

Section 1: Specific Action Projects

1.A Upgrade of the WPCS (Phase 1)

Status of Work Plan Development	The Work Plan for Water Pollution Control Station (WPCS) improvements was submitted to EPA on February 10, 2010, per the Consent Decree.
Status of Design and Construction Activities	Design and construction are complete. Certificate of Achievement of Full Operation was issued and acknowledged on September 20, 2013.
Status of Stress Test Protocol Development	Stress Tests are complete.
Status and Results of Stress Tests	Stress Tests are complete. The Final Demonstration Testing Evaluation Report was submitted to EPA on October 15, 2015, per the Consent Decree.
Capacity Achieved at the WPCS After Upgrade	The Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 have achieved 30 MGD of wet weather treatment capacity.
Project Cost Incurred During Reporting Period	No project costs were incurred during the reporting period.

1.B Upgrade of the WPCS (Contingency Projects)

The Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 achieved 30 MGD of wet weather treatment capacity, therefore, this Consent Decree item is not applicable.

1.C Status of Sewer Separation Projects

1.C.1 Rack 8 Separation Project

Activities Undertaken During Reporting Period	Project is complete.
Status of Construction	Construction is complete.
Date of Anticipated Completion	Achievement of Full Operation occurred on December 14, 2012.

Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

1.C.2 Rack 25 Separation Project

Activities Undertaken During Reporting Period Project is complete.

Status of Construction Construction is complete.

Date of Anticipated Completion Achievement of Full Operation occurred on December 14, 2012.

Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

1.C.3. Rack 21 Separation Project

Activities Undertaken During Reporting Period Project is complete.

Status of Construction Construction is complete.

Date of Anticipated Completion Achievement of Full Operation occurred on November 9, 2017. Construction was substantially complete November 13, 2017.

Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

1.C.4 Rack 13 Separation Project

Activities Undertaken During Reporting Period Project is complete.

Status of Construction Construction is complete.

Date of Anticipated Completion Achievement of Full Operation occurred on October 14, 2016.

Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

1.C.5 Rack 30 Separation Project

Activities Undertaken During Reporting Period Project is complete.

Status of Construction Construction is complete.

Date of Anticipated Completion Achievement of Full Operation occurred on November 9, 2017. Construction on Rack 30 was substantially complete November 13, 2017.

Project Cost Incurred During Reporting Period No project costs were incurred during the reporting period.

Section 2: CSO and WPCS Control Measures

2.A Status of Document Preparation

Table 2-1 shows the current status of documents as listed in Table 1 in Paragraph 17 of the Consent Decree. Documents listed in **bold** have been completed as of the end date of this reporting period.

Table 2-1 Status of Document Preparation

Document	Consent Decree Due Date	Date Submitted or Date of Anticipated Completion
Updated NFA and supplement	November 30, 2009	November 25, 2009
Preliminary Report on Modeling to Predict Size and Number of Overflows	January 15, 2010	January 13, 2010
Preliminary Report on Cost/Benefit Comparison to Predict Sizes and Number of Overflows	March 15, 2010	March 12, 2010
CSO Control Measure Cost/Benefit Tables at Appendix 2 of Attachment A	May 15, 2010	May 14, 2010
Updated Financial Capability Information	May 15, 2010	May 14, 2010
Post-Construction Monitoring Program	August 15, 2010	August 16, 2010
Proposed Long Term Control Plan Update	August 15, 2010	August 16, 2010
Proposed Long Term Control Plan Update Report	August 15, 2010	August 16, 2010
Final Long-Term Control Plan Update	October 15, 2010	October 15, 2010 Revised: February 28, 2011
Final Long-Term Control Plan Update Report	October 15, 2010	October 15, 2010 Revised: February 28, 2011 Revised: November 15, 2011 USEPA Approved: November 16, 2011 Ohio EPA Approved: April 11, 2012
Report on Revising WPCS Control Measure(s) if Akron achieves 130 MGD through secondary treatment using step feed	October 15, 2016	October 14, 2016
Report on Revising WPCS Control Measure(s) if Akron constructs the WPCS Contingency Project	October 15, 2017	N/A

2.A.1 Development of an Integrated Plan

The City's LTCP Update was approved by USEPA on November 16, 2011, and Ohio EPA on April 11, 2012. The LTCP Update was incorporated into the court-approved Consent Decree on January 17, 2014.

The City submitted an Integrated Plan on July 31, 2015, in accordance with USEPA's June 5, 2012, Integrated Planning Framework (IPF) Guidance. The parties participated in several conferences and exchanged several documents regarding the City's proposed Integrated Plan. The City continued to comply with the requirements within the Consent Decree, including, but not limited to, the LTCP Update, during the ongoing discussions of the proposed Integrated Plan.

The parties subsequently agreed to suspend further discussions over the proposed Integrated Plan. At the same time, it was understood that the City would submit requests to modify the LTCP Update, independent of the integrated planning process. Those proposed modifications are discussed in the following section.

2.A.2 Consent Decree Modifications

As a result of ongoing Consent Decree negotiations, modifications were made pursuant to Exhibit 2 and Exhibit 3 of the Consent Decree, and the Court has approved the First Amendment to Consent Decree, the Second Amendment to Consent Decree, and the Third Amendment to Consent Decree. Those modifications are discussed below.

The City received modification approval letters under Exhibit 3 of the LTCP for the following green infrastructure ("GI") projects:

- Rack 36 – approval letter issued on October 30, 2015
- Rack 5/7 – approval letter issued on December 7, 2015
- Rack 22 – approval letter issued on December 7, 2015

Based upon a subsequent agreement of the parties, the City has constructed the original Rack 22 storage basin in lieu of the approved green infrastructure project.

On January 15, 2016, the City submitted an Alternative Plan to the Sizing of Secondary Treatment Capacity under Exhibit 2 of the LTCP Update. USEPA approved the City's Alternative Plan on February 11, 2016. Based on this approval, the WPCS Phase 2 projects were then subject to the requirements of the LTCP Update Rows 17 and 18.

The Court entered the First Amendment to the Consent Decree on September 20, 2016, which modified the Consent Decree as follows: (1) changed the sequencing of the WPCS Phase 2 projects and (2) replaced the MOI parallel relief sewer project with the MOI capping project. The First Amendment to Consent Decree switched the deadlines for the projects in LTCP Update Rows 17 and 18 and replaced the original LTCP Update Rows 21 and 22 with new Rows 21, 22 and 23.

The Court entered the Second Amendment to the Consent Decree on December 17, 2019 which further modified the Consent Decree as follows: (1) replaced the requirement for the BioACTIFLO facility in LTCP Update Row 18 with a BioCEPT facility and a demonstration study as now required in new LTCP Update Rows 18 and 18.a., respectively; and (2) replaced the Racks 3, 26/28 and

27/29 storage basins required in LTCP Update Rows 1, 8 and 9 with upsized underflow drains and pipes (“optimized conveyance”) and two GI projects, including GI operation and maintenance (“O&M”) requirements, and increased the size of the Rack 10/11 storage basin required in Row 3 from 2.5 MG to 4.5 MG. LTCP Update Rows 1, 3, 8 and 9 are now replaced with amended Rows 1, 3, 8 and 9 and new Rows 1.a., 8.a., and 9.a.

The City previously proposed to modify the size of the Northside Interceptor Tunnel (“NSIT”) in Row 12 with a smaller diameter tunnel and the separation of the Rack 34 sewers. Following the dispute resolution process, the United States, the State and the City agreed to the specific wording of a Third Amendment to the Consent Decree (“Third Amendment”) for the modification of the NSIT project. The Third Amendment was lodged with the Court on February 13, 2023. Following the public comment period, the United States filed a Motion to Enter the Third Amendment with the Court on July 28, 2023. Akron filed its own Motion to Enter on August 1, 2023, and the State of Ohio filed a memorandum in support of the U.S.’ motion on August 1, 2023. The Court entered the Third Amendment on November 28, 2023, which modified the Consent Decree to provide for a smaller diameter NSIT and the separation of the Rack 34 sewers. The Third Amendment replaced LTCP Update Row 12, with revised Row 12 and a new Row 12.a.

In the United States’ April 8, 2022, Status Report to the Court, the United States advised the Court and Akron that the United States did not agree with Akron’s and the State of Ohio’s position that the NSIT deadlines have been stayed during the pendency of the dispute over the NSIT project. As a result, Akron submitted a second Notice of Dispute to the parties on April 18, 2022, regarding the applicability of the stay provisions in Paragraph 67 of the Consent Decree to the NSIT deadlines. The parties have engaged in discussions regarding this second Notice of Dispute. Akron’s current estimate provides that the modified NSIT project will be bid and will be in operation within the original LTCP Row 12 deadlines. If Akron is able to bid and complete the project within the LTCP Row 12 deadlines, it will not be necessary for the parties to go through the formal dispute resolution process over the applicability of the stay provisions in Paragraph 67. As a result, the parties have extended the informal dispute resolution period until January 13, 2024, and then extend at six month increments thereafter until the NSIT is completed, pursuant to Paragraph 71 of the Consent Decree. Any party may give written notice that it no longer agrees to the extension of the period for informal dispute resolution and, after receiving or providing such notice, Akron may pursue the dispute through formal dispute resolution in accordance with Paragraph 72 of the Consent Decree.

The City has provided the United States and the State with a proposal to modify Row 11.a. of the LTCP Update and eliminate the EHRT. The City has included technical analysis to support the City’s proposal. On August 3, 2022, the United States sent the City a letter informing the City that the United States did not support the City’s proposal to modify Row 11.a. The United States also represented that the State did not presently support the modification request due the absence of an alternative project. On September 12, 2022, Akron submitted a Notice of Dispute under Section XIV regarding the proposed modification of Row 11.a. The parties have engaged in informal negotiations under the Consent Decree dispute resolution provisions. On July 17, 2023, Akron submitted a Statement of Position to the United States and the State of Ohio invoking the formal dispute resolution procedures under Paragraph 72. On July 31, 2023, Ohio submitted a Statement of Position to the other parties confirming that Ohio supports Akron’s proposed modification. On September 15, 2023, Akron filed its Motion for Judicial Review of Dispute Regarding the EHRT. Akron’s Motion requests that the Court replace the requirement for the EHRT with an alternative set of projects. On September 29, 2023, the United States filed a Memorandum in Opposition to Akron’s Motion. Also on September 29, 2023, Ohio filed a

Memorandum in Support of Akron's Motion. Akron filed its Reply on October 6, 2023. Akron's Motion is currently pending before the Court.

It is Akron's position (which is shared by Ohio) that the deadlines for the EHRT have been stayed pursuant to Paragraph 67 of the Consent Decree. On October 11, 2023, the United States filed a Notice of Update to its October 6, 2023, Status Report representing that the United States disagreed with the representations made in Akron's and the State of Ohio's prior status reports that the stay provision in Paragraph 67 of the Consent Decree applies to the EHRT deadlines in Row 11.a. of the LTCP update. On October 20, 2023, Akron filed its Response to the United States' Update. On that same day Akron also submitted a Notice of Dispute to the United States and Ohio regarding the applicability of the stay provisions in Paragraph 67 of the Consent Decree to the EHRT deadlines. The Parties are currently engaged in the informal negotiation process under the Consent Decree dispute resolution procedures regarding this issue.

2.B Progress Towards Completing Milestones in Approved LTCP Update

Progress on completing milestones, including status of progress toward Achievement of Full Operation, for each of the WPCS and CSO Control Measures set forth in the approved LTCP Update is provided in Table 2-2. The Consent Decree was entered January 17, 2014, and amendments were entered on September 20, 2016, December 17, 2019, and November 28, 2023. In addition, under USEPA's Integrated Plan Framework, during this reporting period the City continued with Long Term Control Plan Optimization to evaluate and identify alternative solutions for the controls listed in the LTCP Update that have yet to be constructed.

Completed projects or rows that are no longer applicable are shaded gray.

**Table 2-2 Status of Progress and Cost Incurred During Reporting Period
For Control Measures Set Forth in Approved LTCP Update**

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
1	Rack 3	Green infrastructure plus optimized conveyance	Bidding of Control Measure – June 30, 2018. Achievement of Full Operation – November 30, 2020.	The Court entered the Second Amendment to the Consent Decree December 17, 2019, which replaced the storage basin with Green infrastructure plus optimized conveyance. Kelly Conveyance (CSO Rack 3) Notice to Proceed was issued on December 5, 2019. Achievement of Full Operation occurred on November 9, 2020. Chittenden Green Project (CSO Rack 3) Notice to Proceed was issued on May 7, 2019. Achievement of Full Operation occurred on May 5, 2020. Duane Green Project (CSO Rack 3) Notice to Proceed was issued on January 14, 2020. Achievement of Full Operation occurred on November 25, 2020.	No costs were incurred during the reporting period.
1.a.	Rack 3	Develop and implement GI O&M Plans	Submit O&M Plan in accordance with Exhibit 7, no later than August 30, 2020	The City submitted the required GI O&M Plan on August 26, 2020. U.S. EPA provided the City of Akron with written comments to the GI O&M Plan on November 18, 2020, and the parties discussed U.S. EPA’s comments on November 19, 2020. The City of Akron then revised the GI O&M Plan to address U.S. EPA’s comments and provided the revised version to U.S. EPA on December 10,	

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
				2020. On December 17, 2020, U.S. EPA informed the City of Akron that the revised plan was acceptable. The City formally submitted the revised O&M Plan on January 27, 2021, and U.S. EPA subsequently issued a formal approval.	
2	Rack 5 and 7	Green Infrastructure and Sewer Separation (Per Exhibit 3)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Project complete. Achievement of Full Operation occurred on October 26, 2017.	No costs were incurred during the reporting period.
3	Racks 10 and 11	Storage Basin(s)	Bidding of Control Measure – June 30, 2018. Achievement of Full Operation – December 31, 2020.	The Court entered the Second Amendment to the Consent Decree December 17, 2019, which increased the size of the storage basin from 2.5 to 4.5 MG. Achievement of Full Operation occurred on July 23, 2020. Punch list is complete, finalizing remaining costs.	Project costs incurred during the reporting period were approximately \$9,439.00.
4	Rack 12	Storage Basin(s)	Bidding of Control Measure – November 30, 2014. Achievement of Full Operation – October 31, 2017.	Project Complete. Achievement of Full Operation occurred on October 30, 2017.	No costs were incurred during the reporting period.
5	Rack 14	Storage Basin(s)	Bidding of Control Measure – October 31, 2014.	Project Complete.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
			Achievement of Full Operation – April 30, 2017.	Achievement of Full Operation occurred on January 3, 2017.	
6	Rack 15	Storage Basin(s)	Bidding of Control Measure – November 30, 2013. Achievement of Full Operation – October 31, 2015.	Project complete. Project placed in service on October 30, 2015. Achievement of Full Operation occurred on February 17, 2016.	No costs were incurred during the reporting period.
7	Rack 22	Storage Basin(s)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – December 31, 2017.	Project complete. Achievement of Full Operation occurred on November 29, 2017.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
8	Rack 26 and 28	Green infrastructure plus optimized conveyance	Bidding of Control Measure – October 31, 2021. Achievement of Full Operation – December 31, 2022.	The Court entered the Second Amendment to the Consent Decree December 17, 2019, which replaced the storage basin with Green infrastructure plus optimized conveyance. Construction of the Aqueduct Green Street Improvements project was completed on December 17, 2018. The Rack 26 construction was completed on December 19, 2022. The Rack 28 work was completed as a change order to the Rack 27 and 29 project to coordinate with other work on Memorial Parkway. Construction was completed on May 6, 2022. Achievement of Full Operation occurred on December 22, 2022.	No costs were incurred during the reporting period.
8.a.	Rack 26 and 28	Develop and implement GI O&M Plans	Submit O&M Plan in accordance with Exhibit 7, no later than March 1, 2019	U.S. EPA issued an approval of the City's O&M Plan on October 23, 2019. GI performance reporting is provided in Appendix H.	Costs are reported in Section 2C as part of the overall Program costs.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
9	Rack 27	Optimized conveyance	Bidding of Control Measure – January 31, 2018. Achievement of Full Operation – December 31, 2019.	The Court entered the Second Amendment to the Consent Decree December 17, 2019, which replaced the storage basin with optimized conveyance. The Notice to Proceed was issued on November 5, 2018. Achievement of Full Operation occurred on December 21, 2019. Final site work and punch list work is ongoing.	No costs were incurred during the reporting period.
9.a.	Rack 29	Optimized conveyance	Bidding of Control Measure – January 31, 2018. Achievement of Full Operation – December 31, 2019.	See Row 9 above for project update.	See Row 9 above for project costs.
10	Rack 36	Green Infrastructure and Sewer Separation (Per Exhibit 3)	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Achievement of Full Operation occurred on October 30, 2017. Construction was substantially complete as of September 15, 2017. Final punch list work is completed.	No costs were incurred during the reporting period.

<p>11</p>	<p>Racks 4, 16, 17, 18, 19, 20, 23, 24, 37</p>	<p>Ohio Canal Tunnel – Construct a 28-foot internal diameter tunnel, 5,500 feet in length, or any other combination of diameter and length that achieves the design criteria.</p>	<p>Bidding of Control Measure – April 30, 2014.</p> <p>Achievement of Full Operation – December 31, 2018.</p>	<p>Notice to Proceed was issued on November 6, 2015.</p> <p>On September 21, 2017, the City submitted a notification that the City has reason to believe that the Ohio Canal Interceptor Tunnel (OCIT) project will not meet the Achievement of Full Operation deadline. The City submitted an amendment to this notification on October 17, 2017. The parties then participated in a conference call on November 29, 2017, and further discussed the status of the schedule of the project. The parties agreed that the City would submit periodic updates on the status of the schedule of the project. The City continued to provide U.S. EPA and Ohio EPA with updated during this reporting period.</p> <p>The OCIT was placed into operation in stages. The racks controlled by the OCIT were tied into, and then controlled by, the OCIT beginning on March 3, 2020. As of May 29, 2020, over 90% of the flow from the racks was tied into and controlled by OCIT. The remaining racks were tied into the OCIT as of June 13, 2020. See Table 2-3 below for the tie in dates of the racks and the associated percentage of total flow.</p> <p>Achievement of Full Operation occurred on June 29, 2020, with the submission of O&M Plans.</p> <p>Construction was substantially complete as of June 7, 2021.</p>	<p>Project costs incurred during the reporting period were approximately \$2,670,000.00.</p>
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Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
11a	Racks 16, 17, 18, 19, 20, 23, 24	Ohio Canal Tunnel – ACTIFLO™ Ballasted Flocculation Unit or equivalent technology that meets the Design and Performance Criteria and Disinfection.	<p>Bidding of Control Measure – April 30, 2024.</p> <p>Achievement of Full Operation – October 31, 2027.</p> <p>It is Akron’s position that these deadlines have been stayed pursuant to Paragraph 67 of the Consent Decree.</p>	<p>The City updated the model to account for the actual OCIT configuration and engaged in flow monitoring activities to recalibrate the model. The parties engaged in multiple discussions regarding the reduced overflow volume at the OCIT and Akron’s position that it is no longer cost effective to treat the remaining overflows with the EHRT. There parties are currently engaged in dispute resolution regarding Akron’s proposal to modify this control measure, and pursuant to the dispute resolution provisions of the Consent Decree, Akron has filed a Motion with the Court requesting that the Court resolve the dispute and replace the EHRT with an alternative set of projects. Akron’s Motion is pending before the Court.</p>	<p>Costs were incurred on the EHRT preliminary design, but not expended as the consultant contract is still being finalized.</p> <p>Expended costs will be provided in next report.</p>
12a	Racks 32, 33, 35	<p>Northside Interceptor Tunnel -Construct a 16-foot internal diameter tunnel, 6850 feet in length or any other combination of diameter and length that achieves the design criteria</p> <p>(Amendment No. 3).</p>	<p>Bidding of Control Measure – April 30, 2023.</p> <p>Achievement of Full Operation – December 31, 2026.</p>	<p>The Court entered the Third Amendment to the Consent Decree November 28, 2023, which provided for a smaller 16-foot internal diameter tunnel.</p> <p>Control Measure Advertised: April 20, 2023</p> <p>The construction contract was awarded on July 10, 2023. The construction funding was awarded by Ohio EPA in August. The Notice to Proceed was given on September 1, 2023. The contractor mobilized to the site, set up their field offices, established utility services, began construction of access roads, and finalized the purchase agreement for the mainline Tunnel Boring Machine.</p>	<p>Project costs incurred during the reporting period were approximately \$12,026,532.84.</p>

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
12b	Rack 34	The Riverside Sewer Separation Project - Construction of new storm sewers in the North Hill neighborhood located along Riverside Drive and along streets that are located between Big Falls and Drexel Avenue. (Amendment No. 3).	Bidding of Control Measure – December 31, 2022 Sewer Separation Substantially Complete – December 31, 2024 Rack 34 Overflow Structure Eliminated – December 31, 2026 A preconstruction meeting was held. Work began on utility relocations and water main offsets.	The Court entered the Third Amendment to the Consent Decree November 28, 2023, which requires the separation of the Rack 34 combined sewers. Control Measure Advertised: November 15, 2022 Construction is underway.	Project costs incurred during the reporting period were approximately \$368,422.66.
13a	WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130MGD by implementing step feed operation in Train 6, as described in Paragraph 10.A of the Consent Decree.	Bidding of Control Measure – October 31, 2011. Achievement of Full Operation – October 15, 2013.	Project complete (see Section 1.A of this Semi-Annual Report).	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
13b	WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130MGD by performing the upgrades identified in the Consent Decree in Section V.10. C.	Bidding of Control Measure – January 15, 2016. Achievement of Full Operation – October 15, 2017.	Since the Final Demonstration Testing Evaluation Report concluded that the step feed and clarifier upgrades to Unit 6 have achieved 30 MGD of wet weather treatment capacity, this Consent Decree item is not required.	No costs were incurred during the reporting period.
14	WPCS Phase 1 BioACTIFLO™ Wet Weather Treatment Pilot Study (the “Pilot Study”)	Conduct the Pilot Study in accordance with Exhibit 1 to this Long-Term Control Plan Update.	Pilot Study Start Date – May 1, 2012. Pilot Study Completion Date – November 30, 2013. Pilot Study Report submitted to EPA by December 31, 2013.	Study is complete. USEPA issued a concurrence letter on April 8, 2015.	No costs were incurred during the reporting period.
15	WPCS Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to 170 MGD.	Bidding of Control Measure – February 28, 2019. Achievement of Full Operation – December 31, 2021.	This project was replaced by WPCS Alternative Plan A Phase 2 – Part 1 per US EPA approval of Alternate Plan A on February 11, 2016.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
16	WPCS Phase 2 – Part 2*	Install BioACTIFLO™ ballasted flocculation to treat all flow that does not receive conventional secondary treatment. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017. Achievement of Full Operation – April 30, 2019.	This project was replaced by WPCS Alternative Plan A Phase 2 – Part 2 per US EPA approval of Alternate Plan A on February 11, 2016.	No costs were incurred during the reporting period.
17	WPCS Alternative Plan A – Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan A approved by USEPA.	Bidding of Control Measure – April 30, 2017. Achievement of Full Operation – April 30, 2019.	USEPA issued an approval of Alternative Plan A on February 11, 2016, to upgrade conventional secondary treatment capacity to 220 MGD. The construction Notice to Proceed was issued on August 24, 2016. Project is complete. Achievement of Full Operation occurred on April 30, 2019. The sequence of the WPCS Alternative A Phase 2, Part 1(Row 17) and Phase 2 Part 2 projects was changed under the First Amendment to the Consent Decree, entered on September 20, 2016. The revised dates are shown in this report.	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
18	WPCS Alternative Plan A – Phase 2 – Part 2*	Install – BioCEPT to achieve a minimum capacity of 60 MGD. In addition, all flows receiving BioCEPT shall receive disinfection during the recreation season.	<p>Bidding of Control Measure – February 28, 2019.</p> <p>Achievement of Full Operation – December 31, 2021.</p>	<p>BioCEPT is to achieve a minimum sustained capacity of 60 MGD.</p> <p>Achievement of Full Operation occurred on December 27, 2021.</p> <p>Work on the punch list is ongoing.</p> <p>The BioCEPT Demonstration Study Final Report was submitted on February 16, 2023.</p> <p>The sequence of the WPCS Alternative A Phase 2, Part 1 (Row 17) and Phase 2 Part 2 projects was changed under the First Amendment to the Consent Decree, entered on September 20, 2016. The revised dates are shown in this report.</p> <p>The Court entered the Second Amendment to the Consent Decree December 17, 2019, which replaced the BioACTIFLO facility with a BioCEPT facility and an additional demonstration study. The replacement project was approved by USEPA and Ohio EPA, see Section 2.A.2.</p>	<p>Project costs incurred during the reporting period were approximately \$55,459.52.</p>

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
19	WPCS Alternative Plan B – Phase 2 – Part 1*	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan B approved by USEPA.	Bidding of Control Measure – December 31, 2019. Achievement of Full Operation – December 31, 2021.	Not Applicable	No costs were incurred during the reporting period.
20	WPCS Alternative Plan B – Phase 2 – Part 2*	Install BioACTIFLO™ ballasted flocculation to achieve the minimum capacity specified in Alternative Plan B approved by USEPA. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017. Achievement of Full Operation – April 30, 2019.	Not Applicable	No costs were incurred during the reporting period.

*Alternative Plan to Upgrading Conventional Secondary Treatment to 170 MGD:

- 1) If US EPA approves in writing an Alternative Plan A, in accordance with Exhibit 2 to the LTCP update, then Akron shall implement the control measures specified in the First Amendment in Rows 17 and 18, instead of the control measures specified in Rows 15 and 16
- 2) If US EPA approves in writing an Alternative Plan B, in accordance with attachment to the LTCP update, then Akron shall implement the control measures specified in the First Amendment in Rows 19 and 20, instead of the control measures specified in Rows 15 and 16

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
(2) Collection System Measures					
21	Main Outfall Sewer Upgrades – Phase I	Installation of pneumatically placed steel reinforced mortar cap over the entire length of the brick-arch section of the Main Outfall Interceptor (“MOI”) that runs between Survey Station 83+00 and the rectangular bridge section that is located upstream of the WPCS (“the Bridge Section”). The Bridge Section is not of brick-arch construction, and the approximately 400-foot portion of the MOI between the Bridge Section and the WPCS is covered with soil. As part of Phase I, a limited amount of additional soil will be added to the brick-arch portion of the MOI between the Bridge Section and the WPCS headworks.	Bidding of Control Measures: May 4, 2016 Achievement of Full Operation: November 30, 2017.	Project complete. Achievement of Full Operation occurred on November 22, 2016.	No costs were incurred during the reporting period

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
22	Main Outfall Sewer Upgrades – Phase II	Additional soil will be added to the soil cap on the brick-arch portion of the MOI between the Bridge Section and the WPCS headworks, after the completion of, and subject to the results of, a geotechnical and engineering evaluation will be to determine the amount of additional soil cover, up to 2 feet, that can be placed on the remaining brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks without causing excessive settlement of that portion of the MOI. The parties understand that the City may eliminate and/or improve some of the brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks project. Any improvements to the brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks through construction of a proposed WPCS headworks project. Any improvements to the brick-arch portion of the MOI between the Bridge Section and the existing WPCS headworks project shall ensure structural integrity such that the improved portion of the enclosed conduit of the MOI withstands at least 5 feet of surcharge.	<p>Completion of engineering evaluation: May 30, 2017</p> <p>Completion of placement of additional soil: November 30, 2017</p>	<p>Project complete.</p> <p>Engineering evaluation completed and submitted to EPA on May 22, 2017.</p> <p>Achievement of Full Operation for the Soil Cap occurred on November 15, 2017.</p>	No costs were incurred during the reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
23	Main Outfall Sewer Inspection	Perform inspection and rehabilitation consistent with the Main Outfall Sewer Supplement to the Approved CMOM Program as outlined in Section VII of the Consent Decree	Full Operation shall be maintained consistent with Main Outfall Sewer Supplement to the Approved CMOM Program	Project complete.	No costs were incurred during the reporting period.

Table 2-3 Ohio Canal Interceptor Tunnel (OCIT) Flow Release Dates as of June 15, 2020

SEWER	FINAL RELEASE DATES	OVERALL	APRIL STORM	JULY STORM	AUGUST STORM
RACK 18	3/9/2020	28.81%	33.75%	26.68%	27.16%
RACK 19	4/16/2020	7.32%	5.98%	7.85%	7.83%
RACK 16 EAST	4/28/2020				
RACK 4	4/30/2020	2.71%	1.99%	3.03%	2.93%
RACK 17	5/5/2020	9.72%	8.33%	10.37%	10.11%
RACK 23	5/7/2020	0.35%	0.29%	0.37%	0.37%
RACK 37	5/13/2020	2.66%	2.52%	2.71%	2.70%
RACK 20	5/13/2020	0.47%	0.50%	0.46%	0.47%
RACK 38	5/21/2020				
RACK 16 WEST	5/29/2020	38.55%	31.89%	42.31%	39.75%
RACK 4 underflow	5/30/2020				
OCI	6/3/2020				
MARKET ST.	6/10/2020	1.43%	1.71%	1.23%	1.44%
RACK 24	6/13/2020	6.98%	12.27%	3.94%	6.11%
TOTAL		99.00%	99.23%	98.95%	98.87%

2.C Project Cost Incurred

Project costs incurred by the City during the reporting period for each of the WPCS and CSO Control Measures set forth in the approved LTCP Update are provided in Table 2-2. The City incurred additional costs for regulatory support, design management, program controls, technical and right of way support, GI operation and maintenance and program management in the amount of approximately \$781,559.49 during the reporting period.

2.D Status of Implementation of the Post-Construction Monitoring Program

The Post-Construction Monitoring Program (PCMP) was submitted on August 15, 2010, and in the revised Long-Term Control Plan on February 29, 2011. In response to comments from U.S. EPA, the City submitted a revised Program on December 14, 2012. U.S. EPA has recently asked the City to update the PCMP to reflect the changes in control measures due to the First and Second Amendment of the Consent Decree. The City is in the process of updating the PCMP for all three of the approved amendments accordingly.

2.E Listing of All CSO Discharges

CSO discharges from each CSO Outfall for the period July 1, 2023, through December 31, 2023, are listed in Appendix B. The listing also provides data on the depth and duration of rainfall at each of the City's thirteen (13) rain gauges. Racks 5, 7, 8, 9, 13, 20, 21, 23, 25, 30, 31, 36, 38 and 39 are not included in the table. Racks 13, 8, 25, 9 and 39 were separated on June 14, 2016, May 21, 2012, April 26, 2012, July 27, 2004, and August 18, 2000, respectively. Racks 5, 7, 21 and 36 were separated on October 13, 2017, October 3, 2017, July 18, 2017, and August 16, 2017, respectively. Rack 30 was separated on November 9, 2017. Racks 20 and 23 were tied into the OCIT and the discharge point eliminated on May 13, 2020, and May 7, 2020, respectively. Rack 31 discharges are included with Rack 40 (Cuyahoga Street Storage Facility). Rack 38 is a diversion chamber that routes flow within the combined sewer system.

2.F Status of Development of the Supplemental Compliance Plan

As of this reporting period, the Supplemental Compliance Plan is not required.

2.G Status of Public Participation Plan Implementation

The City of Akron continued its public participation program with regular updates to the AWR! Stakeholders Group, formally known as the Integrated Plan Stakeholder Group and as the CSO Community Action Group (CAG), prior to that. During the reporting period, the following IP Stakeholder group meeting was held:

- AWR! Stakeholders Meeting, August 10, 2023

The City's public participation efforts also included presentations made at the following events and public meetings during the reporting period:

- Blue Heron Homecoming 2023, Clean Water: Back to Basics, June 24, 2023
- City of Akron Press Conference, Update to Federal Consent Decree, July 18, 2023

- Cleansing the Cuyahoga River: Recent Issues and Challenges, Sierra Club, November 21, 2023

Copies of presentations and distributed materials are included in Appendix C.

The City of Akron has posted updated program information to the Akron Waterways Renewed (AWR!) website (www.akronwaterwaysrenewed.com), in addition the website has been redesigned. Figure 2-1 is a picture of the home page of the AWR! website.

The City of Akron also maintains a Facebook page for the Akron Waterways Renewed! Program. The link for this page is www.facebook.com/akronwaterwaysrenewed. Figure 2-2 represents the Facebook page for the program.

A Twitter account has been established to communicate program updates and general interest topics. The account is @AkronWaterways. Instagram @AkronWaterwaysRenewed has allowed the program to share and showcase the many improvements that are a result of the projects and stakeholder collaborations. Figure 2-3 is a picture of the Twitter page for AWR!

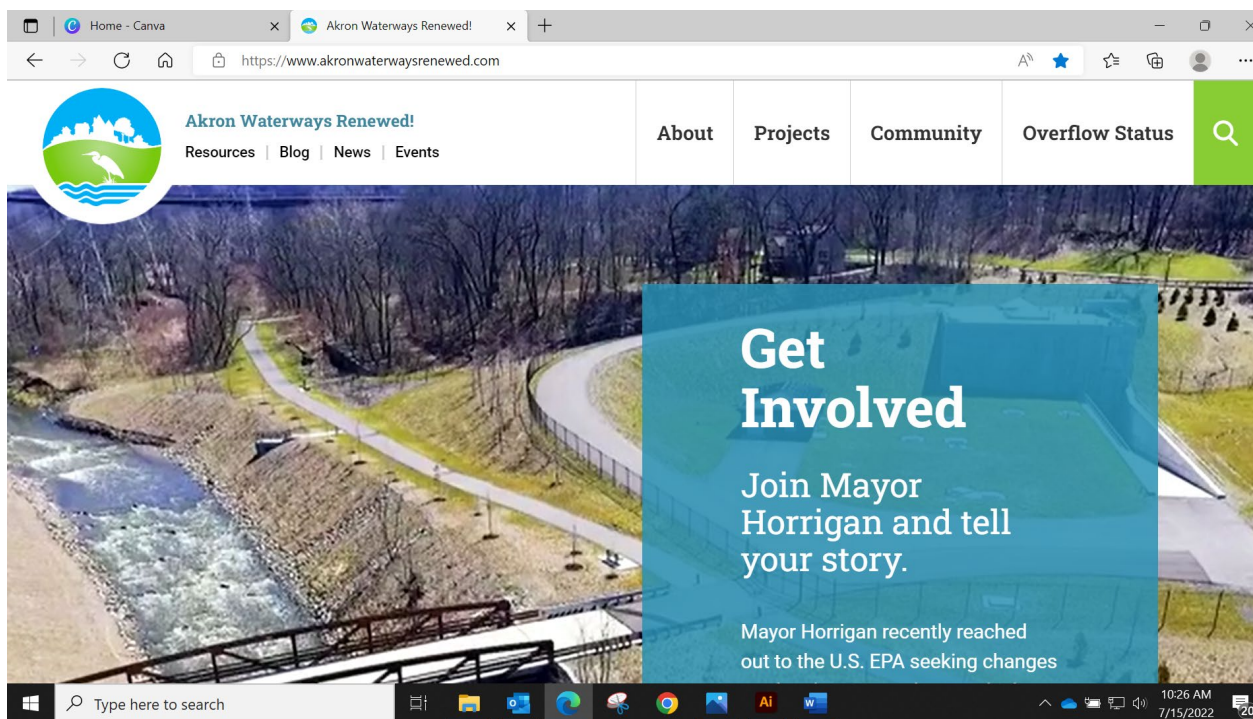


Figure 2-1 Akron Waterways Renewed Home Webpage

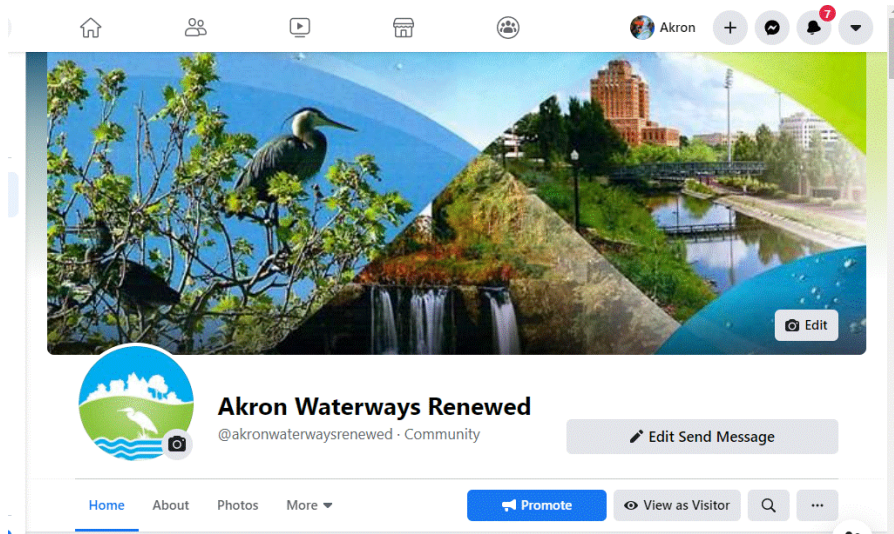


Figure 2-2 Akron Waterways Renewed Facebook Page



Figure 2-3 Akron Waterways Renewed Twitter Page

Section 3: CMOM, Grease Control, and Emergency Response Programs

3.A *List of all SSO and CSS Releases During Reporting Period*

Appendix D provides a list of SSOs and CSS Releases, including Building/Property Backups, during the reporting period.

3.B *System Inspection*

Table 3-1 provides the number of miles and percentage of system inspected during the reporting period.

3.C *Manhole Inspection*

Table 3-2 provides the number and percent of manholes inspected during the reporting period.

3.D *System Cleaning*

The number of miles and percentage of the system cleaned during the reporting period is provided in Table 3-3.

3.E *List of Defects*

The comprehensive list of defects identified in Akron's system, and a list identifying acute defects, and a schedule to repair the defects (including date repaired if the defect has already been repaired) are included in Appendices E and F.

Table 3-1 System Inspection

Period	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
	Miles Inspected	Percentage Inspected	Miles Inspected	Percentage Inspected	Miles Inspected	Percentage Inspected	Miles Inspected	Percentage Inspected
July 1 - December 31, 2023	41.84	4.98*	191.01	22.73*	696.72	82.90*	738.56	87.88*

*Based on 840.45 miles in system

Table 3-2 Manhole Inspection

Period	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
	Manholes Inspected	Percentage Inspected	Manholes Inspected	Percentage Inspected	Manholes Inspected	Percentage Inspected	Manholes Inspected	Percentage Inspected
July 1 - December 31, 2023	961	5.04**	3129	16.40**	14343	75.16**	15304	80.20**

**Based on 19,083 manholes in system

Table 3-3 System Cleaning

Period	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
	Miles Cleaned	Percentage Cleaned	Miles Cleaned	Percentage Cleaned	Miles Cleaned	Percentage Cleaned	Miles Cleaned	Percentage Cleaned
July 1 - December 31, 2023	41.84	4.98*	191.01	22.73*	696.72	82.90*	738.56	87.88*

*Based on 840.45 miles in system

3.F Maintenance and Training Activities

- A. Pump stations and force main preventive maintenance activities were conducted in accordance with Item 2.E of the approved CMOM program.
- B. 961 manholes were inspected during the period beginning July 1, 2023, through December 31, 2023, and no manholes have been documented to have signs of heavy infiltration.
- C. The following sewer construction and rehabilitation projects were completed or are ongoing within the City of Akron during the reporting period:
 - a) Sanitary Sewer Reconstruction 2019 Large Diameter Lining (File 2018-018-01)
To rehabilitate the City's sanitary and combined sewer system, part of the City's annual sewer reconstruction program.
 - b) Sanitary Sewer Reconstruction 2021 Small Diameter Lining (File 2020-025-00)
To rehabilitate the City's sanitary and combined sewer system, part of the City's annual sewer reconstruction program.
 - c) Sanitary Sewer Reconstruction 2021 Large Diameter Lining (File 2020-025-01)
To rehabilitate the City's sanitary and combined sewer system, part of the City's annual sewer reconstruction program.
 - d) Lower Northside Interceptor Lining (File 2022-009-00)
CIPP lining of approximately 6,400 lineal feet of the 36"/39"/48" Northside Interceptor (NSI). The project also includes spray lining existing manholes.
 - e) Mull Avenue Improvements (File 2018-014-00)
Construction of full roadway improvements and utilities along Mull Avenue between S Hawkins and Schneider Park Drive.
 - f) East Exchange Complete Streets (File 2018-023-00)
Construction of full roadway improvements and utilities along East Exchange Street between Fountain Street and Arc Street.
 - g) Riverside Sewer Separation (CSO Rack 34) (File 2021-033-01)
Installing approximately 10,102 lineal feet of 12" – 42" storm sewer, 58 manholes, & 77 catch basins. The project also includes CIPP of existing sanitary sewers.
 - h) Northside Interceptor Tunnel (File 2021-033-00)
Construct a 16.5 ft. diameter tunnel, 6,660 feet long from Peck Rd. to Front St., to collect flows from Rack 35, Rack 34 (Separation), Rack 33, and Rack 32. This project also includes CIPP of existing sanitary sewers.

- i) Goodyear Bridge Replacement (File 2020-012-00)
Replacement of the existing bridge over the Wheeling and Lake Erie Railroad which included 103 lineal feet of sanitary sewer installation.
- j.) Lock 3 Vision Plan (File 2021-036-00)
Improvement of existing entertainment area off S. Main St., north of E. State St., which includes installation of 286 ft of 18” sanitary sewer along with the installation of one new manhole.

D. Root control program activities were conducted in accordance with Item 2.K of the approved CMOM program. As a component of the Accelerated Cleaning and Inspection Program, the Root List requires more frequent attention than the system wide maintenance activities. The City’s approach is to inspect each of these root list locations on a modified schedule and provide cleaning only when it is determined those pipes need maintenance.

E. Training activities were conducted on the following topics. Date of training and number of employees receiving training are indicated in Table 3-5.

Table 3-5 Training Activities

Date	Course Title/Description	Number of Employees
7/25/2023	Aeration Blowers	2
8/2/2023	Phosphorus and Total Nitrogen Removal	2
8/17/2023	Thickening 101	3
9/21/2023	Unlocking Solar Incentives	4
10/16/2023, 11/13/2023	New Employee/Confined Space/Trench Excavation	3
10/17/2023, 10/18/2023	2023 SORNP Yearly Training	41
10/19/2023	Trench Safety	7
11/9/2023	The Wisdom of Green Infrastructure	4
11/17/2023	Backhoe/ Trailer Training	14
12/7/2023	PFAS Source Tracking	5

3.G Grease Control Program

In accordance with Grease Control provisions in the approved CMOM program, this program includes inspection and/or cleaning of the known FOG trouble locations, which is part of the Accelerated Cleaning and Inspection Program.

3.G.1 List of SSO and CSS Releases Caused by Fats, Oils, and Grease (FOG)

Table 3-6 Releases Caused by Fats, Oils and Grease

Date	Location	Type of Release (SSO, Rack, Property Backup)	Add to FOG Trouble Spot List
8/26/2023	2259 East Ave	Property Backup	Yes
9/27/2023	1026 Haynes St.	Property Backup	Yes
11/16/2023	2160 18 th St SW	Property Backup	Yes
11/16/2023	2167 18 th St SW	Property Backup	Yes
12/14/2023	1018 Haynes St	Property Backup	Yes

3.G.2 List of FOG Locations

A complete list of FOG Locations inspected and/or cleaned during the reporting period is included in Appendix G.

As stated in previous Semi-Annual Reports, to optimize the current schedule for the cleaning of locations suspected to have recurring grease accumulation, in 2013, the City began the CCTV inspection of each grease location on or around the next scheduled cleaning cycle to determine if significant grease accumulation has occurred. Based on the findings of the CCTV inspection, the frequency of cleaning at each grease location is adjusted accordingly. With the improvements initiated to control FOG at the source, it is anticipated that scheduled cleaning will be less efficient than periodic inspection, and cleaning only when needed.

3.G.3 FOG Education Efforts Undertaken During Reporting Period

The following educational efforts were undertaken and completed during the reporting period:

- A. The City of Akron developed a website (<https://www.akronohio.gov/>) which includes a FOG page (<https://www.akronohio.gov/cms/site/FOG/index.html>) identifying the effects of fats, oils, and grease discharged into the sewer system and things property owners can do to prevent aforementioned discharges.
- B. Akron Waterways Renewed Team developed a Program website (<http://akronwaterwaysrenewed.com>) which includes the City’s educational FOG brochure (<https://www.akronwaterwaysrenewed.com/sites/default/files/docs/clean-sewers-are-happy-sewers.pdf>) among the topics covered was that of the proper handling of fats, oils, and grease.

3.H Green Infrastructure Performance Reporting

Green Infrastructure Performance Reporting can be found in Appendix H.

Section 4: Mud Run Pump Station

4.A Status of Mud Run Study and Report of Findings

Status of Study and Report of Findings	No activity during this reporting period. The Report of Findings was submitted to USEPA on January 15, 2012.
Date of Report Completion	No activity during this reporting period. Report of Findings submitted on January 15, 2012, per the Consent Decree.
Project Cost Incurred During Reporting Period	Report complete. No costs incurred during the reporting period.

4.B Status of Mud Run Pump Station Remedial Report

Status of Remedial Report	The Remedial Report is complete.
Date of Report Completion	The Remedial Report was completed on October 15, 2012. Additional comments were received after completion and were included in the revised Remedial Report submitted on August 13, 2013. Final written approval dated February 26, 2014 was received via email on March 3, 2014.
Project Cost Incurred During Reporting Period	Report complete. No costs incurred during the reporting period.

4.C Status of Mud Run Pump Station Design and Construction of Projects

Projects Status Table 4-1 shows the current status of the Mud Run Pump Station design projects. Table 4-2 shows the current status of the Mud Run Pump Station construction projects.

Table 4-1 Status of Mud Run Pump Station Design Projects

Project	Status
Mud Run Trunk Sewer Lining	Design complete
Sevilla Trunk Sewer Reconstruction	Design complete
Mud Run Pump Station Improvements	Design complete
Mud Run Storage Basin Improvements	Design complete

Mud Run District Capacity Improvements	Design complete
Mud Run District Infiltration/Inflow Improvements	Design complete

Table 4-2 Status of Mud Run Pump Station Construction Projects

Project	Status
Mud Run Trunk Sewer Lining	Construction is 100% complete
Sevilla Trunk Sewer Reconstruction	Substantially complete as of December 24, 2021
Mud Run Pump Station and Storage Basin Improvements***	Construction is 100% complete
Mud Run District Capacity Improvements***	Construction is 100% complete
Mud Run District I/I Repairs	Construction is 100% complete
Mud Run District I/I Rehabilitation	Construction is 100% complete
NOTE: *** projects indicate those required for CD compliance.	

Construction of the Mud Run Pump Station and Storage Basin is complete.

Mud Run District I/I Repairs is complete.

Mud Run District I/I Rehabilitation is complete.

The Mud Run District Capacity Improvements project is complete.

Anticipated Date of Report Completion

The Report of Findings was completed on January 15, 2012. The Remedial Report was submitted on August 13, 2013. Approval of the Remedial Report was issued on February 26, 2014. On October 31, 2014, a letter was issued by USEPA that agrees to extend the October 15, 2015, construction deadline set forth in paragraph 25 of the Consent Decree to January 8, 2016, in order to construct and achieve full operation of the projects approved under the Mud Run Pump Station Remedial Report. The projects marked with *** will require an Achievement of Full Operation date of January 8, 2016, to be in compliance with the Consent Decree. The other projects are not required to be completed by January 8, 2016, since the anticipated I/I reductions were not used in determining the required storage basin capacity to meet the Consent Decree requirements.

Project Cost Incurred During Reporting Period

Mud Run District Capacity Improvements - Project complete
Mud Run Pump Station & Storage Basin - Project complete
Mud Run District I/I Repairs - Project complete
Mud Run District I/I Rehabilitation - Project complete
Sevilla Trunk Sewer Reconstruction – Project complete

Section 5: Supplemental Environmental Project

The City's third and final payment to the Supplemental Environmental Project (SEP) escrow account was made during the January – July 2011 reporting period. At the request of the State of Ohio, the City transferred the funds in the SEP escrow account (\$905,972.49) to the Friends of the Crooked River, via wire transfer. The wire transfer occurred on October 13, 2017, and the State of Ohio was provided with confirmation of the wire transfer. The City is not required to do anything further regarding the SEP.

Section 6: Other Necessary Information

On October 31, 2014, U.S. EPA and Ohio EPA approved the City's request to remove certain manholes and sewer segments from the City's CMOM inspection and cleaning program. The list included three sewer segments that are tributary to the Ohio Canal Interceptor and were scheduled to be abandoned at the time that the OCIT becomes operational. (Subsequent to receiving the October 31, 2014, letter, the City renumbered segment ID 367480 to 755830.) Page 3 of the letter includes the following provision related to the three specific sewer segments that are tributary to the Ohio Canal Interceptor:

If the City chooses not to abandon or eliminate these sewers by December 31, 2018, you must notify EPA and OEPA of this decision in writing, and you will have to inspect, clean, provide a conditional assessment and correct deficiencies in compliance with Attachment C, Section 2 of the CD no later than April 30, 2019.

The City was unable to abandon these lines until the OCIT project had been completed and the tunnel became operational. The City submitted its original request to remove these segments from the CMOM inspection and cleaning cycle because these segments carry high velocity flows that prevent the City from inspecting and cleaning the segments. Due to the high velocity flows, it is believed that these sewer segments are self-cleaning.

The City determined to abandon two of these segments at the time the OCIT tunnel became fully operational on June 13, 2020. Segment 368243 will not be abandoned. On August 3, 2020, the segment was inspected and defects to the invert of the brick sewer were identified. As a result of the inspection that City was able to confirm that this segment was self-cleaning due to the high velocity flows. As a result, no additional cleaning was required for this segment. Invert repairs were made on September 24, 2020 and the segment was reinspected on September 29, 2020. This segment was lined in March 2021.