

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

V.

CITY OF AKRON, OHIO

and

THE STATE OF OHIO,

Defendants.

CASE NO. 5:09-cv-00272

JUDGE JOHN R. ADAMS

FOURTH AMENDMENT TO CONSENT DECREE

WHEREAS, this Fourth Amendment to Consent Decree (“Fourth Amendment”) amends the consent decree following modifications that the Ohio Environmental Protection Agency (“Ohio EPA”) made on December 19, 2025, to the effluent limitations in the City of Akron’s (“Akron” or “the City”) National Pollutant Discharge Elimination System Permit pertaining to Akron’s combined sewer overflow (“CSO”) discharges, permit modifications that were made in response to the United States Supreme Court’s decision in *City and County of San Francisco, California v. Environmental Protection Agency*, 145 S. Ct. 704 (2025). Specifically, this Fourth Amendment (1) removes the requirement that Akron construct an Enhanced High Rate Treatment Facility (“EHRTF”) to treat discharges from the Ohio Canal Interceptor Tunnel (“OCIT”) and replaces that requirement with Performance Criteria limiting Akron to three

untreated CSO discharges per Typical Year and a total of 93.1 million gallons per Typical Year from the OCIT (while retaining the zero CSO discharge per Typical Year Performance Criteria applicable to all of Akron's other CSO outfalls); (2) adds monitoring, modeling, and reporting requirements for evaluating achievement of the Performance Criteria applicable to all of Akron's CSO outfalls; and (3) requires that Akron disinfect and dechlorinate discharges from the Akron Water Pollution Control Station ("WPCS") in April and November (Akron currently only disinfects and dechlorinates discharges from the WPCS in May through October).

WHEREAS, the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter on February 5, 2009. The complaint was amended on March 20, 2009. The amended complaint sought injunctive relief and civil penalties for, among other things, unauthorized discharges of sewage by the City from its combined and sanitary sewer system in violation of the Clean Water Act ("CWA"), 33 U.S.C. §§ 1311, 1319(b), and 1365(a). The State of Ohio ("State") was named as a defendant pursuant to Section 309(e) of the CWA, 33 U.S.C. § 1319(e). On May 11, 2009, the State filed a crossclaim against the City alleging violations of the CWA and related Ohio law, O.R.C. § 6111.

WHEREAS, the parties in this matter (the "Parties") entered into a Consent Decree (the "Consent Decree") resolving the claims of the United States and State.

WHEREAS, the City entered into the Consent Decree, without admitting the violations alleged by the United States and the State, to settle this case and avoid complicated, protracted, and expensive litigation.

WHEREAS, the Consent Decree, lodged on November 13, 2009, was entered on January 17, 2014.

WHEREAS, Paragraph 120 of the Consent Decree incorporates by reference the injunctive relief required pursuant to all “approved deliverables,” including the Long Term Control Plan (“LTCP”) Update. The City requested approval of the LTCP Update as a deliverable required by Paragraph 12 of the Consent Decree. The LTCP Update was approved by EPA in November 2011 and by Ohio EPA in April 2012.

WHEREAS, Paragraph 112 of the Consent Decree provides that material changes to the terms of the Consent Decree, including any attached appendices, must be approved in writing by all the Parties and the Court. Non-material changes are effective upon written agreement of the Parties. *Id.*

WHEREAS, under the terms of Exhibit 3 of the LTCP Update, on October 30, 2015, the United States approved the City’s requests to substitute green infrastructure, sewer separation, and increased conveyance capacity for storage basins required in Rows 2 and 10 of the LTCP Update.

WHEREAS, under the terms of Exhibit 2 to the LTCP Update, the City proposed to increase the size of the secondary treatment facilities at the WPCS. Alternative A, Rows 17 through 18 of the LTCP Update. This resizing was done under the terms of the LTCP Update itself and therefore did not require a change to the existing agreement. EPA approved the resizing request on February 11, 2016.

WHEREAS, at the request of the Parties, the Court entered the First Amendment to Consent Decree (the “First Amendment”) on September 20, 2016. The First Amendment provided for the following two modifications to the Consent Decree and the LTCP Update: (1) changed the sequencing of two elements of injunctive relief at the City’s WPCS; and (2) changed the method the City is required to use to address potential weaknesses in the Main Outfall Sewer.

WHEREAS, at the request of the Parties, the Court entered the Second Amendment to Consent Decree (the “Second Amendment”) on December 17, 2019. The Second Amendment made two modifications to the Consent Decree and the LTCP Update: (1) changed the technology used to treat secondary bypasses at the WPCS and added a requirement to implement a demonstration study; and (2) replaced the requirement to install certain storage basins with the requirement to install new control measures, including green infrastructure and increased conveyance, to control CSOs.

WHEREAS, at the request of the Parties, the Court entered the Third Amendment to Consent Decree (the “Third Amendment”) on November 28, 2023. The Third Amendment made two modifications to the Consent Decree and LTCP Update: (1) changed the size of the Northside Interceptor Tunnel (“NSIT”) that Akron is required to construct; and (2) added a new combined sewer separation project.

WHEREAS, the Parties have now agreed to additional proposed modifications to the Consent Decree and LTCP Update, as set forth in this Fourth Amendment. These proposed modifications are intended to (1) align the Consent Decree requirements with the effluent limitations in the modified National Pollutant Discharge Elimination System Permit issued by Ohio EPA on December 19, 2025, and ensure that Akron’s discharges of fecal coliform and *E. coli* bacteria are consistent with the wasteload allocation for Akron’s CSO discharges in the Total Maximum Daily Load (“TMDL”) that Ohio EPA established for the Lower Cuyahoga River and EPA approved in 2011 in accordance with Section 303(d) of the CWA, 33 U.S.C. § 1313(d); and (2) replace the Consent Decree’s current requirement that Akron develop and obtain approval of a Post-Construction Monitoring Program with the actual Post-Construction Monitoring Program that Akron must implement.

WHEREAS, this Fourth Amendment will be lodged with the Court for a period of not less than 30 days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw from or withhold its consent if the comments regarding this Fourth Amendment disclose facts or considerations indicating that the Fourth Amendment is inappropriate, improper, or inadequate. Akron and the State consent to entry of this Fourth Amendment without further notice and agree not to withdraw from or oppose entry of this Fourth Amendment by the Court, or to challenge any provision of the Fourth Amendment, unless the United States has notified Akron and the State in writing that the United States no longer supports entry of the Fourth Amendment.

WHEREAS, the Parties recognize, and the Court by entering this Fourth Amendment finds, that this Fourth Amendment has been negotiated at arms-length and in good faith, and that this Fourth Amendment is fair, reasonable, and in the public interest.

NOW THEREFORE, before the taking of any further testimony, without further adjudication of any issue of fact or law, and upon the consent and agreement of the Parties, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

1. The Consent Decree as currently amended shall remain in full force and effect in accordance with its terms except that the body of the Consent Decree, Attachment B to the Consent Decree, and the LTCP Update are modified as set forth below.
2. Paragraphs 15-17 in the body of the Consent Decree as currently amended are modified as follows:

15. ~~Development~~ **Implementation** of Post-Construction Monitoring Program. Akron shall **implement the** ~~develop and provide to U.S. EPA and OEPA a~~ Post-Construction Monitoring Program in accordance with Attachment B, within the timeframes set forth in **Attachment B** ~~Paragraph 17, below.~~

16. ~~[Purposefully left blank.] Implementation of Post-Construction Monitoring Program. Upon approval by U.S. EPA and OEPA, under Section XVII (Review and Approval Procedures), or upon decision by the Court under Section XIV (Dispute Resolution) pertaining to the Post-Construction Monitoring Program provided to U.S. EPA and OEPA under Paragraph 15, Akron shall perform the Post-Construction Monitoring Program in accordance with the provisions and schedule set forth therein.~~

17. Akron shall submit the documents required under this Section VI and Attachment A of the Consent Decree to U.S. EPA and OEPA in accordance with the schedule set forth below:

Table 1 – Schedule of Submissions

Documents	Dates
Updated NFA and supplement	November 30, 2009
Preliminary Report on Modeling to Predict Size and Number of Overflows	January 15, 2010
Preliminary Report on Cost/Benefit Comparison to Predict Sizes and Number of Overflows	March 15, 2010
CSO Control Measure Cost/Benefit Tables at Appendix 2 of Attachment A	May 15, 2010
Updated Financial Capability Information	May 15, 2010
Post-Construction Monitoring Program	August 15, 2010
Proposed Long Term Control Plan Update	August 15, 2010
Proposed Long Term Control Plan Update Report	August 15, 2010
Final Long Term Control Plan Update	October 15, 2010
Final Long Term Control Plan Update Report	October 15, 2010
Report on Revising WPCS Control Measure(s) if Akron achieves 130 MGD through secondary treatment using step feed	October 15, 2016
Report on Revising WPCS Control Measure(s) if Akron constructs the WPCS Contingency Project	October 15, 2017

3. Attachment B to the Consent Decree pertaining to development of a Post-Construction Monitoring Program is replaced by a new Attachment B that sets forth the Post-Construction Monitoring Program that Akron must implement. The new Attachment B is attached as Exhibit 1 to this Fourth Amendment.

4. The LTCP Update is revised to change Row 11, replace Row 11a and change footnote 3 as shown below:

- the Performance Criteria in Row 11 are revised as follows:

No more than ~~7-3~~ CSOs and 93.1 million gallons from the Ohio Canal

Interceptor Tunnel

All Racks in this Row ~~4 and 7~~: 0 CSOs

- Row 11a, which currently requires construction of ACTIFLO™ Ballasted Flocculation Unit or equivalent technology to treat discharges from the OCIT, is replaced by a requirement to disinfect and dechlorinate discharges from the WPCS in April and November.
- Footnote 3 is revised as follows:

3. This footnote applies to Row 18. Akron shall sample all discharges from the BioCEPT ACTIFLO™ and BioACTIFLO™ treatment units such that the samples are representative and accurately characterize the actual treated discharge once stable operation is achieved (beginning no more than ~~(a) 20 minutes after discharge from the ACTIFLO™ treatment system begins; or (b) 40 minutes after discharge from the BioCEPT BioACTIFLO™ treatment systems begins~~), and shall comply with all applicable NPDES permit requirements. CBODS and TSS shall be collected as flow proportioned composite samples taken over the entire period of each discharge and once stable operation of the BioCEPT ACTIFLO™ or BioACTIFLO™ treatment systems is achieved. E. coli shall be collected as two or more grab samples taken during the period of discharge once stable operation of the BioCEPT ACTIFLO™ or BioACTIFLO™ treatment systems is achieved.

A redline/strikeout version of Rows 11, 11a, and footnote 3 of the LTCP Update showing the changes summarized above is attached as Exhibit 2 to this Fourth Amendment. A new LTCP Update, reflecting the changes made by all prior approvals, modifications, and amendments to the Consent Decree and this Fourth Amendment, is attached as Exhibit 3 to this Fourth Amendment. The LTCP Update attached as Exhibit 3 to this Fourth Amendment replaces all prior versions of the LTCP Update.

JUDGMENT IS HEREBY ENTERED in accordance with this Fourth Amendment to
Consent Decree, on this _____ day of _____, 20____.

JUDGE JOHN R. ADAMS
UNITED STATES DISTRICT COURT JUDGE

THE UNDERSIGNED PARTY hereby consents to this Fourth Amendment to the Consent Decree in the matter of *United States v. City of Akron, et al.*, No. 5:09-cv-272 (N.D. Ohio).

FOR THE UNITED STATES OF AMERICA:

Date: October 7, 2026

ADAM R.F. GUSTAFSON
Principal Deputy Assistant Attorney General
Energy and Natural Resources Division U.S.
Department of Justice

s/Samantha M. Ricci

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FOR THE UNITED STATES OF AMERICA:

DAVID M. TOEPFER
United States Attorney
Northern District of Ohio



Dated: July 16, 2026

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FOR THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

CAROL
KING

Digitally signed by
CAROL KING
Date: 2026.10.01
17:24:37 -04'00'

Dated: _____, 2026

CAROL DeMARCO KING
Acting Director, Water Enforcement Division
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FOR THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

Dated: June 22, 2026

Robert Kaplan

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THE UNDERSIGNED PARTY hereby consents to this Fourth Amendment to the Consent Decree in the matter of *United States v. City of Akron, et al.*, No. 5:09-cv-272 (N.D. Ohio).

FOR THE STATE OF OHIO:

D. ANDREW WILSON
Ohio Attorney General

Dated: June 16, 2026



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THE UNDERSIGNED PARTY hereby consents to this Fourth Amendment to the Consent Decree in the matter of *United States v. City of Akron, et al.*, No. 5:09-cv-272 (N.D. Ohio).

Dated: _____, 2026

~~FOR THE CITY OF AKRON~~



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Dated: June 16th, 2026



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EXHIBIT 1

Attachment B: Post-Construction Monitoring Program

Model-Based Approach to Assess Compliance with Typical Year Overflows Performance Criteria

Akron has developed a dynamic model that fully integrates the hydrology and hydraulics of the combined sewer system (collection system model). By no later than 24 months after Achievement of Full Operation of all CSO control measures, Akron will complete steps 1 through 8 below using sound engineering judgment and best industry practices to update and utilize the collection system model to determine whether Akron has achieved compliance with the Performance Criteria set forth in the Long Term Control Plan Update, which is attached as Exhibit 3 to the Fourth Amendment to Consent Decree.

1. Collect rainfall and CSO outfall data for 12 months after completion of the construction of the CSO control measures identified in the Long Term Control Plan Update.
2. Perform quality assurance and quality control of the data collected in Step 1.
3. Utilize the model, (incorporating the improved sewer collection system with in place CSO control measures) in its most recent calibrated state and the rainfall data collected during the 12-month post-construction monitoring period, to run a continuous simulation of CSO discharge occurrences and volumes for the 12-month post-construction monitoring period.
4. Compare the continuous simulation outputs to the CSO monitoring data for the 12-month post-construction monitoring period to determine whether re-calibration of the collection system model is needed. Model re-calibration will not be needed if the monitored and simulated activations match temporally (same date, acceptably close time) and if there is a high degree of agreement between the number of model-predicted activations and volumes and the monitored CSO activations and volumes for each remaining CSO outfall for the 12-month post-construction monitoring period. Otherwise, model recalibration will be needed in accordance with Steps 5 through 7.
5. If re-calibration is needed, two or more appropriate rainfall events from the 12-month post-construction monitoring period will be selected for model recalibration. Akron will apply the standard of practice used in the collection system modeling industry in selecting the best candidate events for model calibration.
6. The existing model parameters will be refined until there is a high degree of agreement between the model-predicted activations and volumes and the monitored CSO activations and volumes for each remaining CSO outfall for the selected recalibration events. In making such adjustments, Akron will consider the inherent variability in both the collection system model and in flow monitoring data, and will exercise sound engineering judgment and best industry practices so as to not compromise the overall representativeness of the model.

7. Once the model has been re-calibrated in accordance with Step 6, Akron will verify the re-calibrated model by again utilizing the model and the rainfall data collected during the 12-month post-construction monitoring period to run another continuous simulation for the 12-month post-construction monitoring period. Akron will again compare the predicted simulation outputs to the CSO monitoring data for the 12-month post-construction monitoring period as described in Step 4, to determine whether additional re-calibration of the collection system model is needed. Re-calibration will be determined to be adequate if there is a high degree of agreement between the model-predicted activations and volumes and the monitored CSO activations and volumes for each remaining CSO outfall for the 12-month post-construction monitoring period. Regarding the prediction of CSO volumes, particular attention should be given to the model's ability to predict CSO volumes from the Ohio Canal Tunnel. Otherwise, further re-calibration will be needed in accordance with Steps 5 through 7 until there is a high degree of agreement between the model-predicted activations and volumes and the monitored CSO activations and volumes for each remaining CSO outfall for the 12-month post-construction monitoring period.

8. Akron will prepare and submit to USEPA and OEPA, for review and approval, a report ("Post-Construction Overflow Occurrence Monitoring Report") that summarizes the changes made to the hydraulic model as a result of the Post-Construction Monitoring Program, presents the calibration and verification data used to update the model, discusses why the updated model achieves at least the same degree of calibration as was achieved for pre-CSO Long-Term Control conditions during the LTCP development process, and compares the model output and CSO monitoring data for activation frequency and volumes for the 12-month post-construction monitoring period. In developing the Post-Construction Monitoring Overflow Occurrence Report, Akron will utilize the original or re-calibrated model to run a continuous simulation for the adjusted 1994 typical year that was agreed on between Akron, USEPA, and OEPA. Akron will use this simulation to evaluate whether Akron has achieved the Performance Criteria set forth in the LTCP Update and will include the results of the simulation in the Post-Construction Monitoring Report.

EXHIBIT 2

Exhibit 2 - Revised Rows 11 and 11a – Akron’s Long Term Control Plan Update

ROW	CONTROL MEASURE LOCATION	DESCRIPTION	DESIGN CRITERIA ¹	PERFORMANCE CRITERIA (TYPICAL YEAR) ²	CRITICAL MILESTONE
11	Racks 4, 16, 17, 18, 19, 20, 23, 24, 37	Ohio Canal Tunnel - Construct a 28-foot internal diameter tunnel, 5,550 feet in length, or any other combination of diameter and length that achieves the design criteria.	Minimum storage volume of 25,600,000 gallons. This volume excludes conveyance tunnels, dewatering tunnels/sewers, adits, and drop shafts.	No more than <u>73 CSOs and 93.1 million gallons from the Ohio Canal Interceptor Tunnel</u> <u>All Racks in this Row4 and 37: 0 CSOs</u>	Bidding of Control Measure —April 30, 2014 Achievement of Full Operation-Dec. 31, 2018
11a	<u>Racks 16, 17, 18, 19, 20, 23, 24</u>	<u>Ohio Canal Tunnel— ACTIFLO™ Ballasted Flocculation Unit or equivalent technology that meets the Design and Performance Criteria and Disinfection</u>	<u>An ACTIFLO™ ballasted flocculation unit (sand ballast technology) or an EPA and OEPA approved equivalent technology that meets the Performance Criteria, including disinfection, with a minimum sustained design capacity of 300 million gallons per day (208,000 gallons per minute). The hydraulic loading rate shall not exceed the manufacturer's recommendation</u>	<u>Treated discharges must not exceed the following discharge limitations:³</u> <u>1) 30 mg/l TSS</u> <u>2) In the recreational season, no more than 10% of the samples taken during any 30 day period shall exceed 298/100 ml of E. coli.</u> <u>3) The geometric mean of all the samples collected during the recreational season shall not exceed 126/100 ml of E. coli.</u>	<u>Bidding of Control Measure—April 30, 2024</u> <u>Achievement of Full Operation-Oct 31, 2027</u>

Exhibit 2 - Revised Rows 11 and 11a – Akron’s Long Term Control Plan Update

	<u>Additional Disinfection of WPCS effluent</u>	<u>Perform Disinfection on the effluent from the WPCS during the month prior to the start (April), and the month after the end of (November) the Recreation Season, as defined in O.A.C. 3745-1-07(B)(3)</u>	<u>Extend the ongoing disinfection of WPCS effluent before the start and after the end of the Recreation Season during the months of April and November to meet the effluent limitations in the Performance Criteria</u>	<u>4) 0.024 mg/l residual chlorine</u> <u>Akron shall monitor and report on the discharges from the WPCS during the months of April and November for E. coli and residual chlorine in accordance with the monitoring and reporting requirements in its NPDES permit applicable to discharges from May through October. Akron’s discharges during the months of April and November shall comply with the E. coli and residual chlorine limitations that are specified in the permit for discharges from May through October.</u>	<u>Achievement of Full Operation – November 1, 2026</u>
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3 This footnote applies to Row 18, as approved by the Second Amendment to Consent Decree. Akron shall sample all discharges from the BioCEPT ACTIFLO™ and BioACTIFLO™ treatment units such that the samples are representative and accurately characterize the actual treated discharge once stable operation is achieved (beginning no more than ~~(a) 20 minutes after discharge from the ACTIFLO™ treatment system begins; or (b) 40 minutes after discharge from the BioCEPT BioACTIFLO™ treatment system begins~~), and shall comply with all applicable NPDES permit requirements. CBOD5 and TSS shall be collected as flow proportioned composite samples taken over the entire period of each discharge once stable operation of the BioCEPT BioACTIFLO™ treatment system is achieved. E. coli shall be collected as two or more grab samples taken during the period of discharge once stable operation of the BioCEPT Bioactiflo treatment systems is achieved.

EXHIBIT 3

Long Term Control Update
Includes All Modifications Through the Fourth Amendment to Consent Decree

Separation of Racks 8, 25, 21, 30 and 13: To be performed consistent with Consent Decree Section V.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
1	Rack 3	Optimized conveyance Green Infrastructure (GI) using a combination of the following in the Rack 3 drainage area: - bioretention - underground attenuation storage - subsurface gravel wetland	Upsize the underflow drain between Rack 3 and the LCI to a minimum of 42" The following GI Control Measures shall be designed to detain through attenuation³ a minimum total stormwater volume of 172,418 ft³ tributary to the Rack 3 overflow structure to ensure zero overflows in the Typical Year. The volumes detained by any combination of the projects below, and any new projects identified in the final design documents shall a) add up to a minimum total stormwater volume of 172,418 ft³ and b) result in zero overflows in the Typical Year from Rack 3. A minimum stormwater volume of 122,947 ft³ shall be detained as follows:	0 CSOs	Bidding of Control Measure – June 30, 2018. Achievement of Full Operation – November 30, 2020.	Second Amendment to Consent Decree. The Rack 3 storage basin was replaced with green infrastructure and optimized conveyance.

¹ The criteria for storage volumes are effective storage volumes and as such shall account for hydraulic and/or operational limitations and any other factors of consideration that are necessary to ensure that the basin(s) or tunnel will be able to store the specified volume identified in this column during either the largest typical year storm event (for the basins and the Northside Interceptor Tunnel) or the 8th largest typical year storm event (for the Ohio Canal Tunnel). Akron may propose that the effective storage volumes for the storage basins set forth in Rows 1-12, excluding Row 11.a., be reduced through the use of Green Infrastructure, in accordance with the requirements and review and approval process set forth in Exhibit 3 to this LTCP Update. Any demonstration by Akron that reduced storage volumes coupled with green infrastructure controls will provide the same or greater level of control in terms of CSO overflows in a typical year must be submitted to EPA and OH EPA for approval, by no later than six (6) months prior to the due date for the bidding of the relevant control measure.

² "Typical Year" is defined as the Adjusted 1994 Typical Year as defined in Appendix 1 to Attachment A of the Consent Decree. Number of overflows and bypasses are based on a 12-hour inter-event period

³ "Infiltration" is the control process by which stormwater seeps into and through in-situ soil profiles and is thereby kept from entering the combined sewer system. "Attenuation" is the process by which stormwater is detained during peak flow events, and is thereby kept from entering the combined sewer system during peak flow events.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
			- Chittenden Priority Catchment Area ("PCA") above-ground bioretention basin with subsurface pipe/gravel storage consisting of a minimum storage of 40,517 ft³ - Duane PCA underground attenuation storage, subsurface pipe/gravel storage, and subsurface gravel wetland consisting of a minimum storage of 14,276 ft³ - Kelly PCA above-ground attenuation basin with underground attenuation storage consisting of a minimum storage of 54,704 ft³ - Weeks PCA above-ground attenuation basin with underground attenuation storage consisting of a minimum storage of 13,450 ft³ The remaining 49,471 ft³ of storm water volume will be detained by either upsizing one or more of the above projects and/or by one or more additional projects. Akron must submit the final design document to EPA and OEPA by April 16, 2018. If the final design document includes a project(s) not listed above, then the final design documents shall include an explanation of the new project(s).			

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
1.a	Rack 3	Develop and implement GI Operation & Maintenance (O&M Plans) in accordance with Exhibit 7 of the LTCP	See Exhibit 7 - Attachment B to the Second Amendment to Consent Decree	See Exhibit 7	Submit O&M Plan in accordance with Exhibit 7, no later than August 30, 2020	Second Amendment to Consent Decree.
2	Rack 5 and 7	Green Infrastructure and Sewer Separation	See U.S. EPA's October 30, 2015 Approval	0 CSOs	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Non-Material Modification approved by US EPA in accordance with LTCP Exhibit 3.
3	Racks 10 and 11	Storage Basin(s)	Minimum storage volume of 4,500,000 gallons	0 CSOs	Bidding of Control Measure – June 30, 2018. Achievement of Full Operation – December 31, 2020.	Second Amendment to Consent Decree. The size of this storage basin was increased from 2.5 to 4.5 million gallons.
4	Rack 12	Storage Basin(s)	Minimum storage volume of 6,004,454 gallons	0 CSOs	Bidding of Control Measure – November 30, 2014. Achievement of Full Operation – October 31, 2017.	N/A

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
5	Rack 14	Storage Basin(s)	Minimum storage volume of 1,927,842 gallons	0 CSOs	Bidding of Control Measure – October 31, 2014. Achievement of Full Operation – April 30, 2017.	N/A
6	Rack 15	Storage Basin(s)	Minimum storage volume 1,446,246	0 CSOs	Bidding of Control Measure – November 30, 2013. Achievement of Full Operation – October 31, 2015.	N/A
7	Rack 22	Storage Basin(s)	Minimum storage volume of 2,424,446	0 CSOs	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – December 31, 2017.	N/A

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
8	Rack 26 and 28	Optimized conveyance Green Infrastructure (GI) using a combination of the following in the Rack 26 & 28 drainage areas: - bioretention - Porous pavement - Underground attenuation storage/infiltration	Upsize the existing underflow drain between Rack 26 and the LCI to a minimum of 30" Upsize the existing underflow drain between Rack 28 and the LCI to a minimum of 33" The following GI Control Measures shall be designed to control through attenuation³ and/or infiltration³ a minimum total stormwater volume of 70,182 ft³, of which 52,533 ft³ is tributary to the Rack 26 overflow structure and 17,649 ft³ is tributary to the Rack 28 overflow structure, to ensure zero overflows in the Typical Year. The design of the GI Control Measures shall incorporate the results of previously obtained geotechnical data. The individual areas and volumes listed below may change, provided a) the combination of all volumes controlled adds up to a minimum total stormwater volume of 70,182 ft³ and b) the combined measures will result in zero overflows in the Typical Year from Racks 26 and 28. - At least 15,689 ft² of Pervious Pavers equating to 1,354 ft³ of stormwater - At least 10,510 ft² of high flow rate bioretention equating to 14,188 ft³ of stormwater - At least 1,477 ft² of aggregate underground storage equating to 42,093 ft³ of stormwater - At least 7 dry well units equating to 506 ft³ of stormwater	0 CSOs	Bidding of Control Measure – October 31, 2021. Achievement of Full Operation – December 31, 2022.	Second Amendment to Consent Decree. The storage basin was replaced with green infrastructure and optimized conveyance.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
			- At least 9,870 ft² of storage /infiltration galleries equating to 9,451 ft³ of stormwater - At least 24,577 ft² of pavement removal equating to 2,590 ft³ of stormwater			
8.a	Rack 26 and 28	Develop and implement GI Operation & Maintenance (O&M Plans) in accordance with Exhibit 7 of the LTCP	See Exhibit 7 - Attachment B to the Second Amendment to Consent Decree	See Exhibit 7	Submit O&M Plan in accordance with Exhibit 7, no later than March 1, 2019	Second Amendment to Consent Decree.
9	Rack 27	Optimized conveyance	Upsize the existing underflow drain between Rack 27 and LCI to a minimum of 30".	0 CSOs	Bidding of Control Measure – January 31, 2018. Achievement of Full Operation – December 31, 2019.	Second Amendment to Consent Decree. Storage basin replaced with optimized conveyance.
9.a	Rack 29	Optimized conveyance	Upsize the existing underflow drain between Rack 29 and Rack 30 to a minimum of 36".		Bidding of Control Measure – January 31, 2018. Achievement of Full Operation – December 31, 2019.	Second Amendment to Consent Decree. Storage basin replaced with optimized conveyance.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
10	Rack 36	Green Infrastructure and Sewer Separation	See U.S. EPA's October 30, 2015 Approval	0 CSOs	Bidding of Control Measure – October 31, 2015. Achievement of Full Operation – October 31, 2017.	Non-Material Modification approved by US EPA in accordance with LTCP Exhibit 3.
11	Racks 4, 16, 17, 18, 19, 20, 23, 24, 37	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.	Minimum storage volume of 25,600,000 gallons. This volume excludes conveyance tunnels, dewatering tunnels/sewers, adits, and drop shafts.	No more than 3 CSOs and 93.1 million gallons from the Ohio Canal Interceptor Tunnel All Racks in this Row: 0 CSOs	Bidding of Control Measure – April 30, 2014. Achievement of Full Operation – December 31, 2018.	Fourth Amendment to Consent Decree. Changed Performance Criteria from seven to three at the OCIT

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
11a	Additional Disinfection of WPCS effluent	Perform Disinfection on the effluent from the WPCS during the month prior to the start (April), and the month after the end of (November) the Recreation Season, as defined in O.A.C. 3745-1-07(B)(3)	Extend the ongoing disinfection of WPCS effluent before the start and after the end of the Recreation Season during the months of April and November to meet the effluent limitations in the Performance Criteria	Akron shall monitor and report on the discharges from the WPCS during the months of April and November for E. coli and residual chlorine in accordance with the monitoring and reporting requirements in its NPDES permit applicable to discharges from May through October. Akron's discharges during the months of April and November shall comply with the E. coli and residual chlorine limitations that are specified in the permit for discharges from May through October.	Achievement of Full Operation – November 1, 2026	Fourth Amendment to Consent Decree. Replaced the EHRT requirement with a requirement to add disinfection at the WPCS in April and November
12	Racks 32, 33, 35	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	Minimum storage volume of 10,300,000 gallons. This volume excludes conveyance tunnels, dewatering tunnels/sewers, adits and drop shafts.	0 CSOs	Bidding of Control Measure – April 30, 2023. Achievement of Full Operation – December 31, 2026.	Third Amendment to the Consent Decree. Changed the size of the NSIT

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
12a	Rack 34	Separation of Rack 34 Sewer	Separate the combined sewer tributary to Rack 34 and eliminate the Rack 34 overflow.	O CSOs.	Bidding of Control Measure – December 31, 2022 Sewer separation substantially complete and in service– December 31, 2024 Rack 34 overflow structure eliminated – December 31, 2026	Third Amendment to the Consent Decree. Added the Rack 34 separation project

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Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)		Critical Milestones	Modification
				Capacity MGD	Number and Effluent Limitations of Bypasses		
13	WPCS Phase 1: Akron shall upgrade conventional secondary treatment capacity to 130 MGD in accordance with either 13a or 13b below, as required in Section V (Special Action Project), Paragraph 10 (Upgrade WPCS to 130 MGD) of the Consent Decree.						
13.a	WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130 MGD by implementing step feed operation in Train 6, as described in Paragraph 10.A of the Consent Decree.	Secondary treatment to achieve a minimum sustained capacity ⁴ of 130 MGD	Secondary treatment capacity to achieve a minimum sustained capacity of 130 MGD.	No more than 22 bypasses	Bidding of Control Measure – October 31, 2011. Achievement of Full Operation – October 15, 2013.	N/A
13.b	WPCS Phase 1	Upgrade conventional secondary treatment capacity to 130 MGD by performing the upgrades identified in the Consent Decree in Section V.10.C.	Secondary treatment to achieve a minimum sustained capacity ⁴ of 130 MGD	Secondary treatment capacity to achieve a minimum sustained capacity of 130 MGD.	No more than 22 bypasses	Bidding of Control Measure – January 15, 2016. Achievement of Full Operation – October 15, 2017.	N/A

⁴ “Minimum sustained capacity” shall be the smallest acceptable peak capacity that can be sustained continuously for a minimum of 48 hours under normal operating conditions.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
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.	BioACTIFLO™ Biological ballasted flocculation system designed to meet parameters of approved study outlined in Exhibit 1. Maximum loading rates shall not exceed the manufacturer's recommendations.	See Exhibit 1	Pilot Study Start Date – May 1, 2012. Pilot Study Completion Date – November 30, 2013. Pilot Study Report submitted to EPA by December 31, 2013.	N/A
15	Intentionally Left Blank ⁵	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank	This project was replaced under WPCS Alternative Plan A Phase 2 – Part 1 per US EPA approval of Alternate Plan A on February 11, 2016.
16	Intentionally Left Blank. ⁵	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank	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.

⁵ Akron submitted Alternative Plan A under Exhibit 2 to change the sizing of the WPCS Phase 2 projects. US EPA issued an approval on February 11, 2016, and the projects in Rows 15 and 16 were replaced with the projects in Rows 17 and 18. The projects in Rows 19 and 20 are additional alternative projects that were not selected by Akron in Alternative Plan A and were not required to be constructed.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
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.	Conventional secondary treatment capacity will be designed to achieve at least the minimum sustained capacity specified in Alternative Plan A approved by U.S. EPA	Conventional secondary treatment facilities will achieve the minimum sustained capacity specified in Alternative Plan A approved by U.S. EPA Comply with NPDES permit limits	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. First Amendment to the Consent Decree. Revised the deadlines for this project.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)		Critical Milestones	Modification
				Capacity MGD	Number and Effluent Limitations of Bypasses		
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.	BioCEPT plus disinfection facilities will be designed to achieve (1) at least the minimum capacity of 60 MGD (2) the effluent limitations as specified in the Performance Criteria for this Row.	BioCEPT will achieve the minimum sustained capacity of 60 MGD and all flows up to that minimum sustained capacity must be disinfected during the recreation season.	Treated discharges must not exceed the following limitations. ⁶ 1) 30 day average of 30 mg/l for TSS and 25 mg/l for CBOD5 at Station 603; 2) an average weekly discharge limitation of 298/100ml e.coli (during recreational season) at Station 001; 3) An average monthly discharge limitation of 126/100 ml e.coli (during recreational season) at Station 001; 4) 0.024 mg/l residual chlorine at Station 001.	Bidding of Control Measure – February 28, 2019. Achievement of Full Operation – December 31, 2021.	Alternative Plan A, approved on February 11, 2016 – changed the size of this project. First Amendment to Consent Decree. Revised the deadlines for the project. Second Amendment to Consent Decree. Replaced the BioACTIFLO facility with a BioCEPT facility and an additional demonstration study.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)		Critical Milestones	Modification
				Capacity MGD	Number and Effluent Limitations of Bypasses		
18a	WPCS BioCEPT Full Scale Demonstration Study ("Demonstration Study")	Conduct the BioCEPT Demonstration Study in accordance with Exhibit 6 of this Long Term Control Plan	See Exhibit 6 – Attachment A to the Second Amendment	See Exhibit 6	N/A	Demonstration Study Start Date – May 1, 2022 Demonstration Study Completion Date – November 1, 2023 Demonstration Study Report Submitted to EPA- 60 days after the last sampling event.	Second Amendment to Consent Decree
19	Intentionally Left Blank ⁵	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank		Intentionally Left Blank	U.S. EPA's February 11, 2016 Approval of Alternative Plan A
20	Intentionally Left Blank ⁵	Intentionally Left Blank	Intentionally Left Blank	Intentionally Left Blank		Intentionally Left Blank	U.S. EPA's February 11, 2016 Approval of Alternative Plan A

⁶ This footnote applies to Row 18, as approved by the Second Amendment to Consent Decree. Akron shall sample all discharges from the BioCEPT treatment unit such that the samples are representative and accurately characterize the actual treated discharge once stable operation is achieved (beginning no more than 40 minutes after discharge from the BioCEPT treatment system begins), and shall comply with all applicable NPDES

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
21	Main Outfall Sewer Upgrades – Phase I	Installation of a 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 just 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.	Mortar cap and reinforcing steel designed to withstand five feet of surcharge in the interceptor, with a thickness ranging from 6 inches at the top to 18 inches at the sides. Cap to be installed over the brick-arch section of the MOI that runs between Survey Station 83+00 and the Bridge Section. A soil cap of at least 3 inches on any brick-arch portion of the MOI between the Bridge Section and the WPCS.	Conveyance capacity under normal operating conditions to allow transmission of 280 MGD to the WPCS.	Bidding of Control Measure: May 4, 2016 Achievement of Full Operation: November 30, 2017	First Amendment to Consent Decree Replaced projects.

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
22	Main Outfall Sewer Upgrades – Phase II	Additional soil will be added to the soil cap on the brick-arch 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. The maximum thickness of the soil cap will be 2 feet. The purpose of the 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	Subject to the results of a geotechnical and engineering evaluation, a soil cover of up to 2 feet on any brick-arch portion of the MOI between the Bridge Section and the WPCS. The actual thickness of soil cover placed on this brick arched portion of the MOI shall be the maximum thickness, up to 2 feet, that will cause no more than one-half (½) of an inch of settlement of the MOI, based upon a recommendation by a Professional Engineer. The Professional Engineer must have expertise in the field of geotechnical engineering and the recommendation shall be based on the results of additional geotechnical investigations and a subsequent engineering evaluation.	Conveyance capacity under normal operating conditions to allow transmission of 280 MGD to the WPCS.	Completion of engineering evaluation: May 30, 2017 Completion of placement of additional soil: November 30, 2017	First Amendment to Consent Decree

Row #	Control Measure Location	Description	Design Criteria ¹	Performance Criteria ² (Typical Year)	Critical Milestones	Modification
		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 associated with the proposed 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.				
23	Main Outfall Sewer Inspection	Perform inspection and rehabilitation consistent with the Main Outfall ⁷ Sewer Supplement to the Approved CMOM Program as outlined in Section VII of the Consent Decree.	Ensure the integrity of the sewer allowing for the transport of flow to the WPCS in accordance with the certification provided in Exhibit 4.	Conveyance capacity under normal operating conditions of projects outlined in Rows 21-22 to allow transmission of up to 280 MGD to the WPCS.	Full Operation shall be maintained consistent with Main Outfall Sewer Supplement to the Approved CMOM Program.	First Amendment to Consent Decree

⁷ The Main Outfall Sewer Supplement to the Approved CMOM shall include, but not be limited to, a Main Outfall Sewer Emergency Response Plan and Schedule for Repair of Defects discovered during internal and external inspection of the Main Outfall Sewer. These items are documented in Exhibit 5.