IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TENNESSEE

UNITED STATES O	F AMERICA and,)	
the STATE OF TENNESSEE, ex. rel.)	·
ROBERT E. COOPER, in his representative)	
capacity as the Attorney General and)	
Reporter of Tennesse)	·
	Plaintiffs,)	Civil Action No. 2:10-cv-02083-SHM-dkv
	and	<i>)</i>)	CONSENT DECREE
TENNESSEE CLEAT	N WATER))	•
MET WORK,	Intervening Plaintiff,))	
v.)	
)	
THE CITY OF MEMPHIS,)	
	Defendant.)	
		_)	

TABLE OF CONTENTS

I. JURISDICTION AND VENUE	7-
II. APPLICABILITY	7-
III. OBJECTIVES	9-
IV. <u>DEFINITIONS</u>	9-
V. COMPLIANCE REQUIREMENTS	16-
VI. REVIEW OF DELIVERABLES/CERTIFICATION OF DELIVERABLES	40-
VII. <u>CIVIL PENALTY</u>	44-
VIII. REPORTING REQUIREMENTS	46-
IX. STIPULATED PENALTIES	49-
X. <u>FORCE MAJEURE</u>	54-
XI. <u>DISPUTE RESOLUTION</u>	56-
XII. RIGHT OF ENTRY INFORMATION COLLECTION AND RETENTION	59-
XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS	61-
XIV. COSTS	63-
XV. NOTICES	64-
XVI. EFFECTIVE DATE	66-
XVII. RETENTION OF JURISDICTION	66-
XIII. MODIFICATION	66-
XIX. TERMINATION	67-
XX. PUBLIC PARTICIPATION	68-
XXI. <u>SIGNATORIES/SERVICE</u>	68-

XXII.	<u>INTEGRATION</u>	-69-
XXIII	FINAL JUDGMENT	-69-
XXIV	. APPENDICES	-69-

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 United States Environmental Protection Agency ("EPA"), filed a Complaint ("Complaint") on February 5, 2010, alleging that Defendant, the City of Memphis, Tennessee ("Memphis"), has violated and continues to violate Sections 301 and 402 of the Clean Water Act ("CWA"), 33 U.S.C. §§ 1311 and 1342;

WHEREAS, Plaintiff, the State of Tennessee ("State"), acting at the request of the Tennessee Department of Environment and Conservation ("TDEC"), joined in the Complaint and seeks injunctive relief and civil penalties for Memphis' alleged violations of the Tennessee Water Quality Control Act ("TWQCA"), Tenn. Code Ann. §§ 69-3-101 et seq., and the regulations promulgated pursuant thereto;

WHEREAS, on February 12, 2010, Intervening Plaintiff, the Tennessee Clean Water Network ("TCWN"), filed a Motion to Intervene as a Matter of Right seeking to intervene in the action initiated by the United States and the State pursuant to Section 505(b)(1)(B) of the CWA, 33 U.S.C. § 1365(b)(1)(B);

WHEREAS, the United States and the State filed an Amended Complaint

("Amended Complaint") concurrently with the lodging of this Consent Decree amending the
allegations of Memphis' violations of the CWA and the TWQCA;

WHEREAS, the TCWN filed an Amended Motion to Intervene as a Matter of Right, pursuant to Section 505(b)(1)(B) of the CWA, 33 U.S.C. § 1365(b)(1)(B), concurrently with lodging of this Consent Decree which provided for its complaint ("TCWN Complaint") to be filed upon entry of this Consent Decree;

WHEREAS, Memphis is a "municipality" pursuant to Section 502(4) of the CWA, 33 U.S.C. § 1362(4); and, therefore, a "person" pursuant to Section 502(5) of the CWA, 33 U.S.C. § 1362(5), and Tenn. Code Ann. § 69-3-103(25);

WHEREAS, the State is also a Plaintiff in this action and is joined as a Party under Section 309(e) of the CWA, 33 U.S.C. § 1319(e), which requires the state in which a municipality is located to be joined as a party whenever the municipality is a party to a civil action brought by the United States under Section 309 of the CWA;

WHEREAS, TDEC has been authorized by EPA to administer the National Pollutant Discharge Elimination System ("NPDES") pursuant to Section 402(b) of the CWA, 33 U.S.C. § 1342(b);

WHEREAS, Memphis' Wastewater Collection and Transmission System ("WCTS") transports wastewater to two publicly owned wastewater treatment plants ("WWTPs"), M.C. Stiles WWTP and T.E. Maxson WWTP, which are operated by Memphis pursuant to NPDES Permit Numbers TN0020711 and TN0020729, respectively;

WHEREAS, Memphis has reported to TDEC Sanitary Sewer Overflows ("SSOs") from the WCTS;

WHEREAS, the United States, the State and the TCWN contend that Memphis has violated the effluent limitations in the NPDES Permits associated with foam;

WHEREAS, the United States, the State and the TCWN contend that these SSOs and effluent limit violations are violations of the CWA, TWQCA, and Memphis' NPDES Permits;

WHEREAS, this Consent Decree requires Memphis to develop, submit, finalize, and implement plans for the continued improvement of its WCTS and WWTPs to address SSOs and effluent limitation for foam;

WHEREAS, TDEC has indicated to Memphis that reissued NPDES permits for the M.C. Stiles and T.E. Maxson WWTPs will require Memphis to meet new NPDES permit requirements pertaining to disinfection and, if applicable, dechlorination of WWTP effluent which will require the expenditure of significant resources;

WHEREAS, Memphis asserts that it took over the grease program from the Shelby County Government on or about 1997 and since that time there has been a significant downward trend in the number of SSOs from Memphis' WCTS as indicated on the chart in Appendix A, attached hereto and incorporated herein;

WHEREAS, on or about October 31, 2005. TDEC approved Memphis' grease program and Memphis has been implementing a program to control grease in its WCTS, including issuing permits to approximately 3,200 restaurants to control grease entering the WCTS;

WHEREAS, the Parties have negotiated in good faith and have reached a settlement of the issues raised in the Amended Complaint and the TCWN Complaint;

WHEREAS, Memphis' agreement to this Consent Decree is not an admission of liability, and except for Memphis' consent to jurisdiction and venue as provided in Section I of this Consent Decree, and it is not an adjudication or admission of any fact or law;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid

litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest;

NOW THEREFORE, with the consent of the Parties, it is hereby ORDERED,

ADJUDGED and DECREED as follows:

I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and over the Parties. This Court has supplemental jurisdiction over the state law claims asserted by the State pursuant to 28 U.S.C. § 1367. Venue is proper in the Western District of Tennessee pursuant to Section 309(b) and 505 of the CWA, 33 U.S.C. §§ 1319(b) and 1365, and 28 U.S.C. §§ 1391(b) and 1395(a), because the violations alleged in the Amended Complaint are alleged to have occurred in this judicial district. For purposes of this Decree, or any action to enforce this Decree, Memphis consents to the Court's jurisdiction over this Decree and any such action and over Memphis and consents to venue in this judicial district.
- 2. For purposes of this Consent Decree, Memphis agrees that the Amended Complaint states claims upon which relief may be granted pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and TWQCA, Tenn. Code Ann. §§ 69-3-101 et seq.

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States, the State and the TCWN, and upon Memphis and any successors, assigns, or other entities or persons otherwise bound by law.

- 4. No transfer of ownership or operation of the WCTS, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Memphis of its obligation to ensure that the terms of the Decree are implemented. At least thirty (30) Days prior to such transfer, Memphis shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA, the United States Department of Justice and TDEC, in accordance with Section XV of this Decree (Notices). Memphis shall require, as a condition of any sale or transfer, that the purchaser or transferee agrees in writing to be bound by this Consent Decree and submit to the jurisdiction of the Court for its enforcement. Any attempt to transfer ownership or operation of the WCTS without complying with this Paragraph constitutes a violation of this Decree.
 - 5. Memphis shall provide written notice, either by hard copy or by electronic mail that a copy of this Consent Decree is posted on its website, to all elected officials and employees whose duties might reasonably include compliance with any provision of this Consent Decree. Memphis shall be responsible for ensuring that all employees involved in performing any work pursuant to this Consent Decree perform such work in a manner consistent with the requirements of this Consent Decree. Memphis shall provide written notice that a copy of this Consent Decree is posted on its website to all successful bidders retained to perform work expressly required by this Consent Decree and shall be responsible for ensuring that any contractors hired to perform work pursuant to this Consent Decree comply with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Memphis shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. OBJECTIVES

7. The express purpose of the Parties entering into this Consent Decree is for Memphis to use its best efforts to prepare and implement all plans, measures, reports, and construction, maintenance, and operational activities called for under this Consent Decree to achieve the goals of: (1) full compliance with the CWA, the TWQCA, and the regulations promulgated thereunder, and (2) the elimination of all SSOs.

IV. DEFINITIONS

- 8. Terms used in this Consent Decree that are defined in the CWA or in regulations promulgated pursuant to the CWA shall have the meanings assigned to them in the CWA, 33 U.S.C. §§ 1251 et seq., and regulations promulgated under the CWA, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:
- a. "Amended Complaint" shall mean the amended complaint filed by the United States and the State concurrently with the lodging of this Consent Decree which amends the Complaint.
- b. "Building Backup" shall mean a wastewater release or backup into a building or private property that is caused by blockages, flow conditions, or other malfunctions in the Wastewater Collection and Transmission System. A wastewater backup or release that is

caused by blockages, flow conditions, or other malfunctions of a Private Lateral is not a Building Backup.

- c. "Bypass" shall have the meaning set forth at 40 C.F.R. § 122.41(m).
- d. "Calendar Quarter" shall mean the 3 month periods ending on March 31, June 30, September 30, and December 31.
- e. "Calendar Year" shall mean the 12 month period starting on January 1 and ending on December 31.
- f. "Certification" or "Certify" when used in this Consent Decree shall require

 Memphis to comply with Section XII (Information Collection and Retention) of this Consent

 Decree.
- g. "Complaint" shall mean the complaint filed by the United States and the State in this action on February 5, 2010.
- h. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto listed in Section XXIV. In the event of a conflict between this document and any appendix, this document shall control.
- i, "CWA" shall mean the Clean Water Act, as amended, 33 U.S.C. §§ 1251, et seq.
- j. "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 Tennessee.
- k. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall

on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.

- l. "Defendant" shall mean the City of Memphis, Tennessee and any successor thereto.
- m. "Deliverable" shall mean any written document required to be prepared and/or submitted by or on behalf of Memphis pursuant to this Consent Decree.
 - n. "DOJ" shall mean the United States Department of Justice.
- o. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.
 - p "Effective Date" shall have the definition provided in Section XVI.
- q. "Force Main" shall mean any pipe that receives and conveys, under pressure, wastewater from the discharge side of a pump. A Force Main is intended to convey wastewater under pressure.
- r. "Gravity Sewer Line" or "Gravity Sewer" shall mean a pipe that receives, contains and conveys wastewater not normally under pressure, but is intended to flow unassisted under the influence of gravity.
- s. "Infiltration" as defined by 40 C.F.R. § 35.2005(b)(20) shall mean water other than wastewater that enters the WCTS (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include and is distinguished from Inflow.
- t. "Inflow" as defined by 40 C.F.R. § 35.2005(b)(21) shall mean water other than wastewater that enters the WCTS (including sewer service connections) from sources such

as, 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, catch basins, cooling towers, storm water, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished, from Infiltration.

- u "I/I" shall mean the total quantity of water from inflow, infiltration, and rainfall induced infiltration without distinguishing the source.
 - v. "Intervening Plaintiff" shall mean the Tennessee Clean Water Network.
- w. "Lift Station" shall mean facilities in the WCTS (not at the WWTPs) comprised of pumps which lift wastewater to a higher hydraulic elevation, including all related electrical, mechanical, and structural systems necessary to the operation of that lift station.
- x. "Memphis" shall mean the City of Memphis, Tennessee, including all of its departments, agencies, instrumentalities such as the Public Works Division, and any successors thereto.
- y. "MOM" or "Management, Operations, and Maintenance" shall mean a program of accepted industry practices to properly manage, operate and maintain sanitary wastewater collection, transmission and treatment systems, investigate capacity-constrained areas of these systems, and respond to SSO events.
- z. "NPDES" shall mean the National Pollutant Discharge Elimination

 System authorized under Section 402 of the CWA, 33 U.S.C. § 1342.
- aa. "NPDES Permits" shall mean NPDES permit No. TN0020711 issued to Memphis pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, for the M.C. Stiles WWTP effective on April 1, 2000, and NPDES permit No TN0020729 issued to Memphis

pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, for the T.E. Maxson WWTP effective on April 1, 2000, and any future extended, modified, or reissued permits.

- bb. "Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral.
- cc. "Parties" shall mean the United States of America on behalf of EPA, the State on behalf of TDEC, the TCWN, and Memphis.
- dd. "Plaintiffs" shall mean the United States of America on behalf of EPA and the State of Tennessee on behalf of TDEC.
- ee. "Private Lateral" shall mean that portion of a sanitary sewer conveyance
 pipe that extends from the wastewater main to the single-family, multi-family, apartment, or
 other dwelling unit or commercial or industrial structure to which wastewater service is provided.
- ff. "Public Document Repository" or "PDR" shall mean the Memphis Central Library, located at 3030 Poplar Avenue, Memphis, Tennessee 38111 and Memphis' website.
- gg. "Publicly Owned Treatment Works" or "POTW" shall mean a publicly owned treatment works or POTW as defined in 40 C.F.R. § 403.3(q), and includes the WCTS and the WWTPs as defined in this Consent Decree.
- hh. "Sanitary Sewer Overflow" or "SSO" shall mean an overflow, spill, or release of wastewater from Memphis' WCTS or WWTPs including: (a) Unpermitted Discharges; (b) overflows, spills, or releases of wastewater that may not have reached waters of the United States or the State; and (c) all Building Backups.
- ii. "Section" shall mean a portion of this Consent Decree identified by a roman numeral.

- ij. "State" shall mean the State of Tennessee, acting on behalf of TDEC, including all of its departments, agencies, and instrumentalities.
- kk. "SORP" shall mean the Sewer Overflow Response Plan that Memphis developed and will implement pursuant to Subparagraph 10.a., a copy of which is attached hereto as Appendix B.
- II. "Subparagraph" shall mean a portion of a paragraph identified by lowercase letters.
 - mm. "TCWN" shall mean the Tennessee Clean Water Network.
- nn. "TCWN Complaint" shall mean the complaint filed by the TCWN concurrently with entry of this Consent Decree which alleges the same CWA violations as set forth in the Amended Complaint.
- oo. "TDEC" shall mean the Tennessee Department of Environment and Conservation and any successor departments or agencies of the State.
- pp. "Timely" when applied to the submittal of a Deliverable shall mean submitted (e.g., postmarked) no later than the deadline established in this Consent Decree (or in a document approved pursuant to this Consent Decree) and containing all of the elements pertaining to the submittal as set forth in this Consent Decree (or in a document approved pursuant to this Consent Decree). "Timely," when applied to the implementation of any Work shall mean implemented no later than the deadline established in this Consent Decree (or in a document approved pursuant to this Consent Decree) and in accordance with the elements pertaining to such Work as set forth in this Consent Decree (or in a document approved pursuant to this Consent Decree).

- qq. "TWQCA" shall mean the Tennessee Water Quality Control Act, Tenn. Code Ann. §§ 69-3-101, et seq.
- rr. "United States" shall mean the United States of America, acting on behalf of EPA, including its departments, agencies, and instrumentalities.
- ss. "Unpermitted Discharge" shall mean a discharge of pollutants which reaches waters of the United States or the State from (a) the WCTS, (b) WWTPs through a point source not specified in an NPDES Permit, or (c) WWTPs which constitutes a prohibited Bypass except if the criteria set forth at 40 C.F.R. § 122.41(m)(2) or 40 C.F.R. § 122.41(m)(4)(i)(A) (C) are met.
- tt. "Wastewater Collection and Transmission System" or "WCTS" shall mean the municipal wastewater collection, retention and transmission system, including all pipes, Force Mains, Gravity Sewer Lines, Lift Stations, pumps, manholes, and appurtenances thereto, which are owned or operated by Memphis and service Memphis and which flow to the M.C. Stiles and T.E. Maxson WWTPs.
- uu. "Wastewater Treatment Plant" or "WWTP" shall mean devices or systems used in the storage, treatment, recycling, and reclamation of municipal wastewater. For purposes of this Consent Decree, this definition shall refer only to following treatment facilities: the M.C. Stiles WWTP located at 2303 N. 2nd St., Memphis, Tennessee, and the T.E. Maxson WWTP located at 2685 Plant Road, Memphis, Tennessee, and all components of such sewage treatment plants.
- vv. "Work" shall mean all activities Memphis is required to perform under this Consent Decree.

V. <u>COMPLIANCE REQUIREMENTS</u>

- 9. <u>Obligation to Perform Work</u>. Upon the Effective Date of this Consent Decree, Memphis shall commence to implement the Work pursuant to this Consent Decree. All Work shall be performed using sound engineering practices, which may include appropriate provisions of the *Handbook: Sewer System Infrastructure Analysis and Rehabilitation*, EPA/625/6-91/030, 1991; Existing Sewer Evaluation and Rehabilitation, WEF MOP FD-6, 1994; and the Tennessee Design Criteria for Sewage Works in accordance with Tenn. Comp. R. & Reg., ch. 1200-4-2-03.
- 10. Management, Operations and Maintenance ("MOM") Programs. Except for the MOM Programs already developed by Memphis and attached to this Consent Decree as appendices, Memphis shall develop the specific MOM Programs set forth below and ensure that each MOM Program has a written, defined purpose; a written, defined goal; is documented in writing with specific detail; is implemented by trained personnel; has established performance measures where applicable; and has written procedures for periodic review. The Parties recognize that during the term of this Consent Decree Memphis may need or want to revise the MOM Programs set forth below. Such revisions shall not be considered modifications to the Consent Decree for purposes of Section XIII (Modification). Memphis must obtain EPA's prior written approval of any revision to the substance of any MOM Program required by this Consent Decree and shall comply with the provisions of Section VI. Memphis may revise the form of any MOM Program required by this Consent Decree without EPA's approval and shall provide a copy of any such revised Program to EPA and TDEC, and place a copy of any such revised Program in the PDR within seven (7) Days after making such revision. Nothing in this Consent Decree shall limit Memphis' ability to modify any other of its programs not specifically required

by this Consent Decree for the design, planning, construction, operation, and maintenance of its WCTS or WWTPs in any fashion not inconsistent with this Decree.

- a. Sewer Overflow Response Plan. Memphis submitted to EPA and TDEC on March 11, 2011 a Sewer Overflow Response Plan ("SORP") that provides for (i) timely and effective methods and means of responding to, cleaning up, and/or minimizing the impact of SSOs; (ii) timely reporting the location, estimated volume, cause, impact, and other pertinent information of SSOs to EPA, TDEC and other appropriate regulatory agencies; and (iii) notifying the potentially impacted public. A copy of the SORP is attached hereto as Appendix B and incorporated by reference herein. Memphis shall implement the SORP as an enforceable obligation under this Consent Decree.
- b. Fats, Oil, and Grease ("FOG") Management Program. Memphis has developed and has been implementing a FOG Management Program since its Grease MOM Program document was approved by TDEC in October of 2005. Notwithstanding any improvements already achieved through the FOG Management Program, Memphis submitted to EPA and TDEC on March 11, 2011 an updated FOG Management Program containing the results of its re-evaluation to expand or modify its existing Program to control further the discharge of FOG into Memphis' WCTS. A copy of the updated FOG Management Program is attached hereto as Appendix C and incorporated by reference herein. Memphis shall implement the updated FOG Management Program as an enforceable obligation under this Consent Decree.
- c. <u>Lift Station and Force Main Operations and Maintenance Program.</u>

 Within three hundred sixty-five (365) Days after the Effective Date of this Consent Decree,

 Memphis shall submit to EPA and TDEC for review and comment a Lift Station and Force Main

Operations and Maintenance Program ("Lift Station & Force Main O&M Program"). The goal of the Lift Station & Force Main O&M Program is to facilitate proper operation and maintenance activities associated with the Lift Stations and Force Mains within the WCTS. The Lift Station & Force Main O&M Program shall include the requirements set forth in Subparagraphs 10.c.(i). through (ix). below.

- (i). Identification of the means and modes of communication between Lift Stations, field crews, and supervising staff.
 - (ii). Technical specifications of each Lift Station within the WCTS.
- (iii). A description of each Lift Station monitoring system which shall continuously monitor, report, and transmit information for each Lift Station. Specifically, the Lift Station & Force Main O&M Program shall provide for Memphis to install, if it has not already done so, on or before March 31, 2012 or one hundred-eighty (180) Days after the Effective Date of this Consent Decree, whichever is later, Supervisory Control and Data Acquisition ("SCADA") systems at all Lift Stations identified on Appendix D, attached hereto and incorporated by reference herein.
- (iv). Written preventive operations and maintenance schedules and procedures which shall be scheduled appropriately and shall include, but not be limited to, written procedures for the following:
- (A). Periodic service and calibration of instrumentation such as flow meters, liquid level sensors, alarm systems, elapsed time meters, and remote monitoring equipment.
 - (B). Inspection and service for air release valves.

- (C). Predictive (including non-physical inspections) and/or physical inspection and service for all Lift Stations including, but not be limited to:
- reading, recording and maintaining records of information from the elapsed time meters and pump start counters;
- (2) observing and documenting wet well conditions, including grease and/or debris accumulation;
- (3) checking and re-setting, as necessary to improve system performance, wet well pumping points (e.g., floats);
- (4) checking, recording and maintaining records of system pressure(s);
 - (5) checking SCADA and/or alarm components;
 - (6) checking stand-by power sources; and
 - (7) identifying maintenance needs.
- (D). The assessment of Force Mains, including an evaluation of potential sulfide and corrosion control options, and a summary report of findings, including a recommendation of the preferred sulfide and corrosion control method(s); provided, however, that such corrosion control options and methods shall not apply to components made of plastic or other similar materials.
- (E). Inspection of Force Main easements, including inspection of creek crossings, stream bank encroachment toward Force Mains, and easement accessibility to identify whether further action would be necessary for Memphis to be able to have access should a problem arise. Inspections shall include written reports, and where appropriate, representative

photographs or videos of appurtenances being inspected (Force Mains, creek crossings, etc.).

Inspectors shall promptly report any observed SSOs to their area supervisors and shall record any evidence of SSOs which may have occurred since the last inspection. Any observed SSO shall be promptly reported in accordance with the SORP.

- (F). A schedule for the maintenance of easements. Memphis need not remove permanent structures (e.g., parts of buildings), fences surrounding private property, or trees or vegetation to assure that a portion of the WCTS is accessible. If, however, an SSO occurs that requires remediation, Memphis may need to cut down trees or remove vegetation to remediate the SSO.
- (G). A description of resource commitments such as staffing, contractual support and equipment.
- (v). Written standard emergency/reactive operations and maintenance procedures. Memphis, subject to its discretion, may use portable pumps, portable generators or alternative power sources as it deems appropriate. At a minimum, the standard emergency/reactive Lift Station operating procedures shall include:
- (A). Criteria used to determine the need for emergency operations and maintenance.
- (B). Initiation/use of stand-by power (e.g., portable generators), where applicable.
- (C). Initiation/use of portable pump use (e.g., bypass/pump-around operations), where applicable.

- (D). Evaluation of the need for additional equipment for emergency/reactive operations, including, but not limited to, additional portable generators and/or additional portable pumps (for pump-around operations).
- (E). Evaluation of the need for on-site standby power (e.g., on-site generator and/or 2nd electrical feed from the power grid) for each Lift Station should Memphis choose, subject to its discretion, not to have a portable pump available at the Lift Station.
- (F). Establishing standard forms, reporting procedures and performance measures for emergency/reactive operations and maintenance.
 - (vi). An inventory management system that includes:
 - (A). Lists of critical equipment and critical spare parts.
- (B). A list of where critical spare parts and critical equipment may be secured to allow repairs in a reasonable amount of time for those spare parts and critical equipment that are not stored by Memphis (e.g., including spare pipe having a diameter of 24 inches or greater). The list shall also set forth an inventory of spare parts and critical equipment stored by Memphis, as applicable.
- (C). Written procedures for updating the critical spare parts and equipment inventories in the inventory management system.
- (vii). A common information system that Memphis will use to track implementation of the Lift Station & Force Main O&M Program, track maintenance activities (including Lift Station equipment histories), and track management, operations, and maintenance performance indicators.

- (viii). The key performance indicators ("KPIs") Memphis will track to measure performance of the WCTS using the information system referenced in Subparagraph 10.c.(vii). above. These KPIs shall include the number of SSOs per mile of Force Main and/or number of Lift Stations; maintenance activities tracked by type (corrective, preventive, and emergency) and such other KPIs as Memphis may suggest and EPA approve.
- (ix). Reports which list equipment problems and the status of work orders generated during the prior month.
- d. <u>Gravity Sewer System Operations and Maintenance Program</u>. Within three hundred sixty-five (365) Days after the Effective Date of this Consent Decree, Memphis shall submit to EPA and TDEC for review and comment, a Gravity Sewer System Operations and Maintenance Program ("Gravity Sewer System O&M Program") to prevent SSOs, particularly those caused by FOG, roots and/or debris obstructions. The Gravity Sewer System O&M Program shall include the requirements set forth in Subparagraphs 10.d.(i) through (xii). below.
- (i). Written preventive operations and maintenance schedules and procedures which shall be scheduled appropriately and shall include, but not be limited to, written procedures for the following:
- (A). Inspection and maintenance of all Gravity Sewers, manholes and inverted siphons.
- (B). Observing and documenting Gravity Sewer, manhole and inverted siphon conditions, including grease, roots, and/or debris accumulation.
 - (C). Identifying maintenance needs.

- (D). Scheduling preventive maintenance work/cleaning which Memphis may schedule in connection with the CSAP and/or IRP programs.
- (ii). An engineering evaluation of potential sulfide and corrosion control options and a summary report of findings, including a recommendation of the preferred sulfide and corrosion control method(s); provided, however, that such corrosion control options and methods shall not apply to components made of plastic or other similar materials.
- (iii). Memphis may prioritize the evaluation of the Gravity Sewer system based upon the size of the pipe (e.g., starting with the larger pipes and work back to smaller pipes), location of SSOs, community input or other criteria it finds appropriate.
- (iv). Inspection of Gravity Sewer, manhole, and inverted siphon easements, including inspection of: creek crossings, stream bank encroachment toward Gravity Sewers, manholes and inverted siphons, and easement accessibility (including the need to control vegetative growth or encroachment of man-made structures or activities that could threaten the integrity of the affected Gravity Sewer, manholes, or inverted siphon). Inspections shall include written reports, and where appropriate, representative photographs or videos of appurtenances being inspected (Gravity Sewers, manholes, inverted siphons, creek crossings, etc.). Inspectors shall promptly report any observed SSOs to their area supervisors and shall record any evidence of SSOs which may have occurred since the last inspection. Any observed SSO shall be promptly reported in accordance with the SORP.
- (v). A schedule for the maintenance of easements. Memphis need not remove permanent structures (e.g., parts of buildings), fences surrounding private property, or trees or vegetation to assure that a portion of the WCTS is accessible. If, however, an SSO

occurs that requires remediation, Memphis may need to cut down trees or remove vegetation to remediate the SSO.

- (vi). A description of resource commitments such as staffing, contractual support, and equipment.
- (vii). Written standard Gravity Sewer system emergency/reactive operations and maintenance procedures. At a minimum, the standard Gravity Sewer system emergency/reactive operations and maintenance procedures shall include:
- (A). Criteria used to determine the need for emergency operations and maintenance.
- (B). Initiation/use of maintenance equipment (e.g., vacuum truck, jet washing truck and/or combination truck).
- (C). Initiation/use of portable pump use (e.g., bypass/pumparound operations).
- (D). Evaluation of the need for additional equipment for emergency/reactive operations and maintenance, including, but not limited to, additional vacuum/cleaning truck(s), portable jet-washing equipment, and/or portable pumps (for pumparound operations).
- (E). Establishing standard forms, reporting procedures, and performance measures for emergency/reactive operations and maintenance.
- (viii). Data attributes for Memphis' mapping program allowing program data to be compared in Memphis' information management system against other pertinent data such as the occurrence of SSOs, including repeat SSO locations, and permit violations.

- (ix). An inventory management system that includes:
 - (A). Lists of critical equipment and critical spare parts.
- (B). A list of where critical spare parts and critical equipment may be secured to allow repairs in a reasonable amount of time for those spare parts and critical equipment that are not stored by Memphis including spare pipe having a diameter of 42 inches or greater. The list shall also set forth an inventory of spare parts and critical equipment stored by Memphis, as applicable.
- (C). Written procedures for updating the critical spare parts and equipment inventories in the inventory management system.
- (x). A common information system that Memphis will use to track implementation of the Gravity Sewer System O&M Program, track maintenance activities, and track management, operations, and maintenance performance indicators.
- (xi). The KPIs Memphis will track to measure performance of the WCTS using the information system referenced in Subparagraph 10.d.(ix). above. These KPIs shall include:
- (A). The linear footage of Gravity Sewer inspections, the linear footage of Gravity Sewers cleaned, the number of manholes inspected, the number of manholes cleaned/maintained, the number of inverted siphons inspected, the number of inverted siphons cleaned/maintained, the number of SSOs per mile of Gravity Sewer, and such other KPIs as Memphis may suggest and EPA approve; and
- (B). Maintenance activity tracked by type (corrective, preventive, and emergency).

- (xii). Reports which list equipment problems and the status of work orders generated during the prior month.
- e. <u>Inter-Jurisdictional Agreement Program</u>. Within one hundred eighty (180) Days after the Effective Date of this Consent Decree, Memphis shall submit to EPA and TDEC for review and comment an Inter-Jurisdictional Agreement Program for when Memphis renews existing agreements or enters into new agreements that cover the collection, conveyance, and treatment of sewage by Memphis from municipal satellite sewer systems. The Parties agree that this Subparagraph 10.e. and the requirements of this Program shall not be applicable to Memphis' agreements with the Town of Collierville, Tennessee due to the minimal collection of sewage by Memphis from Collierville. The Parties acknowledge that TDEC continues to be responsible in all respects for enforcing the requirements of any state operating permits issued to municipal satellite sewer systems. Memphis shall not be responsible for enforcement of any such permits or for management or oversight of any such municipal satellite sewer systems as a requirement of this Consent Decree. At minimum, the Inter-Jurisdictional Agreement Program shall include the requirements set forth in Subparagraphs 10.e.(i). through (iii). below.
- (i). The Program shall delineate the minimum provisions to be set forth in these inter-jurisdictional agreements with which the contracting municipality must comply. Such provisions shall include, but not be limited to, the following:
- (A). Requirements on the contracting party to properly manage, operate, and maintain its sewage collection and conveyance systems so as to minimize peak flows into Memphis' WCTS by excluding, to the maximum reasonable extent, the intrusion of surface and ground water and other extraneous flows.

- (B). Requirements on the contracting party to ensure compliance with the legal authorities required in 40 C.F.R. § 403.8(f) with regard to equivalent control, monitoring and enforcement of industrial use dischargers into Memphis' WCTS from municipal satellite sewer systems.
- (ii). The Program shall also delineate provisions addressing the term or life of these agreements; mechanisms for appropriate modification of the agreements; and mechanisms for enforcement of the agreements (including a description of the legal support necessary to develop, oversee and enforce the agreements) such as provisions permitting termination of the agreement and physical disconnection from Memphis' WCTS within a reasonable time not exceeding two (2) years upon the failure of the contracting party to comply with its management, operations, and maintenance obligations.
- (iii). The Program shall provide that when any of Memphis' currently existing agreements expire or terminate, Memphis may, but shall not be required to, renew any such agreement or enter into a new agreement covering the collection, conveyance, and treatment of sewage from such other municipal satellite sewer system. In the event Memphis does renew such an agreement or enters into any such new agreement, each agreement shall be consistent with the requirements of the Inter-Jurisdictional Agreement Program.
- f. Continuing Sewer Assessment Program ("CSAP") for the WCTS. Within three hundred sixty-five (365) Days after the Effective Date of this Consent Decree, Memphis shall submit to EPA and TDEC for review and comment a CSAP to assess and analyze the infrastructure of the WCTS. The CSAP shall establish procedures for setting priorities and schedules for undertaking the WCTS assessment components set forth in Subparagraph 10.f.(i).

through (viii). below including, as necessary, dyed water flooding, corrosion defect identification, manhole assessment, flow monitoring, closed circuit television inspection ("CCTV"), defect analysis, smoke testing, and lift station performance assessment.

Memphis agrees that the CSAP schedules and priorities shall provide for the assessment of approximately ten percent (10%) of the WCTS on average per year following EPA approval of the CSAP. For purposes of calculating this ten percent (10%) figure for the first year following EPA approval of the CSAP, Memphis may include any assessment activity that it conducted after April 1, 2011. The CSAP shall develop these priorities and schedules taking into consideration the nature and extent of customer complaints; flow monitoring, including flow isolation studies; location and cause of SSOs, including those identified pursuant to the other MOM Programs set forth in this Paragraph 10 of this Consent Decree; any remedial measures already undertaken; field crew work orders; any preliminary sewer assessments, such as midnight flow monitoring; and any other relevant information. In addition, Memphis has determined that the areas of the WCTS identified on the map in Appendix E, attached hereto and incorporated herein, shall be assessed in the first year following EPA approval of the CSAP. These areas have been determined by Memphis to be a priority based in part on the age of the sewer system (the downtown Memphis area has the oldest sewers, most in excess of fifty (50) years old), and on an analysis of the past SSO frequencies and volumes. In addition, areas near surface waters that have been included on TDEC's CWA Section 303(d) list of impaired waters for pathogens also received priority by Memphis. Finally, Memphis also considered areas that have been identified by EPA as potentially having environmental justice issues (minority and low income neighborhoods) when developing the priority area for the first year's assessment.

Furthermore, Memphis has determined that the Lick Creek areas of the WCTS identified on Appendix F, attached hereto and incorporated herein, shall be assessed no later than the second year following EPA approval of the CSAP. If such assessment work is undertaken after April 1, 2011 but prior to the second year following approval of the CSAP and Memphis has otherwise assessed ten percent (10%) of other portions of the WCTS in the first year following approval of the CSAP, Memphis may be credited for such work as assessment work undertaken during the second year following approval of the CSAP.

The CSAP shall include standard procedures for a CSAP information management system and performance goals for each component of the CSAP set forth in Subparagraphs 10.f.(i). through (viii). below. The CSAP shall include the following components applied when appropriate using best professional judgment:

- (i). <u>Dyed Water Flooding</u>. The Dyed Water Flooding component of the CSAP shall establish standard procedures for conducting dyed water testing to locate illegal connections and structural defects within WCTS that may or may not contribute to I/I within the WCTS. Structural defects shall be identified using standard codes defined under the Pipe Assessment Certification Program ("PACP") and Manhole Assessment Certification Program ("MACP") standards of the National Association of Sewer Service Companies ("NASSCO"), Owings Mills, MD (http://www.passco.org).
- (ii). <u>Corrosion Defect Identification</u>. The Corrosion Defect Identification component of the CSAP shall establish standard procedures for inspecting and identifying WCTS infrastructure that is either corroded or at risk of corrosion. The Corrosion

Defect Identification component shall include a system for prioritizing repair of existing corrosion defects, corrosion identification forms, and procedures for a corrosion defect analysis.

- (iii). Manhole Condition Assessment. The Manhole Condition

 Assessment component of the CSAP shall establish standard procedures for the condition assessment of manholes within the WCTS. The Manhole Condition Assessment component shall include manhole inspection forms and procedures for a manhole defect analysis.
- (iv). Flow Monitoring. The Parties agree that flow monitoring is not required at this time but the need may arise in the future in the event circumstances so warrant. As such, the Flow Monitoring component of the CSAP shall establish procedures for initiating flow monitoring when deemed necessary by Memphis' engineering analyses to characterize base flows and I/I rates within the WCTS where capacity-related concerns arise. The procedures shall identify the process used to establish flow monitoring locations, appropriate flow monitoring techniques, sewer cleaning associated with flow monitoring, and a procedure for rainfall measurement.
- (v). <u>Closed Circuit Television ("CCTV") Inspection</u>. The CCTV inspection component of the CSAP shall establish standard procedures for CCTV inspection within the WCTS to support sewer assessment and rehabilitation activities, and shall include procedures for CCTV inspection and a process for the retention and retrieval of CCTV inspection data.
- (vi). <u>Gravity Sewer Line and Force Main Defect Analysis</u>. The Gravity Sewer Line and Force Main defect analysis component of the CSAP shall establish standard procedures for analysis of Gravity Sewer Line and Force Main defects within the WCTS. The

Gravity Sewer Line and Force Main Defect Analysis component shall establish standard defect codes identified using PACP and MACP; defect identification procedures and guidelines; and a standardized process for cataloging Gravity Sewer Line and Force Main defects.

- (vii). Smoke Testing. The Smoke Testing component of the CSAP shall establish standard procedures for smoke testing of the Gravity Sewer Lines within the WCTS to identify sources of I/I, including cross connections and other unauthorized connections. Such procedures shall include Private Lateral investigations to identify sources of I/I. The Smoke Testing component shall include smoke testing forms and procedures for smoke testing defect analysis.
- (viii). <u>Lift Station Performance and Adequacy</u>. The Lift Station

 Performance and Adequacy component of the CSAP shall establish standard procedures for the evaluation of Lift Station performance and Lift Station adequacy within the WCTS. The Lift Station Performance and Adequacy component shall include:
- (A). The use of pump run time meters; pump start counters; computation of Nominal Average Pump Operating Time ("NAPOT"); root cause failure analysis protocols; and appropriate remote sensing such as Supervisory Control and Data Acquisition ("SCADA");
- (B). The evaluation of station capacity, as described in the Pumping Systems chapter of the most current version of WEF's Manual of Practice FD-4, Design of Wastewater and Stormwater Pumping Stations;

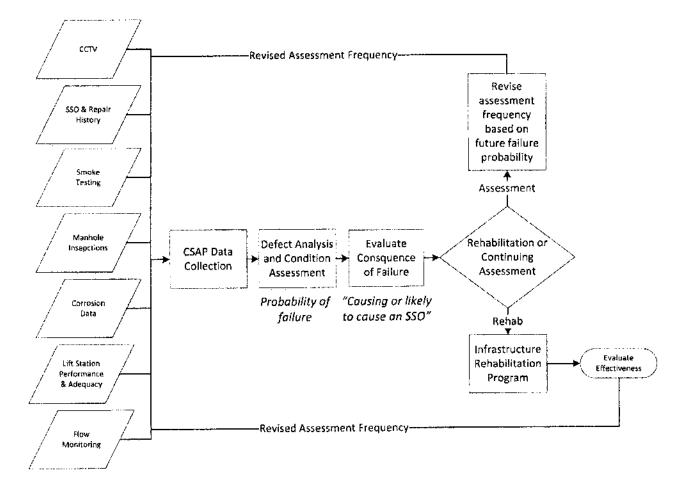
- (C). The evaluation of critical response time, defined as the time interval between activation of the high wet well level alarm and the first SSO, under peak flow conditions;
- (D). The evaluation of station conditions, based upon both physical inspection and recent operating and mechanical failure history during at least the past five years;
- (E). The evaluation of station design and equipment, including redundancy of pumps and electrical power supply, and other equipment installed, based upon Chapter 40, Wastewater Pumping Stations of the most recent edition of Recommended Standards for Wastewater Facilities by the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers (commonly known as the "Ten State Standards"); and
- (f) The evaluation of the ability of maintenance personnel to take corrective action within the critical response time calculated for each Lift Station.
- hundred eighty (180) Days after EPA approval of the CSAP, Memphis shall submit to EPA and TDEC for review and comment an IRP. The IRP shall take into account information gathered pursuant to the CSAP and the other MOM Programs set forth in this Paragraph 10 of this Consent Decree, including maintenance and SSO data, to assess the condition of the WCTS including Gravity Sewers, Lift Stations, and Force Mains. Memphis shall use this information and the judgment of trained and qualified wastewater professionals to rate the condition of each WCTS asset with respect to I/I, structural defects, and the other conditions causing, or that are

likely to cause, SSOs due to conveyance capacity concerns or structural failure. Such professional(s) shall use this information and his or her professional judgment to predict the probability of defects worsening to result in structural or capacity concerns prior to the next CSAP inspection. An example of an evaluation rating is set forth in the table below:

5	Very Poor Condition/Failed	Structural collapse causing surcharge or SSO; Partial collapse or collapse imminent; Severe I/I causing downstream overflow; pump failure causing SSO
4	Poor Condition	Major defects or sags causing debris build up; root balls; moderate I/I over numerous defects causing some surcharging but no SSO; recurring maintenance activities
	Moderate Condition	Mild to moderate structural defects observed, Root intrusions
2	Good Condition	No very poor, poor or moderate conditions observed
1	Excellent Condition	New

The IRP utilization of the CSAP information will provide the basis for evaluating and prioritizing how Memphis will manage and respond to defects found in the WCTS. The management and response to asset conditions could include infrastructure rehabilitation, ongoing maintenance activities, and/or additional assessments. A conceptual process diagram for the IRP process is set forth in Figure 1 below:

Figure 1 Process Diagram



The purpose of the IRP is to establish a process associated with making rehabilitation decisions, but it shall not be necessary for the IRP to include deadlines for specific rehabilitation projects. The assessed condition of each WCTS asset shall be used to prioritize and schedule rehabilitation efforts, maintenance activities and CSAP implementation frequencies. Revisions to the CSAP frequency will be based on the condition or probability of future failure of the asset, and the consequences of such failure. The IRP shall include a description of the techniques to be used for WCTS rehabilitation such as cured-in-place lining, pipe bursting, pipeline replacement,

point repairs and manhole lining or replacement. The IRP shall also provide Memphis with the flexibility to include other techniques that are determined to be appropriate by Memphis based on conditions observed.

The IRP shall include standard procedures for an IRP information management system and procedures for analysis of the effectiveness of completed rehabilitation for each component of the IRP set forth in Subparagraphs 10.g.(i). through (iv). below.

- (i). Gravity Line Rehabilitation. The Gravity Line Rehabilitation component shall establish a process for setting Gravity Sewer Line rehabilitation priorities and schedules; shall establish an ongoing inventory of Gravity Sewer Line rehabilitation, including identification of the rehabilitation techniques used; and shall require an analysis of the effectiveness of completed rehabilitation.
- (ii). <u>Manhole Rehabilitation</u>. The Manhole Rehabilitation component shall establish a process for setting manhole rehabilitation priorities and schedules and shall establish an ongoing inventory of manhole rehabilitation, including identification of the rehabilitation techniques used.
- (iii). <u>Lift Station Rehabilitation</u>. The Lift Station Rehabilitation component shall establish a process for setting Lift Station rehabilitation priorities and schedules and shall establish an ongoing inventory of Lift Station rehabilitation, including identification of the rehabilitation techniques used.
- (iv). <u>Force Main Rehabilitation</u>. The Force Main Rehabilitation component shall establish a process for setting Force Main rehabilitation priorities and schedules

and shall establish an ongoing inventory of force main rehabilitation, including identification of the rehabilitation techniques used.

11. Priority Rehabilitation Projects.

Priority Areas Projects. As set forth in Subparagraph 10.f. above, a. Memphis has determined that the areas of the WCTS identified in Appendix E shall be assessed pursuant to the CSAP in the first year following EPA approval of the CSAP. In addition, Memphis agrees to prioritize the areas of the WCTS identified on the map in Appendix G, attached hereto and incorporated herein, in its implementation of the IRP. The priority areas in Appendix G are a subset of the areas identified in Appendix E. Because the priority areas in Appendix G are part of the priority assessment areas, both areas have the same characteristics in terms of age, frequency and volumes of SSOs, proximity to CWA Section 303(d) listed streams and proximity to environmental justice communities. However, Memphis has determined that the rehabilitation priority areas shown in Appendix G include areas with the highest numbers of SSOs in recent years and encompass nearly all watersheds for the impaired streams in the priority assessment areas shown in Appendix E, specifically the Cypress Creek and Cane Creek watersheds. Memphis shall complete all rehabilitation projects within the priority areas identified in Appendix G pursuant to the IRP within six (6) years and seven (7) months after EPA's approval of the IRP. Twenty-five (25) months after EPA's approval of the IRP but no later than twenty-seven (27) months after EPA's approval of the IRP, Memphis shall submit to EPA and TDEC for review and comment an Interim Priority Areas Project Report setting forth a summary of the results to date of the implementation of the CSAP and IRP within the priority areas identified in Appendix G, including a thorough analysis of assessment data collected during implementation of the CSAP and IRP, and a description of the specific rehabilitation measures implemented by Memphis in these priority areas pursuant to the IRP. Within six (6) months after Memphis completes construction of rehabilitation projects within the priority areas identified in Appendix G pursuant to the IRP, Memphis shall submit to EPA and TDEC for review and comment a Final Priority Areas Project Report setting forth a complete summary of the results of the implementation of the CSAP and IRP within the priority areas identified in Appendix G, including a thorough analysis of assessment data considered and/or collected during implementation of the CSAP and IRP, and a description of all the specific rehabilitation measures implemented by Memphis in these priority areas pursuant to the IRP.

b. <u>Critical Infrastructure Areas Projects</u>. In addition to the assessment and rehabilitation of the priority areas described above, Memphis has also indentified three (3) additional areas within the WCTS that will receive prioritized rehabilitation projects due to the critical nature of the infrastructure and the potential consequences of large volumes of SSOs in the event of infrastructure failure. These critical areas are shown on the map in <u>Appendix II</u>, attached hereto and incorporated herein. The first critical area focuses on the 42-inch to 48-inch Wolf River Interceptor. The portion of the interceptor length that is to be rehabilitated runs approximately one thousand (1,000) feet in the northern area adjacent to the Wolf River.

Portions of the Wolf River Interceptor have failed in the past and during repairs of these sections, as well as through other visual inspections, Memphis has determined that this approximately one thousand (1,000) foot section of the interceptor should receive priority before additional failures occur. Failures of the Wolf River Interceptor could potentially create large volume SSOs which can be avoided if rehabilitation is completed. This portion of the Wolf River Interceptor will be

assessed, cleaned, and rehabilitated as a priority project. The second critical area requiring rehabilitation is the portion of the 96-inch interceptor at the entrance/exit ramp located at mile 51 of Interstate 240 which is approximately one thousand three hundred fifty (1,350) feet in length. This interceptor represents critical infrastructure due to its proximity to the Interstate 240 because of the disruption to traffic that could be caused as a result of any failure. During manhole rehabilitation in other segments of this interceptor, as well as through other visual inspections, Memphis has determined that this portion of the interceptor is in need of rehabilitation. Memphis has observed indications of deteriorated areas within this interceptor that will require rehabilitation as a priority project in order for Memphis to avoid the potential for large volume SSOs should a failure occur. The third critical area requiring rehabilitation is the 84-inch interceptor located where McLean Boulevard crosses the Wolf River and Interstate 40, which is approximately six hundred (600) feet in length. During rehabilitation in other segments of this interceptor, as well as through other visual inspections, Memphis has determined that this portion of the interceptor is in need of rehabilitation. Memphis has observed indications of deteriorated areas within this portion of the interceptor that will require rehabilitation as a priority project in order for Memphis to avoid the potential for large volume SSOs should a failure occur. Memphis shall complete all rehabilitation projects within these three (3) critical areas identified in Appendix H within five (5) years after the Effective Date of this Consent Decree. Within six (6) months after Memphis completes construction of rehabilitation projects within the critical areas identified in Appendix H, Memphis shall submit to EPA and TDEC for review and comment a Final Critical Areas Project Report setting forth a complete summary of the results of the implementation of the CSAP and IRP within the critical areas identified in Appendix H,

including a thorough analysis of assessment data considered and/or collected and a description of all the specific rehabilitation measures implemented by Memphis in these critical areas.

- assessment activity performed by Memphis on various interceptors and large sewer lines in the WCTS, Memphis has identified four (4) additional rehabilitation projects which shall be implemented and completed pursuant to this Consent Decree. Memphis agrees to complete these additional rehabilitation projects within four (4) years after the Effective Date of this Consent Decree. These rehabilitation projects are:
- (i) Cured In-Place Pipe ("CIPP") lining of the Nonconnah Interceptor between manholes numbered N06-119 and N06-127;
- (ii) Rehabilitation or replacement of manholes on Mud Island that include manhole number M10-005 plus the two (2) additional manholes immediately downstream and repair of the liner in the corresponding portion of the 60-inch interceptor near these manholes (such repair work will require the temporary pump around of wastewater during construction);
- (iii) Rehabilitation of approximately sixty-four (64) manholes identified as having heavy or medium corrosion in Appendix B of a June 6, 2006 study report prepared by Buchart-Horn on behalf of Memphis; and
- (iv) CIPP lining on segments of the Wolf River Interceptor between demarcation points W05-120 and W05-130.
- 12. M.C. Stiles WWTP Foam Study and Outfall Improvements Work Plan. To address alleged noncompliance associated with foam discharged from the M.C. Stiles WWTP,

Memphis agrees to implement as an enforceable obligation under this Consent Decree the M.C. Stiles WWTP Foam Study and Outfall Improvements Work Plan, dated September 15, 2010, which is attached hereto as Appendix I and incorporated by reference herein. It is the expectation of the Parties that this Work Plan, once implemented, will eliminate the underlying cause(s) of the alleged noncompliance with the NPDES Permit for the M.C. Stiles WWTP. In the event EPA and TDEC determine within one (1) year after Memphis' completion of the work under this Work Plan that this Work Plan failed to address alleged noncompliance associated with foam discharge from the M.C. Stiles WWTP, EPA and TDEC shall so notify Memphis in writing. Within ninety (90) Days of receiving this notification or such other time as agreed to by EPA and TDEC, Memphis shall submit to EPA and TDEC for review and comment a revised Work Plan to address the alleged noncompliance, subject to Memphis' right to invoke Dispute Resolution under Section XI of this Consent Decree; provided, however, that in any such Dispute, EPA shall bear the burden of proof with respect to its allegation of noncompliance associated with foam discharge from the M.C. Stiles WWTP.

VI. REVIEW OF DELIVERABLES/CERTIFICATION OF DELIVERABLES

EPA and TDEC pursuant to Subparagraphs 10.c., 10.d., 10.e., 10.f., 10.g., 11.a., 11.b., or 11.c., Memphis shall notify the Reference Librarian at the Memphis Central Library (located at 3030 Poplar Avenue, Memphis, Tennessee 38111) and the TCWN identifying the Deliverable to be submitted and providing a one-page instruction flyer containing a brief synopsis of the Deliverable and instructions on how to navigate to Memphis' website and shall make available a copy of each Deliverable on Memphis' website. The Central Library in Memphis and Memphis'

website shall constitute the Public Document Repository ("PDR"). Memphis shall allow the public, including the TCWN, a period of thirty (30) Days to inspect and comment to Memphis on the Deliverable ("Public Review Requirement"). Memphis shall provide instructions to the public in the PDR for submitting comments. Thereafter, Memphis shall consider public comments for a period of up to fifteen (15) Days. Memphis shall bear the sole responsibility for depositing all Deliverables in the PDR. Within seven (7) Days after its submission to EPA and TDEC, Memphis shall place a copy of the submitted version of the Deliverable in the PDR in the same fashion as the original submission and notify the TCWN that the document has been filed. Within seven (7) Days after EPA's approval or modification by EPA pursuant to this Section, if revised, Memphis shall place a copy of such version of the Deliverable in the PDR. This copy shall replace all previous copies of that Deliverable in the PDR and shall remain in the PDR along with all comments until termination of this Consent Decree. In addition, Memphis shall maintain in the PDR a listing of all Deliverables and comments. If Memphis resubmits a Deliverable to EPA in response to EPA comments pursuant to Paragraph 17, such resubmission is not subject to the thirty (30) Day public comment period nor is Memphis required to obtain public comment on the resubmission.

14. <u>Timing of Review of Deliverables</u>. EPA and TDEC agree to use best efforts to expeditiously review and comment on Deliverables. If EPA issues written comments and decisions on the Deliverables required in Subparagraphs 10.f. or 10.g. or Paragraph 11 of this Consent Decree more than one-hundred and twenty (120) Days after receipt of such submission, or on any other Deliverable more than sixty (60) Days after receipt of such submission, any subsequent deadline or milestone that is dependent upon such comments or decisions shall be

extended. The length of the extension shall be determined by calculating the number of Days between EPA's receipt of the submission and the date of EPA's written response, less one-hundred and twenty (120) Days (in the case of the Deliverables required in Subparagraphs 10.f. or 10.g. or Paragraph 11) or sixty (60) Days (in the case of any other Deliverable). Within thirty (30) Days of the date that Memphis knows or should know of a deadline or milestone that Memphis believes is extended under this Paragraph, Memphis shall inform EPA and TDEC, in writing, of its belief and the amount of time Memphis believes the deadlines or milestones are extended. If EPA disagrees with Memphis' determination that a deadline is dependent upon such comments or decisions, EPA shall inform Memphis in writing. Memphis may dispute EPA's conclusion regarding whether a deadline is dependent upon such comments or decisions pursuant to Section XI (Dispute Resolution).

- 15. <u>EPA Action on Deliverables</u>. After review of any Deliverable that is required to be submitted pursuant to this Consent Decree, EPA, after consultation with TDEC, shall in writing:
 - a. approve the submission;
 - b. approve part of the submission and disapprove the remainder; or
 - c. disapprove the submission.
- 16. Approved Deliverables. If a Deliverable is approved by EPA pursuant to Subparagraph 15.a., Memphis shall take all actions required by the Deliverable in accordance with the schedules and requirements of the Deliverable as approved. If the Deliverable is approved only in part pursuant to Subparagraph 15.b., Memphis shall, upon written direction from EPA, after consultation with TDEC, take all actions required by the approved plan, report,

or other item that EPA, after consultation with TDEC, determines are technically severable from any disapproved portions, subject to Memphis' right to dispute only the specified conditions or the disapproved portions, under Section XI of this Decree (Dispute Resolution). Following EPA approval of any Deliverable or portion thereof, such Deliverable or portion thereof so approved shall be incorporated into, and become enforceable under, this Consent Decree.

- pursuant to Subparagraph 15.b. or c., Memphis shall, within thirty (30) Days or such other time as EPA and Memphis agree to in writing, correct all deficiencies and resubmit to EPA the Deliverable, or disapproved portion thereof, for approval, in accordance with Paragraphs 15 and 18. If the resubmission is approved in whole or in part, Memphis shall proceed in accordance with Paragraph 16.
- Deliverable, as provided in Section IX of this Decree, shall accrue during the thirty (30)-Day period or other specified period, but shall not be payable unless the resubmitted Deliverable is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Memphis' obligations under this Decree, the stipulated penaltics applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.
- 19. Resubmitted Deliverable. If a resubmitted Deliverable, or portion thereof, is disapproved in whole or in part, EPA, after consultation with TDEC, may again require Memphis to correct any deficiencies, in accordance with preceding Paragraph 17, or may itself correct any deficiencies, subject to Memphis' right to invoke Dispute Resolution under Section XI of this

Consent Decree and the right of EPA to seek stipulated penalties as provided in preceding Paragraph 18. Upon EPA's correction of any deficiencies, such resubmitted plan, report, or other item, or portion thereof, will be incorporated into and become enforceable under this Consent Decree and shall be implemented by Memphis according to the approved schedule subject to Memphis' right to invoke Dispute Resolution.

20. <u>Certification</u>. In all Deliverables, notices, documents or reports submitted to the United States and State pursuant to this Consent Decree, Memphis shall, by a Memphis senior management official, sign and certify such notices, documents and reports as follows:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, 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.

VII. CIVIL PENALTY

- 21. Memphis shall pay a civil penalty of \$1,290,000 as set forth in Paragraphs 22 and 23 below.
- 22. Within sixty (60) Days after the Effective Date of this Consent Decree, Memphis shall pay to the United States \$645,000 of the civil penalty due by FedWire Electronic Funds

 Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be

provided to Memphis, following lodging of the Consent Decree, by the Financial Litigation

Office of the U.S. Attorney's Office for the Western District of Tennessee, 200 Jefferson

Avenue, Room 811, Memphis, TN 38103; phone number (901) 544-4010. At the time of

payment, Memphis shall send a copy of the EFT authorization form and the EFT transaction

record, together with a transmittal letter, which shall state that the payment is for the civil penalty

owed pursuant to the Consent Decree in United States et al. v. City of Memphis, and shall

reference the civil action number and DOJ case number 90-5-1-1-09720, to the United States in

accordance with Section XV of this Decree (Notices); by email to

acctsreceivable.CINWD@epa.gov; and by mail to:

EPA Cincinnati Finance Office

26 Martin Luther King Drive

Cincinnati, Ohio 45268

In the event that full cash payment to the United States is not made within sixty (60) Days after the Effective Date of this Consent Decree, Memphis shall pay to the United States interest on the balance due from the original due date to the date of full payment, at the rate calculated pursuant to 28 U.S.C. § 1961.

23. Memphis shall make payment as directed by the State as follows: Memphis shall spend \$645,000 on the State Projects in accordance with, and as more particularly set forth in, Appendix J of this Consent Decree. TDEC has approved this payment as appropriate State Projects recognizing the value of these projects and their potential to positively impact the local environment.

VIII. REPORTING REQUIREMENTS

- Quarterly Reports. Beginning thirty (30) Days after the first full three (3) month period following the Effective Date, and thirty (30) Days after each subsequent three (3) month period thereafter until termination of the Consent Decree, Memphis shall submit to EPA and TDEC for review and comment a Quarterly Report that shall include the date, time, location, source, estimated duration, estimated volume, receiving water (if any), and cause of all SSO Events occurring in the applicable three (3) month period. In reporting such SSO data, Memphis shall provide the information in a tabulated electronic format (e.g., Excel spreadsheet) as it deems appropriate. For purposes of this Section VIII (Reporting Requirements), a "SSO Event" shall mean the total time period SSO(s) (as defined in Subparagraph 8.hh. of this Consent Decree) occurs at the same location and due to the same causes(s). For example, a collapsed pipe that results in a SSO on multiple days is a single SSO Event.
- 25. <u>Semi-Annual Reports</u>. Beginning thirty (30) Days after the first full six (6) month period following the Effective Date, and thirty (30) Days after each subsequent six (6) month period until termination of the Consent Decree, Memphis shall submit to EPA and TDEC for review and comment a Semi-Annual Report. Each Semi-Annual Report shall include, at a minimum:
- a. A description of projects and activities completed and milestones achieved during the previous applicable six (6) month period pursuant to the requirements of this Consent Decree, in Gantt chart or similar format, including a description of the status of compliance or non-compliance with the requirements of this Consent Decree and, if applicable, the reasons for non-compliance. If any non-compliance cannot be fully explained at the time the report is due,

Memphis shall include a statement to that effect in the report. Memphis shall investigate to determine the cause of the non-compliance and then shall submit an amendment to the report, including a full explanation of the cause of the non-compliance, within thirty (30) Days after submission of the Semi-Annual Report.

- b. A summary of significant projects and activities anticipated to be performed, and milestones anticipated to be achieved, in the successive applicable six (6) month period to comply with the requirements of this Consent Decree, in Gantt chart or similar format.
- c. Any additional information Memphis determines is appropriate to demonstrate that Memphis is implementing the remedial actions required under this Consent Decree in an adequate and timely manner.
- 26. Annual Reports. Beginning sixty (60) Days after the first full twelve (12) month period following the Effective Date, and sixty (60) Days after each subsequent twelve (12) month period until termination of this Consent Decree, Memphis shall submit to EPA and TDEC for review and comment an Annual Report. Each Annual Report shall cover the most recent applicable twelve (12) month period and shall include, at a minimum:
- a. A summary of the MOM Programs implemented or modified pursuant to this Consent Decree, including a comparison of actual performance with any performance measures that have been established.
- b. A trends analysis of the number, volume, duration, and cause of Memphis' SSO Events for a twenty-four (24) month period updated to reflect the SSO Events that occurred during the previous twelve (12) month period. In reporting trends and other SSO data, Memphis shall provide the information in such format as it deems appropriate.

- 27. Except as otherwise provided in the SORP, whenever any violation of this Consent Decree or any other event affecting Memphis' performance under this Decree or its NPDES Permits may pose an immediate threat to the public health or welfare or the environment, Memphis shall notify EPA and TDEC orally or by electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after Memphis first knew of the violation or event. This procedure is in addition to the requirements set forth in Subparagraph 25.a.
- 28. All reports shall be submitted to the persons designated in Section XV of this Consent Decree (Notices) for EPA and TDEC and shall be certified pursuant to Paragraph 20 of this Consent Decree. The certification requirement in Paragraph 20 does not apply to emergency or similar notifications where compliance would be impractical.
- 29. Compliance with this Section does not relieve Memphis of any other reporting obligations required by the Clean Water Act, the TWQCA, or implementing regulations, or by any other Federal, state, or local law, regulation, permit, or other requirement, including the NPDES Permits.
- 30. Notification to EPA or TDEC pursuant to this Section of an anticipated delay shall not by itself excuse the delay or otherwise satisfy the notification requirements set forth in Section X (Force Majeure).
- 31. Any information provided pursuant to this Consent Decree may be used by the United States and the State in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

IX. STIPULATED PENALTIES

- 32. Memphis shall be liable for stipulated penalties to the United States and the State for violations of this Consent Decree as specified below, unless excused under Section X (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Consent Decree, including any work plan or schedule approved under this Consent Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree.
- 33. If Memphis fails to pay the civil penalty required to be paid under Section VII of this Consent Decree (Civil Penalty) when due. Memphis shall pay a stipulated penalty of \$1,000 per day for each day that the payment is late.
 - 34. The following stipulated penalties shall accrue for each violation identified below:
 - a. Unpermitted Discharges.
- (i). For each Unpermitted Discharge Event occurring after the final deadline for the completion of rehabilitation projects in the specific priority areas of the WCTS as required in Subparagraph 11.a., a stipulated penalty of \$1,000 may be assessed.
- (ii). For each Unpermitted Discharge Event occurring after the final deadline for the completion of rehabilitation projects in the specific critical areas of the WCTS as required in Subparagraph 11.b., a stipulated penalty of \$1,000 may be assessed.
- (iii). For each Unpermitted Discharge Event occurring after the final deadline for the completion of the specific rehabilitation projects in the specific prior assessment areas of the WCTS as required in Subparagraph 11.c., a stipulated penalty of \$1,000 may be assessed.

(iv). For each Unpermitted Discharge Event in the WCTS less than or equal to 25,000 gallons, other than any Unpermitted Discharge Event in those priority areas identified in Subparagraphs 11.a. through c., a stipulated penalty may be assessed. Any such stipulated penalty shall be determined as follows:

If the Unpermitted Discharge Event Occurs: Penalty Per Unpermitted Discharge Event:

Six (6) months after the Effective Date but

before forty-eight (48) months after the Effective Date \$250

Forty-eight (48) months or more after the Effective Date \$500

(v). For each Unpermitted Discharge Event in the WCTS greater than 25,000 gallons but less than or equal to 100,000 gallons, other than any Unpermitted Discharge Event in those priority areas identified in Subparagraphs 11.a. through c., a stipulated penalty may be assessed. Any such stipulated penalty shall be determined as follows:

If the Unpermitted Discharge Event Occurs: Penalty Per Unpermitted Discharge Event:

Six (6) months after the Effective Date but

before thirty-six (36) months after the Effective Date \$500

Thirty-six (36) months or more after the Effective Date \$1,000

(vi). For each Unpermitted Discharge Event in the WCTS greater than 100,000 gallons, other than any Unpermitted Discharge Event in those priority areas identified in Subparagraphs 11.a. through c., a stipulated penalty may be assessed. Any such stipulated penalty shall be determined as follows:

If the Unpermitted Discharge Event Occurs: Penalty Per Unpermitted Discharge Event:

Six (6) months after the Effective Date but

before twenty-four (24) months after the Effective Date \$1,000

Twenty-four (24) months or more after the Effective Date \$2,000

(vii). For purposes of this Subparagraph 34.a, an "Unpermitted Discharge Event" shall mean the total time period Unpermitted Discharge(s) (as defined in Subparagraph 8.ss. of this Consent Decree) occurs at the same location and due to the same causes(s). For example, a collapsed pipe that results in an Unpermitted Discharge on multiple days is a single Unpermitted Discharge Event.

b. <u>Failure to Timely Submit Deliverable</u>. For each day Memphis fails to Timely submit any Deliverable, a stipulated penalty for each such Deliverable may be assessed as follows:

Period of Noncompliance:	Penalty Per Deliverable Per Day:
One (1) to thirty (30) days	\$500
More than thirty (30) days	\$1,000

c. <u>Failure to Meet Deadlines in Paragraph 11</u>. For each day Memphis fails to complete the rehabilitation projects pursuant to and in accordance with the final deadlines set forth in Subparagraph 11.a., b., or c., daily stipulated penalties may be assessed for each missed deadline as follows:

Period of Noncompliance:	Penalty Per Violation Per Day:
One (1) to fourteen (14) days	\$500
Fifteen (15) to thirty (30) days	\$1,000
Thirty-one (31) to sixty (60) days	\$1,500
Sixty-one (61) to one hundred-eighty (180) days	\$2,000
More than one hundred-eighty (180) days	\$2,500

d. Failure to Timely Implement State Project Milestones. For each Day Memphis fails to Timely implement a State Project milestone set forth in Appendix J, Paragraph I.G., or fails to make Timely payment of unspent State Project Funds to the State as set forth in Appendix J. Paragraph I.J., daily stipulated penalties may be assessed only as provided for in Appendix J, Paragraphs I.G and I.J., and as follows:

Period of Noncompliance: Penalty Per Violation Per Day:

One (1) to sixty (60) Days \$500

More than sixty (60) Days \$1,500

- 35. Stipulated penalties under this Section shall begin to accrue on the day after performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.
- 36. Memphis shall pay stipulated penalties to the United States and the State within thirty (30) Days of a written demand by EPA. Memphis shall pay fifty (50) percent of the total stipulated penalty amount due to the United States and fifty (50) percent to the State.
- 37. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due under this Consent Decree.
- 38. Stipulated penalties shall continue to accrue as provided in Paragraph 35 during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Memphis shall pay accrued penalties determined to be owing, together

with interest, to the United States and the State within thirty (30) Days of the effective date of the agreement or the receipt of EPA's decision or order.

- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Memphis shall pay all accrued penalties determined by the Court to be owed, together with interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in Subparagraph 38.c. below.
- c. If the District Court's decision is appealed, Memphis shall pay all accrued penalties determined to be owed, together with interest, within fifteen (15) Days of receiving the final appellate court decision.
- 39. Memphis shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 22, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid. Memphis shall pay stipulated penalties owing to the State by check payable to the "State of Tennessee." Each check shall reference the case name and civil action number herein and shall be sent to:

Sohnia W. Hong Office of the Attorney General Environmental Division P.O. 20207 Nashville, Tennessee 37202

40. If Memphis fails to pay stipulated penalties according to the terms of this Consent Decree, Memphis shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be

construed to limit the United States or the State from seeking any remedy otherwise provided by law for Memphis' failure to pay any stipulated penalties.

41. Subject to the provisions of Section XIII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States and the State for Memphis' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Water Act and/or the TWQCA, Memphis shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

X. FORCE MAJEURE

- 42. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Memphis, of any entity controlled by Memphis, or of Memphis' consultants and contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Memphis' best efforts to fulfill the obligation. The requirement that Memphis exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address 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. "Force Majeure" does not include Memphis' financial inability to perform any obligation under this Consent Decree.
- 43. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Memphis shall provide notice orally or by electronic or facsimile transmission to EPA and TDEC, within

three (3) working days (excluding weekends and holidays) of when Memphis first knew that the event might cause a delay. Within fourteen (14) Days thereafter, Memphis shall provide in writing to EPA and TDEC, to the extent known after reasonable investigation, an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Memphis' rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Memphis, such event may cause or contribute to an endangerment to public health, welfare or the environment. Memphis shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure event. Failure to comply with the above requirements shall preclude Memphis 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. Memphis shall be deemed to know of any circumstance of which Memphis, any entity controlled by Memphis, or Memphis' contractors knew or should have known.

44. If EPA, after a reasonable opportunity for review and comment by TDEC, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA, after a reasonable opportunity for review and comment by TDEC, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the

time for performance of any other obligation. EPA will notify Memphis in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

- 45. If EPA, after a reasonable opportunity for review and comment by TDEC, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Memphis in writing of its decision.
- A6. If Memphis elects to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), it shall do so no later than fifteen (15) Days after receipt of EPA's notice. In any such proceeding, Memphis shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Memphis complied with the requirements of Paragraphs 42 and 43 above. If Memphis carries this burden, the delay at issue shall be deemed not to be a violation by Memphis of the affected obligation of this Consent Decree identified to EPA and the Court.

XI. DISPUTE RESOLUTION

- 47. 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. Memphis' failure to seek resolution of a dispute under this Section shall preclude Memphis from raising any such issue as a defense to an action by the United States or the State to enforce any obligation of Memphis arising under this Decree.
- 48. <u>Informal Dispute Resolution</u>. 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 Memphis 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 twenty (20) Days from the date the dispute arises, unless that period is modified by written agreement between the United States and Memphis. The United States shall consult with the State and the TCWN during the period of informal negotiations. If the United States and Memphis cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within sixty (60) Days after the conclusion of the informal negotiation period, Memphis invokes formal dispute resolution procedures as set forth below.

49. Formal Dispute Resolution. Memphis shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the State a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Memphis' position and any supporting documentation relied upon by Memphis. The United States shall serve its Statement of Position within sixty (60) Days of receipt of Memphis' Statement of Position. The United States' Statement of Position shall include, but need not 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 shall consult with the State and the TCWN during preparation of its Statement of Position. The United States' Statement of Position shall be binding on Memphis, unless Memphis files a motion for judicial review of the dispute in accordance with the following Paragraph.

- 50. Judicial Dispute Resolution. Memphis may seek judicial review of the dispute by filing with the Court and serving on the United States and the State, in accordance with Section XV of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within ten (10) working days (excluding weekends and holidays) of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Memphis' 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. The United States shall respond to Memphis' motion within the time period allowed by the Local Rules of this Court. The United States shall consult with the State and the TCWN during preparation of its response. Memphis may file a reply memorandum, to the extent permitted by the Local Rules.
- 51 Standard of Review. Except as otherwise provided in this Consent Decree, in any dispute brought under this Section, Memphis shall bear the burden of demonstrating that its position complies with this Decree. The United States reserves the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law.
- 52. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Memphis under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 38. If

Memphis does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

XII. RIGHT OF ENTRY AND INFORMATION COLLECTION AND RETENTION

- 53. The United States, the State, and their 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:
 - a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Memphis or its representatives, contractors, or consultants;
 - d. obtain documentary evidence, including photographs and similar data; and
 - e. assess Memphis' compliance with this Consent Decree.
- 54. Upon request, Memphis shall provide EPA and TDEC or their authorized representatives splits of any samples taken by Memphis. Upon request, EPA and TDEC shall provide Memphis splits of any samples taken by EPA or TDEC.
- 55. Until five years after the termination of this Consent Decree, Memphis shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Memphis' performance of its obligations under this Consent Decree. Drafts of final documents or plans,

and non-substantive correspondence and emails do not need to be retained. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or the State, Memphis shall provide copies of any non-privileged documents, records, or other information required to be maintained under this Paragraph.

- At the conclusion of the information-retention period provided in the preceding Paragraph. Memphis shall notify the United States and the State at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or the State, Memphis shall deliver any such documents, records, or other information to EPA or TDEC. Memphis may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Memphis 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;
 - f. the privilege asserted by Memphis.

However, no documents, records, or other information required to be created or generated by this Consent Decree shall be withheld on grounds of privilege.

- 57. Memphis and/or its contractors 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 Memphis seeks to protect as CBI, Memphis shall follow the procedures set forth in 40 C.F.R. Part 2.
- 58. 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 pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Memphis to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

- 59. This Consent Decree resolves the civil claims of the United States and the State for the violations alleged in the Amended Complaint filed in this action through the Date of Lodging of this Consent Decree.
- 60. This Consent Decree also resolves the civil claims of the TCWN for the violations alleged, or that could have been alleged, in the TCWN Complaint filed in this action through the Date of Lodging of this Consent Decree. In addition, this Consent Decree resolves all civil claims of the TCWN for penalties associated with any activity subject to a stipulated penalty under this Consent Decree.
- 61. The United States and the State reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 59.

 This Consent Decree shall not be construed to limit the rights of the United States or the State to obtain penalties or injunctive relief under the CWA, TWQCA, or their implementing regulations,

or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 59. The United States and the State further reserve 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, Memphis' WCTS and/or WWTPs, whether related to the violations addressed in this Consent Decree or otherwise.

- 62. Memphis does not admit any liability arising out of the transactions or occurrences alleged in the Amended Complaint or in the TCWN Complaint and reserves all rights regarding factual and legal contentions therein except in an action to enforce this Consent Decree by a Party.
- 63. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, civil penaltics, other appropriate relief relating to Memphis' WCTS and/or WWTPs or Memphis' violations, Memphis shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 59 of this Section.
- 64. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Memphis is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and Memphis' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein.

The United States and the State do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Memphis' compliance with any aspect of this Consent Decree will result in compliance with provisions of the CWA, TWQCA, or with any other provisions of federal, state, or local laws, regulations, or permits.

- 65. This Consent Decree does not limit or affect the rights of Memphis or of the United States or the State 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 Memphis, except as otherwise provided by law.
- 66. 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.
- 67. The Amended Complaint and this Consent Decree shall constitute and establish diligent prosecution by the United States and the State of Tennessee under CWA section 505(b)(1)(B), 33 U.S.C. § 1365(b)(1)(B), and any other applicable federal or State law, and of all matters alleged in the Amended Complaint arising from the beginning of the applicable statutes of limitation through the Date of Lodging of the Decree.

XIV. COSTS

68. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the State 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 but not paid by Memphis.

XV. NOTICES

69. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

To the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-1-1-09720

and

Chief, Clean Water Enforcement Branch Water Protection Divison ATTN: Brad Ammons U.S Environmental Protection Agency, Region 4 61 Forsyth Street, S.W. Atlanta, GA 30303 (404) 562-9769

To EPA:

Chief, Clean Water Enforcement Branch Water Protection Division ATTN: Brad Ammons U.S Environmental Protection Agency, Region 4 61 Forsyth Street, S.W. Atlanta, GA 30303 (404) 562-9769

To the State:

Sohnia W. Hong Senior Counsel Office of the Attorney General Environmental Division P.O. Box 20207 Nashville, Tennessee 37202

and

Director, Water Pollution Control
Tennessee Department of Environment and Conservation
ATTN: Paul E. Davis
6th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243-1534
(615) 532-0625

To TDEC:

Director, Water Pollution Control
Tennessee Department of Environment and Conservation
ATTN: Paul E. Davis
6th Floor, L&C Annex
401 Church Street
Nashville, Tennessee 37243-1534
(615) 532-0625

To Memphis:

Dwan L. Gilliom, Director City of Memphis Public Works Division 125 North Main, Room 608 Memphis, TN 38103

City Attorney Attn: Herman Morris, Jr. and CC Drayton 125 North Main Street, Room 336 Memphis, Tennessee 38103-2079

To TCWN:

Stephanie Durman Matheny Tennessee Clean Water Network P.O. Box 1521 Knoxville, Tennessee 37901

- 70. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.
- 71. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVI. EFFECTIVE DATE

72. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

XVII. RETENTION OF JURISDICTION

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

XVIII. MODIFICATION

74. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval

by the Court. Non-material changes to this Consent Decree (including appendices) may be made by written agreement of the Parties without court approval, and the Parties may by mutual agreement determine whether a modification is non-material.

75. Any disputes among the Parties concerning modification of this Decree shall be resolved pursuant to Section XI of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 51, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XIX. TERMINATION

- This Consent Decree may be terminated when the United States determines that Memphis has satisfactorily completed performance of its compliance obligations set forth in Section V of this Consent Decree to submit the Deliverables required in Subparagraphs 10.c. through g. and to complete the rehabilitation projects required in Paragraph 11; provided, however, Memphis has fulfilled all other obligations of this Consent Decree, *i.e.*, implementation of the Deliverables to date, payment of the civil penalty under Section VII of this Consent Decree and any accrued stipulated penalties as required by Section IX of this Consent Decree not waived or reduced by the United States. Memphis may serve upon the United States a Request for Termination, certifying that Memphis has satisfied those requirements, together with all necessary supporting documentation.
- 77. Following receipt by the United States of Memphis' Request for Termination, the United States and Memphis shall confer informally concerning the Request and any disagreement that they may have as to whether Memphis has satisfactorily complied with the requirements for

termination of this Consent Decree. If the United States, after consultation with the State and TCWN, agrees that the Decree may be terminated, the United States and Memphis shall submit, for the Court's approval, a joint stipulation terminating the Decree.

78. If the United States, after consultation with the State and TCWN, does not agree that the Decree may be terminated, Memphis may invoke Dispute Resolution under Section XI of this Decree. However, Memphis shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 49 of Section XI, until one hundred-twenty (120) Days after service of its Request for Termination.

XX. 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. Memphis, the State, and TCWN each consent to entry of this Consent Decree without further notice and agree not to withdraw from, or oppose entry of, this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified the Parties in writing that it no longer supports entry of the Decree.

XXI. SIGNATORIES/SERVICE

80. Each undersigned representative of Memphis, EPA, the Assistant Attorney

General for the Environment and Natural Resources Division of the Department of Justice,

TDEC, the State, and TCWN certifies that he or she is fully authorized to enter into the terms and

conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

81. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Memphis 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.

XXII. <u>INTEGRATION</u>

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

XXIII. FINAL JUDGMENT

83. 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, the State, the TCWN, and Memphis. 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.

XXIV. <u>APPENDICES</u>

84. The following appendices are attached to and a part of this Consent Decree:

- "Appendix A" is a chart of SSO trends.
- "Appendix B" is Memphis' SORP.
- "Appendix C" is Memphis' FOG Management Program.
- "Appendix D" is a list of Memphis' Lift Stations scheduled for SCADA installation.
- "Appendix E" is a map of the portion of WCTS to be assessed in the first year of CSAP implementation.
- "Appendix F" is a map of the Lick Creek portion of the WCTS.
- "Appendix G" is a map of the portion of the WCTS to be rehabilitated pursuant to the Priority Area Project Report and the IRP.
- "Appendix H" is a map of the portion of the WCTS to be rehabilitated pursuant to the Critical Area Project Report and the IRP.
- "Appendix I" is the M.C. Stiles WWTP Foam Study and Outfall Improvements Work Plan.
- "Appendix J" is the State Projects.

Dated and entered this 20th day of 544.

s/ Samuel H. Mays, Jr.
SAMUEL H. MAYS, JR.
UNITED STATES DISTRICT JUDGE

Respectfully Submitted,

EDWARD L. STANTON, III United States Attorney Western District of Tennessee

By: s/ WILLIAM W. SILER (BPR # 07194)
Assistant United States Attorney
167 North Main Street
Suite 800
Memphis, TN 38103
Telephone: 901-544-4231
Facsimile: 901-544-4230

bill.siler@usdoj.gov

IGNACIA S. MORENO Assistant Attorney General Environment and Natural Resources Division United States Department of Justice P.O. Box 7415 Washington, D.C. 20044-7415

WILLIAM A. WEINISCHKE
Senior Attorney
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 514-4592 - telephone
(202) 514-0097 - facsimile
bill.weinischke@usdoj.gov

OF COUNSEL: WILLIAM B. BUSH, JR. Associate Regional Counsel U.S. EPA - Region IV 61 Forsythe Street, S.W. Atlanta, Georgia 30303 (404) 562-9538

Respectfully Submitted,

EDWARD L. STANTON, III United States Attorney Western District of Tennessee

By: s/ WILLIAM W. SILER (BPR # 07194)
Assistant United States Attorney
167 North Main Street
Suite 800
Memphis, TN 38103
Telephone: 901-544-4231
Facsimile: 901-544-4230

bill.siler@usdoj.gov

IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7415
Washington, D.C. 20044-7415

WILLIAM A. WEINISCHKE
Senior Attorney
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 514-4592 - telephone
(202) 514-0097 - facsimile
bill.weinischke@usdoj.gov

OF COUNSEL: WILLIAM B. BUSH, JR. Associate Regional Counsel U.S. EPA - Region IV 61 Forsythe Street, S.W. Atlanta, Georgia 30303 (404) 562-9538 WE HEREBY CONSENT to the entry of this Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR PLAINTIFF UNITED STATES OF AMERICA (Continued):

CYNTHIA GILES

Assistant/Administrator

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

PAMELA J. MAZAKAS

Acting Director

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

MARK POLLINS

Division Director

Water Enforcement Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

BENJAMIN BAHK

Water Enforcement Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency 1200 Pennsylvania Ave., NW (2243A)

Washington, DC 20460 Telephone: 202-564-4293 Facsimile: 202-564-0024

FOR CITY OF MEMPHIS:

A C WHARTON, JR. () Mayor, City of Memphs

HERMANMORRIS, JR

City Attorney

125 North Main Street, Room 336 Memphis, Tennessee 38103-2079

CARMALITA CARLETOS-DRAYTON

Senior Assistant City Attorney 125 North Main Street, Room 336 Memphis, Tennessee 38103-2079

Telephone: 901-576-6550 Facsimile: 901-576-6524

BARBARALETTE DAVIS

Assistant City Attorney

125 North Main Street, Room 336 Memphis, Tennessee 38103-2079

Telephone: 901-576-6513 Facsimile: 901-576-6524

GARY B. COMEN

Special Counsel for Memphis

Hall & Associates

1620 I Street, NW, Suite 701

Washington, DC 20006 Telephone: 202-463-1166 Facsimile: 202-463-4207

FOR PLAINTIFF STATE OF TENNESSEE:

ROBERT E. COOPER, JR. Attorney General and Reporter

SOHNIA W. HONG

Senior Counsel

Environmental Division Office of Attorney General

P.O. Box 20207

Nashville, Tennessee 37202-0207

Telephone: 615-741-2379 Facsimile: 615-741-8724

FOR TENNESSEE CLEAN WATER NETWORK:

VICTOR ASHE

President, Board of Directors Tennessee Clean Water Network

P.O. Box 1521

Knoxville, 1N 37901

RENEE VICTORIA HOYOS

Executive Director

Tennessee Clean Water Network

P.O. Box 1521

Knoxville, 1N 37901

Telephone: 865-522-7007x100 Facsimile: 865-525-4988

STEPHANIE D. MATHENY

Staff Attorney

Tennessee Clean Water Network

P.O. Box 1521

Knoxville, IN 37901

Telephone: 865-522-7007x102 Facsimile: 865-525-4988