City of Norwalk 2021 Combined Sewer Overflow (CSO) Annual Report

I. Introduction

This report is being prepared by City of Norwalk Wastewater Treatment Plant (WWTP) personnel to fulfill the requirements of the US EPA's regulations in 40 CFR 122.38 pertaining to public notification requirements for CSO discharges to the Great Lakes Basin, which became effective November 7, 2018. This report covers calendar year 2021.

II. Program Overview

On January 8, 2018, the US EPA announced the Public Notification Requirements for CSOs to the Great Lakes Basin. This rule requires National Pollutant Discharge Elimination System (NPDES) permittees that discharge CSOs to waters within the Great Lakes Basin to develop and implement a Public Notification Plan for CSO discharges. The CSO Public Notification Plan describes how the City of Norwalk will ensure that the public receives notification of CSO occurrences and impacts, as required by US EPA.

The Public Notification Plan was to be submitted to OEPA by August 7, 2018, but due to key personnel leaving the Norwalk's employ during 2018, the plan was not submitted until August 24th, 2018. After several revisions, OEPA approval was received around September 26, 2018. Official implementation of the Plan was to begin on November 7, 2018.

US EPA's new rule also required all Great Lakes Basin NPDES permittees to prepare an annual notice describing all CSO discharges from its sewer system during the previous year. This annual notice must be made available to the public, OEPA, and US EPA by May 1st of each year.

III. CSO Descriptions

The City of Norwalk has two permitted CSO locations. The first is Station 003 – Cline Street CSO. This CSO takes in water along Milan Avenue south of Gallup Street to Main Street and along Cline Street to League Avenue, along with several side streets in this area. This is Norwalk's most active CSO, with overflows occurring during rain events as little as 0.2". Flows from this CSO discharge into Rattlesnake Creek to the east of the Wal-Mart parking lot, just upstream of the Norwalk WWTP's discharge. Waters from this discharge flow north to the Huron River and, eventually, to Lake Erie.

The second CSO is the Station 004 - Washington St CSO. This initial connection between storm and sanitary sewer is in a manhole on Washington St. across from McGuan Park. The outlet to this CSO is in a creek behind 233 Whittlesey Ave. Typically, this CSO is not active until $0.5-1^{\prime\prime}$ of rain has fallen, depending on the severity of the rain event. The sewers affecting this CSO include everything to the south and west of the lift station. Waters from this discharge also flow north to the Huron River and, eventually, to Lake Erie.

A third CSO point has been discovered and is being monitored by WWTP personnel. It is located to the west of the Cline St CSO in the Big Lots parking lot. It is actually on the same pipe as the Cline St CSO, but is downstream of it. It discharges from the same pipe as the Cline St CSO (into Rattlesnake Creek). OEPA has been informed of its existence and Norwalk is waiting whether it will be considered a separate CSO or will be part of the Cline St CSO. No decision has been made yet. Norwalk will continue to monitor it as a separate CSO until told to do otherwise.

None of these CSOs discharge to waters that are considered 'public access waters'. In other words, no fishing, boating, or swimming is occurring in either stream to which these CSOs directly discharge into. These activities do occur in the Huron River, but it would be after the CSO flows have combined with other waters in the river and significantly diluted any contamination that has occurred.

IV. Nine Minimum Controls

The City of Norwalk operates and maintains both its WWTP and the collection system as required in its NPDES permit to maximize the flow through the plant while reducing the frequency and volume of wet weather overflows, as well as preventing dry weather overflows. Below is a description of the Nine Minimum Controls established by US EPA to efficiently reduce the impact of CSOs:

NMC-1: Reducing CSO Overflows through Operations & Maintenance

Norwalk continues to implement its Collection Systems Operations and Maintenance Program for the combined sewer, separate sanitary sewer, and storm sewer systems. The City keeps a list of known problem areas that have recurrent root-intrusion issues. These areas are cleaned and root-cut twice per year. Huron County Public Health also gets notified of FSEs that do not properly maintain their grease traps. The City of Norwalk has a sewer truck and Vacall for sewer maintenance. Norwalk has also purchased pipe line renewal quick lock sewer repair equipment.

NMC-2: Maximum Use of the Collection System for Storage

Norwalk maximizes storage in the collection system through its aggressive sewer cleaning regimen. City of Norwalk's Pleasant Street CSO removal has been completed, with additional storage added at the lift station. Wooster Street and Marshal Street sewer separation, phases 1 thru 5, are completed. \$65,000/year of sewer lining has been performed. Norwalk has replaced 'vented' sanitary manhole lids with solid lids on all new paved streets each year, further reducing I&I.

NMC-3: Reduction of CSO Impacts through the Pretreatment Program

Norwalk continues to monitor industrial discharges. Controls are in place to minimize CSO pollutants from non-domestic dischargers.

NMC-4: Maximizing Flow to the Treatment Plant

Norwalk operates its WWTP at its maximum flow rate during wet weather

events. Additional flows are diverted to an equalization basin for storage during the event and treatment later when the rain subsides. The sanitary and combined sewer maintenance program ensures that all sewers are able to convey the maximum flow volumes possible to the WWTP.

NMC-5: Preventing Dry-Weather CSO Overflows

There were no dry-weather overflows during the 2021 reporting year, caused by a transformer blowing up and power loss to a lift station. The CSO Operational Plan includes several activities that are designed to prevent dry-weather overflows. In addition to inspecting CSO regulators during wet weather event, the City also performs post-rain inspections at all CSO regulators that are known to collect leaves, twigs and other debris during rain events. If such materials are seen around the regulators, the sewer maintenance crew is called and the debris is removed and the combined sewer is cleaned.

NMC-6: Controlling Solids and Floatables in CSO Discharges

Norwalk conducts street sweeping two weeks per month from April through November. Leaf collection is held every year for two weeks in November. Catch basin cleaning is performed as needed, with inspections occurring year around.

NMC-7: Pollution Prevention to Reduce Contaminants in CSOs

Norwalk strives to reduce CSO flows and their impacts as much as practicable. Norwalk has a location to provide residents with a place to take brush, grass clippings, and leaves. The City Sanitation Department also has a brush truck that follows the trash and recyclables trucks on their regular routes through the city.

NMC-8: Public Notification

The public notification process was implemented to inform EPA, the Huron County Public Health Department, interested citizens, and potentially impacted public areas when CSOs occur. Links to CSO event reports are available at:

https://www.norwalkoh.com/wastewater-treatment

Signs are posted at both CSO outfalls to alert the public.

NMC-9: CSO Inspection, Monitoring, and Reporting

CSOs are checked weekly at a minimum for unanticipated activity and also during and after a wet-weather event for anticipated activity. Sampling of an active CSO is to occur at least once a month to be analyzed for total suspended solids (TSS) and carbonaceous biochemical oxygen demand (CBOD). CSO occurrences are reported on Norwalk's website (link above), monthly in the electronic discharge monitoring report (eDMR) submitted to Ohio EPA by the WWTP, and in this Annual CSO Report.

V. Long-Term Control Plan (LTCP)

The City of Norwalk LTCP is being implemented and Norwalk continues to study its CSOs and develop its infrastructure to reduce and, eventually, eliminate its CSOs. Several CSOs have already been eliminated. The one to note is the CSO that existed at Pleasant Street Lift Station.

Currently, Norwalk is in the design phase to determine the best way to eliminate both the Cline Street CSO and the Washington Street CSO. The City is working with American Structurepoint, Inc. to design new sanitary sewers and separate combined sewers so as to eliminate storm water going to the WWTP. If all goes as planned, both CSOs will be eliminated in 2024.

For more information concerning the LTCP, please contact Wade Leimeister, WWTP Superintendent, at (419) 663-6755 or via e-mail at Wastewatersuper@norwalkoh.com.

VI. CSO Occurrence Data

Below is a table outlining when it is believed the CSOs occurred in Norwalk. Currently, Norwalk has flow meters installed at the overflows to better measure the amount of water discharged through these CSOs to the stream. These flow meters are read as soon after an overflow event as practicable.

The table below is an estimate based on the amount and duration of the rain events of 2021 based on the data from the flow meters. Because the CSOs do not have a continuous flow, the data from the flow meters is a good approximation of the volume discharged, but the flow meters are not totally accurate. Changes in barometric pressure can affect these readings significantly, causing some error in the data.

All data from the flow meters is stored on a laptop computer owned by the City for further analysis if necessary.

2021 Combined Sewer Overflows

	2021 COMBI			
Clark Data	E. Ib.	Precip	Cline	Washington
Start Date	End Date	(in)	Street	Street
1/1/2021	1/4/2021	1.13 Melting	X	Х
2/23/2021	3/1/2021	snow	X	
3/18/2021	3/18/2021	0.96	X	Х
4/9/2021	4/9/2021	0.21	X	X
4/10/2021	4/11/2021	0.58	X	
4/12/2021	4/12/2021	0.31	X	
4/21/2021	4/21/2021	0.50	X	
4/29/2021	4/30/2021	1.94	X	Х
5/3/2021	5/3/2021	0.40	X	X
5/6/2021	5/6/2021	0.20	X	
5/9/2021	5/10/2021	1.40	X	Х
5/23/2021	5/24/2021	0.42	X	Λ
5/26/2021	5/26/2021	0.30	X	
5/28/2021	5/28/2021	0.70	X	
6/2/2021	6/3/2021	0.67	X	
6/3/2021	6/4/2021	1.72	X	
6/7/2021	6/7/2021	0.40	X	
6/8/2021	6/8/2021	0.25	X	
6/9/2021	6/9/2021	0.25	X	
6/10/2021	6/10/2021	0.29	X	
6/18/2021	6/18/2021	0.40	X	
6/19/2021	6/21/2021	0.48	X	
6/25/2021	6/26/2021	0.38	X	Х
6/27/2021	6/27/2021	0.60	X	X
6/29/2021	6/30/2021	0.45	X	Λ
6/30/2021	7/1/2021	0.55	X	
7/8/2021	7/8/2021	0.15	X	
7/11/2021	7/12/2021	0.98	X	Х
7/16/2021	7/18/2021	2.61	X	X
7/24/2021	7/25/2021	0.48	X	-
7/30/2021	7/30/2021	0.46	X	
8/11/2021	8/11/2021	0.53	X	
8/16/2021	8/16/2021	0.27	X	
8/25/2021	8/25/2021	0.37	X	
8/25/2021	8/25/2021	0.46	X	
3/23/2021	3/23/2021	0.70	_ ^	

2021 Combined Sewer Overflows (cont.)

		Precip	Cline	Washington
Start Date	End Date	(in)	Street	Street
8/29/2021	8/29/2021	0.88	Х	X
9/22/2021	9/23/2021	3.21	X	X
10/2/2021	10/2/2021	0.22	Х	
10/8/2021	10/8/2021	0.52	X	
10/15/2021	10/15/2021	0.67	X	
10/24/2021	10/26/2021	1.09	Х	
10/28/2021	10/29/2021	0.80	X	
11/11/2021	11/12/2021	0.55	X	
11/18/2021	11/18/2021	0.29	X	
12/6/2021	12/6/2021	0.35	X	
12/11/2021	12/11/2021	0.48	X	
12/15/2021	12/15/2021	0.06	X	
12/18/2021	12/18/2021	0.45	X	
12/25/2021	12/25/2021	0.39	Х	
12/27/2021	12/27/2021	0.35	X	
12/28/2021	12/28/2021	0.25	Х	
Total Occurrences for 2021			51	10

VII. Contact information

If you would like any more information concerning this, please contact Wade Leimeister, WWT Superintendent. His contact information is below:

Phone: (419) 663-6755

E-mail: Wastewatersuper@norwalkoh.com Work Address: 201 Plank Road (WWTP)