

ANNUAL CONSENT DECREE  
PROGRESS REPORT  
FY 2024

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One Donham Plaza  
Middletown, OH 45042

July 30, 2024



Middletown has prepared the following Annual Consent Decree Progress Report in accordance with Section VII, Paragraph 31 of the Consent Decree. Pursuant to Paragraph 36, the following statement certifies that the information contained within this document is true, accurate, and complete:

*I certify under penalty of law that this document 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 information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, 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.*

**City of Middletown**

Signed: \_\_\_\_\_

Printed Name: Scott Tadych

Title: Public Works & Utilities Director

Date: 7/30/2024

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### 1. INTRODUCTION AND PURPOSE

On April 12, 2018 (Effective Date), the U.S. District Court for the Southern District of Ohio entered a Consent Decree (CD) between the City of Middletown, the United States America and the State of Ohio (Ohio) to address alleged violations of the Clean Water Act (CWA).

This annual Progress Report is submitted pursuant to Section VII of the CD. Middletown has prepared this report in accordance with the requirements set forth in Paragraph 31 of the CD in order to apprise U.S. EPA and Ohio EPA of the work and activities undertaken by Middletown from the July 1, 2023 through June 30, 2024 (the “reporting period”).

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### 2. COMPLIANCE DEADLINES AND MILESTONES

The following table summarizes the CD milestones and requirements during the reporting period and the status of Middletown's activities to address such milestones and requirements.

| Table 2-1. Consent Decree Milestones                     |          |             |
|--|----------|-------------|
| Consent Decree Submittal                                 | CD Para. | Status      |
| Planning/Design for Bulls Run to Sunset Park CSO Project | Appx C   | Complete    |
| Construction for Bulls Run to Sunset Park CSO Project    | Appx C   | Complete    |
| Construction for Lakeside Redirect CSO Project           | Appx C   | Complete    |
| Condition Assessment                                     | Appx C   | In Progress |
| Downtown CSO Storage Basin                               | Appx C   | In Progress |
| WWTP, Secondary Settling and Sludge Pumping              | Appx C   | Complete    |
| WWTP, Secondary Aeration                                 | Appx C   | In Progress |

### 3. ANNUAL PROJECT AND ACTIVITY UPDATE

#### 3.1 Condition Assessment

In accordance with Section IV of CD, Middletown is working towards the Performance Criteria outlined in Paragraph 17. Middletown has completed a Condition Assessment Plan for the sanitary and combined sewer systems. Middletown prioritized the inspection of the sanitary and combined sewer systems based on the overall risk score to include pipes that were within 30 years of their remaining useful life. The prioritization was used to develop a schedule to complete inspection of 706,813 LF of pipe by December 31, 2022.

The City hired a consultant to assist with the review of CCTV data from both RedZone and Metropolitan Environmental. The review was prioritized to PACP defect scores of 4's and 5's. The remaining CCTV data will be reviewed to determine if pipes assigned lower defect scores will be eligible for rehabilitation. Generally, the condition of the City's sewer assets appear better than expected.

#### 3.2 Downtown CSO Storage Basin

In accordance with Appendix C of the CD, Middletown has commenced with the design of the Downtown CSO Storage Basin. The City has selected the progressive design-build delivery method to complete the project.

Site prep for construction activities began in July 2023 and construction began in September 2023. As noted in the previous annual report, substantial completion for the Downtown CSO Storage Basin is expected in March 2026.

#### 3.3 Secondary Settling and Sludge Pumping

The secondary settling and sludge pumping project is scheduled to begin in 2039, per Appendix C of the CD. However, in 2021 WWTP staff reported concerns about the existing MCC. The MCC was originally installed in 1972 and was experiencing failures. The City hired a design consultant in 2021 to perform an electrical upgrade for the Secondary Building. As the project was developed, additional scope items were added such as adding variable frequency drives for the sludge pumps, new pump motors, and flow meters for the sludge piping.

The project reached substantial completion in July 2024.

#### 3.3 Secondary Aeration

The secondary aeration project is scheduled to begin in 2028, per Appendix C of the CD. However, the existing blowers have been in operation since the 1970's and have exceeded their useful life. Two of the five blowers that are there have been rebuilt over the last several years at significant expense due to being obsolete. The remaining blowers are similarly in poor condition and may need to be rebuilt soon. In addition to age of the equipment, the blowers are oversized for the current oxygen demands at the plant. The aeration system does not have any automation for process control so as conditions change at the WRF, operators manually throttle valves based on institutional knowledge of where the valve set point should be.

A preliminary engineering study was performed in 2023 to select an alternative for blower replacement and system improvements. Following the completion of the preliminary engineering study, the City issued an RFP for detailed design in March 2024 and is currently working towards a signed agreement with selected consultant.

### 4. SYSTEM PERFORMANCE DURING 2024

#### 4.1 NPDES Permit Violations

During the reporting period, from July 1, 2023 to June 30, 2024, there was one NPDES permit violation that resulted from a missed sampling event in December 2023. Samples were not collected for Total Phosphorus and Hardness. The violation was reported to Ohio EPA in December 2023.

Water in Basement (WIB) reports are summarized by calendar year. In 2023, there were 11 WIBs reported for the calendar year. Roots were the main cause for WIBs. Areas with roots have been identified and will be monitored and treated moving forward.

#### 4.2 CSOs and Dry Weather Overflows

During the reporting period, from July 1, 2023 to June 30, 2024, there were no dry weather overflows.

Known combined sewer overflow (CSO) events that occurred during the reporting period are summarized in Appendix A. During the reporting period, Bulls Run CSO Outfall was not monitored due to ongoing construction for the Downtown CSO Storage Basin.

#### 4.3 Unauthorized Releases

During the reporting period, from July 1, 2023 to June 30, 2024, there were no known Unauthorized Releases.



### 5. PLANNED ACTIVITIES FOR 2024-2025

Middletown will be continuing the overall program outlined in the CD in FY 2025. The following sub-sections provide specifics on this work.

#### **5.1 Condition Assessment**

In accordance with Section IV of CD, Middletown is working towards the Performance Criteria outlined in Paragraph 17 and has completed a Condition Assessment.

Additional CCTV data will continue to be reviewed with the goal of completing a rehabilitation and replacement schedule for the combined and separate sewer systems.

#### **5.2 Downtown CSO Storage Basin**

In accordance with Appendix C of the CD, Middletown will continue to progress construction of the Downtown CSO Storage Basin. Currently substantial completion is expected to occur by March 30, 2026.

#### **5.3 Secondary Aeration**

As noted in Section 3, the City is preparing to commence with detailed design. It is anticipated that this work will continue in 2025.

## APPENDIX A: CSO REPORTS