

City of Tiffin



City of Tiffin CSO Notification Plan Annual Report for 2023

Here is a list of all of our CSO discharge locations. The outfall signs contain the permittee name, permit number and CSO discharge number, our plant contact information including telephone number and the following description of the discharge; "Untreated human sewage may be discharged from the outfall during wet weather and harmful bacteria may be present in the water"

Station Number	Description
2PD00025004	Daughters of America
2PD00025005	Tomb St. East of Henry
2PD00025007	Webster St. @ River
2PD00025008	Harrison St. @ Erie
2PD00025009	Adams St. @ River *
2PD00025010	Miami St & Frost Pkwy *
2PD00025011	Alley S. of Miami St @ Frost *
2PD00025012	W. Perry St. & Frost Pkwy *
2PD00025013	Alley S. of W. Perry St. *

- 2PD00025014 Alley S of W Market St
- 2PD00025015 #67 Benner @ River
- 2PD00025016 Sandusky St. @ Jehovah's Witness
- 2PD00025017 Liberty St. @ Riverside Dr.
- 2PD00025018 Jefferson St. @ Riverside Dr. *
- 2PD00025019 S. Washington St. @ Riverside Dr. *
- 2PD00025020 Alley between E. Perry & E. Market *
- 2PD00025021 E. Market St. @ Parking Lot
- 2PD00025022 Madison St. @ Front St. *
- 2PD00025023 Alley S. of Madison St. *
- 2PD00025025 Circular St., S. of Bridge
- 2PD00025026 Hedges St. @ Rebecca St. Bridge *
- 2PD00025027 Hedges Boyer Park
- 2PD00025028 Hunter St. & Riverside Dr.
- 2PD00025030 Front St. & Third St.
- 2PD00025031 E. Perry St. W of Monroe
- 2PD00025032 State Hospital N. of Main Entrance
- 2PD00025033 Industrial Ave. @ Riverside Park
- 2PD00025034 Huss St. & N. Water St.
- 2PD00025037 S. River Road *
- 2PD00025050 Madison St. @ Schondhart St.
- 2PD0025051 Walker St. @ Hedges St.

*Indicates no sign at discharge point.

* All CSO's discharge to the Sandusky River except for 2PD00025025 through 2PD00025027 which discharge to Rock Creek.

The City of Tiffin's Public Water Supply (PWS) is pulled from wells and the Sandusky River and all of the Cities CSO locations are downstream from the PWS. Also there are no public parks with designed water access. The Long Term Control Plan did not find any additional sensitive areas.

Nine Minimum Controls Implementation

The US EPA CSO Control Policy (1994) requires implementation of the nine minimum controls (NMCs) by all communities with CSOs. All communities with CSOs are required to create and submit a Combined Sewer System Operational Plan (CSSOP). One of the main purposes for submitting the plan is to document how the community will execute the nine minimum controls for combined sewer overflows. These nine minimum controls are:

1. Routine inspection, operation and maintenance of the system.
2. Maximize use of collection system for storage during wet weather.
3. Review and modification of pretreatment program
4. Maximization of flow to Publically Owned Treatment Works (POTW) for treatment.

5. Elimination of dry weather overflows.
6. Control of solid or floatable materials in CSO discharges.
7. Monitoring, inspection and reporting of CSOs.
8. Pollution prevention to reduce CSO impacts.
9. Public notification of any areas that are affected by CSOs, especially beaches and water recreational areas.

Each community with CSOs must provide documentation on specific actions that have been taken to implement all minimum controls in their CSSOP. If a minimum control is not applicable to a community, this must also be explained in the plan such that all controls have been identified and commented on.

The City of Tiffin prepared the “Combined Sewer System Operational Plan” which was originally developed in April 1993 in accordance with Ohio EPA requirements. The CSSOP was revised in February 1998 to address three additional minimum controls. Additional updates to the CSSOP were documented in the LTCP performed in 2006. The CSSOP was developed to document the nine minimum control practices currently being implemented or proposed to be implemented by the City to reduce CSO discharges and maximize the existing system infrastructure. The operation and maintenance (O&M) procedures outlined in the CSSOP still remain in effect by the City, and the following items summarize the ongoing efforts towards obtaining compliance with the nine minimum controls in coordination with their CSSOP.

1. Operation and Maintenance Program

The City's sewer system is maintained by five (5) employees of the Public Works

Department through routine maintenance activities as well as a work order system.

Additionally, personnel from the WWTP department perform some overflow

inspection and sampling activities, as well as pump station maintenance. The

following is a list of on-going system operation and maintenance activities that have

been performed throughout the City:

- CSO structures and catch basins are cleaned as needed.
- The City performs cleaning of any observed or reported blockage in the combined sewer system with the City's vactor.
- In addition, regular street sweeping is performed by the Public Works Department to remove grit and sediment from the pavement surfaces in the City.
- The City's WWTP checks the operation of five (5) CSO structures after every significant rain event or snow melt to ensure that they are operating properly and to identify any maintenance needs. A rain event is considered significant if there is at least 0.2 inches of rainfall.
- The Public Works Department inspects each CSO once per week.
- Additionally, all pump stations are inspected two (2) times per week.
- Record keeping of the routine CSO and pump station inspections include depth of flow in the pipe and necessary repairs or maintenance.
- Pump station wet wells are cleaned twice per year for all pump stations with recurring debris problems.
- The City owns and operates a sewer televising truck. This CCTV truck has greatly enhanced the City's ability to proactively inspect the sewer system and identify where maintenance or repair issues may be necessary.

- As part of the LTCP CSO 24 and 52 were abandoned and their flow was routed to CSO 25.

2. Maximum Use of the Collection System for Storage

One method of increasing collection system storage volume is to keep the interceptor sewer and local sewers clean from debris. Storage will be maximized when the system is operating without obstacles or debris in the lines. This can be accomplished with proper maintenance of the collection system. The City continues to perform its regular maintenance efforts described in the CSSOP to maximize collection system storage. In general, the following is a list of activities that have aided in maximizing collection system storage:

- The City owns and operates a jet-vac (Vactor 810 model) truck and sewer televising truck. These items, along with normal cleaning efforts, have added a significant amount of storage capacity to the sewer system.
- Since 1994, backflow prevention valves were installed in CSO structures throughout the City which has aided in providing additional storage capacity by preventing river water from entering the sewer system.
- Wet weather events can lead to significant amounts of infiltration and inflow (I/I) through leaking joints, cracks, and connections of roof drains and other private structures.
- Flow monitoring has been performed as part of the LTCP Update.
- Prior to 1994, adjustable sluice plates were located on the outlet pipes of the CSO structures to limit flow to the interceptor. These have all been removed to maximize flow to the treatment plant. Also, eighteen (18) overflow weirs have been raised by the City since 1994 to increase the storage capacity of the sewers. Both of these actions were direct recommendations from the CSSOP.

- 2023 maintenance includes 1564 hours in catch basin repairs and catch basin cleaning, 21 catch basins rebuilt or installed, and 182 hours spent inspecting for CSO/SSOs plus 96 hours for IDDE source tracing. Also continued quarterly separator plate inspections.

3. Review and Modification of Pretreatment Program

The City developed an Industrial Pretreatment Program in August, 1984 in an effort to comply with the Clean Water Act. The program included development of several items, including an industrial waste survey, ordinance, technical information, monitoring program, local limitations, monitoring equipment needs, financing, and public participation. The Industrial Pretreatment Program currently remains in effect and annual reporting is performed as required by the Ohio EPA and the City's NPDES permit. In addition, the City obtained a mercury variance which requires annual reporting and updates to the Ohio EPA.

4. Maximization of Flow to POTW for Treatment

Maximizing wet weather flow to the wastewater treatment plant (WWTP) for treatment during wet weather conditions can be done in much the same way as previously described. Performing the proper maintenance on the interceptor as well as all local sewers throughout the collection system will allow a higher volume of flow to reach the WWTP. This includes routine inspections and cleanings of the CSO structures, streets, catch basins, pump stations, and regular cleanings of the entire collection system. Wet wells are cleaned twice per year for pump stations with

recurring debris problems. In addition to cleaning the collection system, another way that the City can increase the wet weather flow to the treatment plant is increased hydraulic capacity of the pump stations.

The Hayes Pump Station was replaced in 2010 at a cost of \$540,399. This pump station is currently referred to as the Borer Lift Station. Additionally, two (2) pumps were replaced at the Behm Lift Station in 2013. We also replaced one of the two pumps at Beechwood lift station in 2022.

Cleaning of sewers as part of on-going maintenance efforts has restored additional hydraulic capacity in the sewers and increased wet weather flow to the WWTP. Including the Public Works Department started to clean the main trunk line in 2022, they were able to clean about 1 mile of line and have about 0.93 miles left to clean.

5. Prohibition of Dry Weather Overflows

Backflow prevention valves have been installed on 20 of the most critical CSO outfall pipes to aid in eliminating river inflow into the interceptor sewers. These prevention devices include flap gates, duckbill valves, and a combination of both. River water intrusion (RWI) was investigated as a potential issue as part of the LTCP Update. Backflow preventers were either installed or replaced in CSO 4, 5, 11, 12, 25, and 33 as it is spelled out in the Cities Long Term Control Plan.

In addition, the City also continues its routine inspection efforts of CSO structures three (3) times per week and after significant rain events to determine if maintenance is required. In the event of a CSO, each outfall is equipped with a sign detailing the severity of such event and directing the observer to contact the public works department if a dry weather overflow is occurring. All CSO signs were inspected during 2023 and replaced if needed.

6. Control of Solid and Floatable Materials in CSO Discharges

Regular street sweeping and catch basin cleaning are ways to minimize discharging solids. These will limit the amount of solid material entering the sewer system through catch basin grates and through regular household items being flushed down private connections. The routine cleanings performed by the Public Works Department have been described in previous sections.

7. Required Inspection, Monitoring, and Reporting of CSOs

The City has continued to upgrade and maintain the CSO monitoring and reporting efforts in conjunction with its maintenance and operating program. Routine monitoring and reporting of CSOs is performed in accordance with the NPDES Permit requirements and information is sent to the Ohio EPA. Monitoring practices include inspecting each CSO structure three times per week as well as choosing five structures for inspection after significant rain events. The City schedules cleaning and lubrication of the CSO structures on an as-needed basis, along with making any needed repairs.

8. Pollution Prevention to Reduce CSO Impacts

Hazardous material discharges to the sewer system are prohibited, and industrial discharges are monitored and regulated through the Industrial Pretreatment Program by the WWTP Superintendent as well as enforcement of the Sewer Use Ordinance.

This has been helpful in reducing the level of contaminants in the CSOs.

Seneca County hosts a biannual household hazardous waste collection. Examples of materials accepted at the collection are latex and oil based paint, primers, pesticides, spray aerosol cans, fluorescent bulbs, oven cleaner, antifreeze, motor oil, mercury thermostats, and household batteries.

The City and Seneca County Board of Commissioners have joined together annually for fifteen (15) years for the Sandusky River Clean Sweep. Volunteers in the community travel to a designated cleanup site that is uniquely chosen each year. At these events there are papers and handouts for river conservation. An additional form of public education is an Earth Day poster contest with various local schools.

9. Public Notification for Any Areas Affected By CSOs

In the event of a CSO, each outfall is equipped with a sign detailing the severity of such event and directing the observer to contact the public works department if a dry weather overflow is occurring.

The City has been diligent in their implementation of the nine minimum controls, which has allowed them to increase capacity in the existing infrastructure and decrease CSO discharges during development and implementation of the LTCP. The nine minimum controls will continue to be implemented during preparation of the LTCP Update and throughout the duration of implementation of the CSO control improvements recommended in the LTCP Update.

This annual report will also be available on the City of Tiffin website. If you have any questions related to the information in this report please contact Plant Superintendent Kevin Hughes at 419-448-5440 or khughes@tiffinohio.gov

April 25, 2024



Kevin Hughes
City of Tiffin WPCC
961 N Water St
419-448-5440

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrence	Overflow volume	Overflow Occurrence	Overflow volume	Overflow Occurrence	Overflow volume
s	s	s	s	s	s
1-Jan-23	2	0.000	3	0.000	4
2-Jan-23		0.000		0.000	
3-Jan-23		0.012		0.226	
4-Jan-23		0.000		0.002	
5-Jan-23		0.000		0.000	
6-Jan-23		0.000		0.000	
7-Jan-23		0.000		0.000	
8-Jan-23		0.000		0.000	
9-Jan-23		0.000		0.000	
10-Jan-23		0.000		0.000	
11-Jan-23		0.000		0.000	
12-Jan-23		0.000		0.950	
13-Jan-23		0.000		0.003	
14-Jan-23		0.000		0.000	
15-Jan-23		0.000		0.000	
16-Jan-23		0.000		0.071	
17-Jan-23		0.000		0.007	
18-Jan-23		0.000		0.000	
19-Jan-23		0.012		0.884	
20-Jan-23		0.000		0.319	
21-Jan-23		0.000		0.000	
22-Jan-23		0.000		0.000	
23-Jan-23		0.000		0.000	
24-Jan-23		0.000		0.000	
25-Jan-23		0.000		0.000	
26-Jan-23		0.000		0.000	
27-Jan-23		0.000		0.000	
28-Jan-23		0.000		0.000	
29-Jan-23		0.000		0.000	
30-Jan-23		0.000		0.000	
31-Jan-23		0.000		0.000	

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrence s	Overflow volume	Overflow Occurrence s	Overflow Occurrence s	Overflow Occurrence s	Overflow Occurrence s
1-Feb-23	3	0.000	6	0.000	1
2-Feb-23		0.000		0.000	3
3-Feb-23		0.000		0.000	0.000
4-Feb-23		0.000		0.000	0.000
5-Feb-23		0.000		0.000	0.000
6-Feb-23		0.000		0.000	0.000
7-Feb-23		0.000		0.000	0.000
8-Feb-23		0.000		0.000	0.000
9-Feb-23	0.013	0.842	0.246	0.002	0.277
10-Feb-23	0.000	0.000	0.000	0.000	0.001
11-Feb-23	0.000	0.000	0.000	0.000	0.019
12-Feb-23	0.000	0.003	0.000	0.000	0.000
13-Feb-23	0.000	0.000	0.000	0.000	0.000
14-Feb-23	0.000	0.000	0.000	0.000	0.000
15-Feb-23	0.000	0.000	0.000	0.000	0.000
16-Feb-23	0.000	0.000	0.000	0.000	0.000
17-Feb-23	0.000	0.000	0.000	0.000	0.000
18-Feb-23	0.000	0.000	0.000	0.000	0.000
19-Feb-23	0.000	0.000	0.000	0.000	0.000
20-Feb-23	0.000	0.000	0.000	0.000	0.000
21-Feb-23	0.000	0.000	0.000	0.000	0.000
22-Feb-23	0.085	2.370	0.512	0.000	0.517
23-Feb-23	0.000	0.539	0.291	0.000	0.224
24-Feb-23	0.000	0.000	0.000	0.000	0.791
25-Feb-23	0.000	0.000	0.000	0.000	0.000
26-Feb-23	0.000	0.000	0.000	0.000	0.000
27-Feb-23	0.025	1.034	0.468	0.000	0.335
28-Feb-23	0.000	0.031	0.000	0.095	1.801

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrences	Overflow volume	Overflow Occurrences	Overflow volume	Overflow Occurrences	Overflow volume
1-Mar-23	3	0.000	3	0.000	4
2-Mar-23		0.000		0.000	1
3-Mar-23		0.318		2.364	0.347
4-Mar-23		0.000		0.257	0.000
5-Mar-23		0.000		0.000	0.084
6-Mar-23		0.000		0.000	0.000
7-Mar-23		0.000		0.000	0.000
8-Mar-23		0.000		0.000	0.000
9-Mar-23		0.000		0.000	0.000
10-Mar-23		0.000		0.000	0.000
11-Mar-23		0.000		0.000	0.000
12-Mar-23		0.000		0.000	0.000
13-Mar-23		0.000		0.000	0.000
14-Mar-23		0.000		0.000	0.000
15-Mar-23		0.000		0.000	0.000
16-Mar-23		0.000		0.000	0.000
17-Mar-23		0.000		0.000	0.000
18-Mar-23		0.000		0.000	0.000
19-Mar-23		0.000		0.000	0.000
20-Mar-23		0.000		0.000	0.000
21-Mar-23		0.000		0.000	0.000
22-Mar-23		0.000		0.108	0.120
23-Mar-23		0.001		0.000	0.052
24-Mar-23		0.000		0.000	0.399
25-Mar-23		0.098		0.427	0.000
26-Mar-23		0.000		0.000	0.000
27-Mar-23		0.000		0.000	0.000
28-Mar-23		0.000		0.000	0.000
29-Mar-23		0.000		0.000	0.000
30-Mar-23		0.000		0.000	0.000
31-Mar-23		0.000		0.000	0.075

	2PDD00025013	2PDD00025017	2PDD00025018	2PDD00025023	2PDD00025030	2PDD00025037
	CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrence s	Overflow volume	Overflow Occurrence s	Overflow volume	Overflow Occurrence s	Overflow volume	Overflow Occurrence s
1-Apr-23	1	0.018	2	0.265	3	0.012
2-Apr-23	0.000	0.000	0.000	0.000	0.000	0.208
3-Apr-23	0.000	0.000	0.000	0.000	0.000	0.000
4-Apr-23	0.000	0.005		0.000	0.000	0.000
5-Apr-23	0.000	0.009		0.000	0.009	0.417
6-Apr-23	0.000	0.000		0.000	0.000	0.002
7-Apr-23	0.000	0.000		0.000	0.000	0.000
8-Apr-23	0.000	0.000		0.000	0.000	0.000
9-Apr-23	0.000	0.000		0.000	0.000	0.000
10-Apr-23	0.000	0.000		0.000	0.000	0.000
11-Apr-23	0.000	0.000		0.000	0.000	0.000
12-Apr-23	0.000	0.000		0.000	0.000	0.000
13-Apr-23	0.000	0.000		0.000	0.000	0.000
14-Apr-23	0.000	0.000		0.000	0.000	0.000
15-Apr-23	0.000	0.000		0.000	0.000	0.021
16-Apr-23	0.000	0.000		0.000	0.000	0.000
17-Apr-23	0.000	0.000		0.000	0.000	0.000
18-Apr-23	0.000	0.000		0.000	0.000	0.000
19-Apr-23	0.000	0.000		0.000	0.000	0.000
20-Apr-23	0.000	0.000		0.000	0.000	0.000
21-Apr-23	0.000	0.000		0.000	0.000	0.005
22-Apr-23	0.000	0.000		0.000	0.000	0.000
23-Apr-23	0.000	0.000		0.000	0.000	0.000
24-Apr-23	0.000	0.000		0.000	0.000	0.000
25-Apr-23	0.000	0.000		0.000	0.000	0.000
26-Apr-23	0.000	0.000		0.000	0.000	0.000
27-Apr-23	0.000	0.000		0.000	0.000	0.000
28-Apr-23	0.000	0.000		0.007	0.000	0.209
29-Apr-23	0.000	0.000		0.006	0.000	0.103
30-Apr-23	0.000	0.001		0.070	0.000	0.366

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrence	Overflow volume	Overflow Occurrence	Overflow volume	Overflow Occurrence	Overflow volume
s	s	s	s	s	s
1-May-23	0.000	1	0.000	1	0.000
2-May-23	0.000	0.000	0.000	0.000	0.000
3-May-23	0.000	0.000	0.000	0.000	0.000
4-May-23	0.000	0.000	0.000	0.000	0.000
5-May-23	0.000	0.000	0.000	0.000	0.000
6-May-23	0.000	0.000	0.000	0.000	0.000
7-May-23	0.000	0.000	0.000	0.000	0.000
8-May-23	0.000	0.000	0.000	0.000	0.000
9-May-23	0.000	0.000	0.000	0.000	0.000
10-May-23	0.000	0.000	0.000	0.000	0.000
11-May-23	0.000	0.000	0.000	0.000	0.000
12-May-23	0.000	0.000	0.000	0.000	0.000
13-May-23	0.000	0.000	0.000	0.000	0.000
14-May-23	0.000	0.000	0.000	0.000	0.000
15-May-23	0.000	0.000	0.000	0.000	0.000
16-May-23	0.000	0.000	0.000	0.000	0.000
17-May-23	0.000	0.000	0.000	0.000	0.000
18-May-23	0.000	0.000	0.000	0.000	0.000
19-May-23	0.000	0.000	0.058	0.000	0.025
20-May-23	0.000	0.276	0.282	0.000	0.142
21-May-23	0.000	0.000	0.000	0.000	0.000
22-May-23	0.000	0.000	0.000	0.000	0.000
23-May-23	0.000	0.000	0.000	0.000	0.000
24-May-23	0.000	0.000	0.000	0.000	0.000
25-May-23	0.000	0.000	0.000	0.000	0.000
26-May-23	0.000	0.000	0.000	0.000	0.000
27-May-23	0.000	0.000	0.000	0.000	0.000
28-May-23	0.000	0.000	0.000	0.000	0.000
29-May-23	0.000	0.000	0.000	0.000	0.000
30-May-23	0.000	0.000	0.000	0.000	0.000
31-May-23	0.000	0.000	0.000	0.000	0.000

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrence s	Overflow volume s	Overflow Occurrence s	Overflow Occurrence s	Overflow Occurrence s	Overflow Occurrence s
1-Jun-23	3	0.000	3	0.000	1
2-Jun-23		0.000		0.000	2
3-Jun-23		0.000		0.000	3
4-Jun-23		0.000		0.000	0.000
5-Jun-23		0.000		0.000	0.000
6-Jun-23		0.000		0.000	0.000
7-Jun-23		0.000		0.000	0.000
8-Jun-23		0.000		0.000	0.000
9-Jun-23		0.000		0.000	0.000
10-Jun-23		0.000		0.000	0.000
11-Jun-23		0.000		0.000	0.111
12-Jun-23		0.000		0.000	0.941
13-Jun-23		0.006	0.025	0.000	0.299
14-Jun-23		0.000	0.000	0.000	0.337
15-Jun-23	0.011	0.106	0.000	0.008	0.266
16-Jun-23	0.000	0.000	0.000	0.002	0.000
17-Jun-23	0.000	0.000	0.000	0.000	0.000
18-Jun-23	0.000	0.000	0.000	0.000	0.000
19-Jun-23	0.000	0.000	0.000	0.000	0.000
20-Jun-23	0.000	0.000	0.000	0.000	0.000
21-Jun-23	0.000	0.000	0.000	0.000	0.000
22-Jun-23	0.000	0.000	0.000	0.000	0.000
23-Jun-23	0.000	0.000	0.000	0.013	0.417
24-Jun-23	0.000	0.000	0.000	0.000	0.000
25-Jun-23	0.000	0.000	0.000	0.000	0.000
26-Jun-23	0.011	0.000	0.000	0.087	0.171
27-Jun-23	0.000	0.000	0.000	0.000	0.000
28-Jun-23	0.000	0.000	0.000	0.000	0.000
29-Jun-23	0.000	0.000	0.000	0.000	0.000
30-Jun-23	0.000	0.000	0.000	0.000	0.000

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrences					
3	1	4	2	6	10
Overflow Volume (MG)					
1-Aug-23	0.000	0.000	0.000	0.000	0.000
2-Aug-23	0.000	0.000	0.000	0.000	0.000
3-Aug-23	0.000	0.000	0.000	0.000	0.000
4-Aug-23	0.000	0.000	0.000	0.000	0.000
5-Aug-23	0.000	0.000	0.000	0.000	0.000
6-Aug-23	0.000	0.000	0.000	0.000	0.000
7-Aug-23	0.000	0.000	0.000	0.000	0.027
8-Aug-23	0.000	0.000	0.000	0.000	0.000
9-Aug-23	0.000	0.000	0.000	0.000	0.000
10-Aug-23	0.000	0.000	0.000	0.000	0.000
11-Aug-23	0.000	0.000	0.000	0.000	0.109
12-Aug-23	0.001	0.000	0.000	0.040	1.105
13-Aug-23	0.000	0.000	0.000	0.017	0.074
14-Aug-23	0.011	0.000	0.000	0.096	0.500
15-Aug-23	0.000	0.000	0.004	0.025	0.625
16-Aug-23	0.000	0.000	0.000	0.000	0.000
17-Aug-23	0.000	0.000	0.000	0.001	0.121
18-Aug-23	0.000	0.000	0.000	0.000	0.000
19-Aug-23	0.000	0.000	0.000	0.000	0.000
20-Aug-23	0.000	0.000	0.000	0.000	0.000
21-Aug-23	0.000	0.000	0.000	0.000	0.000
22-Aug-23	0.000	0.000	0.000	0.000	0.000
23-Aug-23	0.000	0.000	0.000	0.000	0.000
24-Aug-23	0.476	1.429	0.563	1.285	1.106
25-Aug-23	0.054	-0.145	0.021	0.215	0.444
26-Aug-23	0.000	0.000	-0.039	0.000	-0.026
27-Aug-23	0.000	0.000	-0.812	0.000	-0.030
28-Aug-23	0.000	0.000	0.008	0.000	0.001
29-Aug-23	0.000	0.000	0.000	0.000	0.000
30-Aug-23	0.000	0.000	0.000	0.000	0.000
31-Aug-23	0.000	0.000	0.000	0.000	0.000

	2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37	
Overflow Occurrences						
0	0	3	1	0	2	
Date	Rainfall ([in./day])	Overflow Volume (MG)				
1-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
2-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
3-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
4-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
5-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
6-Sep-23	0.08	0.000	0.000	0.000	0.000	0.000
7-Sep-23	0.08	0.000	0.000	0.000	0.000	0.000
8-Sep-23	0.36	0.000	-0.001	0.037	0.000	0.000
9-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
10-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
11-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
12-Sep-23	0.02	0.000	0.000	0.000	0.000	0.000
13-Sep-23	0.01	0.000	0.000	0.000	0.000	0.000
14-Sep-23	0.17	0.000	0.000	0.000	0.000	0.000
15-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
16-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
17-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
18-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
19-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
20-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
21-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
22-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
23-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
24-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
25-Sep-23	0.02	0.000	0.000	0.000	0.000	0.000
26-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
27-Sep-23	0.48	0.000	0.000	0.055	0.025	-0.009
28-Sep-23	0.29	0.000	0.000	0.014	0.000	0.000
29-Sep-23	0.00	0.000	0.000	0.000	0.000	0.000
30-Sep-23	0.01	0.000	0.000	0.000	0.000	0.000
1-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000

	2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37	
Overflow Occurrences						
2	2	6	1	5	6	
Date	Rainfall (In./day)	Overflow Volume (MG)				
1-Oct-23	0.01	0.000	0.000	0.000	0.000	0.000
2-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
3-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
4-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
5-Oct-23	0.96	0.009	0.031	0.084	0.021	0.027
6-Oct-23	0.01	0.000	0.000	-0.002	0.000	0.000
7-Oct-23	0.06	0.000	0.000	0.000	0.000	0.000
8-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
9-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
10-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
11-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
12-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
13-Oct-23	0.29	0.000	0.000	0.020	0.000	0.000
14-Oct-23	1.62	0.014	0.200	0.209	0.000	0.252
15-Oct-23	0.19	0.000	0.000	-0.003	0.000	0.000
16-Oct-23	0.12	0.000	0.000	0.000	0.000	0.000
17-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
18-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
19-Oct-23	0.16	0.000	0.000	0.000	0.000	0.000
20-Oct-23	0.25	0.000	0.000	0.000	0.000	0.000
21-Oct-23	0.31	0.000	0.000	0.012	0.000	0.005
22-Oct-23	0.00	0.000	0.000	-0.022	0.000	0.000
23-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
24-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
25-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
26-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
27-Oct-23	0.00	0.000	0.000	0.000	0.000	0.000
28-Oct-23	0.13	0.000	0.000	0.000	0.000	0.000
29-Oct-23	0.95	0.000	-0.027	0.199	0.000	0.182
30-Oct-23	0.26	0.000	-0.010	0.122	0.000	0.122
31-Oct-23	0.00	0.000	0.000	0.000	0.000	0.263
1-Nov-23	0	0	0	0	0	0

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrences					
0	0	1	0	2	2
	Rainfall (In./day)	Overflow Volume (MG)	Overflow Volume (MG)	Overflow Volume (MG)	Overflow Volume (MG)
1-Nov-23	0.01	0.000	0.000	0.000	0.000
2-Nov-23	0.00	0.000	0.000	0.000	0.000
3-Nov-23	0.00	0.000	0.000	0.000	0.000
4-Nov-23	0.00	0.000	0.000	0.000	0.000
5-Nov-23	0.00	0.000	0.000	0.000	0.000
6-Nov-23	0.01	0.000	0.000	0.000	0.000
7-Nov-23	0.00	0.000	0.000	0.000	0.000
8-Nov-23	0.00	0.000	0.000	0.000	0.000
9-Nov-23	0.00	0.000	0.000	0.000	0.000
10-Nov-23	0.00	0.000	0.000	0.000	0.000
11-Nov-23	0.00	0.000	0.000	0.000	0.000
12-Nov-23	0.00	0.000	0.000	0.000	0.000
13-Nov-23	0.00	0.000	0.000	0.000	0.000
14-Nov-23	0.00	0.000	0.000	0.000	0.000
15-Nov-23	0.00	0.000	0.000	0.000	0.000
16-Nov-23	0.00	0.000	0.000	0.000	0.000
17-Nov-23	0.73	0.000	0.000	-0.050	0.035
18-Nov-23	0.00	0.000	-0.002	0.000	0.000
19-Nov-23	0.00	0.000	0.000	0.000	0.000
20-Nov-23	0.00	0.000	0.000	0.000	0.000
21-Nov-23	0.48	0.000	0.000	-0.014	0.021
22-Nov-23	0.00	0.000	0.000	0.003	0.044
23-Nov-23	0.00	0.000	0.000	0.000	0.000
24-Nov-23	0.00	0.000	0.000	0.000	0.000
25-Nov-23	0.00	0.000	0.000	0.000	0.000
26-Nov-23	0.27	0.000	0.000	0.000	0.000
27-Nov-23	0.00	0.000	0.000	0.000	0.000
28-Nov-23	0.01	0.000	0.000	0.000	0.000
29-Nov-23	0.00	0.000	0.000	0.000	0.000
30-Nov-23	0.00	0.000	0.000	0.000	0.000
1-Dec-23	0.00	0.000	0.000	0.000	0.000

2PD00025013	2PD00025017	2PD00025018	2PD00025023	2PD00025030	2PD00025037
CSO 13	CSO 17	CSO 18	CSO 23	CSO 30	CSO 37
Overflow Occurrences	Overflow Occurrences	Overflow Occurrences	Overflow Occurrences	Overflow Occurrences	Overflow Occurrences
0	0	0	0	0	1
Date	Rainfall (In./day)	Peak Intensity (In./hr.)	Overflow Volume (MG)	Overflow Volume (MG)	Overflow Volume (MG)
1-Dec-23	0.30	0.12	0.000	0.000	0.000
2-Dec-23	0.02	0.04	0.000	0.000	0.000
3-Dec-23	0.04	0.04	0.000	0.000	0.000
4-Dec-23	0.00	0.00	0.000	0.000	0.000
5-Dec-23	0.06	0.04	0.000	0.000	0.000
6-Dec-23	0.00	0.00	0.000	0.000	0.000
7-Dec-23	0.00	0.00	0.000	0.000	0.000
8-Dec-23	0.00	0.00	0.000	0.000	0.000
9-Dec-23	0.48	0.60	0.000	0.084	0.000
10-Dec-23	0.00	0.00	0.000	0.000	0.000
11-Dec-23	0.00	0.00	0.000	0.000	0.000
12-Dec-23	0.00	0.00	0.000	0.000	0.000
13-Dec-23	0.00	0.00	0.000	0.000	0.000
14-Dec-23	0.00	0.00	0.000	0.000	0.000
15-Dec-23	0.00	0.00	0.000	0.000	0.000
16-Dec-23	0.00	0.00	0.000	0.000	0.000
17-Dec-23	0.25	0.12	0.000	0.000	0.000
18-Dec-23	0.07	0.08	0.000	0.000	0.000
19-Dec-23	0.00	0.00	0.000	0.000	0.000
20-Dec-23	0.00	0.00	0.000	0.000	0.000
21-Dec-23	0.00	0.00	0.000	0.000	0.000
22-Dec-23	0.04	0.04	0.000	0.000	0.000
23-Dec-23	0.28	0.12	0.000	0.000	0.000
24-Dec-23	0.00	0.00	0.000	0.000	0.000
25-Dec-23	0.06	0.04	0.000	0.000	0.000
26-Dec-23	0.13	0.16	0.000	0.000	0.000
27-Dec-23	0.09	0.08	0.000	0.000	0.000
28-Dec-23	0.16	0.16	0.000	0.000	-0.003
29-Dec-23	0.00	0.00	0.000	0.000	0.000
30-Dec-23	0.05	0.04	0.000	0.000	-0.001
31-Dec-23	0.09	0.04	0.000	0.000	0.000

Reporting Period:
01/01/2023 - 12/31/2023

Tiffin LTCP Update Model
2023 Modeling Results

Annual Rainfall: 40.1 in

2023 CSO Annual Summary for Non-Metered CSO Outfall Locations for NPDES Permit Reporting			
CSO ID	Location	Estimated Discharge Volume (MG/year)	Estimated No. of Overflows (days/year)
CSO-04	Daughters of America 652 N. Sandusky St	0.014	1
CSO-05	Tomb St. East of Henry	1.537	4
CSO-07	Webster St. @ River	Closed	Closed
CSO-08	Harrison St. @ Erie	Closed	Closed
CSO-09	Adams St. @ River	2.704	19
CSO-10	Miami St & Frost Pkwy	0.575	10
CSO-11	Alley S. of Miami St @ Frost	0.066	2
CSO-12	W. Perry St. & Frost Pkwy	8.667	36
CSO-14	Alley S of W Market St	1.242	20
CSO-15	#67 Benner @ River	3.726	8
CSO-16	Sandusky St. @ Jehovah's Witness	20.113	26
CSO-19	S. Washington St. @ Riveride Dr.	26.566	31
CSO-20	Alley betw E. Perry & E. Market	0.118	2
CSO-21	E. Market St. @ Parking Lot	0.111	2
CSO-22	Madison St. @ Front St.	Closed	Closed
CSO-24	Main & Schonhardt	0.000	0
CSO-25	Circular St., S. of Bridge	6.909	29
CSO-26	Hedges St. @ Rebecca St. Bridge	0.345	3
CSO-27	Hedges Boyer Park	5.597	16
CSO-28	Hunter St. & Riverside Dr.	3.003	20
CSO-31	E. Perry St. W of Monroe	0.190	2
CSO-32	State Hospital N. of Main Ent	0.321	1
CSO-33	Industrial Ave. @ Riverside Park	17.467	30
CSO-34	Huss St. @ N. Water	1.191	3
CSO-50	Madison St. @ Schondhart St.	0.079	2
CSO-51	Walker St. @ Hedges St	2.149	19
CSO-52	Rebecca St. @ Ann St.	0.000	0