

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA,

Plaintiff,

PENNSYLVANIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Plaintiff-Intervenor,

v.

SCRANTON SEWER AUTHORITY,

Defendant.

CIVIL ACTION NO. 3:CV-09-1873

(Judge Jones)

CONSENT DECREE

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WHEREAS, Plaintiff, the United States of America (“United States”), on behalf of the United States Environmental Protection Agency (the “EPA”), filed a Complaint in this matter against Defendant Scranton Sewer Authority, (the “Defendant” or the “SSA”) seeking injunctive relief and civil penalties, and alleging, *inter alia*, that the SSA violated the Clean Water Act (the “CWA”), 33 U.S.C. §§ 1251-1387, and certain terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit issued to the SSA pursuant to the CWA relating to the municipal wastewater treatment plant and collection system owned and operated by the SSA;

WHEREAS, Plaintiff-Intervenor, the Commonwealth of Pennsylvania Department of Environmental Protection (“PADEP”) filed a Complaint in Intervention against the SSA seeking injunctive relief and civil penalties, and alleging, *inter alia*, that the SSA violated the Clean Water Act, 33 U.S.C. §§ 1251-1387, Sections 201, 202 and 401 of the Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.201, 691.202 and 695.401, and certain terms and conditions of the NPDES Permit issued to the SSA pursuant to the CWA relating to the municipal wastewater treatment plant and collection system owned and operated by the SSA;

WHEREAS, the SSA is a municipal authority organized under the Municipal Authorities Act, as amended, 53 Pa. Cons. Stat. Ann. §§ 5601-5623, that owns, operates, and maintains a publicly owned treatment works (“POTW”), which includes a wastewater treatment plant known as the Scranton Sewer Authority Wastewater Treatment Plant (“WWTP”) and a collection system (“Collection System”) which collects stormwater and wastewater from residential, commercial and industrial sources for the purpose of transporting that wastewater to the WWTP. Certain portions of the Collection System are a Combined Sewer System and other portions are a Sanitary Sewer System. The WWTP and Collection System are authorized to discharge

pollutants in accordance with the SSA's NPDES permit into the Lackawanna River, Roaring Brook, Stafford Meadow Brook, Little Roaring Brook, Keyser Creek, Leggetts Creek, and Meadow Brook; all of which are located within the jurisdiction of the U.S. District Court for the Middle District of Pennsylvania;

WHEREAS, the United States and the PADEP allege the SSA has violated and continues to violate Sections 301 and 402 of the Clean Water Act, 33 U.S.C. §§ 1311 and 1342, Sections 3, 201, 202 and 401 of the Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.3, 691.201, 691.202 and 691.401, by impermissibly discharging untreated sewage from the Collection System to the Lackawanna River and several smaller water tributaries to the Lackawanna;

WHEREAS, the United States brings its claims pursuant to Section 309 of the CWA, 33 U.S.C. § 1319. In its complaint, the United States seeks the imposition of civil penalties and injunctive relief against the SSA for alleged violations of Section 301(a) of the CWA, 33 U.S.C. § 1311(a), and terms and conditions of the NPDES permit last issued by the PADEP as NPDES Permit No. PA-0026492, effective on October 1, 2009 and amended on May 13, 2011;

WHEREAS, the SSA has demonstrated through disclosure of its financial records to Plaintiffs that it has, and will likely continue to have for the foreseeable future, limited ability to pay civil or stipulated penalties and simultaneously meet the compliance requirements of this Consent Decree;

WHEREAS, nothing in this Consent Decree will be construed as an admission by the SSA of violations of any provisions of the CWA, or of the SSA's current or past NPDES permits, or of the Clean Streams Law; and

WHEREAS, the United States, the PADEP, and the SSA ("Parties") recognize, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in

good faith and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest;

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I (Jurisdiction and Venue) below, and 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 Parties and the subject matter of this action pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1331, 1345, 1355, and 1367. Venue is proper in this District pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and 1395(a). For purposes of this Consent Decree, or any action to enforce this Consent Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint and the Complaint in Intervention state claims upon which relief may be granted pursuant to Sections 301 and 402 of the Clean Water Act, 33 U.S.C. §§ 1311 and 1342, and Sections 3, 201, 202, 401, 601, and 605 of the Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.3, 691.201, 691.202, 691.401, 691.601, and 691.605.

II. APPLICABILITY AND BINDING EFFECT

3. This Consent Decree will apply to and be binding upon the United States, on behalf of the EPA, the PADEP, and upon Defendant and its successors, assigns, and all other entities and persons provided for in Fed. R. Civ. P. 65(d).

4. Defendant shall notify the following of the existence of this Consent Decree and make a copy available to them: all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any contractor retained to perform work required under this Consent Decree.

5. Effective from the Date of Lodging of this Consent Decree until its termination, in the event that the SSA transfers any ownership or operation of its WWTP, the Collection System, or any portion of the WWTP or Collection System, and includes in such transfer, the transfer of any obligations under this Consent Decree, the SSA will give written notice and a copy of this Consent Decree to any successors in interest at least 30 Days prior to such transfer. The SSA will condition any transfer, in whole or in part, of ownership, operation, or other interest in its WWTP, the Collection System, or any other portion of the SSA WWTP and/or Collection System upon the successful execution of the terms and conditions of this Consent Decree. Simultaneously with notice to any successor in interest, the SSA will provide written notice of such transfer to the United States and the PADEP as provided in Section XVI (Notices and Submissions). In the event of any such transfer of ownership or other interest, the SSA will not be released from the obligations or liabilities of this Consent Decree unless: (i) the transferee has the financial and technical ability to assume these obligations and liabilities; (ii) the United States and the PADEP have agreed to release the SSA from the obligations and liabilities; (iii) the United States, the PADEP, and the transferee have jointly moved to substitute the transferee as Defendant to this Consent Decree; and (iv) the Court has approved the substitution.

6. In any action to enforce this Consent Decree, Defendant will not raise as a defense the failure of its officers, directors, agents, contractors, employees, successors, assigns or any other persons or entities provided for in Fed. R. Civ. P. 65(d) to take any actions necessary to

comply with the provisions hereof. Nothing in this Paragraph prevents the Defendant from invoking Section XI of this Decree (Force Majeure), provided that the event meets the definition of a Force Majeure provided in Paragraph 53.

III. OBJECTIVES

7. The objectives of this Consent Decree are for the Defendant to take the steps necessary to achieve full compliance with the CWA, the regulations promulgated thereunder, including, but not limited to, 33 U.S.C. § 1342(q) and the regulations promulgated thereunder, and the Clean Streams Law and the regulations promulgated thereunder. All plans, reports, construction, remedial maintenance, and other obligations in this Consent Decree or resulting from the activities required by this Consent Decree shall have the objective of causing Defendant to come into and remain in full compliance with the terms and conditions of Defendant's NPDES Permit, the Clean Water Act, and the Clean Streams Law, as these terms are defined in Section IV (Definitions).

IV. DEFINITIONS

8. Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the CWA, 33 U.S.C. § 1251-1387 the regulations promulgated thereunder, or, if not defined in the Clean Water Act or its regulations, then as defined in the Pennsylvania Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.1-691.1001 and the regulations promulgated thereunder. The following definitions shall apply to the terms used in the Consent Decree:

a. "BNR Project" shall mean the wastewater treatment plant upgrades that the SSA is constructing pursuant to requirements in the NPDES Permit, which, as of the Effective Date, are described in Part C § SEVEN.

b. “Building/Private Property Backup” shall mean a wastewater release or backup into a building or private property that is caused by blockages, flow conditions, or other malfunctions of the Collection System. A wastewater backup or release that is caused by blockages, flow conditions, or other malfunctions of a Private Lateral is not a Building/Private Property Backup.

c. “Clean Water Act” or “CWA” shall mean the Federal Water Pollution Control Act found at 33 U.S.C. §§ 1251-1387, and the regulations promulgated thereunder.

d. “Collection System” shall mean the current and future municipal wastewater collection and transmission system owned or operated by the SSA, including all pipes, interceptors, force mains, gravity sewer lines, lift stations, pumping stations, manholes and appurtenances thereto designed to collect and convey municipal sewage and wastewaters (domestic, commercial, and industrial) to the SSA’s WWTP or to a CSO Outfall. “Collection System” includes both the “Combined Sewer System” and the “Sanitary Sewer System.”

e. “Combined Sewer Overflow Control Policy” or “CSO Policy” shall mean the policy issued by the EPA regarding combined sewer overflows, entitled “Combined Sewer Overflow (CSO) Control Policy,” 59 Fed. Reg. 18688 (April 19, 1994) and as identified in Section 402(q) of the Clean Water Act, 33 U.S.C. § 1342(q).

f. “Combined Sewer Overflow” or “CSO” shall mean any discharge from the SSA’s Combined Sewer System at a CSO Outfall designated in the currently applicable NPDES Permit.

g. “Combined Sewer System” shall mean the portion of the SSA’s Collection System designed to convey municipal sewage and wastewaters (domestic,

commercial, and industrial) and stormwater in the same system of pipes to the WWTP or to a CSO Outfall.

h. “Consent Decree” shall mean this Consent Decree, all Appendices hereto, and all plans, schedules, reports, memoranda, or other submittals approved by the Plaintiffs pursuant to the requirements of this Consent Decree or any Appendix hereto. In the event of any conflict between the Consent Decree and any Appendix, this Consent Decree shall control.

i. “CSO Outfall” shall mean an outfall in the Combined Sewer System from which combined sewage and stormwater are discharged and so designated in the currently applicable NPDES Permit.

j. “Date of Lodging” shall mean the date that this Consent Decree is lodged with the Clerk of the Court for the United States District Court for the Middle District of Pennsylvania.

k. “Day” shall mean a calendar day unless expressly stated to be a working day. When the day a report or other deliverable is due under this Consent Decree falls on a Saturday, Sunday, federal holiday, or legal holiday for the SSA, the SSA shall have until the next calendar day that is not one of the aforementioned days for submission of such report or other deliverable.

l. “Dry Weather Overflow” shall mean a discharge that occurs at a permitted CSO Outfall that is not caused by precipitation-related Inflow or Infiltration.

m. “Effective Date” shall mean the date set forth in Section XVII (Effective Date) of this Consent Decree.

n. “EPA” shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

o. “Green Infrastructure Measures” shall mean the range of stormwater control measures that use plant systems, soil systems, permeable pavement, or stormwater management, harvest and reuse, to store, infiltrate, evapotranspire, or reuse stormwater and reduce flows to the Combined Sewer System. Green Infrastructure Measures may include, but shall not be limited to, extended detention wetland areas, green roofs, and cisterns.

p. “Infiltration” shall mean water entering the Collection System and service connections from the ground through means that include, but are not limited to, defective pipes and sewer walls, pipe and sewer joints, connections, and manhole walls.

q. “Inflow” shall mean water introduced into the Collection System, including service connections, from sources including, but not limited to, roof leaders, cellars, basement sump pumps, area drains in yards and driveways, foundation drains, cooling water discharges, drains from springs and other wet areas, cracked or broken manhole covers, cross connections from separate storm sewers, catch basins, stormwater, surface run-off, street wash waters, and drainage.

r. “Long Term Control Plan” or “LTCP” shall mean the currently applicable plan that the SSA develops pursuant to Section V.B.

s. “MGD” shall mean million gallons per day.

t. “Nine Minimum Controls” or “NMCs” shall mean those controls identified in Section II.B. of the EPA’s April 19, 1994, Combined Sewer Overflow (CSO) Control Policy.

u. “Nine Minimum Controls Plan” or “NMC Plan” shall mean the plan attached hereto as Appendix A, as the same may be revised and updated in accordance with

Section V.A. (Nine Minimum Controls) of this Consent Decree and in accordance with the CSO Policy.

v. “NPDES Permit” shall mean the currently effective NPDES Permit No. PA-0026492, effective on October 1, 2009 and amended on May 13, 2011, issued to the SSA by the PADEP. This definition includes any subsequent modification or reissuance of the Permit in accordance with 40 C.F.R Part 123.

w. “Operating Protocols” shall mean the procedures described, as of the Effective Date, in Part C, § TWELVE of the NPDES Permit.

x. “PADEP” shall mean the Pennsylvania Department of Environmental Protection and any successor departments or agencies of the Commonwealth of Pennsylvania.

y. “Paragraph” shall mean a provision of this Consent Decree identified by an Arabic number.

z. “Parties” shall mean the United States, the PADEP, and the SSA.

aa. “Plaintiffs” shall mean the United States and the PADEP.

bb. “Private Lateral” shall mean that portion of the Collection System not owned by the SSA and used to convey wastewater from a building(s) to a portion of the Collection System owned by the SSA.

cc. “Sanitary Sewer System” shall mean the current and future portion of the Collection System Sewer designed to convey municipal sewage and wastewaters (domestic, commercial, and industrial) to the WWTP in one system and stormwater in a separate system.

dd. “Sanitary Sewer Overflow” or “SSO” shall mean an overflow, spill, diversion, or release of wastewater from or caused by the Sanitary Sewer System. This term shall include: (i) discharges to waters of the Commonwealth of Pennsylvania or United States from the

Sanitary Sewer System and (ii) any release of wastewater from the Sanitary Sewer System to public or private property that does not reach waters of the United States or the Commonwealth of Pennsylvania, including Building/Private Property Backups.

ee. “Section” shall mean a portion of this Consent Decree identified by an uppercase Roman Number.

ff. “Semi-annual Progress Report” shall mean the reports due on a semi-annual basis under Section VII (Reporting).

gg. “Six-month Period” shall mean a six month period ending on June 30 and December 31.

hh. “SSA” shall mean Defendant Scranton Sewer Authority, a municipal corporation located in Scranton, Pennsylvania.

ii. “Subparagraph” shall mean a provision of this Consent Decree identified by one or two lowercase letters followed immediately by a period. All Subparagraphs are incorporated into and a part of the Paragraph immediately preceding the Subparagraph.

jj. “Unpermitted Discharge” shall mean a Dry Weather Overflow or any discharge to waters of the United States or the Commonwealth of Pennsylvania from the Collection System at a location other than an Outfall designated in the NPDES Permit.

kk. “Waste Water Treatment Plant” or “WWTP” shall mean the waste water treatment plant owned and operated by the SSA located in Scranton, Pennsylvania.

V. COMPLIANCE MEASURES

A. NINE MINIMUM CONTROLS

9. The SSA shall implement the NMC Plan attached hereto as Appendix A in accordance with the provisions and schedules set forth therein.

10. Ongoing Review of the Nine Minimum Control Plan. The SSA shall, on at least an annual basis, evaluate the efficacy of the measures implemented under its Nine Minimum Controls Plan, as well as other measures undertaken by the SSA pursuant to this Consent Decree, in reducing the impacts of Combined Sewer Overflows on receiving waters. Based on such evaluation, the SSA shall submit to Plaintiffs for review and approval additional proposed changes to its NMC Plan, to the extent any are necessary, which the SSA shall implement, upon approval by Plaintiffs, in accordance with the provisions and schedules set forth therein.

B. LONG-TERM CONTROL PLAN

11. The SSA shall complete and submit a Long Term Control Plan (“LTCP”) to both the EPA and the PADEP by December 1, 2012 for review and approval. This LTCP must:

- a. Meet the requirements of the EPA’s CSO Policy, including but not limited to those requirements set forth in Section II.C. of the CSO Policy;
- b. Select a remedy for CSOs that will result in no more than 4 overflows in a typical year to non-channelized tributaries of the Lackawanna River and no more than 9 overflows in a typical year to the Lackawanna River and its channelized tributaries;
- c. Include a schedule for implementation with appropriate interim milestones that concludes no later than December 1, 2037;
- d. Include a deadline for substantial completion (plant fully operational) of the BNR Project that concludes no later than August 1, 2014;
- e. Include a schedule for constructing CSO controls such as box culverts and storage tanks that is consistent with Appendix B; and
- f. Include a post construction monitoring plan (“PCMP”), which must also meet the requirements of the CSO Policy, including the Policy’s requirements that it be “adequate to verify compliance with water quality standards and protection of designated uses as

well as to ascertain the effectiveness of the CSO controls” and that it “details the monitoring protocols to be followed, including the necessary effluent and ambient monitoring and, where appropriate, other monitoring protocols such as biological assessments, whole effluent toxicity testing, and sediment sampling.”

12. The SSA shall complete implementation of the LTCP as soon as practicable, but no later than December 1, 2037.

13. The SSA shall undertake a study (the “GI Study”) to evaluate the feasibility of implementing Green Infrastructure Measures as part of its long term controls for reducing CSOs from the Collection System. The evaluation in the GI Study must address at least the following criteria: GI site selection, identification and resolution of institutional issues and obstacles, public outreach, design and construction, and monitoring and evaluation. No later than December 1, 2017, the SSA shall submit the completed GI Study to the EPA and to the PADEP.

14. Following completion of the GI Study, Defendant may submit to the EPA and the PADEP for review and approval pursuant to Section VI (Review and Approval of Submittals) a modification of the LTCP that alters the CSO controls in the LTCP by incorporating Green Infrastructure Measures. Defendant shall include the following information with any such submission: (1) a description of the specific technology to be applied; (2) the locations where the technology will be used; (3) the design limits of the proposed use of the technology; and (4) the costs of installation and maintenance and who will bear those costs. If the proposed modification seeks to alter the size of any CSO control in the LTCP, the proposed modification must also include reliable computer modeling and other evidence sufficient to demonstrate that (1) the proposed Green Infrastructure Measures will result in a reduction of wet weather flows into the Combined Sewer System; (2) during future wet weather events the SSA will continue to achieve

such flow reductions; and (3) as a result of the flow reductions achieved as a result of the proposed Green Infrastructure Measures, the proposed modification of the LTCP will achieve the same or better performance, in terms of gallons controlled and the number of CSO activations in a typical year, as the unmodified LTCP.

C. GENERAL COMPLIANCE

15. Effluent Limits.

a. Commencing on the Day that Defendant signs this Consent Decree, the SSA shall comply with all final effluent limits set forth in the NPDES Permit.

b. If, on October 1, 2014, the SSA is not in compliance with its annual effluent limitation for the compliance period ending on September 30, 2014, it shall, on or before November 28, 2014, purchase nutrient credits to the extent required in the NPDES Permit in a quantity costing up to the amount of \$100,000. The SSA shall use reasonable diligence in obtaining the best value for any money it spends purchasing credits.

16. Dry Weather Overflows.

a. All Dry Weather Overflows from the Collection System are prohibited.

b. The SSA must report all Dry Weather Overflows to the PADEP by telephone at 570-826-2511 within twenty-four hours of when the SSA becomes aware of the Dry Weather Overflow and must provide written notification to the PADEP and the EPA within five Days of when the SSA becomes aware of the Dry Weather Overflow.

c. Should the SSA detect a Dry Weather Overflow, the SSA shall begin corrective action immediately. The SSA shall inspect the outfall(s) from which the Dry Weather Overflow occurred each subsequent Day until the overflow has been eliminated.

d. The SSA shall summarize all such Dry Weather Overflows in the Semi-Annual Progress Report required under Section VII (Reporting). Nothing in this Section shall eliminate or minimize any additional notification or reporting required by the NPDES Permit.

17. Compliance with Operating Protocols.

a. Commencing on the Day Defendant signs this Consent Decree, the SSA shall comply with the Operating Protocols regarding flows to the WWTP, which, as of the Effective Date, are described in Part C, § TWELVE of the NPDES Permit.

b. Should the SSA fail to comply with the Operating Protocols described in Subparagraph a. above for more than ten minutes in any 24-hour period, it shall report such failure within 10 Days in writing in accordance with Section XVI (Notices and Submissions).

c. The SSA shall, within 14 Days of a request by the EPA or the PADEP, provide a report in comma-delimited format of the measurements of influent to the WWTP and discharges from Outfall 003 recorded by its supervisory control and data acquisition (SCADA) system in increments of no more than five minutes. To the extent practicable, the data shall be provided in a single table with each measurement being taken simultaneously. The SSA may not limit its production of SCADA data to the data available from one server or storage location, unless that server or storage location contains all of data available to the SSA for the time period covered by the request.

d. Nothing in this Paragraph shall limit the United States' or the PADEP's authority to request other information or information in other formats.

18. Identification of Outfalls.

a. Prior to the Date of Lodging, the SSA identified the following outfalls that are not currently included in its NPDES Permit:

- (i) McNichols (#083);
- (ii) 600 Elm East (#084);
- (iii) 600 Elm West (#085);
- (iv) Cedar/Maple (#086);
- (v) Leggetts/Kelly (#087); and
- (vi) Prospect/Locust (#088).

b. The SSA plugged the Prospect/Locust outfall (#088) and submitted an application to the PADEP on November 28, 2011 requesting an amendment to the NPDES Permit to authorize discharges from the remaining outfalls and to permanently remove the following outfalls from the NPDES Permit: #010, #039, #041, #042, #046, #054, and #064.

c. The SSA hereby affirms that it has conducted a thorough study of its collection system and has identified to the United States and the PADEP, to the best of its knowledge, all of the outfalls from which pollutants may enter waters of the United States or the Commonwealth of Pennsylvania.

d. The SSA shall not discharge pollutants into waters of the United States or the Commonwealth of Pennsylvania from any outfall not identified in its NPDES Permit or in Subparagraph 18.a. above.

e. Should the SSA discover an outfall that is not identified in Subparagraph 18.a or in its NPDES Permit, it shall notify the United States and the PADEP in writing in accordance with Section XVI (Notices and Submissions) within five Days of the discovery of the outfall. The notice shall include a description of the outfall, its location, the portion of the collection system that drains to the outfall, the description of any pathway by which discharges from the outfall might reach waters of the United States or the Commonwealth of Pennsylvania,

any information as to whether stormwater is included in the discharges from the outfall, and any information that might indicate whether pollutants have been discharged from the outfall. Within 60 Days of the discovery of the outfall, Defendant shall submit to the EPA and the PADEP for review and approval pursuant to Section VI (Review and Approval of Submittals) a plan that addresses how the newly discovered outfall(s) will be addressed consistent with SSA's applicable NPDES Permit.

19. Elimination of Sanitary Sewer Overflows. SSOs are prohibited.

20. Reporting Planned Changes and Non-Compliance.

a. The SSA shall comply with the provisions of the NPDES Permit requiring the reporting of anticipated and unanticipated non-compliance with the NPDES Permit, which, as of the Effective Date, are described in Part A, § III.C of the NPDES Permit.

b. Whenever written notice of non-compliance is required to be given to the PADEP pursuant to the NPDES Permit, the SSA shall simultaneously notify the EPA in accordance with Section XVI (Notices and Submissions).

VI. REVIEW AND APPROVAL OF SUBMITTALS

21. For each plan, report, schedule or other document submitted by the SSA for EPA and PADEP approval (other than a request to modify this Consent Decree submitted pursuant to Section XIX (Modification)) the EPA, after consultation with the PADEP, may (a) approve the submittal, in whole or in part; (b) disapprove the submittal, in whole or in part; (c) approve the submittal upon specified conditions, directing the SSA to modify its submission; or (d) any combination of the above. If the EPA approves the submittal, the EPA shall notify the SSA in writing. If the submittal is disapproved in whole or in part, or approved with conditions, the EPA shall describe the deficiencies or conditions in writing so that the SSA can make the required modifications and provide the EPA with a modified submittal. The SSA may request a meeting

and/or conference call with the EPA to discuss the deficiencies, but no such request or meeting shall extend any deadlines set forth in this Section.

22. Within 60 Days following receipt of any notice from the EPA disapproving a submittal or directing modification of a submittal pursuant to the preceding Paragraph (or within such longer time set forth in the notice or agreed to by the parties), the SSA shall submit a modified submittal to the EPA and the PADEP for approval, subject only to the SSA's right to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution). The modified submittal shall correct any deficiencies identified by the EPA, and conform to any directions set forth in the notice provided pursuant to the preceding Paragraph. If the SSA fails to submit a modified document to the EPA within the 60-Day period, the EPA retains the right to modify or develop any disapproved or conditionally approved portion of the submittal. The SSA shall implement any such plan, report, schedule or other submittal as modified or developed by the EPA, subject only to the SSA's right to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution).

23. In the event that a resubmitted plan, report, schedule or other document or portion thereof is disapproved in whole or in part or approved with conditions by the EPA, the EPA shall provide the SSA with a written notice describing the remaining deficiencies or conditions for approval. The EPA may require the SSA to correct the deficiencies or satisfy the conditions for approval of the submittal within a specified time frame, or the EPA may modify or develop any disapproved or conditionally approved portion of the submittal. The SSA may request a meeting and/or conference call with the EPA to discuss the deficiencies, but no such request or meeting shall extend any deadlines set forth in this Section. Following receipt of a notice requiring the SSA to correct deficiencies or satisfy conditions for approval, the SSA shall submit a modified

document in accordance with the EPA's directions, subject only to the SSA's right to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution).

24. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 21 or 23, above, the SSA shall proceed, if directed by the EPA, to take any action required by any non-deficient portion of the SSA's submission, if such action can be undertaken independent of the deficient portion of the SSA's submission. Implementation of any non-deficient portion of a submission shall not relieve the SSA of any liability for stipulated penalties under Section X (Stipulated Penalties) for the deficient portion(s).

25. Other than a modification of the LTCP, all plans and studies submitted pursuant to this Consent Decree shall be incorporated herein as part of this Consent Decree upon approval by the EPA. A modification of the LTCP shall be incorporated into this Consent Decree only if the Parties enter into a written agreement pursuant to Paragraph 88.

26. The SSA shall take all lawful and appropriate actions to facilitate the implementation of this Consent Decree, including prompt review and approval of any appropriate and responsive bids, contracts, or other documents, and, if applicable, prompt review and approval of any appropriate schedule of work necessary to maintain compliance with this Consent Decree.

27. If the EPA fails to take action under Paragraph 21 with respect to a submittal or modified submittal, other than the LTCP or a proposal to modify this Consent Decree, within 90 Days of receiving the submittal or modified submittal, the EPA shall extend any subsequent deadlines dependent upon approval of the submittal by the number of Days in excess of 90 that elapsed between: (i) the date that the EPA and the PADEP received the submittal or modified submittal; and (ii) the date that the EPA took action under Paragraph 21. Such extension will not

be effective unless the EPA grants it in writing. Defendant may invoke dispute resolution under Section XII (Dispute Resolution) with respect to any disputes under this Paragraph.

VII. REPORTING

A. REPORTS

28. The SSA will provide to the EPA copies of all written notifications and reports that the SSA is required to submit to the PADEP relevant to this Consent Decree.

29. On January 31 and July 31 of every year commencing with the first full Six-month Period after Entry of this Consent Decree and continuing until termination of this Consent Decree, the SSA will submit to the EPA and the PADEP a progress report (“Semi-annual Progress Report”) regarding the implementation of the requirements of this Consent Decree in the previous Six-month Period. The Semi-Annual Progress Report will include at a minimum:

a. A statement setting forth the deadlines and other terms that the SSA was required by this Consent Decree to meet since the date of the last Semi-annual Progress Report, whether and to what extent the SSA has met these requirements, and the reasons for any noncompliance;

b. A general description of the work completed within the prior Six-month Period, and a projection of work to be performed pursuant to this Consent Decree during the next or succeeding Six-month Period;

c. A summary of all contacts with the EPA and the PADEP during the reporting period relating to CSOs, SSOs, or implementation of the BNR Project;

d. A statement of any exceedances of NPDES Permit limitations; and,

e. A summary of all CSOs, SSOs and Unpermitted Discharges occurring within the Six-month Period including the actual or estimated frequency, duration, and volume of each CSO, SSO, and Unpermitted Discharge.

B. CERTIFICATION AND ADMISSIBILITY

30. Any report or plan relating to monitoring data or any representation made by the SSA as to its compliance with this Consent Decree that the SSA is required by this Consent Decree to submit, including reports or plans, shall be signed by an official or authorized agent of the SSA and shall include the following certification:

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

31. The SSA shall not object to the authenticity of any report, plan, or other submission prepared in accordance with Paragraph 30 or the information contained in said report, plan or submission in any proceeding to enforce this Consent Decree.

VIII. FUNDING

32. Compliance with the terms of this Consent Decree by the SSA is not conditioned on the receipt of federal or state grant or loan funds or upon the SSA's financial capabilities. In addition, the SSA's failure to comply is not excused by the lack of federal or state grant or loan funds, or by the processing of any applications for the same, or by the SSA's financial capabilities.

IX. CIVIL PENALTY

33. The SSA shall pay the sum of \$170,000 plus an additional sum for interest as explained below, to the United States as a civil penalty. Payment shall be made in two installments. The first installment of \$70,000 shall be made within 30 Days after the Effective Date. The second installment of \$100,000 plus interest shall be made within six months of the

Effective Date. Interest shall accrue from the Date of Lodging at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging.

34. Defendant shall pay the civil penalty due to the United States by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice in accordance with written instruction to be provided to the SSA, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the Middle District of Pennsylvania, 235 N. Washington Ave., Suite 311, Scranton, PA 18503, Phone: 570-348-2800. At the time of payment, Defendant 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 v. Scranton Sewer Authority*, and shall reference the civil action number 3:09-cv-1873 and DOJ case number 90-5-1-1-08778, to the United States in accordance with Section XVI (Notices and Submissions) and to:

EPA Region III Docket Clerk
Office of Enforcement and Compliance Assistance (3EC00)
1650 Arch Street
Philadelphia, PA 19103.

35. The SSA shall pay the sum of \$170,000, plus an additional sum for interest as explained below, to the PADEP as a civil penalty. Payment shall be made in two installments. The first installment of \$70,000 shall be made within 30 Days after the Effective Date. The second installment of \$100,000 plus interest shall be made within six months of the Effective Date. Interest shall accrue from the Date of Lodging at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging. The payment shall be made by corporate check or the like made payable to “Commonwealth of Pennsylvania, Clean Water Fund” and sent to Program Manager, Clean Water Program, Department of Environmental Protection, Northeast Regional Office, 2 Public Square, Wilkes-Barre, Pennsylvania 18701-1915.

X. STIPULATED PENALTIES

36. The SSA shall be liable for stipulated penalties to the United States and the PADEP for violations of this Consent Decree specified below. 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.

37. Late Payment of Civil Penalty. If Defendant fails to pay the civil penalty required to be paid under Section IX of this Decree (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$500 per Day for each Day that the payment is late.

38. Reporting Requirements. For each failure to submit a timely and adequate plan, report, schedule, written notice, or other submission required by this Decree, the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
Days 1-30	\$500
Days 31-60	\$750
Days 61-90	\$1,000
Days 91 and over	\$1,500

39. Compliance Milestones.

a. For each failure to comply with any deadline for completion of construction or for achievement of full operation set forth in the implementation schedule developed and approved pursuant to Paragraph(s) 11 and 12, the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
Days 1-30	\$500
Days 31-60	\$750
Days 61-90	\$1,000
Days 91 and over	\$2,000

b. For each failure to comply with a requirement of, or meet a deadline in, the Nine Minimum Controls Plan pursuant to Paragraph 9 of Section V.A (Nine Minimum Controls), the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
Days 1-30	\$500
Days 31-60	\$750
Days 61-90	\$1,000
Days 91 and over	\$2,000

40. General Compliance.

a. For each discharge in violation of Subparagraph 16.a or for each discharge in violation of Paragraph 19 that reaches waters of the United States or the Commonwealth of Pennsylvania, the SSA shall pay the following stipulated penalties based on the volume of the discharge:

<u>Volume:</u>	<u>The penalty shall be:</u>
Less than 100 gallons	\$100
100 to 2,499 gallons	\$750
2,500 to 9,999 gallons	\$1,250
10,000 to 99,999 gallons	\$3,000
100,000 to 999,999 gallons	\$5,000
1 million gallons or greater	\$10,000

b. For each discharge in violation of Subparagraph 17.a, the SSA shall pay the following stipulated penalties based on the difference between the volume of combined sewage that the SSA would have taken into the WWTP while it was discharging from Outfall 003 if it had complied with Paragraph 17.a., and the volume of combined sewage that it actually took into the WWTP while it was discharging from Outfall 003:

<u>Difference in Volume:</u>	<u>The penalty shall be:</u>
Up to two million gallons	\$2,500
More than two million gallons, but not more than four million gallons	\$5,000
More than four million gallons, but not more than six million gallons	\$7,500
More than six million gallons	\$10,000

c. For each failure to comply with Subparagraph 18.d., the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
Days 1-30	\$500
Days 31-60	\$1,000
Days 61-90	\$2,000
Days 91 and over	\$3,000

d. For failure to comply with Subparagraph 15.b, the SSA shall pay to the Plaintiffs a stipulated penalty equal to the difference between \$100,000 and the amount paid for nutrient credits. The unavailability of credits is not a defense to liability for penalties under this Subparagraph. Thus, if the SSA were to need 10,000 pounds of credits and were to purchase that amount for \$50,000 in accordance with Subparagraph 15.b, then this Subparagraph would have no effect. However, if the SSA were to need 10,000 pounds of credits and were to purchase only 5,000 pounds at a cost of \$25,000, it would have to pay a stipulated penalty equal to \$100,000 minus the \$25,000 it actually spent, or \$75,000.

e. For each failure to comply with Paragraph 15, other than a failure to comply with an annual effluent limit, the SSA shall pay the following stipulated penalties to Plaintiffs:

<u>Type of Permit Limit:</u>	<u>Penalty per violation:</u>
Daily or Instantaneous	\$500
Weekly	\$1,500
Monthly	\$3,000

f. For each failure to provide telephonic notification in compliance with Paragraph 16.b, the SSA shall pay a stipulated penalty of \$1,000 per occurrence.

g. For each failure to comply with Subparagraphs 16.c or 17.c, the SSA shall pay the following stipulated penalties to Plaintiffs per violation per Day:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
Days 1-30	\$500
Days 31-60	\$750
Days 61-90	\$1,000
Days 91 and over	\$2,000

41. If any person discovers an outfall that existed as of the Effective Date, but that is not included in the SSA's NPDES Permit or identified in Subparagraph 18. a, the SSA shall pay a stipulated penalty of \$2,500.

42. Access Requirements. For each failure to allow access to the WWTP in accordance with Section XV (Information Collection and Retention), below, the SSA shall pay stipulated penalties of \$1,000 to Plaintiffs per Day.

43. 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.

44. For stipulated penalties incurred more than one year after the Effective Date, the amount of penalties for which Defendant is liable shall be multiplied by the quotient of: (i) the maximum penalty under 33 U.S.C. § 1319(d) as adjusted pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, Pub. L. 101-410, 104 Stat. 890, as amended; and (ii) \$37,500

45. Defendant shall pay stipulated penalties to the United States and the PADEP within 30 Days of a written demand by either Plaintiff. Defendant shall pay 50% of the total stipulated penalty amount due to the United States and 50% percent to the PADEP. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff.

46. Each Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

47. Stipulated penalties shall continue to accrue as provided in Paragraph 43, 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 the EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of the EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

48. Obligations Prior to the Effective Date. Upon the Effective Date, the stipulated penalty provisions of this Decree shall be retroactively enforceable to the date the SSA signed this Decree, with regard to any and all violations that have occurred after the SSA signed, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

49. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 34, 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.

50. Defendant shall pay stipulated penalties owing to the PADEP by corporate check or the like made payable to “Commonwealth of Pennsylvania, Clean Water Fund” and sent to Program Manager, Clean Water Program, Department of Environmental Protection, Northeast Regional Office, 2 Public Square, Wilkes-Barre, Pennsylvania 18701-1915. The check shall be accompanied by a transmittal letter which shall state that the payment is for stipulated penalties and for which violation(s) the penalties are being paid.

51. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant 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 PADEP from seeking any remedy otherwise provided by law for Defendant’s failure to pay any stipulated penalties.

52. Subject to the provisions of Section XIII (Effect of Settlement), 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 or the PADEP for Defendant’s violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Water Act, 33 U.S.C. §§ 1251-1387, or the Pennsylvania Clean Streams Law, 35 Pa. Stat. Ann. §§ 691.1-691.1001, Defendant shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

XI. FORCE MAJEURE

53. “Force Majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant; its agents, consultants, or contractors; or any entity controlled by Defendant; that delays or prevents the performance of any obligation under this Consent Decree despite Defendant’s best efforts to fulfill the obligation. The requirement that Defendant exercise “best efforts to fulfill the obligation” includes using best

efforts to anticipate any potential Force Majeure 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 Defendant's financial inability to perform any obligation under this Consent Decree.

54. Any delays in implementation of this Consent Decree shall not be excused merely because the SSA notified the EPA and/or the PADEP of the anticipated delay, regardless of whether such notification is contained in a report required under Section VII (Reporting) or any other communication.

55. When the SSA knows, or should have known by the exercise of reasonable diligence, of an event that might delay completion of any requirement of this Consent Decree, whether or not the event is a Force Majeure, the SSA will notify the EPA and the PADEP, in writing, within 14 Days after the SSA first knew, or in the exercise of reasonable diligence under the circumstances, should have known of such event. The notice will indicate whether the SSA claims that the delay should be excused due to a Force Majeure. The notice shall describe in detail the basis for the SSA's contention that it experienced a Force Majeure delay, the anticipated duration of the delay, the cause or causes of the delay, all actions taken or to be taken to prevent or minimize the delay, and the timetable by which those measures will be implemented. Failure to timely notify the EPA and the PADEP may, at the EPA's option, in consultation with the PADEP, preclude SSA from asserting Force Majeure for the period beyond 14 Days it took SSA to provide the required notice.

56. If, after consultation with the PADEP, the EPA finds that a delay in performance is, or was, caused by a Force Majeure, it will extend the time for performance, in writing, for a period to compensate for the delay resulting from such event and stipulated penalties will not be

due to the United States or the PADEP for such period. If the EPA does not grant such an extension within 30 days of receiving the SSA's written notice of the Force Majeure, the SSA may consider the request for an extended time for performance to have been denied, and the SSA may invoke dispute resolution.

57. In proceedings on any dispute regarding a delay in performance, the dispute resolution provisions of Section XII (Dispute Resolution) will apply, and the SSA will have the burden of proving that the delay is, or was, caused by a Force Majeure and that the amount of additional time requested is necessary to compensate for that event.

58. Compliance with a requirement of this Consent Decree shall not by itself constitute compliance with any other requirement. An extension of one compliance date based on a particular event will not extend any other compliance date. The SSA will make an individual showing of proof regarding the cause of each delayed incremental step or other requirement for which an extension is sought. The SSA may petition for the extension of more than one compliance date in a single request.

XII. DISPUTE RESOLUTION

59. 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.

60. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States and the PADEP a written "Notice of Dispute." Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal

negotiations, then the position advanced by the United States, in consultation with the PADEP, shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

61. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the PADEP 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 Defendant’s position and any supporting documentation relied upon by Defendant.

62. The United States, in consultation with the PADEP, shall serve its Statement of Position within 30 Days of receipt of Defendant’s 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’ Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

63. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States and the PADEP, in accordance with Section XVI (Notices and Submissions), a motion requesting judicial resolution of the dispute. The motion must be filed within 30 Days of receipt of the United States’ Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant’s position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

64. The United States, in consultation with the PADEP, shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

65. Standard of Review.

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 63 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by the EPA and/or the PADEP under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States and/or the PADEP is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 63, Defendant shall bear the burden of demonstrating by a preponderance of the evidence that its position complies with this Consent Decree and that Defendant is entitled to relief under applicable law.

66. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant 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 47. If

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

XIII. EFFECT OF SETTLEMENT

67. SSA hereby knowingly waives its right to appeal or challenge the validity of Part C.I.SEVEN.I.B.(5) (Compliance with effluent limitations) of the NPDES Permit, including rights that may be available under Section 4 of the Pennsylvania Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, 35 P.S. Section 7514; the Pennsylvania Administrative Agency Law, 2 Pa. C.S. Section 103(a) and Chapters 5A and 7A; or any other provision of law. This Paragraph, and the SSA's waiver hereunder, shall expire at midnight on September 30, 2014.

68. This Consent Decree resolves the civil claims of the United States for the violations alleged in the United States' Complaint through the Date of Lodging of this Consent Decree and the civil claims of the PADEP for the violations alleged in the PADEP's Complaint in Intervention through the Date of Lodging of this Consent Decree.

69. The United States and the PADEP reserve any and all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 68. This Consent Decree shall not be construed to limit the rights of the United States or the PADEP to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 68. The United States and the PADEP 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, the POTW, whether related to the violations addressed in this Consent Decree or otherwise.

70. In any subsequent administrative or judicial proceeding initiated by the United States or the PADEP for injunctive relief, civil penalties, or other appropriate relief relating to

the Facility, Defendant shall not assert, and may not maintain, any defense or claim against Plaintiffs 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 PADEP 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 67 of this Section.

71. This Consent Decree does not limit or affect the rights of Defendant or of the United States or the PADEP 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 Defendant, except as otherwise provided by law.

72. This Consent Decree does not create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIV. NOT A PERMIT

73. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced by the United States or the PADEP pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the PADEP do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 33 U.S.C. §§ 1251-1387, or with any other provisions of federal, state, or local laws, regulations, or permits.

74. This Consent Decree does not authorize or approve the construction of any physical structure or facilities, or the modification of any existing treatment works or sewer system.

XV. INFORMATION COLLECTION AND RETENTION

75. The United States and the PADEP, and their representatives, contractors, consultants, and attorneys shall have the right of entry into and upon the SSA's WWTP and Sewer System, at all reasonable times, upon proper 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 PADEP in accordance the terms of to this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by the SSA or its representatives, contractors or consultants;
- d. obtain documentary evidence, including photographs and similar data;
- e. inspect and evaluate any portion or portions of the POTW;
- f. inspect and review any records required to be kept under the terms and conditions of the Consent Decree, the SSA's NPDES Permit, any future modifications or renewals thereof, and the CWA; and
- g. assess the SSA's compliance with this Consent Decree.

76. Upon request, Defendant shall provide the EPA and the PADEP or their authorized representatives splits of any samples taken by Defendant. Upon request, the EPA and the PADEP shall provide Defendant splits of any sample taken by the EPA or the PADEP.

77. Defendant shall retain the following documents and electronically stored data for at least five years from the date they are created:

- a. All complaints received by Defendant or its contractors or agents from any person or entity pertaining to the matters addressed by this Consent Decree;
- b. All documents required to be created, submitted, or maintained pursuant to Appendix A (Nine Minimum Controls Plan);
- c. Documentation of all measures undertaken by Defendant to comply with the terms of this Consent Decree; and
- d. SCADA data or other data regarding compliance with Paragraph 17 (Compliance with Operating Protocols).

78. Defendant shall retain the following documents and electronically stored data for at least five years after termination of this Consent Decree:

- a. All reports, plans, permits, and documents submitted to the EPA or the PADEP pursuant to this Consent Decree, including all underlying research and data;
- b. All data developed by, or on behalf of, Defendant pursuant to any post-construction monitoring activities; and
- c. All reports and data regarding water quality;

79. The information-retention requirements in this Section establish minimum retention periods that shall apply regardless of any contrary corporate or institutional policies or procedures but do not excuse Defendant from any legal requirement to retain documents or data for longer periods of time. At any time during this information-retention period, upon request by the United States or the PADEP, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

80. At the conclusion of the information-retention period provided in Paragraph 79, Defendant shall notify the United States and the PADEP at least 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 PADEP, Defendant shall deliver any such documents, records, or other information to the EPA or the PADEP. Defendant 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 Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no final documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

81. Defendant 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 Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

82. 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 PADEP pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XVI. NOTICES AND SUBMISSIONS

83. 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:

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-08778

As to the EPA:

Chief
NPDES Enforcement Branch (3WP42)
Water Protection Division
U.S. Environmental Protection Agency, Region 3
1650 Arch St.
Philadelphia, PA 19103-2029

And

Christopher A. Day
Office of Regional Counsel (3RC20)
U.S. Environmental Protection Agency, Region 3
1650 Arch St.
Philadelphia, PA 19103-2029

As to the PADEP:

Program Manager – Clean Water Program
Department of Environmental Protection
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701-1915

As to the SSA:

Executive Director
Scranton Sewer Authority
312-314 North Adams Avenue
Scranton, PA 18503-1501

Jeffrey Belardi
Belardi Law Offices
410 Spruce Street, 4th Floor
Scranton, PA 18503

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

85. 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.

XVII. EFFECTIVE DATE

86. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court; provided, however, that Defendant hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall be void.

XVIII. RETENTION OF JURISDICTION

87. 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 XII (Dispute Resolution) and XIX (Modification), or effectuating or enforcing compliance with the terms of this Decree.

XIX. MODIFICATION

88. Except as otherwise expressly set forth in this Consent Decree, the terms of this Consent Decree, including the attached appendices and the LTCP approved pursuant to this Consent Decree, may be modified only by a subsequent written agreement signed by all of the Parties or their successors in interest. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court.

89. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XII (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 65, 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).

XX. TERMINATION

90. After Defendant has: (i) completed implementation of the requirements of Section V (Compliance Measures); (ii) certified that all construction required by the Long-Term Control Plan is complete and that the Long-Term Control Plan has been fully implemented; (iii) completed post construction monitoring as required by the Long-Term Control Plan; (iv) submitted a PCMP report to the EPA and the PADEP; (v) demonstrated in the PCMP report that any remaining CSOs will not cause the SSA to violate the CSO Policy or its NPDES Permit; (vi) satisfactorily complied, as determined by the EPA, with its NPDES Permit for a period of 12 months; and (vii) paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree; Defendant may serve upon the United States and the PADEP a “Request for Termination” stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

91. Following receipt by the United States and the PADEP of Defendant’s Request for Termination, the Parties shall confer informally concerning the request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States after consultation with the PADEP agrees that the Consent Decree may be terminated, the Parties shall submit, for the Court’s approval, a joint stipulation terminating the Consent Decree.

92. If the United States after consultation with the PADEP does not agree that the Consent Decree may be terminated, Defendant may invoke Dispute Resolution under Section XII (Dispute Resolution). However, Defendant shall not seek formal dispute resolution under Paragraph 61 of any dispute regarding termination until at least 90 Days after service of its Request for Termination.

XXI. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

93. This Consent Decree will be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the public comments regarding this Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Consent Decree.

XXII. SIGNATORIES/SERVICE

94. Each undersigned representative of Defendant and the PADEP and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

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

XXIII. COSTS OF SUIT

96. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the PADEP 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 Defendant.

XXIV. INTEGRATION

97. 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 Consent Decree or the settlement it represents, nor shall it be used in construing the terms of this Consent Decree.

XXV. APPENDICES

98. The following Appendices are attached to, and a part of, this Consent Decree:
"Appendix A" is the Nine Minimum Controls Plan; and
"Appendix B" is the SSA's schedule for constructing CSO controls.

XXVI. FINAL JUDGMENT

99. 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 PADEP and Defendant. The Court finds that there is no just reason for delay and, therefore, enters this judgment as a final judgment under Federal Rules of Civil Procedure 54 and 58.

SO ORDERED THIS _____ DAY OF _____, 2012

HON. JOHN E. JONES
UNITED STATES DISTRICT JUDGE

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton*.

FOR THE UNITED STATES OF AMERICA:


IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

12/13/2012

Dated

/s/ Daniel S. Smith

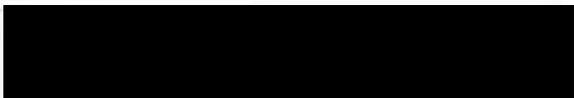
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THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton*.



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Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency



MARK POLLINS
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THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton*.



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THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton*.

FOR THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION:



MICHAEL J. BRUNAMONTI, P.E.
Program Manager
Clean Water Program
Department of Environmental Protection
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Dated 11/21/12



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THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Sewer Authority of the City of Scranton*.

FOR THE SEWER AUTHORITY OF THE CITY OF SCRANTON.

11.15/2012

Date



EUGENE P. BARRETT
Executive Director
Scranton Sewer Authority
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JEFFREY BELARDI, ESQ.
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APPENDIX A

Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

Background

The City of Scranton owns the wastewater collection, conveyance and treatment system serving the City of Scranton and the Borough of Dunmore. The Scranton Sewer Authority (SSA or the Authority) was appointed by the City of Scranton to act as the City's agent to maintain the wastewater system.

The wastewater system consists of over 275 miles of collection sewers and large interceptors, 80 combined sewer overflows (CSOs), 7 pumping stations and a wastewater treatment plant (WWTP). Approximately 63% (172 miles) of the collection sewers are combined sewers, which convey the combined storm water and sanitary sewage flow to regulator chambers prior to connection with an interceptor sewer. Under high wet-weather flow conditions that exceed the capacities of downstream facilities, the regulators direct combined sanitary sewage and storm water to the receiving streams. The SSA's NPDES Permit, No 0026492, lists permitted discharge points including: Treatment Plant Outfall – 001, Treatment Plant Headworks Bypass – 003 and CSOs – 004 through 082, totaling 80 CSO regulators. An additional five outfalls (numbers 83-87) have been requested to be added to the permit. Accordingly, there are 85 total designated CSO outfalls in the sewer system. SSA is currently working to permanently seal a number of these outfalls and will provide an update in the next annual report.

This document summarizes SSA's program to implement the Nine Minimum Controls pursuant to our discharge permit and the National CSO Policy.

1.0 Proper Operation and Regular Maintenance Program – NMC No. 1

1.1 Introduction

The first minimum control, proper operation and regular maintenance of the Combined Sewer System (CSS) and CSO outfalls consists of a program that establishes operation, maintenance and inspection procedures to ensure that a CSS and treatment facility will function in a way to maximize treatment of combined sewage and still comply with NPDES Permit Limitations. Implementation of this control is intended to ensure that the collection and treatment systems perform effectively. The essential elements of a proper operation and maintenance (O&M) program include maintenance of suitable records and identification of O&M as a high management priority.

The steps involved in implementing this minimum control are:

1. Assess how well the O&M program is implemented.
2. Determine if the O&M program needs to be improved to satisfy the intent of the CSO control policy.
3. Develop and implement the improvements to address CSOs.

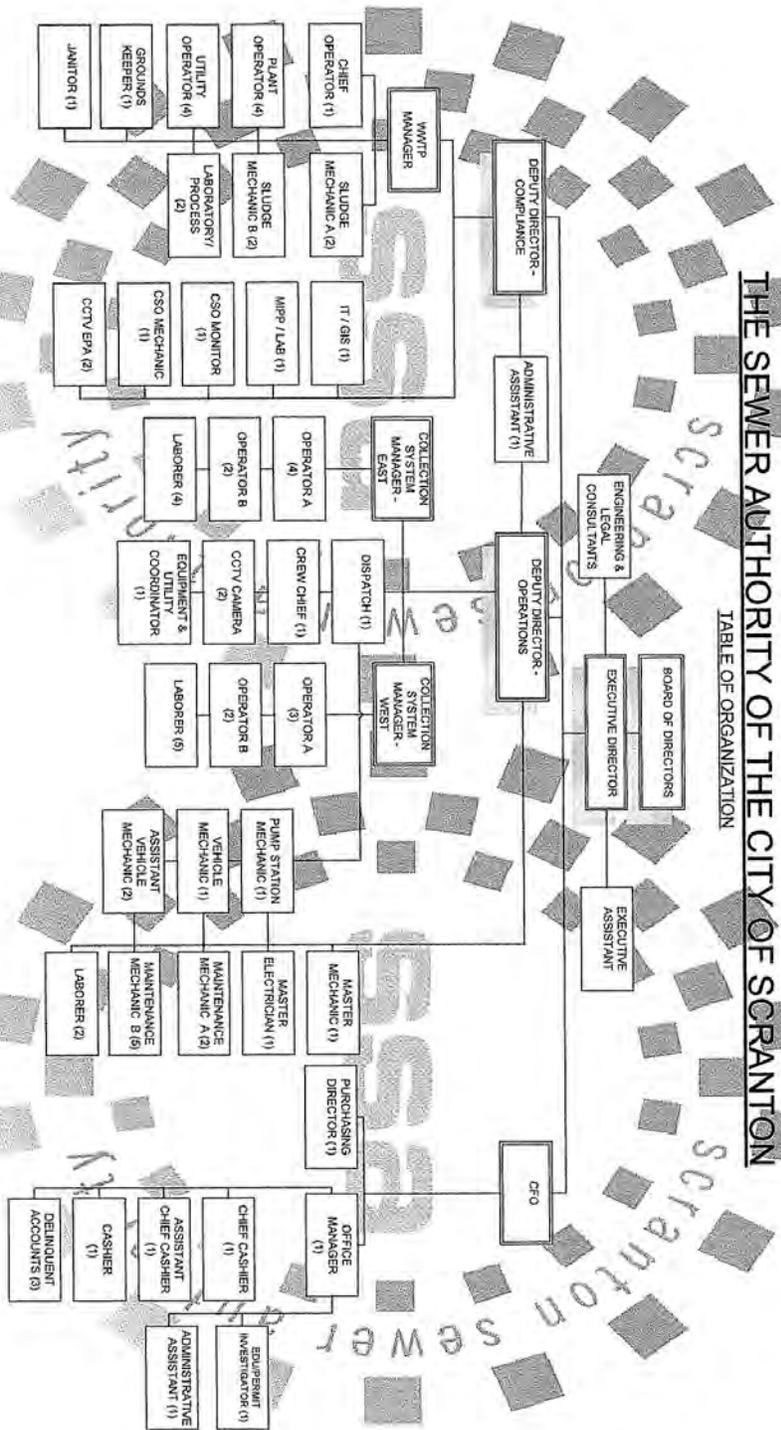
Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

4. Document any actions and report them to the PADEP.

1.2 Organizational Structure

The combined sewer system of the City of Scranton is owned and operated by the SSA. The SSA is a municipal Authority established by the City of Scranton and the Borough of Dunmore. Its Board consists of four members from the City of Scranton which are appointed by the Mayor and confirmed by City Council, and a fifth member who is appointed by the Borough Council of Dunmore. The Authority sewer system serves the City of Scranton and the Borough of Dunmore. The Authority has also entered into agreements with other adjoining municipalities and their sewer authorities for the treatment of additional municipal wastewaters. The Authority provides conveyance and treatment of wastewater from portions of the Boroughs of Taylor, Dickson City, and Moosic. The Authority holds an NPDES permit to discharge treated effluent and CSOs into the Lackawanna River and its tributaries. The organizational structure of the Authority is shown in Figure 1.

Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012



Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

Scranton is a Class 2A City with a Home Rule/Mayor-Council form of municipal government. The elected mayor has the power and responsibility to administer government operations. The elected SSA Board of Directors has the power and responsibility to enact legislation, approve agreements, and adopt an annual budget. Typically the budget is prepared by the SSA staff and submitted to SSA Board of Directors for approval. The City director of public works, appointed by the mayor and confirmed by council, is responsible for the O&M of the public streets and the public storm water drainage system in the City. The Manager of the Borough of Dunmore is responsible for the O&M of the public streets and the public storm water drainage system in the Borough. The SSA maintains the responsibility to set user rates that are sufficient to meet the obligations of the Authority, operating and capital wise.

SSA is the permittee for the Combined Sewer System and is responsible for routine O&M. Figure 1 shows the current SSA organization chart.

1.3 Budget

Normal O&M expenses for the facilities are the responsibility of SSA. Non-routine and extraordinary maintenance expenses, as well as capital improvements are also the responsibility of the SSA.

SSA prepares an annual operating budget of revenues and expenses. The budget for the fiscal year beginning each April 1 will include the funds budgeted for resources and staff for the O&M program. The Authority sets rates for customers in the City of Scranton and the Borough of Dunmore and outside municipalities for bulk treatment of sewage. These various revenues support operation of facilities and the debt service. The Authority has the power, to float tax-exempt bonds or otherwise obtain funds for the design and construction of facilities.

The City is responsible for highway operations including streets maintenance. Highway operations are supported through the City general and the liquid fuels fund. The general fund obtains revenue through property taxes, other taxes, state grants, and various fees. The liquid fuels fund obtains revenue from proceeds of the state motor vehicle liquid fuels tax.

The Authority as owner and operator of the sewer system provides long-term planning and day-to-day operation of the facilities. The Authority operates, maintains, and repairs facilities, conducts measurements and testing, and provides reports to comply with environmental requirements. The Authority retains a consulting engineer and legal counsel.

1.4 Critical Facilities

The critical elements of the combined sewer system are listed in general order of priority below. These facilities and their roles in the operation of the combined sewer system were previously characterized in the 1970 “Design Report” and the October 1994 “Combined Sewer Overflow Minimization Final Plan of Action” reports.

Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

PRIORITY	CRITICAL ELEMENTS OF THE COMBINED SEWER SYSTEM
1	Wastewater Treatment Plant
2	NPDES Outfall 003
3	Pump Stations
4	Diversion Chambers and CSO Outfalls
5	Sanitary Sewer Collection System
6	Combined Sewer Collection System

The operation, maintenance, inspection, and reporting requirements for the above-identified facilities (except the Treatment Plant) are outlined in the Collection System Operation and Maintenance Manual. This manual is to receive annual review to determine if revisions are needed. Requirements for the Treatment plant are listed in Wet Weather Operating Plan.

A list of the CSO regulators and their locations is included in the Collection System Operation and Maintenance Manual.

Trained SSA personnel will use the National Association of Sewer Service Companies (NASCO) ratings (numeric grades from 1-5, where 5 is the most significant defect) to rank its major trunk sewers, interceptors and each pump station by December 31, 2013.

1.5 Procedures for Routine Maintenance

The procedures for routine O&M are included in the Collection System Operation and Maintenance Manual. Typical O&M procedures that are part of the SSA manual include inspection with a CCTV camera, flow measurement, cleaning and removal of foreign materials, chemical treatment of roots, repair/rehabilitation of defects, and maintaining adequate records of inspections and findings.

SSA will use its JOBPLUS/CATS electronic work order management systems to identify and track all collection system routine maintenance. The JOBPLUS database contains all of SSA's Standard Operating Procedures for performing system maintenance. SSA inputs work orders from O & M manuals for new equipment in the JOBPLUS system, making modification as necessary to best fit SSA's process and applications. The JOBPLUS database generates work orders every Monday for each department, which complete tasks as they are able, depending upon the demands of the tasks, task priorities and available staffing. Consequently, tasks are not always completed within a given week, although SSA makes best efforts to perform assigned tasks within a weeks' time. All completed collection system inspection and cleaning is recorded in the CATS system. SSA managers use a map at the plant to direct crews' proactive maintenance through different areas of the collection system, generally working from north to south, and east to west, since the CATS system cannot generate work orders. CATS data is annually provided to SSA's regulators as part of its CSO Report. Although SSA currently cleans its system from north to south, SSA will evaluate cleaning from south to north, starting at the plant and working upstream.

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In 2011, SSA rededicated itself to maximizing the utility and use of the JOBPLUS database to memorialize SOPs and to schedule/track maintenance required and performed. SSA presently schedules and prioritizes maintenance in JOBPLUS. When SSA acquires new equipment for the plant, the manufacturer's recommendations contained in the accompanying O& M manuals are entered into the JOBPLUS database and adjusted to meet SSA's application of the equipment. Every Monday, managers print out preventive maintenance work orders from JOBSPLUS and distribute the work orders to each department, as appropriate. Work crews proceed with work based on these work orders. In addition, as needed, corrective action work orders are delivered to managers and distributed to work crews.

1.6 Non-Routine Maintenance and Emergency Situations

A call out list of private contractors is maintained for both the plant and the collection system to insure that repairs can be arranged outside of normal working hours to the extent outside assistance is necessary.

The Authority recognizes that the operation of the sewer utility may require the expenditure of funds that have not been budgeted. The Authority has secured a \$2 million revolving line of credit for extraordinary problems and expenditures for emergencies that can be accessed upon authorization by the Executive Director.

Management of emergencies in the collection system is also critical. Pipe failures can result in dry weather overflows. Upon notification by outside parties or upon discovery, the Authority takes immediate and appropriate steps to respond to the collection system problem, repair the problem and maintain or restore service to the customers. SSA's target response time for complaints and emergencies relating to collection system releases is as soon as possible. Typical response times are within an hour or two, depending upon the circumstances. Procedures are in place for arranging for bypass pumping between manholes if required to perform the work and SSA maintains a variety of pumps on hand, in addition to its call out list of private contractors, and is well equipped to respond to pump stations as necessary.

1.7 Inspections

Manual onsite inspections of all CSO discharge points will occur at least monthly; however, most outfalls are inspected several times each month in response to significant rain events and SSA will continue its practice of reviewing rainfall data and its correlation to activations at certain "problem" regulators. The result is that most outfalls are visited frequently each month whether due to (1) routinely scheduled inspections, (2) inspection following rain events, (3) in connection with outfall flow meter inspections, or (4) in connection with other visits/inspections. SSA will also regularly deploy a Vactor truck dedicated to CSOs, which it acquired and put into service in 2011.

Inspections include the following: (1) recording time of arrival and departure, (2) noting the inspection type (biweekly or rain event), (3) noting the condition of the outfall, (4) noting infiltration from the river, (5) noting if the gate was moving freely, (6) noting the weather

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conditions, (7) noting whether the wooden block was in or out, (8) noting whether discharge is present, and if so, (9) estimating rainfall, (10) noting the receiving waters, (11) estimating flow, (12) determining the cause of the discharge, (13) noting whether the discharge is wet weather or dry weather related, (14) estimating the duration of the discharge, (15) noting any erosion, (16) dispatching necessary equipment, (17) noting if solids and floatables being discharged, (18) noting whether a plume is present, and (19) performing sampling, noting any other maintenance needs for the regulator. Inspection forms will be completed for each CSO inspection. SSA will continue to employ a wooden block system to assist in verifying CSO activations.

These frequent physical inspections are supported by 1 permanent Sigma 950 flow meter, 4 permanent Sigma 940 flow meters, and 17 portable Sigma 910 flow meters thus providing monitoring at approximately one-third of the regulators in the system. Normal O&M of the wastewater facility occurs with records of operation maintained daily. A Computerized Managed Maintenance Program (CMMP) for preventative maintenance was initiated in January 2003. SSA is utilizing JOBPLUS. This program generates work orders and maintains inventory records. The program also tracks orders for parts and equipment. Historical records are stored in the CMMP database.

Pump stations will be inspected five days per week with logbooks and log sheets maintaining the O&M activities. This includes observations of blocks of wood placed in the emergency overflows and recording of storm pump operation.

Beginning in 2011, SSA undertook a grit cleaning program (televise, clean, re-televise). On a three-year, rolling basis, SSA will clean and inspect 150,000 feet of sewer lines per year, which effectively puts SSA on a 10-year cleaning schedule. SSA will conduct more frequent inspections for areas which warrant them. As appropriate, inspections will be digitally recorded and log sheets and digital recordings of the work will be maintained at the Treatment Plant and the SSA Board of Directors will be updated monthly on the progress of the program.

SSA inspects and cleans catch basins, manhole structures, and sewer lines each year. In our annual reports we will identify the following:

- Catch basins inspected – three-year rolling average of at least 2,000 per year. Catch basins will be inspected: (1) for the presence of a hood or trap (to retain floatables); (2) to determine the rate of solids accumulation (to facilitate a targeted cleanup schedule); and (3) to determine the physical condition of the basin (e.g., cracked, broken outlet pipe, adjacent street collapse) and to assign it a rating based on a consistent rating system.
- Catch basins cleaned – three-year rolling average of at least 2,000 per year.
- Catch basins repaired – as necessary consistent with the rating assigned to each catch basin, as follows: 1 – Excellent; Minor defects; 2 – Good; Defects that have not begun to deteriorate; 3 – Fair; Moderate defects that will continue to deteriorate; 4 – Poor; Severe defects that will become Grade 5 defects within the foreseeable future; or 5 – Attention required; Defects requiring a high priority for repair or attention to be made consistent with NASSCO standards, to return the catch basin to Good (2) or Excellent (1) condition, including the installation/replacement of hoods or traps.

Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

- Manhole structures inspected – SSA’s manholes are not labeled; however, SSA will assign identifiers to its manholes by January 1, 2013, and will update this section by March 1, 2013. In the meantime, SSA will inspect and clean all manhole structures at the same time it inspects and cleans the corresponding sewer segments.
- Manhole structures cleaned – see above.
- Manhole structures repaired/replaced – as necessary, consistent with the NASSCO rating assigned to each manhole; repairs to be consistent with NASSCO standards to return the manhole to Good (2) or Excellent (1) condition
- New manholes installed – as necessary.
- Sewer lines inspected – three-year rolling average of at least 150,000 feet per year.
- Sewer lines televised – three-year rolling average of at least 150,000 feet per year.
- Sewer line cleaned/jetted – three-year rolling average of at least 150,000 feet per year.
- Sewer lines replaced/repared – as necessary, consistent with the NASSCO rating assigned to each sewer segment; repairs to be consistent with NASSCO standards to return the sewer line to Good (2) or Excellent (1) condition.

SSA maintains a network of rain gauges, which are inspected at least monthly, with many being inspected twice a month. The SSA rain gauges are supplemented by other area rain gauges, such as the Wilkes-Barre-Scranton Airport. These other rain gauges are maintained by the gauge owners (such as the Airport Authority).

1.8 Training

The Authority provides and promotes training of operators and maintenance personnel. The Authority supports operator certification for all personnel. At present the SSA has 6 certified “A” Wastewater Operators. The Authority provides direct training in various aspects of sewer operations on an as needed basis. The State operator certification Act as well as other training requirements such as those needed for PENNVEST loan compliance will be accomplished.

1.9 Periodic Review of O&M Plans

The operations manual and other operational instructions will be reviewed annually, during the 4th quarter of each calendar year. SSA is scanning all key O&M Manuals into a central electronic database, searchable by title, and anticipates completion of this effort in FY 2012. During the annual review of O&M manuals, a summary report will be developed which will identify any modifications to the previous O&M plans and document the benefits realized from the specific revisions. SSA will also make best efforts to obtain electronic versions of O&M manuals and will incorporate them into the database.

In particular, SSA now requires that all O&M activities be logged in the JOBPLUS database. This will facilitate our recording and reporting of the extensive collection system O&M that is performed annually.

SSA has developed a wet weather operations plan for the WWTP (April 2011), and will develop plans that identify pre-event, during-event-, and post-event/recovery actions for the

Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

collection system components during the first quarter of 2012. The collection system component plans will present the necessary activities in two ways: (i) organized by event stage (pre-, during-, and post-event), and (ii) organized by collection system component. Upon completion of their development, those plans are incorporated herein by reference.

2.0 Maximum Use of the Collection System for Storage – NMC No. 2**2.1 Introduction**

The second of the nine minimum controls is to maximize the use of the collection system for storage of wet weather flows. The goal of this control is to enable the sewer system to store wet weather flows, as much as possible, until downstream sewers and treatment facilities can handle them. Control measures to obtain the goal include: inspection and removal of obstructions; tide and control gate maintenance and repair; regulator adjustment (including float mechanisms); reduction or retardation of inflows and infiltration; upgrade and adjustment of pumps; raising existing weirs and installation of new weirs. Any attempt to implement the typical measures to maximize the use of the collection system for storage must be tempered with the prevention of upstream basement and street flooding.

SSA has developed a hydraulic model and has worked extensively with Gannett Fleming and EPA/PADEP to evaluate and take full advantage of available collection system storage. This has included a number of weir height adjustments and modeling runs looking to fine-tune collection system performance. These evaluations will continue with the ongoing development of the LTCP.

By way of additional background, following the completion of the hydraulic model calibration in 2010, an evaluation of the CSO regulator settings, including pump station settings, was completed by Gannett Fleming using the calibrated model. The evaluation identified a number of CSO regulators that could be adjusted to reduce the number of CSO activations and improve capture of wet weather flows. The CSO regulators that were identified include the following:

- #004 Wells Street – The regulator sluice gate was removed in 2010. The intercepting capacity was increased from 1.0 MGD to 3.25 MGD.
- #006 Gardner Street – Recommendations include removal of the sluice gate and increasing the opening in the side of the regulator chamber. The intercepting capacity would increase from 2.28 MGD to 4.40 MGD.
- #016 Pettibone Street - Recommendations include removal of the sluice gate and increase the opening in the side of the regulator chamber. The intercepting capacity would increase from 1.94 MGD to 5.02 MGD.
- #034 East Parker Street – The regulator weir height was increased from 3.5 inches to 7 inches in 2010. The intercepting capacity was increased from 0.25 MGD to 0.89 MGD

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Gannett Fleming has used the hydraulic model to evaluate other locations where SSA can increase weir heights without causing in-system problems and these adjustments have been made. SSA will continue to work with Gannett Fleming to identify opportunities to safely and appropriately raise weirs throughout the system.

The weir at the Outfall 003 bypass has been analyzed by Gannett Fleming extensively. The existing weir elevation at Outfall 003 results in significant surcharging along the main interceptor and interceptor backflow at a number of other CSOs during heavy precipitation events. This weir is raised to the greatest extent possible.

2.2 Procedures in Place

2.2.1 O&M Manual

The SSA has existing procedures to maximize the available storage in the collection system. A Collection System O&M Manual is in place to provide procedures for the O&M of the regulator chambers and pumping stations by SSA employees.

SSA is scanning all O&M manuals for both the treatment plant and collection system into a central database so all manuals will be available to all staff. SSA will finish scanning the manuals and saving them to a dedicated location on SSA's server by April 1, 2013, where they will be accessible on SSA's network.

The JOBPLUS database (includes all permitted CSOs, but not pump stations, which will be added April 1, 2013) provides the appropriate instructions for each required collection system O&M task.

2.2.2 Pumping Stations

Pumping stations will be inspected by a dedicated inspection team five days each week. In order to monitor overflows, each pumping station has a block of wood or other suitable indicator device placed in the overflow pipe. During the inspection, the operators will record if the block is present or absent. Rainfall data from rain gauges will also be recorded. Correlation between precipitation and the presence/absence of the wood blocks, or other suitable indicator device, will be reported monthly as part of the Discharge Monitoring Reports (DMRs) and annually in the SSA Chapter 94 Wasteload Management Report. Anomalous information will be investigated and appropriate follow-up measures are implemented. Two pumping stations (Middle Street and Shawnee) are equipped with storm overflow pumps. Runtime meters are installed on the storm water pumps to monitor the quantity of flow pumped into the Lackawanna River. The Myrtle Street pumping station has two main pumps plus a larger capacity storm pump that conveys flow to the force main, maintaining flow in the system.

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2.2.3 Main Interceptor

The current configuration of the influent structure maximizes storage in the main interceptor. The flow that is allowed forward into the WWTP is 25-million-gallons-per-day (MGD) and a peak hourly flow of 39 MGD. The Bypass 003 elevation is set at approximately the crown of the 6.5-foot-diameter interceptor. The invert elevation of the interceptor is 644.86 feet and the invert elevation of the bypass is 650.68 feet. Therefore, the main interceptor must be flowing at nearly full capacity into the plant headworks before any discharge backs up to the point of overflow.

SSA is presently cleaning several major sections of the main interceptor and will report on removed volumes in the FY 2012 annual report. Reports of future scheduled cleaning activities will be integrated into annual budgetary forecasts of extraordinary maintenance & repairs. In the Annual CSO Report a Sediment and Debris Report will be included and submitted to the agencies.

Modeling of the main interceptor for hydraulic capacity and storage capability has been conducted as a part of the LTCP and is an ongoing effort toward optimizing wet weather storage in the interceptor. Weir height adjustments and other system refinements will be made in accordance with the modeling results and associated engineering evaluations.

2.2.4 Sewer Condition Assessment

A television inspection program is necessary to determine lines that are damaged, have root intrusion or silt build-up and may be limiting the upstream storage in the line. A television inspection program, which consists of a goal of inspecting sewers at a rate of 150,000 feet each year, has been established. SSA owns two television camera trucks. The cameras have been typically used to support maintenance activities. The length of lines to be televised will be a combination of those televised in support of normal maintenance activities and those of exploratory nature. Exploratory work will focus on priority areas tributary and those where CSOs have been identified for possible elimination.

2.2.5 Inlets and Catch Basins

Routine maintenance activities including inlet and catch basin cleaning and sewer flushing are performed by SSA. SSA has Vactor and clam trucks available for cleaning. All inlets and catch basins in the system will be cleaned on a maximum 3-year cycle. In priority areas cleaning will be scheduled as needed at a greater frequency interval with priority areas being cleaned twice annually. SSA will identify priority areas and inform EPA and PaDEP of the same by January 15, 2013. Additional cleaning will occur when problems are reported. As defects are observed, they will be reported to the City, Borough or State (PennDOT) for corrective action. Copies of daily work reports and monthly Board reports are maintained.

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SSA will televise and utilize the equipment for routine scheduled inspections. Where it is documented that sediment or other obstructions in non-major sewer lines are present, SSA will flush and/or schedule repair of the sewer. The removal of obstructions increases the storage capacity of the system and can reduce the volume of overflows. Where televising documents excessive clear water flow during dry weather, investigations will be performed to discover/identify the source of the inflow and/or infiltration, since the removal of extraneous flow increases the capacity of the system. Depending on the magnitude and severity, the SSA will schedule the repair/rehabilitation as a part of major capital or extraordinary repair under its annual budgetary program. In the case of storm sewer separation, projects may be referred to the appropriate party (City or Borough) for action. SSA enjoys acceptable levels of cooperation from the City and the Borough, and all known locations of clear water addition have been cooperatively addressed.

SSA personnel generally inspect flap tide gates monthly from topside and specific gates will be inspected as required from the interior. Certain gates, based on experience, are also inspected at least twice a year from the riverside to clean debris. Inspection of the downstream side of the tide gates will be completed monthly. The Collection System Operation and Maintenance Manual contains more specifics on regulator/gate inspection protocol. The function of tide gates is to minimize the receiving stream from flowing back into the sewer system during high river water levels. Proper maintenance is required to ensure that leaks and cracks are not present and that the gate is operating as designed. Leaks and cracks permit water to pass into the overflow and reduce the available downstream storage capacity of the system.

Per discussions with USEPA and PADEP, SSA is evaluating five outfalls where the hydraulic model suggests the possibility of inflows to the combined system. If any material inflow is confirmed to be occurring, SSA will evaluate the need and appropriateness of the installation of a gate or duckbill to prevent river water intrusion. SSA will report on its findings in the next annual report.

SSA continues to work with Red Valve, Inc. to identify a solution to the duckbill regulator for outfall 003. This regulator has allowed some river water intrusion into the treatment plant. Red Valve has already replaced the initial valve twice at SSA's request. As of the date of this plan, a third valve had been installed and appeared to be working properly.

Regulator settings will be adjusted and overflow weirs will be raised as practicable. Regulators are an important component of the CSO system as they regulate the amount of flow permitted into the downstream sewer and provide an outlet for excessive flows. Adjusting the regulator settings and increasing the overflow weirs may permit an additional amount of flow into the downstream sewer and will control the amount of flow discharged into the overflow line. Evaluation of the settings of the regulators was completed as part of the hydraulic modeling of the Lackawanna Watershed 2000 program. Further evaluation is ongoing as part of the CSO LTCP efforts and in response to evaluation requests from PADEP and USEPA.

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Catch basins in the City of Scranton and Borough of Dunmore will be evaluated. The design standards including the hood structure, sump and capacity of storm water discharge to the collection system will be investigated. The use of the hood and sump accomplish isolation of sewer odors, prevention of solids and floatables from entering the sewers, enable an effective means of capture of solids, and provide a reservoir for extracting the solids using non-labor-intensive equipment. The City of Scranton and Borough of Dunmore bear the responsibility to ensure that adequate storm water management is provided under their respective NPDES permits for the EPA Storm Water Phase II program, through a prescribed implementation of Best Management Practice (BMPs) and regulatory reporting. The SSA attempts to limit the amount of storm water discharging into the combined sewer system through a storm water policy. For new connections, the SSA adopted a “Policy on the Connection of Stormwater Discharges into the Combined Sewer System” on November 25, 2003, which includes requirements for effective inlet and catch basin design. This policy sets limits on peak storm water flow into the combined system by requiring storm water management at new developments, as well as requiring developers to look for storm water separation if existing storm conveyance systems or streams are nearby. The policy was provided to the City of Scranton, Borough of Dunmore and adjoining municipalities for incorporation into their storm water management policies and for enforcement. This activity is dependent upon the cooperative adoption of design standards by the municipalities. SSA estimates there are between 10,000 and 14,000 catch basins in its system, of which approximately 75% to 80% contain solids and floatables controls.

Wet wells at all pump stations will be cleaned once per year or more frequently if identified to be necessary by SSA staff through the every weekday pump station inspections. SSA has a pump station SCADA system in place which assists in evaluating dry and wet weather flows to each station. In-line flow meters will document flow, real-time recording rain gauges will document rainfall information (which can be used to correlate pump station flow), wet well levels will be continuously recorded (providing for monitoring of overflows) and storm pump operation will be documented.

Comprehensive CSO regulator and tide gate inspections are performed each year. Detailed assessment of all regulators and appropriate remedial measures are recorded and will be summarized in our annual reports.

Based on the urban setting and the lack of unused facilities, it is not feasible to provide additional in-system storage without significant capital additions to the system, which will be further evaluated in the LTCP.

SSA is working cooperatively with PADEP and USEPA to identify distributed storage solutions along the main interceptor and in other strategic locations as part of the LTCP effort.

2.4 Additional Measures

The LTCP will include evaluation of additional measures for maximum use of the collection system for storage.

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The pumping stations will be evaluated based on the monitoring being performed. Improvements required at the pumping stations will be determined.

3.0 Review and Modification of Pretreatment Requirements – NMC No. 3

3.1 Introduction

The third minimum control is the review and assessment of non-domestic source discharges on CSO impacts. The objective of this control is to minimize the impacts of discharges into combined sewer systems from non-domestic sources during wet weather events.

SSA has relatively few industrial users which collectively contribute an insignificant amount of flow to the collection system.

3.2 Pretreatment Requirements

SSA has worked closely with USEPA to maintain an updated pretreatment program. In 2011, SSA has issued new discharge permits to each of our significant industrial users. These permits reflect updated headworks analysis associated with our newly reissued NPDES discharge permit.

SSA's pretreatment program includes the identification and location of all possible industries, which may be subject to the program.

All permits will be enforced and industries that are in significant noncompliance with the pretreatment requirements will be published in the local paper as required by federal regulations.

The largest non-domestic user is the local landfill, which has already cooperatively agreed to hold waste within their lagoons during periods of wet weather. This will avoid potential non-domestic discharge through a permitted CSO. The SSA on-site inspections will support determination of compliance of industrial users.

Appropriate enforcement action will be taken to bring industrial users into compliance and the Enforcement Response Guide shall be fully implemented. The SSA will prepare quarterly reports and an annual report in accordance with NPDES permitting requirements. In addition, an educational letter concerning the impacts of wet weather discharges will be developed and sent to industries in the service area. The educational letter is being developed in an attempt to encourage industries to voluntarily act to reduce flows during wet weather periods.

During inspections of sewers, if oil and grease build-up is observed SSA will attempt to determine where it is originating and contact the source for resolution. All inspections and follow-up investigations will be documented. SSA does not have any chronic Food, Oils and Grease (FOG) areas that have not been addressed.

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4.0 Maximization of Flow to the WWTP for Treatment – NMC No. 4

4.1 Introduction

The fourth minimum control is to maximize the volume of combined wastewater that is processed at the municipal WWTP. The objective of this control is to minimize the amount of combined wastewater that is discharged untreated into receiving waters. The discussion below pertains to the WWTP as it is currently constructed and will have to be amended before completion of the expansion of the WWTP.

4.2 Measures to Increase Treated Flow Volumes

4.2.1 Collection and Conveyance Facilities

SSA has developed an O&M Program and has implemented the program. SSA will implement simple modifications to the collection and conveyance facilities based upon the results of the flow monitoring and modeling tasks being undertaken. CSOs in the system will be inspected on at least a monthly basis. The main interceptor will be probed at manholes to determine the depth of sediment, which will be documented. The main interceptor was cleaned in 2011.

SSA is maximizing flow to the WWTP. The current configuration of the influent structure maximizes storage in the main interceptor. The flow that is allowed forward into the WWTP is approximately 25 mgd with short-term peak flows of 39 mgd in accordance with the Wet Weather Operating Plan. The Bypass 003 elevation is set at approximately the crown of the 6.5-foot-diameter interceptor. The invert elevation of the interceptor is 644.86 feet and the invert elevation of the bypass is 650.68 feet. Therefore, the main interceptor must be flowing at nearly full capacity into the plant headworks before any discharge backs up to the point of overflow.

Based on staff comments, O&M experience and engineering observations, the existing system has no inoperative or unused facilities in the service area. Retaining flow, during wet weather events by utilizing unused facilities, is not applicable and the construction of additional facilities to retain flow is not feasible in this system, unless otherwise determined through the development of the LTCP. Hydraulic modeling of the collection and conveyance system to determine the hydraulic capacities is ongoing and will be included in the LTCP.

4.2.2 Pumping Stations

SSA will conduct and document draw down tests at each pumping station annually in conjunction with the PADEP Chapter 94 Report. The tests will be used to determine if adequate capacity is available at each of the stations. The results of the draw down tests will be utilized to further calibrate and adjust the sewer system model. Simple modifications (*i.e.*, wet well pump operation level adjustments) will be performed and more complex modifications will be evaluated. Pumping stations with storm water pumps are equipped with run hour meters. During inspection of these pumping stations, storm water pumps frequency and quantity of flow is recorded.

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The LTCP will include modeling of wet weather events to determine required capacity and complex modifications that are required to pumping stations based on achieving and maintaining the necessary capacity.

4.2.3 WWTP

A peak flow hydraulic capacity study of the WWTP has been performed to determine the capacity and capabilities of the WWTP under high-flow conditions. The analysis identified that the WWTP should be capable of properly treating a peak hourly flow of 34 to 39 mgd. After the peak hourly flow, the WWTP should be able to properly treat a flow between 25 to 30 mgd for the next 23 hours. The flows should then be sustained between 20 to 30 mgd with a maximum monthly WWTP flow of 20 mgd. SSA will not divert flow, unless an emergency situation occurs, less than what can be properly treated as documented by the Peak Flow Hydraulic Capacity Study. If flow is diverted before the WWTP peak and sustained capacities are reached, the reason why the flow could not be treated and the quantity of flow bypassed will be documented.

SSA has a Wet Weather Operating Plan, which consists of an operating protocol for the use of the Outfalls 001 (main plant outfall), and 003 (upstream of headworks). The WWTP hydraulic capacity goals and guidelines through the secondary treatment system were established as follows:

Permit Flow Parameter	Goal (mgd)	Guidelines for Acceptable Performance (mgd)
Annual Average Flow/ Average Monthly Flow	20	Up to 20
Maximum Average 24 hr Flow	25	23 to 30
Peak Hourly Flow	39	34 to 42

The WWTP Wet Weather SOP, including proposed protocols for accepting peak flows, remains under development. The plans will reflect SSA's experience, which has strongly indicated the need for flexibility in implementing the peak flow goals. These goals must be viewed in the context of tradeoffs between overall plant maintenance parameters and total amounts of wastewater required to be bypassed. When the flows entering the treatment plant exceed 25 mgd, the headworks are negatively impacted by heavy loadings of grit. SSA continues to address influent flow measurement and is working with its consultants, as well as its state and federal regulators, to address this issue.

The plant headworks has been a continuing limitation on our ability to process peak wet weather flows. After years of grit-related problems, we upgraded the grit removal systems using a Eutek/Hydro International system of grit snails. This new grit system has been unsuccessful in handling the grit which we are experiencing. This has led to major operational problems and the need to use Outfall 003 while the grit systems have been chronically down for cleaning. As a result, SSA is currently in litigation with Eutek/Hydro International, as well as the design engineering firm. In the meantime, SSA is evaluating other grit removal options in conjunction

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with the LTCP effort. Notwithstanding the ongoing litigation, in 2011, SSA cleaned the main interceptor and the branch interceptors.

We have worked daily to try to find a solution to the inability of the new grit system to handle incoming grit. Based upon performance testing, it was established that the grit snails could not handle the specified capacity of grit. SSA is in settlement negotiations with the grit snail manufacturer over this performance deficiency. In the interim, SSA has implemented a grit box system that is working well and will continue to be used in the indefinite future. PADEP has been notified of this situation.

In some instances, such as successive peak flow events, the operator has an obligation to exercise engineering judgment to reduce wet weather flows in order to protect the mechanical integrity of the system and to prevent the need for even more extensive bypasses. Such engineering judgment cannot be replaced by an inflexible peak flow requirement of 39 mgd. Thus, it may be necessary from time to time to discharge to outfall 003 during peak flows of less than 39 mgd, in order to protect the biological or mechanical integrity or general operating capability of the plant. Such decision must rest in the sole discretion of the plant operator and will be meticulously documented. In the event of such discharges, the reporting requirements of the NPDES permit will be followed, and where an SSA operator exercises professional judgment in managing flows inconsistent with flow thresholds in the NPDES permit, SSA will provide appropriate notifications to PaDEP per applicable permit requirements.

The SSA will implement the following operating and monitoring protocols:

- Operating mechanisms will be set to convey a peak flow of 39 mgd to the treatment plant for one hour and 25 mgd thereafter;
- Outfall 003 may discharge if the combined sewage flows to the WWTP exceed 39 mgd for more than one hour in a twenty-four hour period and the SSA is in compliance with the EPA Notice of Compliance Order and all permit conditions. The discharge from Outfall 003 may continue for as long as the combined sewage flows to the WWTP equal or exceed 25 mgd.
- If flow is discharged from Outfall 003 when combined flows have not exceeded 39 mgd for more than one hour in a twenty-four hour period, or have not sustained 25 mgd thereafter, SSA will notify DEP and EPA within 24 hours of the discharge.
- SSA will collect data from Outfall 003 using the flow chart meter.
- SSA will collect data on the flow through the WWTP measured in Mgal on an hourly basis.
- SSA will submit monitoring information on a monthly basis to DEP for each instance in which there is a discharge through Outfall 003.

The grit system has been a major source of frustration for SSA. Despite the daily challenges to keep this system operating, SSA has redoubled its efforts and dedicates plant personnel to directly monitor the system during wet weather events. SSA is evaluating options for a long-term solution as part of the LTCP.

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5.0 Elimination of CSOs During Dry Weather – NMC No. 5

5.1 Introduction

The fifth minimum control is to minimize CSOs during dry weather periods when the sewer system is not conveying significant quantities of storm water. The collection, conveyance and treatment facilities must have sufficient capacity to be able to handle peak dry weather flow. In addition, the facilities are operated and maintained to minimize the potential for overflows during dry weather (i.e. blockages, pump malfunctions, etc.).

5.2 Measures Necessary

SSA will inspect all CSOs at least on a monthly basis. See Section 1.7, above. These inspections coupled with SSA’s extensive metering program allow the detection – usually at an early stage – of any dry weather overflows.

SSA will document all overflow inspections conducted and maintenance performed. SSA will document all overflows on the CSO Discharge Monitoring Reports and submit the reports to the Pennsylvania Department of Environmental Protection.

Dry weather overflows are identified by SSA’s practice of chalking or placing a block of wood in the overflow pipe at the pumping stations and CSO Regulators. Generally, historic dry weather overflows have been due to blockages. Any lines that experience chronic blockages will be televised, cleaned and repaired or replaced as necessary to attempt to eliminate the occurrence of future blockages in these lines. Evaluation of other potential modifications to eliminate DWOs will be performed on a case-by-case basis as potential future chronic locations are identified.

Comprehensive CSO regulator and tide gate inspections were performed during September/October 2004, October/November 2009 and re-inspections are ongoing as part of SSA’s daily inspection program and CSO LTCP effort.

The permanent signage located at each CSO was revised to the following language, “NOTICE Scranton Sewer Authority Combined Sewer Outfall Untreated Sewage CSO # _____. This site is at or downstream of a Combined Sewer Overflow. Avoid water-related activities during discharges or heavy rains. To report a discharge call 570-348-5337.” The signage will enable the general public to report malfunctions.

CSO signs will be maintained and replaced promptly in the event a sign is missing or damaged.

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6.0 Control of Solids and Floatable Material – NMC No. 6

6.1 Introduction

The sixth minimum control is intended to reduce visible floatables and solids from CSO discharges and receiving waters. Controls such as baffles, screens or racks can be included in the combined system to remove solids and floatables before reaching the receiving water. Floatables can be removed from larger receiving water with the use of booms and skimmer vessels. In addition, pollution prevention measures can be utilized to reduce the amount of extraneous floatables and solids entering the combined system.

6.2 Study

SSA performed a study of available controls for solids and floatables and determined that baffles in certain outfalls, coupled with pipe hoods in system catch basins would be the most effective approach for SSA to control solids and floatables. Baffles in CSOs continue to be evaluated and implemented.

6.3 Combined Sewage Control Methods

6.3.1 Collection System Control

The catch basin design will be evaluated to ensure adequate storm water control while attempting to reduce the amount of storm water and debris entering the combined system. Catch basins can be modified to prevent floatables from entering the combined system. Inlet grates can be installed at the top of the catch basins to reduce the street debris that can enter. Trash buckets can be installed in the basin below the grate to retain floatables while letting the stormwater pass to the combined system. Hoods are vertical cast iron baffles that are installed in basins. Hoods are effective for retaining debris within catch basins. A basin can be modified with a vortex valve, which is a throttling device to reduce the frequency and volume of a CSO event and control floatables.

Due to the fact that there are thousands of catch basins in the contributing municipalities, the plan of action to modify the basins will be limited to hoods. It would be cost prohibitive to the contributing municipalities to enact a more elaborate retrofit program. On November 25, 2003, the SSA adopted an updated policy for storm water discharges into the combined sewer system, which included requirements for effective inlet and catch basin design. This policy sets limits on peak storm water flow into the combined system by requiring storm water management at new developments, as well as requiring developers to look for storm water separation if existing storm conveyance systems or streams are nearby. The policy will be provided to the City of Scranton, Borough of Dunmore and adjoining municipalities for incorporation into their storm water management policies and for enforcement. This activity is dependent upon the cooperative adoption of design standards by the municipalities.

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The effectiveness of a catch basin in controlling floatables is dependent on regular maintenance and cleaning. All inlets and catch basins in the system will be cleaned on a maximum six-year cycle. In priority areas, cleaning will be scheduled generally twice annually. Additional cleaning will occur when problems are reported. SSA will document cleaning and input information onto a map and into a database. Through marking/updating inlet and catch basin locations, the map data will be retained for later incorporation into electronic mapping of the sewer system. As defects are observed, they will be reported to the City, Borough or State for corrective action.

SSA has an extensive catch basin hood program. The hoods (bent pipe elbows) are reported to be quite effective at catching solids and floatables. Based upon the experience of SSA's collection system crews in direct response to queries from SSA's Deputy Director for Compliance, SSA believes that 75-80% of all SSA catch basins have some form of hood in place. SSA is currently installing PVC hoods in all remaining catch basins as it performs maintenance on catch basins.

6.3.2 CSO Control

Screens and trash racks are a series of vertical and horizontal bars or wires designed to remove coarse and floating debris from CSOs. The efficiency of this control is based on the design size and typically ranges from 25-90 percent of the total solids. Fine screens are more effective at removing smaller particles but they are also more susceptible to clogging and require additional maintenance. The effectiveness of screening units is reduced significantly by the presence of oil and grease. In order for trash racks or screens to be utilized, the outfall pipe must be an adequate length or land space available for a small structure and outfall must be high enough above the receiving water to permit regular maintenance. Trash racks and screens require regular inspection and maintenance. Application of any of these devices is capital intensive and would be further considered in the floatable control study and the LTCP.

Baffles are floatable control devices that can be installed in a discharge chamber in front of the overflow weir. Baffles are simpler than many of the other control methods and they have lower operating and maintenance costs. The design of the diversion chamber flow regulator and overflow weir determines the effectiveness of the baffles. The discharge chamber and overflow weir must be designed to provide reasonably uniform flow at a low velocity to ensure that floatables are not entrained.

Baffles have been installed at five diversion chambers on a pilot basis. The basic design of the baffle is the same for all of the regulators in the pilot project, but each baffle was customized to fit to the specific regulator such that they are not interchangeable among regulators. The baffles will continue to be monitored during and after storm events. SSA is evaluating the installation of baffles at approximately 10 more sites for FY 2012 and will report on those installations during the next annual report. These sites will be drawn from sites identified by EPA and will include outfalls where SSA staff can perform the installation (which means it will definitely occur in FY 2012) along with other installations that will require an engineering analysis and outside resources to implement (which means a longer schedule may be necessary than FY 2012).

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Regulator and diversion chambers will be inspected monthly and cleaned as required. The inspection and cleaning will be documented in a form similar to the one located in the Collection System O&M Manual.

6.3.3 End-of-Pipe Controls

End-of-Pipe Controls are not currently in place in the SSA system. We have not found these controls to be effective for the SSA system.

6.4 Receiving Water Removal Methods

Receiving water removal methods are not currently utilized in the SSA receiving waters.

6.5 Source Control Methods

Street sweeping can be effective method to control the amount of street debris entering the combined system. SSA has obtained documentation from the City and Borough regarding the schedules for street sweeping. SSA has purchased its own street sweeper to facilitate effective street sweeping.

SSA will enforce the industrial pretreatment program to reduce the amount of extraneous material entering the combined system.

SSA has developed a website to inform the public about the combined sewer system. The website will include educational information addressing street litter. SSA will endeavor to support the City and Borough relative to disseminating educational messages that will advise residents of the importance of proper trash disposal related to the sewer system.

Labeling of specific catch basins is being implemented to identify that the combined sewer system interconnects directly to the receiving streams and that no dumping is allowed. Note that labeling within our GIS has been implemented and documented, but the physical labeling of each basin is still ongoing and is subject to availability of resources.

SSA has also approved a proposal from the Lackawanna River Corridor Association (LRCA) to develop a Public Education and Outreach Program. Among the tasks of the proposed program, SSA is working with LRCA to develop educational materials, identify target audiences and stakeholders, and utilize communication channels to reach and involve target audiences. SSA will conduct educational events for schools and community groups, develop volunteer opportunities for public involvement, and conduct public education meetings. A Household Hazardous Waste program will also be evaluated under the LRCA proposal.

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Pollution Prevention Programs – NMC No. 7

7.1 Introduction

The seventh minimum control is the implementation of pollution prevention programs to reduce contaminants in CSOs. The objective of this control is to reduce to the greatest extent possible, the amount of contaminants that enter the combined sewer system.

7.2 Measures Necessary

SSA will provide information regarding pollution prevention on the website. In addition, pollution prevention information is included in sewer bill mailings.

SSA is evaluating continuation of a marking program to further raise public awareness of the connection between urban impervious area runoff and local water quality.

SSA has developed a website that will be used to provide educational information regarding recycling, proper disposal of waste, proper fertilizer and lawn care products application, and spent oil drop-off programs. The stakeholders involved with the LTCP development will be involved in determining the educational material to be placed on the website and any additional programs to inform residents.

SSA contacted the Lackawanna County Solid Waste Management Authority and determined that there is no collection of household hazardous waste in the area.

SSA is utilizing a clam truck for cleaning. All inlets and catch basins in the system will be cleaned within six years. Additional cleaning will occur when problems are reported.

Street sweeping can be effective method to control the amount of street debris entering the combined system. In concert with NMC No. 6, SSA will obtain documentation from the City and Borough when streets were swept. SSA has purchased its own street sweeper to facilitate street sweeping.

A Household Hazardous Waste program will also be evaluated under the LRCA Public Education and Outreach Program. SSA would like to have such a program, but it must be prioritized in light of all other regulatory commitments.

8.0 Public Notification – NMC No. 8

8.1 Introduction

The eighth minimum control is public notification to inform the public of the location of CSO outfalls, the actual occurrences of CSOs, and the potential health and environmental effects of CSOs.

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8.2 Communications Strategy

SSA currently provides educational materials in sewer bill mailings. SSA will continue to provide educational material to residents.

The permanent signage located at each CSO was revised to the following language, “NOTICE Scranton Sewer Authority Combined Sewer Outfall Untreated Sewage CSO # _____. This site is at or downstream of a Combined Sewer Overflow. Avoid water-related activities during discharges or heavy rains. To report a discharge call 570-348-5337.” The signage will enable the general public to report malfunctions.

SSA has developed a website to inform residents about the about the sewer system and proper operation of the system. Also, the site includes appropriate precautions, risks, potential health hazards, locations of the CSO discharges and incidents of DWOs.

SSA is also working with the Lackawanna River Corridor Association (LRCA) to develop and implement a Public Education and Outreach Program. Among the tasks of the proposed program, SSA will coordinate with LRCA to develop educational materials, identify target audiences and stakeholders, and utilize communication channels to reach and involve target audiences. SSA will conduct educational events for schools and community groups, develop volunteer opportunities for public involvement, and conduct public education meetings. A Household Hazardous Waste program will also be evaluated under the LRCA proposal.

SSA has also implemented additional controls at selected outfalls to prevent public access to CSO facilities (such as large diameter outfalls) and to ensure public safety. Recent fencing at Outfall 023 is a good example of these activities.

9.0 Monitoring to Characterize CSO Impacts – NMC No. 9

9.1 Introduction

The ninth minimum control is monitoring through visual inspections and other simple methods to determine the occurrence and apparent impacts of CSOs.

9.2 Characterization Measures

9.2.1 Mapping

The SSA has a comprehensive set of sewer system index drawings. Additionally, the details of most sewers are contained in original "spur books" obtained from the City Engineer's office for sewers constructed generally prior to 1960, "ward book" sewer mapping for expanded information on all sewers, and engineer's design or record drawings for construction since 1970. GIS mapping was performed as part of the Lackawanna Watershed 2000 program and has been updated by SSA during 2010 and 2011. The SSA has purchased a GPS grade survey unit to continually update this GIS system, as was done through 2010 into 2011.

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9.2.2 Water Quality and Uses

SSA has compiled existing water quality data for the following receiving waters: Lackawanna River, Leggetts Creek, Roaring Brook, Stafford Meadow Brook and Keyser Creek.

As discussed below, using Hawk Mountain Labs, SSA has obtained ambient water quality data at key locations in our CSO receiving waters during the past several years.

The designated uses of some of the local waters in the Scranton area that receive CSO discharges include (as well as the universal designated uses of: Public Water Supply, Boating, Fishing, Water Contact Sports and Esthetics):

- Lackawanna River Warm Water Fishes
- Meadow Brook Cold Water Fishes
- Leggetts Creek Trout Stocking
- Roaring Brook Cold Water Fishes
- Keyser Creek Cold Water Fishes

However, actual uses of these water bodies may be different, which will be inventoried as part of the LTCP.

SSA has developed a comprehensive 3-year water quality monitoring program built upon previously performed water quality studies conducted by SSA as presented in the December 2006 Draft LTCP Report. The Water Quality Monitoring Program began in 2009 and is intended to establish baseline conditions and includes both dry weather and wet weather characterization:

- Dry weather river and stream characterization is intended to provide a baseline water quality description of the existing conditions of the SSA receiving waters to characterize water quality without inputs from CSO or stormwater discharges from the SSA service area. Dry weather monitoring occurs at 14 locations along the Lackawanna River and its six (6) tributaries (Leggetts Creek, Meadow Brook, Roaring Brook, Little Roaring Brook, Stafford Meadow Brook, and Keyser Creek), as well as the SSA WWTP Effluent Outfall No. 001.
- Wet weather river and stream characterization is intended to provide information, that when analyzed in conjunction with the other characterizations, will define the CSO contribution to, and stormwater impact on, water quality of the SSA receiving waters. Wet weather monitoring is conducted at the 14 dry weather monitoring locations, as well as five (5) CSOs (CSO Outfall Nos. 003, 004, 016, 023, and 029), and two (2) stormwater outfalls. Wet weather samples are taken on an hourly basis to depict changes in water quality during and following a wet weather event.

Laboratory analysis of the river and stream samples includes biochemical oxygen demand (BOD), total suspended solids (TSS), total dissolved solids (TDS), oil and grease,

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dissolved oxygen (DO), pH, temperature, microbiological parameters (fecal coliform and *E. coli*), metals (total chromium, total copper, total lead, total mercury, total nickel, and total zinc), and nutrients (ammonia nitrogen, total nitrogen, and total phosphorus). The initial 3 year program includes approximately 20 dry weather sampling events and 2 wet weather sampling events. A benthic macro-invertebrate characterization was also conducted in 2011 to supplement the water quality data in assessing the effects of CSO discharges on receiving water quality in the SSA service area, and to serve as a benchmark for measuring improvements through long-term monitoring. The biota characterization analysis includes EPT Index (%), Hilsenhoff Biotic Index (HBI), Taxa Evenness, and Taxa Richness determinations. The results of this study will be used to assess and quantify the general aquatic health of the ecosystems and compared with previous and future studies to identify trends in the biotic community.

The planning incorporated into the initial 3-year Water Quality Monitoring Program has established the groundwork for on-going water quality monitoring throughout the SSA service area. At the completion of the initial monitoring program in summer 2012, a comprehensive report will be developed detailing the findings of the program and outlining recommendations for future water quality monitoring activities. This information will be included in the LTCP.

9.2.3 System Monitoring

SSA employs flow meters and its updated and calibrated hydraulic model to monitor CSO activations and volumes. SSA has rotated the meters and believes the model is adequately calibrated. SSA will continue to evaluate appropriate locations for in-system meters

SSA visually inspects CSO discharges and documents apparent impacts. This activity will continue in the future. Observations of debris discharged from the CSOs is recorded on inspection forms and inputted into the Authority's electronic database. Also in 2010 the SSA has put their CSO and flowmeter teams on a wireless system allowing direct communication with the Authority's JOBPLUS database. This approach allows more a more efficient and productive CSO inspection program.

SSA is evaluating several outfalls for the potential installation of baffles in an effort to minimize post-activation accumulation of debris.

SSA characterizes the frequency, duration and volume of CSO discharges on a monthly basis in the DMRs. Meters and wooden blocks are used to determine whether regulators have been active. Inspections document the dates the regulators were checked and presence/absence of previous overflows. This information is provided with the monthly DMR.

SSA will monitor flow with permanent and portable flow metering equipment at 15 CSO regulators. SSA installed flow-monitoring devices at the pumping stations as part of the improvements under Phase III of the Capital Improvements Program. Continuous flow monitoring at these select sites will provide information and documented data on frequency, duration and volumes of wet weather overflows. Rain gauges have been installed throughout the sewer system.

Scranton Sewer Authority – CSO Nine Minimum Controls Plan – September 2012

Dry weather overflows will be recorded when observed or when determined from public calls to the SSA office. SSA will document and track public complaints after receiving them.

9.2.4 Impact Data and Trends

SSA will compile trends on an annual basis of:

- frequency of measured overflow volumes where monitored
- rainfall data
- observations of debris discharged
- incidents of DWOs
- reports of water quality problems attributed to CSO discharges
- public complaints
- weir adjustments – dates, previous elevation, new adjusted elevation

These data are being evaluated as part of the development of the LTCP.

APPENDIX B

SCRANTON SEWER AUTHORITY
CSO LONG TERM CONTROL PLAN
CSO CONTROL IMPROVEMENT SCHEDULE

PHASE	YEAR	OUTFALL #	LOCATION	DISTANCE FROM OFBH (RIVER MILES)	CSO CONTROL TYPE	RECEIVING STREAM	STORAGE VOLUME, ESTIMATED (MG)	TOTAL CAPITAL COST, ESTIMATE	EXISTING OVERFLOW VOLUME (mg)	SCORING	
										Total Score	Ranking
A	1	#066	Burke Street	10.045	Offline Box Culvert	Roaring Brook-Natural	0.134	\$1,740,000	1.841	16	2
A	1	#080	Keyser Valley PS	7.192	Inline Box Culvert	Keyser Creek	0.025	\$790,000	0.801	16	3
A	1	#067	Keyser Creek	7.102	Combined With Other	Keyser Creek	N/A	\$1,100,000	0.325	0	
A	2	#087	Leggetts-Kelly	12.881	Inline Box Culvert	Leggetts Creek	0.047	\$880,000	0.684	17	1
A	2	#072	Leggetts Street	12.805	Offline Box Culvert	Leggetts Creek	0.300	\$2,340,000	4.711	15	5
A	2	#065	Drinker Street	11.705	Inline Box Culvert	Little Roaring Brook	0.023	\$780,000	0.171	14	8
A	3	#035	Sanderson Avenue	10.788	Sewer Separation	Lackawanna River-Upper	N/A	\$190,000	1.475	15.5	4
A	3	#037	Brown Avenue	10.599	Offline Box Culvert	Lackawanna River-Upper	0.017	\$1,120,000	0.879	14.5	7
A	3	#011	Von Storch Avenue	9.160	Offline Box Culvert	Lackawanna River-Upper	0.372	\$2,760,000	8.283	13.5	9
A	3	#017	Vine Street	8.201	Offline Box Culvert	Lackawanna River-Lower	0.042	\$1,490,000	1.282	13.5	10
A	4	#020	E Lackawanna Avenue	7.802	Offline Box Culvert	Lackawanna River-Lower	0.302	\$2,870,000	8.812	13.5	11
A	4	#052	Wyoming Avenue	6.394	Inline Box Culvert	Lackawanna River-Lower	0.023	\$790,000	0.477	13.5	12
A	4	#081	Pittston - Brook	6.710	Inline Box Culvert	Stafford Meadow Brook	0.081	\$1,020,000	0.934	15	6
A	4	#084	639 E Elm St	6.974	Offline Box Culvert	Stafford Meadow Brook	0.288	\$2,370,000	0.693	13	13
A	4	#083	Irving-Elm	7.166	Replace Regulator	Stafford Meadow Brook	N/A	\$90,000	0.684	0	
A	4	#085	644 E Elm St	6.971	Replace Regulator	Stafford Meadow Brook	N/A	\$80,000	1.393	0	
B	5	#079	Myrtle Street PS	9.516	Offline Box Culvert	Roaring Brook-Natural	0.182	\$1,860,000	2.663	13	14
B	5	#033	W Parker Street	11.424	Inline Box Culvert	Lackawanna River-Upper	0.013	\$740,000	0.324	12.5	15
B	5	#038	Wurtz Avenue	10.486	Offline Box Culvert	Lackawanna River-Upper	0.117	\$1,590,000	4.012	12.5	16
B	5	#078	Shawnee Avenue PS	11.046	Inline Box Culvert	Lackawanna River-Upper	0.009	\$720,000	0.46	12.5	17
B	5	#040	W Market Street	10.087	Inline Box Culvert	Lackawanna River-Upper	0.017	\$870,000	0.81	11.5	19
B	5	#012	Grove Street	9.102	Offline Box Culvert	Lackawanna River-Upper	0.087	\$1,640,000	2.234	11.5	20
B	6	#018	Love Road	8.087	Offline Box Culvert	Lackawanna River-Lower	0.160	\$1,850,000	4.536	11.5	21
B	6	#019	Linden Street	7.986	Offline Box Culvert	Lackawanna River-Lower	0.897	\$5,430,000	19.26	11.5	22
B	7	#021	W Scranton Street	7.621	Offline Box Culvert	Lackawanna River-Lower	0.750	\$4,960,000	1.757	11.5	23
B	7	#022	Washburn Street	7.468	Combined With Other	Lackawanna River-Lower	N/A	\$120,000	18.944	0	
B	8	#030	Prescott Avenue	8.095	Offline Box Culvert	Roaring Brook-Natural	1.357	\$6,700,000	23.747	12	18
B	8	#024	Hickory Street	7.021	Offline Box Culvert	Lackawanna River-Lower	0.245	\$2,430,000	4.157	11.5	24
B	9	#025	Willow Street	7.031	Offline Box Culvert	Roaring Brook-Channel	0.360	\$2,740,000	6.049	11.5	25
B	9	#049	River Street	7.285	Inline Box Culvert	Roaring Brook-Channel	0.014	\$770,000	0.291	11.5	28
B	9	#073	Front Street	7.835	Replace Regulator	Roaring Brook-Channel	N/A	\$80,000	0.128	0	
C	10	#027	Washington-Locust	6.394	Offline Box Culvert	Lackawanna River-Lower	0.211	\$2,090,000	5.294	11.5	26
C	10	#047	Broadway Street	7.063	Inline Box Culvert	Lackawanna River-Lower	0.013	\$830,000	0.345	11.5	27
C	10	#068	S Sixth Avenue	6.156	Offline Box Culvert	Lackawanna River-Lower	0.020	\$1,140,000	1.523	11.5	29
C	10	#053	Cedar Avenue	6.580	Replace Regulator	Stafford Meadow Brook	N/A	\$80,000	0.145	0	
C	10	#082	Locust - Cedar	6.606	Inline Box Culvert	Stafford Meadow Brook	0.045	\$1,120,000	0.564	11	30
C	11	#086	414 Maple St	6.610	Replace Regulator	Stafford Meadow Brook	N/A	\$80,000	0.278	0	
C	11	#004	Wells Street	11.590	Offline Box Culvert	Lackawanna River-Upper	0.482	\$3,690,000	7.467	10.5	31
C	11	#031	Leggetts Creek	11.690	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	1.112	0	
C	12	#006	Gardner Avenue	9.479	Offline Box Culvert	Lackawanna River-Upper	0.296	\$2,390,000	3.905	10.5	32
C	13	#013	Poplar Street 24-inch	8.969	Offline Box Culvert	Lackawanna River-Upper	1.559	\$7,520,000	3.49	10.5	33
C	13	#014	Poplar Street 90-inch	8.967	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	23.985	0	
C	14	#015	Gordon Avenue (Pinebrook)	8.279	Precast, Post-Tensioned Tank	Lackawanna River-Lower	1.360	\$10,967,000	36.524	10.5	34
D	15	#023	Luzerne Street	6.775	Offline Box Culvert	Lackawanna River-Lower	0.466	\$3,620,000	19.385	10.5	35
D	16	#029	Genet Street	5.978	Offline Box Culvert	Lackawanna River-Lower	0.867	\$5,030,000	19.074	10.5	39
D	17	#003A	WWTP Overflow	5.374	Precast, Post-Tensioned Tank	Lackawanna River-Lower	2.850	\$17,753,000	93.295	10.5	40
E	19	#045	Emmett Street	7.131	Inline Box Culvert	Lackawanna River-Lower	0.008	\$1,130,000	0.33	10.5	36
E	19	#048	Washington-Alder	6.940	Inline Box Culvert	Lackawanna River-Lower	0.014	\$740,000	0.374	10.5	37
E	20	#051	Birch Street	6.915	Inline Box Culvert	Lackawanna River-Lower	0.017	\$860,000	0.34	10.5	38
E	20	#005	Love Place	9.935	Offline Box Culvert	Lackawanna River-Upper	0.086	\$1,850,000	2.483	9.5	41
E	21	#043	Olive Street	8.319	Offline Box Culvert	Lackawanna River-Upper	0.059	\$1,390,000	1.315	9.5	42
E	21	#028	Fig Street	6.191	Offline Box Culvert	Lackawanna River-Lower	0.075	\$1,800,000	2.611	9.5	43
E	22	#016	Pettibone Street	8.138	Offline Box Culvert	Lackawanna River-Lower	0.921	\$4,700,000	17.86	9.5	44
E	23	#007	Philo Street	9.441	Offline Box Culvert	Lackawanna River-Upper	0.685	\$3,770,000	4.341	8.5	45
E	23	#008	Hawk Street	9.379	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	14.291	0	
E	23	#026	W Elm Street	6.549	Offline Box Culvert	Lackawanna River-Lower	0.263	\$2,740,000	1.826	8.5	46
E	24	#055	Drinker Place	10.804	Offline Box Culvert	Lackawanna River-Upper	0.761	\$7,670,000	5.989	7.5	47
E	24	#056	Boulevard Avenue	10.801	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	2.562	0	
E	24	#057	Richmont Street	10.807	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	0.019	0	
E	24	#058	Grandview Street	10.850	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	0.129	0	
E	24	#059	Woodlawn Street	10.924	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	1.287	0	
E	24	#060	Park Avenue	10.999	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	0.496	0	
E	24	#061	Morel Street	0.000	None	Lackawanna River-Upper	N/A	\$0	0	0	
E	24	#062	Fisk Street	0.000	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	0.268	0	
E	24	#063	Olyphant South 24-inch	11.153	Combined With Other	Lackawanna River-Upper	N/A	\$120,000	1.936	0	
E	24	#064	Olyphant North 12-inch	11.148	None	Lackawanna River-Upper	N/A	\$0	0	0	
E	25	#075	Capouse Avenue	9.730	Offline Box Culvert	Meadow Brook-Channel	0.158	\$2,030,000	2.7	6.5	48
E	25	#032	Watkins Street	11.634	Replace Regulator	Lackawanna River-Upper	N/A	\$80,000	0.06	0	
E	25	#034	E Parker Street	11.288	Replace Regulator	Lackawanna River-Upper	N/A	\$80,000	0.175	0	
E	25	#036	Tioga Street	10.658	Replace Regulator	Lackawanna River-Upper	N/A	\$80,000	0.535	0	
E	25	#069	Crane Street	4.346	Replace Regulator	Lackawanna River-Lower	N/A	\$80,000	0.485	0	
E	25	#074	Marion Street	9.597	Replace Regulator	Meadow Brook-Channel	N/A	\$80,000	0.076	0	
E	25	#076	Sanderson-Marion	9.525	Replace Regulator	Meadow Brook-Channel	N/A	\$100,000	0.093	0	
Total							17.078	\$139,600,000	401.784		

Appendix B
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*Note: the Scoring and Ranking columns and the color coding indicate how the projects were evaluated and grouped by the SSA in developing the LTCP.

IMPLEMENTATION OF APPENDIX B PROJECTS

The projects in Appendix B shall be implemented in accordance with the following schedule:

All of the projects in Phase A shall be complete by December 1, 2016.

All of the projects in Phase B shall be complete by December 1, 2021. Moreover, as interim milestones:

- at least 5 of the projects in this phase will be complete by December 1, 2017;
- at least 7 of the projects in this phase will be complete by December 1, 2018;
- at least 9 of the projects in this phase will be complete by December 1, 2019; and
- at least 12 of the projects in this phase will be complete by December 1, 2020.

All of the projects in Phase C shall be complete by December 1, 2026. Moreover, as interim milestones:

- at least 4 of the projects in this phase will be complete by December 1, 2022;
- at least 7 of the projects in this phase will be complete by December 1, 2023;
- at least 9 of the projects in this phase will be complete by December 1, 2024; and
- at least 11 of the projects in this phase will be complete by December 1, 2025.

All of the projects in Phase D shall be complete by December 1, 2029. Moreover, as interim milestones:

- at least 1 of the projects in this phase will be complete by December 1, 2027; and
- at least 2 of the projects in this phase will be complete by December 1, 2028.

All of the projects in Phase E shall be complete by December 1, 2037. Moreover, as an interim milestone, at least 13 of the projects in this phase will be complete by December 1, 2033.