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## CONSENT DECREE

WHEREAS, Plaintiff, the United States of America (“United States”), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency (“EPA”), filed the Complaint herein on (TBD), alleging that Defendant, the City of Kansas City, Missouri (“Kansas City,” “City,” or “Defendant”), has violated and continues to violate the Clean Water Act (“the Act” or “CWA”), 33 U.S.C. § 1251 et seq., and the conditions and limitations of its National Pollutant Discharge Elimination System (“NPDES”) Permit Numbers MO-0024929, MO-0024911, MO-0049531, MO-0048313, MO-0025011, MO-0048305, and MO-0024961.

WHEREAS, the Defendant is a municipality organized and existing under the laws and constitution of the State of Missouri.

WHEREAS, the Defendant owns and operates a Publicly Owned Treatment Works (“POTW”) that includes seven wastewater treatment plants and associated collection systems in Kansas City, that serves the citizens of Kansas City, and several surrounding counties and municipalities. Five of the wastewater treatment plants owned and operated by the City are located within the separate sanitary sewer system and are permitted to discharge treated effluent into the Missouri River, Fishing River, Wilkerson Creek, Rocky Branch Creek, Todd Creek, and their tributaries. These separate sanitary sewer system wastewater treatment plants are the Birmingham Sewage Treatment Plant, Fishing River Wastewater Treatment Plant, Northland Mobile Home Park Wastewater Treatment Plant, Rocky Branch Wastewater Treatment Plant, and Todd Creek Wastewater Treatment Plant. Defendant also owns and operates two wastewater treatment plants located within the combined sewer system area: Westside Wastewater Treatment

Plant and the Blue River Wastewater Treatment Facility. These two treatment plants are permitted to discharge treated effluent into the Missouri River.

WHEREAS this Consent Decree does not, in any way, address nutrient controls which may be required by Current NPDES Permits for the City's Wastewater Treatment Plants.

WHEREAS, the State of Missouri, has been joined in this action to satisfy the requirements of Section 309(e) of the Act, 33 U.S.C. § 1319(e). No allegation is made in the Complaint that the laws of Missouri prevent the City from raising revenues needed to comply with this Decree.

WHEREAS, the United States alleges that the City has violated and continues to violate Section 301 of the CWA, 33 U.S.C. § 1311, and the terms and conditions of the City's NPDES permits, by discharging untreated sewage from its sewage collection system, including but not limited to Combined Sewer Overflows ("CSOs") and Sanitary Sewer Overflows ("SSOs"), as these terms are defined in Section V of this Consent Decree, into the Missouri River, Fishing River, Wilkerson Creek, Rocky Branch Creek, Todd Creek, Blue River, Brush Creek, Penn Valley Lake, and their tributaries, hereinafter "receiving streams" as defined in Section V of this Consent Decree.

WHEREAS, pursuant to its NPDES permits, the City developed a Long Term Control Plan ("LTCP") and pursuant to its approved work plans, the LTCP is included in the City's Overflow Control Plan ("OCP"). The OCP includes the LTCP and a Sanitary Sewer System Control Plan ("SSSC Plan") to address both CSOs and SSOs.

WHEREAS, the City has implemented numerous early action projects to address and minimize sewer overflows.

WHEREAS, the City is becoming a national leader in promoting public and private green

solutions, in an effort to sustainably control sewer overflows and reduce environmental impacts from urban storm water.

WHEREAS, the City has followed the LTCP development process as provided in both EPA's April 19, 1994 "Combined Sewer Overflow (CSO) Policy" ("CSO Policy") and Missouri law in the development of its approved LTCP as part of the OCP.

WHEREAS, the City has developed and is implementing a Capacity, Management, Operation and Maintenance program ("CMOM"), which was submitted to EPA and relevant portions are incorporated as Appendix "C".

WHEREAS, the City has developed and is implementing a Nine Minimum Control ("NMC") Plan, which was submitted to EPA and relevant portions are incorporated as Appendix "B".

WHEREAS, the State of Missouri has approved the City's OCP by letter dated April 14, 2010.

WHEREAS, EPA has approved specific remedial and Control Measures contained within the OCP, which the City shall implement, pursuant to the provisions and schedules specified in this Consent Decree and its Appendices.

WHEREAS, the Parties agree, and the Court finds, that settlement of the claims alleged in the Complaint without further litigation or trial of any issues is fair, reasonable, and in the public interest and that entry of the Consent Decree is the most appropriate way of resolving the claims alleged in the Complaint.

NOW, THEREFORE, without admission by the City of any of the non-jurisdictional allegations in the Complaint and this Consent Decree, and without adjudication of any issue of

fact or law, and with the consent of the Parties, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

### **I. JURISDICTION**

This Court has jurisdiction over the subject matter of this action and over the parties to this action pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b) and 28 U.S.C. §§1331, 1345, and 1355. The Complaint states a claim upon which relief may be granted against the City under Section 309 of the CWA, 33 U.S.C. § 1319, for injunctive relief and civil penalties. The City waives any and all objections that it may have to the Court's jurisdiction to enter and enforce this Consent Decree.

### **II. VENUE**

Venue is proper in this Court pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b) and 28 U.S.C. §§ 1391(b) and 1395(a).

### **III. BINDING EFFECT**

- A. The provisions of this Consent Decree shall apply to and be binding on the City as defined in Section V below and its officers, directors, employees, agents, servants, successors and assigns, upon all persons, firms, and corporations in active concert or participation with the City or its officers, directors, agents, employees, successors and assigns, and upon the United States.
- B. Effective from the Date of Lodging of this Consent Decree until its termination, the City shall give written notice of this Consent Decree to any person or entity to whom the City transfers ownership or operation of any wastewater treatment plant, collection system or any other portion of its wastewater treatment and collection system and shall provide a copy

of this Consent Decree to any such person or entity. The City shall notify EPA and the United States Department of Justice (“DOJ”) in writing of any successor in interest at least thirty (30) days prior to any such transfer. Any sale or transfer of the City’s interests in or operating role with respect to the City’s wastewater treatment plant or collection system shall not in any manner relieve the City of its responsibility to meet the terms and conditions of this Consent Decree unless the Parties agree in writing.

- C. The City shall provide a copy of this Consent Decree to each entity the City retains to perform the work or any portion thereof required by this Consent Decree upon execution of any contract relating to such work, and shall provide a copy to each entity that the City is currently retaining no later than thirty (30) days after the date of entry of this Consent Decree. Providing a copy shall include either making the Consent Decree available electronically or by paper copy if requested by the entity retained. Any action taken by any entity retained by the City to implement the City’s duties under this Consent Decree shall be considered an action of the City for purposes of determining compliance with this Consent Decree.

#### **IV. PURPOSE**

The express purpose of the Parties entering into this Consent Decree is for the City to take all measures necessary to: (a) achieve full compliance with the CWA and the regulations promulgated thereunder; (b) achieve full compliance with the City’s Current NPDES Permits as they relate to the capacity at the WWTPs and capacity, management, operation and maintenance of the collection systems; (c) achieve the goal of eliminating SSOs; and (d) to achieve the goal of eliminating bypasses prohibited by 40 C.F.R. § 122.41(m), as these terms are defined in Section

V of this Consent Decree.

## V. DEFINITIONS

- A. Unless otherwise defined herein, terms used in this Consent Decree shall have the meanings given to those terms in the CWA, 33 U.S.C. §§ 1251 et seq., and the regulations promulgated under the CWA.
- B. The following terms used in this Consent Decree shall be defined as follows:
1. “Achievement of Full Operation” shall mean completion of construction and installation of equipment or infrastructure such that the equipment or infrastructure has been placed into full operation, and is expected to both function and perform as designed.
  2. “Approved Supplemental Remedial Measures Plan” shall mean any Supplemental Remedial Measures Plan approved in accordance with Subparagraph VII.A.1.c of this Consent Decree, or established through Dispute Resolution pursuant to Section XV of this Consent Decree.
  3. “Bypass” as that term is defined in 40 C.F.R. § 122.41(m) means the intentional diversion of waste streams from any portion of a treatment facility. An anticipated bypass may be approved by EPA pursuant to 40 C.F.R. § 122.41(m)(4)(ii).
  4. “City” shall mean the City of Kansas City, Missouri.
  5. “Collection System” or “sewer system” shall mean the sewage collection and transmission system (including, but not limited to, all pipes, force mains, gravity sewer lines, lift stations, pump stations, diversion structures, manholes, and

appurtenances thereto but does not in any way include private laterals) owned or operated by the City and designed to collect and convey wastewater (e.g. commercial, industrial and domestic wastewater) to the WWTPs or to one or more points of discharge.

6. "Combined Sewer Overflow" or "CSO" shall mean a discharge, release and/or overflow from the combined sewer system at a point prior to the headworks of a WWTP.
7. "Combined Sewer Overflow Outfall" or "CSO Outfall" shall mean the outfall from which a CSO is discharged.
8. "Combined Sewer System" or "CSS" shall mean the portion of the City's Sewer System designed to convey municipal sewage (i.e. domestic, commercial and industrial wastewaters) and stormwater runoff through a single-pipe system to a WWTP and/or to a combined sewer overflow structure and/or overflow.
9. "Consent Decree" shall mean this Consent Decree.
10. "Control Measure" or "Overflow Control Measure" or "Supplemental Remedial Control Measure" shall mean the construction, control measures, actions and other activities set forth in Appendix "A" or any revision to Appendix "A" made pursuant to the terms of this Consent Decree.
11. "Current NPDES Permits" means the City's NPDES Permits Nos. MO-0024929, effective date May 28, 2004, and revised November 26, 2008; MO-0024911, effective date December 30, 2005; MO-0025011, effective date July 1, 2005; MO-

0049531, effective date January 26, 2007, and revised June 29, 2007; MO-0048313, effective date December 16, 2005, and revised April 21, 2006; MO-0048305, effective date October 13, 2006; MO-0024961, effective date December 23, 2005, and revised April 21, 2006; and any such permit which succeeds Permit Nos. MO-0024929, MO-0024911, MO-0025011, MO-0049531, MO-0048313, MO-0048305, and MO-0024961 issued to the City, and which is in effect at a particular time in question, and any extended, modified or reissued permit.

12. "Date of Entry" shall mean the date this Consent Decree is approved and signed by the Court.
13. "Date of Lodging" shall mean the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Western District of Missouri.
14. The terms "day" or "days" as used herein shall mean a calendar day or calendar days. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, federal or state holiday, the period shall run until the close of the next business day.
15. "Defendant" shall mean the City of Kansas City, Missouri.
16. "Design" shall include the completion of detailed plans and specifications as needed to begin construction.
17. "Gravity sewer line" shall mean a pipe that receives, contains and conveys wastewater not normally under pressure, which wastewater is intended to flow unassisted under the influence of gravity.

18. “Green Infrastructure” shall mean a wastewater treatment technology or process that uses natural or engineered systems, such as green roofs, rain gardens and permeable pavement that mimics natural processes and directs stormwater to areas where it can be stored, infiltrated, evapotranspired, or be re-used.
19. “Green Infrastructure Project” shall include any project that utilizes green infrastructure and is approved pursuant to Subparagraph VII.A.1.b.
20. “Infiltration” as defined by 40 CFR 35.2005(b)(20) shall mean water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through means including, but not limited to, defective pipes, pipe joints, connections, or manholes.
21. “Inflow” as defined by 40 CFR 35.2005(b)(21) shall mean water other than wastewater that enters a sewer system (including sewer service connections) from sources including, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, foundation drains, storm sewers, catch basins, cooling water discharges, storm waters, surface runoff, street wash waters, or drainage.
22. “I/I” shall mean the total quantity of water from inflow and infiltration without distinguishing the source.
23. “MGD” or “mgd” means million gallons per day.
24. “Monthly Operating Report” or “MOR” is defined as those discharge monitoring reports which Kansas City submits to the MDNR on a monthly basis pursuant to

Section A of the City's NPDES Permit Nos. MO-0024929, MO-0024911, MO-0025011, MO-0049531, MO-0048313, MO-0048305, and MO-0024961 and any similar provision in any of the City's Current NPDES Permits.

25. "Missouri DNR" or "MDNR" means the State of Missouri Department of Natural Resources, a part of the executive branch of the government of the State of Missouri. Subject to the supervisory, rulemaking, and adjudicative authority of the Missouri Clean Water Commission, as described in Chapter 644 RSMo. MDNR issued the Current NPDES Permits at issue in this Consent Decree.
26. "Overflow Control Plan" or "OCP" shall mean the Long Term Control Plan and Sanitary Sewer System Plan collectively referred to by the City as the Overflow Control Plan approved by the MDNR by letter dated April 14, 2010.
27. "Paragraph" shall mean a portion of this Consent Decree identified by Arabic numerals.
28. "Parties" shall mean the signatories to this Consent Decree, the Plaintiff, the United States, and Defendant, the City of Kansas City, Missouri.
29. "Performance Criteria" shall mean the performance criteria and percent capture of wet weather flows specified in Appendix "A" or as specified in any revision to Appendix "A" made pursuant to the terms of this Consent Decree.
30. "Plaintiff" means the United States of America, on behalf of EPA.
31. "Post-Construction Monitoring Program" shall mean the post-construction monitoring program set forth as Appendix "D," as well as any additional post-construction monitoring or modeling activities as specified in any revision to

Appendix "A" made pursuant to the terms of this Consent Decree.

32. "Publicly Owned Treatment Works" or "POTW" shall mean a publicly owned treatment works or POTW as defined in 40 C.F.R. § 403.3(o).
33. "Receiving Stream" or "receiving water" or "receiving water body" shall mean water bodies that receive discharge from the treatment plants and/or the collection system(s), including but not limited to the Missouri River, Fishing River, Wilkerson Creek, Rocky Branch Creek, Todd Creek, Blue River, Brush Creek, Penn Valley Lake, and other waters.
34. "Separate sanitary sewer system" shall mean a conduit designed, or modified in a process called "separation," to carry only sewage, and not stormwater, from residences, commercial buildings, industrial plants and institutions for treatment at a wastewater treatment plant.
35. "Sanitary sewer overflow," or "SSO," shall mean any discharge to waters of the United States from the City's Sanitary Sewer Collection System through point sources not specified in any NPDES permit, as well as any release of wastewater from the City's Separate Sanitary Sewer System to public or private property that does not reach waters of the United States or the State; provided, however, that wastewater backups into buildings that are caused by blockages, flow conditions, or malfunctions in a building lateral, other piping or conveyance system that is not owned or operationally controlled by the City or that are the result of overland, surface flooding not emanating from the City's sewer system, are not SSOs for the purposes of this Consent Decree.

36. "Section" shall mean a portion of this Consent Decree identified by Roman numerals.
37. "State" shall mean the State of Missouri.
38. "Sub-paragraph" shall mean a portion of a paragraph identified by lower case letters.
39. "Subsection" shall mean a portion of this Consent Decree identified by capital letters.
40. "Unpermitted CSO Discharge" shall include any release of untreated or partially treated sewage from the City's combined sewer system that is not authorized by any of the City's NPDES permits.
41. "Wastewater treatment plants" and "WWTPs" shall mean the wastewater treatment plants operated by the City and set forth as follows:
  - i. Birmingham Sewage Treatment Plant, NPDES Permit MO-0049531, located in Clay County, at 10801 NE 28<sup>th</sup> Street, Kansas City, Missouri 64161;
  - ii. Fishing River Wastewater Treatment Plant, NPDES Permit MO-0048313, located in Clay County, at 10300 NE 118<sup>th</sup> Street, Kansas City, Missouri 64157;
  - iii. Northland Mobile Home Park Wastewater Treatment Plant, NPDES Permit MO-0025011, located in Clay County, at 11819 North College, Kansas City, Missouri 64156;
  - iv. Rocky Branch Wastewater Treatment Plant, NPDES Permit MO-

- 0048305, located in Clay County, at 500 NE 132<sup>nd</sup> Street, Kansas City, Missouri 64165;
- v. Todd Creek Wastewater Treatment Plant, NPDES Permit MO-0024961, located in Platte County, at 7600 NW 144<sup>th</sup> Street, Kansas City, Missouri 64163;
  - vi. Westside Wastewater Treatment Plant, NPDES Permit MO-0024929, located in Jackson County, at 1849 Woodswether Road, Kansas City, Missouri 64105; and
  - vii. Blue River Wastewater Treatment Facility, NPDES Permit MO-0024911, located in Jackson County, at 7300 Hawthorne Road, Kansas City, Missouri 64120.

## **VI. SUBMISSIONS REQUIRING EPA APPROVAL**

- A. EPA review: After review of any plan, report or other item that the City is required to submit for approval to EPA pursuant to this Consent Decree, EPA shall: (a) approve the submission, in whole or in part; (b) approve the submission upon specified conditions; (c) disapprove, in whole or in part, the submission, providing comments identifying deficiencies and directing the City to modify the submission; or (d) any combination of the above. If EPA partially approves, disapproves the submission, in whole or in part, or if EPA approves it upon specified conditions, EPA shall notify the City in writing of those portions of the submission that EPA disapproves or approves upon specified conditions. Except where specifically provided otherwise, the City shall provide MDNR with copies of all submittals made to EPA. EPA shall provide MDNR notice and the

opportunity to comment on the submittal, and EPA agrees to consider any comment by MDNR that is received by EPA within forty-five (45) days of the date of EPA's notice to MDNR.

- B. The City's obligations upon EPA approval: In the event of approval, or approval upon conditions by EPA, the City shall proceed to take any action required by the plan or other item as approved by EPA, except as provided in Subsection E.
- C. The City's obligations upon EPA disapproval: Upon receipt of notice of disapproval, partial approval, or conditional approval of a submission pursuant to Subsection VI.A above, the City shall within sixty (60) days, if no other time frame is specified in the notice, address the disapproved portions of the plan, report or other item and resubmit the plan or other item for approval, subject to the City's rights under Section XV, Dispute Resolution.
- D. Procedures for Resubmitted Plans: EPA may take any of the actions described in Subsection VI.A above with respect to any resubmitted document. In the event that EPA disapproves a resubmitted plan, report or other item, or portion thereof, EPA may again require the City to address the disapproved portions and resubmit the plan within sixty (60) days of receipt of the disapproval. If the City fails to timely submit the plan or again does not address the disapproved portions, the City shall be deemed out of compliance with this Consent Decree. The City shall within ten (10) business days, unless a longer period is specified by EPA, proceed with any action required pursuant to the approved resubmitted plan, or the City may initiate the dispute resolution provisions of the Consent Decree, pursuant to Section XV. If the Court upholds EPA's disapproval or approval

upon conditions, stipulated penalties shall accrue for such violation from the date on which the resubmitted submission was originally required.

- E. The City shall proceed, if directed by EPA, to take any action required by any approved portion of the City's submission or resubmission, unless such action is directly dependent upon any unapproved portion of the submission or resubmission and the City invokes its right to dispute resolution under Section XV. Implementation of any approved portion of a submission shall not relieve the City of any liability for stipulated penalties for not implementing the unapproved and/or conditionally approved portion(s).
- F. Any stipulated penalties applicable to the original submission shall not be payable unless the first resubmission, as set forth in Subsection D above, is untimely or is disapproved in whole or in part so as to require another resubmission; provided that, if the original submission was so deficient as to constitute a material breach of the City's obligations under this Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmissions.
- G. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval by EPA pursuant to Section VI, herein, be enforceable under this Consent Decree. In the event EPA approves or approves upon conditions a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved portion shall be enforceable under this Consent Decree, unless such action is directly dependent upon an unapproved portion of the submission or resubmission and the City invokes its right to dispute resolution under Section XV.
- H. EPA agrees to use its best efforts to expeditiously review and comment on submittals that

the City is required to submit to EPA for approval pursuant to the terms and provisions of this Consent Decree. If EPA cannot complete its review of a submittal within ninety (90) days of receipt of the submittal, or within the time period otherwise provided in this Consent Decree, EPA shall so notify the City before the expiration of the applicable review period. If EPA fails to approve, provide comments or otherwise act on a submittal within ninety (90) days of receipt of the submittal, or within the time period otherwise provided in this Consent Decree, the City shall be granted an extension by EPA equal to the number of days that EPA's approval was untimely to complete any dependent subsequent milestones.

## **VII. IMPLEMENTATION OF SEWER SYSTEM REMEDIAL MEASURES AND POST-CONSTRUCTION MONITORING**

- A. Compliance Program and Schedules for the Implementation of the OCP. The City shall achieve and maintain compliance with the City's Current NPDES Permits as they relate to the capacity at the WWTPs and capacity, management, operation and maintenance of the collection systems, the provisions of the CWA, 33 U.S.C. § 1281 et seq., and the CSO Policy, in accordance with the compliance program and schedules set forth below.
1. Implementation of the Overflow Control Measures. The City shall implement the remedial and Control Measures in accordance with the Performance Criteria and implementation schedule incorporated into this Consent Decree and attached hereto as Appendix "A". Construction and implementation of all recommended remedial and Control Measures set forth in Appendix "A" shall be pursuant to Section IV, Purpose, of this Consent Decree. The City shall complete

construction and full implementation of all remedial and Control Measures pursuant to Appendix “A” as expeditiously as possible but in no event later than December 31, 2035.

- a. Post-Construction Monitoring Program. The City shall perform the Post-Construction Monitoring pursuant to the CSO Policy and as set forth in Appendix “D”.
- b. Use of Green Infrastructure and Revision of Control Measures set forth in Appendix “A” to Utilize Green Infrastructure.
  - i. The City intends to use an adaptive management approach in order to extensively utilize green infrastructure in lieu of and in addition to structural controls. No later than 365 days after completion of the Middle Blue River Pilot Project, the City shall submit to EPA for review and comment, a final report on the Middle Blue River 100-acre green infrastructure pilot project. The report shall include:
    - (a) A detailed description of the activities and work performed as part of the pilot project, including specific information about type, number, and location of green infrastructure technologies included in the pilot project;
    - (b) An evaluation of the effectiveness, implementability, and cost of the green infrastructure technologies included in the pilot project; this evaluation shall include a description of any barriers to

green infrastructure implementation encountered by the City during the pilot project, community reaction to and support for green infrastructure, and evaluation of socio-economic benefits from use of green infrastructure in the pilot project;

(c) A plan, based upon the results of the pilot project, for implementation of green infrastructure across the 744-acre Marlborough neighborhood;

(d) A plan, based upon the results of the pilot project, for implementation of green infrastructure potentially throughout the CSS.

- ii. EPA encourages the City to propose revisions to Appendix “A” to utilize green infrastructure as appropriate to reduce or replace gray Control Measures included in Appendix “A,” provided that any green measures proposed provide the same or greater level of control as those gray Control Measures to be reduced or replaced.
- iii. The terms of Section VI, Submissions Requiring EPA Approval, and Section XV, Dispute Resolution of this Consent Decree do not apply to EPA’s review of any Green Infrastructure Project Proposal submitted by the City; rather, the review process set forth herein in Section VII.A.1.b shall control.
- iv. Upon determination by the City to incorporate green infrastructure as an alternative measure to achieve the Performance Criteria set

forth in Appendix “A,” the City shall submit to EPA a conceptual proposal for review and approval.

- v. If EPA disapproves the City’s conceptual proposal, the City may request reconsideration of its proposal by the Director of the Water, Wetlands and Pesticides Division, EPA, Region 7, within thirty (30) days of receipt of EPA’s disapproval. The decision of the Director after reconsideration of the proposal shall be final and not subject to dispute resolution.
- vi. If EPA approves the conceptual proposal, the City shall submit to EPA a detailed Green Infrastructure Project Proposal. This proposal shall be consistent with this Consent Decree and shall at a minimum include the following:
  - (a) The performance levels expected to be achieved with the implementation of the Green Infrastructure Project, utilizing the information and models that the City used in developing the OCP, and any monitoring information used in formulating the proposal; along with a demonstration of the long term effectiveness and performance expected to be achieved with implementation of the project;
  - (b) A description of the work required to implement the Green Infrastructure Project and a schedule for completion of this work and implementation of the Project that is consistent with this

Consent Decree, its Appendices, and the date set forth herein in Section VII.A.1 for completion of construction and full implementation of all remedial and Control Measures; and

(c) A description of any post-construction monitoring and modeling to be performed, in addition to that set forth in Appendix “D” or any previously approved Supplemental Remedial Measures Plan, that is necessary to determine whether the Performance Criteria set forth in Appendix “A” will be met upon completion and implementation of the Green Infrastructure Project.

- vii. Upon receipt of the City’s Green Infrastructure Project Proposal, EPA shall provide notice and a copy of the proposal and the opportunity to comment on the proposal to MDNR. Any comment by MDNR shall be provided to EPA within thirty (30) days of the date of EPA’s notice to MDNR.
- viii. Upon review of the City’s Green Infrastructure Project Proposal and any comments on the proposal submitted by MDNR, EPA will either approve or disapprove the proposal. If approved, the City shall implement the Green Infrastructure Project in accordance with the provisions and schedule in the approved proposal. If disapproved, and EPA determines that the proposal would have constituted a non-material modification to the Consent Decree as defined in Section XXV, Modification, EPA’s decision is final. If

disapproved, and EPA determines that the proposal would have constituted a material modification to the Consent Decree as defined in Section XXV, Modification, the City may, within thirty (30) days of receipt of EPA's disapproval, appeal EPA's disapproval to the Director of the Water, Wetlands and Pesticides Division, EPA, Region 7, whose decision will be final.

- ix. The City shall provide for public participation in the development of any Green Infrastructure Project and corresponding revision to its Overflow Control Plan in accordance with the CSO Policy.
- x. In the event that the City implements an approved Green Infrastructure Project Proposal that fails to meet the Performance Criteria set forth in Appendix "A," the City may propose, within 180 days after submittal of the applicable post-construction monitoring report documenting said failure, additional Control Measures designed to achieve the Performance Criteria, or in the alternative, where the City has fundamentally met the Performance Criteria, the City may, within sixty (60) days after its failure to meet the Performance Criteria, petition EPA for a change in the Performance Criteria. After consideration of any such request by the City, EPA's decision will be final. In the event that EPA disapproves the City's request for a change in the performance Criteria, the City may propose additional Control Measures

designed to achieve the Performance Criteria within 180 days after EPA's disapproval.

- xi. Any change in the Control Measures, the Performance Criteria, or the deadlines set forth in this Consent Decree that occur as a result of a decision made by EPA pursuant to this Subparagraph will be in accordance with Section XXV, Modification. Changes to the Performance Criteria or the implementation date set forth in Paragraph VII.A.1 shall be considered material modifications pursuant to Section XXV, Modification.
- xii. Stipulated penalties will not accrue and become payable in the event that an approved Green Infrastructure Project Proposal, once implemented, fails to meet the Performance Criteria set forth in Appendix "A," provided that the City proposes additional Control Measures designed to meet the Performance Criteria that are approved by EPA, and/or the City petitions EPA for a change in the Performance Criteria, and that request is approved by EPA.
- xiii. The City shall submit to EPA an update on its implementation of green Control Measures as part of the annual report due on March 31 each year.
- xiv. The City shall submit to EPA every five (5) years an update on the status of all green infrastructure projects that have been approved by EPA.

- c. Achievement of Performance Criteria.
- i. By the specified date for Achievement of Full Operation for each specific control measure set forth in Appendix "A" and/or any revision to Appendix "A," the City shall achieve the Performance Criteria as specified in Appendix "A" and/or any revision to Appendix "A" for the specific control measure. The Performance Criteria set forth in Appendix "A" and the Post-construction Monitoring criteria set forth in Appendix "D" shall be used to determine whether the City has achieved the Performance Criteria.
  - ii. Except as provided in Subparagraph VII. A.1.b, if following Achievement of Full Operation of any specific control measure(s), the City needs additional time to implement additional remedial measures necessary to achieve the Performance Criteria pertaining to the specific control measure(s), the City shall submit to EPA within 180 days after the Date of Demonstration of Compliance with the Performance Criteria or the date of completion of the Critical Milestone for CSO Control Measures and/or within 180 days after the Date of Achievement of Full Operation for SSO Control Measures, as set forth in Appendix "A" for approval: (1) a request for an extension of the previously applicable deadline for Achievement of Full Operation for the control measure(s) at issue to allow for implementation of additional remedial measures, and

(2) a plan for performing supplemental remedial measures and additional post-construction monitoring and modeling (“Supplemental Remedial Measures Plan”). EPA shall provide the opportunity to comment on the submittal to the State pursuant to Subsection VI.A. An extension request that is beyond the implementation date set forth in Paragraph VII.A.1 shall be considered a material modification pursuant to Section XXV, Modification, herein. Any Supplemental Remedial Measures Plan submitted by the City shall include a description of the remedial measures that the City will take to ensure that the Performance Criteria will be achieved, and a schedule that is as expeditious as possible for design, construction and implementation of the measures; a description of additional post-construction monitoring and modeling needed to assess whether the City has achieved the Performance Criteria, and a schedule for performing such monitoring and modeling.

- iii. Upon receipt of EPA’s approval of the request for extension of time and the Supplemental Remedial Measures Plan, or upon resolution of any disputes in accordance with Section XV of this Consent Decree, the City shall implement the Approved Supplemental Remedial Measures Plan (including additional monitoring and modeling) in accordance with the schedule and

terms set forth therein.

2. Compliance with NPDES Permits. The City shall at all times comply with the City's Current NPDES Permits, as they relate to the capacity at the WWTPs and capacity, management, operation and maintenance of the collection systems, and the requirements set forth in the CSO Policy that no discharges from CSOs occur during dry weather.
  - a. Nine Minimum Controls. The City shall implement and comply with a NMC Plan that complies with the criteria set forth in Appendix "B."
  - b. Elimination of Unpermitted CSO Discharges within the City's Combined Sewer System. The City shall demonstrate that unpermitted CSO discharges from its Combined Sewer System have been eliminated to the extent practicable. If the City experiences an unpermitted CSO discharge, then the City shall by no later than five (5) days following such an event, submit a report to MDNR, in accordance with the City's Current NPDES Permits.
3. Capacity, Management, Operation and Maintenance Program. The City shall implement a CMOM Program that complies with the criteria set forth in Appendix "C."
4. Implementation of Disinfection at the City's WWTPs. The City shall implement disinfection at its WWTPs in accordance with the schedule provided in Appendix "F" and in compliance with its Current NPDES Permits and applicable laws governing the design, installation, and operation of such disinfection facilities.

The provisions of Section XIII, Stipulated Penalties, do not apply to any failure by the City to comply with any of the requirements of this paragraph relating to implementation of disinfection.

### **VIII. FUNDING**

- A. The City intends to seek federal and state grant funding assistance. However, the City's duty to comply with the terms of this Consent Decree is not contingent on the receipt of federal or state grant funds or the City's financial capabilities. Failure to comply is not excused by the lack of federal or state grant funds, or by the processing of any applications for the same, or by the City's financial capabilities.

### **IX. REPORTING**

- A. Beginning with the first full semi-annual period (either January 1 or July 1) following entry of this Consent Decree, and each such period thereafter until termination of the Consent Decree, the City shall submit in writing to EPA a semi-annual status report on or before each March 31 and September 30. The semi-annual status report shall contain a summary of the status and progress of implementation of all Control Measures required by Section VII and Appendix "A," including but not limited to the status of the following matters:
1. Development and implementation of all plans and reports addressing Control Measures required by Section VII and Appendix "A" of this Decree, including a statement of whether specific scheduled milestone dates in the schedules included in Appendix "A" were timely met during the semi-annual period. Upon completion of a specific project in Appendix "A," the City shall submit a

certification that the specified work has been completed, including the following documentation of the completed work to EPA:

- a. For work performed by a private contractor: an inspection report by City personnel of the completed project and certification by the Water Services Department Director, Deputy Director or Assistant Director, that the specified work has been completed.
  - b. For work performed by City personnel: a copy of the work order or similar document for the project verified by the Water Services Department Director, Deputy Director or Assistant Director, as having been completed.
  - c. The Water Services Department Director, Deputy Director or Assistant Director may delegate the certification responsibilities above by providing advance written notice to EPA for approval.
2. A statement setting forth the deadlines and other terms that the City is required by this Consent Decree to meet since the date of the last semi-annual report, whether and to what extent the City has met these requirements, and the reasons for any noncompliance;
  3. A general description of the progress made toward achievement of the Performance Criteria set forth in Appendix "A" within the six-month period, and a projection of the work to be performed pursuant to Appendix "A" during the following six-month period. Notification to EPA of any anticipated delay in performance shall not, by itself, excuse the delay.

B. Beginning with the first full annual period following entry of this Consent Decree, and each such period thereafter until termination of the Consent Decree, the City shall submit in writing to EPA an annual status report on or before March 31. The annual status report shall contain a summary of and/or copies of reports documenting the following during the previous year:

1. Copies of all unpermitted CSO discharge reports submitted to MDNR, as referenced in Section VII.A.2.b.
2. Copies of all other reports that were required to be submitted under its Current NPDES Permits during the prior twelve (12) months not otherwise submitted to EPA. Nothing in this Consent Decree shall be construed to modify the City's Current NPDES Permits, so as to relieve the City of any of its reporting requirements pursuant to its Current NPDES Permits.
3. A report demonstrating compliance with the Performance Criteria contained in Appendices "B," "C," and "D" during the prior twelve (12) months.
4. An update on implementation of green Control Measures, as required by Subparagraph VII.A.1.b;
5. An update on implementation of the SEP Plan, as required in Subsection XII.D.

C. Any additional report required to be submitted pursuant to Appendix "D" shall be submitted in accordance with the schedules set forth therein.

D. All reports required to be submitted herein shall contain a certification in accordance with Section XVIII of this Decree.

E. The City shall maintain copies of all written submissions prepared pursuant to this

Section and the Appendices of this Decree until the date of termination of this Consent Decree, unless upon the City's request, EPA agrees in writing to allow certain records to be discarded. The City shall provide notice to MDNR prior to any records being discarded.

## **X. COMMUNICATIONS**

- A. Except as specified otherwise, when the Plaintiff, Defendant, and MDNR transmit written notification (including all reports) or communication required by or in conjunction with the terms of the Consent Decree to EPA, DOJ, the United States Attorney, MDNR and the City, the notification shall be addressed as follows:

As to the United States Department of Justice:

Chief  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
Post Office Box 7611  
Washington, D.C. 20044-7611  
Reference Case No. 90-5-1-1-0643811

As to the United States Attorney:

Charles M. Thomas  
Assistant United States Attorney  
Western District of Missouri  
400 East 9<sup>th</sup> Street  
Kansas City, Missouri 64106

As to EPA:

Chief  
Water Enforcement Branch  
Water, Wetlands and Pesticides Division  
U.S. Environmental Protection Agency, Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101

and

Regional Counsel  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101

As to the State:

Chief Counsel  
Agriculture and Environment Division  
State of Missouri Office of Attorney General  
207 West High Street  
Jefferson City, Missouri 65102

and

Chief  
Water Pollution Compliance and Enforcement Section  
Missouri Department of Natural Resources  
P.O. Box 176  
Jefferson City, Missouri 65102

and

Director  
Kansas City Regional Office  
Missouri Department of Natural Resources  
500 NE Colbern Road  
Lee's Summit, Missouri 64086-4710

As to the City:

City Attorney  
City of Kansas City, Missouri  
28<sup>th</sup> Floor  
414 East 12<sup>th</sup> Street  
Kansas City, Missouri 64106

and

Director  
Water Services Department  
City of Kansas City, Missouri  
4800 East 63<sup>rd</sup> Street  
Kansas City, Missouri 64130.

- B. Plaintiff, Defendant, and MDNR, upon written notification to the others listed in Subsection X.A, above, may change the addresses for communication. All notifications or communications shall be deemed submitted on the date they are postmarked and sent by first class mail or certified mail, return receipt requested or sent by electronic mail.

**XI. CIVIL PENALTY**

- A. No later than thirty (30) days after the entry of this Decree, the City shall pay a civil penalty of \$600,000 to the United States.
- B. The United States shall be deemed a judgment creditor for purposes of collection of this civil penalty.
- C. The City shall pay \$600,000 as set forth in Subsection XI.A by Electronic Funds Transfer (“EFT”) to the DOJ lockbox bank, referencing DOJ No. 90-5-1-1-06438/1. Payment shall be made in accordance with instructions provided by the United States to the City following execution of this Consent Decree. Any EFT received at the DOJ lockbox bank after 4:00 P.M. Eastern Time will be credited on the next business day.

D. Notice of the EFT shall simultaneously be sent to the following:

United States Department of Justice

Paul Gormley  
U.S. Department of Justice  
Environmental Enforcement Section  
Environmental and Natural Resources Division  
1961 Stout Street, Suite 800  
Denver, Colorado 80294

EPA

Melissa A.C. Bagley  
U.S. Environmental Protection Agency, Region 7  
Office of Regional Counsel  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101.

- E. The transmittal letter forwarding such notice shall include the caption, civil action number and judicial district of this action.
- F. If the City fails to tender any portion of the payment as set forth above, interest shall accrue in accordance with the provisions of 31 U.S.C. § 3717.

**XII. SUPPLEMENTAL ENVIRONMENTAL PROJECT**

- A. The City shall complete the Supplemental Environmental Project (“SEP”), in accordance with the Supplemental Environmental Project Plan (“SEP Plan”) attached to this Consent Decree as Appendix “E.” EPA and the City agree that the SEP Plan is intended to secure significant environmental protection and improvements with the implementation of the project identified in the SEP Plan that are not otherwise required by law.
1. The City shall complete the SEP pursuant to the plans and time schedule set forth in the SEP Plan.

2. The City shall spend at least \$1,600,000 implementing the SEP identified in the SEP Plan. No part of this expenditure shall include federal or state funds, including federal or state low interest loans, contracts, or grants. The City shall include documentation of expenditures made in connection with the SEP as part of the SEP Completion Report required below in Subsection XII.B.
- B. The City shall submit to EPA a SEP Completion Report for the SEP described in the SEP Plan no later than one hundred and twenty (120) days from the date for completion of the SEP set forth in the SEP Plan. The SEP Completion Report shall contain the following information for the SEP:
1. A detailed description of the SEP as implemented;
  2. A description of any operating problems encountered and the solution thereto;
  3. Itemized costs;
  4. Certification that the SEP has been fully implemented in accordance with the SEP Plan and the provisions of this Consent Decree; and
  5. A description of the environmental and public health benefits resulting from implementation of the SEP.
- C. The City hereby certifies that it is not required to perform or develop the SEP by any federal, state, or local law or regulation; nor is the City required to perform or develop the SEP by agreement, grant or injunctive relief in this or any other case or in compliance with state or local requirements. The City further certifies that it has not received, and is not presently negotiating to receive, credit for the SEP in any other enforcement action or proceeding involving the EPA or MDNR.

D. SEP Reports.

1. SEP Progress Reports. Beginning with the first full year after the commencement of the implementation of the SEP Plan, and continuing every year thereafter until the SEP is completed, the City shall include in its annual progress report to EPA, as required under Section IX herein, an update on the SEP Plan implementation progress and those actions taken to complete the SEP in the preceding year, the actions planned to implement the SEP in the forthcoming year, any current foreseeable delays in implementing the SEP, the action being taken to address such delays, and an itemized accounting of the costs expended for the preceding period and to date.

E. The City shall submit all notices required by this Section in accordance with Section X.

F. Any public announcement, oral or written, made by the City pertaining to the City undertaking the SEP shall include the following language:

This project was undertaken in connection with the settlement of an enforcement action on behalf of EPA.

### **XIII. STIPULATED PENALTIES**

A. Failure to Submit Timely and/or Complete Documents required by Section VII and/or the Appendices of this Consent Decree. The City shall be subject to pay to the United States stipulated penalties, as set forth below, for each day the City fails to submit and/or submits an incomplete or otherwise disapproved plan, report, or other submittal required under Section VII and/or the Appendices of this Decree or fails to make any required material changes to those documents per EPA's comments within the required time

frames. If a due date falls on a holiday or weekend, the due date shall be the following business day. The City shall be subject to stipulated penalties for failure to meet each document submission date as follows:

<b><u>Period of Noncompliance</u></b>	<b><u>Penalty per Violation per Day</u></b>
1st to 30 <sup>th</sup> day	\$500
31st to 60th day	\$1,000
more than 60 days	\$1,500

- B. Remedial Requirements. The City shall be subject to pay to the United States stipulated penalties as set forth below for each day the City fails to satisfy any of the remedial requirements set forth in Section VII and/or the Appendices of this Consent Decree, unless the City has submitted a request for an extension of time and a plan in compliance with Section VII.A.1.c.ii. The stipulated penalties for failure to meet each such requirement shall be as follows:

<b><u>Period of Noncompliance</u></b>	<b><u>Penalty per Violation per Day</u></b>
1st to 30th day	\$1,000
31st to 60th day	\$2,000
more than 60 days	\$4,000

C. Unpermitted CSO Discharges

1. The City shall be subject to pay stipulated penalties for any unpermitted CSO discharge as follows:
  - a. For each unpermitted CSO discharge occurring in a basin during the period from twelve (12) months after the date of entry of this Consent

Decree through the completion of basin specific remedial and Control Measures required by Section VII and/or the Appendices of this Consent Decree, the City shall be subject to pay \$500 per violation per day.

- b. For each unpermitted CSO discharge occurring in a basin after completion of basin specific remedial and Control Measures required by Section VII and/or the Appendices of this Consent Decree, the City shall be subject to pay a stipulated penalty of \$1,000 per violation per day.

D. Bypasses.

1. For any bypass that is prohibited by 40 C.F.R. § 122.41(m) and/or the City's Current NPDES Permits and occurs before the completion of the remedial and Control Measures required by Section VII and/or the Appendices of this Consent Decree, the City shall be subject to a stipulated penalty of \$500 per day per bypass.
2. For any bypass that is prohibited by 40 C.F.R. § 122.41(m) and/or the City's Current NPDES Permits and occurs after the completion of the remedial measures required by Section VII and/or the Appendices of this Consent Decree, the City shall be subject to a stipulated penalty of \$1,000 per day per bypass.

E. Operations and Maintenance Program.

1. For each SSO that occurs where the City did not implement its CMOM developed in accordance with Appendix "C," the City shall be subject to pay stipulated penalties in the following amounts:  
  
\$500 for any discharge of 1,000 gallons or less;

\$1,000 for any discharge of more than 1,000 but less than 10,000 gallons and \$2,000 per violation for all discharges in excess of 10,000 gallons.

F. Delays in Completion of SEP.

1. The City shall be subject to pay stipulated penalties for the failure to meet the milestones set forth in Section XII and Appendix "E" as follows:

<b><u>Period of Noncompliance</u></b>	<b><u>Penalty Per Violation Per Day</u></b>
1 - 30 days	\$500
31 - 60 days	\$1,500
over 60 days	\$3,000

- G. Rejection of SEP Completion Reports: In the event that the United States rejects a SEP Completion Report as required in Section XII, the City shall be subject to pay \$500 per day per report until an acceptable SEP Completion Report is submitted to EPA.

- H. Failure to Substantially Complete a SEP: If the total amount expended on implementing the SEP is less than \$1,600,000, the City shall be subject to a stipulated penalty equal to the difference between the amount spent and \$1,600,000.

- I. Delay in Payment of Penalty: The City shall be subject to pay to the United States, as applicable, a stipulated penalty of \$3,500 for each day that the City is late in paying the civil penalty required under Section XI.

- J. Stipulated penalties shall automatically begin to accrue on the first day the City fails either to meet any of the schedules of performance required by this Consent Decree or to satisfy any obligation or requirement of this Consent Decree and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity,

but need not be paid except as provided in Subsections XIII.A through K. Payment of stipulated penalties as set forth above shall be in addition to any other rights or remedies which may be available to the United States by reason of the City's failure to comply with requirements of this Consent Decree, and any applicable federal, State or local laws, regulations, NPDES Permits, and all other applicable permits.

- K. Stipulated penalties shall be paid within thirty (30) days of EPA's written demand for payment, or as provided in the resolution of a dispute under Subsection XV.E. Stipulated penalties shall be paid to the United States in accordance with the payment procedures detailed in Section XI, Civil Penalty. Copies of any checks and the transmittal letters shall be sent simultaneously to DOJ and EPA, as set forth in Section X.

#### **XIV. FORCE MAJEURE**

- A. A "force majeure event" is any event beyond the control of the City, its contractors, or any entity controlled by the City that delays the performance of any obligation under this Consent Decree despite the City's best efforts to fulfill the obligation. "Best efforts" includes anticipating any potential force majeure event and addressing the effects of any such event (a) as it is occurring and (b) after it has occurred, to prevent or minimize any resulting delay to the greatest extent possible. Unanticipated increased costs or expenses associated with implementation of this Consent Decree and changed financial ability shall not, in any event, be considered a "force majeure event."
- B. The City shall provide notice orally or by electronic or facsimile transmission as soon as possible, but not later than fourteen (14) days after the time the City first knew of, or by the exercise of due diligence, should have known of, a claimed force majeure event. The

City shall also provide written notice, as provided in Section X of this Consent Decree, within thirty (30) days of the time the City first knew of, or by the exercise of due diligence, should have known of, the event. The notice shall state the anticipated duration of any delay; its cause(s); the City's past and proposed actions to prevent or minimize any delay; a schedule for carrying out those actions; and the City's rationale for attributing any delay to a force majeure event. Failure to comply with these notice requirements shall preclude the City from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure.

- C. If the United States agrees that a force majeure event has occurred, the United States shall provide an extension of time for the City to perform the affected requirements for the time necessary to complete those obligations. An extension of time to perform the obligations affected by a force majeure event shall not, by itself, extend the time to perform any other obligation. Where the United States agrees to an extension of time necessitated by a force majeure event, this shall be considered a non-material modification pursuant to Section XXV of this Consent Decree and shall not require court approval.
- D. If the United States does not agree that a force majeure event has occurred, or does not agree to the extension of time sought by the City, the United States' position shall be binding, unless the City invokes Dispute Resolution under Section XV of this Consent Decree. In any such dispute, the City bears the burden of proving, by a preponderance of the evidence, that each claimed force majeure event is a force majeure event, that the

City gave the notice required by Subsection XIV.B above, that the force majeure event caused any delay the City claims was attributable to that event, and that the City exercised best efforts to prevent or minimize any delay caused by the event.

## **XV. DISPUTE RESOLUTION**

- A. This Court shall retain jurisdiction for the purpose of adjudicating, in the manner provided in this Section, all disputes between the Parties, which may arise under this Consent Decree.
- B. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree.
- C. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when the City sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed thirty (30) days from the date the dispute arises, unless that period is modified by a written agreement. If the Parties cannot resolve a dispute by informal negotiations, the position advanced by the United States shall be considered binding unless, within thirty (30) days after the conclusion of the informal negotiation period, the City invokes formal dispute resolution procedures as set forth below or the Parties agree in writing to attempt to resolve the dispute through mediation. EPA shall provide MDNR notice of the informal dispute resolution negotiation and the opportunity to comment to EPA on the position advanced by the United States within the

informal negotiation period.

D. Formal Dispute Resolution. The City shall invoke formal dispute resolution procedures by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but may not necessarily be limited to, any factual data, analysis, or opinion supporting the City's position and any supporting documentation relied upon by the City.

1. The United States shall serve its Statement of Position within thirty (30) days of receipt of the City's Statement of Position unless the Parties agree in writing to a longer period of additional time, and during this additional time, stipulated penalties shall not accrue. EPA agrees to consult with MDNR prior to finalizing the United States' Statement of Position. The United States' Statement of Position shall include, but may not necessarily be limited to, any factual data, analysis, or opinion supporting that position, and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on the City, unless the City files a motion for judicial review of the dispute in accordance with the following Paragraph.
2. The City may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section X of this Consent Decree, a motion requesting judicial resolution of the dispute. The motion must be filed within thirty (30) days of receipt of the United States' Statement of Position pursuant to the preceding paragraph unless the parties agree in writing to a longer period. The motion shall contain a written statement of the City's

position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

3. The United States shall respond to the City's motion within the time period allowed by the Local Rules of this Court. The City may file a reply memorandum, to the extent permitted by the Local Rules of this Court.
4. In any dispute brought under this Subsection, the City shall have the burden of proof, and the standard and scope of review shall be that provided by applicable law.
5. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of the City under this Consent Decree, unless and until final resolution of the dispute so provides.

E. Stipulated Penalties. Stipulated penalties with respect to any disputed matter (and interest thereon) shall accrue in accordance with Section XIII of this Consent Decree; however, payment of stipulated penalties, and any accrued interest, shall be stayed pending resolution of the dispute, as follows:

1. If the dispute is resolved by informal dispute resolution before appeal to this Court, the City shall be subject to pay accrued penalties (and interest), if any, determined to be owing within sixty (60) days of the agreement or the receipt of the United States' final position in writing.
2. If the dispute is appealed to this Court and the United States prevails in whole or

in part, the City shall be subject to pay all accrued penalties (and interest) determined to be owed within sixty (60) days of a final decision.

**XVI. RIGHT OF ENTRY AND INFORMATION COLLECTION AND RETENTION**

- A. The United States, and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree at all reasonable times, upon presentation of credentials, to: (1) monitor the progress of activities required under this Consent Decree; (2) verify any data or information submitted to the United States and/or MDNR in accordance with the terms of this Consent Decree; (3) obtain samples and, upon request, splits of any samples taken by the City or its representatives, contractors, or consultants; (4) obtain documentary evidence, including photographs and similar data; and (5) assess the City's compliance with this Consent Decree.
- B. Upon request, the City shall provide EPA, or its authorized representatives splits of any samples taken by the City. Upon request, EPA shall provide the City splits of any samples taken by EPA, as well as copies of other documents collected, photos taken, or other non-privileged information collected during any facility visit.
- C. The City shall maintain copies of any reports, plans, permits, and documents submitted to EPA pursuant to this Consent Decree, including any underlying research and data, for a period of five (5) years from the date of submission. Where a contractor fails to retain such documents, and the City can demonstrate that the contractor's missing or destroyed documents contained the same information as documents in the possession of the City, the City shall not be liable for the contractor's failure to retain such documents.

- D. At the conclusion of the information-retention period provided in the preceding Subsection, the City shall notify the United States at least ninety (90) days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Subsection and, upon request by the United States, the City shall deliver any such documents, records, or other information to EPA. The City may assert that certain documents, records, or other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the City asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by the City. However, no documents, records, or other information required to be created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.
- E. The City may also assert that information required to be provided under this Section is protected as Confidential Business Information (“CBI”) under 40 C.F.R. Part 2. As to any information that the City seeks to protect as CBI, the City shall follow the procedures set forth in 40 C.F.R. Part 2.
- F. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State of Missouri pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of the City to maintain documents, records, or other information imposed by

applicable federal or state laws, regulations, or permits.

#### **XVII. PERMIT OBLIGATIONS**

- A. This Consent Decree does not authorize or approve the construction of any physical structure or facilities, or the modification of any existing treatment works or sewer system. Approval of such construction or modification shall be as required by applicable City, state, or federal laws or regulations, including applicable requirements of Missouri law and regulations with regard to permits to install.
- B. This Consent Decree is not and shall not be interpreted to be a permit or modification of any Current NPDES Permit issued pursuant to Section 402 of the CWA, 33 U.S.C. § 1342. This Consent Decree does not relieve the City of any obligation to apply for, obtain and comply with the requirements of any Current NPDES Permit, or to comply with any federal, state, or local laws or regulations.

#### **XVIII. CERTIFICATION**

- A. Any report, plan, or other submission that the City is required by this Consent Decree to submit, including reports, plans or other submissions that the City is also required to submit by its Current NPDES Permits, shall be signed by an official or authorized agent of the City and shall include the following certification:

I certify under penalty of law that the document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted, and that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- B. The City shall not object to the authenticity for purposes of admission into evidence of

any report, plan, or other submission prepared in accordance with this Section or the information contained in said reports in any proceeding to enforce this Consent Decree.

#### **XIX. EFFECT OF SETTLEMENT AND RESERVATION OF RIGHTS**

- A. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging.
- B. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, unless expressly stated in the Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or the State of Missouri to obtain penalties or injunctive relief under the CWA or implementing regulations, or under other federal or state laws, regulations, or permit conditions, unless expressly specified in this Consent Decree. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the City's POTW, whether related to the violations addressed in this Consent Decree or otherwise.
- C. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. The City is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and the City's compliance with this Consent Decree shall not be a defense to any action commenced by the United States pursuant to any such laws, regulations, or permits. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that the City's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CWA , 33 U.S.C. § 1251, *et seq.*,

or with any other provisions of federal, state, or local laws, regulations, or permits.

D. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

E. This Consent Decree does not limit or affect the rights of the Parties against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against the City, except as otherwise provided by law.

## **XX. FAILURE OF COMPLIANCE**

The United States reserves any and all legal and equitable remedies available to enforce the provisions of this Consent Decree. The City reserves all legal and equitable defenses to enforcement under this Consent Decree which are not specifically waived.

## **XXI. MISSOURI AS A NON-ALIGNED PARTY**

The State of Missouri is joined as a non-aligned party to this action pursuant to Section 309(e) of the Act, 33 U.S.C. 1319(e), which provides that whenever a municipality is a party to a civil action brought by the United States under this section, the State in which such municipality is located shall be joined as a party. The Plaintiff and Defendant reserve any and all claims and defenses with respect to the State's joinder.

## **XXII. COSTS OF SUIT**

The Plaintiff, Defendant, and the State shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due and demanded but not paid by the City.

### **XXIII. EFFECTIVE DATE**

The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

### **XXIV. RETENTION OF JURISDICTION**

The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Consent Decree pursuant to Section XV or entering orders modifying this Consent Decree pursuant to Section XXV, and for the purpose of effectuating or enforcing compliance with the terms of this Consent Decree.

### **XXV. MODIFICATION**

- A. Except as further set forth in this Section, there shall be no material modification of this Consent Decree without written approval by all Parties and the Court; and any non-material modification of this Consent Decree shall be in writing and signed by all Parties. Modifications (whether material or not) to this Consent Decree that are specifically allowed under the terms of this Consent Decree may be made in accordance with the terms of this Consent Decree.
- B. It is the intention of the Parties to this Consent Decree that the City shall have the opportunity, consistent with applicable law, to conform compliance with this Consent Decree to any modification in EPA's regulations or national policies governing SSOs, CSOs or bypassing; to conform compliance with this Consent Decree to any applicable new or revised water quality standards that have been approved or promulgated by EPA in accordance with 33 U.S.C. § 1313(c) and 40 C.F.R. § 131.21 and 131.22; and to conform compliance with this Consent Decree to any new or more stringent requirements

that are included in the City's Current NPDES Permits pertaining to the City's WWTPs or sewer system.

1. Consequently, upon issuance of any new federal law or state law or regulation that is as or more stringent than current federal law (as to the latter, as promulgated in the Federal Register) or national policy governing SSOs, CSOs or bypassing, upon EPA approval or promulgation of new or revised water quality standards in accordance with 33 U.S.C. § 1313(c) and 40 C.F.R. §131.21 and 131.22; or upon the issuance of a Current Permit that contains new or more stringent requirements pertaining to the City's WWTPs or sewer system, the City may request modification of this Consent Decree (including requests for extensions of time) from the United States to conform this Consent Decree to such regulation, national policy, new or revised water quality standard or current permit. Upon the City's request, the Parties shall discuss the matter. If the Parties agree on a proposed modification to the Consent Decree, they shall prepare a joint motion to the Court requesting such modification.
2. If the Parties do not agree, and the City still believes that modification of this Consent Decree is appropriate, the City may file a motion seeking such modification in accordance with Federal Rule of Civil Procedure 60(b); provided, however, that nothing in this subparagraph is intended to waive the Plaintiff's rights to oppose such motion and to argue that such modification is unwarranted.
3. Following the filing of a motion under Rule 60(b), stipulated penalties shall accrue due to the City's failure, if any, to continue performance of obligations

under the Consent Decree that are necessarily the subject of the Rule 60(b) motion; provided, however, that such penalties need not be paid if the Court resolves the motion in the City's favor, and the City shall comply with the Consent Decree as modified.

## **XXVI. PUBLIC PARTICIPATION**

This Consent Decree 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 Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. The City consents to entry of this Consent Decree without further notice.

## **XXVII. SIGNATORIES AND SERVICE**

- A. Each undersigned representative of the City and the Assistant Attorney General for the Environment and Natural Resources Division of the DOJ certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree, to execute this document, and to legally bind the Party he or she represents to this document.
- B. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.
- C. The City agrees not to oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United States has notified the City in writing that it no longer supports entry of the Consent Decree.
- D. The City agrees to accept service of process by mail with respect to all matters arising

under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

#### **XXVIII. INTEGRATION**

This Consent Decree and its Appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Consent Decree and supersede all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than the Appendices, which are attached hereto, and explicitly incorporated into this Consent Decree, and deliverables that are subsequently submitted and approved pursuant to this Consent Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Consent Decree or the settlement it represents, nor shall it be used in construing the terms of this Consent Decree.

#### **XXIX. TERMINATION**

Upon motion filed with the Court by the United States and/or the City, the Court shall terminate this Consent Decree upon finding that the following has occurred:

- A. The City has achieved and maintained compliance with all provisions of this decree for twelve consecutive months to the satisfaction of EPA;
- B. The City has achieved and maintained substantial compliance with the Current NPDES Permits for twelve consecutive months; and
- C. The City has paid all penalties due and demanded under this decree.

If the City elects to unilaterally move the Court for termination, the City shall certify to the

United States at least one hundred and twenty (120) days before filing a termination motion with the Court that it has met all the requirements above in this Section and provides documentation in support of such certification.

### **XXX. FINAL JUDGMENT**

Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and the City. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

### **XXXI. APPENDICES**

The following Appendices are attached to this Consent Decree:

- A. “Appendix “A” is Performance Criteria of the Overflow Control Program.
- B. “Appendix “B” is the Nine Minimum Control Plan Performance Criteria.
- C. “Appendix “C” is the Capacity, Management, Operation and Maintenance plan (“CMOM”) Performance Criteria.
- D. “Appendix “D” is the Post-Construction Monitoring Program Performance Criteria.
- E. “Appendix “E” is the Supplemental Environmental Project Plan (“SEP Plan”).
- F. “Appendix “F” is the Schedule for Implementation of Disinfection Technology at WWTPs.

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States vs. City of Kansas City, Missouri:

FOR THE UNITED STATES OF AMERICA:

4/23/10  
Date

s/ IGNACIA S. MORENO  
IGNACIA S. MORENO  
Assistant Attorney General  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Ben Franklin Station  
Washington, D.C. 20044-7611  
Telephone: 202-514-2601

5/7/10  
Date

s/ ROBERT R. HOMIAK  
ROBERT R. HOMIAK  
PAUL GORMLEY  
Trial Attorneys  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
1961 Stout Street, Suite 800  
Denver, Colorado 80294-1961  
Telephone: 303-844-1379

MARY ELIZABETH PHILLIPS  
United States Attorney  
Western District of Missouri

5/11/10  
Date

s/ CHARLES M. THOMAS  
CHARLES M. THOMAS  
Assistant United States Attorney  
Charles Evans Whittaker Courthouse  
400 East Ninth Street, Room 5510  
Kansas City, Missouri 64106  
Telephone: 816-426-3130

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

4/27/10  
Date

s/ KARL BROOKS  
KARL BROOKS  
Regional Administrator  
U.S. Environmental Protection Agency  
Region 7  
901 North 5th Street  
Kansas City, Kansas 66101

4/27/10  
Date

s/ WILLIAM A. SPRATLIN  
WILLIAM A. SPRATLIN  
Director  
Water, Wetlands and Pesticides Division  
U.S. Environmental Protection Agency  
Region 7  
901 North 5th Street  
Kansas City, Kansas 66101

4/27/10  
Date

s/ DAVID C. COZAD  
DAVID C. COZAD  
Regional Counsel  
Office of Regional Counsel  
U.S. Environmental Protection Agency  
Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101

5/3/10  
Date

s/ CYNTHIA GILES  
CYNTHIA GILES  
Assistant Administrator  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 204060

April 30, 2010  
Date

s/ ADAM M. KUSHNER  
ADAM M. KUSHNER  
Director  
Office of Civil Enforcement  
U.S. Environmental Protection Agency  
Headquarters  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

FOR THE CITY OF KANSAS CITY, MISSOURI:

April 27, 2010  
Date

s/ TROY SCHULTE  
TROY SCHULTE  
Interim City Manager  
Office of the City Manager  
414 East 12<sup>th</sup> Street  
Kansas City, Missouri 64106

APPROVED AS TO FORM:

April 26, 2010  
Date

s/ GALEN BEAUFORT  
GALEN BEAUFORT  
City Attorney  
28<sup>th</sup> Floor  
City Hall  
414 East 12<sup>th</sup> Street  
Kansas City, Missouri 64106

**APPENDIX A**  
**Performance Measures**

**1. Combined Sewer Overflow (“CSO”) Control Measures, Descriptions, Critical Milestones, Performance Criteria**

The City of Kansas City, Missouri (“KCMO”) shall implement the CSO Control Measures described below. KCMO shall comply with the Project Start Dates, Date of Achievement of Full Operation, Date of Post-Construction Monitoring Plan Submission, and Critical Milestones for each control measure. Upon completion of the CSO Control Measures, KCMO shall meet the Percent Capture of Wet Weather Flows and the Performance Criteria as set forth below.

KCMO shall submit semi-annual reports, as set forth in Section IX in this Decree, describing the City’s progress in implementing the CSO control measures described below. KCMO shall submit the demonstrations of compliance with the percent capture of wet weather flows and the performance criteria in accordance with the schedule listed in this Appendix “A” and include these demonstrations in the semi-annual reports.

KCMO shall demonstrate compliance with both the Percent Capture of Wet Weather Flows and Performance Criteria as set forth below. Determination of achievement of the Percent Capture and Performance Criteria shall be based upon the Post Construction Monitoring Plans as described in Appendix “D” of this Decree. By the Dates of Demonstration of Compliance set forth on pages 3 and 4 herein, KCMO shall utilize the collection system hydraulic model as described in Section 5 of its January 30, 2009 Overflow Control Plan (“OCP”) and the system monitoring data as described in the Post Construction Monitoring Plans as described in Appendix “D” of this Decree. KCMO shall calibrate the collection system hydraulic model to at least the same degree of calibration as was achieved during the OCP development. Upon calibration of the collection system hydraulic model (hereafter referred to as the “calibrated post-construction hydraulic model”), KCMO shall run a continuous simulation of the model inputting the “typical year” design storms used to develop the OCP in place of the actual storms experienced during the post construction monitoring period.

For purposes of this demonstration, the “typical year” is defined as the 8 design storms which have the depth, peak hourly intensity, duration, and frequency as described in Section 5.2.2.3 and Table 5-1 of the OCP. The continuous simulation shall be based on the same timing and arrangement of the design storms as described in the technical memorandum “Design Year for CSS Analyses” included in Appendix A2 of the OCP. The term “overflow event” shall mean the activation of one or more CSOs in a basin due to a discreet storm. For clarification, the

following would be considered three “overflow events” for the Brush Creek Basin: 1) a storm that causes only CSO 007 to overflow; 2) a second storm that causes only CSO 009 to overflow; and, 3) a third storm that causes CSOs 007, 008, 009, 010, 011, 012, 014, 015, 016, 017, 018, 019, and 020 to overflow.

The Percent Capture of Wet Weather Flows and the maximum volume of CSO discharges included in the CSO Control Measures, as specified in the tables below, will be met if the continuous typical year simulations using the calibrated post-construction hydraulic model demonstrate the specified basins in the “typical year” do not exceed the maximum volumes listed.

The Performance Criteria will be met if the continuous typical year simulations using the calibrated post-construction hydraulic model demonstrate the collection system discharges will not exceed the number of “typical year” overflow events as listed below.

Notwithstanding the forgoing, and consistent with this Consent Decree, KCMO is responsible for achieving the percent capture requirement and performance criteria specified herein. KCMO’s compliance with individual “Control Measures” shall not constitute a defense to a failure to achieve the percent capture requirements and performance criteria and shall not relieve KCMO of the obligation to submit plans proposing additional control measures pursuant to Section VII.A.1.c of the Consent Decree.

The City may request that the CSO and SSO Control Measures set forth in this Appendix A be revised if it can demonstrate that the requested revision (1) reflects good engineering practice and (2) will continue to achieve the “Percent Capture of Wet Weather Flows” and “Performance Criteria” as those terms are used in this Appendix. Any request for a revision to the Performance Criteria shall be in writing. The manner in which EPA will review and approve or deny such requests depends upon the extent to which the City proposes to revise the Control Measure and how the control Measure is characterized in this Appendix: 1. If the City seeks to revise a Control Measure that utilizes the term “approximately” to indicate how compliance will be measured AND the proposed revision represents a 20 percent or less reduction of what is called for in the Control Measure, the City’s request shall be submitted pursuant to, and be governed by the procedures of Section VI of this Consent Decree; 2. If the City seeks to revise a Control Measure that does not include the term “approximately” as a compliance measurement OR seeks a greater than 20 percent reduction in a Control Measure that does utilize the term “approximately” as a compliance measure, the requested revision shall be submitted as a proposed Modification pursuant to Section XXV of this Consent Decree. If EPA approves the request, the Decree will be modified in accordance with the provisions of Section XXV. If EPA denies the request the City may, within thirty (30) days of the denial, appeal the decision to the Director, Water, Wetlands, and Pesticides Division, EPA, whose decision shall be final. Simultaneously with any request for modification made pursuant to this paragraph, the City shall provide to EPA all documentation necessary to support the request for modification, including all information relevant to the three criteria set forth above.

**Percent Capture of Wet Weather Flows**

Basin	Percent Capture of “Typical Year” Wet Weather Flows Achieved Upon Completion of the CSO Control Measures within the Specified Basins	Maximum Volume of CSO Discharges in the “Typical Year” Achieved Upon Completion of the CSO Control Measures within the Specified Basins (Billion Gallons)	Date of Demonstration of Compliance with Percent Capture of “Typical Year” Wet Weather Flows
Town Fork Creek/Brush Creek	98% *	0.059	April 30, 2037
Lower Blue River/Middle Blue River**	96% **	0.125	April 30, 2035

\* These percentages include the percent capture of wet weather flows from 74 of the 87 existing CSO outfalls in the KCMO system. The remaining 13 CSO outfalls are located within the NEID Basin and the Turkey Creek/Central Industrial District Basin in which KCMO shall implement the CSO control measures and meet the maximum volume of CSO discharges as specified in the CSO Control Measures table.

\*\* CSO 031 and CSO 033 are included in the NEID Basin; CSO 032 is included in the Lower Blue River Basin.

**Performance Criteria**

<b>CSO Number</b>	<b>Number of “Typical Year” Overflow Events</b>	<b>Date of Demonstration of Compliance with Number of “Typical Year” Overflow Events</b>
041,043, 044, 045, 046, 047, 049, 050, 054, 063, 081, 097***,	0	April 30, 2037
All other remaining CSOs in Brush Creek Basin, (006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 023, 024, 025, 026, 027, 028, 029, 030),	6	April 30, 2037
All other remaining CSOs in Lower Blue River Basin (032, 034, 036, 037, 039, 040, 048, 051, 052, 055), Middle Blue River Basin (056, 057, 058, 059, 060, 061, 062, 064, 065, 066, 067, 068, 069, 070)	7	April 30, 2035
Other Remaining CSOs in Town Fork Creek Basin (079, 080, 082, 083, 085, 089, 090, 091, 093, 094, 095, 096, 099)	7	April 30, 2037
W005	7	April 30, 2037

\*\*\* All typical year overflows from CSO 092 shall be captured by consolidation piping leading to Town Fork Creek Tunnel north of Forest Hills Cemetery

**CSO Control Measures**

**Brush Creek Basin**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>
Construction of approximately 31 million gallons of deep tunnel storage****	Located along Brush Creek near Brookside Blvd to confluence of Brush Creek and Blue River	2028	12-31-2033	
Construction of a 45-MGD deep-tunnel pump station.	Located near the confluence of Brush Creek and Blue River.	2029	12-31-2033	12-31-2032
Construction of a 200-MGD HRT/disinfection facility at the confluence of Brush Creek and the Blue River.	200 MGD high rate treatment discharging to the Blue River. Flow to the HRT will be from the deep tunnel and gravity flow diverted from the Blue River Interceptor Sewer.	2025	12-31-2030	12-31-2032
Construction of approximately 1,200 linear feet of approximately 72-inch diameter consolidation piping downstream of Diversion Structure 42 (Outfall 024)	Reroutes wet weather flows to tunnel drop shafts.	2029	12-31-2032	
Construction of approximately 350 linear feet of relief sewer.	To be located at 48 <sup>th</sup> and Roanoke Parkway	2029	12-31-2032	
Construction of approximately 2,100 linear feet of approximately 36-inch diameter consolidation piping diverting flows from Outfall 026	Reroutes wet weather flows to tunnel drop shafts.	2029	12-31-2032	
Construction of approximately 3,300 linear feet of approximately 60-inch diameter consolidation piping diverting flows from Outfalls 027 and 028	Reroutes wet weather flows to tunnel drop shafts.	2029	12-31-2032	

Construction of approximately 2,800 linear feet of storm sewer approximately 72 inches in diameter.	Reroute separate storm sewer runoff from Wyandotte County directly to Brush Creek.	2024	12-31-2025	
Combined sewer separation in approximately 1,140 acres of the Brookside sub-basin.		2029	12-31-2032	
Construction of approximately 1,150 linear feet of consolidation piping	Reduce frequency of remaining typical year overflows at Outfall 019.	2029	12-31-2032	
Construct new diversion structure and approximately 1,630 linear feet of consolidation piping; add flap gate at Outfall 023	Reduce frequency of remaining typical year overflows at Outfall 023. New diversion structure on existing outfall line.	2029	12-31-2032	
Construct new diversion structure and approximately 950 linear feet of consolidation piping; add flap gate at Outfall 025	Reduce frequency of remaining typical year overflows at Outfall 025. New diversion structure on existing outfall line.	2029	12-31-2032	
Various baseline improvements	Install flap gates on outfalls 007, 009, 010, 011, and 012.	2024	12-31-2025	
Basin-wide small-sewer rehabilitation. The location of the rehabilitations to be determined based upon the discovered condition of the sewers.	Repair of small diameter sewers (less than 12 inches) to reduce the quantity of flow entering the system.	2017	12-31-2020	

A Sewer System Improvement Flow Monitoring Plan consistent with Appendix “D” shall be submitted for the Brush Creek Basin by 12-31-2032.

\*\*\* The deep tunnels in the Brush Creek and Town Fork Creek Basins will provide a combined total of 50 million gallons of storage.

**Lower Blue River Basin**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>
Increase the 15 <sup>th</sup> Street Pump Station capacity to 6.5 mgd or conduct sewer separation to eliminate typical year wet weather flows exceeding the station's current capacity.	Either replace or rehabilitate the 15 <sup>th</sup> Street Pump Station which will increase its capacity, or provide sewer separation in the upstream drainage basin	2020	12-31-2022	
Install approximately 3,500 linear feet of approximately 54-inch diameter relief sewer	Downstream of the intersection of Hardesty Avenue and 31 <sup>st</sup> Street	2020	12-31-2022	
Install approximately 3,400 linear feet of approximately 48-inch diameter relief sewer	Downstream of the intersection of Vineyard and Lawn Street.	2020	12-31-2022	
Install approximately 1,500 linear feet of approximately 24-inch diameter relief sewer	South of 45 <sup>th</sup> Street, between Chelsea Avenue and Van Brunt Boulevard	2020	12-31-2022	
Separate approximately 225 acres at 40 <sup>th</sup> and Monroe	Eliminate typical year overflows at 9 outfalls (041, 043, 044, 045, 046, 047, 049, 050, 052)	2022	12-31-2023	
Separate approximately 35 acres in the upstream drainage area to Outfall 054.	Eliminate typical year overflows at Outfall 054	2022	12-31-2023	
Install approximately 660 linear feet of approximately 18-inch dry weather line	Reduce frequency of typical year overflows at Outfall 055.	2020	12-31-2022	
Basin-wide small-sewer rehabilitation. The location of the rehabilitations to be determined based upon the discovered condition of the sewers.	Repair of small diameter sewers (less than 12 inches) to reduce the quantity of flow entering the system.	2018	12-31-2021	

**A Sewer System Improvement Flow Monitoring Plan consistent with Appendix "D" shall be submitted for the Lower Blue River Basin by 12-31-2022.**

**Middle Blue River Basin**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>
Construction of approximately 9,400 linear feet of relief sewers from Diversion Structure 68 (upstream of Outfall 068) to the Blue River Sewer.		2017	12-31-2018	
Sewer separation in approximately 270 acres in the upstream drainage area to outfall 067,	Elimination of typical year overflows at Outfall 067)	2016	12-31-2019	
Sewer separation in approximately 50 acres in the upstream drainage area to diversion structure 099.	Elimination of typical year overflows at Diversion Structure 099	2016	12-31-2017	
Construction of distributed storage using green infrastructure	To be installed in the 475 acres tributary to Outfall 069. A sufficient volume of storage will be achieved through distributed green solutions to reduce the typical year activation frequency at Outfall 069 to six.	2012	12-31-2017	
Construction of distributed storage using green infrastructure	To be installed in the 269 acres tributary to Outfall 059. A sufficient volume of storage will be achieved through distributed green solutions to reduce the typical year activation frequency at Outfall 059 to six.	2012	12-31-2017	
Construction of approximately 12,000 linear feet of consolidation piping	Elimination of typical year overflows at 14 diversion structures upstream of Outfall 063	2016	12-31-2017	
Install approximately 1,200 linear feet of 18-inch dry weather line	Reduce frequency of typical year overflows at Outfall 056.	2017	12-31-2018	
Raise manhole rim elevations and make structural modifications	Raise the rim elevations of approximately 4 manholes on the main interceptor sewer a minimum of three feet.	2017	12-31-2018	

Basin-wide small-sewer rehabilitation. The location of the rehabilitations to be determined based upon the discovered condition of the sewers.	Repair of small diameter sewers (less than 12 inches) to reduce the quantity of flow entering the system	2014	12-31-2017	
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A Sewer System Improvement Flow Monitoring Plan consistent with Appendix “D” shall be submitted for the Middle Blue River Basin by 12-31-2018.

**Northeast Industrial District Basin**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>	<b>Critical Milestone</b>
Sewer Separation in approximately 260 acres	Includes approximately 13,500 linear feet of new sanitary sewer. Eliminate typical year overflows at diversion structure 006.	2016	12-31-2017		
Green Infrastructure Projects	Green infrastructure pilot project(s) will be constructed to achieve a significantly higher level of CSO control downstream of the project area.	2015	12-31-2020		Submit a conceptual proposal for the green infrastructure projects by 12-31-2014.

Basin-wide small-sewer rehabilitation. The location of the rehabilitations to be determined based upon the discovered condition of the sewers.	Repair of small diameter sewers (less than 12 inches) to reduce the quantity of flow entering the system.	2017	12-31-2020		
Construct 4-MGD pump station	Construct 4 mgd pumping station to dewater the Gooseneck Creek Arch to the Blue River Interceptor Sewer following installation of the automated gate.	2018	12-31-2021	12-31-2020	Upon Completion of this control measure and the Brush Creek HRT, this basin will have a maximum volume of CSO discharges in the 'Typical Year' of 0.700 billion gallons.
Install automated gate in existing Gooseneck Arch Sewer	This will provide 4 MG storage in the existing Gooseneck Creek Arch.	2018	12-31-2021	12-31-2020	

A Sewer System Improvement Flow Monitoring Plan consistent with Appendix "D" shall be submitted for the Northeast Industrial District Basin by 12-31-2020.

**Town Fork Creek Basin**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>
Construction of approximately 19 million gallons of deep tunnel storage *****	The Tunnel will connect to the Brush Creek tunnel near diversion structure 314 and will provide 19 MG of storage capacity	2028	12-31-2032	12-31-2031
Placement of approximately 3,800 linear feet of consolidation piping near and downstream of Outfall 097.	Reroutes wet weather flows to tunnel drop shafts.	2032	12-31-2035	
Placement of approximately 1,100 linear feet of approximately 36 inch diameter consolidation piping downstream of Diversion Structure 46 (Outfall 079)	Reroutes wet weather flows to tunnel drop shafts. To be located near Satchel Paige Stadium	2032	12-31-2035	
Conduct sewer separation in approximately 59 acres	Area is tributary to outfall 082	2024	12-31-2025	
Conduct sewer separation in approximately 138 acres	Area is tributary to outfall 081	2022	12-31-2025	
Construct new diversion structure and approximately 450 linear feet of consolidation piping; add flap gate at Outfall 083	Reduce frequency of remaining typical year overflows at Outfall 083. New diversion structure in existing junction box on outfall line.	2032	12-31-2035	
Construct new diversion structure and approximately 300 linear feet of consolidation piping; add flap gate at Outfall 099	Reduce frequency of remaining typical year overflows at Outfall 099. New diversion structure in existing junction box on outfall line.	2032	12-31-2035	

Basin-wide small-sewer rehabilitation. The location of the rehabilitations to be determined based upon the discovered condition of the sewers.	Repair of small diameter sewers (less than 12 inches) to reduce the quantity of flow entering the system	2015	12-31-2018	
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A Sewer System Improvement Flow Monitoring Plan consistent with Appendix “D” shall be submitted for the Town Fork Creek Basin by 12-31-2025.

\*\*\*\*\* The deep tunnels in the Brush Creek and Town Fork Creek Basins will provide a combined total of 50 million gallons of storage.

**Turkey Creek/Central Industrial District Basins**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>	<b>Critical Milestone</b>
Sewer separation in approximately 66 acres.	Located at 31 <sup>st</sup> Street and Broadway, upstream of George Washington Lake in Penn Valley Park. Eliminates typical year overflows at Outfall W006	2020	12-31-2022		
Construction of approximately 10,600 linear feet of approximately 48-inch force main.	From Turkey Creek Pump Station to Westside WWTP	2032	12-31-2035		

Central Industrial District Storm Drainage Improvements	Includes replacement of gates at the Santa Fe Pumping Station and institution of real-time gate control	2016	12-31-2017	12-31-2017	
Construction of 30 million gallons of deep tunnel storage.	Extends from near West 22 <sup>nd</sup> Street at Grand to the Turkey Creek Pump Station.	2030	12-31-2035		Upon Completion of this control measure, these basins will have a maximum volume of CSO discharges in the 'Typical Year' of 0.574 billion gallons.
Construction of a 30-MGD deep-tunnel pump station.	Located at Turkey Creek Pump station and to be used to dewater the deep storage tunnel	2030	12-31-2035	12-31-2034	
Green Infrastructure Projects	Green infrastructure pilot project(s) will be constructed in the CID to achieve a significantly higher level of control downstream of the project area	2015	12-31-2020		Submit a conceptual proposal for the green infrastructure projects by 12-31-2014.
Upgrade the Turkey Creek Pump Station capacity to 30 MGD.		2014	12-31-2016	12-31-2017	
Construction of OK Creek in-line storage gates	To be used for real-time control of depths in the OK Creek sewer to take advantage of available system storage.	2015	12-31-2018	2017	

Basin-wide small-sewer rehabilitation. The location of the rehabilitations to be determined based upon the discovered condition of the sewers.	Repair of small diameter sewers (less than 12 inches) to reduce the quantity of flow entering the system	2018	12-31-2021		
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A Sewer System Improvement Flow Monitoring Plan consistent with Appendix “D” shall be submitted for the Turkey Creek / Central Industrial District Basins by 12-31-2021.

**Blue River WWTP**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>	<b>Critical Milestone</b>
Diversion of up to 80 MGD of primary-plant effluent directly to disinfection facilities for treatment and discharge to the Blue River during wet-weather events.	This diversion is proposed for flows that exceed the 140-MGD secondary treatment capacity.	2026	12-31-2030	12-31-2029	
Construction of a 50-MGD wet weather treatment facility with disinfection.	Discharges to the Blue River	2026	12-31-2030	12-31-2029	
Expansion, replacement, and/or modification of solids handling facilities to accommodate additional loading from all proposed upgrades to the WWTP.		2025	12-31-2030		

**Westside WWTP**

<b>CSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>	
Construction of 30 to 32 MGD enhancement of peak treatment capacity.	This is a 30 MGD increase of the peak hydraulic capacity through modification of existing treatment facilities, or if such an increase is determined to be infeasible, a 32 MGD HRT/disinfection facility along with grit removal and fine screening. <b>Any bypass is subject to 40 C.F.R. § 122.41(m).</b>	2017	12-31-2020	12-31-2019	A no-feasible alternative analysis pursuant to 40 C.F.R. § 122.41(m) shall be submitted for all planned bypasses as a result of implementation of this Control Measure, 1 year prior to proposed project start date.
Construction of a 32 MGD HRT/disinfection facility	This is an additional increase of 32 MGD in treatment capacity	2032	12-31-2035	12-31-2034	

**2. Separate Sewer Overflows (“SSO”) Control Measures, Descriptions, Critical Milestones, Performance Criteria**

**Performance Criteria**

KCMO shall implement the following SSO control measures. KCMO shall comply with the Project Start Dates, Date of Achievement of Full Operation, and Critical Milestones for each control measure.

KCMO shall submit semi-annual reports, set out in Section IX of this Decree, describing the City’s progress in implementing the following SSO control measures.

All Infiltration and Inflow (“I/I”) reductions shall be estimated based upon peak flows at the lower end of the watersheds. Such a demonstration shall be made using the collection system hydraulic model as described in Section 5 of the OCP, or other demonstration as approved by EPA. KCMO shall submit an estimation of infiltration and inflow reductions included in the semi-annual report due March 31, 2024 for the watersheds North of the Missouri River and for the watersheds South of the Missouri River.

KCMO shall submit a Post Construction Monitoring Plan as described in Appendix “D” of this Decree for the North of the Missouri River Separate Sewer System by December 31, 2025 and for the South of the Missouri River Separate Sewer System by December 31, 2021.

The SSO Control Measures set forth below that include design criteria set forth as "approximately" may be revised by the City provided that: 1) the design criteria is not reduced by more than 20% of what is set forth in this Appendix; 2) reflects good engineering practice; and 3) meets the Performance Criteria set forth in this Appendix. Any reduction in the design criteria by more than 20% of what is set forth in the Control Measures below shall be subject to Paragraph XXV, Modification, of the Consent Decree.

**North of the Missouri River Separate Sewer System**

<b>SSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>	<b>Critical Milestones</b>
Infiltration and Inflow Reduction*****	Northern Watersheds – 30% Targeted Reduction Northwestern Watersheds – 30% Targeted Reduction Line Creek/Rock Creek Watersheds – 35% Targeted Reduction Birmingham/Shoal Creek Watersheds – 40% Targeted Reduction	2014	12-31-2023		
Upgrade the Birmingham WWTP to treat peak wet weather flows.	Treatment capacity will be expanded and/or additional equalization storage constructed to treat peak wet weather flows to the extent feasible. <b>Any bypass is subject to 40 C.F.R. § 122.41(m).</b>	2024	12-31-2027	12-31-2027	A no-feasible alternative analysis pursuant to 40 C.F.R. § 122.41(m) shall be submitted by 04-30-2020 for all planned bypasses, as a result of the implementation of this Control Measure.
Construct the North Bank and Birmingham Deep Tunnels	This will provide approximately 44 million gallons of deep tunnel storage	2022	12-31-2028	12-31-2027	
Construct Upshaft and 30 MGD Tunnel Pump Station	Located Near the Birmingham WWTP to de-water the North Bank and Birmingham Deep Tunnel system.	2022	12-31-2028	12-31-2027	

Construct approximately 12,000 linear feet of approximately 24-inch diameter force main		2024	12-31-2027		
Construct Relief Sewers – Line Creek	To be constructed where insufficient hydraulic capacity exists. The location of the relief sewers to be determined based upon the discovered condition of the sewers.	2022	12-31-2025		
Construct Relief Sewers - Birmingham	Approximately 800 linear feet of approximately 30-inch diameter relief sewers	2018	12-31-2019		
Upgrade Birmingham Pump Station to 50 MGD		2024	12-31-2027		

A Sewer System Improvement Flow Monitoring Plan consistent with Appendix “D” shall be submitted for the North of the Missouri River Separate Sewer System by 12-31-2024.

\*\*\*\*\*Targeted reductions are not independent performance measures. The capacity and configuration of improvements downstream of the I/I reduction areas will be adjusted as necessary to conform to the design goal of eliminating SSOs.

**South of the Missouri River Separate Sewer System**

<b>SSO Control Measure</b>	<b>Additional Description</b>	<b>Project Start Date</b>	<b>Date of Achievement of Full Operation</b>	<b>Date of Post-Construction Monitoring Plan Submission</b>
Infiltration and Inflow Reduction*****	Little Blue River Watershed – 30% Targeted Reduction Blue River South Watershed – 45% Targeted Reduction Blue River Central Watershed – 30% Targeted Reduction Blue River North Watershed – 30% Targeted Reduction Round Grove Watershed – 29% Targeted Reduction	2012	12-31-2021	
Construct Approximately 20 MG Storage Tank at 87 <sup>th</sup> Street Pumping Station	This will include rehabilitation and modification of existing pumps and equipment necessary to support wet weather pumping to storage tanks concurrent with operation of duty pumps.	2012	12-31-2016	
Construct remainder of 68 MG Storage Tanks at 87 <sup>th</sup> Street Pumping Station	The total storage volume at the 87 <sup>th</sup> Street Pumping Station may increase to 82 MG or be reduced, depending upon flows from Johnson County, Kansas.	2020	12-31-2024	12-31-2023
Construct 24-Inch diameter Round Grove Force Main	This force main will parallel the current force main running from the Round Grove Pump Station to the Blue River Interceptor Sewer.	2012	12-31-2013	
Increase Pumping capacity of the Round Grove Pump Station by 12 MGD.	Increase firm pumping capacity through addition of standby pump(s)	2016	12-31-2018	

A Sewer System Improvement Flow Monitoring Plan consistent with Appendix “D” shall be submitted for the South of the Missouri River Separate Sewer System by 12-31-2020.

\*\*\*\*\* Targeted reductions are not independent performance measures. The capacity and configuration of improvements downstream of the I/I reduction areas will be adjusted as necessary to conform to the design goal of eliminating SSOs.

**APPENDIX B**  
**Nine Minimum Controls Plan Performance Criteria**

The City shall implement its Nine Minimum Controls (“NMCs”) Plan in its Combined Sewer System (“CSS”) area and submit a NMCs annual report, pursuant to Section IX of the Consent Decree, demonstrating compliance with the NMCs Plan performance criteria as follows:

- I. Proper Operation and Regular Maintenance Program (NMC – 1)
  - A. The City shall maintain an organization (e.g. the Line Maintenance Division) with personnel responsible for various aspects of the operation and maintenance (“O&M”) program. This organization shall perform regular inspections, cleaning and repair of the system.
  - B. The City shall allocate adequate resources (i.e. personnel and capital) to maintain O&M activities.
  - C. The City shall maintain a list of the facilities (i.e. overflow weirs) critical to the performance of the CSS, and update as necessary.
  - D. The City shall maintain and implement a Combined Sewer Overflow (“CSO”) Sewer Maintenance Manual that includes written procedures and/or schedules for the following:
    - 1. Routine and periodic maintenance of CSO outfall and diversion structures;
    - 2. Emergency response protocol;
    - 3. Dry Weather Overflow (“DWO”) reporting procedures; and
    - 4. Training and safety practices.
  - E. The City shall maintain a log of maintenance activities performed.
  - F. The City shall conduct Closed Circuit Television Inspections (“CCTV”) of at least 26 miles of the sewers in the CSS area annually. This will increase to 52 miles annually by year 2020.
  - G. The City shall clean a minimum of 106 miles of the sewers in the CSS area annually.
  - H. The City shall respond to all CSO and bypass reports.
  - I. The City shall maintain a 24-hour emergency number for citizens and businesses to report CSOs and bypasses.
  
- II. Maximization of Storage in the Collection System (NMC – 2)
  - A. In order to maximize storage in the CSS collection system, the City shall:
    - 1. Inspect all CSS diversion structures at least once per month;
    - 2. Modify diversion structures, as necessary;
    - 3. Reduce and/or eliminate inflows (consistent with the approved OCP);
    - 4. Encourage localized upstream detention;
    - 5. Upgrade and/or adjust pump operations at interceptor lift stations, as practicable; and
    - 6. Remove obstructions to flow.

III. Review and Modification of Pretreatment Requirements (NMC – 3)

- A. The City shall annually:
1. Maintain an inventory of non-domestic discharges to the CSS and update as necessary;
  2. Re-assess the impact of non-domestic discharges on CSOs as appropriate;
  3. Evaluate feasible and necessary modifications to the pretreatment program;
  4. Implement and enforce city-wide ordinances, as they relate to the City's pretreatment program, including but not limited to the Surcharge Program for High Strength Wastewater and the Oil and Grease Management Program; and
  5. Conduct education programs for non-domestic dischargers.

IV. Maximization of Flow to the POTW for Treatment (NMC – 4)

- A. The City has determined the capacity of the major interceptor(s) and pumping station(s) that deliver flows to the CSS Wastewater Treatment Plants ("WWTPs"). The City shall ensure that the full capacity is available by using the O&M program, as described in NMC – 2.
- B. The City shall analyze existing records to compare flows processed by the CSS WWTPs during wet weather events and dry periods and determine the relationships between performance and flow.
- C. The City shall determine whether any inoperative or unused treatment facilities within the POTW can be used to store or treat wet weather flows, and if so, utilize the storage or treatment as appropriate.
- D. The City shall maintain Wet Weather Operating Guidelines for the CSS WWTPs that describe procedures for grit removal, monitoring pumping levels, regulating incoming flows, and balancing process operations.

V. Elimination of CSOs During Dry Weather (NMC – 5)

- A. The City shall inspect all diversion structures located within the CSS to identify potential DWOs, at least once per month.
- B. The City shall correct the cause of a DWO as soon as practicable.
- C. The City shall follow its current NPDES permits for verbal and written notification to the NPDES permitting authority that a DWO has occurred.

VI. Control of Solids and Floatable Material in CSOs (NMC – 6)

- A. The City shall conduct street sweeping to prevent extraneous solids and floatables from entering the CSS. Street sweeping shall be conducted at least two times annually on all streets with curbs within the CSS area.
- B. The City shall repair and clean catch basins.
- C. The City shall enforce City ordinances related to construction site erosion control, as appropriate.

VII. Pollution Prevention Programs to Reduce Contaminants in CSOs (NMC – 7)

The City shall implement pollution prevention measures and programs including but not limited to street cleaning, public education programs, solid waste collection, and recycling.

VIII. Public Notification (NMC – 8)

- A. The City shall inform the public of the location of CSO outfalls, the occurrences of CSOs, the possible health and environmental effects of CSOs, and the recreational or commercial activities (e.g. swimming) curtailed as a result of CSOs. The public notifications shall include the following, as appropriate:
1. Posting warnings at the affected use areas (i.e.. at all swimming locations) downstream of a CSO that have the potential to be affected by pollutants discharged from the CSOs;
  2. Posting warnings at CSO Outfalls and as appropriate downstream public access points which are potentially affected by pollutants discharged from the CSOs;
  3. Periodic notices by general circulation newspapers, local radio, and/or television; and
  4. Telephone Hot-Line for interested citizen calls.

IX. Monitoring to Characterize CSO Impacts and the Efficacy of CSO Controls (NMC – 9)

The City shall conduct any additional activities necessary to characterize the CSS, including but not limited to collecting and documenting information on CSO occurrences and known water quality problems and incidents.

## **APPENDIX C**

### **Capacity, Management, Operation and Maintenance Plan Performance Criteria**

Kansas City, Missouri (“the City”) shall implement its Capacity, Management, Operations and Maintenance (“CMOM”) Plan and submit a CMOM annual report, pursuant to Section IX of the Consent Decree, demonstrating compliance with the CMOM Plan performance criteria as follows:

#### **I. Collection Systems Management**

##### **A. Organizational Structure**

1. The City shall maintain an Organizational Structure that provides delineated job responsibilities, ensures effective employee-supervisor ratios, and guarantees adequate staff is in place to accomplish the responsibilities of the Water Services Department (“WSD”) throughout this Consent Decree. This structure shall be consulted during the annual budget process to determine staffing needs and allocate operational expenses appropriately.

2. The City shall maintain job descriptions and organizational charts and effectively communicate job responsibilities to WSD staff, and acquire and maintain the level of skills and abilities necessary to perform the responsibilities of the WSD.

##### **B. Communication and Customer Service**

1. The City shall maintain a communication and customer service program that will inform and educate customers, WSD staff, and the community about wastewater collection, treatment and water quality issues.

2. The City shall address incoming inquiries, requests, and complaints in a timely fashion and effectively communicate WSD activities to staff and the public. Specifically, the City shall:

- a. Track all customer service requests; and
- b. Develop and implement written Standard Operating Procedures (“SOPs”) for customer service requests by December 31, 2010 that satisfy the requirements of this Consent Decree and its Appendices.

##### **C. Legal Authority**

1. The City shall retain legal authority to conduct the following:

- a. Charge fees to all users of the sewer system, whether or not they are located within the City limits;

- b. Set rates for different classifications of sewer system users.
- c. Enter into agreements with communities outside the City limits for wastewater services;
- d. Measure and/or calculate the volumes of wastewater received from customers outside of the City limits;
- e. Solicit bids, select contractors, and construct public sanitary and combined sewers;
- f. Set standards for the use of private septic tanks or cesspools, including the cleaning of the tanks and the disposal of collected materials;
- g. Maintain the approved pretreatment program pursuant to 40 C.F.R. Part 403 and the Current NPDES Permits
- h. Prohibit the discharge of flammable or other hazardous materials into the sewer system;
- i. Regulate the release of oil and grease into the sewer system by setting acceptable discharge concentrations and setting surcharge rates for higher concentrations of discharged oil and grease;
- j. Require the pretreatment of waste from industrial or commercial users in order to protect the POTW;
- k. Require industrial or commercial users to report on their releases into the sewer system;
- l. Inspect the facilities of industrial or commercial users to determine the types and quantities of materials being released into the sewer system; and
- m. Implement the City's approved pretreatment program against any industrial or commercial users who violate the terms of the ordinance or permits issued.

2. The City shall retain its ability to regulate the connection of private sewers to the public system by entering into contracts, assessing fees, requiring adherence to the City's Standard Specifications, and requiring bonds.

3. The City shall retain the authority to deny a building permit or sewer connection permit if it is determined the receiving sewers have inadequate capacity.

4. The City shall maintain Standard Specifications for the design and construction of new or upgraded sanitary and combined sewers.

#### D. Acquisition Considerations

1. The design and construction of infrastructure that is acquired into the sewer system shall comply with the City's technical specifications and construction

standards. This shall apply to prospective infrastructure from both new construction and privately-owned systems being considered for a transfer of ownership to the City.

2. The City shall:

- a. Establish a formal, written policy and guidelines for assuming ownership of preexisting infrastructure; and
- b. Ensure proper recordkeeping and documentation is performed.

#### E. Information Management System

1. The City shall maintain an Information Management System (“IMS”) that provides tools for tracking collection systems’ performance, costs, and work orders, and measures the effectiveness and efficiency of operation and maintenance (“O&M”) activities.

2. The City shall have adequate and effective computer-based tools to manage and track collection system data, written SOPs to ensure documentation of pertinent collection system data, and staff competent in using IMS tools. The City shall also provide IMS training and continue to move forward with mobile data entry research.

#### F. Geographic Information System Mapping

1. The City shall maintain a Geographic Information System (“GIS”) Mapping Program that ensures a comprehensive inventory of the sewer system is maintained, that it is assembled and presented in a manner conducive for use, and that it is easily accessible by WSD personnel who depend on the data for both performance and planning purposes. The mapping software shall identify several collection system components and attributes, including, but not limited to, gravity sewer, force main, and pipe attributes; property lines and parcels; manholes and access points; diversion structures, flow splitters, and outfalls; ownership of infrastructure; sewer easements; stormwater inlets; impervious surfaces; aerial photography; wastewater facilities (including pump stations, flood pump stations, and WWTPs); and planimetric features (including contours, roads, surface water, and land use).

2. The GIS Mapping Program shall be updated regularly.

#### G. Sanitary Sewer Overflow (“SSO”) Reporting and Notification

The City shall maintain an SSO reporting and notification program that ensures that discharges from the City’s sewer system are properly documented, stored in a data management system, and properly reported to appropriate regulatory authorities and as appropriate the affected public which includes persons with the

potential to come in contact with the sewage. This SSO reporting program shall include a listing of all Building/Private Property Backups discovered by or reported to the City that have occurred. This tabular listing should also include the date of the Building/Private Backup incident, the location by (specific address), source of notification (property owner, field crew, etc.) the general cause(s) of the Building/Private Backup, and actions taken or suggested by the City to halt, mitigate, and prevent future incidents. The City shall follow its Current NPDES Permits for verbal and written notification to the NPDES permitting authority that a SSO has occurred.

## II. Collection Systems Operation

### A. Budgeting

The City shall ensure adequate fiscal and personnel resources to operate and maintain its wastewater collection and treatment system.

### B. Engineering

1. The City shall maintain an Engineering Program that shall conduct the following activities:

- a. Assess and monitor the collection system infrastructure;
- b. Assess the collection system capacity;
- c. Identify, plan, design, and manage the construction of improvements; and
- d. Review improvements and additions to the collection system for compliance with the City's technical specifications and construction standards.

2. The activities of the Engineering Program shall provide that:

- a. The design conveyance and integrity of the collection system is maintained;
- b. Infiltration and Inflow ("I/I") that significantly contributes to the SSOs is removed from the system or otherwise addressed;
- c. SSOs are minimized; and
- d. Wet weather Combined Sewer Overflows ("CSOs") are controlled in accordance with the Nine Minimum Controls ("NMC") program and the Overflow Control Plan.

C. Water Quality Monitoring

The City shall develop a long-term Water Quality Monitoring Program that will be implemented as part of the Overflow Control Plan post-construction monitoring requirements set forth in Appendix “D.”

D. Pretreatment Program

The City shall continue to implement its approved pretreatment program pursuant to 40 C.F.R. Part 403 and the Current NPDES Permits.

E. Pump Station Operations

The City shall maintain reliable operation of the pump stations by:

1. Conducting routine inspections;
2. Troubleshooting when situations arise;
3. Performing preventative maintenance;
4. Retaining appropriate records of pump station inspections and performance; and
5. Remotely monitoring pump station operations through the use of remote dialers and a Supervisory Control and Data Acquisition (“SCADA”) system. This monitoring shall be done twenty four hours a day, seven days a week.

F. Pump Station Emergencies

1. The City shall maintain a formal emergency response plan which includes emergency response procedures that crews must follow in pump station emergencies. The City shall maintain guidelines that specify who to call and when to call based on the time of day, weather conditions, and nature of the issue.

2. Emergency response shall be provided by the City staff and/or additional resources as needed. This system shall be maintained to ensure quick response is available twenty-four hours per day, seven days per week.

3. The City shall ensure equipment is available to respond to pump station emergencies.

4. Records associated with pump station emergencies shall be completed and maintained.

G. Force Mains

By October 31, 2011, the City shall:

1. Develop an inventory and accurately map force mains and air relief valves (“ARVs”) into a GIS database;
2. Develop condition assessments for force mains and ARVs;
3. Investigate corrosion issues in conjunction with the condition assessment process;
4. Perform preventative maintenance when needed to protect the integrity of the infrastructure; and
5. Document force main maintenance activities in an IMS.

H. Smoke Testing

1. The City shall maintain a standard protocol for smoke testing.
2. Smoke Testing shall be utilized for sewer investigation and to identify specific locations where stormwater is entering the sanitary sewer system.

I. Flow Monitoring

1. The City shall use a flow monitoring program for the purpose of assessing capacity in targeted areas of the sewer system consistent with Appendix “D” of this Consent Decree. Flow monitoring shall assess system capacity during both dry and wet weather in order to assure adequate current and future capacity.
2. Flow monitoring shall provide adequate and accurate data to support the City’s Overflow Control Plan, capacity assessment and assurance analyses, and I/I investigation needs.

J. CCTV Inspection

1. The City shall use CCTV inspections to visually assess the condition of the inside of the collection system using standardized ratings to characterize conditions. CCTV inspections shall be conducted to investigate a known trouble area and as a follow-up to line cleaning.
2. The City shall perform CCTV inspections of at least 70 miles per year, which will be increased to 140 miles per year by 2020. This mileage includes the mileage in the combined sewer system (“CSS”) area as specified in Appendix “B”. Resource levels will be maintained to meet the performance goal.

K. Remote Sewer Inspection Program

1. The City shall maintain a remote sewer inspection program to inspect remote portions of the sanitary sewer system.

III. Collection Systems Maintenance

A. Manhole Repairs

1. The City shall maintain a manhole repair program to assure the structural integrity of manholes in the sewer system, reduce infiltration into manholes, control odor problems at manholes, increase accessibility to buried manholes, and prevent public harm due to structural failures.

2. The manhole repair program shall maintain the sewer system's manholes in a structurally sound condition and limit the occurrence of excessive infiltration into the sewer system at the manholes. WSD shall establish an annual performance goal for the manhole repair program.

B. Mainline Sewer Repairs.

1. The City shall perform physical repairs to the gravity sewer lines, as needed, to maintain adequate capacity, to reduce and eliminate excessive I/I, and to maintain the design conveyance of the pipes in the system.

2. The type of repair method used shall be determined by several factors including, but not limited to, pipe size, pipe type, pipe location, flow, surface conditions, and severity of I/I.

3. The City shall utilize appropriate sewer repair technologies, such as open cut, cured in place lining, horizontal directional drilling, boring and jacking, tunneling, pipe bursting, sliplining, grouting of joints, and point repairs.

4. The repairs shall be coordinated through an "asset management" approach to maintenance. The priority for repairs will be determined through the use of the system-wide CCTV inspection program as well as the other programs described in this CMOM Plan.

C. Sewer Cleaning

1. The City shall maintain a Sewer Cleaning Program to perform preventative maintenance cleaning and emergency cleaning on the gravity sewer system.

2. The City shall perform at least 283 miles of preventative maintenance cleaning per year. This mileage includes the mileage in the CSS area as specified in Appendix “B”.

D. Response Plan

The City shall maintain and implement a Building and Private Property Backup Response Plan that provides for basement backup response procedures and a basement backup preventative program. These procedures will be employed to restore the public sewer line to a functioning condition and perform any cleanup that may be required under applicable law, including the removal of wastewater/sewage, cleaning and disinfecting floors and walls, carpet cleaning, cleaning and disinfecting of all other items amenable to cleaning and disinfecting, and repair, replacement and disposal of damaged materials. These procedures will also include cleaning and disinfection of any areas and items remaining inside of an affected building that were in contact with sewage. The basement backup preventative program will allow for the installation of systems or devices to prevent future basement backups in those eligible properties experiencing the backup of wastewater into buildings due to inadequate capacity in the City’s sewer system.

IV. Collection Systems Capacity

A. Capacity Assessment and Assurance

The City shall maintain procedures for capacity assurance as follows:

1. For new development: The developer’s Engineering Consultant is responsible to certify that the proposed development will not overload the receiving sanitary sewer system. This includes (1) verifying the receiving trunk sewer was sized adequately according to the Kansas City Chapter of the American Public Works Association (“APWA”) standards, and (2) verifying any receiving pump station has sufficient capacity to handle the additional flows.
2. For single taps, the City shall regulate sewer connections and inspect the connections for proper installation.

**APPENDIX D**  
**Post Construction Monitoring Program Performance Criteria**

Kansas City, Missouri (“the City”) shall implement the Post Construction Monitoring Program (“PCMP”) as follows:

**I. INTRODUCTION TO THE POST CONSTRUCTION MONITORING PROGRAM**

The implementation of the PCMP shall provide the data necessary to assess and document the extent to which the performance measures contained within Appendix “A” are being met. The PCMP will also identify and evaluate any improvements in receiving water quality that result from the implementation of the control measures set forth in Appendix “A”. During implementation of the control measures set forth in Appendix “A,” the City shall not reroute any flows in the sewer system for the purpose of meeting the performance criteria other than those measures consistent with the Overflow Control Plan (“OCP”) or as otherwise approved in writing by EPA.

Implementation of the PCMP will allow the City to:

- Measure the effectiveness of green solutions projects in the combined sewer system (“CSS”).
- Measure the effectiveness of infiltration and inflow (“I/I”) reduction efforts, including private inflow source reduction projects in the separate sanitary sewer (“SSS”) area.
- Measure the performance of the High-Rate Treatment (“HRT”) facilities in treating wet weather flows.
- Measure the effectiveness of the control measures set forth in Appendix “A”.
- Update and enhance collection system computer models.
- Provide information to educate the public on the need for implementation of wet weather solutions, and the progress made in achieving program objectives.

Performance monitoring and sampling shall be required at many of the monitoring stations identified and used during the development of the OCP and at additional selected locations to compile the data necessary to support the development of a watershed management plan. The use of these locations will enable comparison of post-construction conditions with baseline conditions determined during the development of the OCP.

Short-term flow monitoring of approximately one to two years' duration before and after project completion and activation will be performed to measure and evaluate the performance of green solutions, programmatic elements, and sewer system improvements for the reduction of wet weather flow volumes and peak flow rates. Green solutions will include demonstration projects and green solutions in support of sewer separation projects. Programmatic elements will include private inflow source reduction. Sewer system improvements include I/I reduction projects in the SSS basins, relief sewer construction in the SSS basins, and sewer separation projects in the CSS basins.

Long-term monitoring of the performance of major constructed facilities will be initiated upon the completion of construction and activation of such facilities. Major constructed facilities include pumping station improvements, wet weather storage tanks and conveyance/storage tunnels, expansions and upgrades of existing wastewater treatment plants ("WWTPs"), and any approved HRT facilities planned for the CSS basins. Long-term monitoring of water quality in the receiving streams will be performed in accordance with the Water Quality Monitoring Plan ("WQMP") described below.

Data collected will be periodically evaluated for the extent to which it serves the City's needs for documentation of compliance with the performance measures. Based on such evaluations, the City may propose modifications of the PCMP to EPA, and shall make such modifications to the PCMP once approved by EPA in writing. Proposed modifications may include addition, elimination, or relocation of monitoring stations; addition or elimination of pollutant parameters; modification of data collection techniques; and modification of data evaluation methods.

## **II. WATER QUALITY MONITORING PLAN ("WQMP")**

A WQMP shall be developed by December 31, 2010, and updated as needed. Monitoring locations for receiving waters may include certain sites used during the development of the OCP, existing WSD water quality sampling sites, and one additional site on each of the following water bodies; Indian Creek, Blue River, and Mill Creek. Data collected by the U.S. Geological Survey, Missouri Department of Natural Resources ("MDNR"), or Kansas Department of Health and Environment ("KDHE") may be utilized for this monitoring.

The monitoring plan will focus on water quality parameters related to potential concerns from combined sewer overflows ("CSO") discharges and upstream pollutant sources as follows:

- Indicator bacteria, notably E. coli;
- Dissolved oxygen concentrations; and
- Aesthetics as measured by observations of floatables, debris, odor, and nuisance algal blooms.

The major objectives of the monitoring plan are:

- Further characterization of baseline water quality conditions prior to the development and implementation of the control measures set forth in Appendix “A”.
- Measurement of changes, if any, in water quality during and after implementation of the control measures set forth in Appendix “A”.

The WQMP shall, at a minimum, be structured to permit an assessment of the impact of CSOs remaining after completion of the control measures listed in Appendix “A” in each basin on the water quality in that basin’s receiving stream. Potential receiving stream water quality monitoring sites are listed in Table 1. The WQMP will define the anticipated schedule for monitoring at each site. It is anticipated that this assessment will not require ongoing water quality sampling of remaining CSOs.

Field measurements and collection of water quality samples will be conducted at the recommended sites on a bi-weekly basis throughout the April 1 – October 31 recreation season. Monitoring will begin April 1, 2011, and will be conducted at approximately the same time of day, on the same day of the week, at each location, to obtain an appropriate representation of storm event and non-event conditions. Monitoring will not be delayed because of weather, except for safety reasons. The monitoring frequency will provide data sufficient to calculate a geometric mean E. coli concentration consistent with applicable water quality standards and for tracking long term trends.

Field measurements recorded at each site will consist of temperature, pH, and dissolved oxygen. Field observations will be recorded for floating debris, submerged debris, algal growth, odor, and recreational use. Samples will be collected and analyzed for conductivity, E. coli, and total suspended solids. Monitoring activities will be conducted in accordance with the WSD’s Quality Assurance Plan which is currently the OCP Water Quality Monitoring Quality Assurance Project Plan; LimnoTech; April 14, 2005.

**Table 1 - Potential Receiving Water Monitoring Locations**

<b>Site Identifier</b>	<b>Location Description</b>	<b>Rationale for Selection</b>
BC-1	Brush Creek at Belinder St., KS	Characterize upstream water quality
BC-2	Brush Creek at Ward Parkway	Characterize water quality at state line
BC-3	Brush Creek at Rockwell Lane	Characterize impact of CSO and storm water loads
BC-4	Brush Creek at Broadway Street	Characterize impact of CSO and storm water loads
BC-5	Brush Creek at Rockhill Road	Characterize impact of CSO and storm water loads
BC-6	Brush Creek at Prospect Avenue	Characterize impact of CSO and storm water loads
BC-7	Brush Creek at Elmwood Avenue	Characterize cumulative impacts to Brush Creek
TF-1	Town Fork Creek at 51 <sup>st</sup> Street	Characterize loads from Town Fork Creek
BR-1	Blue River at Bannister Road	Characterize conditions upstream of all Kansas City, Missouri CSOs
BR-2	Blue River at Hickman Mills Dr.	Characterize impact of CSO, storm water, and small tributary loads to Blue River
BR-3	Blue River at Gregory Blvd	Characterize impact of CSO, storm water, and small tributary loads to Blue River
BR-4	Blue River at Blue Parkway	Characterize impact of CSO, storm water, and small tributary loads to Blue River upstream of Brush Creek
BR-5	Blue River at Stadium Drive	Characterize impact of CSO, storm water, and small tributary loads to Blue River
BR-6	Blue River at 23 <sup>rd</sup> Street	Characterize impact of CSO, storm water, and small tributary loads to Blue River
BR-7	Blue River at 12 <sup>th</sup> Street	Characterize impact of CSO, storm water, and small tributary loads to Blue River
BR-8	Blue River at train bridge upstream of I-435	Characterize cumulative impacts to Blue River
BR-9	Blue River south of Kenneth Drive, and west of Missouri-Kansas border	Characterize pollutant loads from Johnson County, KS
PV-1	Penn Valley Lake at outlet	Characterize conditions in Penn Valley Lake
MC-1	Mill Creek south of Kenneth Drive, and north of border between Jackson County and Cass County	Characterize Mill Creek pollutant loads tributary to the Blue River
IC-1	Indian Creek north of US Highway 435 in the vicinity of 103 <sup>rd</sup> Street, and west of Missouri-Kansas border	Characterize pollutant loads from Johnson County, KS
	Kansas River Upstream of outfall W005	At center or east bank of river

390543094363800	Kansas River at Interstate 670	At center or east bank of river
390552094364301	Kansas River below outfall WOO5	At center or east bank of river
390636094361201	Missouri River downstream of Westside WWTP	At center or south bank of river
390642094351901	Missouri River at Hannibal Bridge	At center or south bank of river
39070094335201	Missouri River at Paseo Bridge	At center or south bank of river
390744094280401	Missouri River below Blue River	At center or south bank of river
390745094281000	Missouri River downstream of Kansas River	At center or south bank of river
390815094323101	Missouri River at Riverfront Park	At center or south bank of river
390843094291801	Missouri River downstream of Blue River WWTP	At center or south bank of river

### **III. PCMP FOR CSO CONTROLS AND MAJOR WET WEATHER FACILITIES**

#### Effectiveness of Sewer System Improvements Projects

Flow metering will be performed as part of sewer system improvements to evaluate flow reduction effectiveness. Sewer system improvements consist of I/I reduction in the SSS area, private inflow source reduction, and sewer separation projects in the CSS area.

Specific details for monitoring programs will be developed as part of the planning for sewer system improvements. This monitoring is expected to be highly project-specific and relatively short term in nature. A detailed monitoring plan for the sewer system improvements shall be submitted in accordance with the schedule contained in Appendix “A”.

#### CSS, CSO Outfalls, and Major Wet Weather Facilities

Data collected through flow monitoring of selected CSO outfalls, selected collection system locations, and major wet weather facilities, such as pumping station improvements, in-line storage facilities, storage tanks, and conveyance/storage tunnels, shall enable determination of the level of control achieved as performance criteria implementation progresses and will also support:

- Characterization of sewer flow data for evaluation of long-term collection system

performance.

- Collection of information on overflows at critical CSS diversion structures.
- Collection of additional data, such as discharge rates at new pumping facilities and gate positions at the Blue River Wastewater Treatment Plant (“WWTP”), which would assist in optimizing sewer system operations.
- Development of a database of flow data for use in future design efforts related to controlling both CSOs and Sanitary Sewer Overflows (“SSOs”).
- Enhanced operation and maintenance actions to further control wet weather discharges and achieve NPDES permit compliance.

Table 2, set forth below, presents the initially planned suite of flow monitoring locations for selected CSO outfalls and CSS collection system locations. The monitoring locations were selected with an emphasis on the CSS areas for evaluation of sewer system improvements, facilities performance, system operational characteristics, and dry-weather flows in the CSS areas. No reduction or relocation of sites listed in Table 2 will be made without prior written approval from EPA.

Flow monitoring of the selected CSO outfalls and collection system locations listed in Table 2 will be performed beginning April 1, 2011. Monitoring of each major constructed wet weather facility will commence within six months of Achievement of Full Operation of that facility.

A detailed monitoring plan for each of the following major wet weather facilities will be prepared approximately one year prior to the scheduled substantial completion of construction of that facility and submitted in accordance with the schedule contained in Appendix A:

- In the SSS:
  - Storage tank(s) at the 87<sup>th</sup> Street Pumping Station.
  - Collection system and diverted flows at each downshaft to the North Bank Tunnel System.
  - Deep tunnel pumping station at the downstream end of the North Bank Tunnel System.
  - Expanded Treatment at the Birmingham WWTP.

- In the CSS:
  - Modifications at Blue River WWTP for diversion of up to 80 MGD of primary-plant effluent directly to disinfection facilities for treatment and discharge to the Blue River during wet-weather events.
  - Construction of a 50-MGD wet weather treatment facility with disinfection at Blue River WWTP.
  - HRT facility at the confluence of Brush Creek and the Blue River.
  - Deep tunnel pumping station at the lower end of the Brush Creek/Town Fork Creek CSO storage tunnel.
  - New outfall to Brush Creek at the intersection of the Brush Creek and Town Fork CSO storage tunnels (near existing CSO 030).
  - Deep tunnel pumping station at the lower end of the OK Creek CSO storage tunnel.
  - Reconstructed Turkey Creek Pumping Station.
  - In-line storage gates at the lower end of the existing OK Creek sewer.
  - In-line storage gates at the Santa Fe Pumping Station (CID storm sewers).
  - In-line storage gates and new pumping station at the lower end of the Gooseneck Creek arch.
  - Construction of 30 to 32 MGD enhancement of peak treatment capacity at Westside WWTP.
  - Construction of a 32 MGD HRT/disinfection facility for Turkey Creek Basin.

**Table 2 - CSS Flow Metering  
Sites**

Project Area	Area Type	Site ID or Other Designation	Conduit Dimensions [inches or as shown]	Manhole Number	Comment
<b>Middle Blue River</b>					
Middle Blue River	CSS	BR056	15	S097-061	Measurement of flow to Blue River
Middle Blue River	CSS	BR059	6' x 6' box	S147-011	Measurement of Overflow
Middle Blue River	CSS	BR061	48	S097-005	Measurement of Overflow
Middle Blue River	CSS	BR062	12 dry weather line; 54 wet weather line	S106-032 (dry weather line); S106-034 (wet weather line)	Measurement of dry-weather line; and wet weather flow
Middle Blue River	CSS	BR063	60	To be determined	Measurement of Overflow
Middle Blue River	CSS	BR064	2' - 3" x 4' - 0" overflow	S122-206	Measurement of overflow
Middle Blue River	CSS	BR066	24 overflow	S148-039	Measurement of Overflow
Middle Blue River	CSS	BR067	96	S148-051	Measurement of Overflow
Middle Blue River	CSS	BR069	5' - 8" x 5' - 8" DB	S128-356	Measurement of Overflow
<b>Brush Creek</b>					
Brush Creek	CSS	BR008	72	S078-174	Stormwater separation
Brush Creek	CSS	BR026	48	S082-010	Provides Q from all Town Fork prior to discharge into BRIS.
Brush Creek	CSS	BR030	78	S082-053	Represents a large portion of the Brush Creek basin before discharge to the Blue River Interceptor Sewer (BRIS)
Brush Creek	CSS	BR017	88	S079-219	Diversion structure located in vicinity of Plaza.
Brush Creek	CSS	BR018	12'x6'	S079-640	Diversion structure located in vicinity of Plaza.
Brush Creek	CSS	BR021	24	S080-620	Diversion structure located in vicinity of Plaza.
<b>Town Fork Creek</b>					
Town Fork Creek	CSS	BR090	7' - 3" x 10' - 6" DB	S104-351	Major outfall
Town Fork Creek	CSS	BR090	36	S104-264	Represents a large portion of the Town Fork Creek basin.
<b>Lower Blue River</b>					
Lower Blue River	CSS	BR036	60	S048-800	Overflow at BRIS
Lower Blue River	CSS	BR037	24	S059-009	Overflow at BRIS
Lower Blue River	CSS	BR039	24	S059-001	Overflow to combined sewer outfall
Lower Blue River	CSS	BR040	72	S073-037	Overflow to Parrish Creek
Lower Blue River	CSS	BR054	30	S048-058	Downstream of sewer separation area
Lower Blue River	CSS	BR034	102	S035-431	At lower end of Basin within the BRIS
Lower Blue River	CSS	BR039	36	S058-077	Tributary area into BRIS at the midpoint of this basin.
Lower Blue River	CSS	BR037	96x98 egg	S082-166	At mid-point of BRIS from several upstream CSS basins.
Lower Blue River	CSS	BR055	33	S059-030	Overflow to Blue River
Lower Blue River	CSS	BR036	60	S048-120	BRIS overflow
<b>Gooseneck Creek</b>					
Gooseneck Creek	CSS	BR032	39 to 48	S024-209	Overflow to Blue River
Gooseneck Creek	CSS	BR033	64	S024-091	CSS Interceptors
Gooseneck Creek	CSS	BR033	NA	S024-087	BRIS overflow

(Cont'd. next page)

**Table 2 (Cont'd) - CSS Flow Metering Sites**

Project Area	Area Type	Site ID or Other Designation	Conduit Dimensions [inches or as shown]	Manhole Number	Comment
<b>Turkey Creek</b>					
Turkey Creek/CID	CSS	W005	15'-8" x 15'	S053-127	CSS Interceptors
Turkey Creek/CID	CSS	W005	15'-8" x 15'	S053-127	CSS Interceptors
Turkey Creek/CID	CSS	W005	18' H x 17' W	S053-018Sa	Turkey Creek Pump Station overflow.
Turkey Creek/CID	CSS	W005	18' H x 17' W	S053-018Sa	Turkey Creek Pump Station overflow.
Turkey Creek/CID	CSS	W003	60	S029-811	Westside WWTP outfall
Turkey Creek/CID	CSS	W003	120	S029-820	Santa Fe Pump Station overflow
Turkey Creek/CID	CSS	W002	48	S029-058	Broadway Avenue outfall
Turkey Creek/CID	CSS	W006	24	S055-290	Upstream of Penn Valley Lake
<b>NEID</b>					
NEID	CSS	BR071	18	S028-035	Delaware St. outfall
NEID	CSS	BR072	78	S028-302	Main St. outfall
NEID	CSS	BR073	42	S028-954	Gillis Avenue outfall
NEID	CSS	BR074	72	S027-860	Lydia Avenue outfall
NEID	CSS	BR075	84	S009-017	Prospect Avenue pump station outfall
NEID	CSS	BR076	6' H x 8' W	S006-801	Milwaukee/Choteau outfall
NEID	CSS	BR077	52	S028-955	Holmes Avenue outfall
NEID	CSS	BR100	102 x 114 Horseshoe	S024-807	One of the bypasses at the Blue River WWTP influent box. Install at 1/3 points
NEID	CSS	BR031	42	S023-844	Near Blue River WWTP, overflow to Blue River

For each CSS basin, following implementation of the CSO control measures listed in Appendix “A”, the City shall conduct activation monitoring at all CSO outfalls in that basin to determine the number of activation events at each CSO outfall, and submit the activation information to EPA in the Annual Reports. Such activation information shall be submitted as an actual number of events as well as using the City’s collection system hydraulic model to correlate system performance to the “typical year” identified in the OCP.

**IV. OTHER MONITORING**

The PCMP for CSO controls and other major wet weather facilities will augment WSD’s existing wastewater system monitoring. The City shall implement the following additional monitoring:

Satellite Communities

Flow meter data collected from satellite communities that contribute substantial discharges to the City’s wastewater collection systems will be used to improve and maintain

calibration of the City's collection system hydraulic models in the SSS. Those models will be used in the assessment of compliance with the performance measures, particularly but not limited to I/I reduction initiatives and sewer system improvements in SSS basins. At present, the majority of wastewater flows received from the City of North Kansas City, Missouri, the City of Liberty, Missouri, and Johnson County, Kansas are metered.

In addition, the majority of flows discharged from the City's collection system to the Little Blue Valley Sewer District ("LBVSD") is metered by LBVSD. That meter data will also be used to assess performance of I/I reduction efforts in the City's Little Blue Valley Basin in the SSS.

If necessary, adjustments or additions to flow meter locations will be negotiated with the various satellite communities.

#### Supervisory Control and Data Acquisition (SCADA)

The wastewater utility capital improvement program includes expansion and enhancement of the wastewater SCADA system. That expansion will emphasize control and data acquisition at the various existing pumping stations and at the WWTPs.

#### Flow Metering at Pumping Stations

The wastewater utility capital improvements program includes additional or significant improvement of flow metering capabilities at the following major pumping stations, all of which will provide key data for the long-term assessment of the performance criteria and overall system compliance with the performance measures:

- 87<sup>th</sup> Street Pumping Station (discharges to the BRIS).
- Round Grove Pumping Station (discharges to the BRIS).
- Santa Fe Pumping Station (discharges to the Westside WWTP).
- NEID Pumping Station (discharges to the Blue River WWTP).
- Line Creek Pumping Station (discharges to both the Westside WWTP and the Hillside Bond Sewer in the Line Creek/Rock Creek basin).
- Buckeye Creek Pumping Station (discharges to the NEID interceptor).
- Birmingham Pumping Station (discharges to Birmingham WWTP).

## **V. RAINFALL MONITORING**

Rainfall monitoring is an essential component of the PCMP. Detailed analysis of precipitation data is necessary to fully evaluate compliance with the performance measures. Precipitation data of interest consist of total rainfall depth, duration, intensity, and event distribution.

Rainfall data will be compiled and analyzed as part of the PCMP. The source of rainfall data is planned to be the City's ALERT flood warning system ("FWS"), which presently consists of 44 rain gauges spaced throughout the City's service area. Rainfall data collected by the ALERT FWS will be used for analysis in connection with other post-construction, monitoring data.

## **VI. DATA MANAGEMENT**

The City has developed a Data Management System ("DMS") and associated protocols for the storage, management, retrieval, and analysis of all data of importance in assessment of the performance of the City's collection system.

## **VII. QUALITY CONTROL**

Quality control and quality assurance procedures and protocols prepared as part of the development of the OCP will continue to be used for the implementation of the PCMP. The relevant documents are:

- Appendix A of Administration Manual; OCP; 2005
- Water Quality Monitoring Quality Assurance Project Plan; OCP; April 14, 2005.

The City shall update the quality control and quality assurance procedures and protocols from time to time as appropriate. All monitoring plans shall incorporate the procedures and protocols available at the time of submittal.

## **VIII. ANALYSIS, PROGRESS REPORTING, AND COMPLIANCE DEMONSTRATION**

Data from the PCMP will be used to evaluate the performance and effectiveness of the

control measures set forth in Appendix “A”.

Data from the PCMP shall be used to update and improve calibration and verification of the City’s collection system models. The updated collection system models will be used to demonstrate compliance with both the Percent Capture of Wet Weather flows and Performance Criteria as set forth in Appendix “A” using the same design storms and design typical year hyetograph used in development of the OCP. Due to the inherent 20 percent variability in model predictions, the Performance Criteria of six “Typical Year” Overflow Events for the Brush Creek Basin shall be met if the City demonstrates seven or fewer such events using the updated collection system models and rainfall patterns used to develop the design storms. Also, the Performance Criteria of seven “Typical Year” Overflow Events for the Lower Blue River, Middle Blue River, and Town Fork Creek basins, and Outfall W005 shall be met if the City demonstrates eight or fewer such events using the updated collection system models and rainfall patterns used to develop the design storms.

The results and progress of the PCMP will be reported to the EPA in the Annual Report and as set forth in Section IX of the Consent Decree. This progress report will include a summary of CSS basin performance to-date, consisting of:

- CSO and collection system sampling and flow monitoring data.
- Rainfall data.
- Receiving water monitoring results.
- Flow monitoring for green solutions, programmatic elements, sewer system improvements, and pilot facilities.
- Flow monitoring and sampling results for major wet weather facilities.
- Re-evaluation of collection system hydraulic models to confirm continued acceptable calibration. Necessary model modifications, re-calibration, and re-verification will be indicated and documented.
- Identification and documentation of deficiencies and performance limitations.
- Identification and documentation of proposed supplemental remedial measures.

## **APPENDIX E**

### **Supplemental Environmental Project Plan**

This Appendix “E” describes the Supplemental Environmental Project (“SEP”) to be funded by the City as part of the Consent Decree resolving the allegations in the Complaint filed concurrently with this consent decree. The City will spend One Million Six Hundred Thousand Dollars (\$1,600,000) and perform certain additional functions as set forth herein to implement this SEP.

#### **SEP Overview:**

Septic systems present both public health and environmental risks that can be avoided by connection to public sewers. Many homeowners do not want to connect because of the upfront capital costs and the ongoing monthly bills associated with public sewer. These financial obstacles are particularly acute for low income residents.

In 2008-2009, the Water Services Department (WSD) assisted the Mayor-appointed Infill Sewer Advisory Committee in developing a long-range plan to provide sanitary sewer service to the residential areas of the City that currently use septic systems. The culmination of the Committee’s work is a plan entitled, “A Strategic Plan for Infill Sewers and Septic Tanks in Kansas City, Missouri.” Design and construction for several of these infill sewer projects is underway. The Advisory Committee also recognized that once the sewers were constructed, some homeowners may be financially unable to install their private lateral. The plan’s septic tank closure strategy and corresponding background data provide a timely basis for implementing this SEP.

The SEP shall include the implementation of a Sewer Connection & Septic Tank Closure Program (“Program”). The program shall include the installation of a sewer service line (i.e. lateral) to the homes of participating property owners, removal of their septic tank from operation by capping, filling, or other means as determined and approved by the City and consistent with City ordinances. The Program is generally set up as a sliding-scale grant program for income eligible residential property owners who elect to close their septic tank and connect to the adjacent public sewer.

The Program will be focused in the thirty-two (32) sewer assessment districts, which include approximately 1363 residences (also known as “Completed Project Areas”). The Program is voluntary and will be available to all residents of owner-occupied, single family homes with septic tanks that are on properties served by a public sanitary sewer. In the Completed Project Areas, it is estimated that 50% of the homes are still on septic systems. The City will target program information and applications for assistance to homes within the Completed Project Areas.

#### **SEP Budget and Implementation Period:**

Based on a one million six hundred thousand dollar (\$1,600,000) budget, at an average subsidy level of three thousand dollars (\$3,000) per home, the Program is anticipated to assist five

hundred and thirty-three (533) residents; however, this number may vary depending on the subsidy level. This program provides grant funding assistance on a sliding scale to households at or below 100% of the area median income. The grant amounts at the outset will range from \$2,000 - \$4,000, based on family income and size. SEP funds shall not be used for City administrative expenses.

The SEP shall be completed at a date no later than five (5) years from the date of entry of this Consent Decree.

**Project Processing:**

The City will use a streamlined administrative approach to enhance implementation, while providing appropriate management oversight. The processes will include:

- City to verify applicant’s income, property ownership, occupancy, and current billing status;
- Upon approval of eligibility, owners required to get bids from licensed plumbers;
- City inspection of each sewer lateral connection to verify that connections are properly made;
- Use a special program voucher requiring sign-offs of all parties, including certification that owner funds are paid and documented, all permits acquired, City inspections completed, lien waivers signed, and other program requirements are met prior to City’s final payment to the plumber; and
- City payment will be made directly to the plumber.

**Progress Reports**

The City shall submit to EPA SEP Progress Reports beginning with the first full year after the commencement of the implementation of the SEP, and continuing annually thereafter until the SEP is completed, as set forth in Subsection XII.D of the Consent Decree.

**Compliance**

The City SEP shall be deemed in compliance upon completion of the SEP Program as set forth in this SEP Plan and Section XII of the Consent Decree.

To the extent the City is unable to complete the SEP Program described in this SEP Plan due to lack of homeowner participation, the City may submit the following requests to EPA:

1. The City may request additional time from EPA to complete the above described SEP. Such request shall be made at least sixty (60) days prior to the final completion date as set forth above. However, if EPA denies the request for additional time, then the City shall continue to implement the SEP and be subject to stipulated penalties as set forth in

Section XIII of this Consent Decree. If the City is granted additional time to complete the SEP, the SEP shall be deemed in compliance as described above.

2. The City may propose an alternate SEP proposal and schedule to EPA equal in cost to the difference in the amount the City has expended on the SEP as described above to date, and \$1,600,000. Such request shall be made no later than four (4) years from the Effective Date of the Consent Decree. EPA may approve the alternate SEP proposal and schedule for immediate implementation. If EPA approves an alternate SEP and schedule, the SEP shall be deemed in compliance upon completion of the alternate SEP. If EPA does not approve the alternate SEP proposal, the City shall be subject to stipulated penalties as set forth in Section XIII of this Consent Decree.

### **SEP Completion Report**

Within one hundred and twenty (120) days after the completion of the SEP, the City shall submit to EPA a SEP Completion Report as set forth in Subsection XII.B of the Consent Decree.

**APPENDIX F**  
**Schedule for Implementation of Disinfection Technology at WWTPs**

This Appendix “F” describes the implementation of disinfection at the City’s WWTPs. The City shall complete installation of disinfection technology at its WWTPs as set forth in Section VII of this Consent Decree in accordance with the following schedule:

- Rocky Branch WWTP by no later than October 11, 2011;
- Birmingham WWTP by no later than January 24, 2012;
- Blue River WWTP as included in the Current NPDES Permit, but by no later than December 31, 2013;
- Fishing River WWTP as included in the Current NPDES Permit, but by no later than December 31, 2013;
- Todd Creek WWTP or as included in the Current NPDES Permit, but by no later than December 31, 2013;
- Westside WWTP by as included in the Current NPDES Permit, but by no later than December 31, 2013; and
- Northland Mobile Home Park WWTP as included in the Current NPDES Permit, but by no later than December 31, 2013.