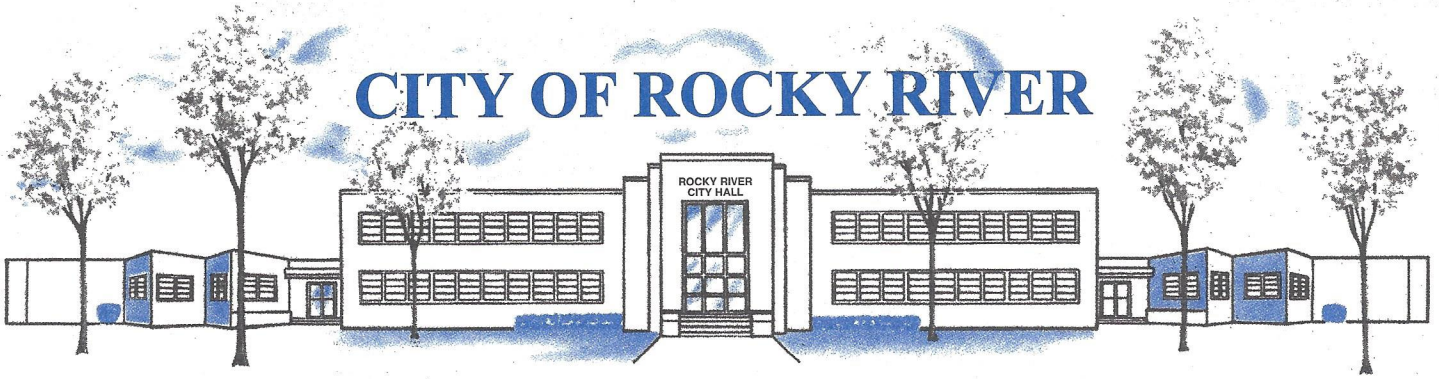


# CITY OF ROCKY RIVER



21012 HILLIARD BLVD.

• ROCKY RIVER, OHIO 44116

• (440) 331-0600

January 19, 2018

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 2017 Annual Progress Report**

Dear Mr. Vargas:

Enclosed is the City of Rocky River's 2017 Annual Progress Report as well as my certification as to the accuracy and completeness of these documents.

The 2017 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. Thank you in advance for your attention to our City.

Sincerely,

A handwritten signature in cursive script that reads "Pamela E. Bobst".

Pamela E. Bobst  
Mayor

Encls.

cc: Safety-Service Director Costello  
Director of Law Bemmer  
Consulting Engineer Mackay  
WWTP Superintendent Rosemark  
Brianne Workman, OEPA NEDO

1/19/2018

---

---

# City of Rocky River 2017 Annual Progress Report

*Environmental Protection Agency Order*

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

*NPDES PERMIT OH0030503*

---

---

---

---

# City of Rocky River 2017 Annual Progress Report

Environmental Protection Agency Order  
Docket No. V-W-09-AO-11  
NPDES PERMIT OH0030503

*January 19, 2018*

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 2018:

- Spencer Road – sewer repairs for sanitary sewer. Sewer repairs that will impact 14 homes. Engineering has begun – **Project Estimate Is \$425,000.**
- Breezevale Storm Water Improvements – replace failed storm water sewer that outfalls to Lake Erie. **Project Estimate: \$440,000. Will Be Bid In February, 2018.**
- Engineering– Morewood Sewer Improvements – continue engineering regarding elimination of inverted sewers and moving an antiquated 12” sanitary line from the rear yards of residences into the sewer main under the street.
- Investigation of Lake Road inverts begin – in 2018 sanitary sewer televising shall begin to document condition of 2 sets of inverted and failing sanitary sewers that run parallel to a 30” sanitary main (one on the north side of the street – another along the south side of the street). Engineering will begin to determine if we can move that sanitary sewer service into the 30” sanitary main. This section of the sewer system is approximately 50’ from the Waste Water Treatment Plant.
- Grouting planned for Parklawn and potentially on Yacht Club Drive and the Yacht Club basin’s pump pit (the “Riverdale pump station”). Investigations into new type of lateral grouting will be made.

### Completed-2017:

- 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. Study is complete and we have budgeted funding for grouting / lining pump pit and possibly sanitary sewer lines leading to the pump pit.**
- 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 Project completed in 2017.**
- 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 were cleaned and relined for both streets in the summer of 2016. The sewer and street improvements will began 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. Project is 50% complete – anticipated completion date November, 2018.**

#### **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 Seven (2017)**

The following goals in year seven have been achieved:

1. Meet with the Service Division to solicit updated safety training records; meet with Building Department to review Grease Trap inspections and confirm that SOPs within CMOM Program are up to date and that BMP logs and records are being maintained. Establish a written measurement of effectiveness of CMOM. **Goal attained and will continue into 2018.**
2. Work with the Service Division and Safety Service Department to introduce the Residential Remediation Program to reduce / eliminate inflow and infiltration from private properties. Begin collecting data from private properties. Establish the timeline for compliance and coordinate the information packet to be distributed to the homeowners. Include a non-compliance action plan. **Moved to 2018.**
3. Confirm with Service Division that maintenance records are being maintained and SOPs for maintenance and records are being maintained. **Goal attained.**
4. Conduct an annual review of CMOM Program: review previous year's BMPs logs. Solicit recommendations from various departments and make updates and changes. **Goal attained – we are going to review the CMOM annually.**
5. Update the City's Storm Water Management Plan and review with Fire and Service Divisions. **Goal attained.**



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

<b>EPA Location ID#</b>	<b>Location Description</b>	<b>Date</b>	<b>Total Volume, MGD</b>
306	Magnolia and Westway	1/12/2017	0.320
306	Magnolia and Westway	2/7/2017	0.493
306	Magnolia and Westway	3/30/2017	0.007
302	Beachcliff and Falmouth	4/19/2017	0.005
306	Magnolia and Westway	4/19/2017	0.108
306	Magnolia and Westway	4/20/2017	0.0005
306	Magnolia and Westway	5/25/2017	0.001
306	Magnolia and Westway	5/28/2017	0.019
302	Beachcliff and Falmouth	6/23/2017	0.005
306	Magnolia and Westway	6/23/2017	0.061
302	Beachcliff and Falmouth	6/30/2017	0.007
306	Magnolia and Westway	6/30/2017	0.153
306	Magnolia and Westway	7/10/2017	0.091
302	Beachcliff and Falmouth	7/11/2017	0.013
302	Beachcliff and Falmouth	7/16/2017	0.006
306	Magnolia and Westway	7/16/2017	0.027
302	Beachcliff and Falmouth	8/3/2017	0.019
306	Magnolia and Westway	8/3/2017	0.081
306	Magnolia and Westway	8/24/2017	0.052
306	Magnolia and Westway	9/8/2017	0.090
302	Beachcliff and Falmouth	10/9/2017	0.039
306	Magnolia and Westway	10/9/2017	0.477
306	Magnolia and Westway	11/2/2017	0.001
302	Beachcliff and Falmouth	11/5/2017	0.059
306	Magnolia and Westway	11/5/2017	0.374
306	Magnolia and Westway	11/18/2017	0.766
306	Magnolia and Westway	11/18/2017	0.040

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.

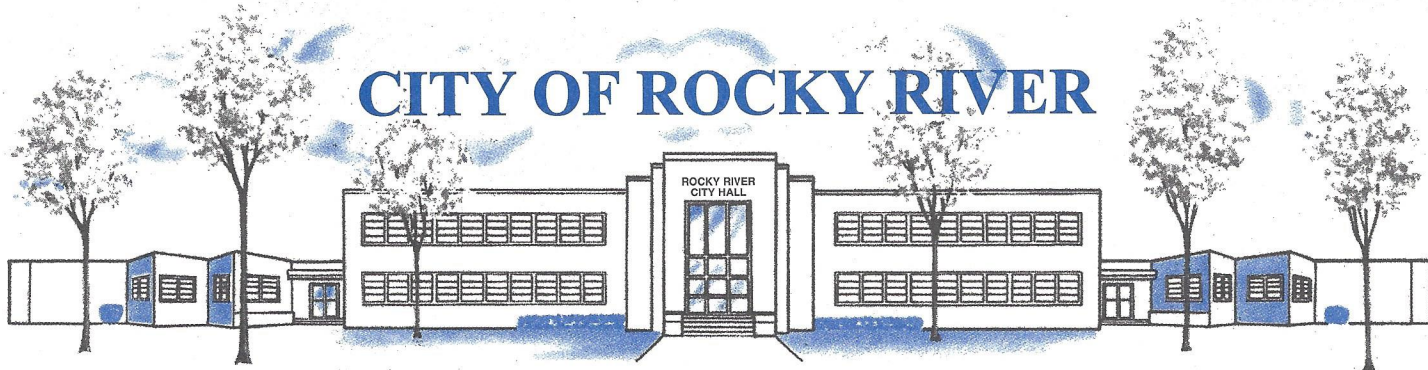
**Principal Constituents:** Sampling was performed on the sanitary sewage throughout the four cities throughout the months of May and June 2017, as part of a sewer flow and strength study. The following table of data represents typical values for the principal constituents of the flow from the SSO's at both Beachcliff (302) and Magnolia (306).

DATE	Sample Location	Total Suspended Solids, mg/L	CBOD, mg/L	Total Phosphorus, mg/L	Ammonia, mg/L	Oil and Grease, mg/L
5/25/2017	Rocky River Lake Road Sewer	196	79	2.09	7.32	13
6/23/2017	Rocky River Lake Road Sewer	140	94	3.32		
6/30/2017	Rocky River Lake Road Sewer	304	190	5.12		

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



# CITY OF ROCKY RIVER



21012 HILLIARD BLVD.

• ROCKY RIVER, OHIO 44116

• (440) 331-0600

January 19, 2018

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 2017 Annual Progress Report**

Dear Mr. Vargas:

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true and accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A handwritten signature in cursive script that reads "Pamela E. Bobst". The signature is written in black ink and is positioned above a horizontal line.

Pamela E. Bobst, Mayor  
City of Rocky River