -05'00'

**Approver Name and Title:** Molly Smith, Chief, Compliance Section 1

**Approver Signature and date:** MOLLY SMITH Digitally signed by MOLLY SMITH  
Date: 2022.12.05 12:19:29 -06'00'

## **1.0 BACKGROUND**

The purpose of this report is to describe, evaluate, and document compliance of the City of Toledo (City or Toledo) with parts of its 2002 consent decree (CD) with EPA/OEPA and parts of its NPDES permit number OH0027740 issued by OEPA on August 10, 2016, effective September 1, 2016 with an expiration date of August 31, 2021. The permit has been administratively extended.

The City of Toledo is under a CD that requires, among other things, the City to implement a long-term control plan that requires specific projects to be built. The CD also requires some early action projects and projects to address bypassing, sanitary sewer overflow and supplemental environmental projects. A schedule of projects is given in attachment A to this report.

Part A of the report are observations from William Jones and Part B of the report are observations from Anne Marie Vincent.

## **2.0 SITE INSPECTION PART A**

At 9:45 a.m. on September 26, 2022, I entered the City of Toledo's Bay View WRF along with the EPA representative listed above on page one to conduct an inspection of part of Toledo's Combined Sewer System, Bay View WRF, and additional storage/treatment facilities. Ryan Gierhart, David Brumbaugh and Ashley Ward with OEPA joined for part or all of the inspection. A rough agenda for the inspection is attached to this report as attachment B. I showed my credentials to a City of Toledo representative at the gate when we entered the facility. Photographs I took during the inspection are included as attachment C to this report. A sewer system storage facility map showing system wide storage locations is attached to this report as attachment D.

### **2.1 FASSETT AND MAIN (E-4)**

At Fassett and Miami there was new construction and there was a structure at the intersection with new manholes. Toledo's staff reports that they lined pipes and put in a new line at Fassett. Toledo raised the weir and reduced the outflow pipe size from 12" to 8".

### **2.2 DEARBORN STORAGE PIPELINE (E-2)**

We inspected part of the Dearborn Storage Pipeline. Construction appeared complete. Dual pipes are used here for storage. The sign for the overflow point for CSO 5 for Dearborn is not very visible due to vegetation growth. See Photos 1 through 4.

The flushing system uses water from the river. Water reclamation division is responsible for cleaning. The facility has a separate Operation and Maintenance (O and M) manual which Toledo provided a copy of.

### **2.3 PAINE AVENUE REGULATOR (E-1)**

In a parking lot at Paine Ave. and Front Street work was also complete. Mr. Selhorst indicated that they readjusted the weir and return line. There were two access doors in the parking lot for access. See photo 5.

### **2.4 DOWNTOWN STORAGE BASIN AND DOWNTOWN STORAGE TUNNEL (W-4C)**

We visited the downtown storage basin and downtown storage tunnel location. Outfall signs for CSO 68 were present. We also viewed the Bosker screens for the downtown storage tunnel. At the downtown storage basin, City staff opened the trap door to the flushing basin on the NE side of the basin and we were able to see inside. Construction of the storage tunnel appeared complete. See photos 6 through 12.

### **2.5 MAGNOLIA**

A new structure sealed off outfall 26. See photo 13.

### **2.6 NEVADA OUTFALL**

I took photos of the top of the Nevada Street diversion chamber for CSO 7. This is near the International Park storage facility. See photo 14.

### **2.7 INTERNATIONAL PARK STORAGE FACILITY (E-3)**

At the International Park Storage Facility, the grit pit needs cleaning. See photos 15-17. Construction was complete.

### **2.8 NEW YORK AREA SEWER SEPARATION (W-7)**

I verified that sanitary-storm connections at manhole 1556 were plugged as part of NY sewer separation. See Photo 18.

I could not see a plug at manhole 2265, but the City subsequently provided photos of the plug. See photo 19.

Manhole 1567 was a new manhole and therefore did not have a storm water connection. See Photo 20.

### **2.9 WHEELING AVENUE SEWER SEPARATION (E-6)**

The City's quarterly reports say that construction was completed during the fourth quarter of 2011.

## **2.10 SWAN CREEK NORTH SEWER SEPARATION AND GREEN INFRASTRUCTURE (GI) (S1-B)**

Seven biocells were constructed as a part of the project. Some of the cells are double units. These projects are catching the flow from the regulator 43 service area. I asked how much was spent on the GI biocells that they constructed, but did not hear back from the City on this during the inspection. I asked to talk about maintenance of the biocells. The City reports that the Parks Department mows the bioswales and Environmental Services inspects them.

On September 27, we inspected the biocells. Edith Kippenhan, Environmental Specialist with the Department of Environmental Services joined us to answer questions. See attachment E for a summary of City inspection reports.

The following are observations from the day of the inspection:

- Biocell number one was mowed. Rags are in the inlet pipe to the Biocell. I asked for an Operation and Maintenance manual. See plan sheet 179. See photos 21, 22, 24 through 27.
- Biocell number two was mowed and had some trash present. The City does annual inspections and then contracts out work. They pull invasive weeds. See photos 28-30.
- Biocell number three has some trash issues. See photos 31-36.
- Biocell number 4 has weed issues, some trash, and needs mowing/vegetation removal. See photos 37-40.
- Biocell number 5 has a blue inlet pipe with trash in it. Also, there is part of an abandoned childrens playset inside the swale and grass in the forebay. See photos 41-43
- Biocell number 6 has an inlet bag on the upstream street site and trash in the inlet pipe coming into the first basin. I don't see a clean out for the bioswale. See photos 44-50.
- Biocell number 7 by the Baptist Church needs to have the curb cuts cleaned in a number of locations. Also, the clean out is damaged and needs repair. There is also a trash issue here. See photos 51-64.
- The team viewed CSO outfall number 45. See photograph 65.
- We looked inside manhole 21398 between Buckingham and Hamilton. The pipe was also plugged here, as a part of the sewer separation. This is near Biocell number 2.
- At Erie near Hamilton, the weir wall was raised by an extension plate for Swan Creek South. See photo 66.
- We also viewed CSO 42 under the bridge. See photograph 67.

### **2.11 WILLIAMS AND KNAPP INFLOW REDUCTION (W-5)**

At Williams and Knapp, there is a grout line (green vertical pipe) still in the connection pipe in Manhole 10-377. The City reported the line as grouted, but the grout pipe needs to be removed. See photo 68.

At manhole 32878, a new manhole was installed so the plug is not visible.

At manhole 25001, the pipe is plugged. See photos 69 and 70.

### **2.12 OTTAWA RIVER STORAGE FACILITY (O-4A, O-4B)**

Starting around 3:50 p.m., we inspected part of the Ottawa River storage facility (ORSF) located along Manhattan Boulevard, west of Franklin Avenue. We observed the pump room and the area above the storage facility. The ORSF construction is complete. The ORSF basin was designed to have a 36.3-million-gallon storage capacity. Mr. Selhorst reported that all six pumps are in service. We exited the facility around 4:10 p.m.

### **2.13 HEATHERDOWNS AND ARLINGTON**

Mr. Elling reported that for the Heatherdowns sanitary sewer overflow (SSO) and Arlington SSO the City lined the sanitary sewers and there have been no overflows in 5 years so no additional work is needed at those locations, according to the City.

### **2.14 LOCKWOOD AND DEVILBISS (O-2)**

Mr. Elling reported that the Lockwood area was separated, but it still has elevated levels of *E. coli*. They televised the entire sewer and lined almost all of the sanitary and storm. They put in new sanitary and made the old combined the storm. They rerouted the laterals and capped it in the storm sewers. They did smoke testing of storm sewers and dye tested houses that smoked.

The City states they will clean, televise and sound (find and locate) the laterals for several houses. They have a purchase order to do this with a contractor who will be doing a lateral inspection. The houses might be tied into the storm.

### **2.15 HIGHLAND SEWER SEPARATION (S-3)**

Mr. Elling reported that for the Highland area the City put a pump station in and might have lined it. At Highland they converted the combined sewer to storm.

### **2.16 WOODSDALE INFLOW REDUCTION (S-4)**

The City replaced manhole lids and castings and possibly did sewer separation, according to City staff.

## **2.17 COLUMBUS**

At Columbus, Mr. Elling indicated that the City constructed a storage pipeline instead of separation.

## **2.18 DELAWARE**

Delaware was actually a pump station for sanitary that was put in. They also lined the sewers downstream.

## **2.19 RIVER ROAD AND MIDLAND**

At River Road and Midland the SSO was plugged, according to Mr. Elling.

## **2.20 BROOKFORD PARK BASIN**

Mr. Elling indicated that the City uses a gravity relief sewer to feed the Brookford Park Basin. See photo 117. We were not able to look into the basin since keys were not available to unlock it. I asked for a follow-up conference call with the City concerning maintenance of the basins.

## **2.21 DETROIT/SCHNEIDER BASIN**

We inspected part of the Detroit Basin. This is part of the Detroit Avenue SSO system improvements. There are three pumps in the building for pumping the basin. See photograph 118. At the Detroit Basin the locks were full of grass and dirt, and it appeared like it had not been opened in a while.

The Detroit and Schneider Basin could overflow to Swan Creek. On the drawings provided by the City, the blue lines indicate closed storm sewers and the yellow lines are closed sanitary sewers.

## **2.22 PARKSIDE BASIN**

This is part of the Parkside CSO system improvements. Quarterly reports say that final completion was attained on August 25, 2014. At Parkside they did not do sewer separation, according to Mr. Elling. They have a gravity relief sewer and the Parkside Basin. The basin has an overflow point, but he was not aware of it overflowing to the ditch. An overflow event would be triggered by a high level in the basin. Mr. Elling indicated that all of the SSO basins (Parkside, Detroit Schneider and Brookford Park) have an overflow structure. Mr. Selhorst indicated that if the basin overflows, the operators would know via SCADA, and then OEPA would be notified by the operator of record.

Quarterly reports indicate that the City constructed a storage basin, pump station and force main to eliminate the remaining sanitary sewer discharge on Mt. Vernon Ave.

See photos 119-121.

### **2.23 MAUMEE BASIN (W-6)**

For the Maumee Basin area the City did not separate sewers, they just constructed the basin. I asked for a copy of the O and M manual for the Maumee basin.

We inspected part of the basin, outfall (CSO #33) and overflow screening/weir. See photos 114-116. The facility has had issues with grit and the City has a pipe installed so that the vac truck can clean out the grit pit. The signage at the outfall was obscured by vegetation when we arrived and needed to be cleared.

### **2.24 BAY VIEW WWTP**

Mr. Schreidah indicated that at the Bay View Treatment plant that Thickener #1 is out of service due to mechanical issues. They have funding to fix the thickener, but the lead time is 9 months. Final clarifier #12 is out of service, but they are fixing the mechanism. Aeration tank #5 is out of service. Digester #1 has been out of service for at least 5 years, but it is not impacting their sludge handling, according to Mr. Schreidah. Toledo does not plan to put it back in service due to flow going down from 80 MGD plus years ago to 60 MGD plus now.

Toledo has a plan to replace the solids handling. They produce dry class B biosolids.

Influent pump #1 at the Bayview pump station has been rebuilt. The drive is down, but a project is underway, and they have ordered pumps. However, there are supply chain issues, so they are looking at 6-9 months to get parts. A variable frequency drive will be installed in the future for pump #6.

The facility has a December 2, 2021, letter from OEPA providing an exemption from having a class 4 operator right now. They have one staff person who has submitted for a class 4 license, and they anticipate this occurring around the end of the year.

See Section 3.7 below for observations of the Bay View Wastewater Treatment Plant.

### **2.25 ASH/COLUMBUS STORAGE PIPELINE AND CSOs 23, 24 and 25 (W-1)**

CSO #24 has been abandoned. There were no sewer related floatables present. It was reported as plugged, but we could not find a location where we could verify this. See photo number 112.

We visited CSO #25, which has been converted to a storm sewer outfall. See photo number 113.

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## **3.0 SITE INSPECTION PART B OF REPORT**

On September 28, 2022, US EPA Inspector Anne Marie Vincent (EPA) toured multiple project sites under the City of Toledo Consent Decree. Mr. Mike Elling accompanied Inspector Vincent

to locate project areas and remove manhole covers as needed for visual observations. Observations from each location are noted in the following summaries for each project area.

### **3.1 ASH STREET SEWER SEPARATION AND WILLIAMS PROJECT AREA (W-2)**

At the intersection of North Ontario Street and Stickney Avenue, EPA observed manhole 1982. The plug for the sewer separation was not readily visible. Mr. Elling stated that the plug was placed further into the pipe as noted on the project drawing and would not be visible right at the outlet in the manhole (Photographs 71 and 72).

EPA also observed manhole 1977 on the west side of the intersection of North Michigan Street and Stickney Avenue. The plugs installed for the separation project were visible in manhole 1977 (Photographs 73 and 74). EPA observed Manhole 1982 in the same intersection (Photographs 75 and 76). The plug to achieve separation was not visible. Inspector Vincent asked Mr. Elling to verify the presence of the plug and provide documentation of the presence of the plug to EPA. In a follow-up e-mail to EPA on October 3, 2022, Mr. Elling stated that he had observed the manhole with a pole camera following the inspection. According to the e-mail and its attached notated aerial photograph, there was no plug or bulkhead visible with the camera. Instead, a new catch basin (cb 4-153d) was installed so that there was no longer a pipe directing flow into manhole 1982. The third manhole at this intersection observed by EPA was manhole 4-153. This manhole receives separate stormwater flow from the catch basins on the corners of the intersection and directs it to the east (Photographs 77 and 78).

### **3.2 LAGRANGE STREET PROJECT AREA**

Mr. Elling and EPA drove to the LaGrange Project Area. EPA observed sanitary manhole 4539 at the intersection of East Hudson Street and the alley west of Elm Street. The plugged stormwater connection was visible (Photographs 79 and 80).

### **3.3 AYERS AVENUE /MONROE STREET STORAGE-CONVEYANCE PIPELINE PROJECT AREA (O-3)**

Mr. Elling and EPA drove to the Ayers Avenue/Monroe Street Project Area. EPA began the area tour by observing various manholes located in the intersection of Monroe Streets and South Cove Boulevard. There was flow visible in the manholes in the intersection. Just northeast of the intersection, on South Cove Boulevard, EPA observed manhole 35551 for junction chamber 1 of the tunnel. This manhole provides access to the storage tunnel and dry weather stormwater flow was observed in the tunnel (Photographs 81 and 82). According to Mr. Elling, water flow did not appear to be going to the return line as designed and was instead flowing through the storage tunnel. This is possibly due to a blockage in the return line system which has been a noted problem previously.

Then next location observed by EPA and Mr. Elling was the expanded regulator #65 structure for the storage tunnel at the top (east end) of South Cove Boulevard (Photographs 83, 84, 85 and 86). EPA observed water in the regulator structure. EPA also observed manhole 14748 (no photograph collected) for the combined sanitary line in this area. There was flow present at

manhole 14748, which Mr. Elling described as “typical dry weather flow”. Next EPA observed another manhole where the flow level sensor for the downstream end of the storage tunnel is located (Photographs 87 and 88).

According to Mr. Elling, if the 60-inch sewer line that flows northeast under I-75 is full, then the storage tunnel will backup and overflow through manhole 35530 adjacent to the expanded regulator #65 structure and flow out to the Ottawa River.

Mr. Elling and EPA attempted to find the location of the closed CSO outfall near the intersection of Monroe Street and South Cove Boulevard. According to the plan drawings, the flap gate was to be removed, the brick sewer was to be filled with control density fill, and the headwall and vent at the CSO were to be removed. Visual observations verified that the flap gate, top of the headwall and the vent were removed. Rock channel Protection Type C was also added where the headwall was removed.

### **3.4 SWAN CREEK SOUTH PROJECT AREA – HILLSIDE AVENUE (2-B)**

Mr. Elling and EPA drove to Hillside Avenue in the Swan Creek South Project Area. EPA observed several manholes on Hillside Avenue, north of Western Avenue. In one of the manholes on Hillside Avenue (Photograph 91), EPA observed an example of the raised weir plates (Photographs 89 and 90) installed as part of the sewer/tunnel project in the Swan Creek South project area. EPA also observed the flow sensor for CSO Outfall 048 which was located in a manhole at the intersection of Hillside Avenue and Chester Street (Photograph 93). EPA and Mr. Elling walked to the location of CSO Outfall 048, just north of the north end of Hillside Avenue. The required outfall identification sign was present (Photograph 92).

### **3.5 DELAWARE CREEK SSO ELIMINATION PROJECT AREA**

Mr. Elling and EPA drove to the pump station located on Yaryan Drive in Delaware Creek SSO Elimination Project Area (Photograph 94). EPA observed the level sensor and the submersible pumps located at the pump station (Photograph 95). EPA observed the controls and valves for the pump station (Photograph 96). According to Mr. Elling, the city is able to connect an external pump via the port opening on the right-hand side of photograph and pump water directly from the pump station into the sewer. The power unit for the pump station was also built with an outlet where a stand-by generator can be brought to site and plugged in when needed.

### **3.6 OUTFALL 023 (W-1)**

Mr. Elling and EPA drove to the location of Outfall 023 (Photographs 97 and 98). The two flapper gates on the CSO were visible (Photograph 97). The CSO identification sign was posted at the outfall (Photograph 98).

### **3.7 BAY VIEW WATER RECLAMATION FACILITY**

After completing the tour of collection system project areas, Mr. Elling and Inspector Vincent returned to the Bay View Water Reclamation Facility. Inspector Vincent met with Mr. Thomas Jasinski who is the Operator of Record for the plant. Mr. Jasinski led Inspector Vincent on a tour

of the plant, with a particular focus on areas where there are operating units that are out of service.

**Skimming Tank #4:** Skimming Tank #4 is inoperable due to a break in the 10-inch pipe. The replacement pipe is already on-site to complete the repair. The repair just needs to be scheduled for completion (Photograph 99).

**#1 Variable Frequency Drive:** The #1 Variable Frequency Drive needs a new drive according to Allen Bradley (manufacturer). The City state that the new drive was to be ordered within the next week, according to Mr. Jasinski. The pump part of the unit had already been rebuilt.

**Digester #1:** Digester #1 is currently offline. According to Mr. Jasinski, Digester #1 was abandoned several years ago when it became clogged with solids, and there is no plan to get it back in service. According to Mr. Jasinski, the plant physically has 6 digesters, but needs 4 operational digesters to efficiently operate during the winter months.

**Digester #2:** Digester #2 is offline due to having a non-operable Limitorque® feeder valve (Photograph 100) and the mixers need to be rebuilt, according to Mr. Jasinski. These improvements are in the Capital Improvement Plan budget for 2023. Once these repairs are made, Digester #2 will serve as the spare digester.

**Digester #3:** The heat exchanger for Digester #3 became non-operational in March 2022. Mr. Jasinski stated that the plan is to move the heat exchanger from Digester #1, which is offline due to being clogged, to Digester #3 because the lead time to receive a newly purchased heat exchanger is very long due to supply chain disruptions. A contract company will be used to move the heat exchanger from Digester #1 to Digester #3. Eventually, Mr. Jasinski would like to have all the heat exchangers replaced.

All digesters are losing insulation on their roofs to varying degrees.

**Gravity Thickener #1:** There are operational issues with the mechanisms for Gravity Thickener #1. Funding is already in place for the repairs. However, there is currently a 9-month lead time to get necessary parts for the repairs. According to Mr. Jasinski, there are plans in place to install a new collector and completely rebuild Gravity Thickener #1 (not including the concrete structure) in the spring of 2023. Gravity Thickener #1 is being used as a gravity thickener, but they are not withdrawing sludge off of the gravity thickener (Photographs 103 and 104). EPA observed solids collecting on the top of the water surface and around the effluent weir teeth in Gravity Thickener #1. Plant personnel will look at the concrete structure of Gravity Thickener #1 to identify any structural issues during the rebuilding process. The overall facilities plan includes future projects to add 2 more gravity thickeners and rebuild Gravity Thickener #2.

**Final Effluent:** Inspector Vincent and Mr. Jasinski observed the final effluent outfall at the river (Photograph 105). EPA did not observe evidence of visible sheen, foam, or other discharge characteristics of concern such as odor.

**Clarifier #12:** One side of the rotating arm in Clarifier #12 (Photographs 107 and 108) is out of alignment, according to Mr. Jasinski. This causes the arm to scrape along the inside of Clarifier #12 and it gets stuck in place. There is a plan to replace both sides of the rotating arm, according to Mr. Jasinski. There are a total of 12 clarifiers at the plant.

**Aeration Tank #2:** Aeration Tank #2 has problem areas of greater turbulence where the diffuse bubblers have blown off of their positions (Photograph 109). Aeration Tank #2 is on the schedule to be cleaned and the diffuse bubblers will be repaired, according to Mr. Jasinski.

**Aeration Tank #5:** Aeration Tank #5 has woody vegetation growing within the tank. (Photographs 110 and 111). According to Mr. Jasinski, Aeration Tank #5 will be scheduled to remove and vegetation and be cleaned. This work has been delayed during the Covid pandemic, because the contractor originally scheduled to complete the work was from Canada.

**Aeration Tank #6:** Aeration Tank #6 is a spare aeration tank that is ready to be placed into service when needed, according to Mr. Jasinski. According to Mr. Jasinski, the plant only needs 7 out of 9 aeration tanks to operate efficiently. If the plant runs more than 7 aeration tanks, it upsets the nitrification process.

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#### **4.0 DOCUMENTS RECEIVED/REVIEWED**

1. Maps/drawings showing areas where sewers were disconnected
2. Quarterly Compliance report for City of Toledo - April -June 2022

#### **5.0 CLOSING CONFERENCE**

During the closing conference, the EPA inspectors provided a briefing on the preliminary findings to David Selhorst, Mike Elling, and Mike Schreidah. Ryan Gierhart, Ashley Ward, and David Brumbaugh with Ohio EPA were also present for the closing. I said that I would prepare a report and that it was our goal to send it to Toledo within 70 days. I asked if anything that we had observed or collected was Confidential Business Information (CBI) and the facility staff did not indicate that anything was CBI. The following preliminary findings of the inspection were identified during the closing conference, with the caveat that these were preliminary:

1. We asked to have a call with Shiron Lee to discuss maintenance at the facilities.
2. The sign for CSO 33 was obscured by vegetation growth and not easily visible from the shore.
3. For the three remote basins, I need to review the documents sent to me and may have more to say after looking at them. The Detroit basin overflowed in December of 2021.<sup>1</sup>
4. We were not able to see the plug inside manhole 2265, so we requested that they provide a photo of it.
5. Also, I requested the dates of when the operation and maintenance manuals were last revised for the plant. I have a date of 2008 from my files. Also, I asked when the

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1 The 8-million gallon (MG) Detroit Basin overflowed 12.26 MG on 9/23-24/2021. See page 36 of Q3 2021 report which mentions a 5” rain event causing the overflow. The report says it is the 3<sup>rd</sup> largest rain event in Toledo history.

capacity, management, operation and maintenance (CMOM) manual was last revised. I have a date of 2004.

6. For the green infrastructure portion of the inspection there was some trash noted in the basins and basin 4 was overgrown. Curb cuts for bioswale number 7 needed to be cleaned out along the roadway where the church is.
7. Mike Elling said he would put a full set of plans for the Detroit, Brookford Park and other sites on the file transfer site shared with EPA.
8. See Anne Marie's observations for the out of service equipment under 3.7 above. We are particularly concerned about the sludge digesters and having adequate capacity this winter.

We exited the inspection around 4:35 p.m. on September 28, 2022.

## **6.0 POST INSPECTION CONFERENCE CALL ABOUT MAINTENANCE**

On September 30, 2022, at 8 a.m. central time Anne Marie Vincent and I had a call with Shiron Lee, David Selhorst, David Brumbaugh, Ashley Ward, and Ryan Gierhart to discuss maintenance of Toledo's wastewater related facilities. We are concerned about Toledo having enough staff to maintain the new facilities that were constructed as part of the consent decree.

Mr. Lee said that they do maintenance twice a year on the Detroit, Parkside and Brookford Park basins. They check the bar screens and vac out the wet well, except at the Brookford Park, which does not have a wet well.

At the International Park, Maumee, and Oakdale basins they have a two-month interval for vacuuming out the pump side.

Twice a year they do maintenance on the regulators, static screens and outfalls and make sure tide gates are open.

At Ottawa, the wet wells are part of a six-month inspection program.

For the downtown CSO tunnels 1 and 2 they have 1 pump out of service and expect to fix it in the next couple of weeks. It has been out of service for a month now.

The maintenance issue at the Maumee basin is the pumps plugging up from solids.

Mr. Selhorst indicated that at the downtown basin all of the equipment is in service. They have experienced heavier solids at the basin that are plugging up the pumps at the downtown basin and believe it is due to the tunnels.

At Swan Creek North and South, there are no pump issues. They check the Bosker screens.

Mr. Lee said that they pull the pumps themselves every 6 months and they have an operation and maintenance schedule that they go by for doing this. They grease the gates for preventative maintenance. Most of the pumps are submersible pumps. They clean the wells all the way to the

bottom. Mr. Lee was not familiar with the CMOM document. Mr. Selhorst did not have an updated CMOM document beyond what EPA already has received.

Mr. Selhorst said that there is coolant in the pumps that they change out, per the manual recommendations.

Mr. Lee said that they do not have an electronic work order system. The maximo system went out years ago. They use a city works system to track work orders. The system does not automatically generate recurring work orders.

Mr. Selhorst indicated that they have asked for more staff. Mr. Lee indicated that they have 9 people for maintenance. He is interviewing workers, but it is hard to fill the jobs. They anticipate losing three experienced maintenance staff in the next 6 months.

Mr. Lee is also in charge of plant maintenance work including the grit facilities. He manages 4 crews, which includes electrical and stockroom.

Mr. Selhorst indicated that the last operation and maintenance manual update was from Jones and Henry. I asked what date this was but have not heard back from the City.

Mr. Lee indicated that they are in the process of looking at return lines for the dry weather flow observed at Ayers and Monroe.

Mr. Lee indicated that they have one combo jet vactor truck that is at least 5 years old and they need at least one more vactor truck. He has a crane truck that has been out of service. They should get the crane truck back in a few days.

Mr. Lee says that getting more experienced staff is their highest need right now. Their number of staff has not gone up with the additional responsibilities of the Long Term Control Plan (LTCP) projects that were constructed. They are currently responsible for maintaining 46 pump stations plus the Bay View Treatment Plant, and the facilities constructed in response to the consent decree requirements.

## **7.0 AREAS OF CONCERN**

The following are areas of concern:

The Parkside, Brookford Park, Detroit/Schneider basins have constructed overflow points. At Lockwood and Devilbiss the City is still experiencing elevated *E. coli* levels.

### **Toledo Consent Decree paragraph 48:**

**“Within six months of completion of all of the improvements required pursuant to Section V.B above and on a biannual basis thereafter, Toledo shall submit to U.S.EPA and Ohio EPA for approval an updated MOM plan which takes into account any improvements at the Bayview WWTP or in Toledo’s sewer system which could impact Toledo’s management operation and maintenance of Toledo’s Sewer System which could impact Toledo’s**

**management, operation and maintenance of Toledo's Sewer System, and Toledo's practical experience in using those improvements. The updated plan shall contain the provisions described in Paragraphs 45-47."**

Toledo's MOM plan that was last submitted to EPA was dated 5/4/2004. Since that time improvements have been made to the grit system at the plant and in Toledo's sewer system. The MOM plan needs to be updated to reflect any impact from the changes.

**Toledo Consent Decree paragraph 51:**

**"Within one year after completion of construction of all of the improvements required pursuant to Section V.B. above, and on a biannual basis thereafter, Toledo shall submit to U.S. EPA and Ohio EPA for approval an updated operations and maintenance plan which takes into account any improvements at the Bayview WWTP or in Toledo's Sewer System which could impact Toledo's operation and maintenance of the Bayview WWTP, and Toledo's practical experience in using those improvements."**

Toledo's operation and maintenance plan, that was last submitted to EPA, was dated 9/27/2004. The wet weather grit facility was completed in 2014. Since 9/27/2004 improvements have also been made to Toledo's sewer system. The Toledo operation and maintenance plan needs to be updated to reflect any impacts from changes to the treatment plant and collection system.

**Toledo Consent Decree paragraph 57:**

**"Toledo shall implement all necessary steps to assure that the Bayview WWTP is under the responsible charge of a State of Ohio certified Class IV wastewater treatment plant operator. The term "responsible charge" means the physical on-site supervision of technical operations and maintenance of the wastewater treatment works at all times."**

Toledo's WWTP was only under the supervision of a class III operator during the inspection. OEPA provided a temporary waiver of the class IV requirement in the permit. Toledo was working to get an operator certified as class IV by the end of the year.

**Part II. AC. Outfall Signage**

**Not later than 4 months from the effective date of this permit, the permittee shall post a permanent marker on the stream bank at each outfall that is regulated under this NPDES permit where a marker does not currently exist. This includes final outfalls, bypasses, and combined sewer overflows. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible. If the outfall is normally submerged the sign shall indicate that. If the outfall is a combined sewer outfall, the sign shall indicate that untreated human sewage may be**

**discharged from the outfall during wet weather and that harmful bacteria may be present in the water. When an existing marker is replaced or reset, the new marker shall comply with the requirements of this section.**

The City of Toledo needs to maintain the visibility of the signs. Signs for CSO #5 and CSO #33 were obstructed by vegetation.

### **3. FACILITY OPERATION AND QUALITY CONTROL**

**All wastewater treatment works shall be operated in a manner consistent with the following:**

- A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.**
- At the Bayview WRF, we are concerned about the digesters and aeration tanks. The facility has six digesters, but only three fully functional digesters and needs to have four during the winter months. Three digesters are not being properly maintained. The Facility has nine aeration tanks in total. Tank number 5 has not been operational and has woody vegetation growing in the tank.
- We are concerned about the city having adequate staffing to maintain the facilities newly constructed under the CD given the increased number of facilities they have now and the anticipated loss of three experienced staff.
- Maintenance is needed at some of the green infrastructure facilities inspected above to address trash, inlet protection from construction, and overgrowth of vegetation.

### **8.0 LIST OF ATTACHMENTS**

- A. Schedule of Projects
- B. Rough Agenda
- C. Photolog
- D. Figure showing project locations
- E. Summary email of City's inspection of bioswales for Swan Creek North
- F. U.S. EPA Small Business Resources Information Sheet