



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO ATTENTION OF
ECW-15J

Purpose: City of East St. Louis CSO Inspection

Facility: City of East St. Louis, IL

NPDES Permit: IL0033472

Dates of Inspection: March 31, 2021 – April 1, 2021

Illinois EPA Inspector:

Joe Stitely; (618) 993-7200

Ingrid Acevedo; (618) 993-7200

U.S. EPA Inspectors:

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City of East St. Louis Representative:

Sam Swanson, Director of Public Works; (618) 641-1765; sswanson@cesl.us

Terrance Stith, Superintendent and Pump Station Operator; (618) 974-3848

Girthal Clemmons, Retired Director of Public Works; 618-979-7895

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Inspection Report Prepared by:

Joan Rogers, U.S. EPA Region 5 Inspector

JOAN ROGERS

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ROGERS

Date: 2021.05.27 13:24:20 -05'00'

U.S. EPA Inspector Signature: _____

Approver Name & Title:

Ryan Bahr, Chief, Section 2, Water Enforcement and Compliance Assurance Branch

RYAN
BAHR

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RYAN BAHR

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Approver Signature: _____

All photos taken by Joan Rogers, Environmental Scientist, U.S. EPA
Camera: Olympus TG-4 Tough

March 31, 2021

On March 31, 2021, the EPA inspection team of Dean Maraldo, Ted Flatebo, and Joan Rogers traveled to the City of East St. Louis to conduct an inspection of the City's combined sewer system and compliance with their Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) Permit (Permit), number IL0033472. The Permit was issued by Illinois EPA (IEPA) on September 11, 2019 and expires on August 31, 2024. The effective date of the Permit is September 11, 2019. The Permit authorizes CSOs through three outfalls. Outfalls 001 and 002 discharge to the Mississippi River, while Outfall 003 discharges to the Frank Holten State Park Lake. This inspection was an announced inspection and was scheduled with the Director of Public Works, Mr. Sam Swanson.

IEPA previously inspected the City of East St. Louis in September and October 2016 and June 2019. The inspection report from the 2016 inspections, dated June 29, 2017, noted that the City had not submitted a Long-Term Control Plan, a Pollution Prevention Plan, and had not been submitting monthly Discharge Monitoring Reports as required by their Permit. IEPA recommended that the City determine the sources of Inflow and Infiltration (I/I) that have caused CSOs and basement backups.

Ms. Rogers and Mr. Flatebo arrived at the Department of Public Works, 613 N. 20th Street in East St. Louis at 11:58 A.M. IEPA inspectors, Mr. Stitely and Ms. Acevedo arrived at the same time. EPA inspectors presented credentials to Mr. Swanson and Mr. Stith at 12:01 P.M. EPA provided an opening conference and explained the purpose of the inspection.

During the interview, Mr. Swanson stated that he had only become the Director of Public Works a year before. He stated that the City owns 20 lift stations that lift either sanitary waste or combined sanitary waste and storm water to piping that directs the flow to the American Bottoms Regional Wastewater Treatment Facility (American Bottoms). Ms. Rogers asked if the City had collection system maps and Mr. Swanson produced the paper maps created by the engineering firm Hurst-Rosche. Hurst-Rosche is the engineering firm used by the City for all engineering projects. Ms. Rogers requested digital copies of the collection system maps.

In a discussion about funding and billing, Mr. Swanson stated that the City does all the billing and collection of sewer fees for collection but American Bottoms collects separately for wastewater treatment. The residents are billed for the collection system based on their water usage. American Bottoms maintains the residents' usage records because they also base their fees for sewage treatment on water usage. American Bottoms shares the information on water usage with the City of East St. Louis.

Mr. Swanson stated that he has ten staff members. In addition to Mr. Swanson and Mr. Stith, two are operators or laborers, three are truck drivers, two are dedicated to lift station maintenance and they have one secretary. Mr. Stith stated that all 20 lift stations are operational except for one, the 8th Street Underpass Lift Station. That lift station, a separate storm water lift station, was recently

vandalized and will cost the City approximately \$110,000 to repair. The City has a contract with Vandevanter Engineering to maintain all the lift stations and this vandalized lift station is scheduled for repair within eight weeks. Vandevanter will install a new pump and electrical wiring.

Mr. Swanson stated that the lift station maintenance personnel inspect each lift station every day, Monday through Friday. The City budgets \$200,000 per year for lift station maintenance. Mr. Stith stated that there are three pumps in all the major lift stations. They usually rotate through one pump at a time, but those lift stations can run all three of the pumps at the same time, if needed.

There are three connections from the Commonfields of Cahokia collection system that bring waste into the East St. Louis collection system, and all are at the border of City of Centreville and the City of East St. Louis. They are located at 63rd Street, 73rd Street, and 82nd Street. Ms. Rogers asked if the City has any way to limit flow from upstream communities. Mr. Swanson and Mr. Stith stated that they didn't.

Ms. Rogers requested information about maintenance procedures and how complaints are handled and documented in the City. Mr. Swanson stated that complaints come into the City and are logged on paper. The paper complaints are distributed to Mr. Stith who then directs the work to be completed in response. The City's secretary files the paper complaint in a box. If they receive complaints from residents of other municipal systems, the secretary will call the complainant and let them know that they should call the other jurisdiction. Mr. Stith explained that the paper complaints are not sorted by type of complaint or responsibility for the problem. He also stated that they are not logged into any system that could provide a report, but he keeps records of any maintenance or jetting of sewer lines. Ms. Rogers requested scans of the complaints from 2020 through the present.

After hours complaints are called into the police department if they are an emergency. The police department will then call Mr. Swanson. After hours non-emergency complaints are left on voicemail and the City's secretary will create a work order in the morning.

The City owns its own vac/jetting truck. It recently needed repairs and the complaints that came into the City needed to be put on hold until the truck was operational again. The City has the ability to repair a broken sewer line within 24 hours. Pump stations are inspected by the City sewer personnel using a Pump Station Inspection Checklist. After the inspection, the completed checklists are turned in to Mr. Stith.

Ms. Rogers requested information about any I/I projects that have been completed or are planned. Mr. Swanson stated that he had none planned and there have been no I/I projects completed that he knew of. The City also has not performed any smoke testing, but if there was a need for it to be performed, Vandevanter Engineering would conduct it.

Two main pipes transport combined sewer and storm water to the American Bottoms East St. Louis Pump Station. One pipe is 10.5' in diameter and discharges at 14th and Gay Avenue into another pipe that is 12.5' in diameter. If the flow from the 10.5' pipe cannot enter the 12.5' pipe,

due to the 12.5' pipe being too full already, there is a weir before the connection that allows the flow to leave the 10.5' pipe and go to the Metro East Sanitary District East St. Louis Pump Station as a Combined Sewer Overflow through Outfall 002.

The 12.5' pipe flows directly to the American Bottoms East St. Louis Pump Station which then diverts the flow to the American Bottoms Regional Wastewater Treatment Plant. An overflow weir at this pump station allows combined sewer overflows to leave the pump station through Outfall 001 and travel to the Metro East Sanitary District East St. Louis Pump Station.

A third Combined Sewer Outfall, Outfall 003, is located at 47th Street and Lake Drive. Any combined sewer overflows from this location discharge to the north end of the Frank Holten State Park Lake.

NPDES Permit No. IL0033472, has requirements for management, monitoring, reporting, and notifications. Some of the requirements include:

- The City shall monitor the frequency of discharges from the combined system and report the duration and estimated volume of the discharge to IEPA on Discharge Monitoring Reports (DMRs).
- CSO discharges are to be treated to control sludge deposits and floatables.
- The collection system shall be operated to optimize transport of wastewater flows and to minimize CSO discharges.
- The City shall comply with the nine minimum controls contained in the National CSO Control Policy. The nine minimum controls are:
 - Proper operation and maintenance for the sewer system and the CSOs;
 - Maximize use of the collection system for storage;
 - Pretreatment requirements to assure CSO impacts are minimized;
 - Maximize flow to the POTW for treatment;
 - CSOs are prohibited in dry weather;
 - Control of solids and floatable materials in CSOs;
 - Pollution prevention programs which focus on source control activities;
 - Public notification regarding CSO occurrences and CSO impacts; and
 - Monitoring to characterize impacts and efficiency of CSO controls.
- The City shall develop a Pollution Prevention Plan (PPP) within 12 months of the effective date of the Permit.
- The State of Illinois has determined that Outfall 003 discharges to a sensitive area and the City was required to submit a plan to eliminate or relocate the outfall within three months of the effective date of the Permit.
- The City was required to fully implement the approved CSO Operational and Maintenance (O&M) Plan, which was submitted to IEPA on May 9, 2000. The CSO O&M Plan shall include procedures to ensure:
 - The collection system is inspected on a scheduled basis;
 - Regular cleaning and maintenance of the sewers and catch basins is done on a scheduled basis;
 - Inspections and preventative maintenance are performed on all pump/lift stations;
 - Collection system replacement, where necessary;

- Detection and elimination of illegal connections;
- Detection, prevention, and elimination of dry weather overflows;
- Collection system is operated to maximize storage capacity and to delay storm entry into the system.
- The system is operated to maximize treatment.
- The City shall review and where necessary, modify its existing sewer use ordinance and enforce it.
- The City shall develop a Long-Term CSO Control Plan (LTCP).
- The City shall submit annual fiscal data regarding sewerage system operations to the IEPA.

During the conversation about the requirements of the Permit, Mr. Swanson stated that the City has not developed an LTCP or PPP. Mr. Swanson also stated that he has not been monitoring the CSO discharges or submitting DMRs to the state. Mr. Swanson did not know of any CSO O&M Plan and the City does not provide any signage or notifications to the public about the CSOs. Mr. Swanson also did not know that there was a requirement to develop a plan to eliminate Outfall 003.

Since Mr. Swanson was relatively new to the position, he called Ms. Girthal Clemmons, the former Director of Public Works who retired approximately one year prior. Mr. Swanson arranged for Ms. Clemmons to meet the inspection team in the morning of April 1, 2021 at 10:00 A.M.

Mr. Swanson stated that on April 1, 2021, he could not meet very long with us and we could work with Ms. Clemmons to locate any documentation that she worked on prior to her retirement. Not knowing if we would have time with Mr. Swanson the next day, Ms. Rogers provided a preliminary closing conference to him. During the preliminary closing conference, Ms. Rogers identified these areas of concern:

1. The Permit had not been read and needs to be read to understand the requirements.
2. The Long-Term Control Plan has not been developed.
3. The Pollution Prevention Plan has not been developed.
4. The CSO Operation and Maintenance Plan was not available or known to exist.
5. The Plan to eliminate Outfall 003 had not been developed.
6. Inflow and Infiltration had not been addressed.
7. Complaints were not logged into a system that can produce a report which could help the City identify and manage problem areas.

At 2:00 P.M. the inspection team left the Department of Public Works with City personnel to observe the manholes that are downstream of the City of Centreville. The first manhole observed was on 82nd Street, arriving there at 2:19 P.M. This manhole is #15 on the City's sewer maps and is the second manhole downstream of the City of Centreville's system. This manhole was retaining water and while it appeared that there was some flow into and out of the manhole, the level never went down. The water was clear.



1: P3310004

Description: Looking down into the manhole that is the second manhole downstream of the flow from Centreville on 82nd Street. The manhole had standing water which was clear. There was some flow movement, but the level of the water did not recede.

Location: Manhole #15 in East St. Louis. Northwest of intersection of North 82nd Street and Ridge Avenue.

Camera Direction: Down

Date/Time: March 31, 2021 / 2:22 P.M.



2: P3310005

Description: There was standing water with some flow into and out of manhole #15.

Location: Northwest of intersection of North 82nd Street and Ridge Avenue.

Camera Direction: Down

Date/Time: March 31, 2021 / 2:23 P.M.

At 2:30 P.M., EPA observed the first manhole downstream of the City of Centreville's system on 82nd Street. Again, the manhole was holding water and the level did not recede.



3: P3310007

Description: There was standing water in the first manhole downstream of Centreville in the East St. Louis collection system. There was some flow in and out, but the level of water did not recede.

Location: Manhole #42, southeast of North 82nd Street and Ridge Avenue.

Camera Direction: Down

Date/Time: March 31, 2021 / 2:33 P.M.

Mr. Swanson and Mr. Stith then opened the last manhole in the City of Centreville's collection system on 82nd Street. This manhole had standing water in it also. IEPA inspector, Mr. Stitely, advised Mr. Swanson and Mr. Stith to continue to open manholes along this sewer line and find one that is not holding water. Mr. Stitely advised them to jet the line upstream of the first manhole that was not holding water to potentially break up any blockage in the sewer line that was preventing water from flowing freely. Mr. Swanson stated that they would try to perform this task the following day.



4: P3310008

Description: The last manhole for the Centreville collection system before it flowed into the East St. Louis collection system had standing water in it.

Location: South of intersection of North 82nd Street and Ridge Avenue, behind the Greater Faith Christian Church.

Camera Direction: Down

Date/Time: March 31, 2021 / 2:38 P.M.

The EPA inspection team then drove to observe Outfall 003 that discharges into the Frank Holten State Park Lake. Outfall 003 is listed in the Permit as a CSO discharge location at 47th Street and Lake Drive and the receiving water is the Frank Holten State Park Lake. There was no signage posted at the discharge location that would let the public know that the three pipes could contain sanitary waste. There were fishing lines and bobs hanging from the vegetation along the banks of the lake which is evidence that people fish off the bridge. The only signage contained some numbers with no description of their meaning.



5: P3310009

Description: The sign marking at East St. Louis' Outfall 003, which flows to the Frank Holten State Park Lake.

Location: North 47th Street and Lake Drive in Centreville.

Camera Direction: Northwest

Date/Time: March 31, 2021 / 3:00 P.M.



6: P3310010

Description: East St. Louis' Outfall 003 flows into the Frank Holten State Park Lake.

Location: North 47th Street and Lake Drive in Centreville.

Camera Direction: Southwest

Date/Time: March 31, 2021 / 3:02 P.M.



7: P3310011

Description: Looking down at one of the three pipes that make up Outfall 003.

Location: North 47th Street and Lake Drive in Centreville.

Camera Direction: Down

Date/Time: March 31, 2021 / 3:02 P.M.



8: P3310012

Description: Looking down at Outfall 003 from above.

Location: North 47th Street and Lake Drive in Centreville.

Camera Direction: Down

Date/Time: March 31, 2021 / 3:02 P.M.



9: P3310013

Description: Looking down at one of the three pipes that make up Outfall 003.

Location: North 47th Street and Lake Drive in Centreville.

Camera Direction: Down

Date/Time: March 31, 2021 / 3:02 P.M.

Mr. Swanson and Mr. Stith stated they did not know that the location where the three pipes discharged to the Frank Holten State Park Lake were a CSO location for East St. Louis. The Outfall is located in the City of Centreville, but just south of the East St. Louis City boundary. They noted that there was a storm water pump station just to the northeast on North 47th Street near the East St. Louis Senior High School. EPA and the City personnel drove to the pump station.

This pump station was in a locked brick structure. There were three pumps in the pump station that, according to Mr. Stith, pumped storm water to one pipe, located in the street which then gravity flows to the Mississippi River. According to the sewer maps that were reviewed after the inspection, there are three 72" storm pipes that originate on 47th Street north of State Street and flow directly to the Frank Holten State Park Lake.

Adjacent to the pump station was a ditch that Mr. Stith says is maintained by the Metro East Sanitary District. On the south end of the ditch there were three culverts that allowed flow to continue to the south. EPA did not observe where this water discharged and it isn't apparent on maps. On the east side of the ditch were outlets for water to enter the ditch. One of the outlets had a backflow prevention gate on it. Mr. Swanson stated that the outlets are connected to drains from the Senior High School parking lot. It was unclear to EPA how the sanitary waste is flowing in this area and whether it enters either the ditch or the storm water pipes. EPA reviewed the sewer maps after the inspection the maps did not include a connection to sanitary waste upstream of the CSO Outfall 003.



10: P3310014

Description: The ditch next to the pump station on North 47th Street north of State Street. Flow from the ditch flows south toward State Street.

Location: 47th Street north of State Street.

Camera Direction: South

Date/Time: March 31, 2021 / 3:17 P.M.



11: P3310015

Description: The ditch next to the pump station on North 47th Street north of State Street. Flow from the ditch flows south toward State Street.

Location: 47th Street north of State Street.

Camera Direction: Northeast

Date/Time: March 31, 2021 / 3:17 P.M.



12: P3310016

Description: There are outlets on the east side of the ditch. There was no flow coming from the outlets on the day of the inspection and Mr. Swanson did not know where the flow would originate.

Location: 47th Street north of State Street.

Camera Direction: Southeast

Date/Time: March 31, 2021 / 3:17 P.M.



13: P3310017

Description: One of the outlets to the ditch has a backflow cover on the pipe. There was no flow coming from the outlets on the day of the inspection and Mr. Swanson did not know where the flow would originate.

Location: 47th Street north of State Street.

Camera Direction: East

Date/Time: March 31, 2021 / 3:19 P.M.

EPA then continued to the remaining two sewer lines that connect the sanitary waste from the City of Centreville to the collection system in East St. Louis. The first manhole downstream from the City of Centreville along 63rd Street was flowing and had very low flow. The water was not clear and contained sanitary waste.

The first manhole downstream from the City of Centreville along 73rd Street had standing water in it, but the water level was low. There did not appear to be any flow coming in or going out.



14: P3310018

Description: The manhole at 63rd Street.

Location: South of 63rd Street and State Street.

Camera Direction: Down

Date/Time: March 31, 2021 / 3:28 P.M.



15: P3310019

Description: The manhole at 73rd Street.

Location: South of 73rd Street and State Street.

Camera Direction: Down

Date/Time: March 31, 2021 / 3:38 P.M.

After observing these two manholes, at approximately 3:45 P.M., EPA ended the inspection for the day and made plans to meet with Mr. Swanson at 9:30 A.M. on April 1, 2021 at the Department of Public Works.

On April 1, 2021, EPA and IEPA arrived at the Department of Public Works at 9:30 A.M. Before Ms. Clemmons was scheduled to arrive at 10:00 A.M., and before Mr. Swanson had to leave for another appointment, EPA provided a final closing conference to Mr. Swanson. During the closing conference, Ms. Rogers expressed these areas of concern:

1. The Permit requires a Long-Term Control Plan, CSO Operation and Maintenance Plan and a Pollution Prevention Plan. The City does not have any of these documents.
2. Inflow and Infiltration getting into the system could be causing more CSOs than necessary.
3. There needs to be signage at the CSO Outfalls.
4. East St. Louis should monitor the entry points to the collection system to ensure that there are no blockages that could be causing SSOs upstream
5. Work orders and complaints should be separated and labeled so problem areas can be identified.
6. The City is not monitoring CSO discharges as required by the Permit.
7. DMRs are not being submitted to IEPA as required by the Permit.
8. The City should investigate why Outfall 003 is identified as a CSO Outfall.

Ms. Rogers then reiterated the documents that she wished to receive electronically. Those were:

1. Digital copies of the collection system maps, and
2. Copies of the complaints and workorders from January 2020 to present.

EPA began discussions with Ms. Clemmons on her involvement in developing the required documents for the Permit. Ms. Clemmons stated that after she received a Violation Notice from IEPA in 2017, she began to develop the required documents. She stated that while she started the documents, she did not get very far on the LTCP, the PPP, the CSO O&M Plan, or on I/I projects. Ms. Clemmons has been retired for approximately one year and there has been no additional work on these Permit requirements.

Ms. Clemmons recalled that the City submitted a permit to eliminate CSO Outfall 003 and the City designed a new pump station sometime in 2017-2019. For the submittal of volume of CSO discharge, Ms. Clemmons stated that the City hired an engineering firm to design a system to measure the flow out Outfall 001, but the project was not completed. Ms. Clemmons located the Sewer Use Ordinance and provided a copy to Ms. Rogers.

EPA inspector Mr. Maraldo made arrangements with Mr. Sudholt to pick up the digital sewer maps from the Hurst-Rosche office. EPA inspectors thanked Mr. Swanson and Ms. Clemmons for her time and left the City of East St. Louis City Hall at approximately 11:00 A.M.

At 4:30 P.M. on April 1, 2021, the EPA inspectors stopped at the East St. Louis storm water pump station at 68th Street and State Street. This pump station was not functioning and was in disrepair. There were no pumps on top of the pump housing in the pump station. There were two

bypass pumps outside the pump station for pumping the storm water from deep wet wells to a waterway that flowed southwest and south to Harding Ditch. Plastic sheeting was being held in place by sandpaper above the outfall pipe. The pump station building was unlocked and open to the public. There was no cover on the deep open wet wells. EPA also observed a deep manhole to the northeast of the building that had no sewer cover. EPA inspectors left the pump station at approximately 4:40 P.M.



16: P4010023

Description: Large storm water outfall has been sandbagged and poly lined.

Location: 68th and State Street.

Camera Direction: North

Date/Time: April 1, 2021 / 4:32 P.M.



17: P4010024

Description: Storm water pump station is being bypassed.

Location: 68th and State Street.

Camera Direction: North

Date/Time: April 1, 2021 / 4:32 P.M.

ADDENDUMS

Addendum 1: Storm Water Pump Station at 68th and State Street on April 23, 2021

Addendum 1

Addendum 1

On April 22, 2021, EPA inspectors Joan Rogers, Dean Maraldo, and Ted Flatebo returned to the storm water pump station at 68th Street and State Street with Mr. Scott Hillman from the Metro East Sanitary District (MESD). Mr. Hillman explained that MESD installed the plastic sheeting and the sandbags because the flap gate in the outfall pipe was broken and when water levels were high in the waterway, they would back up into the wet well and then overflow into the surrounding neighborhood. The plastic sheeting was to allow water to flow out the outfall, but then it would provide some relief from water flowing back into the pump station. Mr. Hillman stated that Mr. Swanson knew that the gate was not functioning.

EPA inspectors again went into the pump station to document the condition. The following photos show the extent of the disrepair of the pump station.



P4220019.JPG

Description: Plastic Sheeting to prevent flow from entering the outlet pipe is held in place by sandbags.

Location: 68th and State Street.

Camera Direction: Down

Date/Time: April 22, 2021 / 12:06 P.M.



P4220020.JPG

Description: Pump station is being bypassed. Gate cannot be closed and pump station door is open.

Location: 68th and State Street.

Camera Direction: Northeast

Date/Time: April 22, 2021 / 12:06 P.M.



P4220021.JPG

Description: Roof is damaged and open to the elements.

Location: 68th and State Street.

Camera Direction: Up

Date/Time: April 22, 2021 / 12:06 P.M.



P4220022.JPG

Description: Wet well is open to the public.

Location: 68th and State Street.

Camera Direction: East

Date/Time: April 22, 2021 / 12:06 P.M.



P4220023.JPG

Description: Wet well is not covered and is open to the public.

Location: 68th and State Street.

Camera Direction: Down

Date/Time: April 22, 2021 / 12:06 P.M.



P4220024.JPG

Description: Wet well is not covered and is open to the public.

Location: 68th and State Street.

Camera Direction: Down

Date/Time: April 22, 2021 / 12:06 P.M.



P4220025.JPG

Description: There is still power going to the pump station.

Location: 68th and State Street.

Camera Direction: Northeast

Date/Time: April 22, 2021 / 12:06 P.M.



P4220026.JPG

Description: Electric feed is still on.

Location: 68th and State Street.

Camera Direction: Northeast

Date/Time: April 22, 2021 / 12:06 P.M.