

Annual CSO Notification

2021

This notification is required by Ohio Environmental Protection Agency (OEPA) and is a National Pollutant Discharge Elimination System permit requirement.

Receiving waters of the Combined Sewer Overflows (CSO's) within the City of Wapakoneta is the Auglaize River.

The following is the location, date, approximate duration, measured or estimated volume and cause of each wet weather overflow per site.

Site Heritage Park station code #003

5/9/2021 Duration 6hrs Flow 1.568 MGD

Site Hamilton Street station code #004

5/9/2021 Duration 12hrs Flow 8.871 MGD

9/21/2021 Duration 42hrs Flow 10.496 MGD

The city experienced no dry weather CSO events in 2021.

The following data was collected at each site for 2021:

Site - #003

CBOD₅ - N/A mg/l T.S.S. N/A mg/l Average flow 1.568 MG

Total yearly flow 1.568MG

Site - #004

CBOD₅ - 24 mg/l T.S.S. - 49 mg/l average flow per event - 9.684 MG

Total yearly flow - 19.367 MG

Public access areas that may be impacted by CSO events is the Auglaize River.

Rainfall is recorded daily to the nearest tenth of an inch (0.01) for every CSO event.

5/9/2021 2.68 inches of rain

9/21/2021 3.55 inches of rain

The permittee contact information is as follows:

Justin Waid (Superintendent)

City of Wapakoneta WWTP

201 Herbstritt Court

Wapakoneta, Ohio 45895

(P) 419-738-2418 M-F 7am to 3:30pm

Implementation of nine minimum controls by the city

1. Proper operation and regular maintenance programs for the sewer system and Combined Sewer Overflows (CSOs).

The City of Wapakoneta operates and maintains their Water Reclamation Facility (WRF) and collection system. Equipment, the collection system, and outfalls are inspected regularly by the city. Pump stations and CSOs are inspected weekly during dry weather and after each rain event. The city is currently reviewing and updating its inspection and maintenance activities. An Operation and Maintenance (O&M) Manual for the collection system is being developed. This manual includes the following items at a minimum:

Collection system map and description

Description of types of inspection activities including frequency of different types of inspection, and documentation to record inspection

Description of types of maintenance activities including frequency of different types of maintenance, and documentation to record maintenance activities

Information regarding specific preventative maintenance programs, such as Fats, Oils, and Grease Control

Work orders and report management

Safety plan and documentation of safety procedures

Emergency plan

2. Maximum use of the collection system for storage.

In 2019, with follow-up activities performed in 2021, the city performed a Sanitary Sewer Overflow (SSO) Elimination Study to determine the performance of its collection system regarding SSOs and CSOs. This study, including hydraulic modeling, enabled the city to determine the areas where in-system storage would be most beneficial. The information gathered during this study phase provided the basis for the current design of the Wapakoneta WRF Expansion Project. This project includes a new flow control structure that allows the city to maximize storage in the interceptor system, prior to flow reaching the WRF, and without causing violations to the existing NPDES permit.

Modifications have been made at Park Street CSO 003. The duckbill was replaced with an inline Tideflex valve. With the improvements that have been made to this CSO, the new valve fully seals when the elevation of the river rises, preventing river water from entering the collection system.

3. Review and modification of the pretreatment requirements to assure CSO impacts are minimized

Each industrial user that contributes flow to the collection system is required by the city to have an Industrial User Permit. All permits are reviewed each quarter by the city to confirm that all industrial users are in compliance with their permit. The South Interceptor is the only interceptor within the City's collection system that has CSOs. There is only one industrial user that contributes flow to the South Interceptor, American Trim, LLC. This industrial user is in full compliance with their Industrial User Permit. In comparison, flow from American Trim, LLC is 0.04 MGD while the average dry weather flow in the South Interceptor is 0.3 MGD.

4. Maximize flow at the WWTP for treatment

As mentioned above, the city is currently in the design phase of the Wapakoneta WRF Expansion Project. Currently, the average design flow of the WRF is 4 MGD with a peak of 6 MGD. Hydraulic modeling performed during the SSO Elimination Study shows that during design storm events as much as 39 MGD can reach the WRF. During periods of high flow up to 25 MGD can be diverted to the existing 2.5 MG storage facility, through an existing pump station. The remaining 8 MGD is stored in in-system storage until it can be treated and may escape the system through the City's CSOs or SSOs. After the expansion, the average design flow at the WRF will be 6 MGD with a peak of 12 MGD. The WRF expansion also includes a new 14 MGD pump station. This pump station will send up to 12 MGD to the WRF and 2 MGD to the existing 1.3 MG EQ basin. This additional 14 MGD (12 MGD + 2 MGD) of flow along with the existing 25 MGD pump station will allow all 39 MGD from the collection system to be sent directly to the plant or be stored offline until there is sufficient capacity at the plant for treatment.

5. Prohibition of CSOs during dry weather

The city collects continuous flow monitoring data at all its CSO locations. This data is downloaded and reviewed each week. Since the implementation of Phase III of the City's Long Term Control Plan in 2016, there have been zero CSOs during dry weather.

6. Control of solid and floatable materials in CSOs

The CSOs are all similarly designed where the weir is angled towards the mainline sewer. This aids in the prevention of floatables from being discharged over the weir. All City CSOs are equipped with coarse bar screens to prevent solids and floatables from being discharged to the river. Once a month and after each rain event the CSOs are inspected and cleaned of any remaining debris.

7. Pollution prevention

Streets in Wapakoneta are swept daily, weather permitting. The street sweeping follows the waste collection route, to ensure that any waste that escapes the collection stream is removed from the streets. The city also provides recycling along with waste collection. Waste receptacles are placed along Auglaize Street, through the main section of the city, as well as throughout the city owned parks to reduce pollution. The City Streets Department operates a curbside leaf pick up program in the fall. Notices are placed on the City's website to notify residents of the leaf pick up program and remind them to not place leaves in the curb line where they can end up in the storm drains.

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

City staff notifies the County Health Department and the City Service Director within 24 hours, or by the next business day, when a CSO occurs. Information regarding the CSO and its impacts is posted on the City website, in accordance with the City's CSO Public Notification Program. Signs are also posted at the CSO outfall location. Due to their locations, the activation of any of the City's CSOs does not require beach closures.

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

The City continues to monitor its CSOs in accordance with its current NPDES permit. During each CSO event TSS, cBOD and flow are measured. A visual inspection of the CSO and its outfall are conducted after each rain event. Areas adjacent to the outfall are cleaned, if required.

In 2009 the city accepted and began implementation of the Long-Term Control Plan (LTCP). The LTCP consists of four (4) phases.

Phase 1 – Completed in 2013 included the construction of a 2.5 MG storage tank and 25 MGD pump station.

Phase 2 – Completed in 2016 consisted of the complete replacement of the existing South Interceptor. At this time as well CSO site #002 was completely sealed. With the completion of this phase the SCADA system was updated to allow for instantaneous monitoring and data collection at the two remaining CSO sites #003 and #004.

Phase 3 – Completed in 2017 consisted of flow monitoring and evaluation of the South Interceptor project. With the results it was determined that one additional 2.5 MG storage tank may be needed to meet the requirement of fewer than 4 CSO event per year under a normal rain event.

Phase 4 – Yet to be completed or evaluated. Potential construction of the third and final 2.5 MG storage tank.

This notice will be posted on the city website at www.wapakoneta.net