
Exhibit 1

CERTIFICATE OF SERVICE

I hereby certify that on this 24th day of September 2010 that I served by first class mail the Civil Cover Sheet, Complaint (Waiver of Service of Summons to follow) and Notice of Lodging of Proposed Consent Decree, to the following:

Russ Sacco, Esquire
53 South Main Street
Yardley, PA 19067
215-321-0300 (phone)
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PAUL W. KAUFMAN
Assistant United States Attorney

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA
and COMMONWEALTH OF
PENNSYLVANIA,

Plaintiffs,

v.

BRISTOL TOWNSHIP,

Defendant

Civil Action No.

CONSENT DECREE

WHEREAS, Plaintiff, the United States of America ("United States"), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), and co-Plaintiff, the Commonwealth of Pennsylvania Department of Environmental Protection ("Commonwealth," "PADEP," or "Department") acting at the request and on behalf of the Secretary of PADEP have filed the Complaint in this action seeking injunctive relief and civil penalties pursuant to Section 309 of the Clean Water Act, 33 U.S.C. § 1319 ("Clean Water Act" or "CWA"), naming as Defendant, Bristol Township (hereinafter referred to as "Defendant" or "Bristol" or "Township" or "Bristol Township") for Defendant's alleged violations of the federal Clean Water Act, 33 U.S.C. §§ 1251-1387, and the Pennsylvania Clean Streams Law, Act of June 22, 1937, P.S. 1987, *as amended*, 35 P.S. §§ 691.1-691.1001 ("the Clean Streams Law");

WHEREAS, the Defendant owns and operates a sanitary sewer collection system and wastewater treatment plant that serves the citizens of Bristol Township;

WHEREAS, pursuant to Section 402 of the Act, 33 U.S.C. § 1342, EPA has authorized the Commonwealth to administer the National Pollutant Discharge Elimination System (“NPDES”) in Pennsylvania;

WHEREAS, the Department has issued an NPDES permit to Bristol Township authorizing the discharge of treated effluent from the Defendant’s wastewater treatment plant;

WHEREAS, the United States alleges that Defendant has violated and continues to violate Sections 301 and 307 of the Clean Water Act, 33 U.S.C. §§ 1311 and 1317, by discharging pollutants exceeding various effluent limitations and conditions set forth in Defendant’s NPDES permit as well as violating the requirements of the federally approved pretreatment program;

WHEREAS, the United States alleges that Defendant has violated Section 301 of the CWA, 33 U.S.C. § 1311, with the occurrence of unpermitted discharges from sanitary sewer overflows (“SSOs”), including unpermitted discharges on September 30, 2004 and December 30, 2006;

WHEREAS, the Department alleges that Defendant has violated and continues to violate Sections 201 and 202 of the Clean Streams Law, 35 P.S. §§ 691.201 and 691.202 by discharging pollutants exceeding various effluent limitations and conditions set forth in Defendant’s NPDES permit;

WHEREAS, the Department is the agency with the duty and authority to administer and enforce the Clean Streams Law, and Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, 71 P.S. § 510.17 (“Administrative Code”) and the rules and regulations promulgated thereunder;

WHEREAS, Bristol Township exists under the laws of the Commonwealth of Pennsylvania with its office located in Bristol Township, Bucks County. The mailing address of

that office is 2501 Bath Road, Bristol, PA 19007. The Township is considered a “municipality” as that term is defined in Section 1 of the Clean Streams Law;

WHEREAS, the Commonwealth alleges that Defendant has violated the Clean Streams Law, 35 P.S. 691.401, with the occurrence of unpermitted discharges from SSOs, including those that occurred on December 30, 2006 and July 20, 2007;

WHEREAS, the United States and Commonwealth allege that Defendant has violated its NPDES permit by failing to submit accurate discharge monitoring reports;

WHEREAS, the United States and Commonwealth allege that Defendant has violated its NPDES permit by failing to properly operate and maintain the Publicly Owned Treatment Works (“POTW”);

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

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

NOW THEREFORE, it is hereby ORDERED, ADJUDGED and DECREED as follows:

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I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action and over the Parties to this action pursuant to Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b), and 28 U.S.C. § 1331. The Complaint states claims upon which relief may be granted against the Defendant for injunctive relief and civil penalties under Section 309 of the Clean Water Act, 33 U.S.C. § 1319, and Sections 601 and 605 of the Clean Streams Law, 35 P.S. §§ 691.601 & 691.605. Venue is proper in this District pursuant to Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and 1395(a). Defendant waives any and all objections or defenses that it might have to the Court's jurisdiction to enter and enforce this Consent Decree or to venue in this District.

II. BINDING EFFECT

2. The provisions of this Consent Decree shall apply to and be binding on the United States and the Commonwealth, and on Bristol Township, its agents, successors, and assigns.

3. Within thirty (30) days from the Date of Lodging of this Consent Decree until its termination, Defendant shall give written notice of and provide a copy of this Consent Decree to any person or entity to whom Defendant may transfer ownership or operation of any portion of Waste Water Treatment Plant ("WWTP") and/or Collection System. The Defendant shall notify EPA, the Department and the United States Department of Justice in writing of any successor in interest at least twenty-one (21) days prior to any such transfer. No transfer of ownership or operation of the POTW and/or Collection System shall relieve Defendant of its obligations to ensure that the terms of this Consent Decree are implemented.

4. Defendant shall be solely responsible for ensuring that performance of the work contemplated under this Consent Decree is undertaken in accordance with the deadlines and requirements contained in this Consent Decree, and any exhibits hereto. Any action taken by

any contractor or consultant retained to implement Defendant's duties under this Consent Decree shall be considered an action of Defendant for purposes of determining compliance with this Consent Decree. In an action to enforce this Consent Decree, Defendant shall not assert as a defense against the United States, EPA or the Department any act or failure to act by any of its officers, council members, managers, commissioners, employees, agents, contractors, successors and assigns; however, this Consent Decree shall not limit Defendant's right to take all appropriate action against any person or entity that causes or contributes to Defendant's failure to perform.

III. PURPOSE

5. The express purpose of the Parties entering into this Consent Decree is for Defendant to take all measures necessary to comply with the Clean Water Act and the regulations promulgated thereunder, and the Clean Streams Law and the regulations promulgated thereunder, to ensure compliance with Defendant's NPDES permit limitations and requirements, proper operation and maintenance of the WWTP and the collection system, and effective implementation of Defendant's Pretreatment Program.

IV. DEFINITIONS

6. Unless otherwise defined herein, the terms used in this Consent Decree will have the meaning given to those terms in the Clean Water Act, 33 U.S.C. §§ 1251-1387, and the regulations promulgated thereunder or, if not defined in the Clean Water Act or its regulations, then as defined in the Clean Streams Law, 35 P.S. §§ 691.1-691.1001, and the regulations promulgated thereunder. Any other words shall be given their ordinary meaning.

The following terms used in this Consent Decree, its appendices, and studies and plans submitted by Defendant and approved by EPA and the Department will be defined as follows:

(a) "Act 537" shall mean the Pennsylvania Sewage Facilities Act, 35 P.S. §§ 750.1, *et seq.*, and "537 Plan" shall mean a municipality's Official Plan Revision as defined in the Pennsylvania Sewage Facilities Act.

(b) "Annual Report" shall mean the report submitted by Defendant, including, but not limited to, the Chapter 94 report, defined below, on or before March 31 of each calendar year pursuant to Section VI, Paragraph 41 of this Consent Decree.

(c) "Bypass" shall mean the intentional diversion of wastewater either at or after the headworks of the plant.

(d) "Chapter 94 Report" shall mean the annual report required by Section 94.12 of the Pennsylvania Code, Title 25, Chapter 94, Municipal Wasteload Management.

(e) "CAP" shall mean a Corrective Action Plan as defined in the Pennsylvania Code, Title 25, Chapter 94, Municipal Wasteload Management and shall include any additional requirements imposed by this Consent Decree.

(f) "CMP" shall mean a Connection Management Plan, which is that portion of a CAP defined in Chapter 94, Section 94.21(a)(3), as "limitations on and a program for control of new connections to the overloaded sewerage facilities and a schedule showing the dates each step toward compliance with Section 94.21(a)(2) shall be completed."

(g) "Collection System Components" shall mean those components of the Sanitary System Collection System, described below, and specifically including all pipes, force mains, gravity lines, pump stations, sanitary sewer lines, lift stations, manholes and their respective related appurtenances, owned, operated or maintained by Bristol Township.

(h) "Construction Completion" of a construction project under Paragraph 26 or a rehabilitation or other corrective action project proposed under Paragraph 26 shall mean the point in time the new, modified, or rehabilitated facilities are functioning.

(i) "Date of Lodging" shall mean the date on which the Consent Decree is lodged with the United States District Court for the Eastern District of Pennsylvania.

(j) "Day" or "days" shall mean a calendar day or calendar days. When the day a report or other deliverable is due under this Consent Decree falls on a Saturday, Sunday or any Federal, Commonwealth of Pennsylvania or Defendant's legal holiday, Defendant shall have until the next calendar day that is not one of the aforementioned days for submittal of such report or other deliverable, with the exception of Rainfall and Flow Monitoring reports required by Paragraph 19.h.4 of this Consent Decree.

(k) "Department of Justice or DOJ" shall mean the United States Department of Justice and any successor departments or agencies of the United States government.

(l) "Discharge" shall mean a spill, release or diversion of sewage.

(m) "Force main" shall mean any pipe that receives and conveys wastewater from the discharge side of a pump. A force main is intended to convey wastewater under pressure.

(n) "Industrial User" shall mean a source of indirect discharge, including any Significant Industrial User.

(o) "Infiltration" shall mean water, other than Sewage, that enters a sewer system through structural or mechanical defects in the system.

(p) "Inflow" shall mean water, other than Sewage or Infiltration, that enters a sewer system from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, French drains, foundation drains, streams, springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, storm water, surface runoff, street wash waters or drainage.

(q) "Information Management System" or "IMS" shall mean the system utilized, in accordance with Paragraph 12 of the Remedial Measures Section (Section V) of this Consent Decree, to track Sanitary Sewer Overflows, to identify known existing and potential sources of Sanitary Sewer Overflows and to maintain and manage the information necessary to operate and maintain Bristol's Collection System to eliminate existing Sanitary Sewer Overflows and avoid future Sanitary Sewer Overflows. The Information Management System shall consist of a

maintenance management system or systems, a Geographic Information System (“GIS”) or the functional equivalent, and a Pretreatment Data Management System Plan.

(r) “Maintenance Management System” shall mean the computer system that Bristol shall develop and utilize in accordance with Paragraph 12 of the Remedial Measures Section of this Consent Decree (Section V) to collect information regarding the operation, maintenance and performance of the Collection System, including maintenance history, repair history, and the status of the maintenance work to be implemented and completed under the Consent Decree, and the publicly owned treatment works.

(s) “NPDES Permit” or “Permit” shall mean the currently effective NPDES permit No. PA-0026450 originally issued to Defendant on January 10, 2002, amended on May 17, 2004, effective June 1, 2004 and which was renewed and later became effective on November 1, 2007. The permit authorized the discharge of treated effluent and set forth requirements regarding the operation and maintenance of the Facility and Collection System as well as effective implementation of the pretreatment program.

(t) “Operation and Maintenance Plan” shall mean the plan that Bristol shall develop and submit in accordance with the requirements contained in Paragraph 16 of the Remedial Measures Section (Section V) of this Consent Decree to respond adequately to the occurrence of Sanitary Sewer Discharges in its Collection System to protect human health and welfare.

(u) “Parties” shall mean the United States of America, the Commonwealth of Pennsylvania and Defendant.

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

(w) “Plant” or “Facility” shall mean the publicly owned treatment works (POTW) located at 1800 River Road, Croydon, PA 19021, owned and operated by Bristol Township. This Facility provides wastewater treatment service for a portion of Bristol Township.

(x) "Pollution" shall mean contamination of any waters such as will create or is likely to create a nuisance or to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, including but not limited to such contamination by alteration of the physical, chemical or biological properties of such waters, or change in temperature, taste, color or odor thereof, or the discharge of any liquid, gaseous, radioactive, solid or other substances into such waters.

(y) "Pretreatment Data Management System" shall mean a computerized system developed in order to achieve and maintain full and complete compliance with the pretreatment requirements set forth in Defendant's approved pretreatment program, Defendant's NPDES permit, the CWA and the implementing regulations promulgated thereto.

(z) "Pretreatment Program" shall mean the currently approved and effective pretreatment program of Bristol Township developed in accordance with 40 C.F.R. Part 403.

(aa) "Preventive Maintenance" shall mean any inspection, condition, assessment, equipment and/or facility servicing, cleaning, upgrading, or other similar activity undertaken to help and/or maintain the components and/or the operation of the Collection System.

(bb) "Pump Station" shall mean facilities comprised of pumps which lift wastewater to a higher hydraulic elevation, including all related electrical, mechanical, and structural systems necessary to the operation of that pump station.

(cc) "Sanitary Sewer Discharge" or "SSD" shall mean any Discharge (as defined above) from Bristol's Collection System through a point source not specified in any NPDES permit to "Waters of the United States," and/or "Waters of the Commonwealth."

(dd) "Sanitary Sewer Overflows" or "SSOs" shall mean any Discharge from the Collection System, including, but not limited to, any SSDs.

(ee) "Sanitary Sewer Collection System" or "Collection System" shall mean the collection and transmission system (including all pipes, force mains, sanitary sewer lines, lift

stations, pump stations, manholes, and appurtenances thereto, owned by Defendant and designed to convey only sewage, and not storm water, from residences, commercial buildings, industrial plants and institutions for treatment at Defendant's wastewater treatment plants, including portions of the system added after the Date of Lodging of the Consent Decree.

(ff) "Sewage" shall mean any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or animals and any noxious or deleterious substances being harmful or inimical to the public health, or to animal or aquatic life, or to the use of water for domestic water supply or for recreation, or which constitutes pollution under the Clean Water Act or the Clean Streams Law.

(gg) "Significant Industrial User" has the meaning as set forth in 40 C.F.R. § 403.4(t) and as used in Defendant's current approved pretreatment program. The regulatory definition of 403.4(t) shall control in the case of any conflict.

(hh) "Table of Deliverables", attached hereto as Appendix "F" is a list of deliverables, along with their due dates, under the Consent Decree.

(ii) "United States" shall mean the United States of America, acting on behalf of EPA.

(jj) "WQM Permit" shall mean a Water Quality Management Permit, aka Part II Permit, aka Clean Streams Law Permit for the construction and operation of the wastewater sewerage facilities. WQM permits are required for treatment plants, pumping stations, force mains, interceptors, and large collection systems.

(kk) "Waters of the Commonwealth" shall mean the "Waters of the Commonwealth" of Pennsylvania, as that term is defined in the Clean Streams Law.

(ll) "Waters of the United States" shall mean the "waters of the United States" as that term is defined in 40 C.F.R. section 122.22.

V. REMEDIAL MEASURES

A. GENERAL DUTIES

7. Duty to Comply with Permit At all times Defendant shall comply with all terms, conditions and requirements of the currently effective NPDES Permit, including the effluent limitations and with the Clean Water Act and the regulations promulgated thereunder.

Discharges of pollutants from the Facility or Collection System are prohibited except as authorized by the NPDES permit. In addition, Bristol shall eliminate SSOs and SSDs from the Collection System through development and implementation of the measures set forth in Paragraphs 11 through 32, below.

8. Operation and Maintenance of the Facility Defendant shall at all times maintain in good working order and properly operate and maintain the Facility, Collection System, Pump Stations and laboratory (including appropriate lab controls and quality assurance procedures).

9. Reports and Deliverables All plans, reports or other deliverables required under the terms of this Consent Decree shall be submitted to both EPA and the Department for review and approval. All plans and schedules submitted to and approved by EPA and the Department pursuant to this subsection shall be incorporated into and become enforceable under this Consent Decree.

10. Relationship between Federal and State Deliverables Plaintiffs and Defendant agree that any plans, reports, and/or other deliverables required to be submitted under any Section of this Consent Decree may also be submitted or combined with any reports or plans required solely by the Department under the Department's Chapter 94 and/or Act 537 requirements. Notwithstanding the above, this Consent Decree shall not excuse Defendant from meeting any deadlines, schedules and requirements pursuant to Act 537 and Chapter 94 of the Pennsylvania Code.

B. INTERIM COMPLIANCE – PLAN OF ACTION (“POA”)

11. Within one hundred and eighty (180) days of the Date of Lodging of this Consent Decree, Defendant shall submit to EPA and the Department all deliverables required under the POA as set forth in this section and in Section V.C. – V. G., below. Defendant shall implement the specific requirements of the POA according to the schedule developed therein. The EPA and the Department will have 120 days in which to review this submission and respond to it, which time period will be incorporated into the deliverables and the POA. In the event that the Department or the EPA fails to respond within 120 days and that failure is not due to the incompleteness of the Township’s submission, the Township will be entitled to an extension of time for each affected obligation described in the deliverables and the POA equal to the amount by which the Department or the EPA exceeded 120 days. Upon approval by EPA and the Department of the POA, all requirements and schedules detailed therein and provided thereunder shall be enforceable under this Consent Decree. The following elements of the POA are required to be submitted to EPA and the Department:

12. Information Management System Plan

a. Defendant shall submit to the EPA and the Department a plan for development of an Information Management System. Defendant shall continue to populate the attributes of the IMS as data is collected through the SSES on a schedule detailed in said plan. Within one year of the date of lodging, Defendant shall generate 11 x 17 inch GIS maps of each sewer service area tributary to the Defendant’s pump stations. The maps should illustrate the existing attributes in the Defendant’s GIS system, and should illustrate all intermunicipal connections. In populating these attributes, Defendant may rely upon design data. However, within this one year period, Defendant will verify the accuracy (“ground truth”) of at least 10% of the area depicted on the map through physical inspection of the items depicted therein and shall report to the EPA and the Department on the results of this verification process. The EPA and the Department may, in their sole discretion based on the results of this verification process,

insist that the Defendant physically verify the accuracy of all structures and elements depicted on the GIS system within eighteen (18) months of such decision being transmitted to Defendant in writing.

b. At a minimum, the plan submitted as part of the POA shall include a schedule providing for the population of the following attributes:

1. SSOs
2. SSDs
3. A Maintenance Management System (“MMS”) designed to manage and track all Maintenance activities, including but not limited to scheduled preventive and predictive maintenance tasks, as well as emergency (reactive) maintenance tasks. The MMS shall track both assigned and completion dates of maintenance tasks.
4. All Collection System components, private and public, including any public components owned by other municipal entities or authorities.
5. Attribute data for Sewer Segments including:
 - a. Date of installation (if available);
 - b. Pipe length;
 - c. Age;
 - d. Inverts at manholes;
 - e. Slope;
 - f. Flow Direction;
 - g. Diameter (dimensions if not cylindrical);
 - h. Type (e.g. gravity or pressure);
 - i. Material (if available);
 - j. Nominal capacity (i.e. Manning) design;
 - k. Geographical location; and
 - l. Interconnections with other municipalities and authorities.

6. Display attribute data for structures including:
 - a. Structure type (e.g. siphon, manhole, junction box, force main, air relief valve);
 - b. Invert elevation;
 - c. Geographic location; and
 - d. Age.

Defendant shall certify that it has developed an IMS that is adequate to track SSOs and SSDs, to identify known existing and potential sources of SSOs and SSDs and to maintain and manage the information necessary to operate and maintain Defendant's Collection System to eliminate SSOs and SSDs and avoid future SSOs and SSDs. Upon implementation of the IMS, Defendant shall certify by letter to EPA and the Department that the IMS is fully functioning. Defendant shall report on its progress toward compliance in the Annual Report required pursuant to Paragraph 41 of this Consent Decree.

13. Supervisory Control and Data Acquisition ("SCADA") system

- a. Defendant shall develop and implement a plan for a SCADA system consisting of an electronic monitoring system for the monitoring and control of the Facility and Collection System. At a minimum, the SCADA system shall provide for monitoring influent or effluent flow metering data and alarms at all pump stations, influent and effluent flow metering at the Facility, and treatment unit processes at the Facility. The schedule shall provide for installation of the SCADA system in accordance with the following:

1. Within one year of the Date of Lodging, install SCADA (including Facility control panel and telemetry) at four pump stations chosen by the Defendant based upon the Defendant's engineers' assessment of performance and reliability of all of the pumping stations in Defendant's system.

2. Within two years of the Date of Lodging, install SCADA (including telemetry and interface with the Facility control panel) at four additional pump stations chosen by the Defendant based upon the Defendant's engineers' assessment of performance and reliability of all of the pumping stations in Defendant's system.
3. Install SCADA (telemetry and interface with Facility control panel) at the remaining pump stations in accordance with the Plan of Action (V.B.11.) and the Capital Improvement Plan (V.D.25.) schedules or within three years of the Date of Lodging, whichever occurs sooner.
4. Defendant's engineers determine the stations at which the SCADA will be installed based solely on the performance and reliability of the existing stations. Defendant's engineers shall not consider cost in making this determination.
5. Within eighteen months of the Date of Lodging, install SCADA (including telemetry and interface with Facility control panel) for monitoring sludge handling units at the Facility (sludge levels within the digesters, sludge blankets in the primary and secondary clarifiers and amount of waste sludge removed from the Facility for disposal).
6. Install SCADA (including telemetry and interface with Facility control panel) for all treatment unit processes at the Facility in accordance with the Plan of Action (V.B.11.) and the Capital Improvement Plan (V.D.25.) schedules or within ten (10) years of the Date of Lodging, whichever comes sooner.
14. Reserved
15. Pump Station Maintenance Plan
 - a. For each Pump Station, Defendant shall develop and submit for review, in accordance with Section VIII, a Preventive Maintenance program appropriate to the type, size and permitted capacity of the Pump Station which includes the following elements:

1. For each Pump Station in its sewer system, Defendant shall provide for: adequate inventory of equipment, pumps and motors; appropriate, necessary and periodic servicing and calibration of Pump Station instrumentation; periodic inspection of the Pump Station; and periodic servicing of all Pump Station equipment.

2. All Preventive Maintenance and repair activities undertaken at any Pump Station shall be documented and tracked under the automated IMS system, when such system becomes operational. Prior to the IMS system completion, such activities shall be tracked manually.

3. Defendant shall maintain and periodically review and update Pump Station standard operating procedures (“SOPs”) for each of its Pump Stations, appropriate in detail and format to the type, size and permitted capacity of the particular Pump Station. For purposes of this provision, if any physical or operational changes are made at a Pump Station, the periodic review and update of the SOP shall occur no later than ninety (90) days from completion of the physical change or initial implementation of the operational change in question.

4. Defendant shall prioritize the evaluation of those Pump Stations that have been identified by the Defendant as hydraulically overloaded in accordance with ¶ 24, *infra*, as well as those specifically identified by the Department as hydraulically overloaded in the Department’s April 1, 2008 review of the Bristol Township 2006 Chapter 94 Report, attached hereto as **Appendix “A.”** These pump stations include the Silver Lake, Palmer Avenue, Delaware Avenue, College Park, and Beaver Dam Road pump stations, and any other places found to be hydraulically overloaded.

16. Operation and Maintenance Plan

Within two years of the date of lodging of the Consent Decree, Defendant shall develop and submit to EPA and the Department for review, in accordance with Section VIII, a system-wide, comprehensive Operation and Maintenance (“O&M”) Plan for the Facility and the

Collection System that will provide for the proper operation and maintenance of equipment while minimizing failures, malfunctions, and line blockages that could contribute to SSOs due to lack of adequate preventive care. The O&M Plan shall, at a minimum, provide for the achievement and maintenance of compliance with all applicable permits, laws, and regulations. The Plan shall include an identification of existing key processes and assessment of the vulnerability of each such process from human caused (both internal and external) threats, and from natural threats. A process shall be considered key if its failure or malfunction may endanger human or aquatic health. The Plan shall detail a method for monitoring each process, such as by inspection and/or SCADA monitoring, to inform personnel of a malfunction or failure within each such process. Preventive and emergency maintenance procedures shall be detailed for all identified key processes including the spare parts inventory required and vendor information for obtaining critical parts. As part of the identification of each key process, Defendant shall assess the vulnerability of said processes and the associated life-span of each item of electrical and mechanical equipment. Defendant shall develop SOPs for sampling procedures, record keeping, daily and weekly maintenance, sludge management and annual inspection and assessment of key processes and related equipment. Defendant shall develop a plan for employees to be trained in the new operation and maintenance plan as well as a schedule and plan for refresher training. Defendant shall also assess the need for provision of commonly required spare parts, and the lead time generally needed to obtain such parts. Additionally, Defendant shall create and maintain an adequate spare parts inventory for servicing key processes and/or have contracts in place for timely repairs by reputable contractors. Upon approval by EPA and the Department, Defendant will immediately implement this O&M Plan.

17. Interim High Flow Maintenance Plan Defendant shall submit to EPA and the Department, for review, in accordance with Section VIII, an interim wet weather operational strategy, or Interim High Flow Maintenance Plan, that includes both the Facility and the Collection System. Defendant shall implement this Interim High Flow Maintenance Plan in

accordance with the proposed schedule therein. This strategy shall provide for maximizing the flow to and through the Plant while minimizing the washout of solids throughout the treatment process. This strategy shall include process monitoring during periods of wet weather flow. The data compiled during this operation shall be used for an annual evaluation and modification of the wet weather strategy, which must be included in the Annual Report.

18. Interim Plant Improvement Plan Defendant shall submit an interim plant improvement plan, as further described below, to the EPA and the Department, for review and approval in accordance with Section VIII of this Decree. This plan shall be a revision to the capital improvements schedule in Defendant's report entitled "Evaluation of Existing Bristol Township Sanitary Sewer Facilities," approved by the Department in December 2006 and attached hereto as **Appendix "B."** Defendant shall provide a revised construction schedule of this work to be completed such that items previously scheduled for fiscal year 2008-2009 will be completed within twelve (12) months of the Date of Lodging of this Consent Decree, except that improvements to the I-95 Pump Station will be completed within 2 years. Upon approval by EPA and the Department, in accordance with Section VIII of this Decree, Defendant shall immediately implement this plan and construction schedule.

- a. In addition, beginning with the Annual Report and continuing for every twelve (12) month period, Defendant shall provide a summary of the tasks that have been completed pursuant to **Appendix "B."**

19. Sewer System Evaluation Survey

a. SSES Work Plan. The EPA and Department acknowledge that Defendant has successfully conducted substantial inflow and infiltration ("I/I") work on the system and has expended significant sums to perform this work. Within one hundred and twenty (120) days of Consent Decree lodging, Defendant shall submit to EPA and the Department for review and approval, a Work Plan for continuing a Sewer System Evaluation Survey ("SSES") to: a) identify sewersheds where excessive I&I exists, such that these conditions are causing and/or

contributing to SSOs (including Public or Private Property Backups), overloading and/or Bypasses at the WWTP; b) identify and quantify sources within the sewersheds determined to have excessive I/I rates; c) identify and quantify the time period of occurrence and volume of SSOs; d) identify areas subject to Public/Private Property Backups; e) identify cross connections and unauthorized connections; and f) identify physical degradation of the Collection System, including general pipe condition and condition of force mains, that causes or contributes to SSOs (including Public/Private Property Backups):

b. The SSES shall involve the use of appropriate and accurate existing attribute data concerning the Collection System, and as necessary, the collection and use of additional physical attribute data for the Collection System; the use of verified existing rainfall and flow data, and as necessary, the collecting and use of additional flow data for the Collection System; the monitoring of WWTP flows and flows at key locations within the Collection System; the monitoring of groundwater and rainfall at appropriate locations throughout the Collection System; the physical investigation of the causes of I/I and SSOs, including Public/Private Property Backups; and the documentation of the condition of the portions of the Collection System causing or contributing to SSOs and specifically identifying portions of the Collection System causing or contributing to Building/Private Property Backups.

c. The SSES shall incorporate existing monitoring and characterization data only to the extent that it is of adequate quality and for locations appropriate for the purposes of the survey. The SSES Work Plan shall (a) identify all existing data to be utilized; (b) identify all additional data to be collected; (c) describe in detail how together the existing and proposed additional data will satisfy the objectives of the SSES; and (d) include a schedule for performing and completing a SSES that is as expeditious as possible within a maximum period of eighteen (18) months after submission of the SSES Work Plan.

d. The SSES Work Plan shall include a schedule for the expeditious installation of appropriate sewer flow, WWTP flow, groundwater level, and rainfall monitoring

equipment; completion of all monitoring activities by completing an expeditious review of all investigative activities; and for completing the analysis of the data collected and submitting an SSES Report to EPA and the Department no later than twenty four (24) months from Consent Decree lodging. Defendant shall implement the plan, in accordance with the schedule, upon submission of such plan and schedule to EPA and the Department.

e. To identify sources of excessive I/I, the SSES should be conducted by dividing the Collection System into appropriate sewersheds. Sufficient rainfall and flow data at key locations in each sewershed should be collected to allow the characterization of each sewershed's I/I contribution. In lieu of rainfall monitoring, Defendant may use valid rainfall data collected by other sources as long as such data was collected according to sound engineering practice and has been properly quality assured and quality controlled. Examples of such rainfall data sources are the National Oceanic and Atmospheric Administration ("NOAA"); United States Geological Survey ("USGS"); and local airport rain gauge data. All sewersheds should then be prioritized, based on I/I contribution and wet weather peaking factors, and subsequent investigations carried out in a sufficient portion of the Collection System to allow the preparation of a Collection System and WWTP Remedial Measures Plan (as described in Sub-Section V.F) that has the goal of eliminating all SSOs, including all Public/Private Property Backups

f. Investigative activities, such as CCTV inspection should focus on portions of the Collection System that cause or contribute to SSOs, including those portions subject to Public/Private Property Backups.

g. The SSES shall include (and the SSES Work Plan shall describe) at a minimum the following requirements:

1. Data Management: A description of the data management system that will organize, analyze, and report all existing data to be utilized and all of the data that Defendant will be collecting in accordance with this Paragraph;

2. Quality Control/Quality Assurance: A description of the quality assurance and quality control program Defendant will follow to ensure the accuracy and reliability of data collected or used in accordance with this Paragraph;

3. Data Review: A review of existing data concerning SSOs, sewage flows, WWTP and Collection System attributes (e.g., pipe diameters, pipe segment lengths, diversion structure characteristics, catchment characteristics, invert elevations, pipe interior roughness coefficients, etc.), and rainfall and groundwater levels; and an evaluation of the accuracy, completeness and adequacy of that data for purposes of supporting the characterization of the Collection System's condition and sources of extraneous wet weather flow. The data review will further identify all additional data needed to allow the SSES to satisfy the objectives stated herein;

4. Rainfall and Flow Monitoring: As part of the SSES, Defendant shall carry out all additional dry and wet weather rainfall flow monitoring as needed to satisfy the requirements of this Paragraph. Where the review of existing data under Paragraph 19.c above, is adequate to satisfy the requirements of this Consent Decree, Defendant may use such data to complete both this SSES and the Collection System Rehabilitation required by Section E, in lieu of the collection of new and additional data. Dry weather monitoring shall be carried out so as to allow the characterization of base flows and Infiltration rates. Wet weather monitoring shall be carried out following wet weather events of sufficient duration and intensity to cause significant I/I in the system to allow the collection of sufficient rainfall and flow monitoring data, to allow the prioritization of sewersheds described above, and to support the development of Collection System Rehabilitation required by Section E. The locations, types and rationale for placement or use of rain gauges, flow monitors, and any other equipment required by this Section and a discussion of how Doppler radar will be employed (if appropriate) shall be included in the SSES Work Plan.

5. Rainfall Gauges: To monitor the contribution from rainfall to a sewershed within Defendant's jurisdictional boundaries, Defendant shall use a network of rain gauge stations in accordance with industry standards and sound engineering practice. Defendant may use rainfall data collected by others as described in Paragraph 19.e.

6. Flow Monitoring: Flow data shall be collected using a system of permanent and/or temporary flow monitors placed at locations in the Collection System necessary to allow the characterization of flow from each sewershed service area. Defendant shall inspect, maintain, and calibrate (if necessary) all flow monitors at least once per week.

7. The rainfall and flow monitoring network shall be designed, installed, operated, and maintained to provide representative, accurate, and precise data of sufficient quality for at least ninety (90) percent of the scheduled operation time for each meter.

h. Defendant's flow and rainfall monitoring network shall be designed, installed, operated and maintained to provide representative data of sufficient quality for use in the development of Collection System Rehabilitation as required by Section E. Monitoring site selection, equipment selection and installation, calibration, maintenance, and data quality assurance checks shall all be carried out to optimize monitoring accuracy, and shall all conform with the equipment manufacturers' recommendations and current, good engineering practice. The flow monitoring and rainfall data shall be used to prioritize the sewersheds for further flow monitoring and physical investigation activities, as described below.

i. Defendant shall perform further investigative activities in sewersheds determined to have excessive I&I and any determined to cause or contribute to SSOs, Bypasses and/or overloading at the WWTP and/or Building/Private Property Backups. The investigative activities shall locate and allow estimation of the wet weather flows associated with individual sources of I&I, or shall identify physical degradation of the Collection System that causes or contributes to SSOs including Building/Private Property Backups. The investigative activities shall include, as appropriate:

1. Further flow monitoring to isolate sources of I&I. Such flow monitoring will be carried out as specified above in this Paragraph;

2. Smoke testing;

3. Visual inspections of pipes and manholes;

4. Dye testing;

5. Night flow isolation;

6. CCTV inspection to identify sewers in need of repair,

rehabilitation, or replacement; and

7. Building inspections.

j. These further investigative activities shall be sufficient to allow detailed characterizations of all significant sewer defects in sewersheds with excessive I/I, SSOs, including sewersheds with Public/Private Property Backups, and to support the development of the Collection System Rehabilitation and the identification of all remedial measures necessary to satisfy the objectives of the Collection System Rehabilitation Plan.

k. Defendant shall perform the SSES and any further investigative activities in accordance with the guidance provided in the appropriate sections of the *Handbook: Sewer System Infrastructure Analysis and Rehabilitation*, EPA/625/6-91/030, 1991 ("EPA Handbook") (unless that EPA Handbook is replaced or superseded by other Agency guidance or regulations, in which case the replacement or superseding guidance or regulations shall be used); the National Association of Sewer Service Companies "Manual of Practice"; and sound engineering practice. The aforementioned documents are intended to provide guidance on the methodologies and techniques to be used in identifying sources of I/I, however, that guidance shall be applied in a manner consistent with the purpose of eliminating SSOs, including all Public/Private Property Backups.

C. **ADDITIONAL INTERIM MEASURES**

20. **Responses to the Occurrence of an SSD at a Pump Station** If any SSD occurs at a Pump Station, Defendant shall notify the Department immediately, and Defendant shall conduct an analysis to determine the cause of the SSD. In addition, Defendant shall immediately take or cause to be taken steps necessary to prevent injury to property and to downstream users of the affected waters of the U.S. and the Commonwealth from pollution or a danger of pollution, and, in addition thereto, within fifteen (15) days from the incident shall remove from the ground and from the affected waters the residual substances contained thereon and therein. If the Defendant determines that the SSD was due to inadequate capacity or design deficiencies of the Pump Station, then within ninety (90) days of the SSD occurrence, Defendant shall submit an amended Pump Station Maintenance Plan pursuant to Paragraph 15 with a plan and schedule for the completion of appropriate corrective measures to EPA and the Department for their review and approval.

21. **Staffing**

a. Immediately upon the Date of Lodging of this Consent Decree, Defendant shall submit a staffing plan to Plaintiffs that shall provide for a certified operator to be continuously present at, or in contact with, the Facility at all times. The staffing plan will also address the specific duties of each certified operator and staff member, including which other certified operator or staff member(s) shall be responsible for performing duties if the regular certified operator or staff member is unavailable. Said plan shall further describe the communication processes between certified operators, treatment plant and municipal management, and contractors or engineers that are responsible for facility design, operation and maintenance to assure efficient and effective management of the facilities operations and maintenance. Within twelve (12) months from the Date of Lodging, the Defendant shall hire a sufficient number of staff, including certified operators, in a number adequate to perform all O&M activities on a daily basis in accordance with standard operating procedures.

b. Every Annual Report shall include an evaluation of the staffing plan, specifically, how successfully the existing staff has operated and maintained the Plant and Collection System, has implemented the requirements of the Consent Decree, and how the staff needs to be expanded or reorganized to properly operate the Plant and Collection System and to implement the future requirements of the Consent Decree.

22. Connection Management The Defendant shall continue to place limitations on and control new connections to the overloaded sewerage facilities according to a Connection Management Plan ("CMP"), which shall be submitted to the Department for its review and approval. The CMP shall be submitted within 90 days of the Consent Decree lodging. Any changes to the approved CMP may be requested in the Annual Reports to Plaintiffs or more frequently, if necessary. All changes to the CMP must be approved in writing by the Department.

D. **LONG TERM EVALUATION AND CONSTRUCTION SCHEDULE**

23. Pump Station Maintenance Plan Defendant shall prioritize the implementation of the corrective work evaluated in paragraph 15 (Pump Station Maintenance Plan) of this Consent Decree, for those Pump Stations that have been identified by the Defendant as hydraulically overloaded and including those specifically identified by the Department as hydraulically overloaded in the Department's April 1, 2008 review of the Bristol Township 2006 Chapter 94 Report, attached hereto as **Appendix "A"**. These pump stations include the Silver Lake, Palmer Avenue, Delaware Avenue, College Park, and Beaver Dam Road pump stations, and any other places found to be hydraulically overloaded.

24. Pump Station Annual Review Defendant shall re-evaluate its Pump Stations annually to assure that each Pump Station is of sufficient size and capacity to handle expected waste water flows. The results of the re-evaluations shall be reported to EPA and the Department in the Annual Report which is to be submitted under Section VI of this Consent

Decree. Modifications to the Pump Station Maintenance Plan shall be made, as necessary, at the request of EPA and the Department.

25. Facility and Alternatives Submission Within one hundred and eighty (180) days of approval of the POA, Defendant shall provide for review and approval a detailed evaluation of the need for capital expenditures, and further provide preliminary estimates of such capital expenditures in accordance with the elements below.

a. Existing Plant Process Evaluation Report Defendant shall perform an evaluation of existing plant processes and submit to EPA and the Department a report that describes the Defendant's evaluation of the treatment capacity of the existing facility and identify the enhancements required to be made to the existing facility in order to meet current and anticipated regulatory requirements. This evaluation shall include:

1. Process Control Testing and unit efficiency monitoring;
2. Characterization of the existing influent wastewater;
3. Waste load projections taking into account the impacts of the industrial pretreatment program and satellite communities and treatment capacity;
4. Process modeling of the existing liquid process treatment train; and
5. Evaluation of the existing process capabilities to meet existing and future load and nutrient limits.

b. Evaluation of Treatment Facilities Alternatives Defendant shall complete a review, including preliminary cost estimates, of alternative treatment systems that effectively meet existing and future needs and anticipated regulatory requirements. Defendant shall identify in this evaluation its selected alternative(s) among the alternatives discussed and describe the basis for such preferences. The alternatives to be evaluated shall include, but shall not be limited to, increasing sewage flows, decreasing sewage flows, and maintaining existing sewage flows from Bristol Township at the Bristol Borough WWTP, at the Lower Bucks Joint Municipal Authority WWTP, and into the Bucks County Water and Sewer Authority conveyance system

for treatment at the City of Philadelphia's WWTP. For any proposed changes in flow, Bristol Township must obtain approval from the permittees of all affected facilities.

1. Evaluation of Treatment Alternatives Report Defendant shall submit a report which shall include an analysis of the cost of new construction versus the cost of modifying existing facilities for EPA and the Department's review and analysis. The report shall also include the following elements:

2. Sizing Evaluation of Existing Treatment Facilities Defendant shall evaluate the sizing of the existing liquid process and solids handling facilities. If Defendant finds these adequately sized, Defendant may propose a solution to optimize the facilities as described in subparagraph 2, below. Defendant shall also perform an evaluation of new treatment facilities as described in subparagraph 3, below.

3. Optimization of Existing Treatment Facilities

a. Liquid Process Facilities Defendant shall evaluate the existing liquid process facilities, describe how to optimize current facilities, and develop cost estimates addressing the rehabilitation of existing liquid treatment process units required to meet effluent limits. As part of that evaluation, Defendant shall perform a hydraulic evaluation to determine the hydraulic limitations of the existing facility.

b. Solids Handling Facilities Defendant shall evaluate all existing solids handling facilities to determine the treatment efficiency and capacity of solids handling equipment. This report will include evaluation of capacity limitations and cost estimates to increase capacity to meet future needs based on current waste load projections. This report shall also include a review and evaluation of Defendant's solids handling operational procedures and include

recommendations for optimizing the operations of the existing equipment.

26. Capital Improvements Plan Upon approval by EPA and the Department of the treatment alternative(s), Defendant shall develop and submit a capital improvements plan, as provided below in subparagraphs a.1. – 3., to Plaintiffs for review and approval in accordance with Section VI of this Decree. This plan shall include the capital cost and budgetary impact for implementation of the recommended alternative submitted by Defendant and approved by Plaintiffs as described in Paragraph 25.b. above.

a. The scope of the Capital Improvements Plan shall encompass the approved conclusions of the “Evaluation of Treatment Alternatives Report” described in Paragraph 25.b. above.

1. If an upgrade of the existing facility is the selected alternative, a full facility audit of the plant infrastructure will be completed including plant inventory of structural, electrical and mechanical components, and their life expectancy. This facility audit will be submitted within six (6) months of the approval of the selected treatment alternative.

2. If utilization of a combination of new and existing equipment is the approved alternative, an audit of the equipment and facilities to be reused shall be performed. This partial facility audit shall be submitted within six (6) months of the approval of the selected treatment alternative.

3. If a new facility is the approved alternative, the interim plant improvement plan required as part of the POA shall be amended to summarize any additional upgrades that may be required to improve performance of the existing facility until start-up of the new plant. The amended interim plant improvement plan shall be submitted in the next Semi-Annual Report.

27. Request for Proposals By no later than three (3) months from the Plaintiffs’ approval of the Capital Improvement Plan, the Defendant shall seek proposals through its request

for proposal (RFP) process pursuant to the Charter and Municipal Ordinances and any other procedures required by regulation or law.

28. Permit Applications and Design Consistent with the implementation schedule in the approved POA and Capital Improvements Plan, but no later than January 1, 2012, the Defendant shall complete and submit to the Department the NPDES (Part I) and the Water Quality Management (Part II) Permit applications, as necessary, to implement the approved treatment alternative described in the Capital Improvements Plan. In the event that the Department or the EPA fails to respond to the POA or the Capital Improvements Plan within 120 days and that failure is not due to the incompleteness of the Township's submission, the Township will be entitled to an extension of the January 1 deadline equal to the number of days by which the Department or the EPA exceeded 120 days. The applications shall include among other items all the design, architectural and engineering plans and information necessary to secure permits, receive bids and construct the Treatment Alternative submitted by Defendant and approved by Plaintiffs. Defendant shall also obtain other approvals and/or permits as necessary including but not limited to: NPDES permits; permits for Construction and/or Earthmoving permits pursuant to 25 PA Code Chapter 102; and, if necessary, a permit for water obstruction/wetlands pursuant to 25 PA Code Chapter 105 and/or a permit issued under Section 404 of the Clean Water Act.

29. Construction Completion

a. If a new treatment plant is to be constructed, Defendant shall complete construction by no later than January 15, 2015.

b. For upgrade and/or expansion at the existing location, Defendant shall complete construction by no later than January 15, 2015.

30. Start-Up & Operation

a. The Defendant shall complete start-up and operation of the plant improvements within three (3) months of construction completion.

- b. Defendant shall achieve final compliance with all NPDES permit requirements within six (6) months of start-up and operation.
- c. Defendant shall notify the Department and EPA within thirty (30) days of completion construction.

E. COLLECTION SYSTEM REHABILITATION

31. Rehabilitation Plan By no later than January 15, 2012 and consistent with the results of the Sewer System Evaluation Survey, the Defendant shall develop and submit to Plaintiffs a Rehabilitation Plan to adequately address those specific priority areas of the sanitary sewer system that require repair, replacement, upgrade and/or other remediation. Defendant shall submit the "Rehabilitation Plan" to EPA and the PADEP for review and approval in accordance with Section VIII of this Decree. This Plan shall serve as the basis for Defendant's implementation of the sanitary sewer system collection system rehabilitation required by Paragraph 32 of this Decree.

32. Rehabilitation of Priority Areas of Collection System By no later than January 15, 2015 and in accordance with the approved Rehabilitation Plan described in Paragraph 31 of this Decree, the Defendant shall complete the recommendations set forth in that Plan for repair, replacement, upgrade and/or other remediation of the priority areas.

F. HIGH FLOW MAINTENANCE PLAN

33. High Flow Maintenance Plan By no later than eighteen (18) months from the Date of Lodging, the Defendant shall develop and submit and implement a "High Flow Maintenance Plan" and a schedule for implementation to EPA and PADEP. The High Flow Maintenance Plan shall set forth how to operate the treatment plant and the Collection System during wet weather events to maximize treatment and prevent sanitary sewer overflows (SSOs) or bypasses. This Plan shall build on and update the development of the Interim High Flow

Maintenance Plan described above at Paragraph 17 of this Consent Decree. The High Flow Maintenance Plan shall adequately address any comments from EPA and PADEP on the wet weather operational strategy. The High Flow Maintenance Plan shall also provide for and include a log of any SSO events which identify the nature of the storm events, the locations of the SSO discharges, and the duration and estimated volume of the SSO discharges. Upon review and comment from EPA and the Department, the Defendant shall address the comments and, if necessary, change the High Flow Maintenance Plan accordingly.

G. **PRETREATMENT PROGRAM**

34. Defendant shall not accept non-domestic wastewater from industrial users that causes pass through or interference at the Facility and/or that does not comply with local limits.

35. Within six (6) months from the Date of Lodging, the Defendant shall have on its staff a qualified pretreatment coordinator who shall be in charge of and be responsible for the pretreatment program. From that time forward, the Defendant shall continue to retain a qualified pretreatment coordinator with such power and responsibility. Should such pretreatment coordinator cease to be retained or employed by the Defendant, the Defendant shall advertise the position internally and externally immediately and shall hire a new pretreatment coordinator not later than six (6) months following the conclusion of the prior coordinator's employment or retention.

36. The Defendant shall implement its current Enforcement Response Plan ("ERP"), attached as **Appendix E**, to address Industrial User ("IU") noncompliance. After the Defendant assesses any penalties and/or a compliance schedule, if such IUs remain in Significant Non-Compliance ("SNC"), or the IU does not agree to a reasonable compliance schedule and/or penalty consistent with the ERP, then the Defendant shall escalate its response in accordance with the current EPA approved ERP, including issuance of an administrative order by the

Defendant, the assessment of a penalty, the revocation of the local permit and/or referring the IU to EPA for additional enforcement action.

37. For any IU that is a frequent violator of any pretreatment standards (including approved local limits), Defendant shall require more frequent monitoring in accordance with Defendant's approved pretreatment program. If necessary, the Defendant shall amend or reissue an existing IU permit to increase the frequency of self-monitoring for the pollutants of concern. Defendant shall require such sampling to commence within ninety (90) days of the Date of Lodging.

38. Pretreatment Computerized Management System Plan To improve tracking of document submission violations, required re-sampling, and compliance milestones and aid in assessment of SNCs, Defendant shall commit to developing and implementing a computerized management system plan for the pretreatment program which plan incorporates Defendant's approved pretreatment program. Defendant shall submit a Pretreatment Computerized Management System plan and implementation schedule to EPA within ninety (90) days of the Date of Lodging of the Consent Decree. The computerized management system plan shall ensure full and complete compliance with the pretreatment requirements set forth in the CWA, the implementing regulations thereto, and Defendant's approved pretreatment program, including, but not limited to, the terms and conditions of Defendant's NPDES Permit. Upon approval of the plan by EPA, Defendant shall implement the computerized management system plan in accordance with the approved implementation schedule. This system shall be on-line and fully functional within three (3) months of implementation.

39. By no later than six (6) months from the Date of Lodging of this Consent Decree, the Defendant shall complete its reevaluation of local limits as required by the current NPDES permit and submit that reevaluation to EPA for review and approval. The Defendant shall require that all contributing member municipalities adopt local limits by ordinance within one (1) year of EPA acceptance of revised or new local limits. If any such municipality has not adopted

all current local limits within one (1) year from the Date of Lodging, then the Defendant shall take further action to compel the contributing municipality to formally adopt the local limits ordinance. These further actions may include equitable enforcement of the inter-municipal agreement requesting injunctive relief, damages, penalties, attorney's fees, and other costs that may be incurred by Defendant in compelling compliance and/or any other penalties allowable under state or federal law.

40. The Defendant shall report semi-annually on which IUs are in SNC and identify all violations. This report shall also include all monitoring results, and copies of enforcement actions taken, and penalties issued, assessed and collected pursuant to the ERP. One such report shall occur in the Annual Report, and copies of both reports shall be submitted to the Pretreatment Coordinator, EPA Region 3, 1650 Arch St., Philadelphia, PA 19103-2029.

VI. REPORTING REQUIREMENTS

41. Beginning March 31, 2011, Defendant shall submit to EPA and the Department and before March 31 of each year until termination of this Consent Decree, an Annual Report ("Annual Report") of all subjects required to be in the Annual Report pursuant to this Consent Decree, including, but not limited to: the interim wet weather operational strategy; the interim plant improvement plan; the connection management plan; the pump station annual review; and a list of SIUs in SNC. In addition, the Annual Report shall include any updates or changes to the POA as well as a list of all SSDs and SSOs, occurring in the system in the preceding year, which identifies, where available, the frequency, date, duration and volume of SSOs and SSDs, the magnitude of each rainfall event, and the cause or condition which contributed to each event.

42. This Annual Report shall also contain the following:

- a. Progress reports on the implementation of the requirements of Section V (Remedial Measures) as described in Paragraphs 7 through 40;

b. A description of any problems anticipated with respect to meeting the requirements of Section V (Remedial Measures) of this Consent Decree;

c. Updated POA Reports, which shall include, but not be limited to, the status of the corrective actions conducted or completed in the past twelve (12) months and the work anticipated to occur in the following twelve-month period, the number of connections made during the year, a chart listing all projects that have received certification of capacity for planning module revision and the allocations per year, and a chart of all projected connections by Defendant; and

d. Any such additional matters as Defendant believes should be brought to the attention of EPA and the Department.

43. The Annual Reports shall be certified, consistent with the requirements of 40 C.F.R. 122.22(a)(3), by the person responsible for compliance or by a person responsible for overseeing implementation of this Consent Decree, who shall state:

“I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.”

VII. RIGHT OF ACCESS

44. EPA and the Department, and their authorized representatives and contractors, shall each have authority at all reasonable times, upon the presentation of credentials, to enter the property of Defendant to:

- a. Monitor the progress of activities required by this Consent Decree;
- b. Verify any data or information submitted to the United States and Commonwealth of Pennsylvania;
- c. Obtain samples;

- d. Observe performance tests;
- e. Inspect and evaluate any portion of the Collection System; and
- f. Review and copy any record required to be kept under the terms and

conditions of this Consent Decree.

45. Upon request, Defendant shall provide EPA or the Department or their authorized representative(s) splits of any samples collected by Defendant or its consultants and contractors. Upon request, EPA or the Department shall provide Defendant splits of any samples collected by EPA or the Department.

46. These inspection rights are in addition to, and in no way limit or otherwise affect, EPA's and the Department's statutory authorities to conduct inspections, to require monitoring and to obtain information from Defendant as authorized by law.

VIII. REVIEW AND APPROVAL PROCEDURES

47. After receipt and review of any plan, program or other document which is required to be submitted for approval pursuant to this Consent Decree, EPA and the Department may (1) approve, in whole or in part, the submission; (2) approve the complete submission or portions of the submission upon specified conditions; (3) disapprove the submission, in whole or in part, and direct that Defendant modify the submission; or (4) any combination of the above. The EPA and Department will have 120 days in which to review each such plan, program or other document and respond to it, which time period will be anticipated by the Township in its planning process. In the event that the Department or the EPA fails to respond within 120 days and that failure is not due to the incompleteness of the Township's submission, the Township will be entitled to an extension of time for each affected obligation equal to the amount by which the Department or the EPA exceeded 120 days.

48. In the event of approval of the complete submission, Defendant shall proceed to take any actions required by the plan, program or other approved document, as approved by EPA and the Department.

49. In the event of approval of portions of the submission or approval upon specified conditions, Defendant shall proceed to take the actions identified in the non-deficient portion of the plan, program, other document, or portion thereof, in accordance with any applicable conditions specified by EPA and the Department, subject only to Defendant's right to invoke the Dispute Resolution procedures set forth in Section XII with respect to the conditions imposed. Implementation of any non-deficient portion of the submission shall not eliminate the potential of Defendant to incur stipulated penalties pursuant to Section X.

50. Upon receipt of a notice of disapproval of all or part of a submission from EPA and the Department, Defendant shall, within thirty (30) days (or such greater time frame as specified by EPA and/or PADEP in writing), correct the deficiencies as directed by EPA's and the Department's written comments and resubmit the plan, program or other document for approval. Any stipulated penalties applicable to the submission, as provided in Section X, shall accrue during the 30-day period, but shall not be payable unless the resubmission is disapproved as provided in Paragraph 49.

51. In the event that a resubmitted plan, program or other document, or portion thereof, is disapproved by EPA and the Department, EPA and the Department may again require the Defendant to correct the deficiencies in accordance with this Section. Unless Defendant invokes the Dispute Resolution Procedures set forth in Section XII and EPA's and the Department's disapproval of the Defendant's resubmission is overturned pursuant to that Section, Defendant shall be deemed to have failed to submit such program, plan or other document timely and adequately and stipulated penalties shall accrue for such violation from the date on which the initial submission was originally due.

52. All programs, plans or other documents required to be submitted pursuant to this Consent Decree shall become incorporated into and enforceable under this Consent Decree, upon EPA's and the Department's approval. In the event EPA and the Department approve a portion of any program, plan or other document pursuant to this Section, then the approved portion shall become incorporated into and enforceable under this Consent Decree.

IX. CIVIL PENALTY

53. Defendant shall pay a total civil penalty in the amount of \$226,000 to the United States and the Commonwealth for violations as alleged by the United States and the Commonwealth in the Complaint. Defendant shall pay twenty-five percent (25%) of the total civil penalty to the United States within thirty (30) days of the Date of Lodging of this Consent Decree in accordance with the procedures described in Paragraph 55, below. Defendant shall pay twenty-five percent (25%) of the total civil penalty to the Commonwealth within thirty (30) days of the Date of Lodging in accordance with the procedures described in Paragraph 56, below. Defendant shall pay twenty-five percent (25%) of the total civil penalty, plus interest at the post-judgment interest rate applicable on the Date of Lodging of this Consent Decree, to the United States within twelve (12) months of the Date of Lodging of this Consent Decree in accordance with the procedures described in Paragraph 55, below. Defendant shall pay twenty-five percent (25%) of the total civil penalty, plus interest at the post-judgment interest rate applicable on the Date of Lodging of this Consent Decree, to the Commonwealth within twelve (12) months of the Date of Lodging in accordance with the procedures described in Paragraph 56, below.

54. The United States and the Commonwealth shall be deemed judgment creditors for purposes of collection of this penalty.

55. Payment of the civil penalty to the United States shall be made by Electronic Funds Transfer ("EFT") to the U.S. Department of Justice ("DOJ") lockbox bank, referencing

DOJ No 90-5-1-1-4402/2. Payment shall be made in accordance with instructions provided by the United States to Defendant following execution of this Consent Decree. Any EFT received at the DOJ lockbox bank after 11:00 A.M. Eastern Time will be credited on the next business day. Notice of the EFT shall simultaneously be mailed to the following:

Docket Clerk (3RC00)
U.S. EPA - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Pamela J. Lazos (3RC20)
U.S. EPA - Region III
1650 Arch Street
Philadelphia, PA 19103-2029; and

Margaret L. Hutchinson
Chief, Civil Division Eastern District of Pennsylvania
615 Chestnut Street, Suite 1250
Philadelphia, PA 19106-4476
Re: DOJ No. 2008-V00444

The transmittal letter forwarding such notice shall include the caption, civil action number and judicial district of this action.

56. Payments to the Commonwealth of Pennsylvania shall be made by tendering to the Pennsylvania Department of Environmental Protection checks made payable to: "Commonwealth of Pennsylvania" and sent to:

Steve O'Neil
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

57. If Defendant fails to tender all or any portion of the civil penalty payment owed to the United States within thirty (30) days of the Date of Lodging of this Consent Decree interest on the unpaid amount shall accrue in accordance with the provisions of 28 U.S.C. § 1961 from the date of the original payment until all amounts owed are paid. If Defendant fails to tender all or any portion of the civil penalty payment owed to the Commonwealth of Pennsylvania within

thirty (30) days of the Date of Lodging of this Consent Decree interest on the unpaid amount shall accrue in accordance with the provisions of 41 Pa. C.S. § 202 from the date of the original payment until all amounts owed are paid.

X. STIPULATED PENALTIES

58. Defendant shall pay stipulated penalties for each failure to comply with the terms of this Consent Decree, including the terms of any plans or schedules developed pursuant to and incorporated into this Consent Decree. The stipulated penalties shall be assessed as follows and paid 50% to the United States and 50% to the Commonwealth as set forth in Paragraph 55 and 56 of this Decree:

59. Stipulated Penalties for Failure to Comply with Various Provisions of this Consent Decree Defendant shall pay stipulated penalties in the amount set forth below for each day it fails to meet any of the project milestone dates set forth in Section V. Remedial Measures, of this Consent Decree, for each failure to satisfactorily perform in accordance with the requirements under the Consent Decree, and for each late submission:

<u>Period of Non-Compliance</u>	<u>Penalty per Milestone Date per day of Violation</u>
1 st to 15 th Day	\$ 500
16 th to 30 th Day	\$ 1,000
31 st to 60 th Day	\$ 2,000
After 60 Days	\$ 5,000

60. Stipulated Penalties for NPDES Permit Violations Beginning on the Date of Lodging, Defendant shall pay a stipulated penalty for each NPDES Permit Violation in the amount set forth below.

Type of Violation : Daily/Instantaneous

Penalty Per Day or Excursion	Period of Noncompliance
\$ 100	1 st through 12 th Month
\$ 200	13 th through 24 th Month
\$ 300	25 th Month and Beyond

Type of Violation: Weekly Average

Penalty Per Violation Per Week	Period of Noncompliance
\$ 100	1 st through 12 th Month
\$ 200	13 th through 24 th Month
\$ 300	25 th Month and Beyond

Type of Violation: Monthly Average

Penalty Per Violation Per Month	Period of Noncompliance
\$ 250	1 st through 12 th Month
\$ 500	13 th through 18 th Month
\$ 750	19 th through 24 th Month
\$ 2,500	25 th Month and beyond

61. Compliance Reporting Defendant shall pay stipulated penalties in the amount set forth below for each day it fails to submit any progress report other than one in Section V. Remedial Measures of this Consent Decree or information required to be included within a progress report required to be submitted pursuant to this Consent Decree.

<u>Period of Non-Compliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 15	\$ 150
16 th to 30 th Day	\$ 300
31 st to 60 th Day	\$ 500
After 60 days	\$ 1,000

62. Stipulated Penalties for Sanitary Sewer Overflows (“SSOs”) Defendant shall pay stipulated penalties in the amount of \$1,000 for each SSO that occurs in the Sanitary Sewer Collection System.

63. Pretreatment Program Stipulated Penalties

Defendants shall pay 100% of the stipulated penalty to EPA:

a. For the first calendar quarter within three months after the Date of Lodging, for failure to enforce the pretreatment program according to the ERP against each Significant Industrial User (“SIU”) in SNC and for each such subsequent quarter: \$1,000 per SIU.

b. Beginning with the first calendar quarter within three months after the date of Lodging of this Consent Decree, failure to conduct and/or report quarterly influent, effluent and sludge monitoring, will result in the following stipulated penalties:

<u>Period of Non-Compliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 15 th Day	\$ 200
16 th to 30 th Day	\$ 400
31 st to 60 th Day	\$ 600
After 60 days	\$ 1,200

64. Defendant shall pay 100% of the stipulated penalties to the EPA in the amount set forth below for each day it fails to submit its annual pretreatment report.

<u>Period of Non-Compliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 15 th Day	\$ 150
16 th to 30 th Day	\$ 300
31 st to 60 th Day	\$ 500
After 60 days	\$ 1,000

65. Stipulated civil penalties shall automatically begin to accrue on the first day Defendant fails to satisfy any obligation or requirement of this Consent Decree and shall continue to accrue until the violation or deficiency is corrected.

66. Stipulated penalties incurred by Defendant under this Consent Decree shall be due on or before the twenty-eighth (28th) day of each succeeding month. Stipulated Penalty payments for effluent violations shall be accompanied by a copy of the Discharge Monitoring Report (DMR) for that month.

67. Stipulated penalties incurred under this Consent Decree shall be due automatically and without notice, unless Defendant contests the penalty in accordance with the dispute resolution provisions of this Consent Decree. If Defendant invokes the dispute resolution provisions in Section XII of this Consent Decree, it shall deposit any disputed penalty in an interest-bearing escrow account within ten (10) days of invoking dispute resolution. The stipulated penalties that are the subject of the dispute, as well as interest earned thereon, shall be released in a manner consistent with the terms of the resolution of the dispute within sixty (60) days after the dispute is resolved. Stipulated penalties for any continuing violation shall accrue during the resolution of any dispute.

68. The stipulated civil penalties as set forth above shall be in addition to any other rights or remedies which may be available to the United States and the Commonwealth or their agencies by reason of Defendants failure to comply with the requirements of this Consent Decree, and all applicable federal, Commonwealth or local laws, regulations, or permits.

69. In the event that a stipulated civil penalty is not paid when due, the stipulated civil penalty owed to the United States and or the Department shall be payable with interest from the original due date to the date of payment at the statutory judgment rate set forth at 28 U.S.C. § 1961(a) with respect to the federal government and 41 Pa. C.S. § 202 with respect to the Commonwealth.

70. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due to the United States under this Consent Decree. Any such reduction or waiver shall be without prejudice to any other penalty that is already, or later becomes, due. Defendant shall not rely on any such waiver or reduction being repeated with respect to any future penalty.

XI. FORCE MAJEURE

71. "Force Majeure" for the purposes of this Consent Decree is defined as an event arising from causes beyond the control of Defendant or the control of any entity controlled by Defendant, including their agents, consultants and contractors, which 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 event and best efforts to address the effects of any such event a) as it is occurring, and b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. Unanticipated or increased costs or expenses associated with implementation of this Consent Decree and changed financial circumstances shall not, in any event, be considered "force majeure" events. In addition, failure to apply for a required permit or approval or to provide in a timely manner all information required to obtain a permit or approval that is necessary to meet the requirements of this Consent Decree, or failure of Defendant to approve contracts, shall not, in any event, be

considered “force majeure” events. Defendant shall adopt all reasonable measures to avoid or minimize such delay.

72. Defendant shall notify EPA and the Department, in writing, within twenty (20) business days after Defendant first knew, or in the exercise of reasonable diligence under the circumstances, should have known of an event that might delay completion of any requirement of this Consent Decree, whether or not the event is a “force majeure” event. The notice shall provide a description of the event and an explanation of the reasons for the delay, the anticipated duration of the delay, all actions taken or to be taken to prevent or mitigate the delay or the effect of the delay, the timetable by which those measures will be implemented, whether Defendant claims that the delay should be excused as a “force majeure” event, and its rationale for attributing such delay to a “force majeure” event if it asserts such a claim. Defendant shall include all available documentation supporting its claim that the delay was attributable to a “force majeure” event. Further, where a contractor or subcontractor has not completed a construction project on time, Defendant shall state what steps it is taking to ensure performance by the contractor or subcontractor in question, and shall supply any documentation available to show the steps it has taken.

73. Failure to provide the required written notice to EPA and the Department shall render this Section void and of no effect as to the event in question, and shall be a waiver of Defendant’s right to obtain an extension of time for its obligations based on such event. Defendant shall be deemed to have notice of any circumstance of which its contractors, or subcontractors had or should have had notice.

74. If EPA and the Department find that a delay in performance is, or was, caused by a “force majeure” event, the time for performance of the specific obligation(s) under this Consent Decree that are caused by the “force majeure” event shall be extended for a period to compensate for the delay resulting from such event, and stipulated penalties shall not be due for such period. EPA and the Department will notify Defendant in writing of the length of the

extension for performance of the obligation(s) caused by the "force majeure" event. An extension of time for performance of the obligation(s) caused by the "force majeure" event shall not, of itself, extend the time for performance of any other obligation. Defendant shall make an individual showing of proof regarding the cause of each delayed incremental step or other requirement for which an extension is sought.

75. In the event of a dispute regarding application of these provisions to a delay in performance, the dispute resolution provisions of Section XII (Dispute Resolution) shall apply, and Defendant shall have the burden of proving that the delay is, or was, caused by a "force majeure" event, and that the amount of additional time requested is necessary to compensate for that event. Defendant shall not be liable for stipulated penalties for any period of delay which was excused by the Court or EPA and the Department pursuant to this "Force Majeure" Section. However, pending resolution of a "force majeure" dispute, stipulated penalties will continue to accrue, and shall be due and payable if the Court determines that the event in question was not a "force majeure" event, that the Defendant did not undertake reasonable measures to limit the effect of the event, or that the "force majeure" event occurred for a shorter period of time than that alleged by Defendant.

XII. DISPUTE RESOLUTION

76. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes between Defendant and/or EPA or the Department arising under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States and the Commonwealth of Pennsylvania to enforce obligations of Defendant that have not been disputed in accordance with this Section.

77. Informal Dispute Resolution Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between

Defendant, EPA and the Department. The period for informal negotiations shall not exceed twenty (20) days from the time Defendant sends EPA and the Department a written Notice of Dispute, unless that period is modified by written agreement of Defendant, EPA and the Department. The Notice of Dispute shall clearly describe the matter in dispute. In the event the parties cannot resolve their dispute within the informal negotiation period, then the position advanced by EPA and the Department shall be considered binding unless, within 30 days of the conclusion of the informal negotiation period, Defendant invokes the formal dispute resolution procedures as set forth below.

78. Formal Dispute Resolution Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by filing with the Court and serving on EPA and the Department a motion requesting judicial resolution of the dispute. 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.

79. Notwithstanding the provisions of the Federal Rules of Civil Procedure, the United States and the Commonwealth shall respond to Defendant's motion within thirty (30) days, unless the Parties stipulate otherwise. Defendant may file a reply memorandum, to the extent permitted by the Local Rules or the Parties' stipulation, as applicable.

80. In any dispute under this Paragraph, Defendant shall bear the burden of demonstrating that Defendant's position best complies with the terms and conditions of, and furthers the objectives of, this Consent Decree, the Clean Water Act, and the Clean Streams Law.

81. Submission of any matter to the Court for resolution shall not extend any of the deadlines set forth in this Consent Decree unless the Parties agree to such extension in writing or the Court grants an order extending such deadline. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the

dispute as provided in Section X. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X (Stipulated Penalties) and consistent with the Court's ruling.

XIII. EFFECT OF SETTLEMENT

82. Compliance with this Consent Decree, including the payment of all civil and stipulated penalties and interest accrued thereon, and the completion of all injunctive relief, shall resolve the United States' and the Commonwealth of Pennsylvania's civil claims for violations of the Clean Water Act and the Clean Streams Law as alleged in the Complaint filed in this matter, through the Date of Lodging of this Consent Decree.

XIV. NON-WAIVER PROVISIONS

83. The Parties agree that Defendant is responsible for achieving and maintaining complete compliance with all applicable federal and Commonwealth laws, regulations, and permits, and that compliance with this Consent Decree shall be no defense to any actions commenced pursuant to said laws, regulations, or permits, except as otherwise expressly specified in the Consent Decree.

84. The United States and Commonwealth of Pennsylvania, do not, by their consent to the Lodging of this Consent Decree, warrant or aver in any manner that Defendant's complete compliance with this Consent Decree will result in compliance with the provisions of the Clean Water Act, 33 U.S.C. §§ 1251 et seq. or with Pennsylvania's water pollution control laws. Notwithstanding EPA's and the Department's review or acceptance of any plans, reports, policies, or procedures formulated pursuant to this Consent Decree, Defendant shall remain solely responsible for any non-compliance with the terms of this Consent Decree, the Clean

Water Act and regulations promulgated under that Act, and Pennsylvania's Environment Article and implementing regulations.

85. The Parties reserve any and all legal and equitable remedies available to enforce the provisions of this Consent Decree.

86. This Consent Decree shall not limit any authority of EPA and the Department under the Clean Water Act, the Clean Streams Law, or any other applicable statute, including the authority to seek information from Defendant or to seek access to the property of Defendant.

87. Performance of the terms of this Consent Decree by Defendant is not conditioned on the receipt of any federal, Commonwealth or local funds. Application for construction grants, Commonwealth revolving loan funds, or any other grants or loans, or delays caused by inadequate facility planning or plans and specifications on the part of Defendant shall not be cause for extension of any required compliance date in this Consent Decree.

88. The United States and the Commonwealth of Pennsylvania reserve all remedies available to them for violations of the Clean Water Act and the Clean Streams Law by Defendant which are not addressed in this Consent Decree.

89. This Consent Decree does not resolve criminal liability, if any, that any person might have for violations of the Clean Water Act or the Clean Streams Law.

90. Nothing in this Consent Decree shall be construed to limit the authority of the United States or the Commonwealth of Pennsylvania to undertake any action against any person, including Defendant, in response to conditions that may present an imminent and substantial endangerment to the environment or to the public health or welfare.

XV. NOT A PERMIT/COMPLIANCE WITH OTHER STATUTES/REGULATIONS

91. This Consent Decree is not and shall not be construed as a permit issued pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, nor as a modification of any existing permit so issued, nor shall it in any way relieve Defendant of its obligations to comply with

permits, if any, otherwise required for any portion of its Collection System or related sanitary sewage treatment facilities, and with any other applicable federal or Commonwealth law or regulation. Defendant must comply with any new permit, or modification of existing permits, in accordance with applicable federal and Commonwealth laws and regulations.

92. Nothing herein shall be construed as relieving Defendant of the duty to comply with the Clean Water Act and the Pennsylvania Clean Streams Law, the regulations promulgated under those acts, and all applicable permits issued under those acts and regulations.

XVI. COSTS OF SUIT

93. All parties shall bear their own costs and attorney's fees with respect to matters resolved by this Consent Decree.

XVII. RECORD KEEPING

94. Defendant shall maintain copies of any reports, plans, permits and documents, submitted to EPA and the Department pursuant to this Consent Decree, including any underlying research and data, for a period of five (5) years from date of submission. Defendant shall require any independent contractor operating any portion of the Defendant's Collection System or implementing any portion of this Consent Decree to also retain such materials for a period of five (5) years from date of submission. Defendant shall submit such supporting documents to EPA and the Department upon request.

95. In addition to the reports and documentation required to be provided by Defendant under the terms of this Consent Decree, Defendant shall also provide, upon demand, any analytical data or any other documents requested by the United States and the Department to review work done, or to be done, by Defendant or to determine Defendant's compliance with the terms of this Consent Decree.

96. Defendant shall notify EPA and the Department thirty (30) days prior to the disposal or destruction of such records at the end of this five year period and shall, upon EPA's and the Department's request, make such records available to EPA and the Department prior to such disposal or destruction.

XVIII. FORM OF NOTICE

97. Unless otherwise specified, all reports, notices, or any other written communications required to be submitted under this Consent Decree shall be sent to the respective Parties at the following addresses:

As to the United States:

Margaret L. Hutchinson
Chief, Civil Division Eastern District of Pennsylvania
615 Chestnut Street, Suite 1250
Philadelphia, PA 19106-4476
Re: DOJ No. 90-5-1-1-4402/2

Nancy Flickinger
Senior Attorney
United States Department of Justice
Environmental and Natural Resources Division
Ben Franklin Station
P.O. Box 7611
Washington, DC 20044-7611

As to the Environmental Protection Agency:

Pamela Lazos (3RC20)
Senior Assistant Regional Counsel
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

Lisa Trakis (3WP42)
Water Protection Division
United States Environmental Protection Agency
Region III

1650 Arch Street
Philadelphia, PA 19103

As to Commonwealth of Pennsylvania:

Steve O'Neil
Environmental Group Manager
Water Management Program
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

As to Defendant:

Jeff Bartlett
Managing Director of Bristol Township
Bristol Township Municipal Building
2501 Bath Road
Bristol, PA 19007

Russell P. Sacco, Esquire
Solicitor for Bristol Township
53 S. Main Street
Yardley, PA 19067

Notifications to or communications with EPA, the Department and the United States Department of Justice ("DOJ") shall be deemed submitted on the date they are received.

XIX. MODIFICATION

98. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior written agreement, representation or understanding. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that instead of the burden of proof provided by Paragraph 80, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with the Fed. R. Civ. P. 65(b). The Consent Decree may be modified by written Order of this Court. Modifications deemed non-material by mutual agreement of EPA, the Department, and Defendant, including extension of deadlines

within this Consent Decree for not more than ninety (90) days; shall be in writing and must be filed with the Court before such modification will be deemed effective but are deemed effective without further written Order of this Court.

XX. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

99. This Consent Decree shall be lodged with the Court for a period of thirty (30) days for public notice and comment, pursuant to the requirements of 28 C.F.R. § 50.7. The United States and the Commonwealth reserve the right to withdraw or withhold their consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Defendant consents to the Lodging of this Consent Decree without further notice.

100. If for any reason this Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XXI. RETENTION OF JURISDICTION

101. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of this Consent Decree and for the purpose of adjudicating all disputes among the Parties that may arise under the provisions of this Consent Decree, to the extent that this Consent Decree provides for resolution of disputes by the Court. Such jurisdiction shall not terminate until all requirements of this Consent Decree have been fulfilled and all disputes arising under this Consent Decree have been resolved.

XXII. TERMINATION

102. The Consent Decree shall terminate when all of the following events have occurred:

a. Defendant certifies that it has completed all obligations under Section V (Remedial Measures) of this Consent Decree, and that it has maintained compliance with all other requirements of the Consent Decree for a period of one year following completion of its obligations under Section V.

b. Defendant has paid all civil penalties, costs, damages, stipulated penalties, and any other sums due under this Consent Decree; and

c. The Parties file a Joint Motion to Terminate the Consent Decree with the Court and the Court grants the Motion.

103. The Consent Decree shall not terminate if, following certification by Defendant of compliance pursuant to Paragraph 102, above, the United States or the Commonwealth of Pennsylvania assert in writing that full compliance has not been achieved. If the United States or the Commonwealth of Pennsylvania dispute Defendant's full compliance, this Consent Decree shall remain in effect pending resolution of the dispute by the Parties or the Court in accordance with the Dispute Resolution provisions of this Consent Decree.

XXIII. SIGNATORIES/SERVICE

104. The Assistant Attorney General and her designee on behalf of the United States and the undersigned representatives of Defendant and the Commonwealth of Pennsylvania certify that they are fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such party to this document.

105. 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 Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXIV. INTEGRATION/APPENDICES

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

Dated and entered this _____ day of _____ 2010.

UNITED STATES DISTRICT COURT

U.S. District Court Judge

WE HEREBY CONSENT to the entry of the Consent Decree in the United States v. Bristol Township, Civil Action No. _____, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ATTORNEY:

ZANE DAVID MEMEGER
United States Attorney

615 Chestnut Street, Suite 1250
Philadelphia, PA 19106-4476
Re: DOJ No. 90-5-1-1-444402/2

Dated: 9-27-10

MARGARET L. HUTCHINSON
Chief, Civil Division, Eastern District of Pennsylvania
615 Chestnut Street, Suite 1250
Philadelphia, PA 19106-4476
Re: DOJ No. 90-5-1-1-444402/2

Dated: 9-27-10

PAUL W. KAUFMAN
Assistant U.S. Attorney *PKA*
615 Chestnut Street, Suite 1250
Philadelphia, PA 19106-4476
Re: DOJ No. 90-5-1-1-444402/2

Dated: 9-27-10

WE HEREBY CONSENT to the entry of the Consent Decree in the United States v. Bristol Township, Civil Action No. _____, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES DEPARTMENT OF JUSTICE:

W. Benjamin Fisherow
Deputy Chief
Environmental Enforcement Section
Environment and Natural Resources Division
Ben Franklin Station
P.O. Box 7611
Washington, DC, 20044-7611

Dated: _____

9/8/10

NANCY FLICKINGER
Environmental Enforcement Section
Environment and Natural Resource Division
United States Department of Justice
Ben Franklin Station
P.O. Box 7611
Washington, DC 20044-7611

Dated: _____

9/9/2010

WE HEREBY CONSENT to the entry of the Consent Decree in the United States v. Bristol Township, Civil Action No. _____, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

ADAM M. KUSHNER
Office Director
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dated: September 24, 2010

MARK POLKINS
Division Director
Water Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dated: 9/23/10

CAROL DEMARCO
Water Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dated: 9/23/10

WE HEREBY CONSENT to the entry of the Consent Decree in the United States v. Bristol Township, Civil Action No. _____, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

SHAWN M. GARVIN
Regional Administrator
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

Dated: 9/23/10

MARCIA MULKEY
Regional Counsel
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

Dated: 9/17/10

PAMELA J. LAZOS
Sr. Assistant Regional Counsel
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

Dated: 9/15/10

WE HEREBY CONSENT to the entry of the Consent Decree in the United States v. Bristol Township, Civil Action No.

FOR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION:

WILLIAM H. GELLES
Assistant Counsel
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

Dated: 9/15/2010

JENIFER FIELDS
Water Program Manager
Pennsylvania Department of Environmental Protection
2 East Main Street
Norristown, PA 19401

Dated: 9/15/10

WE HEREBY CONSENT to the entry of the Consent Decree in the United States v. Bristol Township, Civil Action No.

FOR BRISTOL TOWNSHIP:

~~KICK~~ PLUTA
Bristol Township Council
Council President
2501 Bath Road
Bristol, PA 19007

Dated: 08/19/10

~~JEFF~~ BARTLETT
Bristol Township
Managing Director
2501 Bath Road
Bristol, PA 19007

Dated: 08/19/10

~~RUSSELL~~ P. SACCO
Solicitor, Bristol Township
53 South Main Street
Yardley, PA 19067

Dated: 08/19/10

APPENDICES

- A. Department's April 1, 2008 review of Bristol Township's 2006 Chapter 94 Report.
- B. Bristol Township's October 2006 Report entitled, "Evaluation of Existing Bristol Township Sanitary Sewer Facilities."
- C. "Water and Waste System Operator's Certification Act ("Act 11").
- D. [Intentionally Left Blank]
- E. Enforcement Response Plan.
- F. Table of Deliverables

Appendix A



Pennsylvania Department of Environmental Protection

2 East Main Street
Norristown, PA 19401

April 1, 2008

Southeast Regional Office

Phone: 484-250-5970

Fax: 484-250-5971

Mr. Jeff Bartlett
Managing Director
Bristol Township
2501 Bath Road
Bristol, PA 19007

Re: Chapter 94 Annual Report
Bristol Township Treatment Plant
NPDES Permit No. PA0026450
Bristol Township
Bucks County

Dear Mr. Bartlett:

The Department of Environmental Protection ("Department") originally sent this letter to the Lower Bucks County Joint Municipal Authority in error. This letter is being sent to you as originally intended, regarding the review of Bristol Township's 2006 Chapter 94 Report.

A review of your 2006 Annual Wasteload Management Report ("Report") submitted pursuant to Chapter 94 of the Department's rules and regulations has been completed. As conveyed to Bristol Township by the Department during a conference call with the Environmental Protection Agency (EPA) on February 14, 2008, your 2006 Report indicates that your Wastewater Treatment Plant ("Plant") is hydraulically and organically overloaded. In addition, five pumping stations within Lower Bucks County Joint Municipal Authority's ("Authority") collection and conveyance system are also hydraulically overloaded.

Your Report stated that the monthly average flow at the plant exceeded the hydraulic design capacity of 3.0 million gallons per day (MGD) during the months of November and December 2006 as well as during the months of January and February 2007. A subsequent review of the Plant's 2007 Discharge Monitoring Reports (DMRs) revealed that the monthly average flow at the Plant also exceeded the hydraulic design capacity in March, April, and May 2007. In addition, the Plant's influent organic loading exceeded its permitted influent loading of 3,950 pounds per day (lbs/day) during the months of April, July, and September 2006. Regarding the Authority's pumping stations, the Silver Lake, Palmer Avenue, Delaware Avenue, College Park, and Beaver Dam Road stations were noted as not being able to handle peak influent flows without the backup pump coming online. As such, it will be necessary for the Authority, as the permittee, to comply with Sections 94.21 and 94.22 of Chapter 94 as follows:

1. Prohibit new connections to the overloaded sewerage facilities except as approved by the permittee under the standards for granting exceptions contained in Sections 94.55 and 94.57 (relating to building permit issued prior to ban, replacement of a discharge, and other exceptions). No building permit may be issued by a governmental entity which may result in a connection to overloaded sewerage facilities or increase the load to those sewerage facilities from an existing connection. The permittee shall retain records of exceptions granted and make the records available to the Department upon request.

2. Immediately begin work for the planning, design, financing, construction and operation of the sewerage facilities that may be necessary to provide required capacities to meet anticipated demands for a reasonable time in the future and resulting in a project that is consistent with the applicable official plans approved under the Pennsylvania Sewage Facilities Act (35 P.S. Sections 750.1 and 750.20) and the regulations thereunder in Chapter 71 (relating to administration of the sewage facilities planning program) and consistent with the requirements of the Department and the federal government regarding areawide planning and sewerage facilities.
3. Submit to the Regional Office, for the review and approval of the Department, a written Corrective Action Plan (CAP) to be submitted with the annual report or within 90 days of notification of the Department's determination of overload, setting forth the actions to be taken to reduce the overload and to provide the needed additional capacity. The written CAP shall include, but not be limited to, limitations on and a program for control of new connections to the overloaded sewerage facilities and a schedule showing the dates each step toward compliance with paragraph 2 shall be completed.

The Department would like to note the following regarding items in the Report that should be addressed with the submittal of the Authority's 2007 Municipal Wasteload Management Report or with the submittal of your CAP:

1. The 2006 Report did not contain a line graph illustrating the hydraulic or organic projections for the next 5 years, a discussion of the data used for these projections, or a copy of the data, as required by Chapter 94, Section 94.12(a)(1)(2) and (3).
2. The Report discussed that the influent sampler, located near the Control Building, has been repaired yet continues to produce unrepresentative influent wastewater samples. Please indicate when the influent sampler will be replaced, and describe the type of sampler to be installed.
3. As indicated in the Report, the head measuring device and transmitter have been removed from the influent channel to the wet well, where a 12-inch parshall flume is used for influent flow measurement. Please explain when this equipment was removed and how influent flows have been and will continue to be taken. Also, please indicate when the devices are to be replaced.

Please submit the information requested above, as well as a Corrective Action Plan (CAP) and Connection Management Plan (CMP) within 90 days of the date of this letter.

Vijay S. Rajput, Ph.D., P.E.

- 3 -

April 1, 2008

If you should have any questions regarding this letter or the Chapter 94 program, please call Ms. Dana Walker of my staff at 484-250-5881.

Sincerely,

Jenifer Fields, P.E.
Regional Manager
Water Management

cc: Mr. Smith - EOM Consultants
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Appendix B

**EVALUATION OF THE EXISTING
BRISTOL TOWNSHIP
SANITARY SEWER FACILITIES**

BRISTOL TOWNSHIP

OCTOBER 2006



a Bursich company

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**FIGURE NO. 1: BRISTOL TOWNSHIP AUTHORITY
SANITARY SEWER FACILITIES**

**FIGURE NO. 2: TREATMENT PLANT SITE
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EVALUATION OF THE EXISTING BRISTOL TOWNSHIP SANITARY SEWER FACILITIES

1.0 Background

The purpose of this report is to evaluate the existing sanitary sewer facilities that are owned by the Bristol Township Authority and operated and maintained by Bristol Township and make recommendations for a five (5) year Capital Improvement Plan.

Figure No. 1 shows the sanitary sewer facilities owned by the Authority, which includes approximately 65 miles of sewer main and interceptor sewers ranging in size from 8" to 36", eighteen (18) pumping stations and a two (2) stage trickling filter treatment plant that currently has a maximum monthly flow rated capacity of 3.0 MGD. The effluent is discharged to the Delaware River via a 36" outfall sewer with a submerged orifice discharge manifold. The discharge to the Delaware River is permitted under NPDES Permit No. PA0026450.

The current influent limitations contained in the discharge permit are shown in Appendix A. The permit expires January 7, 2007 and the Township has submitted an application to the Department of Environmental Resources for the renewal of the NPDES permit.

The majority of the wastewater produced in the collection system is transported to and treated at the Authority's treatment plant. However, some of the wastewater is conveyed to the Authority's Palmer Avenue Pump Station which discharges the flow directly to the Lower Bucks Joint Municipal Authority's treatment plant for treatment and disposal. Another portion of the wastewater is conveyed to the Authority's Silver Lake Pump Station and a portion of the flow from the station is diverted to the Bristol Borough's collection system for treatment and disposal at the Borough's plant. Lastly, a portion of the wastewater is discharged either to the Falls Township's interceptor for conveyance to the Bucks County Water and Sewer Authority's (BCWSA) interceptor or discharged directly to the BCWSA interceptor for conveyance and treatment at the City of Philadelphia's Northeast Sewage Treatment Plant.

2.0 Description Of Existing Treatment Plant

The original treatment plant was constructed in 1963 and had a rated capacity of 2.25 MGD. The facilities provided were as follows:

- Influent pump station
- Two (2) Primary Clarifiers
- One (1) Distribution Chamber
- Two (2) Trickling Filters with rock media operating in a semi-series mode
- Two (2) Final Clarifiers
- Two (2) Chlorine Contact Tanks
- Recirculation Pump Station
- 1100 Feet of 36" RCP outfall sewer with a submerged discharge to the Delaware River
- Two (2) Anaerobic Digesters with floating covers and Operations Building

- Control Building housing the following items:
 - Influent Pumps and Controls
 - Influent Wet Well with Comminutor
 - Two (2) Vacuum Filters
 - Chlorine Room
 - Chemical Storage Room
 - Primary Sludge Pumps
 - Two (2) Vacuum Filter and Associated Pumps and Conveyors
 - Chemical Makeup Equipment for Sludge Conditioning
 - Office
 - Small Laboratory Toilet and Locker Room
 - Water Pit
 - Sludge Well
 - Boiler Room
 - Standby Generator

From 1983 to 1989, the following additions or modifications were made to the treatment plant:

- Replacement of rock media in the Trickling Filters with synthetic plastic media
- Replacement of existing Rotary Distributors and change in operation of trickling filters from semi-series to parallel
- Installation of automatic filter screen and Grit Chamber upstream of the Primary Clarifiers
- Installation of Effluent Meter Chamber with Doppler type meter upstream of the Chlorine Contact Tanks
- Installation of two (2) trickling filter towers with associated lift pumps
- Replacement of Digester covers, piping, valves, boiler control panel and gas handling equipment. The Primary Digester floating cover was provided with a gas recirculation system for mixing the tank contents. The Secondary Digester was provided with a gas holder type floating cover.
- The existing two (2) 18" Primary Clarifier gate valves were replaced with 18" ball valves. At the same time, the 18" bypass line downstream of these valves was cut and capped. As a result, the bypassing of raw sewage directly to the Chlorine Contact Tanks is no longer possible.
- Installation of Stormwater collection system to solve ponding problems at the site. Stormwater is discharged to the 36" outfall sewer.
- Telescopic valve pits with mixers were added to each Primary Clarifier to allow for control of the concentration of sludge that is pumped to the digesters

In 1994, the two (2) existing Vacuum Filters and associated equipment were removed and replaced with one (1) centrifuge. The existing conveyor that transports the sludge to the receptacle located outside the Control Building was not replaced. Appendix B provides detailed information about the equipment at the treatment plant.

3.0 Evaluation of and Recommendations for the Treatment Plant Facilities

3.1 General

Several visits were recently made to the treatment plant to observe the condition and operation of the existing treatment facilities. The purpose of this evaluation is to identify significant or potentially significant problems that either exist or might develop in the near future. An in depth discussion of maintenance and preventative maintenance practices at the treatment plant will not be discussed in this report. However, a brief discussion of this item will be addressed. Figure No. 2 shows the treatment units and yard piping at the Authority's treatment plant.

3.2 Maintenance

A significant number of the equipment manufacturers' operation and maintenance manuals are not present at the plant site. In addition, no formal operation and maintenance manual for the overall treatment plant has been prepared.

Most of the employees at the treatment plant have been recently hired and, as a result, they could not describe the past preventive maintenance or maintenance practices. It appears the Policy in place was that if something broke and it was considered important, it would be fixed. If the item was not considered important, it was not fixed or replaced. Lastly, there is no plan in place and the associated budgeting to replace equipment that is approaching the end of its useful life.

3.3 Influent Sampler

Located near the Control Building and adjacent to the first manhole upstream from the wet well for the three influent pumps is a small masonry building that houses the influent sampler. The sampler has been repaired several times and continues to produce samples that do not appear to be representative of the characteristics of the influent wastewater. Samples that are not representative can result in NPDES Permit violations for percent removal of BOD and suspended solids, make it difficult to evaluate plant performance, distort the actual loadings to the plant and do not produce reliable results for use in the Pretreatment Program or the establishment of local discharge limits.

It is noted that in addition to the raw wastewater, the digester supernatant and overflow pipe is also tributary to the sampling manhole. A piped digester overflow rarely occurs because of a high level alarm and the operator does not withdraw supernatant on the days that the wastewater is being sampled. As a result, the sample obtained from this location is representative of the raw influent wastewater.

It is recommended that the influent sampler be replaced with the same type as was recently purchased for the effluent sampler.

3.4 Influent Wet Well

A. The influent channel to the wet well has a 12" parshall flume for flow measurement. However, the head measuring device and transmitter have been removed. It is recommended that a new level indicator/transmitter be installed.

- B. The wet well has been provided with two (2) compartments with an interconnecting 20" square sluice gate. The influent channel has been provided with two (2) stop plates that allow for the flow to be directed to one or both wet well compartments. If the flow is directed to only one compartment, the level in the two compartments will be equalized if the interconnecting 20" sluice gate is open.

Directing the flow to one compartment and closing the 20" sluice gate would allow the plant personnel to clean the other compartment, replace or repair the level sensing element that controls the pump operation or repair or replace the suction valve or piping to the associated influent pump without the need for bypass piping.

There is no indication that the 20" sluice gate has ever been operated. It is recommended that the plant personnel attempt to close the gate and prove that each compartment can be isolated. If the gate is inoperable, then it is recommended to be replaced. Unfortunately, bypass pumping of the entire influent flow will be required to accomplish the replacement. As a result, this work should be scheduled concurrently when the 12" discharge valves for the three (3) raw sewage pumps are replaced. The replacement of the 12" valves is discussed in the next section.

- C. The treatment plant personnel have indicated that periodically during manned and non-manned hours that slugs of waste with a low pH are discharged to the treatment plant. Since the influent pH is only sampled twice per day by means of grab samples, it is impossible to determine when and if a wastewater with a low pH is entering the treatment plant. It is recommended that a system to continuously measure and record the influent pH be installed.

3.5 Influent Pumps

- A. The three (3) influent pumps are in reasonably good condition and can pump the maximum influent flow with one (1) pump in standby. A spare rotating assembly is available for immediate installation if a problem occurs with one of the pumps. Unfortunately, it is reported that both the suction and discharge OS & Y gate valve are difficult to operate and do not provide tight shutoff. It is recommended that all six (6) valves be replaced. In order to replace the discharge valves, bypass pumping of the influent flow to the Automatic Filter Screen located upstream of the Grit Chamber will be required.
- B. Two (2) of the pumps have magnetic clutches coupled to the drive motor that permit the speed of the pump to be varied so that the discharge rate closely matches the influent rate. These drives are part of the original equipment installed in 1963 and have been very reliable. There is no record whether any service has ever been performed on the drives or speed controls. It is recommended at this time that a field service technician familiar with the equipment inspect the drives and controls, determine their condition, verify that replacement parts are available and make all necessary repairs.

3.6 Influent Pump Controller

The influent pump controller controls the starting, stopping and speed of the two (2) variable speed pumps and the one (1) constant speed pump. The manufacturer of the control panel is no longer in business and almost all of the parts are no longer manufactured. It is recommended that the control panel be completely replaced.

3.7 Automatic Filter Screen

The screen has been in continuous use for approximately eighteen (18) years and has performed well. The plant personnel indicate that some of the screenings that would be captured by the screen are found being lodged in some of the downstream equipment. It is felt, as a minimum, that the brushes that clean the screen need to be replaced. However, considering the running time accumulated over the years and that there is no record that any significant maintenance has been performed, it is recommended that a factory authorized technician with the assistance of the plant personnel inspect the screen and replace parts as needed.

3.8 Grit Chamber

The inclined grit screw is the only moving part in the Grit Chamber. The screw operates at a low speed for a short time period each day. There is no apparent significant wear, noise or vibration from the drive system or the exposed portion of the screw.

It is recommended that the tank be drained and the lower and intermediate bearings and the submerged portion of the screw be inspected for wear.

3.9 Primary Clarifiers

A. The two (2) clarifiers are of the center feed, column supported type. The clarifier mechanisms are the original equipment and have been in continuous operation since being placed in service. There is no unusual noise, vibration or jerking motion in the drive system. It is understood that the torque sensing equipment for alarming and shutdown are not operable. Considering that the drive systems are approaching the end of their useful life and that the equipment manufacturer is no longer in business, it is recommended that the drives be replaced using a different drive manufacturer.

B. In order to replace the drives, the bridge from the outer wall to the center of the tank must be removed, an adapter plate installed to adapt to the new drive and then the bridge reinstalled. The bridge assembly consists of I beams with cross members, steel checkered plate walkway and iron handrail. From a visual inspection of that portion of the bridge that can be inspected with the tanks in service, the material appears to be in reasonable condition. However, since there is a substantial amount of cost to remove, adapt and reinstall the bridge assembly, it is felt that it would be prudent to budget for its replacement.

C. The weirs and baffles are in good condition.

- D. Each clarifier has a scum collector arm at the liquid surface that is attached to and rotates with the collector mechanism. The scum arm directs the floating material to a scum box for removal from the tank. Unfortunately, there seems always to be a significant amount of floatables that have accumulated on the surface of both tanks. This accumulation is aesthetically unpleasant and can cause odors in warm weather.

It is felt that the scum removal system is not as effective as it could be because the crest of the scum troughs are too high. It is recommended that the crest be $\frac{3}{4}$ " to 1" above the maximum water level. The crests for both scum trough appear to be approximately 2 to 2 $\frac{1}{2}$ " above the water level. It is recommended that the troughs be lowered. In the event the raising of the scum box does not completely resolve the problem, it is suggested that a baffle approximately 24 feet in length be installed from the center feed well to the scum box to guide the floatables to the scum box.

- E. The submerged portion of the clarifier mechanism is usually fabricated from steel angles. At the bottom of the mechanism is a series of adjustable metal squeegees that are angled to direct the sludge on the bottom to the center sludge hopper as the mechanism turns. It is recommended that each tank be drained, the mechanism cleaned and any corroded structural member or defective squeegee replaced.

3.10 Trickling Filter Distribution Box

- A. The effluent of both Primary Clarifiers is discharged to a distribution box. The distribution box serves the following functions:
- Receives the Primary Clarifier effluent and distributes the flow to the two Primary Trickling Filters that operate in parallel.
 - Receive recirculated flow from the effluent of the Secondary Clarifiers and combines it with the Primary Clarifier effluent.
 - Provides sluice gates for the isolation of each trickling filter.
- B. The two (2) sluice gates for the trickling filters are provided with electric actuators. The actuators are original equipment and are no longer operable. It is recommended that as a minimum, both electric actuators be replaced. It is not known what type of shutoff will be provided when the gates are closed.
- C. A third sluice gate is located in the distribution box. The electric actuator for this gate is also inoperable. This gate is always closed. However, if the gate were to be opened, the effluent from the Primary Clarifiers would be directed to the influent of the Chlorine Contact Tanks. No action is recommended for this actuator and the gate will remain closed.

3.11 Primary Trickling Filters

- A. The synthetic media and rotary distributors are both in good condition and are operating well. It appears, however, that the orifices for the rotary distributors are not adjusted properly. It is recommended that the orifices be adjusted in accordance with the manufacturer's specifications to ensure that the distributors continue to rotate at low flows.

- B. Sluice gates with inoperable electric actuators are located in the effluent box for each trickling filter. In the past, the sluice gates would be used TO periodically flood the rock media. However, since the rock media has been replaced with synthetic media with a high void ratio, periodic flooding is no longer required. As a result, no action on these gates is recommended.

3.12 Secondary Trickling Filter Pumps

- A. The effluent of the Primary Trickling Filters flows by gravity to the wet well of the Secondary Trickling Filter pumps. The original screw pumps installed in 1988 to lift the sewage to the influent channel of the Secondary Trickling Filters have recently been replaced with self-priming type centrifugal pumps with variable speed drives. The pumps and controls are operating well.
- B. A submerged transducer is used to measure the liquid depth in the wet well and send the speed signal to the pump controller. The type of transducer used is intended to be used for clean water. It is recommended that the transducer be replaced with one that is intended to be used in dirty water applications. In addition, it is recommended that a high level alarm be installed to indicate either a pump failure or pumping problem.

3.13 Secondary Trickling Filters

All items or equipment associated with the Secondary Trickling Filters appear to be in good condition and are operating well.

3.14 Secondary Clarifier Isolation Valves

Both clarifiers have a buried 24" gate valve on their influent pipes to allow for isolation of the clarifiers in order to perform the required maintenance. Each valve is difficult to operate and does not provide tight shutoff. As a result, each clarifier has not been drained for more than twenty (20) years. It is recommended that each 24" valve be replaced.

3.15 Secondary Clarifiers

- A. The Secondary Clarifiers are of the same manufacturer as the Primary Clarifiers and are also original equipment. The same comments presented about the Primary Clarifiers also apply to the Secondary Clarifiers with the exception of the scum collector. No scum collection equipment has been provided. It is recommended that each clarifier drive be replaced after the influent isolation valves have been replaced. Also, it is recommended that the submerged portion of each clarifier mechanism be inspected and repaired as required.
- B. Apparently several years after startup, a scum collection manhole was installed on the 24" influent line to each clarifier upstream of each shutoff valve. Scum is 'trapped' in each manhole and floatables are not usually present on the Clarifier water surface. However, no means of removing the accumulated scum from each manhole was provided and a thick scum mat is usually located in the manhole that is difficult for the operators to remove. Prior to replacing the 24" influent valves, it is recommended that a method for removing the scum be determined.

3.16 Chlorine Contact Tanks

- A. The effluent from each Secondary Clarifier flows by gravity through the wet well of the Recirculation pump Station and then to the influent box of the Chlorine Contact Tanks via a submerged 24" pipe. Located in a Meter Pit between the wet well and the influent box is the effluent Doppler type flow meter. A 1 ½" PVC pipe chlorine solution diffuser with ten (10) 3/8" diameter holes has recently been installed and is located at the exit of the 24" pipe in the influent box to add and mix chlorine solution with the wastewater.
- B. A chronic problem at the treatment plant has been non-compliance with either or both fecal coliform and chlorine residual limits. Better results have been obtained with the installation of the new diffuser, but non-compliance still exists. In order to obtain a fecal coliform count of less than 200/100 ml, a chlorine residual at the effluent of the Chlorine Contact Tanks of approximately 0.6 mg/l is required.
- C. It has been observed that significantly different chlorine residuals are obtained when effluent samples are tested from each of the contact tanks. As a result, it is recommended that a mixer be installed in the influent box to obtain a better mix of the chlorine solution with the wastewater. Hopefully, the better mix will also result in a better coliform reduction.
- D. The walls and floors of the Contact Tanks are black and some of the aggregate is exposed resulting in rough surfaces in portions of the tanks. It is recommended that the tanks be cleaned, patched where required and a protective coating be applied that will produce smooth and slippery surface that will be conducive to cleaning and not to bacterial growth or solids accumulation.

3.17 Recirculation Pump Station

- A. A portion of the Final Clarifier effluent is pumped to the Primary Trickling Filter Distribution Box to ensure that there is sufficient forward flow to turn the rotary distributors and to dilute the Primary Clarifier effluent with oxygenated water. Two (2) vertical, pedestal-mounted, constant speed pumps each rated at 2.25 MGD are located in the pump station. With the exception of during high wet weather flows, one (1) pump runs continuously.
- B. The pumps and valves are original equipment and are in reasonably good condition considering their age and use.
- C. Since the equipment is approximately forty (40) years old, it is recommended that its replacement be planned for in the next few years. Either before or during the replacement of the pumps, it is suggested that the installation of Variable Frequency Drives with a controller be considered to allow for an automatic varying rate of recirculation and a relatively constant hydraulic loading to the Trickling Filters.

3.18 Utility Water System

- A. Potable water is used at the treatment plant for making chlorine solution, pump seal water, flushing water, yard hydrants and wall hydrants. The water from the water supplier is discharged to an atmospheric sump through a control valve. An air gap is provided to prevent backsiphonage. The water from the sump is pressurized by two (2) horizontal, close-coupled centrifugal pumps.**
- B. A control panel has been provided for the operation of the two (2) pumps. The controls are designed for one (1) pump to operate continuously as the lead pump with the second pump called if the pressure drops below a certain set point. If the pressure were to continue to drop below a second set point, an alarm would be sounded. Unfortunately, the control panel is not functional and parts are not available. Presently, one pump is put in the 'hand' position and let to run continuously. If a pump failure occurred, the failure would not be annunciated and the second would not be automatically started. As a result, the disinfection system would not be in operation and this condition could exist for up to twenty (20) hours before being detected. It is recommended that a completely new control system be installed.**
- C. The seals on both pumps are leaking and the pumps have been rebuilt several times. It is recommended that either before or during the replacement of the control panel that both pumps be replaced.**
- D. The treatment plant does not have a utility water system with wall and yard hydrants throughout the plant site that would provide flushing or housekeeping water at each treatment unit. In addition, the treatment plant receives a bill for potable water of approximately \$1200.00 each month. It is recommended that a utility water system that uses filtered treatment plant effluent water be designed and installed.**

3.19 Chlorination System

- A. The chlorination system consists of the following items:**
 - One (1) one-ton cylinder with tank mounted vacuum regulator.
 - Two (2) 100 lb. cylinders with tank-mounted vacuum regulators.
 - One (1) automatic gas valve with a 100 ppd Rotometer.
 - One (1) 100 ppd manually controlled rate valve.
 - One (1) 100 ppd ejector with a potable water supply for vacuum production and chlorine solution.
 - Scales for each cylinder with low weight alarms.
 - Automatic switchover from the ton cylinder to the 100 lb. Cylinder when the ton cylinder is out of chlorine.
- B. All regulators are new and the automatic gas valve has recently been serviced.**

- C. The one (1) ton cylinder was located out of doors for at least fifteen (15) years and operated satisfactorily. For some reason, the plant personnel were advised or directed to install the ton cylinder in the Control Building. The cylinder is presently located in an unsafe area that is not designed to house a hazardous gas. If a leak were to occur, the entire Control Building could fill with chlorine gas and a significant amount of damage to equipment would occur and to personnel if they were in the Building at the time a leak occurred. It is recommended that the one (1) ton cylinder be relocated outdoors immediately.

3.20 Sludge Removal

- A. Sludge from the Secondary Clarifiers is removed continuously via telescopic valves and returned to the headend of the treatment plant. The telescopic valves are hard to operate and need some maintenance work. Unfortunately, this cannot be accomplished until the influent valves to the clarifiers have been replaced so each tank could be isolated and partially drained.
- B. Sludge from the Primary Clarifiers, which is a combination of Primary and Secondary sludge, is removed from each clarifier via telescopic valves and discharged to a sludge pit attached to the side of each clarifier. Scum from the sludge skimmer is also discharged to the pit. A mixer is located in each pit to blend the sludge and scum. The mixer motors have recently been replaced and all equipment is operating satisfactorily.

3.21 Primary Clarifier Sludge Pumps

- A. The original duplex piston pumps have been removed. One (1) suction-lift, self-priming type centrifugal pump with a sludge grinder in the suction piping has been installed. A second pump with valves and fittings are in the Control Building but not installed. It is recommended that the pump and piping be installed as soon as possible.
- B. The Primary Clarifier Sludge Pumps pump sludge from the Primary Clarifier Sludge Pits to the Anaerobic Digesters. Presently, there is no meter located in the discharge piping to measure and totalize the amount of sludge wasted. It is recommended that a magnetic flowmeter be installed.

3.22 Anaerobic Digesters

- A. In 1985, major rehabilitation of the digesters was completed that included the following:
- Removal and replacement of both floating covers.
 - Draining and cleaning of each tank.
 - Installation of gas recirculation equipment.
 - Installation of new gas collection equipment.
 - Replacement of heater controls

- B. Shortly after the digesters were cleaned, the Automatic Filter Screen and Grit Chamber were placed into operation. Considering this, it is felt that the tanks would not have a significant accumulation of grit and rags that would rob the tanks of useful volume, and, as a result, cleaning of the tanks at present should not be required.
- C. The digester boiler is original equipment. It is reported that the water tubes have been replaced several times, some of the sludge tubes are in poor condition and some of the appurtenant equipment located on the boiler need to be replaced. It is recommended that the boiler be replaced.
- D. The gas recirculation system is not operable and hasn't been used for several years. It is recommended that the equipment be inspected by the manufacturer's representative to determine whether it is cost effective to repair or replace the unit.
- E. The rollers for the covers are in poor condition and should be replaced.
- F. Some of the gas handling equipment such as drip traps, moisture and sediment accumulators and pressure/vacuum relief valves have been removed. These items should be purchased and installed.
- G. Maintenance work is required on the gas manometer and gas flowmeter system.

3.23 Digested Sludge Transfer

Digested sludge is transferred from the digesters to a Sludge Well at the Control Building. Transfer of the sludge is controlled by a bubbler level system in the well and an air-operated plug valve in the transfer pipe. The equipment has operated relatively trouble free for several years and no recommendation for repair or replacement is made at this time.

3.24 Centrifuge Loading Pumps

- A. Two (2) progressive cavity pumps with mechanical variable speed drives are located in the basement of the Control Building. The pumps withdraw sludge from the sludge well and pump the sludge to the centrifuge. The centrifuge control panel controls the operation of the pumps. Both pumps and drives are in good operating condition and no action recommended to be taken.
- B. No flowmeter exists in the discharge piping to the centrifuge. It is recommended that a 4" magmeter be installed to indicate and totalize the amount of sludge processed.

3.25 Centrifuge

- A. The centrifuge is relatively new and in good working condition. Operation of the centrifuge is usually required only one (1) or two (2) days per week and a sludge cake of approximately 24% is usually obtained.

- B. Sludge cake from the centrifuge is discharged to a screw conveyor that was installed with the centrifuge. The screw conveyor conveys the sludge a short horizontal and vertical distance to a horizontal flat belt conveyor, which in turn discharges to an inclined troughing belt conveyor for disposal of the sludge to a 20 cubic yard container located outside the Control Building. Both belt conveyors are original equipment and significant portions of the frames are corroded. In addition, the drive systems, belt tensioners and some rollers need replacement. It is recommended that both conveyors be removed and replaced with a single conveyor.

3.26 Polymer System

The polymer makeup system is completely manual. The operator drains a known amount of emulsion polymer into a container and then empties the container into a tank with a mixer that is located in the upper level of the Control Building. A known amount of water is manually added to the tank through a meter and mixed for several minutes to obtain a uniform and thinner emulsion. When the operator notices that the polymer storage tank located in the basement of the Control Building is low, the drain valve for the mix tank on the upper level is opened and the tank drains by gravity to the storage tank below. The operator repeats this process up to thirty (30) times a day! It is recommended that an automatic makeup and blending system be installed.

3.27 Diesel Powered Generator

A 200 kw, 240 volt, 3 phase diesel-powered generator with an automatic transfer switch is located in the basement of the Control Building. The generator is exercised usually every other Friday for 30 to 45 minutes under load. The generator powers everything in the plant with the exception of the Automatic Filter Screen, Grit Chamber and Secondary Trickling Filter pumps. The generator and transfer switch are original equipment. The generator is reported to be in good operating condition. However, intermittent problems have been encountered with the transfer switch. Considering the age of the transfer switch, it is recommended to be replaced.

4.0 Sewage Pumping Stations

4.1 General

The following eighteen (18) pumping stations are located in the Bristol Township Authority's sewage collection system:

- Croydon Acres
- Croydon Manor
- Croydon Park
- Bristol Park
- State Road
- College Park
- Delhaas
- FDR
- Silver Lake

- Margo Gardens
- Beaver Dam Road
- Palmer Avenue
- Radcliffe Street
- Atkins Avenue
- Keystone Park
- Hartel Street
- Delaware Avenue
- I-95 Pump Station

The Croydon Acres and FDR stations were constructed and in service prior to the construction of the Authority's collection system and treatment plant. These stations conveyed the wastewater to the Township of Falls treatment plant located at Newportville and Ford Roads. When the Authority's system was constructed, the discharge from these two (2) stations was routed to discharge to the Authority's system.

The Croydon Manor, Croydon Park, Silver Lake, Palmer Avenue, Radcliffe Street, College Park and Margo Gardens stations were constructed with the original system. As the original collection system was extended to serve development, the remaining pump stations were installed by Developers and dedicated to the Authority. The last pump station constructed was the I-95 station.

The Croydon Manor, Croydon Park, FDR, Croydon Acres, Silver Lake, Palmer Avenue and Delaware Avenue stations are of the concrete and masonry wet well and dry well design. Bristol Park, State Road, Delhaas, Margo Gardens, Beaver Dam Road, Keystone Park and Hartel Street are of the pre-engineered metal dry well and round concrete wet well type.

The College Park and Radcliffe Street stations were originally of the pre-engineered air ejector type station with the equipment installed in a metal well. Because of the inherent operating problems with these types of stations, each station was converted to a self-priming, suction lift station by installing the pumps, valves and controls in a concrete pit adjacent to the metal well and converting the well into a wet well.

The Atkins Avenue station is a pre-engineered, air ejector type station with a metal well. The I-95 station is a vacuum primed, suction lift station with the pumps, controls and valves installed in a small fiberglass enclosure mounted atop a six (6') foot diameter concrete wet well.

Appendix C provides detailed information about each pump station.

4.2 Condition of Pump Stations

From a mechanical and electrical standpoint, all the stations have been reasonably well maintained. All stations can handle peak wet weather flows and no overflows have been reported to occur. Over the years, the majority of the pumps in the original pump station have been replaced in kind. It is noted that the bubbler based control panels installed in several of the original pump stations have parts that are no longer available. It is recommended that these panels be either upgraded or replaced in the next few years. It is reported that the control panels are presently functioning well.

4.3 Alarm System

Each of the eighteen (18) stations has a high level float located in the wet well. When a high level condition occurs, the float switch closes and sends a signal via a dedicated pair of telephone lines to a Main Alarm Panel located at the treatment plant. During non-working hours, an alarm dialer will be activated to contact personnel to respond to the alarm condition.

The alarm system was installed twenty-six years ago and still remains functional with a reasonable amount of maintenance. However, when funds become available in the future, it is recommended that the system be replaced with equipment employing current technology.

4.4 Recommended Actions

In addition to the miscellaneous maintenance that is ongoing at each pump station, the following major items of work are recommended:

A. Palmer Avenue Pump Station

- 1. The last 12" X 8" wye in the elevated discharge manifold has developed a leak and a temporary gasket type patch was installed several months ago. It is imperative that the fitting be replaced as soon as possible. The Palmer Avenue Pump Station discharges wastewater from the northern portion of the collection system directly to the Lower Bucks Joint Municipal Authority's (LBJMA) treatment plant. Unfortunately, the forcemain is long and has a submerged discharge at the treatment plant. Careful planning and coordination will be required for this repair/replacement.**
- 2. Representatives of LBJMA have indicated that their Authority will be proposing to charge Bristol Township for treatment at their plant on the basis of measured flow and not on the basis of the number of connections. Considering this, it is recommended that, if possible, a magnetic flowmeter be installed in the forcemain at the same time the wye fitting is being replaced.**

B. Silver Lake Pump Station

- 1. A portion of the flow from the pump station is diverted to the Bristol Borough collection system for treatment at the Borough's plant. The remaining flow is conveyed to the Authority's treatment plant. Billing from the Borough is based on metered flow. The accuracy of the existing Doppler meter that replaced the original magnetic flowmeter is questionable. As a result, a new magnetic flowmeter and discharge valve are recommended to be installed.**
- 2. In 1976, the Authority entered into a thirty (30) year agreement, which provided for the Township to have 0.5 MGD of capacity at the Borough's plant. Both parties have expressed a willingness to extend the Agreement and negotiations are underway for a new Agreement. Since recent monthly flows have periodically slightly exceeded the 3.0 rated capacity of the treatment plant,**

consideration should be given to purchasing additional capacity in the future from the Borough. Several large developments are being proposed that are tributary to the Authority's treatment plant and it is questionable whether capacity will be available at the Authority's treatment plant. The cost to purchase additional capacity can be recovered by increasing the tapping fee.

3. A PLC Controller was recently installed to function in conjunction with the existing control panel. However, no operator interface was installed to allow the Authority personnel to change set points. It is recommended that the interface be installed in the near future.

C. I-95 Pump Station

This station is the least expensive type of pump station that a Developer could have been permitted to install. It has been a constant maintenance nightmare to the Township personnel and after hour callouts are becoming more frequent. It is recommended that the vacuum prime, suction lift type station be abandoned and a submersible type station be installed. The existing wet well would be used to house the pumps. Water service or lighting has not been provided at the site.

Consideration may be given to establishing a separate district for the area serviced by the station and enacting a surcharge to recover the replacement costs.

D. Atkins Avenue Station

This air ejector type station also has required a significant amount of maintenance since its installation. During a recent visit to the station, it was noticed that the influent flow to the station was approaching the station's capacity of 50 gpm.

The station has a small service area but one with a high groundwater table. A subsequent video inspection of a portion of the system revealed two (2) sources of significant infiltration. It is recommended that these leaks be repaired as soon as possible.

After the leaks have been repaired, the reserve capacity of the station should be evaluated. Even if it is determined that sufficient reserve capacity exists, funds should be budgeted for upgrading the station controls.

5.0 Gravity Sewer System

As shown in Figure 1, the Authority has an extensive gravity collection system. The majority of the system was installed in 1962 – 1963 using vitrified clay pipe (VCP). Pipe sizes range from 8" in diameter to the 36" influent trunk sewer to the treatment plant. In 1990, the specification for the sewer main material was changed from VCP to SDR18 PVC or Class 52 ductile iron pipe. It is noted that the comprehensive sewer map shown in Figure 1 has not been updated since 1991 to show extensions to the sewer system. It is recommended that the sewer map be revised to indicate recent extensions to the system.

The overall system is in good condition considering its age. Unfortunately, the collection system exhibits I/I problems during rain events. The portion of the system that is tributary to the treatment plant is not significant enough to exceed conveyance capacities in the collection and pumping station systems or create operating problems at the treatment plant.

However, both the Bucks County Water and Sewer Authority and the Lower Bucks Joint Municipal Authority have imposed connection bans to those portions of the collection system that are tributary to their systems due to high peak flows during rain events.

Because of insufficient funding, manpower and equipment, Bristol Township has never implemented a significant and continuous I/I abatement program. For the most part, maintenance of the collection system has been on a reactive basis instead of proactive.

The only major equipment item the Authority has for maintenance of the collection system is a high pressure jet washer. However, the last three times a washer was purchased it was used equipment sold by other Sewer Authorities. Needless to say, the equipment required constant maintenance and was often unreliable.

Reduction of I/I will be important if the Township is to proceed with some of the proposed developments. In order to implement an effective I/I reduction program, there must be proper equipment and staffing available. It is recommended that a new high pressure jet washer, a lateral camera and sewer main video inspection equipment be purchased.

6.0 Staffing

In order to maintain reliable operation at the treatment plant and pump station, properly maintain the collection system and implement an I/I reduction program, it is recommended that, as a minimum, the following staff be in place:

<u>Position</u>	<u>No. of Employees</u>
Superintendent	1
Plant Operators	2
Mechanics	2
Mechanic Helper	1
Sewer System Crew	3

7.0 Estimated Costs

The estimated present day costs to implement the recommended actions are as follows:

7.1 Treatment Plant

A. Maintenance

- Preparation of O&M Manual \$ 20,000

B. Replace Influent Sampler 6,000

C. Wet Well

- Install Influent Flowmeter 3,000
- Repair/Replace Sluice Gate 5,000
- Install pH Meter/Recorder 6,000

D. Influent Pumps

- Replace Suction and Discharge Valves 30,000
- Replace Pump Control Panel 15,000
- Service Electro-Magnetic Clutches and Controls 4,000

E. Filter Screen and Grit Chamber

- Service Filter Screen 15,000
- Service Grit Screw 2,000

F. Primary Clarifiers

- Replace Collector Drives 80,000
- Replace Bridges 20,000
- Repairs to Submerged Mechanism 2,000
- Raise Scum Troughs 1,000

G. Distribution Box

- Replace Electric Actuators 12,000
- Miscellaneous Repairs to Sluice Gates 2,000

H. Secondary Trickling Filter Pumps

- Replace Transducers 2,000
- Install Alarms 3,000

I. Secondary Clarifiers	
• Replace Influent Valves	40,000
• Install Scum Collection Equipment	25,000
• Replace Collector Drives	80,000
• Replace Bridges	20,000
• Repairs to Submerged Mechanism	2,000
J. Chlorine Contact Tanks	
• Install Mixer	6,000
• Clean and Install Protective Coating	15,000
K. Recirculation Pump Station	
• Replace Pumps and Motors	28,000
• Install VFDs and Controller	8,000
L. Utility Water System	
• Replace Pumps	6,000
• Replace Control Panel	6,000
• Install Non-Potable Water Utility System	40,000
M. Sludge Removal	
• Maintenance on Telescopic Valves	2,000
N. Primary Clarifier Sludge Pumps	
• Install Second Pump and Piping	3,000
• Install Flowmeter	7,000
O. Anaerobic Digesters	
• Replace Boiler	40,000
• Repair/Replace Gas Recirculation System	40,000
• Replace Cover Rollers	15,000
• Replace or Repair Gas Collection and Safety Equipment	50,000
• Clean Interior Piping and Replace Defective Valves	20,000
P. Centrifuge Loading Pumps	
• Install Flowmeter	5,000

Q. Centrifuge		
• Replace Belt Conveyors		35,000
R. Polymer System		
• Install Labor Saving Automatic Feed System		25,000
S. Generator		
• Replace 800 Amp Transfer Switch		<u>30,000</u>
	Total	\$ 776,000

7.2 Pump Stations

A. Control Panels		
• Modify Control Panels to Various Pump Stations (\$3000/YR for 5 Years)		\$ 15,000
B. Palmer Avenue P.S.		
• Replace Defective Wye		20,000
• Install Flowmeter		8,000
C. Silver Lake P.S.		
• Replace Meter and Valve		10,000
• Install Operator Interface		600
D. I-95 P.S.		
• Replace with Submersible Pumps and Valve Chamber and Provide Water Service and Lighting		90,000
E. Atkins Avenue P.S.		
• Repair Leaks in Collection System		6,000
• Upgrade Controls and Equipment		<u>10,000</u>
	Total	\$ 159,600

7.3 Gravity Sewer System

- Purchase High Pressure Jetter \$ 85,000
- Update Sewer Map 5,000
- Purchase Lateral Camera 7,000
- Purchase Sewer Main Video Inspection Equipment 100,000
- Allocate a Minimum of \$50,000/Yr for I/I Repairs for next Four (4) Years and \$10,000 this Year 210,000

Total \$ 407,000

Total Estimated Installed Costs \$1,342,600

10% Contingency 134,260

Subtotal \$1,476,860

Engineering, Legal And Administration \$ 153,140

Total \$1,630,000

8.0 Recommended Five (5) Year Capital Improvement Plan

The following is the recommended plan for implementing the recommended actions and estimated costs discussed in the previous sections of the Report. The highest priority is given to reducing the possibility of pollution incidence, NPDES Permit exceptions or significant reduction in system reliability. Also considered is work related to reducing I/I in the system so that proposed projects can proceed without delay. The Authority's fiscal year runs from April 1 to March 31.

8.1 Fiscal Year 06-07

• Replace Defective Wye and Install Meter in Palmer Avenue P.S.	\$ 28,000
• Replace Meter and Valve and Install Operator Interface at Silver Lake P.S.	10,600
• Repair Sewer Main Leaks in Atkins Ave.	6,000
• Update Sewer Map	5,000
• Upgrade Pump Station Controls	3,000
• Purchase High Pressure Jetter	85,000
• Purchase Lateral Camera	7,000
• I/I Repairs	10,000
• Replace Influent Pump Control Panel	15,000
• Install Chlorine Mixer	6,000
• Install Second Primary Sludge Pump	3,000
• Service Grit Screw	2,000
• Raise Scum Troughs	<u>1,000</u>
Total	<u>\$ 181,600</u>
10% Contingency	18,160
Engineering, Legal & Administration	<u>20,345</u>
Total for Fiscal Year 06-07	<u>\$ 220,105</u>

8.2 Fiscal Year 07-08

• Preparation of O&M Manual	\$ 20,000
• Replace Influent Sampler	6,000
• Service Electro-Magnetic Clutches and Controls	4,000
• Service Filter Screen	15,000
• Repairs to Primary Clarifier Submerged Mechanisms	2,000
• Replace Transducers for Secondary Trickling Filter Pumps and Install Alarms	5,000
• Replace Utility Water Pumps	6,000
• Replace Utility Water Pump Control Panel	6,000
• Install Automatic Polymer Feed System	25,000
• I/I Repairs	50,000
• Purchase Sewer Main Video Inspection Equipment	100,000
• Upgrade Pump Station Controls	3,000
• Upgrade Controls at Atkins Avenue P.S.	10,000
• Replace Influent Valves to Secondary Clarifiers	40,000
• Install Scum Collection Equipment for Secondary Clarifiers	25,000
• Install Influent pH Meter/Recorder	<u>6,000</u>
Total	<u>\$ 323,000</u>
10% Contingency	32,300
Engineering, Legal & Administration	<u>38,915</u>
Total for Fiscal Year 07-08	<u>\$ 394,215</u>

8.3 Fiscal Year 08-09

• I/I Repairs	\$ 50,000
• Upgrade Pump Station Controls	3,000
• Replace Suction and Discharge Valves for Influent Pumps	30,000
• Repair/Replace Wet Well Sluice Gate	5,000
• Replace Electric Actuator on Trickling Filter Distribution Box Sluice Gates and Miscellaneous Repairs to Gates	14,000
• Replace Primary Clarifier Collector Drives and Bridges	100,000
• Replace I-95 Pump Station	90,000
• Install Primary Sludge Pump Flow Meter	7,000
• Replace or Repair Digester Gas Collection and Safety Equipment	50,000
• Replace Digester Cover Rollers	15,000
• Replace Sludge Cake Conveyors	35,000
• Install Flowmeter for Centrifuge Loading Pumps	<u>5,000</u>
Total	<u>\$ 404,000</u>
10%Contingency	40,400
Engineering, Legal & Administration	<u>45,260</u>
Total for Fiscal Year 08-09	<u>\$ 489,660</u>

8.4 Fiscal Year 09-10

• I/I Repairs	\$ 50,000
• Upgrade Pump Station Controls	3,000
• Install Influent Flowmeter at Treatment Plant	3,000
• Replace Secondary Clarifier Collector Drives and Bridges And Repairs to Submerged Mechanism	102,000
• Maintenance to Secondary Clarifier Telescopic Valves	2,000
• Clean and Install Protective in Contact Tanks	15,000
• Clean Interior Piping and Replace Defective Valves	<u>20,000</u>
Total	<u>\$ 195,000</u>
10% Contingency	19,500
Engineering, Legal & Administration	<u>21,845</u>
Total for Fiscal Year 09-10	<u>\$ 236,345</u>

8.5 Fiscal Year 10-11

• I/I Repairs	\$ 50,000
• Upgrade Pump Station Controls	3,000
• Replace Generator Automatic Transfer Switch	30,000
• Replace Digester Boiler	40,000
• Repair/Replace Digester Gas Recirculation System	40,000
• Install Non-Potable Water Utility Water System	40,000
• Replace Recirculation Pumps and Install VFD and Controller	<u>36,000</u>
Total	\$ <u>239,000</u>
10% Contingency	23,900
Engineering, Legal & Administration	<u>26,775</u>
Total for Fiscal Year 10-11	\$ <u>289,675</u>

FIGURE NO. 1

**BRISTOL TOWNSHIP AUTHORITY
SANITARY SEWER FACILITIES**

FIGURE NO. 2

**TREATMENT PLANT SITE
AND YARD PIPING PLAN**

APPENDIX A

NPDES PERMIT EFFLUENT LIMITATIONS

NATIONAL POLLUTANT DISCHARGE MONITORING SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Approved
to: 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: BRISTOL TWP AUTH
ADDRESS: 1800 RIVER RD
CROYDON, PA 19021
FACILITY: BRISTOL TWP STP
LOCATION: 1800 RIVER RD
CROYDON, PA 19021

PA0026450
PERMIT NUMBER

001A
DISCHARGE NUMBER

DMR MAILING ZIP CODE: 19021
MAJOR (SUBR01)
OUTFALL 001
External Outfall

Page 1

ATTN:STEVEN W MCCLAIN/PBLC WRKS DIR

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
06	10	01		06	10	31

No Data Indicator

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
pH	SAMPLE MEASUREMENT										
00400 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT				6 INST MIN		9 INST MAX	pH		Daily	GRAB
Solids, total suspended	SAMPLE MEASUREMENT										
00530 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT	563 MO AVG	844 MX WK AV	lb/d		30 MO AVG	45 MX WK AV	mg/L		Twice Every Week	COMP24
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT										
00610 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT	857 MO AVG	885 MX WK AV	lb/d		35 MO AVG		mg/L		Twice Every Week	COMP24
Dieldrin	SAMPLE MEASUREMENT										
38380 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT					Req. Mon. MO AVG	Req. Mon. MX WK AV	mg/L		Once Per Month	COMP24
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT										
50050 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d						Continuous	RCORDR
Chlorine, total residual	SAMPLE MEASUREMENT										
50060 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT					5 MO AVG	1.3 INST MAX	mg/L		Daily	GRAB
Coliform, fecal general	SAMPLE MEASUREMENT										
74055 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT					200 30DA GEO		#/100mL		Twice Every Week	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.	TELEPHONE		DATE		
		AREA Code	NUMBER	YEAR	MO	DAY
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE MONITORING SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Approved
No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

Page 2

NAME: BRISTOL TWP AUTH
ADDRESS: 1800 RIVER RD
CROYDON, PA 19021
FACILITY: BRISTOL TWP STP
LOCATION: 1800 RIVER RD
CROYDON, PA 19021

PA0026450
PERMIT NUMBER

001A
DISCHARGE NUMBER

DMR MAILING ZIP CODE: 19021
MAJOR (SUBR01)
OUTFALL 001
External Outfall

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
06	10	01	06	10	31

FROM

TO

No Data Indicator

ATTN:STEVEN W MCCLAIN/PBLC WRKS DIR

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT										
80082 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT	384 MO AVG	600 MX WK AV	lb/d	*****	21 MO AVG	32 MX WK AV	mg/L		Twice Every Week	COMP24
BOD, carbonaceous, 20 day, 20 C	SAMPLE MEASUREMENT										
80087 A 0 Disinfection, Process Complete	PERMIT REQUIREMENT	590 MO AVG	*****	lb/d	*****	*****	*****			Once Per Month	COMP24
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT										
80091 K 0 Percent Removal	PERMIT REQUIREMENT	*****	*****		*****	88.5 MO AV MN	*****	%		Twice Every Week	COMP24
Solids, suspended percent removal	SAMPLE MEASUREMENT										
81011 K 0 Percent Removal	PERMIT REQUIREMENT	*****	*****		*****	85 MO AV MN	*****	%		Twice Every Week	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge 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.	TELEPHONE		DATE		
		AREA Code	NUMBER	YEAR	MO	DAY
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

APPENDIX B

DESCRIPTION OF TREATMENT FACILITIES

DESCRIPTION OF TREATMENT FACILITIES

1. Influent Pumps

Number of Pumps	-	3
Type of Pump	-	Vertical Centrifugal with Intermediate Drive Shaft
Rated Capacity	-	3000 gpm @ 32 ft. TDH
Drive Type	-	Two (2) with magnetic clutch variable speed drives and 40 HP, 880 RPM Motors
	-	One (1) constant speed with 40 hp, 880 RPM Motor
Speed and Level Control Type	-	Bubbler and Pressure Transducer

2. Automatic Filter Screen

Number of Units	-	1
Size	-	Installed in 2'-6" wide by 4'-6" deep channel
Filter Opening Size	-	15 mm
Rated Capacity	-	8 MGD
Automatic Controls	-	Timer based with high upstream level override
Bypass	-	2'-8" wide by 4'-6" deep channel with manually-cleaned barscreen with 1 5/8" clear opening

3. Grit Chamber

Number of Units	-	1
Type	-	Aerated
Size	-	5' wide by 12' deep
Rated Capacity	-	6 MGD
Grit Removal Equipment Type	-	Shafted screw with solid flights
Controls	-	Manual stop/start for Grit Screw
	-	Aeration Blower runs continuously
Blower Capacity	-	16 cfm
Blower Type	-	Rotary Lobe

4. Primary Clarifiers

Number of Units	-	2
Size, each	-	65' dia. by 8' SWD
Bottom Slope	-	1 in 12
Equipment Type	-	Center Feed, Column Support Type
Detention Time*	-	3.7 hours
Surface Overflow Rate*	-	452 gpd/ft ²
Weir Loading Rate*	-	7,352 gpd/LF
Influent Pipe Size	-	18"
Sludge Withdrawal Pipe Size	-	8"

*at 3MGD

Primary Clarifiers (continued)

Method of Sludge Withdrawal	-	Manually-operated telescopic valves discharging to an attached sludge well for each tank
Scum Removal Equipment	-	Skimmer attached to clarifier mechanism. Scum is discharged to Sludge Well
Sludge Well	-	9'-0" W X 9'-5" L X 13' Deep Box attached to each clarifier. Manually-operated mixer provided to blend the scum and sludge that is pumped by the Primary Sludge pumps.

5. Primary Trickling Filters

Number of Units	-	2
Size, each	-	80' diameter by 6'-3" average media depth
Media Type	-	Munters Synthetic PVC Media providing 42 square feet of surface area and a void ratio of 95%
Rotary Distributor Type	-	Reaction Type with Primary and Secondary Arms
Dosing Interval	-	Continuous
Recirculation Rate	-	2.25 MGD (Total for both filters)
Hydraulic Loading at 3MGD plus 2.25MGD Recirculation	-	22.76 mgad
Tank Type	-	Poured-in-place reinforced concrete with top of tank 6" above
Underdrain Type	-	6" High precast concrete curbs spaced at 6 feet c to c

6. Secondary Trickling Filter Pumps

Number of Units	-	2
Type of Pump	-	Self-Priming Centrifugal (Dri-Prime by Godwin Pumps)
Rated Capacity	-	4050 GPM at 36 ft. TDH
Motor	-	50 hp, 900 RPM
Drive Type	-	Variable Frequency Drive
Speed & Level Control Type	-	Submerged Transducer

7. Secondary Trickling Filters

Number of Units	-	2
Size, each	-	62' diameter by 10 foot average media depth
Media Type	-	Munters Synthetic PVC Media providing 42 square feet of surface area and a void ratio of 95%
Rotary Distributor Type	-	Reaction Type with Primary and Secondary Arms
Dosing Interval	-	Continuous
Hydraulic Loading Rate at 3MGD Plus 2.25MGD Recirculation	-	37.9 mgad

Secondary Trickling Filters (continued)

Tank Type	-	Glass-coated steel. Top of tank located 17 feet above grade.
Underdrain Type	-	6" Precast concrete curbs set spaced at 3 feet on center and mounted on poured-in-place concrete. Walls spaced at 8 feet on center. A 3'-9" average plenum space provided.

8. Final Clarifiers

Number of Units	-	2
Size, each	-	60' Diameter X 8' SWD
Bottom Slope	-	1 in 12
Equipment Type	-	Center Feed, column support type
Detention Time*	-	1.78 Hours
Surface Overflow Rate*	-	928 gpd/ft ²
Weir Loading Rate*	-	13,926 gpd/LF
Influent Pipe Size	-	24"
Scum Removal Equipment	-	None
Sludge Removal Equipment	-	Manually-operated telescopic valves. Waste sludge is returned by gravity to the headend of the treatment plant.

9. Recirculation Pump Station

Number of Units	-	2
Type of Pump	-	Vertical pedestal-mounted centrifugal pump
Drive Type	-	15 hp, 900 RPM constant speed motor
Rated Capacity	-	1575 GPM @ 20 ft. TDH
Level Control	-	None
Mode of Operation	-	One (1) pump operates continuously (except during wet weather flow when it is shut down)

10. Effluent Meter

Meter Type	-	Ultrasonic type with two (2) transducers located on a 24" DIP flowing full
Meter Location	-	In precast concrete Meter Chamber located between the Final Clarifiers and the Chlorine Contact Tanks
Velocity Range in 24" Pipe	-	1.0 to 2.5 fps
Full Scale Setting	-	5 MGD

11. Chlorine Contact Tanks

Number of Units	-	2
Tank Size, each	-	26'-6" L X 14'-9" W X 8' Deep
Baffle Type and Spacing	-	End around at 4'-3" c to c
Number of Baffles/Tank	-	5

Chlorine Contact Tanks (continued)

Inlet Size & Location	-	16" Sq. opening with sluice gate at tank bottom
Inlet Box Size	-	3'6" W X 8' L X 8' Deep
Total tank Volume	-	44,760 Gal.
Contact Time @ 3MGD	-	21.3 Min.
Floatable Baffle	-	No

12. Outfall Sewer

Size & Material	-	36" Dia. RCP
Length	-	1160 LF
Discharge Type	-	Submerged manifold with three (3) 20" outlets
Additional Contact Time at Mean High Tide & 3MGD	-	17 Minutes

13. Chlorination System

Chlorine Source	-	1 Ton cylinder with tank-mounted vacuum regulator. Cylinder mounted on scale.
System Capacity	-	100 lb/day
Backup System	-	100 lb. Cylinder with tank mounted. Vacuum regulator and automatic switchover cylinder mounted on scale.
Feed System	-	Automatic flow-paced gas valve with manual dosage pot. Flow signal received from effluent flowmeter.
Backup Feed System	-	Rotometer with manual gas valve for constant feed rate up to 100 lb/day
Water Source for Ejector	-	Potable water
Alarms	-	Low weight in ton cylinder
	-	Low weight in 100 lb cylinder
	-	Gas leak detector

14. Primary Sludge Pumps

Number of Units	-	2
Type of Pump	-	ITT-Marlow Trash Hog self-priming centrifugal pump with belt drive and 7.5hp motor
Pump Capacity	-	200 gpm @ 42 ft. TDH
Pump Grinder	-	4" Muffin Monster with automatic controls installed on suction side of the pumps

15. Anaerobic Digesters

Number of Units	-	2
Size, each	-	50' Diameter and 22' SWD (max.)
Digester Types	-	Primary Digester with gas recirculation mixer and floating steel cover. Secondary Digester with spiral guided floating steel gas holder cover.

Anaerobic Digesters (continued)

Gas Recirculation

- Mixer Capacity - 150 cfm @ 10 psi
- Tank Bottom Slope - 1 in 4
- Heat Exchanger Capacity - 500,000 BTU/Hr
- Recirculation Pumps - Two (2) recessed impeller, horizontal pumps with variable frequency drive. Each pump rated at 175 GPM @ 12 ft. TDH.

16. Centrifuge Pumps

- Number of Units - 2
- Type of Pump - Netzsch Model NE60A progressive cavity
- Drive Type - Reeves variable pitch drive with electric actuator. Maximum output speed 245 RPM.
- Pump Capacity, max - 54 gpm

17. Centrifuge

- Number of Units - 1
- Manufacturer - Humboldt Model CP2-1.1
- Input Capacity - 55-85 gpm

APPENDIX C

DESCRIPTION OF PUMP STATIONS

Name of Pump Station SILVER LAKE

Manufacturer of Pumps CHICAGO PUMP

Number of Pumps THREE (3)

Approximate Age of Pumps 3 Years

Model No. OL4

Serial No.(s) 9609767

Rated Capacity 578 GPM

Head 32' TDH

Speed 900 RPM

Motor Hp 10

Pump Suction Size 8 X 5 In.

Pump Discharge Size 4 X 8 In.

Force Main Size 10 In.

Motor Manufacturer U.S. MOTOR

Power Supply 230/460 Volts

Motor Speed 900 RPM

Type of Pump Controls – AUTOCON BUBBLTROL WITH TWO COMPRESSORS

Standby Power – 25 KW ONAN DIESEL GENERATOR W/AUTO TRANSFER

REMARKS: COMMINUTOR REMOVED
VERTICAL PUMPS WITH DRIVE SHAFTS

Name of Pump Station FDR

Manufacturer of Pumps CHICAGO PUMP

Number of Pumps TWO (2) Approximate Age of Pumps 17 Years

Model No. LM VO6

Serial No.(s) 9809339

Rated Capacity 1100 GPM

Head 50' TDH

Speed 1200 RPM

Motor Hp 25

Pump Suction Size 8 X 6 In.

Pump Discharge Size 4 X 8 In.

Force Main Size 10 In.

Motor Manufacturer U.S. MOTOR

Power Supply 230/460 Volts

Motor Speed 1200 RPM

Type of Pump Controls - BUBBLER AND PRESSUREW SWITCHES

Standby Power - FOR ONE PUMP ONLY
JOHNSON GEAR TRANS., 25 hp @ 1150 RPM
WISCONSIN ENGINE

REMARKS: SPARE ROTATING ASSEMBLY AT STATION
VERTICAL PUMPS WITH DRIVE SHAFTS

Name of Pump Station DELHAAS

Manufacturer of Pumps DAVCO

Number of Pumps TWO (2)

Approximate Age of Pumps 4 Years

Model No. P04LB-8D

Serial No.(s) C1567

C1569

Rated Capacity 185 GPM

Head TDH

Speed BELT DRIVE RPM

Motor Hp 10

Pump Suction Size 4 In.

Pump Discharge Size 4 In.

Force Main Size 6 In.

Motor Manufacturer U.S. MOTOR

Power Supply 230/460 Volts

Motor Speed 1720 RPM

Type of Pump Controls – BUBBLER WITH ONE COMPRESSOR

Standby Power – NONE

REMARKS: PACKAGE STATION
SUCTION LIFT DESIGN

Name of Pump Station MARGO GARDENS

Manufacturer of Pumps KSB

Number of Pumps TWO (2)

Approximate Age of Pumps 17 Years

Model No. KRTBK

Serial No.(s) 2-L32-758035

Rated Capacity 200 GPM

Head 39' TDH

Speed 1150 RPM

Motor Hp 8

Pump Suction Size 6 X 4 In.

Pump Discharge Size 4 In.

Force Main Size 4 In.

Motor Manufacturer _____

Power Supply 220 Volts

Motor Speed 1150 RPM

Type of Pump Controls - **BUBBLER SYSTEM WITH PRESSURE SWITCHES AND
STANDBY COMPRESSOR**

Standby Power - **NONE**

REMARKS: **PACKAGE TYPE STATION
DRY PIT SUBMERSIBLE TYPE PUMPS**

Name of Pump Station CROYDON ACRES

Manufacturer of Pumps CHICAGO PUMP

Number of Pumps TWO (2)

Approximate Age of Pumps 15 Years

Model No. JOSOMC6

Serial No.(s) 61227571

A-5651-2

Rated Capacity 500 GPM

Head TDH

Speed 870 RPM

Motor Hp 7.5

Pump Suction Size 8 X 6 In.

Pump Discharge Size 6 X 8 In.

Force Main Size 10 In.

Motor Manufacturer RELIANCE

Power Supply 230/460 Volts

Motor Speed 870 RPM

Type of Pump Controls - **BUBBLER SYSTEM WITH PRESSURE SWITCHES**

Standby Power - **EMERGENCY GENERATOR WITH ANGLE DRIVE TO ONE PUMP**

REMARKS: **VERTICAL PUMPS WITH DRIVE SHAFT**

Name of Pump Station BRISTOL PARK

Manufacturer of Pumps FLYGT

Number of Pumps TWO (2)

Approximate Age of Pumps 17 Years

Model No. 3102

Serial No.(s) 9540213

Rated Capacity 225 GPM

Head 31' TDH

Speed 1750 RPM

Motor Hp 5

Pump Suction Size 4 In.

Pump Discharge Size 4 In.

Force Main Size 6 In.

Motor Manufacturer FLYGT

Power Supply 230/460 Volts

Motor Speed 1730 RPM

Type of Pump Controls - **BUBBLER WITH TWO COMPRESSORS**

Standby Power - **NONE**

REMARKS: **PACKAGE STATION
DRY PIT SUBMERSIBLE PUMPS**

Name of Pump Station BEAVER DAM ROAD

Manufacturer of Pumps ITT FLYGT

Number of Pumps TWO (2)

Approximate Age of Pumps 14 Years

Model No. CS 3102

Serial No.(s) 310280159

Rated Capacity 175 GPM

Head 30' TDH

Speed 1750 RPM

Motor Hp 5

Pump Suction Size 4 In.

Pump Discharge Size 4 In.

Force Main Size 6 In.

Motor Manufacturer FLYGT

Power Supply 230 Volts

Motor Speed 1750 RPM

Type of Pump Controls - **BUBBLER WITH PRESSURE SWITCHES AND ONE COMPRESSOR**

Standby Power - **NONE**

REMARKS: **PACKAGE TYPE STATION
DRY PIT SUBMERSIBLE PUMPS**

Name of Pump Station KEYSTONE PARK

Manufacturer of Pumps FAIRBANKS

Number of Pumps TWO (2)

Approximate Age of Pumps 15 Years

Model No. _____

Serial No.(s) A488676-615-U

Rated Capacity 300 GPM

Head _____ TDH

Speed 1165 RPM

Motor Hp 7.5

Pump Suction Size 4 In.

Pump Discharge Size 4 In.

Force Main Size 6 In.

Motor Manufacturer _____

Power Supply _____ Volts

Motor Speed 1105 RPM

Type of Pump Controls - BUBBLER SYSTEM WITH PRESSURE SWITCHES

Standby Power - NONE

REMARKS: PACKAGE TYPE METAL DRY WELL
CLOSE COUPLED VERTICAL PUMPS

Name of Pump Station STATE ROAD

Manufacturer of Pumps PACIFIC PUMPING CO.

Number of Pumps TWO (2)

Approximate Age of Pumps 13 Years

Model No. 4CC-NCF

Serial No.(s) C1AE27394

C1AE27395

Rated Capacity 150 GPM

Head 35' TDH

Speed 875 RPM

Motor Hp 5.

Pump Suction Size 4 In.

Pump Discharge Size 4 In.

Force Main Size 6 In.

Motor Manufacturer WESTINGHOUSE
Volts

Power Supply 230/460

Motor Speed 875 RPM

Type of Pump Controls -- BUBBLER WITH ONE COMPRESSOR

Standby Power -- NONE

REMARKS: PACKAGE STATION
FLUSH KLEEN DESIGN
CLOSE-COUPLED VERTICAL PUMPS

Name of Pump Station CROYDON MANOR

Manufacturer of Pumps CHICAGO PUMPS

Number of Pumps TWO (2)

Approximate Age of Pumps 17 Years

Model No. LLCH

Serial No.(s) D0446-1

D0446-2

Rated Capacity 285 GPM

Head 43' TDH

Speed 1200 RPM

Motor Hp 7.5

Pump Suction Size 6 X 5 In.

Pump Discharge Size 4 X 6 In.

Force Main Size 6 In.

Motor Manufacturer U. S. MOTOR

Power Supply 230/460 Volts

Motor Speed 1200 RPM

Type of Pump Controls - AUTOCON BUBBLTROL WITH TWO COMPRESSORS

Standby Power - NONE

REMARKS: COMMUNOTOR REMOVED
WET WELL HAS OVERFLOW
VERTICAL PUMPS WITH DRIVE SHAFTS

Name of Pump Station HARTEL STREET

Manufacturer of Pumps CLOW

Number of Pumps TWO (2)

Approximate Age of Pumps 15 Years

Model No. 4310

Serial No.(s) _____

Rated Capacity 200 GPM

Head _____ TDH

Speed 1170 RPM

Motor Hp 3

Pump Suction Size 4 In.

Pump Discharge Size 4 In.

Force Main Size 4 In.

Motor Manufacturer RELIANCE

Power Supply _____ Volts

Motor Speed 1170 RPM

Type of Pump Controls - BUBBLER SYSTEM WITH PRESSURE SWITCHES AND ONE COMPRESSOR

Standby Power - NONE

REMARKS: PACKAGE TYPE METAL DRY WELL

Name of Pump Station CROYDON PARK

Manufacturer of Pumps CHICAGO PUMP CO.

Number of Pumps TWO (2)

Approximate Age of Pumps 17 Years

Model No. OM4

Serial No.(s) D0447-1

D0447-2

Rated Capacity 465 GPM

Head 32' TDH

Speed 1200 RPM

Motor Hp 7.5

Pump Suction Size 6 X 5 In.

Pump Discharge Size 4 X 6 In.

Force Main Size 6 In.

Motor Manufacturer U. S. MOTOR

Power Supply 230/460 Volts

Motor Speed 1200 RPM

Type of Pump Controls - **AUTOCON BUBBLETROL WITH TWO COMPRESSORS**

Standby Power - **NONE**

REMARKS: **COMMINUTOR REMOVED
WET WELL HAS OVERFLOW
VERTICAL PUMP WITH DRIVE SHAFTS**

Name of Pump Station COLLEGE PARK

Manufacturer of Pumps GORMAN RUPP

Number of Pumps TWO (2)

Approximate Age of Pumps 17 Years

Model No. THA3B

Serial No.(s) 69137-4

69137-2

Rated Capacity 150 GPM

Head _____ TDH

Speed BELT DRIVE RPM

Motor Hp 7.5

Pump Suction Size 6 X 4 In.

Pump Discharge Size 4 In.

Force Main Size 6 In.

Motor Manufacturer BALDOR

Power Supply 230/460 Volts

Motor Speed 1745 RPM

Type of Pump Controls - **BUBBLER SYSTEM WITH PRESSURE SWITCHES AND ONE (1) COMPRESSOR**

Standby Power - **NONE**

REMARKS: **SUCTION LIFT DESIGN
OVERFLOW TO RIVER
METAL WET WELL (OLD P.S.)**

Name of Pump Station PALMER AVENUE

Manufacturer of Pumps CHICAGO PUMP

Number of Pumps THREE (3)

Approximate Age of Pumps 17 Years

Model No. OL4

Serial No.(s) C9863-1

C9863-2

C9863-3

Rated Capacity 705 GPM

Head 37' TDH

Speed 1200 RPM

Motor Hp 10

Pump Suction Size 10 X 6 In.

Pump Discharge Size 4 X 8 In.

Force Main Size 12 In.

Motor Manufacturer U. S. MOTOR

Power Supply 230/460 Volts

Motor Speed 1200 RPM

Type of Pump Controls - BUBBLER SYSTEM WITH PLC AND ONE (1) COMPRESSOR

Standby Power - 40 KW ONAN DIESEL WITH AUTO TRANSFER SWITCH

REMARKS: COMMINUTOR REMOVED
VERTICAL PUMPS WITH DRIVE SHAFTS

Name of Pump Station DELAWARE AVENUE

Manufacturer of Pumps CHICAGO PUMP CO.

Number of Pumps THREE (3) Approximate Age of Pumps 5 Years

Model No. OL4

Serial No.(s) 9802201

61-22255-B

61-22255-C

Rated Capacity 710 GPM

Head 57' TDH

Speed 1200 RPM

Motor Hp 15

Pump Suction Size 8 X 5 In.

Pump Discharge Size 4 X 6 In.

Force Main Size 8 In.

Motor Manufacturer U. S. MOTOR

Power Supply 230/460 Volts

Motor Speed 1200 RPM

Type of Pump Controls - AUTOCON BUBBLTROL WITH ONE (1) COMPRESSOR

Standby Power - ONAN GENERATOR WITH AUTOMATIC TRANSFER SWITCH PRESENTLY OPERABLE SYSTEM

REMARKS: COMMINUTOR REMOVED
COMPARTMENTED WET WELL

Appendix C

63 P.S. § 818.37

PROFESSIONS AND OCCUPATION

§ 818.37. Existing rules and regulations

Each rule and regulation of the board not inconsistent with this act shall remain in effect after such date until repealed or amended by the board.

1983, Dec. 22, P.L. 306, No. 84, § 28, effective Jan. 1, 1984. Renumbered as § 37 and amended 1996, April 19, P.L. 104, No. 27, § 19, effective in 60 days.

Renumbered

This section was renumbered from 63 P.S. § 818.28 in 1996.

Historical and Statutory Notes

1996 Legislation

The 1996 amendment renumbered this section and substituted "not inconsistent with this act" for "in effect on December 31, 1983".

Research References

Encyclopedias

Summ-PA Jur. 2d Commercial Law § 20:38, Assurance of Voluntary Compliance.

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:104, Vehicle Manufacturers, Dealers, and Salespersons.

CHAPTER 22B

MOTOR VEHICLE DAMAGE APPRAISERS

§ 859. Penalties

Research References

Treatises and Practice Aids

14 West's Pennsylvania Practice P80.1, Professions and Occupations Offenses (Title 63).

14 West's Pennsylvania Practice P110, Professions and Occupations Offenses (Title 63).

CHAPTER 23

LANDSCAPE ARCHITECTS' REGISTRATION LAW

§ 901. Short title

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 167:347, Liability of Construction Design Professionals

to Nonemployee Workers at Construction Site.

§ 911. Penalties

Research References

Treatises and Practice Aids

14 West's Pennsylvania Practice P80.1, Professions and Occupations Offenses (Title 63).

14 West's Pennsylvania Practice P110, Professions and Occupations Offenses (Title 63).

CHAPTER 24

WATER AND WASTEWATER SYSTEMS OPERATORS

Section

1001. Short title.

Section

1002. Definitions.

PROFESSIONS AND OCCUPATIONS

63 P.S. § 1002

Section		Section	
1003.	State Board for Certification of Water and Wastewater Systems Operators.	1007.	Professional engineers.
1004.	Powers and duties.	1008.	Deleted.
1004.1	Certification Program Advisory Committee.	1009.	Reciprocity.
1005.	Wastewater system operator certificates.	1010.	Repealed.
1006.	Water system operator certificates.	1011.	Administrative procedure and judicial review.
1006.1.	Interim program authorization.	1012.	Repealed.
		1013.	Operation of water or wastewater systems.
		1014.	Enforcement.
		1015.	Civil relief.
		1015.1.	Whistleblower.

§ 1001. Short title

This act shall be known, and may be cited, as the "Water and Wastewater Systems Operators' Certification Act."

1968, Nov. 18, P.L. 1052, No. 322, § 1, effective Jan. 1, 1969. Amended 2002, Feb. 21, P.L. 134, No. 11, § 2, imd. effective.

Historical and Statutory Notes

Title of Act:

An Act providing for the certification of water and wastewater systems operators; creating the State Board for Certification of Water and Wastewater Systems Operators and prescribing its powers and duties; conferring powers and duties upon the Department of Environmental

Protection, the Environmental Hearing Board and the Environmental Quality Board; providing for continuing education requirements; and providing for civil relief and penalties. 1968, Nov. 18, P.L. 1052, No. 322. Amended 1989, Dec. 22, P.L. 790, No. 112, § 1; 2002, Feb. 21, P.L. 134, No. 11, § 1, imd. effective.

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:106, Water and Wastewater Systems Operators.

§ 1002. Definitions

The following words and phrases, when used in this act, shall have the meanings ascribed to them in this section, unless the context clearly indicates otherwise.

"Available operator" means a certified operator who is on site or able to be contacted as needed to make process control decisions in a timely manner to protect the environment and public health.

"Board" means the State Board for Certification of Water and Wastewater Systems Operators.

"Certification" means the process by which an individual obtains a water or wastewater system operator's certificate in accordance with the requirements of this act and the rules and regulations adopted thereunder.

"Certified operator" means any operator who holds a valid certificate in accordance with this act.

"Continuing education" means approved activities to include training, outreach programs, contact hours, meetings, presentations and/or other activities designed to increase the knowledge, abilities and skills of system operators.

"Department" means the Department of Environmental Protection of the Commonwealth.

"Environmental Hearing Board" means the board established pursuant to the act of July 13, 1988 (P.L. 530, No. 94), known as the "Environmental Hearing Board Act."

"Environmental Quality Board" means the board established pursuant to section 1920-A of the act of April 9, 1929 (P.L. 177, No. 175),² known as "The Administrative Code of 1929," for the purposes set forth in that section.

"Grandparenting" means the temporary exemption for an existing operator of an existing system, as of the effective date of this act, from the initial educational and examination requirements for certification where a system was not required by prior law to have a certified operator. A grandparented operator may be an operator in responsible charge.

"Industrial wastewater treatment facility" means any facility that treats industrial waste or pollution, but not sewage, as those terms are defined in the act of June 22, 1937 (P.L. 1987, No. 394),³ known as "The Clean Streams Law."

"Operator" means an individual who works with water or wastewater system processes or portions thereof. The term includes, but is not limited to, an individual who may be gaining experience to obtain certification in appropriate subclassifications within classifications of certification. These individuals shall have a working knowledge of system operation. Nothing in this act shall be construed to require operators of industrial wastewater treatment facilities to obtain an operator's certificate. However, operators of industrial wastewater treatment facilities may voluntarily obtain a wastewater system operator's certificate consistent with the provisions of this act and the rules and regulations adopted thereunder.

"Operator in responsible charge" means an individual designated by the owner to be the certified operator who makes the process control decisions that directly impact the quality and/or quantity of water.

"Owner" means a person who owns or is the holder of an applicable permit for the operation of a water or wastewater system.

"Person" means any individual, company, corporation, municipality, municipal authority, partnership, firm, association, trust, estate, public or private institution, or any agency of Federal or State government. The term also includes the officers, directors, employes and agents of any partnership, firm, association, company, corporation, municipality, municipal authority, public or private institution or any agency of Federal or State government.

"Political subdivision" means any county, city, borough, town, township, school district, institution or any authority created by any one or more of the foregoing.

"Process control decision" means a decision which maintains or changes the water quality or quantity of a water system or wastewater system in a manner that may affect the public health or environment.

"Recertification" means the process by which an individual's water or wastewater system operator certificate, previously certified under this act, obtains a new certificate following expiration, suspension or revocation of the previous certificate.

"Renewal of certification" means the process by which an individual extends for another period of time an existing, valid water system or wastewater system operator's certificate under this act.

"Secretary" means the Secretary of Environmental Protection of the Commonwealth.

"The Administrative Code" means the act of April 9, 1929 (P.L. 177, No. 175),⁴ known as "The Administrative Code of 1929."

"Wastewater" means a substance that contains the waste products or excrement or other discharge from the bodies of human beings or animals and noxious or deleterious substances being harmful or inimical to the public health or to animal or aquatic life or to the use of water for domestic water supply or for recreation, or which constitutes pollution under the act of June 22, 1937 (P.L. 1987, No. 394), known as "The Clean Streams Law."

"Wastewater system" means any structure designed to collect, convey or treat wastewater and from which effluent in excess of two thousand gallons per day is discharged into waters of the Commonwealth.

PROFESSIONS AND OCCUPATIONS

63 P.S. § 1004

"Water system" means a community water system or a nontransient noncommunity water system, as those terms are defined in the act of May 1, 1984 (P.L. 206, No. 43),⁵ known as the "Pennsylvania Safe Drinking Water Act."

1968, Nov. 18, P.L. 1052, No. 322, § 2, effective Jan. 1, 1969. Amended 1989, Dec. 22, P.L. 790, No. 112, § 2, imd. effective; 2002, Feb. 21, P.L. 134, No. 11, § 3, imd. effective.

¹ 35 P.S. § 7511 et seq.

² 71 P.S. § 510-20.

³ 35 P.S. § 691.1 et seq.

⁴ 71 P.S. § 51 et seq.

⁵ 35 P.S. § 721.1 et seq.

§ 1003. State Board for Certification of Water and Wastewater Systems Operators

(a) (1) There is hereby created within the department a State Board for Certification of Water and Wastewater Systems Operators. The board shall consist of the secretary, or his representative, and six additional members to be appointed by the Governor.

(2) One member shall be an employe of a political subdivision who is certified to operate a water or wastewater system or a certified operator who represents a State association of political subdivisions.

(3) One member shall be an individual certified under this act to operate a water system.

(3.1) One member shall be an individual certified under this act to operate a wastewater system.

(4) One member shall be a certified operator who is the owner or official of a privately owned water or wastewater system.

(5) Deleted by 2002, Feb. 21, P.L. 134, No. 11, § 4, imd. effective.

(6) One member shall be on the teaching staff of the civil, environmental or sanitary engineering department of an accredited Pennsylvania university or college.

(7) One member shall be a member of the general public who is knowledgeable in water systems or wastewater systems.

(b) The original appointed members of the board, in the order listed above, shall hold office for one, two, three, three, four and four years respectfully. Thereafter, each appointment shall be for a period of four years duration. The Governor may reappoint board members for successive terms. Members of the board shall remain in office until a successor is appointed and qualified. If vacancies occur prior to completion of a term the Governor shall appoint another member in accordance with this section to fill the unexpired term.

(c) A chairman and secretary shall be elected annually. Four members of the board shall constitute a quorum. Meetings may be called by the chairman as needed to conduct the business of the board.

(d) The members of the board shall receive no compensation for their service but shall be reimbursed for actual and necessary expenses incurred in the performance of their duties in accordance with Commonwealth policy or regulations.

1968, Nov. 18, P.L. 1052, No. 322, § 3, effective Jan. 1, 1969. Amended 1989, Dec. 22, P.L. 790, No. 112, § 2, imd. effective; 2002, Feb. 21, P.L. 134, No. 11, § 4, imd. effective.

§ 1004. Powers and duties

(a) The board shall have the power and its duty shall be to:

(1) Review and act upon applications for certification, recertification and renewal of certification of water and wastewater systems operators. All applications for certification and all applications for recertification must be accompanied by a report of criminal history record from the Pennsylvania State Police pursuant to 18 Pa.C.S. Ch. 91¹ (relating to criminal history record information). All operators certified on or before the effective date of this act² shall submit a report of criminal history record from the Pennsylvania State Police pursuant to 18 Pa.C.S. Ch. 91 with an application for renewal

within three years of the effective date of this section pursuant to a schedule established by the board. The board may establish a schedule for subsequent submissions of a report of criminal history record from the Pennsylvania State Police. The board's decision shall be considered an action of the department and shall be appealable to the Environmental Hearing Board:

(2) Administer such examinations prepared by the department as may be deemed necessary to determine the competency of applicants for certification and recertification. At least one examination shall be held each year at a time and place designated by the board. Whenever it is practicable to do so, the board and the department shall provide examinations which are based upon nationally accepted standards of practice which shall promote reciprocity with other jurisdictions.

(3) Revoke, suspend, modify or reinstate certificates upon petition of the department. Upon receipt of such petition, the board shall promptly schedule a hearing and give due notice to the certificate holder of the time and place of such hearing. The board shall hold administrative hearings and issue adjudications in accordance with the provisions of 2 Pa.C.S. Chs. 5 Subch. A (relating to practice and procedure of Commonwealth agencies) and 7 Subch. A (relating to judicial review of Commonwealth agency action),³ known as the "Administrative Agency Law." The board's decision shall be considered an action of the department and shall be appealable to the Environmental Hearing Board. The board may revoke, suspend or modify a certificate for misconduct, including, but not limited to, negligence in the operation of a water or wastewater system, fraud, falsification of application, falsification of operating records, incompetence or failure to use reasonable care or judgment in performance of duties as specified in this act or other applicable laws administered by the department.

(4) Receive and act upon complaints arising under its powers and duties.

(5) Subpoena witnesses, records and other physical evidence. The board may enforce its subpoenas in Commonwealth Court.

(6) Review, provide written comments and make recommendations to the department on such rules and regulations as are deemed necessary to implement this act prior to submission to the Environmental Quality Board under subsection (c). These comments and recommendations of the Certification Board, with appropriate response and comment from the department, will be presented as part of the department rulemaking package to the Environmental Quality Board.

(7) Issue written orders, or modifications thereof, as may be necessary in connection with proceedings under this act.

(8) Adopt bylaws as needed to properly direct and carry out the activities of the board.

(9) Collect fees for examinations and applications for certification, recertification and renewal of certification.

(10) Upon request, approve or disapprove department decisions regarding training for certification and continuing education for recertification and renewal of certification. Upon disapproval, suspension or revocation by the department, the board may approve training for certification and continuing education for recertification and renewal of certification.

(11) Authorize the one-time reissuance of certificates by the department to all existing certified operators at the time revised regulations adopted by the Environmental Quality Board under subsection (c) take effect. The special certificate will reflect the revised operator certification classifications and subclassifications contained in the amendatory act and the revised regulations. There shall be no examination required for this one-time reissuance of operator certificates.

(b) The department shall have the power and its duty shall be to:

(1) Initiate proceedings before the board by petition as may be necessary and appropriate to modify, suspend, revoke or reinstate certificates, receive and process applications, prepare and validate examinations, make recommendations, issue certificates to applicants approved by the board and establish and implement such procedures as are necessary and desirable to carry out the provisions of this act, rules and regulations promulgated under it and orders of the board.

(1.1) Issue written orders as necessary to owners or operators to comply with sections 5, 6 or 13⁴ or to correct violations of the act.

(2) Determine the number and class of water and wastewater systems which may be supervised by a single certified operator and issue orders requiring owners to employ the services of additional certified operators and such orders shall be made in accordance with this act and with the rules and regulations promulgated under it.

(3) Compile and keep current a register showing the names and addresses of certified operators. Copies of this register shall be furnished on request upon payment of such reasonable fee as the department shall establish.

(4) Enter into agreements, contracts or cooperative arrangements to carry out the purposes of this act, under such terms and conditions as may be deemed appropriate, with other Federal or State agencies, political subdivisions, public or private agencies or other persons, including agreements to give or receive financial and technical assistance. The department may delegate one or more of its powers and duties, including enforcement of the act, to local health departments under such terms and conditions as may be deemed appropriate; notwithstanding the grant of this power, in any case where administration and enforcement of this act by a local health department conflicts with the administration and enforcement by the department, the department shall notify the local health department of the conflict, and administration and enforcement by the department shall take precedence over administration and enforcement by a local health department.

(5) With available funding, may reimburse water and wastewater system operators or owners for the costs of training and continuing education and certification as may be appropriate.

(6) Approve, disapprove, suspend, revoke approval for and offer training for certification and continuing education for recertification and renewal of certification. The department may accredit sponsors providing training or continuing education on either a program basis or an individual activity basis. The department may approve the course content, instructor's qualifications and appropriate credit hours or continuing education units to be assigned in accordance with such specifications or guidelines the department may develop in consultation with the board and the Certification Program Advisory Committee. The department may audit, examine, inspect and review the operations of sponsors, including instructors, classes, curricula, teaching materials, facilities and other matters pertaining to the provision of training or continuing education in accordance with the department's guidelines. The department may establish and collect such fees or attendance at department-sponsored training and continuing education, which may include the cost of manuals and other training materials and services, and for approval of training and continuing education conducted by others, as may be reasonable and appropriate to recover the cost of providing such services. Department-approved training and continuing education, whether department-sponsored or not, shall satisfy the requirements of section 10(j) of the act of March 1, 1988 (P.L. 82, No. 16), known as the "Pennsylvania Infrastructure Investment Authority Act."

(c) The Environmental Quality Board shall have the power and its duty shall be to adopt such rules and regulations of the department as it deems necessary for the implementation of the provisions of this act, including, but not limited to, the following:

(1) Set standards in regulation for certification, recertification and renewal of certification of water and wastewater systems operators, including minimum education, experience, training and continuing education requirements. Standards for operators shall take into account the size and complexity of the system. Standards for certification, recertification and renewal of certification shall be designed to meet the requirements of any applicable Federal or State law. The standards for certification, recertification and renewal of certification shall include training related to the security of water and wastewater systems. The standards heretofore prescribed by regulation shall continue in full force and effect until superseded and repealed by the rules and regulations promulgated pursuant to this subsection.

(2) Establish appropriate periods, not to exceed three years, for renewal of certification in lieu of annual renewals. Annual renewals of certificates shall continue in full force and effect upon payment of the renewal fees heretofore prescribed by law in

section 607-A of The Administrative Code⁶ until superseded and repealed by rules and regulations promulgated pursuant to this subsection.

(3) Establish fees for examinations and applications for certification, recertification and renewal of certification as may be reasonable and appropriate to recover the cost of providing such services. When fees are set by regulation, the fees heretofore prescribed by law in section 607-A of The Administrative Code shall be deemed repealed.

(4) Establish subclassifications within classifications for the certification of water and wastewater operators. When establishing subclassifications within classifications for certification, the size and complexity of the water and wastewater systems and the quality of source water or water systems shall be taken into consideration. A special site-specific certificate for operators of community water systems serving less than 15 connections or 500 persons, operators of nontransient noncommunity water systems and the operators of collection system facilities associated with wastewater systems may be established. The site-specific certificate is not transferable to any other system. A Operator in Training certificate for individuals who have passed the appropriate certification examination but need the required experience may be established.

1968, Nov. 18, P.L. 1052, No. 322, § 4, effective Jan. 1, 1969. Amended 2002, Feb. 2, P.L. 134, No. 11, § 5, *imd.* effective.

¹ 18 Pa.C.S.A. § 9101 et seq.

² 2002, Feb. 21, P.L. 134, No. 11, *imd.* effective.

³ 2 Pa.C.S.A. §§ 501 et seq., 701 et seq.

⁴ 63 P.S. §§ 1005, 1006, 1013.

⁵ 35 P.S. § 751.10.

⁶ 71 P.S. § 240.7A.

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:106, Water and Wastewater Systems Operators.

§ 1004.1. Certification Program Advisory Committee

(a) The Certification Program Advisory Committee is hereby established. Within 30 days of the effective date of this section,¹ the secretary shall appoint members to the Certification Program Advisory Committee as follows:

(1) This committee shall consist of not more than nineteen members.

(2) The secretary shall specify the term of service for each member.

(b) The committee shall comprise:

(1) One member appointed from each certification classification established under sections 5 and 6.²

(2) One member from the teaching staff of the civil, environmental or sanitary engineering department of an accredited Pennsylvania university or college with a water system or wastewater treatment curriculum.

(3) Four members who represent owners of water and wastewater systems, two of whom shall be owners of a manufactured housing community that have water/wastewater systems.

(4) An engineer registered under the act of May 23, 1945 (P.L. 913, No. 367),³ known as the "Engineer, Land Surveyor and Geologist Registration Law," and who is a certified operator.

(5) One member from the general public.

(c) The secretary may appoint additional persons to the committee beyond seventeen members, but no more than two additional members, on a temporary basis to address specific issues at his discretion or at the board's request.

(d) The committee shall be provided with an opportunity to provide written comments and recommendations to the board and the department on regulatory proposals and department guidance. The committee may provide written comments and recommenda-

tions related to operator certification issues at the board's or the department's request. A representative of the committee may request that an issue be considered and that appropriate assignments be made to the committee for consideration.

(e) The committee members shall elect a chairman annually by majority vote and shall serve without compensation other than reimbursement for actual and necessary expenses incurred in the performance of their duties, in accordance with Commonwealth policy or regulations. The committee shall hold its first meeting within sixty days of the effective date of this section. It shall meet quarterly unless the secretary determines that a more or less frequent meeting schedule is in the best interest of the department or the board.

1968, Nov. 18, P.L. 1052, No. 322, § 4.1; added 2002, Feb. 21, P.L. 134, No. 11, § 6, imd. effective.

¹ 2002, Feb. 21, P.L. 134, No. 11, § 6, imd. effective.

² 63 P.S. §§ 1005, 1006.

³ 63 P.S. § 148 et seq.

§ 1005. Wastewater system operator certificates

(a) A certificate approved by the board and issued by the department shall authorize the individual to whom it is issued to operate a wastewater system in accordance with the following classification:

"Class A certificate." Wastewater systems of unlimited permitted discharge flow.

"Class B certificate." Wastewater systems with a permitted average daily discharge flow equal to or less than five million gallons.

"Class C certificate." Wastewater systems with a permitted average daily discharge flow equal to or less than one million gallons.

"Class D certificate." Wastewater systems with a permitted average daily discharge flow equal to or less than one hundred thousand gallons.

"Class E certificate." Wastewater systems consisting only of collection facilities with pumping stations which discharge untreated wastewater into another system.

(b) In order to be eligible for certification, an applicant shall have had sufficient experience acceptable to the board in the operation of wastewater systems. In determining whether minimum experience requirements are met, the board may make reasonable allowance for education and training in the field of wastewater system operation and for training and experience in allied fields.

(c) In order to be eligible for renewal of certification, in addition to submitting an application and the appropriate fee, an applicant:

(1) shall be in compliance with the conditions of his or her current certificate, the act and the rules and regulations adopted thereunder and any orders of the board or the department relative to certification; and

(2) shall have completed the minimum continuing education requirements as specified in the rules and regulations adopted under this act.

(d) No operator shall make any process control decisions unless the individual is in possession of a valid certificate for the applicable classification and subclassification assigned to the wastewater system.

1968, Nov. 18, P.L. 1052, No. 322, § 5, effective Jan. 1, 1969. Amended 2002, Feb. 21, P.L. 134, No. 11, § 7, imd. effective.

§ 1006. Water system operator certificates

(a) A certificate approved by the board and issued by the department shall authorize the individual to whom it is issued to operate a water system in accordance with the following classifications:

"Class A certificate." Water systems of all types and capacities.

"Class B certificate." Water systems serving an average of not more than five million gallons per day.

63 P.S. § 1006

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"Class C certificate." Water systems serving an average of not more than one millic gallons per day.

"Class D certificate." Water systems serving an average of not more than one hundred thousand gallons per day.

"Class E certificate." This certificate covers the distribution portion of water system only.

(b) In order to be eligible for certification, an applicant shall have had sufficient experience acceptable to the board in the operation of water systems. In determining whether minimum experience requirements are met, the board may make reasonable allowance for education and training in the field of water system operation and for training and experience in allied fields.

(c) In order to be eligible for renewal of certification, in addition to submitting an application and the appropriate fee, an applicant:

(1) shall be in compliance with the conditions of his or her current certificate, the act and the rules and regulations adopted thereunder and any orders of the board or the department relative to certification; and

(2) shall have completed the minimum continuing education requirements as specified in the rules and regulations adopted under this act.

(d) No operator shall make any process control decisions unless he or she is in possession of a valid certificate for the applicable classification and subclassification assigned to the water system.

1968, Nov. 18, P.L. 1052, No. 322, § 6, effective Jan. 1, 1969. Amended 2002, Feb. 21 P.L. 134, No. 11, § 7, imd. effective.

§ 1006.1. Interim program authorization

(a) Notwithstanding any provision to the contrary, the department shall implement an interim certification program to meet the requirements of section 1419 of the Safe Drinking Water Act (Public Law 93-523, 21 U.S.C. § 349 and 42 U.S.C. § 201 and 300f et seq.) in a timely manner. The interim program shall expire after the Environmental Quality Board adopts regulations under section 4(c).¹

(b) The program shall meet the requirements of the final Guidelines for the Certification and Recertification of the Operators of Community and Nontransient Noncommunity Public Water Systems published in the Federal Register under the requirements of section 1419 of the Safe Drinking Water Act (Public Law 93-523, 21 U.S.C. § 349 and 42 U.S.C. §§ 201 and 300f et seq.). The program may include comparable requirements for wastewater treatment operators including continuing education requirements.

(c) The department may develop, after notice and opportunity for comments, guidelines to implement an interim program authorized under this section.

1968, Nov. 18, P.L. 1052, No. 322, § 6.1, added 2002, Feb. 21, P.L. 134, No. 11, § 8, imd. effective.

¹ 63 P.S. § 1004.

Historical and Statutory Notes

Act 2002-11 legislation

Section 17 of 2002, Feb. 21, P.L. 134, No. 11, imd. effective, provides:

"All rules and regulations promulgated under this act are continued in full force and effect

until superseded by the interim program authorized under section 6.1 [63 P.S. § 1006.1] or by rules or regulations promulgated under it."

§ 1007. Professional engineers

An engineer registered under the act of May 23, 1945 (P.L. 913, No. 367),¹ known as the "Engineer, Land Surveyor and Geologist Registration Law," after the effective date of this amendment² who has been examined in civil, environmental or sanitary engineering and is otherwise qualified consistent with the act and the rules and regulations adopted under it shall be granted a certificate upon application to the board after

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63 P.S. § 1012

Repealed

successfully passing a certification examination for the appropriate classification and subclassification and payment of the appropriate fee. The requirements related to recertification, renewal of certification and continuing education shall also apply to engineers. To the extent authorized by Federal requirements, the board shall allow a registered professional engineer to rely upon the examination testing under the "Engineer, Land Surveyor and Geologist Registration Law" related to civil, environmental or sanitary engineers to demonstrate that the registered professional engineer has the necessary skills, knowledge, ability and judgment for classifications and subclassifications, as appropriate, and to meet all or a portion of the certification examination requirement in this section. To the extent authorized by Federal requirements, the board may allow a registered professional engineer to rely upon examination testing associated with board-approved college or university courses or curriculum to demonstrate that the registered professional has the necessary skills, knowledge, ability and judgment for classifications and subclassifications, as appropriate, and to meet all or a portion of the certification examination requirements in this section. For purposes of this section, the requirements for wastewater system certificates shall be deemed the same as water system operation certificates.

1968, Nov. 18, P.L. 1052, No. 322, § 7, effective Jan. 1, 1969. Amended 1973, June 27, P.L. 87, No. 37, § 1, imd. effective; 2002, Feb. 21, P.L. 134, No. 11, § 9, imd. effective.

¹ 63 P.S. § 148 et seq.

² 2002, Feb. 21, P.L. 134, No. 11, imd. effective.

§ 1008. Deleted by 2002, Feb. 21, P.L. 134, No. 11, § 10, imd. effective

Historical and Statutory Notes

The deleted section, authorizing certain special certificates without examination, was derived from 1968, Nov. 18, P.L. 1052, No. 322, § 8.

§ 1009. Reciprocity

The board may authorize the issuance of certificates without examination to applicants who hold valid certificates issued under laws of any other state, territory, the District of Columbia or any board-approved reciprocity register, provided the out-of-state certificate was issued as a result of the successful passing of an examination equivalent to the examination given by the board for the same classification and subclassification. Experience and training requirements of applicants for certification as operators set forth in the rules and regulations promulgated under this act shall apply to all such applicants. The requirements relating to recertification and renewal of certification shall apply to operators who receive their certificate under this section.

1968, Nov. 18, P.L. 1052, No. 322, § 9, effective Jan. 1, 1969. Amended 2002, Feb. 21, P.L. 134, No. 11, § 10, imd. effective.

§ 1010. Repealed by 2002, Feb. 21, P.L. 134, No. 11, § 11, imd. effective

Historical and Statutory Notes

The repealed section, relating to suspension and revocation of certificates, was derived from 1968, Nov. 18, P.L. 1052, No. 322, § 10; 1989, Dec. 22, P.L. 790, No. 112, § 3.

§ 1011. Administrative procedure and judicial review

The board shall be subject to the provisions of 2 Pa.C.S. Chs. 5 Subch. A (relating to practice and procedure of Commonwealth agencies) and 7 Subch. A¹ (relating to judicial review of Commonwealth agency action), known as the "Administrative Agency Law." 1968, Nov. 18, P.L. 1052, No. 322, § 11, effective Jan. 1, 1969. Amended 2002, Feb. 21, P.L. 134, No. 11, § 12, imd. effective.

¹ 2 Pa.C.S.A. §§ 501 et seq., 701 et seq.

§ 1012. Repealed by 2002, Feb. 21, P.L. 134, No. 11, § 13, imd. effective

63 P.S. § 1012
Repealed

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Historical and Statutory Notes

The repealed section, relating to fees, was derived from: 1970, June 23, P.L. 435, No. 146, § 1.
1989, Dec. 22, P.L. 790, No. 112, § 4.
1968, Nov. 18, P.L. 1052, No. 322, § 12.

§ 1013. Operation of water or wastewater systems

(a) After January 1, 1971, and, except as provided in the following paragraphs, each owner shall employ the services of a certified operator of the required classification and subclassification who shall have the direct responsibility for the operation of the water or wastewater system and shall employ the services of such additional certified operators as are required pursuant to the provisions of this act and rules and regulations promulgated under it. The name of operators in responsible charge must be on file at all times with the department.

(b) On or before three years from the effective date of this amendatory act,¹ each owner must place the direct supervision of their water or wastewater system under the responsible charge of available operators who hold a valid certificate of the applicable classification and subclassification to operate their system. Each owner shall employ the services of available operators of the required classification and subclassification who shall make process control decisions for the operation of the water or wastewater system during all periods of operation. All process control decisions must be made by a certified operator. Such decisions may be made on site, from a remote location and communicated to operators on site or by means of an approved standard operating procedure as provided by the rules and regulations adopted under this act.

(c) An individual who holds a valid certificate issued pursuant to the rules and regulations adopted under this act which were in effect before the effective date of this act may continue to operate under the terms and conditions of that certification as long as he or she is in compliance with the act and the rules and regulations adopted thereunder and any orders of the board or the department relative to certification. Annual renewals of certificates shall continue in full force and effect upon application and payment of the renewal fees heretofore prescribed by law in section 607-A of The Administrative Code² until such fees are superseded and repealed by the rules and regulations adopted under this act. Such certification shall expire and the operator shall apply for renewal of certification within such time as may be set by the revised rules and regulations adopted under this act and upon the receipt of notice from the board that such operator shall apply for and obtain certification in accordance with the revised rules and regulations.

(d) An owner of a nontransient noncommunity water system or a wastewater collection system who has not employed a certified operator prior to the effective date of this act and is required to comply with the provisions of the act may continue to employ such operator as was associated with the system on the effective date of this act on an interim basis provided that the owner applies for the grandparenting of such operator or operators within sixty days of notification by the department, but in any case no later than two years after the effective date of this act. Certification for such grandparented operators shall be temporary, site-specific and nontransferable to other systems. The grandparenting of such operator shall expire and the operator must apply for and be granted certification or renewal of certification on or before a date specified in the rules and regulations adopted under this act.

(e) It shall be the duty of all certified operators to comply with the applicable Federal and State laws; and rules and regulations associated with a water or wastewater system, including, but not limited to:

(1) Meeting all the requirements for recertification or renewal of certification, including any continuing education requirements.

(2) Reporting to the system owner any known violations or system conditions that may be or are causing violations of any department regulation or permit conditions or requirements.

(3) Providing for the suitable operation and maintenance of a water or wastewater system utilizing available resources needed to comply with all applicable laws, rules and regulations and permit conditions or requirements.

(4) Reporting to the system owner any action necessary to prevent or eliminate a violation of applicable water or wastewater system laws, rules and regulations and permit conditions and requirements.

(5) Making or implementing appropriate process control decisions or taking or directing actions related to process control decisions for specific water or wastewater systems.

(f) It shall be the duty of all owners to comply with the applicable Federal and State laws, and rules and regulations associated with a water or wastewater system, including, but not limited to:

(1) Employing, identifying and reporting to the department the names of available operators and other information required by the department.

(2) Requiring, supervising and directing certified operators to take such action so that the water and wastewater system is in compliance with all applicable laws, rules, regulations and permits.

(3) Providing to all certified operators in responsible charge a copy of all current water or wastewater permits in order to make process control decisions to comply with regulatory requirements. Upon written request from an owner, the department shall provide the current water and wastewater permits to a single certified operator in responsible charge as designated by the owner.

1968, Nov. 18, P.L. 1052, No. 322, § 13, effective Jan. 1, 1969. Amended 2002, Feb. 21, P.L. 134, No. 11, § 14, imd. effective.

¹ 2002, Feb. 21, P.L. 134, No. 11, imd. effective.

² 71 P.S. § 240.7A.

§ 1014. Enforcement

(a) An owner who violates any applicable provision of section 13¹ and any written order of the department issued under section 4(b)(2)² of this act is guilty of a summary offense and shall, upon conviction thereof, in a summary proceeding, be sentenced to pay a fine or not less than fifty dollars (\$50) nor more than one thousand dollars (\$1,000) and costs. For the purpose of this section, each day that an offense continues shall be construed to constitute a separate offense. The department shall have the power and duty to initiate summary proceedings in accordance with this section.

(b) An operator who violates any provision of section 5(d) or 6(d)³ and an order of the department issued under section 4(b)(2) is guilty of a summary offense and shall, upon conviction thereof in a summary proceeding, be sentenced to pay a fine of not less than fifty dollars (\$50) nor more than five hundred dollars (\$500) and costs. For the purpose of this section, each day that a violation continues shall be construed to constitute a separate offense. The department shall have the power and duty to initiate summary proceedings in accordance with this section.

(c) In addition to a proceeding under any other remedy available at law or in equity, the department may assess a civil penalty upon any person who violates any applicable provision of section 13 or any operator who violates section 5(d) or 6(d) and any order issued by the department under section 4(b)(2). A penalty may be assessed whether or not the violation was willful or negligent. When the department assesses a civil penalty, it shall inform the person of the amount of the penalty. The amount must be commensurate with the type, severity and frequency of the violation and its measurable impact on the environment or public health. The owner or operator so assessed shall have thirty days to pay the penalty in full or, if the person wishes to contest either the amount of the penalty or the fact of the violation, the person shall, within the thirty-day period, file an appeal with the Environmental Hearing Board. Failure to appeal within thirty days of the assessment shall result in a waiver of all legal rights to contest the violation or the amount of the penalty. The maximum civil penalty which may be assessed is one thousand dollars (\$1,000) per day for each violation. For the purpose of this section, each day that a violation continues shall be construed to constitute a separate violation.

(d) The civil penalty assessed in section 14(c)⁴ after administrative hearing or after waiver of administrative hearing shall be payable to the Commonwealth of Pennsylvania and shall be collectable in any manner provided by law for the collection of debts. If

63 P.S. § 1014

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any person liable to pay any such penalty neglects or refuses to pay the same after demand, the amount, together with interest and any costs that may accrue, shall constitute a judgment in favor of the Commonwealth upon the property of such person from the date it has been entered and docketed on record by the prothonotary of the county where such is situated. The department may, at any time, transmit to the prothonotary's office of the respective counties certified copies of all such judgments and it shall be the duty of each prothonotary to enter and docket them of record in his office and to index the same as judgments are indexed.

1968, Nov. 18, P.L. 1052, No. 322, § 14, effective Jan. 1, 1969. Amended 2002, Feb. 21, P.L. 134, No. 11, § 14, imd. effective.

¹ 63 P.S. § 1013.

² 63 P.S. § 1004.

³ 63 P.S. §§ 1005, 1006.

⁴ 63 P.S. § 1014.

Research References

Treatises and Practice Aids

14 West's Pennsylvania Practice P80.1, Professions and Occupations Offenses (Title 63).

14 West's Pennsylvania Practice P110, Professions and Occupations Offenses (Title 63).

§ 1015. Civil relief

The department may maintain an action in the name of the Commonwealth for an injunction or other process against an owner or operator to restrain or prevent such person from violating the provisions of sections 5(d), 6(d) or 13¹ or any order of the department issued under section 4(b)(2)².

1968, Nov. 18, P.L. 1052, No. 322, § 15, effective Jan. 1, 1969. Amended 1989, Dec. 22, P.L. 790, No. 112, § 5, imd. effective; 2002, Feb. 21, P.L. 134, No. 11, § 15, imd. effective.

¹ 63 P.S. §§ 1005, 1006, 1013.

² 63 P.S. § 1004.

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:106, Water and Wastewater Systems Operators.

§ 1015.1. Whistleblower

(a) No employer may discharge, threaten or otherwise discriminate or retaliate against an employe regarding the employe's compensation, terms, conditions, location or privileges of employment because the employe makes a good faith report or is about to report, verbally or in writing, to the owner or appropriate authority an instance of wrongdoing.

(b) The remedies, penalties and enforcement procedures for violations of this section shall be provided in the act of December 12, 1986 (P.L. 1559, No. 169),¹ known as the "Whistleblower Law."

(c) As used in this section, the following words and phrases shall have the meanings given to them in this subsection:

"Appropriate authority." A Federal, State or local government body, agency or organization having jurisdiction over criminal law enforcement or regulatory violations; or a member, officer, agent, representative or supervisory employe of the body, agency or organization.

"Employe." A person who performs services for wages or other remunerations under a contract for hire, written or oral, express or implied, at a water and wastewater system, including the operators of such systems.

"Employer." A person supervising employes at water and wastewater systems, including owners of such systems.

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"Good faith report." A report of conduct defined in this section as wrongdoing which is made without malice or consideration of personal benefit and which the person making the report has reasonable cause to believe is true.

"Wrongdoing." A violation which is not of a merely technical or minimal nature of a Federal or State statute, regulation, license, permit, certificate or order relating to the operation of water and wastewater systems or relating to the preservation of public health and safety in relation to such systems.

1968, Nov. 18, P.L. 1052, No. 322, § 15.1, added 2002, Feb. 21, P.L. 134, No. 11, § 16, imd. effective.

143 P.S. § 1421 et seq.

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:106, Water and Wastewater Systems Operators.

CHAPTER 25

NURSING HOME ADMINISTRATORS

§ 1101. Short title

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:88, Nursing Home Administrators.

§ 1103. Administrator license required

Research References

Treatises and Practice Aids

14 West's Pennsylvania Practice P80.1, Professions and Occupations Offenses (Title 63).

14 West's Pennsylvania Practice P110, Professions and Occupations Offenses (Title 63).

§ 1114.1. Injunction against unlawful practice

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:88, Nursing Home Administrators.

§ 1114.2. Investigative Subpoena

Research References

Treatises and Practice Aids

Standard Pennsylvania Practice § 83:88, Nursing Home Administrators.

Appendix D

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Appendix E

§ 160-37. Duties of improved property owner. [Amended 10-20-1992 by Ord. No. 92-17]

The owner of an improved property that utilizes a holding tank shall maintain the holding tank in conformance with this article or any ordinance of this Township, the provisions of any applicable law and the rules and regulations of the Council and any administrative agency of the Commonwealth of Pennsylvania.

§ 160-38. Violations and penalties.

Any person who violates any provisions of § 160-37 shall, upon conviction thereof by summary proceedings, be sentenced to pay a fine of not less than \$100 and not more than \$300, and costs, and in default of said fine and costs, to undergo imprisonment in the county prison for a period not in excess of 30 days.

§ 160-39. Abatement of nuisances. [Amended 10-20-1992 by Ord. No. 92-17]

In addition to any other remedies provided in this article, any violation of § 160-37 above shall constitute a nuisance and shall be abated by the municipality or the Council by seeking either appropriate equitable or legal relief from a court of competent jurisdiction

ARTICLE IV**Sewer Use Regulations for Bristol Township System**

[Adopted 10-10-1984 by Ord. No. 1070; amended in its entirety 5-25-1993 by Ord. No. 93-6]

§ 160-40. Purpose and policy; applicability.

A. This article sets forth uniform requirements for users of the publicly owned treatment works for the Township of Bristol and enables the Township of Bristol to comply with all applicable state and federal laws, including the Clean Water Act (33 U.S.C. § 1251 et seq.) and the General Pretreatment Regulations (40 CFR Part 403). The objectives of this article are:

- (1) To prevent the introduction of pollutants into the publicly owned treatment works that will interfere with its operation.
- (2) To prevent the introduction of pollutants into the publicly owned treatment works that will pass through the publicly owned treatment works inadequately treated, into receiving waters or otherwise be incompatible with the publicly owned treatment works
- (3) To protect both publicly owned treatment works personnel who may be affected by wastewater and sludge in the course of their employment and the general public.
- (4) To promote reuse and recycling of industrial wastewater and sludge from the publicly owned treatment works.
- (5) To enable the Township of Bristol to comply with its National Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements and

any other federal or state laws to which the publicly owned treatment works is subject.

- B. This article shall apply to all users of the publicly owned treatment works. The article authorizes the issuance of wastewater discharge permits; provides for monitoring, compliance and enforcement activities; establishes administrative review procedures; requires user reporting; and provides for variances.

§ 160-41. Administration.

Except as otherwise provided herein, the Superintendent of the sewage treatment system shall administer, implement and enforce the provisions of this article. Any powers granted to or duties imposed upon the Superintendent may be delegated by the Superintendent to other Bristol Township Authority personnel.

§ 160-42. Abbreviations.

The following abbreviations, when used in this article, shall have the following designated meanings:

BOD	—	Biochemical oxygen demand
CFR	—	Code of Federal Regulations
COD	—	Chemical oxygen demand
EPA	—	United States Environmental Protection Agency
gpd	—	Gallons per day
mg/l	—	Milligrams per liter
NPDES	—	National Pollutant Discharge Elimination System
POTW	—	Publicly owned treatment works
RCRA	—	Resource Conservation and Recovery Act
SIC	—	Standard industrial classification
TSS	—	Total suspended solids
U.S.C.	—	United States Code

§ 160-43. Definitions.

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this article, shall have the meanings hereinafter designated:

ACT or THE ACT — The Federal Water Pollution Control Act, also known as the "Clean Water Act," as amended, 33 U.S.C. § 1251 et seq.

APPROVAL AUTHORITY — Region III United States Environmental Protection Agency.

AUTHORIZED REPRESENTATIVE OF THE USER —

- A. If the user is a corporation:

- (1) The president, secretary, treasurer or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decisionmaking functions for the corporation; or
 - (2) The manager of one or more manufacturing, production or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- B. If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.
- C. If the user is a federal, state or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.
- D. The individuals described in Subsections A through C above may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position who is responsible for the overall operation of the facility from which the discharge originates or who has overall responsibility for environmental matters for the company and the written authorization is submitted to the Bristol Township Authority.

BIOCHEMICAL OXYGEN DEMAND OR BOD — The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five days at 20° C., usually expressed as a concentration (e.g., mg/l)

CATEGORICAL PRETREATMENT STANDARD or CATEGORICAL STANDARD — Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. § 1317) which apply to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405 to 471.

ENVIRONMENTAL PROTECTION AGENCY or EPA — The United States Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director or other duly authorized official of said agency.

EXISTING SOURCE — Any source of discharge, the construction or operation of which commenced prior to the publication by the EPA of proposed categorical pretreatment standards which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

GRAB SAMPLE — A sample which is taken from a waste stream without regard to the flow in the waste stream and over a period of time not to exceed 15 minutes.

INDIRECT DISCHARGE OR DISCHARGE — The introduction of pollutants into the POTW from any nondomestic source regulated under Section 307(b), (c) or (d) of the Act

INSTANTANEOUS MAXIMUM ALLOWABLE DISCHARGE LIMIT — The maximum concentration of a pollutant allowed to be discharged at any time, determined from the

analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

INTERFERENCE — A discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal and, therefore, is a cause of a violation of the Township of Bristol's NPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder or any more stringent state or local regulations: Section 405 of the Act; the Solid Waste Disposal Act, including Title II, commonly referred to as the "Resource Conservation and Recovery Act" (RCRA); any state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research and Sanctuaries Act.

MEDICAL WASTE — Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes and dialysis wastes.

NEW SOURCE —

- A. Any building, structure, facility or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:
- (1) The building, structure, facility or installation is constructed at a site at which no other source is located.
 - ~~(2) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source.~~
 - (3) The production or wastewater-generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
- B Construction on a site at which an existing source is located results in a modification rather than a "new source" if the construction does not create a new building, structure, facility or installation meeting the criteria of Subsection A(1) or (2) above but otherwise alters, replaces or adds to existing process or production equipment.
- C. Construction of a new source as defined under this definition has commenced if the owner or operator has:

- (1) Begun, or caused to begin, as part of a continuous on-site construction program:
 - (a) Any placement, assembly or installation of facilities or equipment.
 - (b) Significant site preparation work, including the clearing, excavation or removal of existing buildings, structures or facilities which is necessary for the placement, assembly or installation of new source facilities or equipment.
- (2) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss and contracts for feasibility, engineering and design studies do not constitute a contractual obligation under this subsection.

NONCONTACT COOLING WATER — Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product.

PASS-THROUGH — A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the Bristol Township Authority NPDES permit, including an increase in the magnitude or duration of a violation.

PERSON — Any individual, partnership, copartnership, firm, company, corporation, association, joint-stock company, trust, estate, governmental entity or any other legal entity; or their legal representatives, agents or assigns. This definition includes all federal, state and local governmental entities.

pH — A measure of the acidity or alkalinity of a solution, expressed in standard units.

POLLUTANT — Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, ~~radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal,~~ agricultural and industrial wastes and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity or odor).

PRETREATMENT — The reduction of the amount of pollutants, the elimination of pollutants or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.

PRETREATMENT REQUIREMENTS — Any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

PRETREATMENT STANDARDS or STANDARDS — Prohibited discharge standards, categorical pretreatment standards and local limits.

PROHIBITED DISCHARGE STANDARDS or PROHIBITED DISCHARGES — Absolute prohibitions against the discharge of certain substances; these prohibitions appear in § 160-44 of this article.

PUBLICLY OWNED TREATMENT WORKS OR POTW — A treatment works, as defined by Section 212 of the Act (33 U.S.C. § 1292), which is owned by the Township of Bristol. This definition includes any devices or systems used in the collection, storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant

SEPTIC TANK WASTE — Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers and septic tanks.

SEWAGE — Human excrement and gray water (household showers, dishwashing operations, etc.).

SIGNIFICANT INDUSTRIAL USER —

A. A user subject to categorical pretreatment standards

B. A user that:

- (1) Discharges an average of 25,000 gpd or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater).
- (2) Contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant.
- (3) Is designated as such by the Bristol Township Authority on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

C. Upon a finding that a user meeting the criteria in Subsection B has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Bristol Township Authority may at any time, on its own ~~initiative or in response to a petition received from a user and in accordance with~~ procedures in 40 CFR 403.8(f)(6), determine that such user should not be considered a significant industrial user.

SLUG LOAD OR SLUG — Any discharge at a flow or concentration which could cause a violation of the prohibited discharge standards in § 160-44 of this article.

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE — A classification pursuant to the Standard Industrial Classification Manual issued by the United States Office of Management and Budget.

STORMWATER — Any flow occurring during or following any form of natural precipitation and resulting from such precipitation, including snowmelt.

SUPERINTENDENT — The person designated by the Bristol Township Authority to supervise the operation of the POTW and who is charged with certain duties and responsibilities by this article or a duly authorized representative

SUSPENDED SOLIDS — The total suspended matter that floats on the surface of or is suspended in water, wastewater or other liquid and which is removable by laboratory filtering.

TOWNSHIP — The Township of Bristol or the Bristol Township Authority as manager for the Township of Bristol.

USER or INDUSTRIAL USER — A source of indirect discharge

WASTEWATER — Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities and institutions, whether treated or untreated, which are contributed to the POTW.

WASTEWATER TREATMENT PLANT or TREATMENT PLANT — That portion of the POTW which is designed to provide treatment of municipal sewage and industrial waste

§ 160-44. Prohibited discharge standards.

- A. General prohibitions. No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass-through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other national, state or local pretreatment standards or requirements.
- B. Specific prohibitions. No user shall introduce or cause to be introduced into the POTW the following pollutants, substances or wastewater:
- (1) Pollutants which create a fire or explosive hazard in the POTW, including but not limited to waste streams with a closed-cup flash point of less than 140° F (60° C.) using the test methods specified in 40 CFR 261.21
 - (2) Wastewater having a pH less than 5.0 or more than 10.0 or otherwise causing corrosive structural damage to the POTW or equipment.
 - (3) Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference.
 - (4) Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW.
 - (5) Wastewater having a temperature which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104° F. (40° C.).
 - (6) Petroleum oil, nonbiodegradable cutting oil or products of mineral oil origin, in amounts that will cause interference or pass-through.
 - (7) Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems
 - (8) Trucked or hauled pollutants.

- (9) Noxious or malodorous liquids, gases, solids or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life or to prevent entry into the sewers for maintenance or repair.
- (10) Wastewater which imparts color which cannot be removed by the treatment process, such as but not limited to dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating the Bristol Township Authority's NPDES permit.
- (11) Wastewater containing any radioactive wastes or isotopes except in compliance with applicable state or federal regulations.
- (12) Stormwater, surface water, groundwater, roof runoff, subsurface drainage, swimming pool drainage and deionized water.
- (13) Sludges, screenings or other residues from the pretreatment of industrial wastes.
- (14) Medical wastes.
- (15) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test.
- (16) Detergents, surface-active agents or other substances which may cause excessive foaming in the POTW.
- (17) Fats, oils or greases of animal or vegetable origin in concentrations greater than 97 mg/l.
- (18) Wastewater causing two readings on an explosion hazard meter, at the point of discharge into the POTW or at any point in the POTW, of more than 5% or any single reading over 10% of the lower explosive limit of the meter.

(19) Wastewater containing any material which is defined as hazardous waste under 40 CFR Part 261.

- C. Pollutants, substances or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW.

§ 160-45. National Categorical Pretreatment Standards.

The Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405 to 471 are hereby incorporated.

- A. Where a categorical pretreatment standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, the Superintendent may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c).
- B. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the Superintendent shall impose an alternate limit using the combined waste stream formula in 40 CFR 403.6(e).

- C. A user may obtain a variance from a categorical pretreatment standard if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by the EPA when developing the categorical pretreatment standard.
- D. A user may obtain a net gross adjustment to a categorical standard in accordance with 40 CFR 403.15.

§ 160-46. Local limits.

- A. The following pollutant limits are established to protect against pass-through and interference. No person shall discharge wastewater containing in excess of the following: [Amended 12-12-1997 by Ord. No. 97-16]

Pollutants	Maximum Concentration (mg/l)
Arsenic (T)	2.30
Cadmium (T)	0.10
Chromium (T)	1.80
Copper (T)	0.51
Lead (T)	0.43
Mercury (T)	0.003
Nickel (T)	0.51
Silver (T)	0.14
Zinc (T)	2.90
Cyanide (T)	2.30
<hr/>	
Phenols (T)	1.83
Ammonia as N (NH _{3-N})	69.0
Fats, oils and grease	107.0
Biochemical oxygen demand (BOD ⁵)	775.0
Total suspended solids (TSS)	1054.0
Chemical oxygen demand (COD)	1550.0
Sulfate as SO ₄	360.0

- B. The above limits apply at the point where the wastewater is discharged to the POTW. All concentration for metallic substances are for total metal unless indicated otherwise. The Superintendent may impose mass limitations in addition to or in place of the concentration-based limitations above.

§ 160-47. Bristol Township Authority's right of revision.

The Bristol Township Authority reserves the right to establish, by ordinance or in wastewater discharge permits, more stringent standards or requirements on discharges to the POTW.

§ 160-48. Dilution.

No user shall ever increase the use of process water or in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The Superintendent may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements or in other cases when the imposition of mass limitations is appropriate.

§ 160-49. Pretreatment facilities.

Users shall provide wastewater treatment as necessary to comply with this article and shall achieve compliance with all categorical pretreatment standards, local limits and the prohibitions set out in § 160-44 of this article within the time limitations specified by the EPA, the state or the Superintendent, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the Bristol Township Authority for review and shall be acceptable to them before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the Bristol Township Authority under the provisions of this article.

§ 160-50. Additional pretreatment measures.

- A. Whenever deemed necessary, the Superintendent may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams and such other conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this article.
- B. The Superintendent may require any person discharging into the POTW to install and maintain, on his property and at his expense, a suitable storage and flow-control facility to ensure equalization of flow. A wastewater discharge permit may be issued solely for flow equalization.
- C. Grease, oil and sand interceptors shall be provided when, in the opinion of the Superintendent, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil or sand; except that such interceptors shall not be required for residential users. All interception units shall be of type and capacity approved by the Superintendent and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned and repaired regularly, as needed, by the user at his expense.

- D Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

§ 160-51. Accidental discharge/slug control plans.

At least once every two years, the Superintendent shall evaluate whether each significant industrial user needs an accidental discharge/slug control plan. The Bristol Township Authority may require any user to develop, submit for approval and implement such a plan. Alternatively, the Bristol Township Authority may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

- A. A description of discharge practices, including nonroutine batch discharges.
- B. A description of stored chemicals.
- C. Procedures for immediately notifying the Superintendent of any accidental or slug discharge, as required by § 160-70 of this article
- D. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response

§ 160-52. Wastewater analysis.

When requested by the Superintendent, a user must submit information on the nature and characteristics of its wastewater within 30 days of the request. The Superintendent is authorized to prepare a form for this purpose and may periodically require users to update this information.

§ 160-53. Wastewater discharge permit required.

- A. No significant industrial user shall discharge wastewater into the POTW without first obtaining a wastewater discharge permit.
- B. The Superintendent may require other users to obtain wastewater discharge permits as necessary to carry out the purposes of this article.
- C. Any violation of the terms and conditions of a wastewater discharge permit shall be deemed a violation of this article and subjects the wastewater discharge permittee to the sanctions set out in §§ 160-70.11 through 160-70.25 of this article. Obtaining a wastewater discharge permit does not relieve a permittee of its obligation to comply with all federal and state pretreatment standards or requirements or with any other requirements of federal, state and local law.

§ 160-54. Time to obtain permit.

Any user required to obtain a wastewater discharge permit who proposes to begin or continue discharging into the POTW must obtain such permit prior to the beginning or continuing of such discharge. An application for this wastewater discharge permit, in accordance with § 160-55 of this article, must be filed at least 90 days prior to the date upon which any discharge will begin or recommence.

§ 160-55. Wastewater discharge permit application contents.

A. All users required to obtain a wastewater discharge permit must submit a permit application. The Superintendent may require all users to submit as part of an application the following information:

- (1) All information required by § 160-65B of this article.
 - (2) A description of activities, facilities and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility which are, or could accidentally or intentionally be, discharged to the POTW.
 - (3) The number and type of employees, hours of operation and proposed or actual hours of operation.
 - (4) Each product produced by type, amount, process or processes and rate of production.
 - (5) The type and amount of raw materials processed (average and maximum per day).
 - (6) Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, floor drains and appurtenances by size, location and elevation and all points of discharge.
-
- (7) The time and duration of discharges.
 - (8) Any other information as may be deemed necessary by the Superintendent to evaluate the wastewater discharge permit application.

B. Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.

§ 160-56. Application signatories and certification.

All wastewater discharge permit applications and user reports must be signed by an authorized representative of the user and contain the following certification statement:

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

§ 160-57. Wastewater discharge permit decisions.

The Superintendent will evaluate the data furnished by the user and may require additional information. Within 30 days of receipt of a complete wastewater discharge permit application, the Superintendent will determine whether or not to issue a wastewater discharge permit. The Superintendent may deny any application for a wastewater discharge permit.

§ 160-58. Wastewater discharge permit duration.

A wastewater discharge permit may be issued for a period of one year but not more than five years at the discretion of the Superintendent. Each wastewater discharge permit will indicate a specific date upon which it will expire.

§ 160-59. Wastewater discharge permit contents.

A wastewater discharge permit shall include such conditions as are deemed reasonably necessary by the Superintendent to prevent pass-through or interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal and protect against damage to the POTW

A. Wastewater discharge permits must contain:

- (1) A statement that indicates the wastewater discharge permit's duration, which in no event shall exceed five years
- (2) A statement that the wastewater discharge permit is nontransferable without prior notification to the Bristol Township Authority in accordance with § 160-62 of this article and provisions for furnishing the new owner or operator with a copy of the existing wastewater discharge permit.
- (3) Effluent limits based on applicable pretreatment standards.
- (4) Self-monitoring, sampling, reporting, notification and recordkeeping requirements. These requirements shall include an identification of pollutants to be monitored, sampling location, sampling frequency and sample type based on federal, state and local law.
- (5) A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and any applicable compliance schedule. Such schedule

may not extend the time for compliance beyond that required by applicable federal, state or local law.

- B Wastewater discharge permits may contain, but need not be limited to, the following conditions:
- (1) Limits on the average and/or maximum rate of discharge, time of discharge and/or requirements for flow regulation and equalization.
 - (2) Requirements for the installation of pretreatment technology, pollution control or the construction of appropriate containment devices designed to reduce, eliminate or prevent the introduction of pollutants into the treatment works.
 - (3) Requirements for the development and implementation of spill control plans or other special conditions, including management practices necessary to adequately prevent accidental, unanticipated or nonroutine discharges.
 - (4) Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW.
 - (5) Requirements for the installation and maintenance of inspection and sampling facilities and equipment.
 - (6) A statement that compliance with the wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable federal and state pretreatment standards, including those which become effective during the term of the wastewater discharge permit.
 - (7) Other conditions as deemed appropriate by the Superintendent to ensure compliance with this article and state and federal laws, rules and regulations

§ 160-60. Wastewater discharge permit appeals.

The Bristol Township Authority shall provide public notice of the issuance of a wastewater discharge permit. Any person, including the user, may petition the Bristol Township Authority to reconsider the terms of a wastewater discharge permit within 30 days of notice of its issuance.

- A. Failure to submit a timely petition for review shall be deemed to be a waiver of the administrative appeal.
- B. In its petition, the appealing party must indicate the wastewater discharge permit provisions objected to, the reasons for this objection and the alternative condition, if any, it seeks to place in the wastewater discharge permit.
- C. The effectiveness of the wastewater discharge permit shall not be stayed pending the appeal.
- D. If the Bristol Township Authority fails to act within 30 days, a request for reconsideration shall be deemed to be denied. Decisions not to reconsider a wastewater discharge permit, not to issue a wastewater discharge permit or not to modify a

wastewater discharge permit shall be considered final administrative actions for purposes of judicial review.

- E. Aggrieved parties seeking judicial review of the final administrative wastewater discharge permit decision must do so by filing a complaint with the Court of Common Pleas of Bucks County within 30 days.

§ 160-61. Wastewater discharge permit modification.

The Bristol Township Authority may modify a wastewater discharge permit for good cause, including but not limited to the following reasons:

- A. To incorporate any new or revised federal, state or local pretreatment standards or requirements.
- B. To address significant alteration or additions to the user's operation, processes or wastewater volume or character since the time of the wastewater discharge permit's issuance
- C. A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge
- D. Information indicating that the permitted discharge poses a threat to the Bristol Township Authority's POTW, personnel or the receiving waters.
- E. Violation of any terms or conditions of the wastewater discharge permit
- F. Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting.
- G. Revision of or a grant of variance from categorical pretreatment standards pursuant to 40 CFR 403.13.
- H. To correct typographical or other errors in the wastewater discharge permit.
- I. To reflect a transfer of the facility ownership or operation to a new owner or operator

§ 160-62. Wastewater discharge permit transfer.

- A. Wastewater discharge permits may be transferred to a new owner or operator only if the permittee gives at least 30 days' advance notice to the Superintendent and the Superintendent approves the wastewater discharge permit transfer. The notice to the Superintendent must include a written certification by the new owner or operator which:
 - (1) States that the new owner and/or operator has no immediate intent to change the facility's operations and processes
 - (2) Identifies the specific date on which the transfer is to occur.
 - (3) Acknowledges full responsibility for complying with the existing wastewater discharge permit.

- B. Failure to provide advance notice of a transfer renders the wastewater discharge permit void as of the date of facility transfer.

§ 160-63. Wastewater discharge permit revocation.

- A. The Superintendent may revoke a wastewater discharge permit for good cause, including but not limited to the following reasons:

- (1) Failure to notify the Superintendent of significant changes to the wastewater prior to the changed discharge.
- (2) Failure to provide prior notification to the Superintendent of changed conditions pursuant to § 160-69 of this article.
- (3) Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application.
- (4) Falsifying self-monitoring reports.
- (5) Tampering with monitoring equipment.
- (6) Refusing to allow the Superintendent timely access to the facility premises and records.
- (7) Failure to meet effluent limitations.
- (8) Failure to pay fines.
- (9) Failure to pay sewer charges.
- (10) Failure to meet compliance schedules.

(11) Failure to complete a wastewater survey or the wastewater discharge permit application.

(12) Failure to provide advance notice of the transfer of business ownership of a permitted facility.

(13) Violation of any pretreatment standard or requirement or any terms of the wastewater discharge permit or this article.

- B. Wastewater discharge permits shall be voidable upon cessation of operations or transfer of business ownership. All wastewater discharge permits issued to a particular user are void upon the issuance of a new wastewater discharge permit to that user.

§ 160-64. Wastewater discharge permit reissuance.

A user with an expiring wastewater discharge permit shall apply for wastewater discharge permit reissuance by submitting a complete permit application a minimum of 90 days prior to the expiration of the user's existing wastewater discharge permit.

§ 160-65. Baseline monitoring reports.

- A. Within either 180 days after the effective date of a Categorical Pretreatment Standard or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the POTW shall submit to the Superintendent a report which contains the information listed in Subsection B below. At least 90 days prior to commencement of their discharge, new sources and sources that become categorical users subsequent to the promulgation of an applicable categorical standard shall submit to the Superintendent a report which contains the information listed in Subsection B below. A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.
- B. Users described above shall submit the information set forth below:
- (1) Identifying information. The name and address of the facility, including the name of the operator and owner.
 - (2) Environmental permits. A list of any environmental control permits held by or for the facility.
 - (3) Description of operations. A brief description of the nature, average rate of production and standard industrial classifications of the operation(s) carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.
 - (4) Flow measurement. Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in 40 CFR 403.6(e).
 - (5) Measurement of pollutants.
 - (a) The categorical pretreatment standards applicable to each regulated process.
 - (b) The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the standard or by the Superintendent, of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum and long-term average concentrations or mass, where required, shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in § 160-70.3 of this article.
 - (c) Sampling must be performed in accordance with procedures set out in § 160-70.4 of this article.
 - (6) Certification. A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis and, if not, whether additional operation and

maintenance (O&M) and/or additional pretreatment is required to meet the pretreatment standards and requirements.

- (7) Compliance schedule. If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in § 160-66 of this article.
- (8) Signature and certification. All baseline monitoring reports must be signed and certified in accordance with § 160-56 of this article.

§ 160-66. Compliance schedule progress reports.

The following conditions shall apply to the compliance schedule required by § 160-65B(7) of this article:

- A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction and beginning and conducting routine operation).
- B. No increment referred to above shall exceed nine months.
- C. The user shall submit a progress report to the Superintendent no later than 14 days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay and, if appropriate, the steps being taken by the user to return to the established schedule.
- D. In no event shall more than nine months elapse between such progress reports to the Superintendent.

§ 160-67. Reports on compliance with categorical pretreatment standard deadline.

Within 90 days following the date for final compliance with applicable Categorical Pretreatment Standards or, in the case of a new source, following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the Superintendent a report containing the information described in § 160-65B(4), (5) and (6) of this article. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to Categorical Pretreatment Standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with § 160-56 of this article.

§ 160-68. Periodic compliance reports.

- A. All significant industrial users shall, at a frequency determined by the Superintendent but in no case less than twice per year, submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with § 160-56 of this article.
- B. All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.
- C. If a user subject to the reporting requirement in this section monitors any pollutant more frequently than required by the Superintendent, using the procedures prescribed in § 160-70.4 of this article, the results of this monitoring shall be included in the report.

§ 160-69. Reports of changed conditions.

Each user must notify the Superintendent of any planned significant changes to the user's operations or system which might alter the nature, quality or volume of its wastewater at least 30 days before the change.

- A. The Superintendent may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under § 160-55 of this article.
- B. The Superintendent may issue a wastewater discharge permit under § 160-57 of this article or modify an existing wastewater discharge permit under § 160-61 of this article in response to changed conditions or anticipated changed conditions.
- C. For purposes of this requirement, significant changes include, but are not limited to, flow increases of 20% or greater and the discharge of any previously unreported pollutants.

§ 160-70. Reports of potential problems.

- A. In the case of any discharge, including but not limited to accidental discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge or a slug load, that may cause potential problems for the POTW, the user shall immediately telephone and notify the Superintendent of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the user.
- B. Within five days following such discharge, the user shall, unless waived by the Superintendent, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage or other liability.

which may be incurred as a result of damage to the POTW, natural resources or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties or other liability which may be imposed pursuant to this article.

- C A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a discharge described in Subsection A above. Employers shall ensure that all employees who may cause such a discharge to occur are advised of the emergency notification procedure.

§ 160-70.1. Reports from unpermitted users.

All users not required to obtain a wastewater discharge permit shall provide appropriate reports to the Superintendent as the Superintendent may require.

§ 160-70.2. Notice of violation; repeat sampling and reporting.

If sampling performed by a user indicates a violation, the user must notify the Superintendent within 24 hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Superintendent within 30 days after becoming aware of the violation. The user is not required to resample if the Superintendent monitors at the user's facility at least once a month or if the Superintendent samples between the user's initial sampling and when the user receives the results of this sampling.

§ 160-70.3. Analytical requirements.

All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable Categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by the EPA.

§ 160-70.4. Sample collection.

- A. Except as indicated in Subsection B below, the user must collect wastewater samples using flow proportional composite collection techniques. In the event that flow proportional sampling is unfeasible, the Superintendent may authorize the use of time proportional sampling or a minimum of four grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.
- B. Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides and volatile organic compounds must be obtained using grab collection techniques.

§ 160-70.5. Timing.

Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility serviced by the United States Postal Service, the date of receipt of the report shall govern.

§ 160-70.6. Recordkeeping.

Users subject to the reporting requirements of this article shall retain and make available for inspection and copying all records of information obtained pursuant to any monitoring activities required by this article and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements. Records shall include the date, exact place, method and time of sampling and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three years. This period shall be automatically extended for the duration of any litigation concerning the user or the Bristol Township Authority or where the user has been specifically notified of a longer retention period by the Superintendent.

§ 160-70.7. Right of entry; inspection and sampling.

The Superintendent shall have the right to enter the premises of any user to determine whether the user is complying with all requirements of this article and any wastewater discharge permit or order issued hereunder. Users shall allow the Superintendent ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying and the performance of any additional duties.

- A. ~~Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Superintendent will be permitted to enter without delay for the purposes of performing specific responsibilities.~~
- B. The Superintendent shall have the right to set up on the user's property, or require the installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.
- C. The Superintendent may require the user to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and properly operating condition by the user at its own expense. All devices used to measure wastewater flow and quality shall be calibrated to ensure their accuracy.
- D. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the Superintendent and shall not be replaced. The costs of clearing such access shall be born by the user.

- E Unreasonable delays in allowing the Superintendent access to the user's premises shall be a violation of this article.

§ 160-70.8. Search warrants.

If the Superintendent has been refused access to a building, structure or property or any part thereof and is able to demonstrate structure or property or any part thereof and is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the Bristol Township Authority designed to verify compliance with this article or any permit or order issued hereunder or to protect the overall public health, safety and welfare of the community, then the Superintendent may seek issuance of a search warrant from the Court of Common Pleas of Bucks County.

§ 160-70.9. Confidential information.

Information and data on a user obtained from reports, surveys, wastewater discharge permit applications, wastewater discharge permits and monitoring programs and from the Superintendent's inspection and sampling activities shall be available to the public without restriction, unless the user specifically requests and is able to demonstrate to the satisfaction of the Superintendent that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets under applicable state law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program and in enforcement proceedings involving the person furnishing the report. ~~Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.~~

§ 160-70.10. Publication of users in significant noncompliance.

The Superintendent shall publish annually, in the largest daily newspaper published in the municipality where the POTW is located, a list of the users which, during the previous 12 months, were in significant noncompliance with applicable pretreatment standards and requirements. The term "significant noncompliance" shall mean:

- A. Chronic violations of wastewater discharge limits, defined here as those in which 66% or more of wastewater measurements taken during a six-month period exceed the daily maximum limit or average limit for the same pollutant parameter by any amount.
- B. Technical review criteria (TRC) violations, defined here as those in which 33% or more of wastewater measurements taken for each pollutant parameter during a six-month period equals or exceeds the product of the daily maximum limit or the average limit

multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH).

- C. Any other discharge violation that the Superintendent believes has caused, alone or in combination with other discharges, interference or pass-through, including endangering the health of POTW personnel or the general public.
- D. Any discharge of pollutants that has caused imminent endangerment to the public or to the environment or has resulted in the Superintendent's exercise of his emergency authority to halt or prevent such a discharge
- E. Failure to meet, within 90 days of the scheduled date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction or attaining final compliance
- F. Failure to provide, within 30 days after the due date, any required reports, including baseline monitoring reports, reports on compliance with Categorical Pretreatment Standard deadlines, periodic self-monitoring reports and reports on compliance with compliance schedules.
- G. Failure to accurately report noncompliance.
- H. Any other violation(s) which the Superintendent determines will adversely affect the operation or implementation of the local pretreatment program.

§ 160-70.11. Notification of violation.

When the Superintendent finds that a user has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the Superintendent may serve upon that user a written notice of violation. Within 20 days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the Superintendent. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violation. Nothing in this section shall limit the authority of the Superintendent to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation.

§ 160-70.12. Consent orders.

The Superintendent may enter into consent orders, assurances of voluntary compliance or other similar documents establishing an agreement with any user responsible for noncompliance. Such documents will include specific action to be taken by the user to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to §§ 160-70.14 and 160-70.15 of this article and shall be judicially enforceable.

§ 160-70.13. Show-cause hearing.

The Superintendent may order a user which has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement to appear before the Superintendent and show cause why the proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action and a request that the user show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least 10 days prior to the hearing. Such notice may be served on any authorized representative of the user. A show-cause hearing shall not be a bar against or prerequisite for taking any other action against the user.

§ 160-70.14. Compliance orders.

When the Superintendent finds that a user has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the Superintendent may issue an order to the user responsible for the discharge directing that the user come into compliance within a specified time. If the user does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices or other related appurtenances are installed and properly operated. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a pretreatment standard or requirement, nor does a compliance order relieve the user of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against or a prerequisite for taking any other action against the user.

§ 160-70.15. Cease-and-desist orders.

- A. When the Superintendent finds that a user has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, or that the user's past violations are likely to recur, the Superintendent may issue an order to the user directing it to cease and desist all such violations and directing the user to:
- (1) Immediately comply with all requirements.
 - (2) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatening violation, including halting operations and/or terminating the discharge.
- B. Issuance of a cease-and-desist order shall not be a bar against or prerequisite for taking any other action against the user.

§ 160-70.16. Administrative fines.

- A. When the Superintendent finds that a user has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the Superintendent may fine such user in an amount not to exceed \$1,000. Such fines shall be assessed on a per-violation, per-day basis. In the case of monthly or other long-term average discharge limits, fines shall be assessed for each day during the period of violation.
- B. Unpaid charges, fines and penalties shall, after 30 calendar days, be assessed an additional penalty of 10% of the unpaid balance, and interest shall accrue thereafter at a rate of 1% per month. A lien against the user's property will be sought for unpaid charges, fines and penalties
- C. Users desiring to dispute such fines must file a written request for the Superintendent to reconsider the fine along with full payment of the fine amount within 20 days of being notified of the fine. Where a request has merit, the Superintendent may convene a hearing on the matter. In the event that the user's appeal is successful, the payment, together with any interest accruing thereto, shall be returned to the user. The Superintendent may add the costs of preparing administrative enforcement actions, such as notices and orders, to the fine and also deduct said costs from fine payments to be returned as a result of successful appeal
- D. Issuance of an administrative fine shall not be a bar against or a prerequisite for taking any other action against the user.

§ 160-70.17. Emergency suspensions.

- A. The Superintendent may immediately suspend a user's discharge, after informal notice to the user, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The Superintendent may also immediately suspend a user's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the POTW or which presents or may present an endangerment to the environment
 - (1) Any user notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the Superintendent may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW or its receiving stream or endangerment to any individuals. The Superintendent may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of the Superintendent that the period of endangerment has passed, unless the termination proceedings in § 160-70.18 of this article are initiated against the user.
 - (2) A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future

occurrences, to the Superintendent prior to the date of any show-cause or termination hearing under § 160-70.13 or 160-70.18 of this article.

- B. Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

§ 160-70.18. Termination of discharge.

- A. In addition to the provisions in § 160-63 of this article, any user who violates the following conditions is subject to discharge termination:
- (1) Violation of wastewater discharge permit conditions.
 - (2) Failure to accurately report the wastewater constituents and characteristics of its discharge.
 - (3) Failure to report significant changes in operations or wastewater volume, constituents and characteristics prior to discharge.
 - (4) Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring or sampling.
 - (5) Violation of the pretreatment standards in §§ 160-44 through 160-48 of this article
- B. Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under § 160-70.13 of this article why the proposed action should not be taken. Exercise of this option by the Superintendent shall not be a bar to or a prerequisite for taking any other action against the user.

§ 160-70.19. Injunctive relief.

When the Superintendent finds that a user has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the Superintendent may petition the Court of Common Pleas of Bucks County, through the Bristol Township Authority's attorney, for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit order or other requirement imposed by this article on activities of the user. The Superintendent may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation. A petition for injunctive relief shall not be a bar against or a prerequisite for taking any other action against a user.

§ 160-70.20. Civil penalties.

- A. A user who has violated or continues to violate any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement shall be liable to the Bristol Township Authority for a maximum civil penalty of \$25,000 per violation, per day. In the case of a monthly or other long-term

average discharge limit, penalties shall accrue for each day during the period of the violation.

- B. The Bristol Township Authority may recover reasonable attorneys' fees, court costs and other expenses associated with enforcement activities, including sampling and monitoring expenses and the cost of any actual damages incurred by the Bristol Township Authority.
- C. In determining the amount of civil liability, the court shall take into account all relevant circumstances, including but not limited to the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user and any other factor as justice requires.
- D. Filing a suit for civil penalties shall not be a bar against or a prerequisite for taking any other action against a user

§ 160-70.21. Criminal prosecution; violations and penalties.

- A. A user who willfully or negligently violates any provision of this article, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement shall, upon conviction, be guilty of a summary offense, punishable by a fine of not more than \$1,000 per violation, per day, or imprisonment for not more than 90 days, or both
- B. A user who willfully or negligently introduces any substance into the POTW which causes personal injury or property damage shall, upon conviction, be guilty of a summary offense and be subject to a penalty of at least \$5,000 or be subject to imprisonment for not more than 180 days, or both. This penalty shall be in addition to any other cause of action for personal injury or property damage available under state law.
- C. A user who knowingly makes any false statements, representation or certifications in any application, record, report, plan or other documentation filed or required to be maintained pursuant to this article, a wastewater discharge permit or an order issued hereunder or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this article shall, upon conviction, be punished by a fine of not more than \$1,000 per violation, per day, or imprisonment for not more than 120 days, or both

§ 160-70.22. Remedies to be nonexclusive.

The remedies provided for in this article are not exclusive. The Superintendent may take any, all or any combination of these actions against a noncompliant user. Enforcement of pretreatment violations will generally be in accordance with the Bristol Township Authority's Enforcement Response Plan. However, the Superintendent may take other action against any user when the circumstances warrant. Further, the Superintendent is empowered to take more than one enforcement action against any noncompliant user.

§ 160-70.23. Performance bonds.

The Superintendent may decline to issue or reissue a wastewater discharge permit to any user who has failed to comply with any provision of this article, a previous wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, unless such user first files a satisfactory bond, payable to the Bristol Township Authority, in a sum not to exceed a value determined by the Superintendent to be necessary to achieve consistent compliance.

§ 160-70.24. Liability insurance.

The Superintendent may decline to issue or reissue a wastewater discharge permit to any user who has failed to comply with any provision of this article, a previous wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, unless the user first submits proof that it has obtained financial assurances sufficient to restore or repair damage to the POTW caused by its discharge.

§ 160-70.25. Informant rewards.

The Bristol Township Authority may pay up to \$100 for information leading to the discovery of noncompliance by a user. In the event that the information provided results in a civil penalty or an administrative fine levied against the user, the Bristol Township authority may disperse up to 5% of the collected fine or penalty to the informant. However, a single reward payment may not exceed \$1,000

§ 160-70.26. Variances.

- A. ~~Notwithstanding the limitations set forth in these regulations, a special variance or amendment may be issued whereby a waste of unusual character or strength may be~~ accepted, when in the opinion of the Bristol Township Authority, unusual or extraordinary circumstances compel special terms or special conditions. As a separate and additional requirement, such variance or amendment will be issued only when, in the opinion of the Superintendent, it would not have any deleterious effect on the system by causing interference with or disruption in the treatment works or violation of NPDES permit or state water quality criteria or standards. In no case shall a discharge be approved which would exceed the limits established by a National Categorical Pretreatment Standard.
- B. A user seeking a variance or amendment shall petition the Bristol Township Authority in writing and provide documentation of the exceptional circumstances which the user believes would justify a variance or amendment. If a variance or amendment is approved by the Bristol Township Authority, the user shall pay a surcharge in addition to the applicable volume charges. Said surcharge shall be established by the Bristol Township Authority for each variance or amendment granted.

§ 160-70.27. Pretreatment charges and fees.

The Bristol Township Authority may adopt reasonable fees for reimbursement of costs of setting up and operating the pretreatment program, which may include:

- A. Fees for wastewater discharge permit applications, including the cost of processing such applications
- B. Fees for monitoring, inspection and surveillance procedures, including the cost of collection and analyzing a user's discharge and reviewing monitoring reports submitted by users.
- C. Fees for reviewing and responding to accidental discharge procedures and construction.
- D. Fees for filing appeals.
- E. Other fees as the Bristol Township Authority may deem necessary to carry out the requirements contained herein. These fees relate solely to the matters covered by this article and are separate from all other fees, fines and penalties chargeable by the Bristol Township Authority.

ARTICLE V**Sewer Use Regulations for Lower Bucks County Joint Municipal Authority System**

[Adopted 5-8-1990 by Ord. No. 90-10]

§ 160-71. Purpose and objectives.

- A. This article sets forth uniform requirements for direct and indirect Township contributors into the wastewater collection and treatment system of the Lower Bucks County Joint Municipal Authority at the Levittown wastewater treatment facility and to enable the Authority and Township to comply with all applicable state and federal laws required by the Clean Water Act of 1977 and the General Pretreatment Regulations (40 CFR 403)
- B. The objectives of this article are to:
 - (1) Prevent the introduction of pollutants into the municipal wastewater system which will interfere with the operation of the system or contaminate the resulting sludge.
 - (2) Prevent the introduction of pollutants into the municipal wastewater system which will pass through the system inadequately treated into receiving waters or the atmosphere or otherwise be incompatible with the system.
 - (3) Improve the opportunity to recycle and reclaim wastewaters and sludges from the system.
 - (4) Provide for equitable distribution of the cost for the implementation of the Authority's industrial pretreatment program
- C. This article provides for the regulation of direct and indirect contributors to the municipal wastewater system through the issuance of permits to certain nonresidential users and through enforcement of general requirements for the other nonresidential users;

Appendix F

TABLE OF DELIVERABLES

#	Consent Decree Paragraph	Submission Deadline	Submittal	Components of Submittal
1	11	180 Days after Entry Date	Plan Of Action (POA)	Information Management System Plan SCADA System Pump Station Maintenance Plan Operation and Maintenance Plan Interim High Flow Maintenance Plan Interim Plant Improvement Plan Sewer System Evaluation Survey (SSES) Workplan
	12			
	13			
	15			
	16			
	17			
	18			
	19			
	19d	24 Months after Lodging Date	SSES Report	
2	20	90 Days after Occurrence	Amended Pump Station Maintenance Plan following SSD at Pump Station	
3	22	90 Days after Lodging	Connection Management Plan (CMP)	
4	25	180 days after approval of POA	Facilities and Alternatives Submission	
5		Upon Approval of the Facilities and Alternatives Submission	Capital Improvements Plan (CIP)	
	26			
6	26.a.1	6 Months of Approval of Selected Alternative		Facilities audit
7	27	3 Months of Approval of CIP		Request for Proposals
8	28	Consistent with POA and CIP, but Not Later Than January 1, 2012	Permit Applications Construction Completion Start Up and Operation	NPDES and Water Quality Management
	29			
	30			
	30.b.			
	30.c.			
9	31	January 15, 2012	Collection System Rehabilitation Plan	
	32	January 15, 2015	Collection System Priority Areas Rehabilitation Completion	
10	33	18 Months after Date of Lodging	High Flow Maintenance Plan	
11	38	90 Days after Date of Lodging	Pretreatment Computerized Management System Plan	
12	39	6 Months from Date of Lodging	Local Limits Reevaluation	
	41	Beginning March 31, 2011, and Continuing on the March 31st of Each Calendar Year until Termination of the Consent Decree	Annual Report	