IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF INDIANA
EVANSVILLE DIVISION

UNITED STATES OF AMERICA,

and

THE STATE OF INDIANA,

Plaintiffs,

v. Case No. 3:09-CV-0128 WTL-MPB

THE CITY OF EVANSVILLE, INDIANA,

and

EVANSVILLE WATER AND SEWER UTILITY BOARD,

Defendants.

# FIFTH AGREED CONSENT DECREE MODIFICATION

## Background

A. On June 22, 2011, the United States District Court for the Southern District of Indiana approved and entered a Consent Decree between the United States and the State of Indiana (collectively "Plaintiffs") and the City of Evansville, Indiana and the Evansville Water and Sewer Utility Board (collectively "Evansville" or "Defendants") in the above-captioned case.

B. The Consent Decree was subsequently modified by the Parties and entered by this Court on April 23, 2012 [Dkt. No. 180], November 30, 2012 [Dkt. No. 233], December 6, 2016 [Dkt. No. 291], and most recently on October 27, 2017 [Dkt. No. 292].

C. The Consent Decree requires Defendants to perform a number of Control Measures consisting of various projects to construct, upgrade, or improve portions of its system as listed in Appendix G.

D. Since entering the Consent Decree, Defendants have experienced additional financial and technical hardships that have resulted in difficulties in completing some of the Control Measure projects on time. Among these is the previously unanticipated need to spend an estimated $304 million on capital improvement projects plus 30 year life cycle costs to its drinking water system. Consequently, flexibility in scheduling is appropriate to reduce immediate financial burdens on Defendants without delaying the overall deadline for completion of the Control Measures.

E. Paragraph 124 of the Consent Decree provides that the Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all Parties. Where the modification constitutes a material change to the Consent Decree, the modification shall be effective only upon approval by the Court.

F. Plaintiffs and Defendants have agreed, pursuant to Paragraph 124 of the Consent Decree, to this Fifth Agreed Consent Decree Modification. The changes made herein constitute material Consent Decree modifications that require Court approval under Consent Decree Paragraph 124. The undersigned parties anticipate that the United States will file this Fifth Agreed Consent Decree Modification ("Agreement") with the Court as a material modification and an agreed supplement to the Consent Decree.

WHEREAS, the Parties agree that this Fifth Agreed Consent Decree Modification constitutes a material change to the Consent Decree, and requires Court approval to be effective. The Parties recognize, and the Court by entering this Fifth Agreed Consent Decree Modification

finds, that it has been negotiated at arms-length and in good faith and that this Fifth Agreed Consent Decree Modification is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

1. Except as specifically provided in this Fifth Agreed Consent Decree Modification, all provisions of the original Consent Decree, as modified through the Fourth Agreed Consent Decree Modification, shall remain in full force and effect. No provision of the current Consent Decree is modified, superseded, or altered in any way except as specifically provided in this Fifth Agreed Consent Decree Modification.

2. For the purposes of this Fifth Agreed Consent Decree Modification, the following definitions shall apply and shall be substituted for any prior use of such definitions:

> "Consent Decree" or "Decree" shall mean the Consent Decree entered in this action on June 22, 2011 and all Appendices attached thereto, as modified by the Court on April 23, 2012 [Dkt. No. 180], November 30, 2012 [Dkt. No. 233], December 6, 2016 [Dkt. No. 291], October 27, 2017 [Dkt. No. 292], and this Fifth Agreed Consent Decree Modification. In the event of conflict between the Decree and any Appendix, the Decree shall control.
>
> "Control Measure" and "Remedial Measure" shall mean those improvements identified in Appendix G and shall include the Design Criteria and the Performance Criteria identified in Appendix G for each such measure.
>
> "R-Value" shall mean the fraction of rainfall volume that enters the sewer system, as calculated by EPA's Storm Water Management Model, ver. 5.1, for the purpose of estimating the I/I response in a separate sanitary sewer system.

**3.** The Fifth Agreed Consent Decree Modification hereby attaches and incorporates into the Consent Decree, as amended, a revised Appendix G, which contains the following modifications:

**a. <u>Schedule Modifications</u>.**

**i.** The respective deadlines of the Bid Date, Commencement of Construction Date, and Achievement of Full Operation Date for the following four

projects listed in Appendix G are extended by up to three years and superseded by the following deadlines in Table 1:

| Table 1: Schedule as Revised | | | |
|---|---|---|---|
| **Project** | **Bid Date** | **Start of Const.** | **AFO Date** |
| Constructed Wetland Treatment System in Control Measure 1 | N/A | 7/1/2026 | 1/1/2028 |
| Oak Hill Partial Sewer Separation in Control Measure 8 | N/A | N/A | 1/1/2028 |
| NW/SW Rehabilitation Projects in SSRMP | 1/1/2025 | 12/1/2025 | 1/1/2030 |
| E-11 Rehabilitation Projects in SSRMP | 1/1/2024 | 1/1/2025 | 1/1/2029 |

ii. Additional Schedule Extensions: EPA and IDEM may approve requests by the Defendants to extend any of the deadlines listed above and the Baker Relief Pump Station project in Control Measure 6 by up to two additional years. Any extension within this two-year period would not be considered a material modification to the Amended Consent Decree. EPA's and IDEM's decision to grant or deny such additional extensions of up to two years for these projects is not subject to dispute resolution.

iii. Criteria for Granting Additional Schedule Extensions: EPA and IDEM shall consider the following criteria when deciding whether to grant an additional extension for any of the deadlines listed above and the Baker Relief Pump Station project in Control Measure 6:

- Extent of progress Evansville makes in implementing Non-IOCP projects (including the Wansford Yard Lift Station) necessary to maintain compliance with its currently effective NPDES permits;
- Extent of progress that Evansville makes in implementing green infrastructure in its downtown combined sewer sub-basins;
- Extent to which Evansville has presented information demonstrating that there could be viable alternatives to IOCP projects currently required for achieving environmental goals; and

- Evansville's financial situation in 2023, including any updated Financial Capability Analysis (FCA) prepared in accordance with current and applicable FCA guidance.

iv. Evansville will also consider accelerating the implementation schedule associated with the North Park Capacity Projects within an extension request, pursuant to subparagraphs 3.a.ii and 3.a.iii, including an analysis, to be submitted to EPA and IDEM, that prioritizes the final implementation of the North Park Capacity Projects on or before January 1, 2029.

b. **Replacement of Design Criteria for SSRMP Projects**. The Design Criteria for the following three SSRMP rehabilitation projects (Lloyd Expressway, NW/SW, and E-11) are deleted and replaced with the following Performance Criteria:

- Evansville will achieve a targeted sewershed basin area-weighted median R-Value of 5% or less in each of the three targeted sewersheds after completion of its rehabilitation projects. In addition, if a sub-basin/sub-catchment within one of the targeted sewershed basins has had a wet-weather SSO in the three years following completion of the corresponding capacity projects related to each sub-basin, Evansville shall demonstrate that the sub-basin/sub-catchment has an R-value less than 5% within one year after the end of the three-year targeted sewershed basin monitoring period, unless another timeframe is approved by EPA and IDEM. This post-capacity project analysis will also include the calculations and information necessary to demonstrate whether the wet weather SSO occurred during a wet weather event that exceeded the 10-year level of control or was equal to or less than the 10-year level of control.

The Design Criteria for the North Park SSRMP rehabilitation project are deleted and replaced with the following Performance Criteria:

- Evansville has achieved a targeted sewershed basin area-weighted median R-Value of 5% or less. If a sub-basin/sub-catchment within the targeted basin has had a wet-weather SSO occurrence during a wet weather event that was equal to or less than the 10-year level of control in the three years from the

date of entry of this Fifth Agreed Consent Decree Modification, Evansville shall demonstrate that the sub-basin/sub-catchment with a SSO occurrence, that meets the conditions above, has an R-value less than 5% on or before four years from the date of entry of this Fifth Agreed Consent Decree Modification, unless a different timeframe is approved by the EPA and IDEM.

The Design Criteria for the General SSS SSRMP rehabilitation project are replaced with the following Design Criteria:

- Defendants shall spend not less than $3,671,000 in 2015 dollars.

c. **Other Appendix G Modifications**.

- The Design Criteria for the East WWTP Effluent Pump Station in Control Measure 1 is modified as follows: "Conveyance pump station with minimum sustained design capacity of 40 million gallons per day."

- West WWTP Improvement Projects (Expanded Peak Primary Treatment Capacity) in Control Measure 3 is modified to reflect an updated Achievement of Full Operation Date of April 29, 2021 instead of January 1, 2023.

- West WWTP Improvement Projects (Howel Park Storage) in Control Measure 3 is modified as follows:
  - Achievement of Full Operation Date is changed to January 1, 2021 instead of January 1, 2023; and
  - Description (5th column) shall read as follows: "Construct storage basin near West WWTP at 900 South Tekoppel Avenue."

- Pigeon Creek Interceptor Optimization and RTC Projects in Control Measure 4 is modified to reflect an updated Achievement of Full Operation Date of April 1, 2020 instead of January 1, 2022.

4. The Fifth Agreed Consent Decree Modification inserts within Section XIII (Consent Decree Reporting Requirements) a new Paragraph 97.1, which states as follows:

SWMM Sewer Collection System Model Reevaluation Report. On or before May 2, 2022, Evansville shall submit a Storm Water Management Model ("SWMM") Sewer Collection System Model Reevaluation Report to EPA and IDEM for review and

comment. This SWMM Sewer Collection System Model Reevaluation Report shall contain the information required by subparagraphs (a) through (c) below.

a. A thorough analysis of the West WWTP Sewer Collection System SWMM ("West WWTP SWMM"), including a final modeling analysis with a proper dry and wet calibration that meets the table below:

| **Table 2** | |
|---|---|
| **Hydrograph Component** | **Calibration and Validation Requirements** |
| Timing | The timing of the peaks and troughs of the hydrograph should be +/- 1 hour when comparing the modeled hydrograph to the observed flow meter hydrograph. |
| Flooding | The West WWTP SWMM shall predict any flooding and the volume associated with these conditions shall be equivalent to the observed volumes. |
| CSO and SSO discharges | The West WWTP SWMM shall predict any CSOs or SSOs from Evansville's sewer collection system and the volume and peak flow rate from the modeled CSOs/SSOs should be equivalent to the observed CSO/SSO volume and peak flow rate. The curve shapes for volume and flow rate from the modeled CSO/SSO should be equivalent to the curve shapes for volume and flow rate for the observed CSO/SSO discharge. |
| Peak Flow Rate | The West WWTP SWMM hydrograph shall be within -15% to +25% of the observed flow meter data. |
| Flow Volume | The West WWTP SWMM hydrograph shall be within -10% to +20% of the observed flow meter data. |

b. Analysis of the status of both the East WWTP Sewer Collection System SWMM ("East WWTP SWMM") and the West WWTP SWMM, including any changes made to the models and any deficiencies identified.

c. A proposed schedule for completion no later than July 1, 2023, also submitted to EPA and IDEM for review and comment, if any recalibration and/or revalidation is needed for either the East WWTP SWMM or the West WWTP SWMM. The conditions listed in Table 2 above shall also apply to any East WWTP SWMM or West WWTP SWMM recalibration or revalidation.

5. The Fifth Agreed Consent Decree Modification inserts within Section XIII (Consent Decree Reporting Requirements) a new Paragraph 97.2, which states as follows:

Quarterly Status Report: From the first calendar quarter after the date of lodging of this Fifth Agreed Consent Decree Modification until December 31, 2023, Evansville shall develop and submit to EPA and IDEM on January 20th, April 20th, July 20th, and October 20th of each year, a quarterly status report for the preceding three months that includes the following information:

a. The status of the SSRMP implementation, pursuant to the requirements of Appendix G;

b. New alternatives, including remote treatment and/or storage technologies, that Evansville analyzed in the previous quarterly period;

c. Potential new problems or issues discovered regarding the implementation of the current Appendix G;

d. Update on Evansville's drinking water (SDWA) compliance projects (including the implementation of all projects, the status of current projects, the completion of all projects, and the associated final costs of the completed projects);

e. Update on Green Infrastructure implementation;

f. The status of Green Infrastructure Post-Construction Testing/Monitoring; and

g. The status of any other project being implemented that is related to the Consent Decree, including Non-IOCP project implementation.

If EPA and IDEM approve requests by the Defendants to extend any of the deadlines of the Remedial Measures identified above, pursuant to subparagraph 3.a.ii, EPA and IDEM may also extend Evansville's submission of the Quarterly Status Report, which shall

include the information identified in subparagraphs 5.a through 5.g, until December 31, 2025.

6. The Fifth Agreed Consent Decree inserts within Section VI (Prohibitions and Operation/Maintenance Measures) a new Paragraph 21.1, which states as follows:

Bee Slough Cleaning Protocol. Defendants have submitted for approval pursuant to Section XV of the Consent Decree (Review and Approval Procedures) a protocol for cleaning the entire Bee Slough open channel at least three times per calendar year until the date the last completed project of Control Measure 1 reaches its achievement of full operation date. Defendants shall implement the protocol as approved by EPA and IDEM. After the last project implemented under Control Measure 1 is fully operational, Defendants shall clean the Bee Slough after each CSO discharge to the Bee Slough.

7. This Fifth Agreed Consent Decree Modification incorporates the following changes within Section XIV (Notices and Submissions):

a. Replacement of Paragraph 98 with the following:

98. Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and sent by mail or email, with the preference being for email if listed below, addressed as follows:

To the United States:

To the U.S. Department of Justice:
Chief, Environmental Enforcement Section
U.S. Department of Justice -- DOJ No. 90-5-1-1-08738
P.O. Box 7611
Washington, D.C. 20044-7611

and

To U.S. EPA:

Chief, Water Enforcement and Compliance Assurance Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard (ECW-15J)
Chicago, IL 60604
By Email: middleton.keith@epa.gov

and

Regional Counsel (C-14J)
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
By Email: r5weca@epa.gov

To the State:

To the Indiana Attorney General:

Chief Counsel, Litigation
Office of the Attorney General
Indiana Government Center South
5th Floor
302 West Washington Street
Indianapolis, IN 46204

and

To IDEM:

Chief, Compliance Branch
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-40
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

Office of Legal Counsel
Mail Code 60-01
100 North Senate Street
Indianapolis, IN 46204-2251

To Defendants:

Executive Director
Evansville Water & Sewer Utility
One N.W. Martin Luther King, Jr., #104
Evansville, IN 47740

and

Corporation Counsel
City of Evansville
20 NW 1st Street – 9th Floor
Post Office Box 916
Evansville, IN 47706

b. Insertion of a new Paragraph 98.1, which states as follows:

All electronic submittals made pursuant to Paragraph 98 shall be in Portable Document Format ("pdf") or similar format that is text searchable. If data are submitted in electronic spreadsheet form, it shall be provided along with any corresponding information in editable Excel format and not in image format. If Excel format is not available, then the electronic format should allow for data to be used in calculations by a standard spreadsheet program similar to Excel. The subject of the email correspondence must include the Party's name, the name of the deliverable, and the Court's case number. If a Party is unable to submit a notification, submission, or communication by email, if preferred, the Party shall provide the notification, submission, or communication required by this Consent Decree to the mailing addresses listed above in Paragraph 98 and include electronic format of the notifications, submissions, or communications on physical media such as compact disk, flash drive, or a similar storage device.

c. Insertion of a new Paragraph 98.2, which states as follows:

Any Party may, by written notice to the other Parties, change its designated notice recipient, notice address, or preference for mail or email provided above.

8. This Fifth Agreed Consent Modification shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Fifth Agreed Consent Decree Modification disclose facts or considerations indicating that the Fifth Agreed Consent Decree Modification is inappropriate, improper, or inadequate. Evansville consents to entry of this Fifth Agreed Consent Decree Modification without further notice.

9. If for any reason the Court should decline to approve this Fifth Agreed Consent Decree Modification in the form presented, this Fifth Agreed Consent Decree Modification is voidable at the sole discretion of any Party in writing within 30 days of the Court's action. If any Party elects to void the Fifth Agreed Consent Decree Modification, the terms of the Fifth Agreed Consent Decree Modification may not be used as evidence in any litigation between the Parties and the Consent Decree as Amended shall remain fully in effect and enforceable.

10. Each of the undersigned representatives of Defendants, of IDEM, and of the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Fifth Agreed Consent Decree Modification and to execute and legally bind such Party to this document.

11. This Fifth Agreed Consent Decree Modification may be executed in counterparts.

SO ORDERED.

Date:

Hon. William T. Lawrence, Judge
United States District Court
Southern District of Indiana

THE UNDERSIGNED PARTY enters into this Fifth Agreed Consent Decree Modification in United States and the State of Indiana v. City of Evansville, Indiana and Evansville Water and Sewer Utility Board, Case No. 3:09-cv-0128-WTL-MPD (S.D. Ind.):

**FOR THE UNITED STATES OF AMERICA**

TODD KIM
Assistant Attorney General
Environment & Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

DATE: April 25, 2022

s/ Michael J. Zoeller
MICHAEL J. ZOELLER
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 305-1478

DATE: April 25, 2022

s/ Shelese M. Woods (with consent)
SHELESE M. WOODS
Assistant United States Attorney
Southern District of Indiana
10 W. Market St., Suite 2100
Indianapolis, IN 46204
(317) 226-6333
Fax (317) 226-5027
shelese.woods@usdoj.gov

THE UNDERSIGNED PARTY enters into this Fifth Agreed Consent Decree Modification in United States and the State of Indiana v. City of Evansville, Indiana and Evansville Water and Sewer Utility Board, Case No. 3:09-cv-0128-WTL-MPD (S.D. Ind.):

FOR THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5

JANE LUPTON

Digitally signed by JANE LUPTON
Date: 2022.04.19 12:55:22 -05'00'

DATE:_____

ROBERT A. KAPLAN
Regional Counsel
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, IL 60604

THE UNDERSIGNED PARTY enters into this Fifth Agreed Consent Decree Modification in United States and the State of Indiana v. City of Evansville, Indiana and Evansville Water and Sewer Utility Board, Case No. 3:09-cv-0128-WTL-MPD (S.D. Ind.):

FOR THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENFORCEMENT
AND COMPLIANCE ASSURANCE

DATE:_____

JOSEPH THEIS Digitally signed by JOSEPH THEIS Date: 2022.04.13 09:20:11 -04'00'

JOSEPH G. THEIS
Acting Director, Water Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

DATE:_____

James Vinch Digitally signed by James Vinch Date: 2022.04.13 08:54:22 -04'00'

JAMES VINCH
Attorney-Advisor
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

THE UNDERSIGNED PARTY enters into this Fifth Agreed Consent Decree Modification in United States and the State of Indiana v. City of Evansville, Indiana and Evansville Water and Sewer Utility Board, Case No. 3:09-cv-0128-WTL-MPD (S.D. Ind.):

FOR THE STATE OF INDIANA

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

DATE: 4/13/2022

BRIAN C. ROCKENSUESS
Commissioner
Indiana Department of Environmental Management
100 North Senate Street
P.O. Box 6015
Indianapolis, IN 46206

Approved as to form and legality:

DATE: 4/13/2022

ELIZABETH ADMIRE
Attorney
Indiana Department of Environmental Management
100 North Senate Street
P.O. Box 6015
Indianapolis, IN 46206

INDIANA ATTORNEY GENERAL

DATE: _____

COURTNEY L. ABSHIRE
Deputy Attorney General
Office of the Indiana Attorney General
Indiana Government Center South, 5th Floor
302 W. Washington Street
Indianapolis, IN 46204-2770

THE UNDERSIGNED PARTY enters into this Fifth Agreed Consent Decree Modification in United States and the State of Indiana v. City of Evansville, Indiana and Evansville Water and Sewer Utility Board, Case No. 3:09-cv-0128-WTL-MPD (S.D. Ind.):

FOR THE CITY OF EVANSVILLE, INDIANA

DATE: 3/1/2022

MARCO L. DELUCIO
Corporation Counsel
City of Evansville
20 NW 1st Street – 9th Floor
P.O. Box 916
Evansville, IN 47706

FOR THE EVANSVILLE
WATER AND SEWER UTILITY BOARD

DATE: 3/1/2022

for

STEVEN R. HEIDORN
President, Board of Directors
Evansville Water & Sewer Utility
One NW Martin Luther King Jr., #104
Evansville, IN 47740

**REVISED Appendix G: Approved IOCP Remedial Measures, Design Criteria, Performance Criteria, and Implementation Schedule**

| | | | | | Narrative Description of Proposed Design and Performance Criteria | | Implementation Schedule | | |
|---|---|---|---|---|---|---|---|---|---|
| **Control Measure/Plan** | **Project** | **Outfall Number or Overflow** | **Name** | **Description** | **Design Criteria** | **Performance Criteria** | **Bid Date** | **Commencement of Construction** | **Achievement of Full Operation** |
| Green Infrastructure | All | CSS Basins | | | | | 1/1/2016 | 1/1/2017 | 12/31/2039 |
| 1 | Bee Slough Restoration and CSO Treatment | 001 | Kentucky Ave | Wetlands treatment system | Constructed wetland treatment with a minimum storage volume of 42 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. Conveyance pump station with minimum sustained design capacity of 198 million gallons per day. Relief sewer with a minimum diameter of 108 inches. The hydraulic loading rates for all projects shall not exceed any manufacture's recommendation. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. Treated discharges shall meet a 50% TSS reduction by mass standard, with a flow weighted basis and 12-Month Rolling Average reported each month. See Appendix H for monitoring and reporting requirements. | N/A | 7/1/2026 | 1/1/2028 |
| | | 002 | Cass Ave | Vertical treatment unit (VTU) | Satellite vertical treatment unit that meets the performance criteria, including disinfection, with a minimum sustained design capacity of 226 million gallons per day. The hydraulic loading rate shall not exceed the manufacture's recommendation. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. Treated discharges shall meet a 50% TSS reduction by mass with a flow weighted basis and 12-Month Rolling Average reported each month. See Appendix H for monitoring and reporting requirements. | 1/1/2030 | 1/1/2031 | 1/1/2033 |
| | | 004 | Adams | Relief sewer to Cass Ave CSO control facility | Relief sewer to the Cass Avenue Vertical Treatment with a minimum diameter of 72 inches. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2030* | 1/1/2031* | 1/1/2033* |
| | | 001, 002, 004 | Bee Slough | Bee Slough Drainage Pipeline | Drainage pipelines between the concrete channel and the East WWTP Headworks Facility to provide the ability to send standing water in Bee Slough to the WWTP for treatment. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. Maximize flow to the East WWTP after wet weather events. | | | 1/1/2018 |
| | | 103 | East WWTP | Effluent Pump Station | Conveyance pump station with minimum sustained design capacity of 40 million gallons per day. | Eliminate CSO overflow point. All East WWTP effluent pumped to the Ohio River and not to Bee Slough during high river levels. | 1/1/2019 | 1/1/2020 | 1/1/2023 |
| | | 001, 002, 004 | Bee Slough | Akin Park Partial sewer separation | Partial sewer separation projects in sewerage tributary to Bee Slough/East WWTP. | No SSOs pursuant to Consent Decree paragraph 12, subject to Consent Decree paragraph 69. | | | 1/1/2020 |

**REVISED Appendix G: Approved IOCP Remedial Measures, Design Criteria, Performance Criteria, and Implementation Schedule**

| | | | | | Narrative Description of Proposed Design and Performance Criteria | | Implementation Schedule | | |
|---|---|---|---|---|---|---|---|---|---|
| **Control Measure/Plan** | **Project** | **Outfall Number or Overflow** | **Name** | **Description** | **Design Criteria** | **Performance Criteria** | **Bid Date** | **Commencement of Construction** | **Achievement of Full Operation** |
| 2 | East WWTP Improvement Projects | 103 | East WWTP | Expand peak Treatment Capacity | Expand secondary treatment system to achieve a minimum sustained capacity of 40 million gallons per day through the entire East WWTP. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. No bypasses of any portion of East WWTP. | 1/1/2019 | 1/1/2020 | 1/1/2023 |
| 3 | West WWTP Improvement Projects | 123 | West WWTP | Expand peak primary treatment capacity; Storage Basin in Howell Park with overflow, Gravity in and out of Storage | Expand West WWTP headworks and primary treatment to achieve a minimum sustained capacity of 45 million gallons per day through the entire West WWTP. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2019 | 1/1/2020 | 4/29/2021 |
| | | 123 | Howell Park Storage | Construct storage basin near West WWTP at 900 Tekoppel Av. | Storage basin with a minimum storage volume of 6.1 MG. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2019* | 1/1/2020* | 1/1/2021 |
| 4 | Pigeon Creek Interceptor Optimization and RTC Projects | 012, 013, 014, 016, 017, 018, 024, 025 | PCI | Complete cleaning and inspection of the PCI | Full interceptor capacity available to convey dry and wet weather flow to the West WWTP | Convey total capacity of the interceptor to the WWTP and maximize wet weather storage capacity within the interceptor. | 1/1/2017 | 1/1/2018 | 4/1/2020 |
| 5 | 7th Avenue, Franklin Street, Fulton Avenue, 9th Avenue, and St. Joseph Avenue CSO Control Projects | 006 | Fulton Avenue Pump Station | Send to 7th Ave East. Use existing pipe | Eliminate CSO overflow point | Eliminate CSO overflow point. All wastewater will be conveyed to new 7th Avenue Pump Station using existing pipe. | | | 1/1/2036 |
| | | 009 | 7th Avenue West | Eliminated | Eliminate CSO overflow point | Eliminate CSO overflow point. All wastewater will be conveyed to new 7th Avenue Pump Station using existing pipe. | | | 1/1/2036 |
| | | 015 | 7th Avenue East | Construct new 7th Ave Lift station for wet and dry weather flows. | Conveyance pump station with minimum sustained design capacity of 135 million gallons per day. | Ability to pump 45 MGD to the West WWTP and 90 MGD to onsite storage and high-rate treatment facility. | | 1/1/2026 | 1/1/2038* |
| | | | | Above ground storage basin | Storage basin with a minimum storage volume of 5.1 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers | After construction of the high-rate treatment unit, no more than 4 CSOs, and a total of 7 MG of residual overflow volume under Typical Year conditions. Treated discharges must not exceed a TSS concentration of 40 mg/L averaged over the last seven discharge events. The compliance sampling done at the proposed high-rate treatment unit will be representative and reported as a 7-Discharge Rolling Average over the seven most recent discharge events. See Appendix H for monitoring and reporting requirements. | | 1/1/2028 | 1/1/2038* |
| | | | | Satellite high rate treatment facility | Satellite high rate treatment unit that meets the performance criteria, including disinfection, with a minimum sustained design capacity of 72 million gallons per day. The hydraulic loading rate shall not exceed the manufacture's recommendation. | | 1/1/2035 | 1/1/2036 | 1/1/2038 |
| | | 016 | Franklin Street | Relief sewer to 7th Avenue CSO Control Facility | Relief sewer with a minimum diameter of 72 inches. | No more than 2 CSOs, and a total of 2 MG of residual overflow volume under Typical Year conditions. | 1/1/2035 | 1/1/2036 | 1/1/2038* |
| | | 020 | 9th Avenue | Relief sewer to 7th Avenue CSO Control Facility | Relief sewer with a minimum diameter of 48 inches. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2035* | 1/1/2036 | 1/1/2038* |
| | | 022 | St. Joseph Avenue | Increase underflow pipe size and build weir | Raise CSO regulatory weir and increase underflow sewer diameter to 36 inches. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2026 | 1/1/2027 | 1/1/2028 |

**REVISED Appendix G: Approved IOCP Remedial Measures, Design Criteria, Performance Criteria, and Implementation Schedule**

| | | | | | Narrative Description of Proposed Design and Performance Criteria | | Implementation Schedule | | |
|---|---|---|---|---|---|---|---|---|---|
| **Control Measure/Plan** | **Project** | **Outfall Number or Overflow** | **Name** | **Description** | **Design Criteria** | **Performance Criteria** | **Bid Date** | **Commencement of Construction** | **Achievement of Full Operation** |
| 6 | Diamond Avenue/Baker Street Sewer Separation and CSO Control Projects | 024 | Baker | Relief pump station to Diamond Avenue CSO Control Facility | Conveyance pump station with minimum sustained design capacity of 100 million gallons per day. | No more than 4 CSOs, and a total of 12 MG of residual overflow volume under Typical Year conditions. | 1/1/2025 | 1/1/2026 | 7/1/2038 |
| | | 025 | Diamond Avenue | Storage basin with dewatering pump station. | Storage basin with a minimum storage volume of 8.1 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. Dewatering pump station with minimum sustained design capacity of 4 million gallons per day. | After construction of the treatment unit, no more than 4 CSOs, and a total of 40 MG of residual overflow volume will occur under Typical Year conditions. Treated discharges must not exceed a TSS concentration of 40 mg/L averaged over the last seven discharge events. The compliance sampling done at the proposed high-rate treatment unit will be representative and reported as a 7-Discharge Rolling Average over the seven most recent discharge events. See Appendix H for monitoring and reporting requirements. | 1/1/2028 | 1/1/2029 | 1/1/2032* |
| | | | | Conveyance Pump Station | Pump station to conveyance wastewater to Diamond Avenue storage basin/treatment facility with minimum sustained design capacity of 150 million gallons per day. | | 1/1/2028* | 1/1/2029 | 1/1/2032* |
| | | | | Satellite high rate treatment facility | Satellite high rate treatment unit that meets the performance criteria, including disinfection, with a minimum sustained design capacity of 20 million gallons per day. The hydraulic loading rate shall not exceed the manufacture's recommendation. | | 1/1/2028* | 1/1/2029 | 1/1/2032 |
| | | | | Diamond Avenue partial sewer separation | Partial sewer separation within the Diamond Avenue subbasin , as described in Evansville's 2007 Stormwater Master Plan and in Figure 9-5 of the July 31, 2015 IOCP. | No SSOs pursuant to Consent Decree paragraph 12, subject to Consent Decree paragraph 69. | | | 1/1/2026 |
| 7 | Oakley Street CSO Storage Facility | 018 | Oakley Street | Storage basin with gravity influent & effluent | Storage basin with a minimum storage volume of 0.6 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2034 | 1/1/2035 | 7/1/2036 |
| 8 | Oak Hill Sewer Separation and CSO Control Projects | | Oak Hill | Partial sewer separation | Partial sewer separation projects, including the State Hospital, Boeke Road Outfall, Weinbach and Keck projects, as identified within Evansville's 2007 Stormwater Master Plan. | No SSOs pursuant to Consent Decree paragraph 12, subject to Consent Decree paragraph 69. | | | 1/1/2028 |
| | | 011 | Oak Hill | Storage basin with dewatering pump station | Storage basin with a minimum storage volume of 6.4 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. dewatering pump station with minimum sustained design capacity of 4.6 million gallons per day. | No more than 3 CSOs, and a total of 5 MG of residual overflow volume under Typical Year conditions. | 1/1/2035 | 1/1/2036 | 7/1/2037 |

**REVISED Appendix G: Approved IOCP Remedial Measures, Design Criteria, Performance Criteria, and Implementation Schedule**

| | | | | | Narrative Description of Proposed Design and Performance Criteria | | Implementation Schedule | | |
|---|---|---|---|---|---|---|---|---|---|
| **Control Measure/Plan** | **Project** | **Outfall Number or Overflow** | **Name** | **Description** | **Design Criteria** | **Performance Criteria** | **Bid Date** | **Commencement of Construction** | **Achievement of Full Operation** |
| 9 | Downtown CSO (Oak/Riverside, Chestnut, and Dress Plaza) Control Projects | 008 | Chestnut | Relief sewer to Oak-Riverside Storage facility | Relief sewer with a minimum diameter of 84 inches. | No more than 3 CSOs, and a total of 13 MG of residual overflow volume under Typical Year conditions. | 1/1/2037 | 1/1/2038 | 1/1/2039 |
| | | 010 | Oak and Riverside | Storage basin with dewatering pump station | Storage basin with a minimum storage volume of 7.5 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. Dewatering pump station with minimum sustained design capacity of 3.8 million gallons per day. Relief sewer with a minimum diameter of 48 inches. | 0 CSOs and 0 gallons of residual overflow volume under Typical Year conditions. | 1/1/2037 | 1/1/2038 | 12/31/2039 |
| | | 038 | Dress Plaza | Storage basin with dewatering pump station | Storage basin with a minimum storage volume of 3.2 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. Dewatering pump station with minimum sustained design capacity of 2.1 million gallons per day. Relief sewer with a minimum diameter of 60 inches. | No more than 3 CSOs, and a total of 7 MG of residual overflow volume under Typical Year conditions. | 1/1/2035 | 1/1/2036 | 1/1/2037 |
| 10 | 6th Avenue, Dresden Street, Maryland Street, and Delaware Street CSO Control Projects | 012 | Maryland Street | Relocate diversion structure and sanitary connection to the upstream. Relief Sewer to Delaware CSO Control Facility. | Relief sewer with a minimum diameter of 72 inches. | No more than 2 CSOs, and a total of 1 MG of residual overflow volume under Typical Year conditions. | 1/1/2036 | 1/1/2038 | 5/31/2040 |
| | | 13 | Delaware Street | Storage basin with dewatering pump station, conveyance pump station, and relief sewer. | Storage basin with a minimum storage volume of 3.5 million gallons. This volume is for the storage basin only, and excludes conveyance sewers and dewatering sewers. Dewatering pump station with minimum sustained design capacity of 1.8 million gallons per day. Conveyance pump station with minimum sustained design capacity of 70 million gallons per day. Relief sewer with minimum diameter of 84 inches. | No more than 2 CSOs, and a total of 3 MG of residual overflow volume under Typical Year conditions. | 1/1/2036 | 1/1/2038 | 5/31/2040 |
| | | 014 | Dresden Street | Relief sewer to Delaware Street CSO Control Facility | Relief sewer with a minimum diameter of 60 inches. | No more than 2 CSOs, and a total of 1 MG of residual overflow volume under Typical Year conditions. | 1/1/2036 | 1/1/2038 | 5/31/2040 |
| | | 017 | 6th Avenue | Relief sewer to Delaware Street CSO Control Facility | Relief sewer with a minimum diameter of 24 inches. | No more than 1 CSOs, and 1 MG of residual overflow volume under Typical Year conditions. | 1/1/2036 | 1/1/2038 | 5/31/2040 |
| SSRMP | North Park Rehabilitation Projects | | Mill Road SSOs | Sewer and manhole rehabilitation | See Note 8. | | 1/1/2018 | 1/1/2019 | 1/1/2023 |
| SSRMP | North Park Capacity Projects | SSO | Mill Road SSOs | Increase conveyance capacity by upsizing trunk sewers; raise manhole rim elevations; pump flow into CSS | Conveyance pump station with minimum sustained design capacity of 17.7 million gallons per day. Upsize a total length of 7,759 feet of sanitary sewer. Relief sewer diameter will be determined using 10-year level of SSO control. Seal manholes associated with upsized sewer lines. See Evansville's approved Sanitary Sewers Remedial Measures Plan for more specific project details. | 0 SSOs, 10-year level of SSO control | 1/1/2030 | 1/1/2031 | 5/31/2035 |
| SSRMP | Lloyd Expressway Rehabilitation Projects | SSO | Lincoln Avenue SSOs | Sewer and manhole rehabilitation | See Note 9. | | 1/1/2021 | 1/1/2022 | 1/1/2025 |
| SSRMP | Lloyd Expressway Capacity Projects | SSO | Lincoln Avenue SSOs | Increase conveyance capacity by upsizing trunk sewers; raise manhole rim elevations | Upsize a total length of 5,951 feet of sanitary sewer. Relief sewer diameter based on 10-year level of SSO control. Adjust 2 manhole inverts. See Evansville's approved Sanitary Sewers Remedial Measures Plan for more specific project details. | 0 SSOs, 10-year level of SSO control | 1/1/2024 | 1/1/2025 | 1/1/2027 |
| SSRMP | NW/SW Rehabilitation Projects | SSO | Tekoppel Avenue SSOs | Sewer and manhole rehabilitation | See Note 9. | | 1/1/2025 | 12/1/2025 | 1/1/2030 |
| SSRMP | NW/SW Capacity Projects | SSO | Tekoppel Avenue SSOs | Increase conveyance capacity by upsizing trunk sewers; raise manhole rim elevations; pump flow into CSS | Conveyance pump station with minimum sustained design capacity of 14.5 million gallons per day. Size any relief sewer diameter based on 10-year level of SSO control. See Evansville's approved Sanitary Sewers Remedial Measures Plan for more specific project details. | 0 SSOs, 10-year level of SSO control | 1/1/2026 | 1/1/2027 | 1/1/2028 |
| SSRMP | E-11 Rehabilitation Projects | SSO | Bergdolt Rd SSOs | Sewer and manhole rehabilitation | See Note 9. | | 1/1/2024 | 1/1/2025 | 1/1/2029 |

**Appendix G: Approved IOCP Remedial Measures, Design Criteria, Performance Criteria, and Implementation Schedule**

| | | | | | Narrative Description of Proposed Design and Performance Criteria | | Implementation Schedule | | |
|---|---|---|---|---|---|---|---|---|---|
| **Control Measure/Plan** | **Project** | **Outfall Number or Overflow** | **Name** | **Description** | **Design Criteria** | **Performance Criteria** | **Bid Date** | **Commencement of Construction** | **Achievement of Full Operation** |
| SSRMP | E-11 Capacity Projects | SSO | Bergdolt Rd SSOs | Increase conveyance capacity by upsizing trunk sewers; raise manhole rim elevations; pump flow into CSS | Conveyance pump station with minimum sustained design capacity of 14.5 million gallons per day. Upsize a total sewer length of 12,043 feet. Relief sewer diameter based on 10-year level of SSO control. Adjust 21 manhole inverts. See Evansville's approved Sanitary Sewers Remedial Measures Plan for more specific project details. | 0 SSOs, 10-year level of SSO control | 1/1/2027 | 1/1/2028 | 1/1/2030 |
| SSRMP | SSS Rehabilitation Projects | SSO | SSS Basins | Sewer and manhole rehabilitation | Defendants shall spend not less than $3,671,000, in 2015 dollars. | | 1/1/2024 | 1/1/2025 | 1/1/2035 |

Notes:

1 With the exception of the SSRMP Projects noted above, this summary table does not include cost information. Capital Costs, Project O&M, and Life Cycle costs are presented with project details in the LTCP, SSRMP, and WWTP Facility Plan.

2 Performance criteria based on Evansville's typical precipitation year. Evansville should have no more than four CSO activations within the combined sewer collection system during the typical precipitation year.

3 Crossed out boxes in the Implementation Schedule indicated smaller projects whose full completion dates were earlier than the larger projects within the same control measure.

4 Dates with an asterix denote dates in the Implementation Schedule that were taken from a larger project in the same control measure, consistent with the 9/29/2015 discussion.

5 Effluent from the 7th Avenue Remote Treatment Unit, Diamond Avenue Remote Treatment Unit, the Constructed Wetland, and the VTU shall not exceed the following E. coli criteria from April 1 through October 31 of each year: (A) One hundred twenty-five (125) colony forming units per one hundred (100) milliliters as a geometric mean provided that five (5) grab samples or more are collected over a thirty (30) day period and (B) Two hundred thirty-five (235) colony forming units per one hundred (100) milliliters daily maximum. Daily maximum shall be the geometric mean of all samples on any discharge day provided that three (3) or more grab samples are collected. If less than 3 grab samples are taken then the arithmetic mean shall be reported instead. The goal of the effluent monitoring program is to collect at least 3 grab samples during each discharge event, and the samples shall be collected at shorter intervals at the onset of the event, if Evansville estimates that the event duration may be less than 6 hours.

6 Discharges from the wetland treatment system, VTU, 7th Avenue East satellite high rate treatment system, and Diamond Avenue high rate treatment system in compliance with the applicable Design and Performance Criteria in this Appendix G and applicable NPDES permit requirements shall not be considered a "CSO" prohibited by the Consent Decree, as amended, for purposes of determining compliance with the number of CSOs specified by the Performance Criteria applicable to each such system in this Appendix G.

7 Per Evansville's 2015 Combined Sewer Overflow Operation Plan (CSOOP) Update, CSOs 009 and 123 are not utilized. Evansville shall physically eliminate both of these CSOs by October 31, 2016 and reflect the elimination of these outfalls in its 2016 CSOOP Update.

8 Evansville will achieve a targeted sewershed basin area-weighted median R Value of 5% or less after completion of its rehabilitation projects in the North Park sewershed. In addition, if a sub-basin/sub-catchment within the targeted basin has had a wet-weather SSO in the three years following completion of the rehabilitation projects related to the sub-basin, that sub-basin/sub-catchment shall demonstrate an R value less than 5%.

9 Evansville will achieve a targeted sewershed basin area-weighted median R Value of 5% or less in each of the three targeted sewersheds after completion of its rehabilitation projects. In addition, if a sub-basin/sub-catchment within one of the targeted sewershed basins has had a wet-weather SSO in the three years following completion of the corresponding capacity projects related to each sub-basin, that sub-basin/sub-catchment shall demonstrate an R-value less than 5%. This post-capacity project analysis will also include the necessary calculations and information necessary to demonstrate whether the wet weather SSO occurred during a wet weather event that exceeded the 10-year level of control or was equal to or less than the 10-year level of control.