

CITY OF ROCKY RIVER
2012 ANNUAL PROGRESS REPORT

January 22, 2013

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:

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CITY OF ROCKY RIVER 2012 ANNUAL PROGRESS REPORT

ENVIRONMENTAL PROTECTION AGENCY ORDER

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

NPDES Permit OH0030503

January 22, 2013

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.

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 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:

- **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 2011 and 2012 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.

Lake Road Sewer Improvement Project (Sewer Sheds 4 & 5) COMPLETED

ODOT Shared Funding

This project replaced inverted sewers which allowed the City to close a sanitary sewer overflow and reduce by-passes at the Waste Water Treatment Plant.

Total Project Cost for City \$1,257,396.00

2012

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

Water Line Rehabilitation \$139,125.00 Phase 1-Water Line -**COMPLETED**

Hampton Road (Sewer Shed 8 & affecting Sewer Sheds 4&5) Phase 2 Sewer Improvements

OPWC Loan for Sewer improvements - replacing a collapsing storm sewer main, inverted sanitary and storm sewers which cause infiltration into the system and contributes to sanitary sewer overflows at the Rocky River Waste Water Treatment Plant.

Bid award: \$2,129,978.95 – **COMPLETED**

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

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

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

2013-15

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. To be bid in July of 2013. Estimated completion date is July 2014.

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

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

Estimated Start of Construction 2014

Westway Sewer Improvements (Sewer Shed 12)

Estimated Start of Construction 2014

"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 two (2012)

The following goals in year two have been achieved:

- 1) Make appropriate adjustments to the CMOM Program where necessary and adding training opportunities for the Service Division for Storm Water Management and Sewer Emergency education. **GOAL ACHIEVED.**
- 2) The City of Rocky River updated its MS4 Storm Water Ordinances for construction and post-construction in 2012 and will move forward with codifying and implementing the Grease Trap Ordinance in 2013.

"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 2012 including date of events, location, volume, receiving water and principal pollutant test results:

Date of SSO event	Location	Volume Million Gallons	Receiving Water
1/11/2012	Beachcliff and Falmouth (ID 302)	0.001	Lake Erie
1/17/2012	Beachcliff and Falmouth (ID 302)	0.1855	Lake Erie
1/17/2012	Westway and Magnolia (ID 306)	0.2527	Spencer Creek
1/23/2012	Beachcliff and Falmouth (ID 302)	0.0297	Lake Erie

1/23/2012	Westway and Magnolia (ID 306)	0.0179	Spencer Creek
1/26-27/2012	Beachcliff and Falmouth (ID 302)	0.1011	Lake Erie
1/26-27/2012	Westway and Magnolia (ID 306)	0.0694	Spencer Creek
2/23-24/2012	Beachcliff and Falmouth (ID 302)	0.026	Lake Erie
2/23/2012	Westway and Magnolia (ID 306)	0.008	Spencer Creek
2/29/2012	Beachcliff and Falmouth (ID 302)	0.074	Lake Erie
2/29/2012	Westway and Magnolia (ID 306)	0.041	Spencer Creek
3/2/2012	Beachcliff and Falmouth (ID 302)	0.016	Lake Erie
3/13/2012	Beachcliff and Falmouth (ID 302)	0.048	Lake Erie
3/15/2012	Beachcliff and Falmouth (ID 302)	0.0016	Lake Erie
3/16/2012	Beachcliff and Falmouth (ID 302)	0.0079	Lake Erie
3/18/2012	Beachcliff and Falmouth (ID 302)	0.2377	Lake Erie
3/18/2012	Westway and Magnolia (ID 306)	0.2522	Spencer Creek
4/1/2012	Beachcliff and Falmouth (ID 302)	0.022	Lake Erie
5/7/2012	Beachcliff and Falmouth (ID 302)	0.019	Lake Erie
5/8/2012	Beachcliff and Falmouth (ID 302)	0.041	Lake Erie
5/8/2012	Westway and Magnolia (ID 306)	0.007	Spencer Creek
5/25/2012	Beachcliff and Falmouth (ID 302)	0.013	Lake Erie
5/25/2012	Westway and Magnolia (ID 306)	0.021	Spencer Creek
5/29/2012	Beachcliff and Falmouth (ID 302)	0.021	Lake Erie
5/29/2012	Westway and Magnolia (ID 306)	0.042	Spencer Creek
6/1/2012	Beachcliff and Falmouth (ID 302)	0.107	Lake Erie
6/1/2012	Westway and Magnolia (ID 306)	0.101	Spencer Creek
6/17/2012	Beachcliff and Falmouth (ID 302)	0.087	Lake Erie
6/17/2012	Westway and Magnolia (ID 306)	0.095	Spencer Creek
7/3/2012-7/4/2012	Beachcliff and Falmouth (ID 302)	0.236	Lake Erie
7/3/2012-7/4/2012	Westway and Magnolia (ID 306)	0.147	Spencer Creek
7/5/2012	Beachcliff and Falmouth (ID 302)	0.083	Lake Erie
7/5/2012	Westway and Magnolia (ID 306)	0.035	Spencer Creek
7/15/2012	Beachcliff and Falmouth (ID 302)	0.018	Lake Erie
7/19/2012	Beachcliff and Falmouth (ID 302)	0.003	Lake Erie
7/19/2012	Westway and Magnolia (ID 306)	0.005	Spencer Creek
7/26/2012	Beachcliff and Falmouth (ID 302)	0.034	Lake Erie
7/26/2012	Westway and Magnolia (ID 306)	0.003	Spencer Creek
7/27/2012	Beachcliff and Falmouth (ID 302)	0.021	Lake Erie
7/27/2012	Westway and Magnolia (ID 306)	0.005	Spencer Creek
7/28/2012	Beachcliff and Falmouth (ID 302)	0.007	Lake Erie

7/28/2012	Westway and Magnolia (ID 306)	0.094	Spencer Creek
8/9/2012- 8/10/2012**	Beachcliff and Falmouth (ID 302)	0.113	Lake Erie
8/9/2012**	Westway and Magnolia (ID 306)	0.086	Spencer Creek
8/14/2012	Beachcliff and Falmouth (ID 302)	0.178	Lake Erie
8/14/2012	Westway and Magnolia (ID 306)	0.850	Spencer Creek
8/27/2012	Beachcliff and Falmouth (ID 302)	0.231	Lake Erie
8/27/2012	Westway and Magnolia (ID 306)	0.206	Spencer Creek
9/3/2012	Westway and Magnolia (ID 306)	0.034	Spencer Creek
9/7/2012	Beachcliff and Falmouth (ID 302)	0.007	Lake Erie
9/8/2012	Beachcliff and Falmouth (ID 302)	0.436	Lake Erie
9/8/2012	Westway and Magnolia (ID 306)	0.562	Spencer Creek
9/18/2012	Beachcliff and Falmouth (ID 302)	0.052	Lake Erie
9/18/2012	Westway and Magnolia (ID 306)	0.042	Spencer Creek
9/21/2012	Beachcliff and Falmouth (ID 302)	0.271	Lake Erie
9/21/2012	Westway and Magnolia (ID 306)	0.185	Spencer Creek
9/23/2012	Beachcliff and Falmouth (ID 302)	0.038	Lake Erie
9/24/2012	Beachcliff and Falmouth (ID 302)	0.084	Lake Erie
9/24/2012	Westway and Magnolia (ID 306)	0.006	Spencer Creek
9/26/2012	Beachcliff and Falmouth (ID 302)	0.051	Lake Erie
9/26/2012	Westway and Magnolia (ID 306)	0.109	Spencer Creek
10/3/2012	Beachcliff and Falmouth (ID 302)	0.035	Lake Erie
10/3/2012	Westway and Magnolia (ID 306)	0.052	Spencer Creek
10/5/2012-10/6/2012	Beachcliff and Falmouth (ID 302)	0.128	Lake Erie
10/5/2012-10/6/2012	Westway and Magnolia (ID 306)	0.202	Spencer Creek
10/23/2012	Beachcliff and Falmouth (ID 302)	0.084	Lake Erie
10/23/2012	Westway and Magnolia (ID 306)	0.109	Spencer Creek
10/26/2012	Beachcliff and Falmouth (ID 302)	0.003	Lake Erie
10/27/2012	Beachcliff and Falmouth (ID 302)	0.007	Lake Erie
10/27/2012	Westway and Magnolia (ID 306)	0.004	Spencer Creek
10/29/2012	Beachcliff and Falmouth (ID 302)	0.121	Lake Erie
10/29/2012	Westway and Magnolia (ID 306)	0.259	Spencer Creek
10/30/2012	Beachcliff and Falmouth (ID 302)	0.372	Lake Erie
10/30/2012	Westway and Magnolia (ID 306)	1.068	Spencer Creek
10/31/2012	Beachcliff and Falmouth (ID 302)	0.036	Lake Erie
10/31/2012	Westway and Magnolia (ID 306)	0.518	Spencer Creek
11/12/2012	Beachcliff and Falmouth (ID 302)	0.019	Lake Erie
11/12/2012	Westway and Magnolia (ID 306)	0.009	Spencer Creek

12/2/2012	Beachcliff and Falmouth (ID 302)	0.008	Lake Erie
12/4/2012	Beachcliff and Falmouth (ID 302)	0.017	Lake Erie
12/17/2012- 12/18/2012	Beachcliff and Falmouth (ID 302)	0.142	Lake Erie
12/18/2012	Westway and Magnolia (ID 306)	0.026	Spencer Creek
12/20/2012	Beachcliff and Falmouth (ID 302)	0.004	Lake Erie

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

Date of SSO Event	Location	Volume MG	Suspended Solids	CBOD5	Phosphorus	Nitrogen Ammonia	E. coli
8/9/2012	Beachcliff @ Falmouth ID 302	0.113 MG	120 mg/l	16 mg/l	3.17 mg/l	1.89 mg/l	Too Numerous to count
8/9/2012	Westway @ Magnolia ID 306	0.086 MG	100 mg/l	31 mg/l	1.53 mg/l	2.94 mg/l	Too Numerous to count

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.