

CITY OF ROCKY RIVER
2014 ANNUAL PROGRESS REPORT

January 14, 2015

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:

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ENVIRONMENTAL PROTECTION AGENCY ORDER

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

NPDES Permit OH0030503

January 14, 2015

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."

Progress of Sewer System Evaluation Study (SSES):

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.

During 2013, the City of Rocky River continued concentrating efforts with construction projects to work towards 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. There are four (4) sanitary pump stations in addition to one (1) storm pump station.

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 (WWTP) located on Lake Road in the northern portion of the City. The WWTP 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 WWTP 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. **The following SSO is no longer active and has been eliminated:**

- **EPA ID# 303** - Avalon and Falmouth. The overflow manhole was located in the sidewalk at the north-east corner of the intersection of Avalon Drive and Falmouth Drive.

The following are construction projects that have been completed during 2013 and 2014 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.

2012-13

Frazier / Beachcliff Blvd. Phase 1 Water Line Improvements (Sewer Shed 4)

\$598,165.56 (Cleveland Division of Water pledged funding to assist the City with these improvements)

Bid award: \$598,165.56 - **COMPLETED**

2013-14

Frazier Drive Sewer Replacement Sewer Project (Sewer Shed 4)

OPWC Loan for \$3,277,120.00

This is 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; **SEWER WORK COMPLETED**

Hampton Road (Sewer Shed 8 and affecting Sewer Sheds 4 & 5)

Phase 3 – Estimated Cost - \$2,500,000.00

Estimated Bidding April 2013

Estimated Completion November 2013 – **SEWER WORK COMPLETED**

Avalon Drive Improvements Phase I Water Main Rehabilitation (Sewer Sheds 3, 4 & 5)

\$900,000 (Engineer's Estimate) bid in early summer 2014 – Cleveland Division of Water approved the project and reviewed plans in February / March of 2014; **COMPLETED**

Avalon Drive (Sanitary and Storm) Improvements Phase II (Sewer Sheds 3, 4 & 5)

\$7,100,000 (Engineer's Estimate) for replacing approximately one mile of inverted sanitary and storm lines and residential "t" connections and laterals. **Project scheduled for public bidding in April 2015.**

Morewood Parkway Force Main and Pump Station Improvements (Sewer Sheds 4 & 5)

Estimated Start of Construction May, 2015

Also replaced 2 of 5 pumps at the Falmouth pump station with new chopper pumps to handle debris better and to 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.

Westway Sewer Improvements (Sewer Shed 12)

Estimated water line replacement June 2015. **Sewer work will be scheduled after water line replacement has been completed.**

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

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 four (2014)

The following goals in year four have been achieved:

- 1) Conducted an annual review of the CMOM Program which would include the Director of Public Safety Services, Service Commissioner, and Safety Service Coordinator. A review was conducted and the meeting included the sewer department personnel. This meeting was productive and all in attendance agreed that additional, quarterly meetings would be held with the sewer department personnel. During this annual review of the CMOM, logs were collected and evaluated. As a result, logs were redesigned for better reporting. The City's CMOM Program was reviewed, no changes were necessary at this time. **GOAL ACHIEVED**
- 2) Created and implemented the Grease Trap Ordinance & have the City's Building Department inspect and maintain records for inspections and follow up. **GOAL ACHIEVED (Ordinance No. 3-14 passed on March 10, 2014)**

"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."

Inventory of all Sanitary Sewer Overflows (SSOs) within the City of Rocky River's sewer system during 2014 including date of events, location, volume, receiving water and principal pollutant test results:

Date of SSO event	Location	Volume Million Gallons	Receiving Water
2/1/2014	Beachcliff and Falmouth (ID 302)	0.001	Lake Erie
2/21/2014	Beachcliff and Falmouth (ID 302)	0.005	Lake Erie
2/21/2014	Westway and Magnolia (ID 306)	0.590	Spencer Creek
4/3/2014-4/4/2014	Westway and Magnolia (ID 306)	0.180	Spencer Creek
4/8/2014	Westway and Magnolia (ID 306)	0.012	Spencer Creek
4/15/2014	Westway and Magnolia (ID 306)	0.003	Spencer Creek
4/29/2014	Westway and Magnolia (ID 306)	0.034	Spencer Creek
4/30/2014	Westway and Magnolia (ID 306)	0.006	Spencer Creek
5/12/2014	Beachcliff and Falmouth (ID 302)	0.008	Lake Erie
5/12/2014	Westway and Magnolia (ID 306)	0.412	Spencer Creek
6/18/2014	Beachcliff and Falmouth (ID 302)	0.006	Lake Erie
6/18/2014	Westway and Magnolia (ID 306)	0.087	Spencer Creek
6/24/2014	Beachcliff and Falmouth (ID 302)	0.002	Lake Erie
6/24/2014-6/25/2014	Westway and Magnolia (ID 306)	0.232	Spencer Creek
6/29/2014	Westway and Magnolia (ID 306)	0.003	Spencer Creek
7/8/2014	Westway and Magnolia (ID 306)	0.066	Spencer Creek
7/27/2014	Beachcliff and Falmouth (ID 302)	0.065	Lake Erie
7/27/2014-7/28/2014	Westway and Magnolia (ID 306)	0.464	Spencer Creek
8/2/2014	Beachcliff and Falmouth (ID 302)	0.016	Lake Erie
8/2/2014	Westway and Magnolia (ID 306)	0.201	Spencer Creek
8/11/2014-8/13/2014	Westway and Magnolia (ID 306)	0.228	Spencer Creek
8/12/2014-8/13/2014	Beachcliff and Falmouth (ID 302)	0.008	Lake Erie
8/17/2014	Westway and Magnolia (ID 306)	0.003	Spencer Creek
8/19/2014	Westway and Magnolia (ID 306)	0.040	Spencer Creek
8/21/2014	Westway and Magnolia (ID 306)	0.097	Spencer Creek
8/26/2014	Westway and Magnolia (ID 306)	0.043	Spencer Creek
9/5/2014-9/6/2014	Beachcliff and Falmouth (ID 302)	0.044	Lake Erie
9/5/2014-9/6/2014	Westway and Magnolia (ID 306)	0.333	Spencer Creek
9/10/2014	Beachcliff and Falmouth (ID 302)	0.076	Lake Erie
9/10/2014	Westway and Magnolia (ID 306)	0.431	Spencer Creek

10/16/2014 **	Beachcliff and Falmouth (ID 302)	0.001	Lake Erie
10/16/2014 **	Westway and Magnolia (ID 306)	0.058	Spencer Creek

**** PRINCIPAL POLLUTANTS IN 2 SAMPLED EVENTS**

Date of SSO Event	Location	Volume MG	Suspended Solids	CBOD5	Phosphorus	Nitrogen Ammonia	E. coli
10/16/2014	Beachcliff @ Falmouth ID 302	0.001 MG	140 mg/l	AE*	0.64 mg/l	0.97 mg/l	Too Numerous to count
10/16/2014	Westway @ Magnolia ID 306	0.058 MG	208 mg/l	49 mg/l	1.51 mg/l	2.30 mg/l	Too Numerous to count

*** AE: Analytical Data Not Valid**

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*KD issued to the Rocky River Wastewater Treatment Plant.