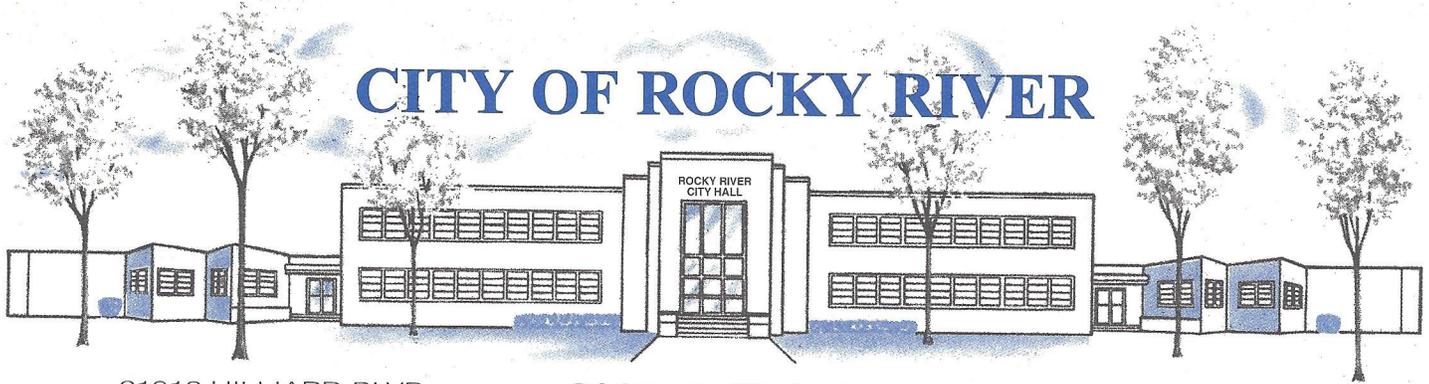


CITY OF ROCKY RIVER



21012 HILLIARD BLVD.

• ROCKY RIVER, OHIO 44116

• (440) 331-0600

February 8, 2017

Noel Vargas (WC-15J)
Water Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
77 West Jackson Blvd.
Chicago, Illinois 60604

RE: City of Rocky River: OH0030503
U.S. Environmental Protection Agency Region 5 Order
City of Rocky River 2014 Annual Progress Report

Dear Mr. Vargas:

Enclosed is the City of Rocky River's 2016 Annual Progress Report as well as my certification as to the accuracy and completeness of these documents.

The 2016 Annual Progress Report has been composed by the Wastewater Treatment Plant Superintendent and reviewed by the City with our consulting engineer and the Public Safety-Service Director. A public notice will be placed in the local news paper indicating the availability of this report and a link to this report will be placed on the City's website.

I can be reached at 440-331-0600 to discuss these documents and thank you in advance for your time and effort in this regard.

Sincerely,

A handwritten signature in black ink that reads "Pamela E. Bobst". The signature is written in a cursive, flowing style.

Pamela E. Bobst
Mayor

Encls.

cc: Safety-Service Director Costello
Director of Law Bemer
Consulting Engineer Mackay
WWTP Superintendent Rosemark
Erm Gomes, OEPA NEDO

2/8/2016

City of Rocky River 2016 Annual Progress Report

Environmental Protection Agency Order

Docket No. V-W-09-AO-11

NPDES PERMIT OH0030503

City of Rocky River 2016 Annual Progress Report

Environmental Protection Agency Order

Docket No. V-W-09-AO-11

NPDES PERMIT OH0030503

February 8, 2017

The United States Environmental Protection Agency's (USEPA) Administrative Order, dated September 29, 2009, revised April 27, 2010, required the City of Rocky River under paragraph 25 to submit an annual progress report conveying the following information:

"25(a) (Revised April 27, 2010 Administrative Order) Respondent's progress on the projects described in the SSES implementation schedule, including specific references to the projects in that schedule. Respondent must identify any deficiencies and all steps that have been taken to correct the deficiencies."

"25(b) (Revised April 27, 2010 Administrative Order) Respondent's progress in implementing the CMOM program once approved and incorporated into this Order."

"25(c) (Revised April 27, 2010 Administrative Order) An inventory of all SSOs from the Respondent's sewers from the previous year, identifying the dates, sources, estimated volumes, receiving waters and principal pollutants contained in the discharges. Respondent must also issue a press release informing the public of the availability of the inventory and make the inventories available on its principle webpage."

The following is information intended to fulfill the requirements of the above language:

Part 25(a): Progress of Sewer System Evaluation Study (SSES) and associated projects

Introduction

The Rocky River SSES Phase 1 was undertaken in 2011 for a cost of \$607,330 and is the first of a four (4) phased approach of Sanitary Sewer Evaluation Studies being completed by the City in response to the Administrative Orders issued to the City of Rocky River by the United States Environmental Protection Agency. The Administrative Orders directed the City to eliminate its remaining SSO's as well as reduce the amount of rain derived water that is transported to the Rocky River Waste Water Treatment Plant through the sanitary collection system. This is to be accomplished through a long term capital improvement plan that includes a multi-phased, multi-year SSES investigation and subsequent rehabilitation of the collection system.

On March 29, 2012, the City of Rocky River discussed with the U.S. EPA, with a verbal agreement being reached, to suspend its work on the future phases of the SSES in order to concentrate efforts and funds to close the two (2) remaining sanitary sewer overflows. The City of Rocky River continued concentrating efforts with construction projects intended to begin eliminating the two (2) remaining sanitary sewer overflows.

Existing Collection System Background

The City of Rocky River owns and maintains separate storm and sanitary sewer collection systems within the city. The City of Rocky River has a number of pumping stations throughout the city that, coupled with the gravity collection system, convey the City's sanitary sewage to the jointly owned Rocky River Wastewater Treatment Plant (RRWWTP) located on Lake Road in the northern portion of the City. There are five (5) sanitary pump stations in addition to one (1) storm pump station:

- Riverdale
- Falmouth
- Breezevale
- Lake Road
- Lake Road Auxiliary (Storm)
- Grinder Pump at Bradstreet's landing

The RRWWTP is jointly owned by the Cities of Rocky River, Westlake, Bay Village and Fairview Park. A total of eight pipes discharge sewage at or near the head-works of the WWTP. Five of the eight interceptors convey flows from the City of Rocky River. The sewage conveyed and treated at the RRWWTP is ultimately discharged to Lake Erie.

The City's storm sewer collection system collects and transports storm water to the various outfalls found within the City limits. In the case of excessive wet weather flow that enters the sanitary collection system, sewage that cannot be contained within the sanitary system is redirected to the storm sewer system through two (2) Sanitary Sewer Overflows (SSO's) in the sanitary collection system.

The two (2) active SSO's at the time of the SSES Phase 1 study are as follows:

- **EPA ID# 302** - Beach Cliff and Falmouth, upstream of the Beach Cliff Pump Station. The overflow manhole is located near the sidewalk at the south-west corner of the intersection of Beach Cliff Blvd. and Falmouth Drive.
- **EPA ID# 306** - Westway and Magnolia. The overflow manhole is located in the street at the intersection of Westway Drive and Magnolia Drive.

Since the issuance of the Administrative Orders from the USEPA, the City has been able to close one (1) of the original three (3) SSO's through the implementation of sewer improvements in the area. EPA ID# 303 was closed.

Status of Projects- Past, Current and Planned

The following are construction projects that have been completed from 2012 through 2016, or are currently being completed, that will greatly reduce inflow and infiltration, and aid in the reduction and ultimate elimination of sanitary sewer overflow occurrences.

ACTIVE/BEGINNING IN 2016:

- **Riverdale Pump Station:** The City of Rocky River circulated a Request for Proposals for the Riverdale Drive and Pump station study to area engineering firms. The study will provide an analysis of the pump station and the feasibility of moving flow from Lake Road (where there have been numerous basement floods and away from the Beachcliff sanitary sewer overflow. The City believes that diverting flow away from the main sewer near the Beachcliff overflow will be another

step towards eliminating that sanitary sewer overflow. There will also be analysis of the pump station and any needs that may present themselves in the near future and if it is feasible to move flow to a different main line to the Waste Water Plant. The study of these items should be completed by spring of 2017. The City has selected AECOM for these specialized study items (road stabilization and slope study and pump requirements, etc.). **Engineering Cost for Study: \$64,000.**

- Magnolia/Westway: The Safety Service Director worked with the City Engineer, Mr. Michael Mackay to begin another sewer project close to the other sanitary sewer overflow (located on Westway near Magnolia). In the winter of 2017, the storm sewer just west of the Magnolia overflow on Westway will be replaced; a failing 8” sanitary line will be removed and flow will be moved to an existing 24” sanitary that had been installed by the County many years ago. The new storm sewer will be lower and larger – and this added capacity and depth will aid in reducing storm water building up at the overflow located just east of this work (#306 located in Sewer Shed 12). This project will commence in 2017. **Project Cost Estimate: \$920,000**
- Lakeview/Hampton: Engineering for the Lakeview / Hampton sewer project – also located in Sewer Shed 12) was progressing well during 2016 and is anticipated to be completed in February of 2017. The City was also successful in being awarded a no interest DOPWIC (District One Public Works) loan for the Lakeview / Hampton sewer and street improvements. The water lines have been cleaned and relined for both streets in the summer of 2016. The sewer and street improvements will begin in the summer of 2017 and are anticipated to require 2 years to complete. Water line and sewer work will assist in further reducing sanitary sewer overflows (at the Magnolia Sanitary Sewer Overflow - #306). It cannot be overstated that the Ohio Public Works funding is critically important to the City of Rocky River to coordinate these projects that eliminate sanitary sewer overflow into Lake Erie. Without this type of funding it is difficult to fund multi-million sewer dollar projects. The City will continue to monitor the SSOs at #302 and #306. **Project Cost Estimate: \$6,953,000.**

COMPLETED IN 2016:

- Morewood Force Main: This project was instrumental in removing sanitary flow into the (metered) Beachcliff overflow. Previous to this construction – rain water that leaked into the sanitary system in the Beachcliff area would overwhelmed the system and be forced into the Lake Road sanitary line. This was flooding the Lake Road sewers and causing serious issues in basements all along Lake Road and on side streets off Lake Road. Since the installation of the new Morewood Force a much more efficient processing of rain and sanitary water has been established and the number of reported basement flooding - reduced. In addition, sanitary sewer overflows at Beachcliff have declined. **Project Cost: \$786,500**
- Avalon Drive (Sanitary and Storm) Improvements Phase II (Sewer Sheds 3, 4 & 5): This project replaced approximately one mile of inverted sanitary and storm lines, residential “t” connections, and laterals. Construction commenced in July of 2015. This project was funded with a no interest loan from the Ohio Public Works Commission (OPWC). As a precursor to these improvements, the water line for Avalon Drive was refurbished in 2014. The scope of this sewer improvement was large – close to a mile of sanitary and storm sewer mains with 126 sewer laterals being replaced (some homes had two sets of laterals that were replaced). Importantly, eighteen homes were removed from the system where the sanitary sewer overflow (#302) is located. Moving the sanitary flow to the Waste Water Plant via another direction will assist in the City’s goal of closing that sanitary sewer overflow in the future. **Project Cost: \$5.9 million**

PREVIOUSLY COMPLETED PROJECTS:

2012-14

Frazier/Beachcliff Boulevard: Phase 1 Water Line Improvements (Sewer Shed 4)

Bid award: **\$3.5 million - COMPLETED**

(Cleveland Division of Water provided funding to assist the City with these improvements)

2013-14

- Frazier Drive Sewer Replacement Sewer Project (Sewer Shed 4): This was the first of the planned projects that will lead to closing of sanitary sewer overflow EPA identification number 302, by replacing a leaking and inverted sewer main. Project publically bid. Project start date was January 2, 2014.

Bid Award/ OPWC Loan for **\$3,277,120.00 COMPLETED**

- Hampton Road (Sewer Shed 8 and affecting Sewer Sheds 4 & 5)
Phase 3 - **\$2,500,000.00 COMPLETED**
- Avalon Drive Improvements Phase I Water Main Rehabilitation (Sewer Sheds 3, 4 & 5: bid in early summer 2014 – Cleveland Division of Water approved the project and reviewed plans in February / March of 2014- **\$900,000 COMPLETED**
Storm and sanitary sewer replacement began in 2015 and is scheduled for completion in 2016. This project will remove 18 homes from flowing towards SSO 302.

2014-15

- Falmouth Pump Station: Replaced 2 of 5 pumps at the Falmouth pump station with new chopper pumps. These pumps will handle debris better, and maintain maximum continuous capacity to reduce SSO's at EPA ID overflow site 302. The wet well at the South Island pump station was sealed to reduce infiltration. **\$40,000.00 COMPLETED**

Part 25b: Progress of the Capacity, Management, Operation and Maintenance (CMOM) Program

On October 22, 2010, the City of Rocky River submitted as required by the USEPA Order, a CMOM schedule and program manual. The City received the approval from the USEPA for the CMOM program in a letter dated December 30, 2010. The City is currently implementing the approved CMOM program. During 2011, the completed CMOM manual has been dispersed to various departments involved in the implementation of the program.

Progress of the CMOM Program in Year Six (2016)

The following goals in year six have been achieved:

- **Conduct an annual review of CMOM Program:** review previous year's BMPs logs. Review CMOM Program with Fire Department. Solicit recommendations from various departments and make updates and changes to the City's CMOM Program. **GOAL ACHIEVED**

-
- Use feedback from annual review and review established written “effectiveness criteria” and use this information to make additional updates, changes and improvements to CMOM Program. Make necessary updates to “effectiveness criteria”. Update the safety forces, Service Division and Administration’s copies of the CMOM Program manual. **GOAL ACHIEVED**
 - Continue to work on City’s SPCC Program. **GOAL ACHIEVED**
 - Continue to work on Residential Remediate Program to reduce inflow and infiltration into the City’s sewer system. **GOAL ACHIEVED**

Part 25c: Inventory of SSO occurrences for 2016, and statement of principal pollutants

EPA ID#	Location Description	Date	Volume
302	Beachcliff and Falmouth	2/24/2016	0.002
306	Magnolia and Westway	2/24/2016	0.221
306	Magnolia and Westway	3/14/2016	0.266
306	Magnolia and Westway	3/24/2016	0.01
306	Magnolia and Westway	3/28/2016	0.026
302	Beachcliff and Falmouth	4/6/2016	0.002
306	Magnolia and Westway	4/6/2016	0.272
302	Beachcliff and Falmouth	5/2/2016	0.003
306	Magnolia and Westway	5/2/2016	0.326
306	Magnolia and Westway	5/12/2016	0.004
302	Beachcliff and Falmouth	5/29/2016	0.001
306	Magnolia and Westway	5/29/2016	0.037
306	Magnolia and Westway	6/16/2016	0.006
306	Magnolia and Westway	7/18/2016	0.038
302	Beachcliff and Falmouth	8/9/2016	0.016

306	Magnolia and Westway	8/9/2016	0.138
306	Magnolia and Westway	8/11/2016	0.217
306	Magnolia and Westway	8/17/2016	0.068
306	Magnolia and Westway	8/19/2016	0.025
302	Beachcliff and Falmouth	8/25/2016	0.003
306	Magnolia and Westway	8/25/2016	0.106
302	Beachcliff and Falmouth	9/17/2016	0.077
306	Magnolia and Westway	9/17/2016	0.622
306	Magnolia and Westway	9/29/2016	0.023

All above recorded sanitary sewer overflows occurred during wet weather (rain and/or snow melt) events due to excessive infiltration and inflow (I&I) within the City of Rocky River sewer system. The City of Rocky River has implemented a long-term maintenance and rehabilitation program to clean, repair and improve the sewer system and reduce I & I and sanitary sewer overflows.

All sanitary sewer overflows have been reported to the United States Environmental Protection Agency Region 5, the Ohio Environmental Protection Agency and the Cuyahoga County Board of Health as required by the Order and the Ohio EPA NPDES Permit 3PE00009*MD issued to the Rocky River Wastewater Treatment Plant.

Principal Constituents: Sampling was conducted at the Magnolia/Westway SSO in 2016. Data was as follows:

DATE	Location	CBOD	TSS	pH
8/19/2016	SSO 306	135	594	7.1

The RRWWTP pre-treatment program is currently compliant, and no sampling events at the identified SIU locations have indicated any other constituents of concern.