Sanitary Sewer Overflow Annual Report

Division of Surface Water

Date:	March 15,2023
Facility name:	Department of Water, Water Utility Field Operations, Sewer Maintenance Bureau
Ohio NPDES permit no.:	1PF00000*QD
Period covered by report:	March 15, 2022 to March 15, 2023
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 (typed):	Anthony Wade	**Title:**	Operations Administrator
Signature:		**Date:**	3/15/23

SSO Annual Report Table 1: SSO Identification		Ohio NPDES Permit No.: 1PF00000*QD	
Identification No.[A]	Location Description	Receiving Water[B]	Eliminated[C]
301-0222221201	Riverside Dr & E Parkwood Dr	Stillwater River-SWR-16	
301-0223221307	Xenia Av & Pritz Av	Great Miami River-GML-27	
301-0222221336	N Gettysburg Av & Cornell Dr	Wolf Creek-WCL-28	
301-0307220721	Harvard Blvd & Princeton Dr	Wolf Creek-WCL-11	
301-0307220752	Arcadia Av & Russet Av	Lily Creek-LCL-21	
301-0307220802	N Gettysburg Av & Cornell Dr	Wolf Creek-WCL-28	
301-0307220844	Xenia Av & Pritz Av	Great Miami River-GML-27	
301-0307220900	115 N Plaza Av	Wolf Creek-WCL-10	
301-0323221804	McCall Rd & Abbey Av	Wolf Creek-WCL-07	
301-0413221300	1905 Lucille Dr	Great Miami River-GML-76	
301-0414221703	Home Av & McCall St	Wolf Creek-WCL-07	
301-0422221247	3365 Obco Ct	Outfall (Unidentified)	
301-0428221200	1905 Lucille Dr	Great Miami River-GML-76	
301-0522221202	Adelite Av & Germantown St	Great Miami River-GMR-05	
301-0821221822	Harvard Blvd & Amherst Pl	Wolf Creek-WCL-11	
301-0927221056	2006 Cornell Ridge Dr	Wolf Creek-WCL-26	
301-1222221200	Harvard Blvd & Amherst Pl	Wolf Creek-WCL-11	

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*QD	
Date[A]	Identification No.[B]	Receiving Water[C]	Volume[D]
02/22/22	301-0222221201	(307) Upper Riverdale Sewershed	1.54 [MG]
02/22/22	301-0222221307	(303) Southeast Sewershed	0.457
02/22/22	301-0222221336	(305) Wolfcreek Sewershed	0.0102
03/07/22	301-0307220721	(305) Wolfcreek Sewershed	0.0036
03/07/22	301-0307220752	(305) Southeast Sewershed	0.018
03/07/22	301-0307220802	(305) Wolfcreek Sewershed	0.01224
03/07/22	301-0307220844	(303) Southeast Sewershed	0.274
03/07/22	301-0307220900	(305) Wolfcreek Sewershed	0.0002
03/23/22	301-0323221804	(305) Wolfcreek Sewershed	0.00021
04/13/22	301-0413221300	(302) Lucille Sewershed	0.0195
04/14/22	301-0414221703	(305) Wolfcreek Sewershed	0.00089
04/22/22	301-0422221247	Outfall (Unidentified)	0.0003
04/28/22	301-0428221200	(302) Lucille Sewershed	0.0033
05/22/22	301-0522221202	(305) Wolfcreek Sewershed	0.00103
08/21/22	301-0821221822	(305) Wolfcreek Sewershed	0.001
09/27/22	301-0927221056	(305) Wolfcreek Sewershed	0.000025
12/22/22	301-1222221200	(305) Wolfcreek Sewershed	0.001
			2.34250

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*QD	
Sewershed[A]	WIB Occurrences[B]	Causes[C]
(302) Lucille Sewershed	2	G
(303) Southeast Sewershed	5	D, G, R
(304) Miscellaneous Sewershed	3	G
(305) Wolfcreek Sewershed	6	R, G
(307) Upper Riverdale Sewershed	3	R, G, O
Total Occurrences	19	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.

SSO Annual Report: Water in Basement Narratives	Ohio NPDES Permit No.: 1PF00000*QD

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 implemented to investigate all customer complaints. For this calendar year WIB's decreased by 47 occurrences. A query of our data base generated a total of 19 WIBs in 2022 and none were directly related to Sanitary Sewer Overflows (SSOs). WIBs decreased in the Southeast Sewershed to 5 from 20 in 2021, of the 5 WIBs there were no "other" blockages recorded. For this period, there were 3 WIBs in the Upper Riverdale Sewershed decreasing by 3; there were 6 WIBs in 2021, with 1 "other" blockage, there were no significant changes. In the Wolf Creek Sewershed, there were 6 WIBs in 2022, 27 in 2021, decreasing by 19 occurrences, no "other" blockages were recorded. In the Miscellaneous Sewershed, there were 3 WIBs in 2022, 7 in 2021; decreasing by 4; there was one "other" blockage and no significant changes in the Sewershed. In the Lucille Sewershed there were 2 WIBs in 2022, 9 in 2021, decreasing by 7, and no "other" blockages were recorded. In the Northeast Sewershed there were no WIBs in 2022, 1 in 2021, there were no significant changes in the Sewershed. In the Southeast Sewershed, there were 3 SSOs due to Inflow and Infiltration generated by inclement weather events. In the Northeast and Miscellaneous Sewersheds there were no SSO occcurences. There were 10 SSO occurrences in the Wolf Creek Sewershed; occurrences increased by 3 as compared to 2021, due to inclement weather, grease, root intrusion and debris; there were no significant changes in this sewershed since 2021. 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 and blockage occurrences. In the Upper Riverdale Sewershed, there was 1 SSO occurrence due to Inflow and infiltration generated by inclement weather, occurrences remained the same since 2021. The performance in this sewershed has improved, however, infiltration and inflow have typically negatively impacted the performance of this area. In the Lucille Sewershed, there was 2 SSO due to equipment failure. A bypass pumping assembly was installed to convey flows temporarily, until switch gear and pumping systems are restored, which will return the pump station to a condition for which it is capable of operating as designed and will eliminate these SSO occurrences. Occurrences in the Lucille Sewershed increased by 1 since 2021; there are no noticeable changes in this sewershed. There was 1 SSO occurrence in an unidentified Sewershed due to debris and grease. Overall, SSO occurrences increased by 5 since 2021, which is a moderate increase. This increase is partially due to inclement weather events negatively impacting the sanitary sewer collection system via inflow and infiltration. Our Engineering Group is aware of this issue and are proposing improvement projects, which are designed to address this issue in an immediate manner. The Bureau has significantly reduced stoppages and blockages, for this period, by 55 percent due to enhancement of our roots and grease treatment means and methods. The Bureau has a standard operating procedure in place to increase the treatment of sanitary sewer mainlines for root infestation and grease occurrences upon discovery, which has had a significant positive impact on stoppages and blockages. 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 reduction of root intrusion. The Bureau is increasing the frequency of the use of a Rodder, purchased several years ago, in the pursuit of reducing root infestation in our sanitary sewer collection system. For this period, there were 3 WIBs and 2 SSOs due to root infestation. Root intrusion was reduced by 63 percent since 2021, 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 decreased from 38 to 14, showing that grease incidents are decreasing significantly. The Bureau is continuing the use of grease blocks and solvent, for implementation in high frequency grease areas of the sanitary sewer collection system, in an effort to further reduce occurrences of grease stoppages and blockages. 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 will continue to enhance its efforts in the pursiut of reducing grease stoppage and blockage occurrences. The Bureau is continuing to experience industrial users disposing of non-biodegradable and objectionable solids into the sanitary sewer collection system. Once the origin of these discharges are confirmed, supervision has served "cease and desist" warnings to these violators, which are designed to deter improper disposals of this nature. The Bureau is continuing to invest in the latest equipment, most advanced training and associated technologies in the pursuit of reducing stoppage and blockage incidents. 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 sanitary sewer 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 sixth MOM Program, which is designed to enhance the performance of our sanitary sewer collections system. It is the Bureaus' 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 productively and proficiently.