



Sanitary Sewer Overflow Annual Report

Division of Surface Water

Date: 3/15/19
Facility name: Department of Water, Water Utility Field Operations, Sewer Maintenance Bureau
Ohio NPDES permit no.: 1PF00000*OD
Period covered by report: March 15, 2018 to March 15, 2019

Contact person

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Certification:

I certify under penalty of law that I have personally examined and am familiar with the information in this report and all attachments. Based on my inquiry of those persons immediately for obtaining the information contained in the report, I believe that the information is true, accurate, and complete.

Name Anthony Wade
(typed):

Title: Operations Administrator

Signature:

Date:

3/15/19

SSO Annual Report Table 1: SSO Identification		Ohio NPDES Permit No.: 1PF00000*OD	
Identification No. ^A	Location Description	Receiving Water ^B	Eliminated ^C
301-0129181158	S Gettysburg Av & Caylor Rd	Opossum Creek-TOC-12	
301-0202181539	N Keowee St & Tony Stein Way	Great Miami River-GML-56	
301-0216180543	3843 Alvin Av	Great Miami River-TGM-08	
301-0217181248	E Fifth St & Keowee St	Great Miami River-GML-27	
301-0222180932	De Weese Pkwy & Siebenthaler Av	Stillwater River-SWL-04	
301-0222181050	Superior Av & Kumler Av	Wolf Creek-WCL-12	
301-0225181405	1849 Russett Av	Lily Creek-LCL-21	
301-0227181516	Gilbert Av & Davis Av	Great Miami River-GML-27	
301-0329181824	E Parkwood Dr & Riverside Dr	Stillwater River-SWR-17	
301-0403180801	2800 Guthrie Rd	Great Miami River-GML-03	
301-0403180843	Xenia Av & Pritz Av	Great Miami River-GML-27	
301-0403180800	Riverside Dr & Ernst Av	Stillwater River-SWR-17	
301-0403181058	Cornell Dr & N Gettysburg Av	Wolf Creek-WCL-26	
301-0415181507	4654 Owens Dr	Wolf Creek--TWCL-01	
301-0503180810	1016 Leo St	Great Miami River-GML-56A	
301-0508181329	4995 Woodman Dr	Lily Creek-LCL-22	
301-0720181725	2320 Edwin C Moses Blvd	Great Miami River-GMR-14	
301-0723181634	3425 E Second St	Mad River-MRL-10	
301-0828181155	5651 Woodmore Dr	Stillwater River-TSW-11	
301-1018181213	Leo St & Milburn Av	Great Miami River-GML-56A	
301-1101181344	Riverside Dr & E Parkwood Dr	Stillwater River-SWR-17	
301-1211180905	1525 Salem Av	Wolf Creek-WCL-11	
301-1212181139	1124 Leo St	Great Miami River-GML-56A	

- A. Assign each SSO location a unique identification by numbering them consecutively, beginning with 301.
- B. Enter name of receiving water. If an SSO enters a storm sewer, enter "SS to (name of receiving water)." If an SSO does not reach a receiving water, enter (None".
- C. If an SSO has been eliminated, enter the date of elimination (MM/DD/YY).

Use additional pages as needed.

SSO Annual Report Table 2: SSO Event Information

Ohio NPDES Permit No.: 1PF00000*OD

Date ^A	Identification No. ^B	Receiving Water ^C	Volume ^D
01/29/18	301-0129181158	(304) Miscellaneous Sewershed	0.00015 [MG]
02/02/18	301-0202181539	(303) Southeast Sewershed	0.002
02/16/18	301-0216180543	(304) Miscellaneous Sewershed	0.0001
02/17/18	301-0217181248	(303) Southeast Sewershed	0.0003
02/22/18	301-0222180932	(301) Northeast Sewershed	0.001
02/22/18	301-0222181050	(305) Wolfcreek Sewershed	0.0002
02/25/18	301-0225181405	(303) Southeast Sewershed	0.0005
02/27/18	301-0227181516	(303) Southeast Sewershed	0.0005
03/29/18	301-0329181824	(307) Upper Riverdale Sewershed	0.100
04/03/18	301-0403180801	(304) Miscellaneous Sewershed	Unknown
04/03/18	301-0403180843	(303) Southeast Sewershed	0.150
04/03/18	301-0403180800	(307) Upper Riverdale Sewershed	0.150
04/03/18	301-0403181058	(305) Wolfcreek Sewershed	0.120
04/15/18	301-0415181507	(305) Wolfcreek Sewershed	0.000001
05/03/18	301-0503180810	(302) Lucille Sewershed	Unknown
05/08/18	301-0508181329	(303) Southeast Sewershed	0.0005
07/02/18	301-0720181725	(304) Miscellaneous Sewershed	0.00001
07/23/18	301-0723181634	(303) Southeast Sewershed	0.000001
08/28/18	301-0828181155	(305) Wolfcreek Sewershed	0.000005
10/18/18	301-1018181213	(302) Lucille Sewershed	0.001
11/01/18	301-1101181344	(307) Upper Riverdale Sewershed	0.001
12/11/18	301-1211180905	(305) Wolfcreek Sewershed	0.0005
12/12/18	301-1212181139	(302) Lucille Sewershed	0.001
	23		0.528767

- A. Enter date as "MM/DD/YY". Enter "Various" to summarize overflows of less than 1000 gallons from an SSO location
- B. Enter the unique identification assigned in Table 1.
- C. Enter name of receiving water. If an SSO enters a storm sewer, enter "SS to (name of receiving water)." If an SSO does not reach a receiving water, enter "None".
- D. Enter estimate of volume in MG (million gallons). Enter estimate of total volume if summarizing data.

Use additional pages as needed.

SSO Annual Report Table 3: Water in Basement Occurrences

Ohio NPDES Permit No.:
1PF00000*OD

Sewershed ^A	WIB Occurrences ^B	Causes ^C
(301) Northeast Sewershed	2	G
(302) Lucille Sewershed	3	D, G
(303) Southeast Sewershed	22	D, R, G
(304) Miscellaneous Sewershed	9	D, G
(305) Wolfcreek Sewershed	16	D, G, O
(307) Upper Riverdale Sewershed	2	G
Total Occurrences	54	4

A. A sewershed is a specific geographic area, such as a city block or a subdivision, that drains to a common outlet.
 B. Enter the total number of water in basement occurrences report for the sewershed.
 C. Enter all causes that apply: W = extreme weather; E = equipment failure; P = power failure; D = debris in line; R = roots; G = grease; B = other blockages; L = Line deterioration; V = vandalism; O = other, prove details.

Use additional pages as needed.

Enter narrative analysis of WIB patterns by location, frequency and cause.

The City of Dayton, Department of Water, Division of Water Utility Field Operations Sewer Maintenance Bureau maintains a twenty-four hour seven days weekly emergency service to investigate all customer complaints. The Bureau has a 90-minute response time parameter to resolve all reported service requests and emergencies. For this calendar year WIB's increased by four (4) occurrences. A query of our data base generated a total of 54 WIBs, in 2018, and none were directly related to Sanitary Sewer Overflows (SSOs). There were no changes in the Southeast Sewershed, 22 WIBs in 2017 and 22 WIBs in 2018; of the 22 WIBs there were no "other" blockages recorded. In the Upper Riverdale Sewershed, there was 1 WIB in 2017 and 2 WIBs in 2018, no significant changes. In the Wolf Creek Sewershed, there were 13 WIBs in 2017 and 16 in 2018, increasing by three occurrences, two (2) "other" blockages were recorded. After thorough investigation, the reason for the "other" blockages could not be determined. In the Miscellaneous Sewershed there were 8 WIBs in 2017 and 9 in 2018, no significant changes. In the Lucille Sewershed there were 6 WIBs in 2017 and 3 in 2018, decreasing by three, and no "other" blockages were recorded. In the Northeast Sewershed there were 0 WIBs in 2017 and 2 in 2018, increasing by two. In the Southeast Sewershed, there were five (5) SSOs due to extreme weather, grease, and debris. After investigation, two (2) of these SSOs were found to be associated with an overtaxed sewer due to inclement weather, the others were due to grease and debris. There were follow up investigations completed which initiated needed and necessary maintenance activities in an effort to correct inefficiencies with regard to our findings. The Engineering Group is in the process of addressing overtaxing sewers in an effort to eliminate reoccurrence. There was one (1) SSO occurrences in the Northeast Sewershed during this period due to extreme weather overtaxing the sewer. There were four (4) SSO occurrences in the Miscellaneous Sewershed due to extreme weather, debris and grease; occurrences decreased by one since 2017 year. There were five (5) SSO occurrences in the Wolf Creek Sewershed due to equipment failure, debris and grease; there were no significant changes in this sewershed since 2017 year. This sewershed continues to be a high grease incidence area; grease treatment blocks and solvent have been used to deter stoppages and blockages, which lead to SSO occurrences. Crews have increased the frequency of maintenance in this sewershed in an effort to reduce grease stoppage/blockage occurrences. In the Upper Riverdale Sewershed, there were three (3) SSO occurrence due to extreme weather. The performance in this sewershed has improved; there were no SSOs due to other "Causes" occurring during this period. In the Lucille Sewershed there were three (3) SSOs due to debris and grease, there are no noticeable changes in this sewershed. There were no (0) SSOs occurrences in the Stillwater Sewershed; this sewershed is performing as designed. It is the Bureau's intent to address these measures with enhancement of the following programs. The Bureau has a standard operating procedure in place to treat all sanitary sewer mains for root growth, which has been associated with causing stoppages, which could potentially create Sanitary Sewer Overflows (SSOs). This plan is continuously being enhanced by increasing the number of sanitary sewers treated for roots upon discovery and following up with CCTV investigations to ensure the reduction of root growth. The Bureau has also purchased sewer cleaning nozzles and a Rodder in the pursuit of reducing root infestation in our sanitary sewer collection system. For this period there was only one (1) WIB due to root infestation, and no SSOs due to root infestation, which reflects the effectiveness of our standard operating procedures. The Bureau is also addressing grease build up within the sanitary sewer mainlines. For this period, grease occurrences are continuing to trend upward. The Bureau has purchased grease blocks and solvent, for placement in high frequency grease areas of the sanitary sewer collection system, in an effort to reduce occurrences of grease stoppages and blockages. For this period, the Bureau launched its fifth campaign of the "Grease Monster Program", which is designed to inform the residents and/or customers of the challenges the Bureau faces when grease is intentionally disposed in our sanitary sewer collection system. The areas canvassed are high grease incidence areas; it is hypothesized that once residents receive these materials they will dispose of their grease waste in accordance with the guidelines and directions specified within. After completing the distribution of these kits to a significant number of our customers, our Bureau will analyze the data and determine the effectiveness of the program. These measures are designed to aid in reducing stoppages, which lead to WIBs, which leads to Sanitary Sewer Overflow (SSO) occurrences due to grease build up. The Bureau is performing well in of our efforts in addressing root incidents. However, efforts must be enhanced to reduce grease occurrences. The Bureau is continuing to invest in the latest equipment and technologies in the pursuit of reducing grease occurrences. The Bureau performs routine cleaning and CCTV investigations throughout the year in an effort to reduce blockages, stoppages and SSO occurrences, as well as, confirm the integrity of our sanitary sewers and assess the conditions of our collection system, keeping spans opened to safely convey raw sewage to our reclamation facility for treatment. As per rules and regulations of the Ohio EPA with regard to our NPDES Permit, the Bureau has submitted its second MOM Program, which is designed to enhance the performance of our sanitary sewer collections system. It is the Bureau's goal to reduce sanitary sewer stoppages, lower WIB occurrences and ultimately reduce SSO frequency to ZERO in the years to come. For this period, the Bureau continues to perform proficiently.