PENNSYLVANIA
AMERICAN WATER

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June 3, 2016

VIA UPS OVERNIGHT DELIVERY

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Application of the Pennsylvania-American Water Company – Wastewater Division for Acquisition of the New Cumberland Borough's Wastewater System Assets; Docket No.: A-2016-2544151

Dear Secretary Chiavetta:

In response to your letter dated May 23, 2016, I am enclosing Pennsylvania-American Water Company's responses to Data Requests Set 1 regarding the above-referenced docket number.

Due to the size of the filing, I am also including, for your convenience, a CD with the responses on as well.

Should you have any questions concerning this filing, please contact me. Thank you for your attention.

Respectfully yours,

Melanie J. El Atieh

Enclosures

cc: S. Donnelly, Bureau of Technical Utility Services w/Enc. (via e-mail)
C. McKinley, Bureau of Technical Utility Services w/Enc. (via e-mail)

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-01. Please provide a copy of the Department of Environmental Protection (DEP)-approved Act 537 Official Sewage Facilities Plan for New Cumberland Borough (Borough) dated June 30, 2009 that is referenced in the Application.

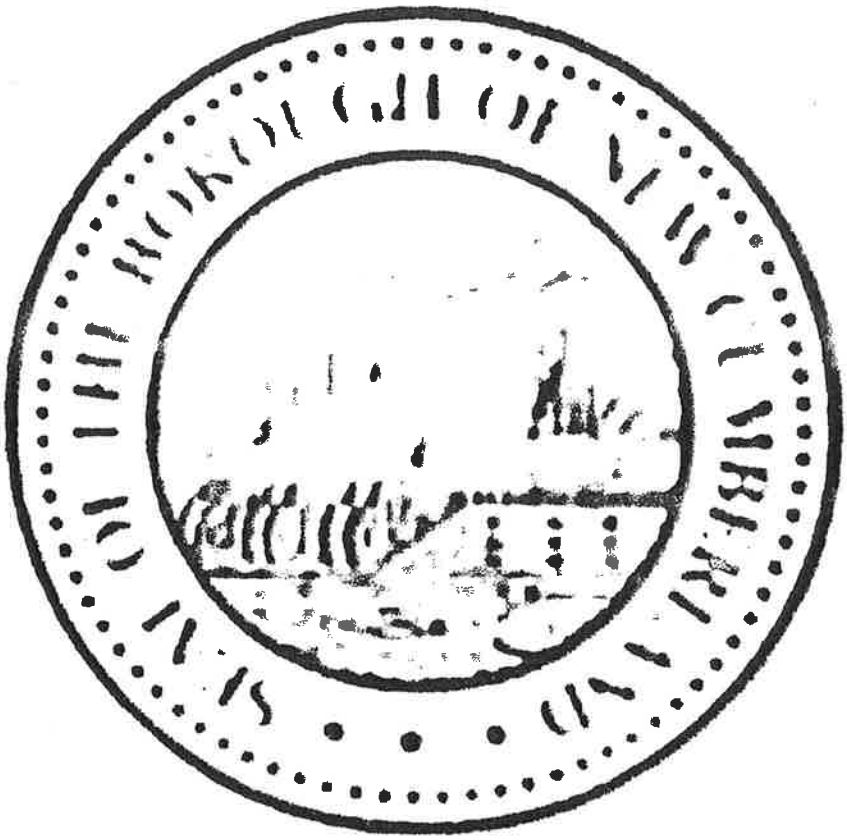
RESPONSE: See Attachment TUS Set 1, No. A-01, Parts A – D as follows:

Part A: Act 537 Plan
Part B: Act 537 Plan Map
Part C: Act 537 Future Land Use Map
Part D: Act 537 Zoning Map

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

Attachment TUS Set 1, No. A-01, Part A

Borough of New Cumberland



Act 537 Sewage Facilities Plan

December, 2008

Prepared By: FPE Consulting Engineers

537 PLAN

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA
OFICIAL SEWAGE FACILITIES PLAN

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BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA
OFFICIAL SEWAGE FACILITIES PLAN

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OFFICIAL SEWAGE FACILITIES PLAN

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BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA
OFFICIAL SEWAGE FACILITIES PLAN

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PLAN SUMMARY

Act 537, enacted by Pennsylvania Legislature in 1966, requires every municipality in the state to develop and maintain an up-to-date sewage facilities plan. The reason for this requirement is to protect the health, safety and welfare of a municipality's populace by functioning to protect Pennsylvania's ground and surface waters through the prevention of future sewage disposal problems.

In order to comply with state law and to plan for the update to water quality standards, the Borough of New Cumberland has opted to develop a sewage facilities plan. The Plan addresses the ability of the Borough's wastewater treatment facility to satisfactorily meet the revised water quality standards imposed by the Pennsylvania Department of Environmental Protection in response to the Chesapeake Bay Tributary Strategy.

The Borough proposes new treatment facilities to be constructed adjacent to existing facilities located within the boundaries of the Borough's property. The new structures will not increase the plant's existing capacity but will provide the technology in order to meet the new standards. The chosen technology is an oxidation ditch type process.

No additional land or easements will need to be acquired in order to implement the recommendations of this Plan. Since the Borough is fully sewered, there are no sewage disposal needs or the need for additional collection system lines to be constructed.

The Borough will need to finance this project and proposes to do so through the U.S. Department of Agriculture – Rural Utility Service. Grant money will be sought after to reduce the amount needed to be financed. This may involve other funding agencies.

Major milestones for the Borough to fully execute the Plan are listed below:

1. DEP Approval – June, 2009
2. Secure Funding and Complete Design – December, 2010
3. Bid Project – January, 2011
4. Start Construction – April, 2011
5. Construction Complete and Start-Up – October 1, 2012

SECTION I
PREVIOUS WASTEWATER PLANNING

Previous Planning and Its Impact on Current Planning

History of Sanitary Sewerage System

Prior to the construction of the original sewage treatment facility, a combined sewer system (sanitary sewage along with storm water) existed in the Borough of New Cumberland. The effluent from the collection system discharged directly to the Susquehanna River and the Yellow Breeches Creek.

Construction of the first sewage treatment works and the comprehensive sanitary sewerage collection system was initiated in late 1950 by the New Cumberland Borough Authority to serve the Borough of New Cumberland. The plant's capacity was seven hundred ninety-five thousand gallons per day (0.795 MGD). This flow was based on a design of 100 gallons per capita per day (GPCD) and a projected population of 7,000 for 1975, allowing capacity for growth in the area. An estimated figure of 95,000 gallons per day due to infiltration was also taken into account. The Borough became fully sewered with the installation of the new collection system. The old collection lines were converted to convey only storm sewer water, making separate sewer systems. The facilities began operation in November, 1951.

The original treatment works was designed so as to provide for primary treatment of sewage; that is, thirty-five percent (35%) removal of the biochemical oxygen demand (BOD) and the suspended solids (SS) content of the raw sewage.

The plant, which was more or less of an orthodox type, containing a comminutor, pre-aeration tank, duplicate primary settling tanks, a separate sludge digestion tank, control building and five open sludge drying beds, had been extremely effective for the entire life of the plant.

On March 20, 1968, the water quality criteria for the Susquehanna River, into which the treated wastewater from the Borough is discharged, were upgraded. Article 300 of the Sanitary Water Board Regulations required a minimum of secondary treatment for the Susquehanna River. By requiring secondary treatment, it was implied that eighty-five percent (85%) of the BOD and SS would need to be removed from the raw sewage prior to being discharged.

On March 26, 1970, the Borough of New Cumberland received a directive from the Department of Health of the Commonwealth of Pennsylvania, requiring that the wastewaters of the community be provided with a minimum of secondary treatment and

an eighty percent (80%) removal of phosphorus from the raw sewage prior to disposal of the effluent.

Modifications to the plant were necessary in order to meet the new effluent requirements. The comminutor was replaced and the pre-aeration tank was converted to a grit removal tank. Two aeration tanks designed to treat sewage by the use of contact stabilization, a form of the activated sludge process, were constructed along with two clarifiers. The formerly existing primary settling tanks were converted to a chlorine contact tank. The sludge digestion tank, which previously used an anaerobic process, was converted to an aerobic sludge digester. The original pumps and pumping system were modified as necessary for the implementation of the contact stabilization process. The sludge drying beds were maintained for standby service; however, a vacuum filter, which has since been abandoned, was installed for sludge dewatering. Phosphorus removal was accomplished by mineral additives in the secondary process. Chemical storage and application equipment were placed in a separate building which also housed the blowers for the activated sludge process. No changes were made in the method of delivering sewage to the plant for treatment.

Consideration was also given to the treatment plant capacity during the upgrade process in the 1970's. U.S. Census records for the Borough of New Cumberland indicated populations in 1950 and 1960 of 6,204 and 9,257 persons, respectively. The population growth rate increased forty-nine and two tenths percent (49.2%) during that period. During the period of time between 1960 and 1970, however, the population growth rate decreased significantly to five and nine tenths percent (5.9%), with a population of 9,803 in 1970.

Since the land available for residential or other development within the Borough was extremely limited, it appeared that no major increase in population was anticipated unless occupied land was converted to some uses other than single residential units. Such a variation in use was contemplated and the construction of high rise and multi-unit apartments was allowed in certain areas. In anticipation of this situation, the ultimate contributing population used in the design of the additions and alterations to the previously existing treatment plant was 12,500 persons.

Enlargement of the previously existing primary treatment plant with a design capacity of 0.795 million gallons a day consisted of converting to a secondary plant with a capacity to treat 1.25 MGD of wastewater, based on a design population of 12,500 and a wastewater flow generation of 100 GPCD. No additional flows from infiltration were considered in the design flow because the collection system was deemed to be relatively water-tight at that time.

Under Sanitary Water Board Permit No. 2169403 issued on March 19, 1971, construction of the upgrading and expansion of the wastewater treatment plant commenced on April 10, 1974. The secondary facility was placed in operation on January 19, 1976.

Some minor modifications have been made to the treatment plant since its upgrade in the mid-1970's. In 1996, the primary treatment process was upgraded by replacing the grit removal tank with a solids and grit removal system that employed the use of shaftless spiral technology. Additionally, in 2002 the chlorine disinfection process was replaced by an ultraviolet radiation disinfection system.

Recent Revisions to Water Quality Standards

Under the Federal Clean Water Act, the Chesapeake Bay is currently listed as an impaired waterway. Pennsylvania and other states made a commitment under the Chesapeake 2000 Agreement to help improve water quality by reducing the level of nutrients – specifically nitrogen, phosphorus and sediments – that pollute the Bay. The goal of the Agreement is to remove the Chesapeake Bay from the federal Clean Water Act's list of impaired waters prior to 2011 when the United States Environmental Protection Agency (EPA) would establish a bay-wide Total Maximum Daily Load resulting in mandatory directives from EPA.

In August 2005, new water quality standards to address this impairment under the Clean Water Act came into effect. To meet these standards, EPA and the affected states (those that contain one or more tributaries to the Chesapeake Bay) developed a maximum nutrient load, or "cap load," for each major tributary. As a result, sewage treatment plants and others discharging nutrients to Pennsylvania's Susquehanna River and Potomac River tributaries must cap those discharges or they will be in violation of the downstream water quality standards, under federal law.

The Pennsylvania Chesapeake Bay Compliance Plan was developed to adequately address the State's portion of the cap load, dividing the responsibility between the major contributors, i.e. agricultural operations and point source dischargers, such as power plants and wastewater treatment plants. As stated by the Pennsylvania Department of Environmental Protection (DEP), the "significant" point source dischargers, such as municipal sewage treatment plants, are responsible for approximately fourteen percent (14%) of the total nitrogen (TN) and twenty-two percent (22%) of the total phosphorus (TP) that leaves Pennsylvania waters for the Bay. Consequently, point sources are being asked to provide 14 percent and 22 percent of the required reductions in TN and TP, respectively.

Existing sewage treatment facilities will receive TN and TP cap loads in their individual NPDES permits. Permitting for existing sewage discharges will be implemented by revoking and reissuing permits using a phased approach, initially imposing TN and TP cap loads for significant sewage dischargers, based in part on their respective delivered loads to the Bay. The Borough's wastewater treatment plant is considered a Phase 2 facility, meaning that the final permit with the cap load will be issued no later than September 30, 2009 and the cap load will become effective on October 1, 2012, according to DEP. The cap load will be based on a concentration of 6.0 mg/L TN and 0.8 mg/L TP at design annual average daily flow.

Previously Undertaken Under Act 537

This plan has been developed in response to the requirements of the *Pennsylvania Sewage Facilities Act, P.L. 1535, No. 537.* Act 537, enacted by the Pennsylvania Legislature in 1966, requires that every municipality in the state develop and maintain an up-to-date sewage facilities plan. The main purpose of a municipality's sewage facilities plan is to protect the health, safety, and welfare of the citizens living in the municipality by correcting malfunctioning on-lot septic systems, overloaded treatment plants or sewer lines and wildcat sewers. Additionally, an important and critical purpose of the sewage facilities plan is to prevent future sewage disposal problems from occurring and to provide for both the groundwater and surface waters of the Commonwealth.

The Borough is now initiating the final step in its sewage planning obligations by authorizing the preparation of this official Act 537 Sewage Facilities Planning Guide for the entire Borough. This decision to meet that obligation is based primarily on expected upgrades that will be necessary for the Borough's Wastewater Treatment Facility to meet anticipated, revised water quality standards as part of Pennsylvania's Chesapeake Bay Compliance Plan.

The scope of this study involves the evaluation of the current wastewater facilities and alternatives for resolving any existing sewage problems and providing for adequate future facilities to properly treat the wastewater to meet anticipated effluent requirements.

Planning By Borough and Under Chapter 94 Corrective Action Plan

In July, 2007, the Borough received a letter from the Department of Environmental Protection regarding the overflows experienced at three manholes located in the southern sector of the Borough. The letter required the Borough to submit a Corrective Action Plan (CAP) to the Department which outlined the steps needed to be taken to reduce the overload and/or provide the needed capacity. The Plan was to include target completion dates for each step of the program. The Plan was submitted to DEP in October, 2007 and approved on November 2, 2007.

The plant experiences the manhole overflows during periods of heavy rain only. The annual average flow through the plant is approximately 0.6 MGD with an annual average permitted flow of 1.25 MGD. During periods of little or no rain, the peak flow is approximately 0.8-0.9 MGD. By comparison, a peak flow of approximately 2.8 MGD or higher is experienced during significant rainfall events.

Since the start of the Borough's Infiltration and Inflow (I/I) Remediation Program in October, 1977, several steps have been taken to identify and alleviate I/I problems in the sanitary sewer system.

Several series of smoke testing were conducted, with many sections having to be retested two and three times due to homeowners' reconnection of downspouts and outside drains.

A main line camera with a trailer was purchased for inspection of the main lines. To date, seven thousand four hundred fifty-five feet (7,455') of main lines have been relined to eliminate infiltration through cracks in the lines. As reported by the Wastewater Superintendent, main line repairs remove roughly forty percent (40%) of the I/I. However, approximately thirty-three percent (33%) of the flow removed migrates back into the system via cracks and open joints in the private building sewers. Sump pump connections also continue to plague the sanitary sewer system. It is estimated that around nineteen percent (19%) of the excess flow in the collection system is generated by these connections.

In 2007 the Borough purchased a lateral camera capable of inspecting private building sewers for the presence of cracks, open joints and various other deficiencies. The total expenditures for the I/I Program prior to implementing the CAP was four hundred sixty-nine thousand four hundred seventy-two dollars ($469,472.00).

The tasks outlined in the CAP involve activities designed to rehabilitate the collection system and private building sewers. The tasks include: flow metering, subsystem flow monitoring, smoke and dye testing and correction of identified deficiencies, manhole inspections and repairs, main line inspections and repairs, building sewer inspections and repairs and updating sewer ordinances. It is not anticipated that additional facilities will need to be constructed in order to alleviate the excessive flows.

Flow metering will primarily be accomplished by reviewing the data produced from the new magnetic flow meter installed at the Southeast pump station (the pump station that collects all of the area of concern), a new rain gauge at the treatment plant, and new flow meters installed inside three (3) key manholes in the collection system. Comparing results from the pump station flow meter, manhole flow meters and the rain gauge will allow the WWTF personnel to monitor the extent of the hydraulic overload, define the extent of the excess flow problem and allow flow comparisons to be made.

Subsystem flow monitoring is conducted frequently and helps to isolate problem areas throughout the system. By checking various locations in the system under dry and wet weather conditions, the personnel are able to isolate areas that would require additional investigation upstream of the area of observation.

The continuation of smoke and dye testing will assist in identifying illegal connections to the system.

Manhole rehabilitation also plays a very important part in eliminating I/I from the collection system. The first task in the rehabilitation process involved inspection of each manhole in the southern sector. The condition of each manhole was noted and then a manhole insert was either installed or replaced. The inserts eliminate the inflow through pick holes in the manhole covers. Those manholes that exhibit inflow through the walls will require repair or replacement.

Televising and inspection of the main lines will identify any structural deficiencies. Repair of the mains will involve either a relining process or replacement.

Building sewer inspections and repairs will be conducted in accordance with the newly adopted ordinance that regulates connections, establishes regulations for maintaining connections, regulates taps and discharges into the system, establishes penalties for violations, and addresses the need for obtaining inspection certificates.

The initial cost estimate for the completion of the tasks described in the CAP was approximately $3.6 million dollars. However, the total cost of the project is expected to double this figure or more.

Planning Modules

The present method of wastewater planning within the Borough of New Cumberland is the on-going review of planning modules for any sanitary sewerage system to be connected to the existing sanitary sewerage system. Currently, Borough Council and DEP enforce the submission of planning modules and the permitting of all sanitary sewerage system connections. This is further defined in the New Cumberland Borough Subdivision and Land Development Ordinance.

In reference to the submission of the Final Plat for Minor Subdivisions or Land Development, Section 403.1.B.(9)(o) states, "When applicable, five (5) copies of the "Sewage Module for Land Development" or other equivalent documentation required by the PA DEP in compliance with the requirements of the Pennsylvania Sewage Facilities Act and Chapter 71 of Title 25 of the Pennsylvania Code."

In reference to the submission procedure of Preliminary Plats, Section 404.1. states that, "The applicant shall submit concurrently, with the Preliminary Plat, five (5) copies of the sewage "Plan Revision Module for Land Development", if applicable." It also states in Section 405.2.F. that Preliminary Plats shall be accompanied by the following: "If necessary, a completed sewage "Plan Revision Module for Land Development" to comply with the planning requirements of the Pennsylvania Sewage Facilities Act and Section 71.16 of Chapter 71 of Title 25 of the Pennsylvania Code for Submission by the Borough of New Cumberland to the PA DEP." Additionally, Section 405.2.O. states that "In the event that the plans propose enlargement of utility and other services extending from another municipality, a statement or certificate indicating that the proposal and a PA DEP Planning Module for Land Development, if required, has been submitted by the developer for review and has been approved by the municipality or municipal authority concerned and is considered to be reasonable. Approval by the utility will be required when deemed necessary by the Borough Council."

Section 407.1.A.(20)(f) requires that "A copy of the sewage "Plan Revision Module for Land Development" approved by the PA DEP in compliance with the requirements of the Pennsylvania Sewage Facilities Act and Section 71.16 of Chapter 71 of Title 25 of the Pennsylvania Code." be submitted in application for review and approval of a Final Plat.

Finally, in reference to a developer connecting a sanitary sewerage system to the existing sanitary sewerage system, Section 604.1.A. states that "PA DEP planning module approval and required permits shall be obtained prior to final approval by Borough Council."

SECTION II
PHYSICAL AND DEMOGRAPHIC ANALYSIS

Planning Area

The Borough of New Cumberland is located in Cumberland County, northwest of the intersection of the Yellow Breeches Creek and the Susquehanna River approximately four miles south of the City of Harrisburg. The Borough has an asymmetrical shape. It runs along the western bank of the Susquehanna River and is bordered by Lemoyne Borough to the north, Lower Allen Township to the west and the Yellow Breeches Creek to the south, buffering the Borough from Fairview Township, York County. Interstate Routes 83 and 76 (Pennsylvania Turnpike) intersect within one mile of the Borough Limits. The planning area includes the entire Borough of New Cumberland.

Physical Characteristics

There are no streams, lakes, impoundments, natural conveyance or channels within the Borough. Drainage for the Borough is provided by the Municipal Separate Storm Sewer System (MS4) which is permitted under the NPDES Permit No. PAG 133677. The southern section of the Borough has fourteen (14) MS4 outfalls that discharge to the Yellow Breeches Creek near the mouth to the Susquehanna River. This section of the creek is located in the Lower Yellow Breeches Creek watershed. The remaining eleven (11) MS4 outfalls discharge directly to the Susquehanna River.

According to the Borough's Official Flood Plain and Flood Zone Maps, New Cumberland Borough has floodplains located in its southwest section, along the Yellow Breeches Creek. The floodplains extend alongside the creek to the southeastern section of the Borough, to the Susquehanna River. From there they follow the River northward toward the Lemoyne municipal boundary. The section with the farthest in-land reaching floodplain is located in the southern region of the Borough; along the park and where the Creek meets the River. Traveling northward along the Susquehanna, the floodplains decrease in size with a few sporadic deep reaching areas.

Soils

In regards to the purpose of an Act 537 Plan, a discussion of soils within the planning area is necessary when discussing on-lot treatment of sanitary sewage. Since the entire Borough of New Cumberland is presently served by sanitary sewer service and all wastewater generated within the Borough is collected and conveyed to the New Cumberland Wastewater Treatment Facility for treatment prior to surface water disposal, a discussion of the soils within the Borough is not required.

Geologic Features

The soils of New Cumberland are underlain by Martinsburg Shale and Beekmantown Limestone. Martinsburg Shale consists of a lower black to grey carbonaceous fissile shale which weathers rapidly. Water circulates through openings rather than pores in the rock and there is little storage space in this type of rock. Water fluctuates considerably with the season; during dry years it sometimes drops 25 to 50 feet below its height in wet years. Beekmantown Limestone consists of a series of layers of magnesium and non-magnesium layers of varying thickness. This limestone weathers to a deep soil and forms open valleys with few natural outcrops. As it is soluble and thoroughly channeled, it has a high water storage capacity.

Areas underlain by bedrock such as limestone that is easily dissolved by water are referred to as karst areas. Sinkholes, shallow soils, sinking streams and springs are found in areas of karst bedrock. Karst regions are generally characterized by connecting cracks and layers between rocks that easily transport water and pollutants to the groundwater. A particular groundwater pollutant of concern is nitrate. High levels of nitrate in groundwater, when consumed by infants, can cause a fatal condition known as blue baby syndrome. Effluent from septic systems, animal waste and fertilizer are all potential sources of nitrate contamination. Water that comes into contact with a source of nitrate can carry that contamination through the soil and into the groundwater supply.

Since the entire Borough of New Cumberland is served by a sanitary sewer collection system, nitrate contamination of groundwater from dysfunctional septic systems within the Borough is not possible. Additionally, the Borough is served by a public water system which uses surface water as its source. Although groundwater contaminants, such as nitrate, can appear in surface water via underground springs, the public water supplier must treat this contaminant to meet the MCL's (maximum contaminant levels) prior to distribution to the public.

Topography

Topography limits how certain on-lot treatment systems can be installed. Therefore, a discussion of a planning area's topography is necessary when discussing on-lot treatment of sanitary sewage. However, as noted earlier, the entire Borough of New Cumberland is presently served by sanitary sewer service. All wastewater generated within the Borough is collected and conveyed to the New Cumberland Wastewater Treatment Facility for treatment. Because no land located in the Borough is utilized as a method of on-lot treatment of sanitary sewage, a discussion on topography and its suitability for various on-lot treatment systems is unwarranted.

Potable Water Supplies

New Cumberland Borough receives potable water through the Pennsylvania subsidiary of American Water otherwise known as Pennsylvania American Water (formally known as Pennsylvania-American Water Company). The local branch of Pennsylvania American

Water serves the Greater Mechanicsburg Area. The east to west service boundaries are from the Susquehanna River to Carlisle and the north to south boundaries are from Interstate Route 81S into York County. These boundaries include the Borough of New Cumberland. The branch has approximately 33,000 customers and serves a population of roughly 90,000 people.

The local branch operates two treatment facilities in order to meet the needs of its service area. The first treatment facility utilizes the Conodoguinet Creek and is capable of producing 8 MGD. The second facility, the newly constructed West Shore Regional Facility, utilizes the Yellow Breeches Creek and is capable of producing 12 MGD. Currently, the combined average daily production from the two plants is 13 MGD, indicating that there is available capacity for growth in the service area.

Wetlands

According to the National Wetlands Inventory Map, New Cumberland Borough does not have any officially designated wetlands.

SECTION III
EXISTING SEWAGE FACILITIES IN THE PLANNING AREA – IDENTIFYING THE EXISTING NEEDS

Identification of Existing Facilities

Description of Municipal Sewerage System

The New Cumberland WWTF is located adjacent to the Norfolk Southern Railroad and the Susquehanna River on the northeast, at the intersection of Twelfth and Market Streets in the Borough of New Cumberland. The New Cumberland Authority provided the Borough with sewage service from the 1930's up until the 1970's, when the Authority was disbanded. Since then, all wastewater treatment has fallen under the authority of the Borough.

The separate sanitary sewer main intercepting lines are 8", 10", and 12" in diameter. The total length of these lines is approximately twenty-six (26) miles. The approximate number of laterals connected to these lines is 3,150 which serve a population of 7,349, according to the 2000 U.S. Census. The majority of the collection system was constructed in the 1950's using vitrified clay pipes. The originally installed lines are still in use; however, due to main breaks, some of the mains have been replaced using PVC. Additionally, a few of the mains have been lined with PVC as part of the Borough's ongoing I/I Remediation Program.

There are three pump stations that are operated in the Borough of New Cumberland: the Southeast PS, the Northwest PS and the Drexel Hills PS. The Southeast PS has two 8" pumps that are rated at 750 gpm each. When both pumps are employed the pumping capacity becomes approximately 800 gpm (1.15 MGD). An 8" force main from the Southeast PS discharges to a manhole located near the head of the treatment facility. The Northwest PS has two 4" pumps that are rated at 260 gpm each. When both pumps are employed the pumping capacity becomes approximately 295 gpm (0.425 MGD). A 6" force main from the Northwest PS discharges to a gravity line located on Simpson Ferry Road. The Drexel Hills PS has two 3" pumps that are rated at 100 gpm each. A 4" force main from the Drexel Hills PS discharges to a gravity line located on Drexel Hills Boulevard.

The treatment plant discharges directly to the Susquehanna River, a tributary of the Chesapeake Bay. The current effluent discharge requirements for the treatment plant are listed in Table 3.1 below:

DISCHARGE LIMITATIONS								MONITORING REQUIREMENTS	
	Mass Units (lbs/day)			Concentrations (mg/l)					
Discharge Parameters	**Average Monthly**	**Average Weekly**	**Max. Daily**	**Average Monthly**	**Max. Average Weekly**	**Max. Daily**	**Inst. Maximum**	**Monitoring Frequency**	**Sample Type**
Flow (mgd)	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	XXX	From 6.0 to 9.0 inclusive				1/day	Grab
D.O.	XXX	XXX	XXX	Minimum of 5.0 mg/L at all times				1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	XXX	1.6	1/day	Grab
Total Suspended Solids	313	469	XXX	30	45	XXX	1.6	1/day	24-hour comp
CBOD	260	417	XXX	25	40	XXX	60	2/week	24-hour comp
Total Phosphorus	21	XXX	XXX	2.0	XXX	XXX	50	2/week	24-hour comp
Fecal Coliform (5/1 to 9/30)	XXX	XXX	XXX	200	XXX	XXX	4.0	2/week	Grab
Fecal Coliform (10/1 to 4/30)	XXX	XXX	XXX	86,500	XXX	XXX	XXX	2/week	Grab
Total Nitrogen	XXX	XXX	Monitor and Report	XXX	XXX	XXX	XXX	1/quarter	24-hour comp

Table 3.1 Current Discharge Limitations and Monitoring Requirements

Treatment Process

The first process that occurs at the plant is the removal of solids and grit. During this process, a perforated screen separates the solids from the flow in the screening zone. The screenings are conveyed out of the tank to the dewatering zone. The pre-screened liquid then flows to a grit chamber where grit is allowed to settle. The settled grit is conveyed to dewatering via a shaftless spiral that runs the length of the chamber. The dewatering spiral conveys the grit upward, moving slowly and intermittently to allow maximum drainage before discharge.

The screened, degritted liquid flows over a weir to the contact aeration tanks where the first stage of BOD removal occurs. This stage, known as the absorptive phase removes by absorption most of the colloidal finely suspended and dissolved organics in a period of

15 to 45 minutes. Here organisms assimilate and store large portions of the influent waste load.

Following the absorptive phase in the contact tanks, sedimentation occurs in the secondary clarifiers. The settled sludge is then returned to the reaeration (stabilization) tanks to be aerated from 3 to 6 hours. In order to maintain a constant solids concentration in the reaeration tanks, a portion of the return sludge is wasted to the aerobic digester prior to recycle.

In the reaeration tanks, the second stage of BOD removal occurs. This is referred to as the oxidation phase. Here the absorbed organics are metabolically assimilated, that is, the organisms must use up the waste material (organics) they collected and stored in the contact tanks for energy and production of new cells. When the stored food is used up, the organisms begin searching for more food and are ready to be returned to the contact aeration tank.

Chemical treatment is provided for phosphorus removal. Typically aluminum sulfate, a mineral additive, is added along the wye wall between the contact tanks. This chemical reacts with phosphate present in domestic sewage to form a precipitate. In the contact aeration tanks, the growth of certain strains of aerobic bacteria is stimulated through aeration and agitation. The bacterial cultures develop on the finely suspended organic materials which tend to form clusters which cling to the chemical precipitate. This is the activated sludge which absorbs most of the sewage pollutants within 15 to 45 minutes.

From the contact tanks the mixed liquor is piped to the clarifiers where the sludge produced by the process is separated by gravity from the treated wastewater, and then recycled back to the reaeration (stabilization) tanks for 3 to 6 hours additional aeration. It is here that the organisms perform the essential life processes: reproduction, digestion and death.

The activated sludge produced in the secondary clarifiers is removed by sludge updraft tubes and is pumped back to the reaeration tanks. On the other hand, the heavy settled sludge is removed by the slow mechanical movement of metal rakes and squeegees along the bottom of the settling tanks which gently scrape the settled sludge into a hopper where it is periodically pumped (wasted) to the aerobic digester for further treatment. The clarifier effluent flows over the circular weirs and then flows by gravity to the ultraviolet radiation disinfection contact reactors.

The clarifier effluent flows through several banks of ultraviolet lights to achieve the required level of disinfection. Ultraviolet disinfection is a physical process rather than a chemical disinfectant, which eliminates the need to generate, handle, transport, or store toxic/hazardous or corrosive chemicals. The ultraviolet (UV) disinfection system transfers electromagnetic energy from a mercury arc lamp to an organism's genetic material (DNA and RNA). When UV radiation penetrates the cell wall of an organism, it destroys the cell's ability to reproduce. After leaving the UV process, the effluent flows through a meter pit to the outfall to the Susquehanna River.

Aerobic sludge digestion is a biological treatment process that uses long-term aeration to stabilize and reduce the total mass of organic waste by biologically destroying volatile solids. This process extends decomposition of solids and regrowth of organisms to a point where available energy in active cells and storage of waste materials are sufficiently low to permit the waste sludge to be considered stable enough for discharge to some disposal operation. In aerobic digestion, aerobic and facultative microorganisms use oxygen and obtain energy from the available biodegradable organic matter. The end products of aerobic digestion typically are carbon dioxide, water and non-degradable materials.

During optimal weather conditions, the stabilized sludge is spread over the sludge drying beds to be dewatered. The water is removed either through evaporation or by draining through the bed material. The drained water is collected and piped to the head of the treatment plant. The dry solids that remain are scraped from the surface of the drying beds and hauled to a local landfill. When weather conditions do not permit the use of the sludge drying beds, a hauler is retained and the liquid, stabilized sludge is transported to another wastewater treatment facility for further treatment and dewatering. A schematic diagram of the facility is presented in Figure 3.1.

The plant's permitted capacity is 1.25 MGD. In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. and Pennsylvania Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., New Cumberland Borough is authorized to discharge into the Susquehanna River in accordance with effluent limitations, monitoring requirements and other conditions set forth in Part A, B, and C presented on NPDES permit PA 0026654 issued February 22, 2001 which expired February, 2006. DEP issued an addendum on April 1, 2006 to the expired permit allowing the facility to continue monitoring and reporting for the discharge parameters indicated on the expired permit in addition to monitoring for updated parameters stipulated on the addendum until a new permit is issued. Table 3.2 lists the additional parameters that must be monitored.

	MONITORING REQUIRMENTS	
Discharge Parameters	**Minimum Measurable Frequency**	**Required Sample Type**
Total Phosphorus	2/month	8-hour/24-hour comp
NH_3 - N	2/month	8-hour/24-hour comp
TKN-N	2/month	8-hour/24-hour comp
$NO_3 - NO_2$ as N	2/month	8-hour/24-hour comp
Total Nitrogen ($TKN+NO_2+NO_3$)	1/month	Calculate

Table 3.2 Total Nitrogen and Total Phosphorus Monitoring Requirements

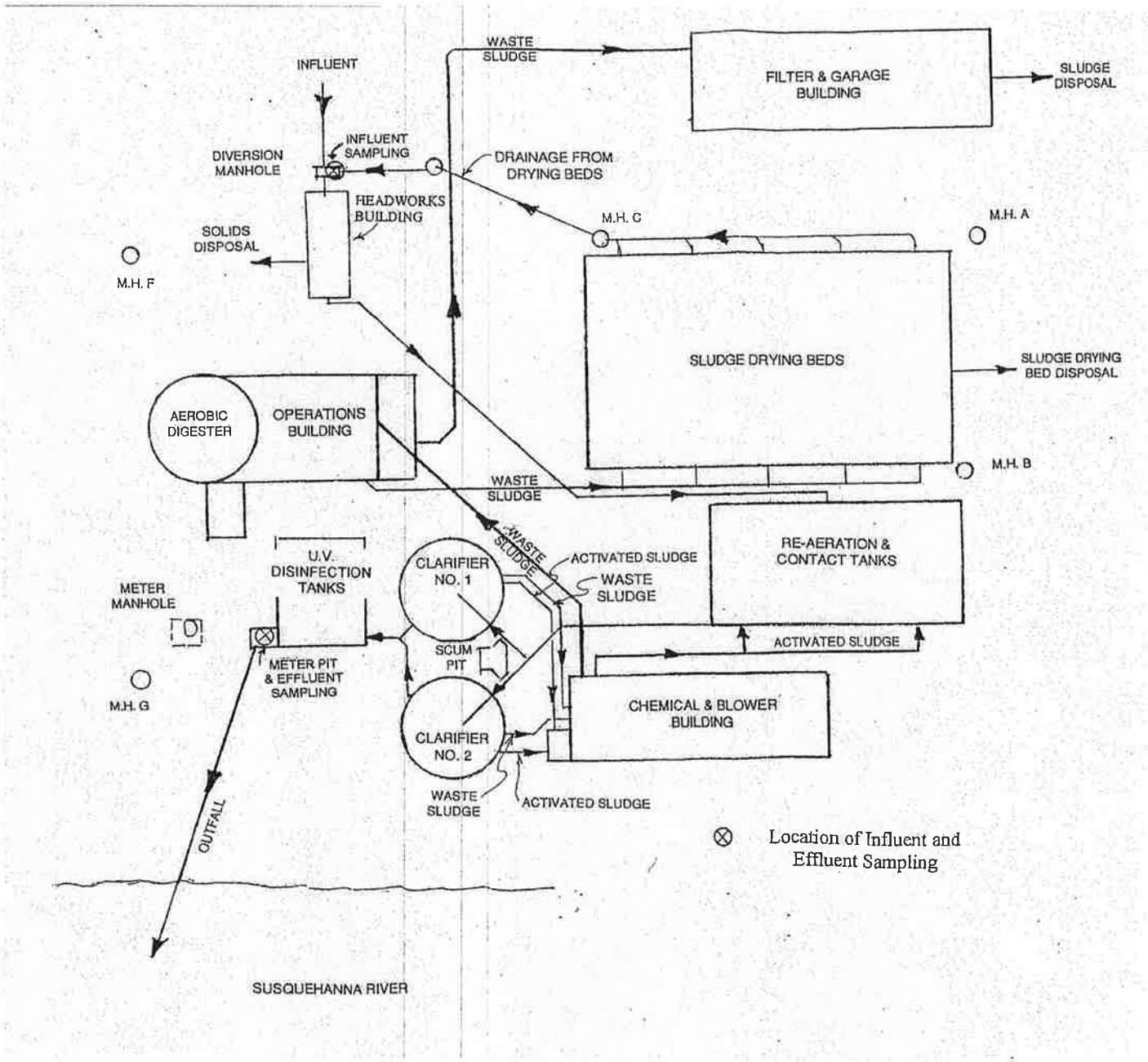


Figure 3.1 New Cumberland WWTF Process Flow Diagram

Problems with Existing Facilities

The New Cumberland wastewater treatment facility is not in violation of the NPDES permit, Clean Streams Law permit, or other permit, rule or regulation of DEP. However, the facility is experiencing hydraulic overloads in the system under Title 25, Chapter 94.

The existing collection system in the Borough was installed in the early 1950's. As expected, over time the main lines, laterals and building sewers have deteriorated and many cracks and leaks exist mainly as a result of root intrusion and offset joints. Some

leaks in the walls of manholes have been detected as well. Sump pump and other illegal connections also burden the system. During significant rainfall events, the I/I generated throughout the system causes three manholes located in the southern section of the Borough to become surcharged, resulting in an unseating of the manhole covers. As directed by DEP, the Borough devised a Corrective Action Plan (CAP) to alleviate the overloading. The Plan was approved by DEP in November, 2007. Required activities to meet the goals of the CAP are outlined in Section I of this Plan.

A new NPDES permit is expected to be issued by DEP no later than September 30, 2009. It is expected that the permit will include a discharge limit for TN and a revised discharge limit for TP in the treated effluent. If the Borough does not make any provisions to meet the new limits, they will be in violation of the permit beginning October 1, 2012, the expected effective date of the new limits.

As discussed in Section I, the cap load for the parameters will be based on a concentration of 6.0 mg/L for TN and 0.8 mg/L for TP at design annual average daily flow. At a concentration of 6.0 mg/L and a design annual average daily flow of 1.25 MGD, the expected maximum annual loading will be 22,831 pounds of TN. Based on a concentration of 0.8 mg/L at the same flow, the expected maximum annual loading will be 3,044 pounds of TP.

The 2007 monitoring reports for these parameters indicate that the total annual loading at the existing treatment facility for TN and TP was 24,821 pounds and 1,251 pounds, respectively. It would appear that with an excess of 1,990 pounds of TN, the amount of TN would need to be reduced by only 8% in order to achieve compliance. Additionally, with a credit of 1,793 pounds of TP it would appear as though the current treatment technology is sufficient. However, the figures from 2007 are based on an annual average flow of 0.49 MGD or roughly 40% of the design/permitted flow.

If growth was to occur in the Borough and the plant was operating at the design capacity of 1.25 MGD, using the existing treatment technology, the plant would be exceedingly incapable of meeting the new limits. Simple calculations indicate that a possible annual TN loading could be as much as 63,319 pounds at the design flow. In order to meet the maximum TN loading, a reduction of roughly 64% would be required. Considering the same conditions, an average annual TP loading of 3,191 pounds could be possible. This estimate would exceed the TP limit by only 147 pounds, requiring a 4.6% reduction. It is quite possible that the current chemical process used for the TP reduction could be tweaked in order to achieve the anticipated compliance. However, significant changes to the existing technology would be necessary in order to achieve the expected TN limits.

In order to achieve a reduction in the amount of TN in the effluent, the wastewater must undergo a two staged process: nitrification followed by denitrification. During the nitrification process, two different types of bacteria convert the ammonia (NH_3) present in the raw wastewater to nitrite (NO_2^-) and nitrate (NO_3^-). The chemical reactions that occur during the nitrification process require oxygen and occur slowly. The rate of these reactions seems to be limited by the slow growth rates of the bacteria involved. The

bacteria which metabolize ammonia into nitrite and nitrate are slow growing organisms and normally require a sludge retention time (SRT) of 6-12 days for full treatment. SRT, a function of basin volume and the mass of microorganisms in that given volume over a period of time, is an integral component in the nitrification process. The existing plant operates with a sludge retention time (SRT) of less than 12 hours. In order to achieve the required SRT for treatment of ammonia, additional aeration basin volume must be provided to allow for an increased inventory of the bacteria.

Denitrification is a process that occurs under anoxic conditions, meaning there is no remaining dissolved oxygen present in the wastewater. When dissolved oxygen levels are depleted, nitrate becomes the primary oxygen source for bacteria. Bacteria break apart nitrate (NO_3^-) to gain the oxygen (O_2), thereby reducing nitrate to nitrous oxide (N_2O), and nitrogen gas (N_2) which can then be liberated into the atmosphere. Denitrification cannot occur without nitrification first taking place. Since the New Cumberland WWTF cannot adequately achieve nitrification using the existing treatment process, a reduction in the TN cannot, therefore, be accomplished. Furthermore, since all existing tanks (excluding clarifiers) are utilized as aeration basins, additional basin volume would have to be constructed in order to create anoxic conditions.

Upgrade of Treatment Facilities

There are no scheduled upgrades or upgrades that are currently in-progress at the New Cumberland WWTF. However, an upgrade to the facility may be the best alternative in order to meet the expected revised discharge limits. If an upgrade to the facility is deemed the alternative of choice, it is expected that the Borough will be required to have the new facilities constructed and operating at the new treatment levels for the first permit term which will be October 1, 2012 through September 30, 2013. A discussion of the alternatives will be addressed in Section V of this Plan.

Based on population growth data and flow rates experienced by the existing treatment plant, a proposed expansion of the facilities is highly unlikely. As mentioned in previous discussion, the existing facility, constructed in the 1970's, was designed to handle flows for a population of 12,500 with a generation rate of 100 GPCD, equating to an average annual design flow rate of 1.25 MGD. Considering that the population in 1970 was only 9,803, this design flow rate allowed for growth in the area. The provision for the extra capacity was spurred by zoning changes in the Borough. Recognizing that the land available for residential or other development was extremely limited, the Borough planned for growth by permitting the construction of high rise and multi-unit apartments in certain areas of the municipality. As is evident by the data presented in Table 3.3, the planned growth has yet to come to the Borough. In fact, since 1970 there has been a significant decline in the population. With an annual average flow of 0.6 MGD, the treatment plant still has more than enough capacity to provide for growth in the municipality.

		% Change (from previous decade)
1930	4,283	-
1940	4,525	5.65
1950	6,204	37.10
1960	9,257	49.21
1970	9,803	5.90
1980	8,051	-17.87
1990	7,665	-4.80
2000	7,349	-4.10

Table 3.3 Population Growth, 1930 – 2000

Because there is no anticipated growth expected, the Borough does not have a reserve capacity program or any policies concerning the allocation of reserve capacity at the treatment plant. Because of the limited growth potential in the Borough, the number of connections that are required annually is minimal. In fact there have only been 28 new connections over the past nine years, an average of 3 connections per year. For that reason it has been satisfactory to simply have developers purchase the connections as needed. However, as part of the CAP, DEP has put a partial moratorium on connections in the southern sector of the Borough. As per DEP, there are a minimal number of new connections that can be allocated in this sector of the system though DEP reserves the right to increase the number of connections permitted or lift the moratorium as progress is made during the course of the CAP. There are no stipulations on the number of connections that are allowed throughout the remainder of the Borough.

O & M Requirements for SFTF's

All residential, commercial and industrial wastewater generators are required to be connected to the municipal sanitary sewer system. Small Flow Treatment Facilities (SFTF's) are not permitted nor are there any sewage management programs within the Borough.

Disposal Areas

All of the wastewater generated within the Borough of New Cumberland is collected and conveyed to the New Cumberland WWTF for treatment. Treated effluent from the facility is discharged to the Susquehanna River.

Sewage Disposal Needs Identification

The entire Borough of New Cumberland is served by sanitary sewer service. Individual and community onlot sewage disposal, unpermitted collection and disposal systems and retaining tank systems do not exist nor are they permitted within the Borough. Refer to Appendix A for a map of the collection system.

Sludge Generation, Transport and Disposal

Sludge Source

The only source of wastewater sludge within the Borough is from the treatment process at the New Cumberland WWTF.

Quantity of Sludge Generated

As reported in the 2007 Municipal Wasteload Report (Chapter 94 Report), total sludge production for the year was one million two hundred ninety-six thousand (1,296,000) gallons of liquid sludge and thirty-three and six tenths (33.6) dry tons as dewatered sludge. These figures are fairly consistent with previous years' production considering the hydraulic and organic loading to the treatment system remains fairly constant as well. Annual average organic loadings for the past five years have been: 938, 925, 896, 900 and 1,002 lb. BOD/day for the years 2003, 2004, 2005, 2006 and 2007, respectively. The 5-year annual average organic loading is 932 lb BOD/day.

Transport and Disposal

According to the 2007 Chapter 94 Report, one million one hundred eighty-two thousand (1,182,000) gallons of liquid sludge (approx. 71% of the total produced) were delivered to the Harrisburg Advanced Wastewater Treatment Plant. At this facility, the methane generated from the sludge treatment is burned to produce electricity which is then sold to PPL Electric Utilities Corp. One hundred fourteen thousand (114,000) gallons of liquid sludge (approximately 7% of the total produced) were delivered to Kline's Septic Treatment Facility where the sludge is processed, dewatered and land applied. All liquid sludge is transported via tanker trucks to the final destination. Thirty-three and six tenths tons of dewatered sludge was collected in a container and delivered to the Modern Landfill in York, Pennsylvania by Penn Waste.

Occasionally, liquid sludge is delivered to the Springettsbury Treatment Facility where it undergoes further digestion, centrifugation, and is then land applied or composted. According to the 2006 Chapter 94 Report, thirty thousand (30,000) gallons (approximately 1.4% of the total produced for 2006) was delivered to this facility.

SECTION IV
FUTURE GROWTH AND LAND DEVELOPMENT

Municipal And County Planning Documents Adopted Pursuant To The PaMPC (Act 247)

Land Use and Zoning

The most recent land use plans for the Borough of New Cumberland are the Existing Land Use (ELU) Inventory, the Future Land Use (FLU) Plan, (both presented in the Borough's 1994 Comprehensive Plan Update), and the Borough's current Zoning Plan.

Existing Land Use Inventory
The various classifications that were used to identify the existing land uses at the time the Comprehensive Plan Update was developed were Residential – Single Family, Residential – Multi-Family, Commercial, Industrial, Public/Semi-Public and Vacant.

Residential – Single Family
This land use consisted of detached dwellings, semi-detached "twins", attached dwellings (row houses), and manufactured homes and condominiums.

Residential – Multi-Family
This land use consisted of multi-family structures that were detected during a tax parcel review and windshield surveys. Visual clues for locating multi-family units included: multiple electric meters on buildings, separate mailboxes at the address, apparent secondary entrances at the side or rear of the house, fire escapes or separate porch areas for other units, and multiple TV cable lines.

Commercial
These land uses were considered to be a mixture of commercial, residential, and office uses and uses that appeared to be exclusively commercial in nature.

Industrial
The parcels identified as industrial land use were actually defined as commercial use by the County Tax Office. However, during a windshield survey, these parcels appeared to be of a more intensive commercial and industrial usage.

Public/Semi-Public
This land use category included public utility facilities, municipal administration and maintenance buildings, sewage treatment and pumping stations, schools, public parks and recreation areas, firehouses, churches, and cemeteries.

Vacant

Identifying vacant land was challenging especially when trying to distinguish undeveloped land from side yards of existing residential structures. The total area of vacant land was determined to be so small that it was concluded that the Borough was almost completely developed at that time.

Table 4.1 includes the total number of parcels in each use classification, as supplied by the Cumberland County Tax Assessment Office, and the estimated number of acres used by each land use category. A copy of the ELU Inventory Map presented in the Comprehensive Plan Update is shown on Figure 4.1.

Land Use Classification	Total Number of Parcels	% of Total Land Parcels	Estimated % of Land Area	Estimated Total Acres
Residential				
Single-Family	2734	90.3	59.5	646.9
Multi-Family	96	3.2	3.1	34.0
Commercial	126	4.1	5.1	55.3
Industrial	0	0.0	0.3	3.4
Public/Semi-Public	38	1.3	7.0	75.8
Vacant	35	1.1	3.3	35.8
Rail Road	1.77 Miles		3.2	35.1
Streets/Alleys			18.5	201.7
State	3.94 Miles		2.2	23.6
Local Streets	27.00 Miles		15.1	164.0
Local Alleys	11.67 Miles		1.3	14.1
TOTAL	**3029**	**100.0**	**100.0**	**1088.0**

Table 4.1 Existing Land Use, 1990

Future Land Use Plan

The Future Land Use Plan was developed to identify the areas within the Borough best suited and intended for the following uses: Low-Density Residential, Moderate-Density Residential, High-Density Residential, Commercial/Office/Residential, Commercial Business, Light Industrial, Public/Semi-Public, and Environmental Limitations.

Residential – Low Density

This district was intended to facilitate and stabilize the single family detached dwelling unit development found in the Borough's low density neighborhoods. It was recommended that this district have a maximum residential density of 2 to 5 units per acre.

Residential – Moderate Density

This district was intended to facilitate a variety of residential types at generally moderate densities. The district would encompass many of the Borough's attached dwelling units that abut the Residential – Low Density area and single family detached dwellings located in the fringe area. Generally, this area would apply to the existing attached units, single family units, and apartment

RE 4.1
UMBERLAND
LAND USE MAP



ITY

conversions. The maximum residential density recommended for this area was 5 to 12 units per acre.

Residential – High Density

One purpose of this district is to satisfy the housing needs of individuals and families not able to afford the more expensive owner-occupied single family detached and attached dwellings. Commercial apartments, apartment conversions, elderly housing, and other forms of high-density residential uses are intended for this area. The maximum residential density recommended for this area was 18 units per acre.

Commercial/Office/Residential

This district would provide an area of mixed use character that would compatibly combine residential uses (single family, residential conversions, limited multi-family) with small commercial and professional office uses.

Commercial Business

The intent of this district is to provide a variety of business, service, and entertainment opportunities in downtown New Cumberland. This district would stabilize the fragile relationships of competing land uses that define the Borough's quaintness and small town character. As the center of the Borough, this area would be the focal point of commercial activity.

Light Industrial

Light manufacturing, building materials, warehousing, automotive repair, printing and dry cleaning plants are the kinds of less intensive industrial uses that are proposed for this area.

Public/Semi-Public

The uses for this district consist of churches, schools, libraries, and Borough and school district parks and recreation facilities. Although inconsistent with the Borough's present zoning ordinance, the FLU Plan proposes to reserve the Norfolk Southern rail line that passes through the Borough for public/semi-public uses. If the line were to be abandoned in the future, the FLU Plan proposes public/semi-public uses for this area. Park and recreational facilities, a public walking trail, and river access paths are examples of how this area could be developed in the future.

Environmental Limitations

The intent of this area is to identify sections that should maintained in their natural state of vegetation, soil, water table, and wildlife or strictly monitored to ensure that developments meet floodplain standards and satisfy other environmental requirements. This area is not proposed as an individual land use district but rather as an environmental overlay.

In general, the FLU Plan suggests retention of the Borough's urban and suburban character by establishing future development patterns that would concentrate a mixture of residential housing opportunities around the existing central business district and the proposed Commercial/Office/Residential area. Lower density residential neighborhoods surrounding this central mix of development types would be maintained. Table 4.2 illustrates the proposed land use categories and estimated percentages of total land area they would contain. A copy of the FLU Map from the Comprehensive Plan Update is presented in Figure 4.2.

Land Use	Estimated ELU %	Approximate ELU Acres	Estimated FLU %	Approximate FLU Acres
Residential – Low	---		56.8	618.6
Residential – Moderate	---		6.5	70.9
Residential – High	---		1.8	19.5
Residential	62.6	680.9		
Commercial/Office/Residential	---		2.8	31.0
Commercial/Business	5.1	55.3	2.1	23.0
Industrial	0.3	3.4	2.9	32.0
Public/Semi-Public	7.0	146.7 (includes Vacant)	8.5	92.0
Streets/Alleys	18.5	201.7	18.5	201.7
Environmental Limits Overlay	---		7.0	95.0
TOTAL	**93.5**	**1088.0**	**100.0**	**1088.7**

Table 4.2 ELU and FLU Comparisons, 1992

Zoning Plan

The Borough's Zoning Plan is fairly consistent with the Future Land Use Plan presented in the Comprehensive Plan. A copy of the Zoning Map is shown on Figure 4.3.

R-1-A: Residential District

The purpose of this district is to permit single family residential development which provides suburban housing with all the public utilities. Permitted uses include: single family detached dwellings, and public recreational facilities.

R-1: Residential District

The purpose of this district is to permit single-family residential development which provides suburban housing with all the public utilities. Non-residential uses are restricted in this area. Permitted uses include: single family detached dwellings, public recreational facilities, churches, schools, public libraries, public museums, and a municipal building with the exception of a sewage disposal plant, garbage incinerator, warehouse, garage, gasoline filling station, or shop.

R-2: Residential District

The purpose of this district is to permit residential development which provides urban housing in older residential areas. Permitted uses include those permitted

in the R-1 district and the following: single family semi-detached dwelling, two family detached dwellings, and two family semi-detached dwellings.

C-1: Commercial District
The purpose of this district is to encourage commercial development which will benefit the older commercial sections of the municipality and along major roadways.

C-2: Commercial District
The purpose of this district is to: provide professional facilities to serve primarily the business needs not necessarily directly related to the Central Business District, but which require adequacy to both intensive commercial and residential uses; provide space for parking areas which are directly related to and support the Central Business District; and provide an area for high intensity residential development in the form of apartments and in some instances to act as a buffer between existing residential areas and the Central Business District.

I: Industrial District
The purpose of this district is to: provide sufficient space for the types of industrial uses deemed desirable to the general welfare of the community; protect industrial development against intrusive uses which are incompatible with it so as to deter future industrial expansion; and group types of industrial development in areas which the uses are compatible and will be accessible to necessary public and private facilities to service their needs.

Regulations That Establish Lot Sizes Predicated on Sewage Disposal Methods

Since all properties in the Borough are served by the sanitary sewer system, there are no zoning or subdivision regulations that establish lot sizes based on sewage disposal methods.

Limitations and Plans Related to Floodplain, Stormwater Management and Special Protection Areas

Other than the floodway and floodplain districts, the Borough has no areas considered to be special protection areas.

The Borough has several ordinances that regulate land use and development in the floodway and floodplain. These are Ordinance Nos. 444, 445, 446 and 480. In regards to limitations in the floodplain, Ordinance Nos. 444, 445 and 446, enacted February 2, 1977, provide for additional regulation of subdivision and development of lands subject to flooding, regulate the use of lands subject to flooding, and include flood damage controls for construction of new structures or substantial improvement of existing structures within the floodway and flood fringe districts. Ordinance No. 480, enacted April 6, 1983, provides further rules and regulations for uses of property and lands

subject to flooding. Additionally, Section 508 of the Subdivision and Land Development Ordinance describes the design standards for lands in the floodplain.

Ordinance No. 621, enacted August 3, 2005 established storm water management requirements in the Borough. The ordinance was developed in response to a requirement of the Borough's MS-4 NPDES permit. A copy of all referenced ordinances can be found in Appendix B.

Providing For the Future

Existing Development

There is no significant existing development in the Borough of New Cumberland.

Permitted Land Uses vs. Sewage Facility Planning

The latest sewage facility planning that has occurred in the Borough was prior to the treatment plant upgrade in the 1970's. When designing for the treatment plant, permitted land uses were considered. Land available for residential or other development within the Borough at that time was extremely limited giving the appearance that no major increase in population was anticipated unless occupied land was converted to some uses other than single residential units. Such a variation in use was contemplated and the construction of high rise and multi-unit apartments was allowed in certain areas. In anticipation of this situation, the ultimate contributing population used in the design of the additions and alterations to the original treatment plant was 12,500 persons.

Zoning in the Borough has not changed since that time and the contributing population has actually declined over the past couple of decades, as is evident by the 1980, 1990 and 2000 U.S. census data. When considering that the Borough is fully sewered, the existing plant is only operating at 50% of its capacity, and population is in decline, it is expected that no further planning will be required at this time. Existing treatment facilities and collection and conveyance system are expected to be adequate enough to handle any increase in flow that may occur as a result of current zoning regulations.

Future Growth Areas

The population projections for New Cumberland Borough listed in *Table 10.1* of the *2003 Cumberland County Comprehensive Plan* are presented in Table 4.3. Even though the projections seem conservative, there is some speculation as to the validity of these numbers. According to information presented on *city-data.com*, an estimated population for the Borough in 2007 was 7,088, a 3.4% drop since the 2000 U.S. census and a -5.8% difference in the number projected by County Planning for 2005.

	Projected Population	Increase From Previous Decade
2005	7,522	-
2010	7,603	3.4%
2015	7,675	-
2020	7,740	1.8%

Table 4.3 Population Projections

To reiterate previous material presented in this Plan, there is very little land accessible for new development. In fact, as of October, 2008 the Cumberland County Tax Assessment Office reports that there are only 22 acres of land listed as vacant; however, it is unclear how much of that is actually able to be developed. Under current zoning, the only areas available for growth are the areas where high rise and multi-unit apartments are permitted.

Planning Relating to Development, Use and Protection of Land and Water Resources

Other than the floodplain areas, there are no significant land or water resources within the Borough that require protection or regulations regarding their use or development.

Sewage Planning Required For 5- and 10-Year Future Planning Periods

By the year 2020, the projected population in New Cumberland is estimated to be 7,740 persons. Considering that the current growth rate is declining, it is doubtful that the Borough will see the population hit that projected figure by 2020. However, even if the population was to increase and that projection figure was met, the population would still be only 62% of the projected population used when designing the existing treatment plant. Therefore, it is reasonable to assume that the capacity of the existing treatment facility will still exceed the generated flow expected for the next 5- and 10-year period. This suggests that, based on capacity issues only, sewage facility planning will not be required for quite some time.

SECTION V
ALTERNATIVES TO PROVIDE NEW OR IMPROVED WASTEWATER DISPOSAL FACILITIES

Conventional Disposal Facilities

Potential for Regional Wastewater Treatment

The Borough of New Cumberland is bordered by Lemoyne Borough to the north and Lower Allen Township to the west. All three municipalities possess wastewater treatment facilities. Some discussions were conducted with the neighboring municipalities concerning their ability to accept flows from New Cumberland in an effort to achieve regional treatment.

The Lower Allen Treatment Authority and the Lemoyne facility are both considered Phase I sewage dischargers according to Pennsylvania's Chesapeake Bay Tributary Strategy. In accordance with the Department's guidelines, Phase I facilities' cap loads were placed in permits which become effective on October 1, 2010. In order to meet this compliance date, both facilities had already completed or was near completion of their Phase I studies of their Sewage Facilities Planning (Act 537 Plan) prior to talks with New Cumberland Borough. Because a Phase I study of an Act 537 Plan involves determining the needed capacity at a facility, it was imperative for both facilities to know if New Cumberland intended to connect to and send its flows to their facility by the summer of 2008. After completing a cost analysis, it was determined that connecting to either system would not be in the best interest of the Borough from a financial or operational aspect.

Potential for Extension of Existing Facilities to Needs Areas

As discussed previously in this document, the Borough is already fully sewered. There are no areas within its corporate limits have sewage disposal needs.

Potential for Continued Use of Existing Facilities

Repair

The existing treatment facility is in need of much repair. Much of the facility has not been upgraded since its installation in the 1950's. Additionally, many of the structures and equipment installed as part of the upgrade in the 1970's are in need of repair or replacement.

However, it may be possible for the Borough to perform the necessary repairs and continue to operate the existing facility and still meet proposed effluent limits. This could be accomplished by using the nutrient credit trading system.

Nutrient credit trading employs market mechanisms to produce nutrient reductions. The voluntary trading program is an option for point sources (wastewater treatment facilities) and non-point sources (agricultural and stormwater runoff) that exceed their environmental obligations to generate credits that may be traded to others who are seeking nutrient reduction credits.

Trading may occur for either nutrient (total phosphorus or total nitrogen). A credit is the unit of compliance that corresponds with a pound of reduction of a nutrient as recognized by the Department which, when registered by the Department, may be used in a trade. Credits, expressed as pounds per year, are valid for one year. Trading can only occur within the Pennsylvania portion of the Chesapeake Bay Watershed, specifically within the Susquehanna or Potomac watersheds. Trading cannot occur between a source in the Susquehanna watershed and a source located in the Potomac watershed. Trades must be of equal credits (e.g. nitrogen must be traded for nitrogen) and can occur between any combinations of eligible point sources, non-point sources and third parties.

All sources must meet legal baseline requirements before nutrient reductions will be considered eligible for trade by DEP. For a point source to generate credits, it must treat at a level that exceeds the requirements stated in the NPDES permit. These credits will be based on the difference in permit limit and treatment level based on information presented in the Discharge Monitoring Reports for that particular facility. For non-point sources, the legal baseline is compliance with the set of legal requirements under current regulations. All credits generated must be approved by DEP before it can be used in a NPDES permit.

Trades must be registered before the credits can be used to meet permit limits. DEP will operate an on-line marketplace that will assist with the registration, tracking and application of credits. The registration system will be used by DEP when credits are proposed to be used in a new NPDES permit, and to verify compliance with a NPDES permit during its term.

When calculating credits, trading ratios will be used to help ensure that trading provides the desired level of nutrient reductions or other water quality benefits. For point source dischargers, two types of trading ratios will be applied to credit generating activities. These are the delivery ratio and the reserve ratio.

The delivery ratio compensates for the natural attenuation or loss of nutrients as they travel in water. The ratio, also known as a delivery factor, varies depending on the distance of the source from the mainstem of the Chesapeake Bay. Generally, the greater the distance the pollutant has to travel, the greater the pollutant loss will be. The delivery factors are based on information from applicable and accepted data sources such as the

Chesapeake Bay Watershed Model. A copy of the Delivery Ratio Map and nutrient delivery ratios table for Pennsylvania are presented in Appendix C.

The reserve ratio, also known as the credit reserve, is applied to implement policy-driven decisions to require part of the credits generated be reserved to cover for failed credit generating activities due to uncontrollable or unforeseeable circumstances such as extreme weather conditions. The reserve ratio will be 10% of all credits generated. These reserved credits will be set aside by DEP to address nutrient reduction failures, uncertainty, and to provide liquidity in the market. Example computations for determining the amount of credits generated and the amount of credits needed for point sources are found in Appendix C.

Based on the Discharge Monitoring Reports from 2007 and the Point Source Calculation Example in Appendix C, New Cumberland would have to purchase one thousand nine hundred ninety (1,990) credits of TN annually. However, as mentioned in Section III, the data from the 2007 DMR's is based on an annual average flow of 0.49 MGD. Therefore, it is highly probable that the number of credits needed annually would increase if the Borough's population begins to increase. For this reason there is a degree of uncertainty in purchasing credits to meet compliance levels since the amount needed to comply with regulations may fluctuate from year to year.

Using existing performance data, the Borough could possibly have phosphorus credits to sell. Again, using the Point Source Calculation Example and considering a 10% factor of safety, the Borough could possibly sell as many 633 credits. However, if the Borough's population would begin to increase, the phosphorus loading would increase accordingly and this figure would decrease.

Since this trading program has only recently been implemented, it has not yet proven itself to be a long-term compliance option. More specifically, it is unclear that nutrient credits will be available to serve future needs. Once cap loads have been established for all dischargers, they will not be increased. To illustrate this point, once a treatment plant reaches its capacity to the point that an expansion of the facility would be required, the nutrient loading initially assigned for that facility will not be increased. Therefore, any developer within the area served by that particular facility will be required to offset the increased nutrient loading that the development would generate. For developers especially, it is expected that the most cost effective way to achieve this would be to purchase credits; otherwise, the developer would need to build some type of treatment facilities to remove the necessary nutrient loadings prior to discharging to the system. Once treatment facilities begin to reach their nutrient loading capacities or once credits generated by those facilities (or any other credit generating activity) are purchased, locating available credits for purchase may be exceedingly difficult to find or may be too costly to continue to be a viable alternative for compliance. As the population within the Susquehanna River watershed, in which New Cumberland is located, continues to increase, it is expected that using nutrient credit trading as an alternative may only prove to be a short-term option at best. A cost estimate for this alternative is presented in Section VI of this plan.

Upgrading

An upgrade to the existing process is an appealing alternative. A treatment process upgrade will not only bring the Borough into compliance with the new effluent requirements of the forthcoming NPDES permit but it will also afford the Borough an opportunity to sell nutrient credits and generate income. If the Borough would choose to perform a facility upgrade with a treatment process that would produce an effluent with a TN limit of 6 mg/L and a TN limit of 0.8 mg/L while still continuing to operate at 50% of its hydraulic capacity, credits can be generated. To illustrate this, an average annual flow rate of 0.6 MGD containing a TN effluent concentration of 6 mg/L would create an annual loading of 10,979 pounds of TN. With an allowable annual loading of 22,831 pounds, using the Point Source Calculation Example in Appendix C and a 10% factor of safety indicates that 9,225 credits of nitrogen could be generated annually. When considering the same conditions for the phosphorus loading, 558 credits of phosphorus could be generated annually. Although if the population within the Borough would begin to increase then the number of credits generated annually would likely decrease.

Several technological processes that claim to achieve biological nutrient reduction (BNR) were reviewed. Several factors were used to evaluate each process. These include: ability to achieve adequate reduction with minimal operator effort, cost, maintenance and footprint. Based on these factors, two types of processes were determined to be acceptable alternatives. These processes were identified as the oxidation ditch process and the membrane bioreactor process.

Oxidation Ditch

An oxidation ditch is a modified activated sludge biological treatment process that utilizes long solids retention times (SRTs) to remove biodegradable organics. Typical oxidation ditch treatment systems consist of a single or multi-channel configuration within a ring, oval, or horseshoe-shaped basin. As a result, oxidation ditches are called "racetrack type" reactors. Horizontally or vertically mounted aerators provide circulation, oxygen transfer, and aeration in the ditch.

Preliminary treatment, such as bar screens and grit removal, normally precedes the oxidation ditch. Flow to the oxidation ditch is aerated and mixed with return sludge from a secondary clarifier. Surface aerators, such as brush rotors, disc aerators, draft tube aerators, or fine bubble diffusers are used to circulate the mixed liquor. A high degree of nitrification can occur during this process. Effluent from the oxidation ditch is usually settled in a separate secondary clarifier. To enhance biological phosphorus removal, an anaerobic tank may be added prior to the ditch.

An oxidation ditch may also be operated to achieve partial denitrification. To achieve this, an anoxic (absence of dissolved oxygen) tank is added upstream of the ditch along with mixed liquor recirculation from the aerobic zone to the anoxic tank to achieve higher levels of denitrification. In the aerobic basin, bacteria convert ammonia to nitrite and then nitrate. In the anoxic zone, another type of bacteria convert nitrate to nitrogen gas which is released to the atmosphere. Some mixed liquor from the aerobic basin is

recirculated to the anoxic zone to provide a mixed liquor with a high-concentration of nitrate.

While the mechanics of operation differ by manufacturer, in general, the process consists of two separate aeration basins, the first is anoxic and the second is aerobic. Wastewater and return activated sludge are introduced into the first reactor which operates under anoxic conditions. Mixed liquor then flows into the second reactor operating under aerobic conditions. The process is then reversed and the second reactor begins to operate under anoxic conditions.

Advantages of implementing the oxidation ditch are:

- Ability to achieve removal performance objectives with low operational requirements and operation and maintenance costs
- An added measure of reliability and performance over other biological processes due to a constant water level and continuous discharge which lowers the weir overflow rate and eliminates the periodic effluent surge common to other biological processes, such as Sequencing Batch Reactors (SBRs)
- Long hydraulic retention time and complete mixing, minimizing the impact of a shock load or hydraulic surge
- Less sludge production than other biological treatment processes due to extended biological activity during the activated sludge process
- Energy efficient operations resulting in reduced energy costs compared with other biological treatment processes.

Disadvantages of implementing the oxidation ditch are:

- Effluent suspended solids concentrations are relatively high compared to other modifications of the activated sludge process, requiring larger secondary clarifiers
- Requires a larger land area than other activated sludge treatment options

To achieve the required level of nutrient reduction with this process, an additional secondary clarifier, larger than the two existing clarifiers, will have to be constructed.

Membrane Bioreactor

Microfiltration membrane bioreactors (MBRs) combine a suspended growth biological reactor with solids removal via filtration. The membranes can be designed for and operated in small spaces and with high removal efficiency of contaminants such as nitrogen, phosphorus, bacteria, BOD, and TSS. The membrane filtration system in effect can replace the secondary clarifier in a typical activated sludge treatment system. Membrane filtration allows a higher biomass concentration to be maintained, thereby allowing smaller bioreactors to be used.

The use of MBR systems allows for higher wastewater flow or improved treatment performance in a smaller space than a conventional design. The high-quality effluent

produced by MBRs makes them particularly applicable for surface water discharge applications requiring extensive nutrient removal.

The advantages of MBR systems over conventional biological systems include:

- Better effluent quality – low concentrations of bacteria (high-level disinfection), TSS, BOD, and phosphorus
- Smaller space requirements resulting from higher volumetric loading rates and lower hydraulic retention times
- Ease of automation

The primary disadvantage of MBR systems is the typically higher capital and operating costs than conventional systems for the same throughput.

Membrane filtration involves the flow of polluted water across a membrane. Water permeates through the membrane into a separate channel for recovery while the waste constituents are left behind. These materials do not accumulate at the membrane surface but are carried out of the system for later recovery or disposal.

Membranes are constructed of cellulose or other polymer material, with a maximum pore size set during the manufacturing process. The requirement is that the membranes prevent passage of particles the size of microorganisms, or about 1 micron, so that they remain in the system. Membranes are configured in one of two ways: hollow fiber bundles or flat sheets. The configuration reviewed for New Cumberland is the flat sheet type.

Although MBR systems provide operational flexibility with respect to flow rates, that flexibility has limits. Throughput limitations are dictated by the physical properties of the membrane, and the result is that peak design flows should be no more than 1.5 to 2 times the average design flow. If peak flows exceed that limit, either additional membranes are needed simply to process the peak flow, or equalization should be included in the overall design. Because the New Cumberland facility can experience flows in excess of 2.5 times the design flow during periods of heavy rain, a supplemental system designed to handle excess flows was investigated.

The supplemental process is a compact, conventional-type clarification system that utilizes microsand as a seed for floc formation. The microsand provides surface area that enhances flocculation and acts as a ballast or weight. The resulting sand ballasted floc display unique settling characteristics, which allow for clarifier designs with high overflow rates and short retention times.

To achieve the required level of nutrient reduction with this process, additional bioreactors will be installed prior to the MBR tanks. Most of the nitrogen removal will occur in these tanks. The MBRs will function primarily as a means of solids separation, producing a superior quality effluent and eliminating the need to construct an additional secondary clarifier, unlike the requirements of the oxidation ditch. Once flow through the MBRs begins to exceed the design flow, excess flow will be routed through the

supplemental, compact clarification process to extend the life of the membranes. Effluent flow from each process would then be combined prior to entering the existing disinfection process.

Reduction of Hydraulic or Organic Loading

According to the Borough's 2007 Wasteload Management Report, the treatment plant's 5-year annual averages for hydraulic loading is 0.62 MGD or roughly 50% of the permitted capacity while the 5-year annual average organic loading is 932.1 lb BOD/day or roughly 34% of the plant's permitted capacity. It is, therefore, apparent that the Borough's wastewater treatment facility is not in need of an upgrade due to hydraulic or organic overloading.

Improved O&M or Other Actions to Resolve Identified Problems

Despite the age and condition of the existing treatment facility it continues to function satisfactorily and meet the requirements of the current NPDES permit. However, the facility as designed is not capable of meeting the new effluent limits to be outlined in their forthcoming NPDES permit. Simple adjustments to operations or maintenance procedures will not address the nutrient loading issue.

Repair or Replacement of Existing Collection and Conveyance System

Repairs and/or replacement of the existing collection and conveyance system components are part of the Borough's sanitary sewer system maintenance program. Other than emergency repairs, repairs or replacement needs to the infrastructure are prioritized and addressed as quickly as possible as funds become available.

Most recently, the portion of the Borough's collection and conveyance system that is collected by the Southeast pump station has been given top priority. Expected repairs are outlined in the Borough's Corrective Action Plan, a plan mandated by DEP in an effort to reduce I/I problems experienced during periods of heavy rainfall. However necessary, these repairs will not alleviate nutrient loadings and bring the treatment facility into compliance with the new effluent limits to be outlined in their NPDES permit.

Need for Construction of New Community Sewage Systems

The Borough of New Cumberland is fully sewered with a public sanitary sewage system, complete with a collection and conveyance system and treatment facility. The existing facility is fully capable of meeting the needs of the community without further need for additional facilities.

Use of Innovative Methods of Collection and Conveyance to Serve Needs Areas Using Existing Treatment Facilities

Because the Borough is fully sewered with a public sanitary sewage system, there are no areas within the municipality that are considered to have sewage disposal needs.

Individual Disposal Systems

According to Section 3 of Ordinance No. 635 of the Borough Code, all owners of any improved property abutting any thoroughfare in which a public sewer main line of the Borough's sewer system is located is required to connect to the system. Because the Borough is fully sewered with a public sanitary sewage system, individual sewage disposal systems are not permitted within the Borough.

Small Flow and Package Treatment Facilities

Small flow sewage treatment facilities and package treatment facilities are designed to alleviate sewage disposal needs for individual homes or clusters of homes. These types of systems are not permitted within the Borough since a public sewage system is available to all homes within the limits of the municipality.

Community Land Disposal

Land application of treated sewage is not permitted within the Borough since the public sewage system is available to all land owners within the municipality.

Retaining Tanks

Retaining tanks are not permitted within the Borough since the public sewage system is available to all land owners within the municipality.

Sewage Management Programs

Sewage management programs are municipally controlled plans that are designed to ensure that on-lot sewage treatment systems within its jurisdiction are properly operated and maintained. Since the Borough of New Cumberland is fully sewered with a public sanitary sewer system, there are no on-lot sewage systems to regulate. Therefore, there is no need for such a program to be implemented.

Non-Structural Comprehensive Planning to Meet Existing and Future Sewage Disposal Needs

Since the Borough is fully sewered, there are no existing needs. It is also expected that the capacity of the current facilities is adequate to meet future needs into the next decade, at the very least. A revision to the Borough's Comprehensive Plan, Zoning Plan or subdivision regulations would not create any needs areas.

No Action Alternative

The Borough simply cannot entertain the idea of a no action alternative to meeting the proposed effluent limitations. The Borough must meet the new effluent limits as imposed by the requirements of their NPDES permit. Failure to comply with the terms, conditions, or effluent limitations of the Borough's NPDES permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application by DEP.

SECTION VI
EVALUATION OF ALTERNATIVES

Specific Consistency Determinations

When technically feasible alternatives are being considered, it is important to evaluate each possible alternative with its relationship to various goals and objectives of the planning, environmental and natural resource laws and policies of the Commonwealth. If an alternative is determined to conflict with or be inconsistent with these goals and objectives, these conflicts and inconsistencies must be resolved by the municipality before the municipality may pursue DEP approval of that alternative. Technically feasible alternatives identified by this Plan have been evaluated for consistency with the objectives and policies of the following:

Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act

Sections 4 and 5 of the Clean Streams Law require that consideration be given to: water quality management and pollution control in a watershed as a whole, present and possible future uses of particular waters, the feasibility of combined or joint facilities, the state of scientific and technical knowledge, and immediate and long-range economic impact upon the Commonwealth and its citizens. Section 208 of the Clean Water Act calls for the development of plans for the identification of treatment works necessary to meet the anticipated municipal and industrial waste treatment needs of an area over a 20-year period. This would include any requirements for the acquisition of land for treatment purposes, the necessary wastewater collection and urban storm water runoff systems, programs to provide the necessary financial arrangements for the development of such treatment works, an identification of open space and recreation opportunities that can be expected to result from improved water quality, consideration of potential use of lands associated with treatment works and increased access to water-based recreation.

Comprehensive Water Quality Management Plans were developed under Sections 4 and 5 of the Clean Streams Law and 208 of the Clean Water Act for all areas of the Commonwealth of Pennsylvania. According to the Water Planning Office of DEP, these plans are not dynamic and have not undergone a revision since the 1980's and a future revision of these plans is not expected. Therefore, it would not be advantageous to determine the consistency of the technically feasible alternatives to the goals and objectives presented in these antiquated plans.

Corrective Action Plans or Annual Reports

As mentioned in Section I of this Plan and indicated in the Borough's Corrective Action Plan, it is not anticipated that additional facilities will need to be constructed in order to

alleviate the excessive flows that are generated from the I/I that can occur during periods of heavy rainfall.

According to the Borough's 2007 Wasteload Management Report, the Borough's wastewater treatment plant's 5-year annual average hydraulic loading is 0.620 MGD, or roughly 50% of the permitted capacity (1.25 MGD). Additionally, the 5-year annual average organic loading is 932.1 lb BOD/day, which is roughly 34% of the plant's permitted capacity (2710.5 lbs/day). Furthermore, the projected loadings are to remain constant over the next five years as a result of growth patterns exhibited within the past couple of decades. This data indicates that no expansion of the existing treatment facilities is required.

Since the Borough is not proposing an expansion of the existing facilities, choosing any of the technically feasible alternatives would be consistent with these two documents.

Title II of the Clean Water Act or Titles II & VI of the Water Quality Act of 1987

The Clean Water Act consisted of two major parts, one being the Title II and Title VI provisions which authorized federal financial assistance for municipal sewage treatment plant construction. The other was regulatory requirements, found throughout the act, which applied to industrial and municipal dischargers. To achieve its objectives, the act embodied the concept that all dischargers into the nation's waters are unlawful unless specifically authorized by a permit under the act's National Pollution Discharge Elimination System (NPDES). More specifically, the Clean Water Act required the Borough's wastewater treatment facility to install treatment technologies that would achieve "secondary treatment", required the facility to obtain and operate under the requirements set forth in a NPDES permit, and provided federal funding for 75% of the costs related to meeting these requirements. New Cumberland was required to complete a Section 201 Feasibility Study in order to receive the federal financial assistance made available through this act.

Federal assistance made available under this act is no longer available; however, the requirements of the NPDES system are still effective. In choosing any proposed alternative, other than the No Action Alternative, the Borough will continue to comply with the requirements of the forthcoming NPDES permit and remain consistent with the requirements of the Clean Water Act.

Comprehensive Plans

Since the Borough is fully sewered and the existing treatment plant is sized to adequately handle flows from projected growth, choosing any of the technically feasible alternatives would be consistent with land uses and all other requirements of the Borough's Comprehensive Plan.

Anti-Degredation Requirements

Section 4 of Pennsylvania's Clean Streams Law states in part, "It is the objective of the Clean Streams Law not only to prevent further pollution of the waters of the Commonwealth, but also to reclaim and restore to a clean, unpolluted condition every stream in Pennsylvania that is presently polluted." The federal Clean Water Act states that water quality standards shall be established to protect the public health or welfare and enhance the quality of water. Such standards are to consider the use and value of water for public water supply, propagation of fish and wildlife, recreation, agriculture, industry and navigation.

In compliance with these laws, DEP has classified all surface waters according to water uses to be protected and water quality criteria (levels or parameters) which need to be maintained in order to prevent or eliminate pollution. This classification system is known as Pennsylvania's Water Quality Standards. These standards are implemented through the provisions of Chapter 93 and Chapter 95 under the Clean Streams Law and the National Pollution Discharge Elimination System (NPDES) permitting process.

Pennsylvania's Water Quality Standards are important in the assessment of sewage facilities alternatives because they set general and specific goals for the quality of the State's water and are used in control of sources of wastewater pollution. The standards are used as a basis for establishing effluent limits in wastewater discharges where minimum technology-based treatment is not adequate to meet the standards.

There are also surface waters that are under protection because of their existing quality. These bodies of water are classified as High Quality or Exceptional Value waters. Any proposed wastewater discharge to these waters requires additional justification. The treated effluent from New Cumberland's wastewater treatment facility discharges to the Susquehanna River which is not classified as a surface water of High Quality or Exceptional Value.

Effluent limitations are obtained from DEP and are outlined in the Borough's NPDES permit. The Borough is currently in compliance with the requirements of the permit. By choosing any of the technically feasible alternatives, the Borough will continue to meet the expected requirements of the permit. Therefore, this Plan is consistent with these anti-degradation requirements.

State Water Plans

The State Water Plan was developed as a comprehensive management tool to guide the conservation, development, and administration of the Commonwealth's water and related land resources. The State Water Plan is made up of 19 subbasin reports covering the entire state and includes recommended solutions to water quantity and quality problems as well as recommendations designed to meet short-term and long-term water needs.

As explained by the Water Planning Office of DEP, the State Water Plan is similar to the Comprehensive Water Quality Management Plans in that it too has been outdated since

the 1980's. However, the State Water Plan is currently in the process of being updated. By choosing any of the technically feasible alternatives, the Borough will remain in compliance with the requirements of their NPDES permit. Therefore it is uncertain but highly probable that this Plan will be consistent with the goals and objectives presented in the forthcoming revision of the State Water Plan.

Pennsylvania Prime Agricultural Land Policy

Prime farmland, as a designation assigned by U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. Pennsylvania Prime Agricultural Land Policy orders and directs the prevention of the irreversible conversion of prime agricultural land to uses that result in its loss as an environmental or essential food production resource. State agencies are also to prohibit the use of state or federal funds from facilitating the conversion of prime agricultural land to other uses when feasible alternatives are available.

Because there is basically no land available for development, it is understood that there is no prime agricultural land available in the Borough. Therefore, this Plan is consistent with this policy.

County Stormwater Management Plans

Stormwater generated in the Borough is discharged to the Lower Yellow Breeches and the Susquehanna River. This Plan must be consistent with the stormwater plans for these two watersheds. Stormwater plans can influence the areas of the municipality which are being scheduled for centralized sewer service or other methods of sewage treatment and disposal which would allow growth at high densities. Because land available for new development is essentially non-existent, significant growth in the Borough is not expected. In addition, a Stormwater Management Plan for the Lower Yellow Breeches is not yet fully developed and there is no such plan for the Susquehanna River. Therefore this Plan is consistent with this policy.

Wetland Protection

There are no wetlands within the Borough.

Protection of Rare, Endangered or Threatened Plant and Animal Species

There is an increasing effort at local, state and federal levels of government to protect the habitat of rare, endangered and threatened species. There are state and federal laws and regulations administered by numerous agencies that protect these species. These laws and regulations make it necessary for municipalities to assess the impact a proposed sewage facilities planning alternative may have on protected species and to assess ways to reduce any impact. Impacts must be assessed for proposed collection, conveyance and treatment facility locations.

The Department of Conservation and Natural Resources (DCNR), Bureau of Forestry maintains the "Pennsylvania Natural Diversity Inventory" (PNDI), a database containing site specific information about the Commonwealth's most uncommon natural resources. Included are plant species regulated by DCNR, Bureau of Forestry, animal species regulated by the Pennsylvania Fish and Boat Commission and Pennsylvania Game Commission, outstanding geologic features, and significant natural communities.

Results of a PNDI search of the proposed project location indicate that there are no known impacts on special concern species and resources within the project area. A copy of the PNDI Project Environmental Review Receipt is provided in Appendix D.

Historical and Archaeological Resource Protection

The Pennsylvania Historical Preservation Act of 1978 requires that Commonwealth agencies and municipalities cooperate fully with the Pennsylvania Historical and Museum Commission (PHMC) in the preservation, protection and investigation of archaeological resources. The act lists specific activities which must be completed to meet this obligation. One of these activities requires that the commission be notified when either the Commonwealth or a municipality becomes aware of any undertaking in connection with any Commonwealth assisted, permitted or contracted project, activity or program which affects or may affect an archaeological or historical site. This also requires that the commission be provided with information concerning the project, program or activity.

Results from a review of the proposed project by the PHMC indicate that there is a very good possibility that prehistoric and historic archaeological resources are located within the proposed project area. Since any proposed construction activity will occur in the area of previously constructed facilities, activities related to any of the identified alternatives should not have an effect on these resources. A copy of the Cultural Resource Notice request of the Bureau of Historic Preservation and the response letter can be found in Appendix D.

Resolution of Inconsistencies

No inconsistencies were found between any of the technically feasible alternatives proposed in this Plan and the acts, programs and policies described above.

Evaluation Of Alternatives Regarding Water Quality Standards, Effluent Limitations or Other Requirements

All of the technically feasible alternatives will, in one way or another, be expected to meet the new nutrient limits to be set in the forthcoming NPDES permit. However, when designing a treatment facility, it is prudent to evaluate the alternatives based on their ability to continue to meet water quality standards anticipated in the future. Proactive

design and implementation of wastewater processes that meet the inevitable tightening of effluent nutrient limits may save time, money and problems in the long run.

The new water quality standards to be set forth in the Borough's anticipated NPDES permit will be addressing nutrient removal, more specifically biological nutrient removal (BNR) which will reduce the effluent total nitrogen to an average level of 6 mg/L and total phosphorus to an average of 0.8 mg/L before being discharged. However, Maryland, one of the partners of the Chesapeake Bay Tributary Strategy, has been achieving a BNR level of treatment at 66 of its major wastewater treatment plants which discharge to the Bay for several years. The BNR effluent limits were established in support of Maryland's commitment to the Chesapeake Bay Agreement of 1983, an agreement that established a nutrient reduction goal of 40% delivered to the Bay by the year 2000.

Despite this reduction, it is evident that BNR limits were not strict enough to protect water quality of the receiving waters. Therefore, Maryland is now requiring those 66 major treatment plants to treat to a level of enhanced nutrient removal (ENR). This means that the effluent total nitrogen is to be treated to an average level of 3 mg/L and total phosphorus to an average of 0.3 mg/L before being discharged. These more stringent limits are a result of the Chesapeake Bay 2000 Agreement. In essence, ENR for New Cumberland's wastewater treatment facility is simply the next step in the natural technological progression of wastewater treatment processes. An evaluation of the three technically feasible alternatives indicates that only one is suitable with respect to its ability to meet an ENR level of treatment – the MBR process.

The alternative that suggests repair of the existing facility and compliance with the BNR treatment standards by using the nutrient credit trading process would not be able to meet compliance with ENR treatment standards without further dependence on the nutrient credit trading process. The concern with that scenario is if or when ENR water quality standards are implemented, other plants will be forced to treat their wastewater at the limits of technology and may not be able to generate any credits. If no credits would be available, then New Cumberland would be forced to construct new facilities at that time. Considering the rising costs of construction, it may not be wise to wait to take such action.

If the Borough chose to construct an oxidation ditch facility to meet BNR treatment levels, additional volume would be required in order to meet ENR treatment levels. While this additional volume would be minimal compared to the volume required to meet a BNR level of treatment, it would require more real estate in addition the large amount needed to construct BNR treatment facilities. Furthermore, the construction of the additional volume may be very costly if or when ENR treatment standards are implemented.

In respect to being prepared to meet anticipated water quality standards in the future, the logical alternative choice to implement at this time would be the MBR process. MBR process manufacturers have analyzed the process's ability to meet ENR treatment level

standards and have indicated that it will be capable of meeting the standards with only chemical addition. No further renovations or additions would be required. Implementing this alternative now may very well prove to be a cost savings in the long run.

Cost Estimates

Cost estimates for the three alternatives identified in this Plan are presented in Appendix E. The "No Treatment Change" alternative analyzes all the estimated costs associated with the repair of the existing treatment facility and utilizes the nutrient credit trading program to meet the expected nutrient limits in the forthcoming NPDES permit. The alternative listed as "Oxidation Ditch" analyzes the costs associated with the construction of an oxidation ditch treatment process and all costs associated with the renovation of the accessory structures located at the existing facility. The alternative listed as "MBR" also analyzes all estimated costs associated with the renovation of the accessory structures located at the existing facility but includes costs associated with the construction of a membrane bioreactor treatment process. All capital and O&M costs were considered in the analyses.

Present worth analysis was used to determine the annual estimated debt service using a loan term of 40 years at 4.5% APR, similar to financing terms offered by RUS (detailed below). The total additional annual costs were then broken down as additional monthly and quarterly costs that would be imposed per EDU.

Further analysis was done to show the amount of income possible with the generation of credits. This extra income could be used to assist the Borough in paying back the required project construction loan. However, as discussed previously in this document, it is uncertain how successful the nutrient credit trading market will be. For this reason, these figures were used in the cost analysis only for the "No Treatment Change" alternative. Note the estimated annual income from credit sales for the "No Treatment Change" alternative is a negative number since nutrient credits will have to be purchased (an annual expense to the Borough) if this alternative is chosen.

Analysis of Available Funding Methods

For every expansion, upgrade, or new construction project that must be funded, a variety of financing alternatives are available. Each alternative will have an impact on a long-term cost of service to be paid by the users. Each one is different, and each strategy has both positive and negative aspects. Finding the right source of financing can be a challenge. Understanding the strengths and weaknesses of each of the available financing options is essential in order to properly evaluate all of the various financing strategies.

Short-Term Financing

Loans from local banks often represent a good alternative for funding the preliminary costs for large projects such as the one proposed for New Cumberland. The best way to decide whether or not a bank financing is right is to determine how soon the bank can be

repaid. If it is less than five years and the amount of money involved is within the lending limit of the bank, a bank loan probably represents the most cost-effective and readily available source of financing.

Bank loans do not need to be repaid solely from customer revenues. They may be repaid from the proceeds of another loan. Short-term debt is frequently repaid when a project's permanent financing is settled. For projects that require a large amount of money than can be comfortably borrowed from the local bank, regional banks are typically a good source. The municipality may also choose to sell short-term project notes. Often, interest on the loan or notes is included in the borrowing.

Short-term notes are generally issued to provide large amounts of money to undertake a project through some prescribed milestone or to finance several smaller projects over a period of several years. For very large projects where preliminary costs may exceed $1,000,000.00, the notes may be issued to pay these costs and then refinanced as part of a permanent financing after construction bids have been received. Under some circumstances, the municipality may wish to borrow enough money to provide for both the preliminary costs and the construction of the project. This may be useful if the permanent financing is being provided by a federal or state agency.

Short-term notes are not always the best financing vehicle since very stringent treasury regulations govern the issuance of such debt. The state may limit such notes if they must be guaranteed by the sponsoring municipality. Also, the success of such financing is dependent upon specific marketing conditions including the size and credit worthiness of the municipality, issue size and the general economic forecast and activity.

Long-Term Financing

Long-term financing is usually necessary in order to distribute the cost of major capital improvements over many years. Several sources of long-term financing are used in Pennsylvania, including different grants and loans. The loans have interest rates ranging from 1 percent per year to whatever the current market demands, and the terms vary from 10 to 40 years. Descriptions of the various types of long-term financing available in Pennsylvania are described in the following sections.

Pennsylvania Infrastructure Investment Authority (PENNVEST)

PENNVEST is governed by a Board of Directors and administered by the PENNVEST staff in conjunction with Pennsylvania Department of Environmental Protection. PENNVEST provides twenty year construction loans at subsidized interest rates based on the county unemployment rate, Commonwealth cost of funds, and affordability factors. Interest rates may be as low as 1 percent but are subject to increase to a predetermined rate after five years.

An application for construction funding for sewer projects is generally not considered for approval by the PENNVEST board until:

- An Act 537 Plan is approved.
- Project design is complete.

- DEP permits are issued or the project is verbally approved by DEP.
- Technical evaluation and priority rating of application by a DEP representative is concluded.

PENNVEST applies prescribed health, safety and environmental criteria in determining funding priority. A maximum of $11 million per project for a single municipality is available, and grant funding authorized by statute is limited to $250,000.

The application process is very streamlined, and administration is fairly easy compared to other federal or state agencies. Local or project counsel is required to render enforceability and rate opinions and obtain approval of the Department of Community and Economic Development for municipal guaranty. Construction cannot commence until funding is approved and a written consent to proceed ("Letter of No Prejudice") is received from PENNVEST. Monthly progress reports must be submitted to PENNVEST during the construction period.

Municipalities who opt to finance their projects with PENNVEST funds will enjoy many advantages of the program:

- It offers the lowest interest rates available.
- It may accept subordinate or party lien position in order to accommodate outstanding debt.
- The issuance costs are low.
- There is no negative arbitrage.
- A trustee is not required.

However, there are also disadvantages to consider, as well.

- The board meets only three times each year.
- Approval is uncertain.
- It's sometimes difficult to coordinate project and financing timetables.

Undertaking design without a commitment for permanent financing is risky because PENNVEST may provide only partial funding and coordinating two financing agreements simultaneously is a complex process.

Although PENNVEST offers an advance funding program for especially needy communities, such loans are difficult to obtain, and no grants are offered through this program. Interim financing may be necessary to speed up the project and meet DEP commitments. Other disadvantages of this approach include the fact that borrowing may be limited to a term of no more than five years and must have a short call feature to allow current refunding with PENNVEST loan proceeds.

Rural Utility Service (RUS) - U.S. Department of Agriculture
RUS provides long-term fixed rate financing (40 years) for qualified municipal utility projects. Eligibility is based on the reasonableness of estimated user charges and the median household income (MHI) of the municipality's residents. Grant funding is also

available if qualified and necessary to make the project affordable. The availability of loan and grant funds is determined in the federal budget, and competition among applicants in Pennsylvania is strong.

RUS loans offer a low interest rate for low income municipalities or an equally advantage rate for others based on average municipal bond rates and the longest fixed rate term available: 40 years. In many cases, this results in the lowest annual debt service payments available. Overall, grant eligibility is up to 75 percent, but no grants are awarded until the minimum target user fee is reached and the actual loan and grant eligibility is determined by reasonableness of estimated user charges and MHI. A municipal guaranty may not be required, and issuance costs are generally low. RUS will provide commitment for permanent financing prior to authorizing design, but interest rate and grants are not established until time of settlement. A trustee is not required.

RUS's project involvement from funding through design and construction can add delays to project progress. RUS must approve the project scope, bid specifications, costs, etc. Interim construction financing is generally required but may be waived in certain cases. Future borrowing and expansion are subject to RUS approval and so are rate adjustments. A reserve fund equal to the annual debt service must be built-up over 10 years, and the possibility of a future loan call exists if the financial condition of the municipality improves.

Public Bond Issue

Public bond issues are perhaps the most traditional method of funding for infrastructure projects in Pennsylvania. Municipalities can borrow at tax exempt interest rates for purely public projects for up to 30 or 35 years, depending upon the size and credit worthiness of the municipality, the size of the issue, and the general economic conditions at the time of issuance. Interest rates may be fixed or variable, and security is generally the pledge of the system revenues. A municipal guarantee may be required under some circumstances. Bond insurance is often used to achieve a lower interest rate. A debt service reserve fund equal to 100 percent of the average annual debt service is usually required, but special circumstances may prevent its establishment. The services of a bond counsel are critical to the transaction. A trustee is also required, which is typically a bank having corporate trust powers or a trust company.

The bond market may be accessed in a number of ways but the two principle methods are 1) direct issuance by the authority utilizing the services of a bond underwriting firm or 2) the municipality's participation in a bond pool.

The first method requires a municipality to select an underwriter and sometimes a financial advisor to structure the bond issue and sell the bonds. The underwriter, financial advisor, bond counsel, municipal solicitor, and engineer will structure financing specifically tailored to the municipality's needs. The financing plan will take into consideration the municipality's cash flow and revenue stream, length of the construction period, any existing indebtedness, and the need for future borrowing. Typically, revenue bond financing can be accomplished in a relatively short period of time compared to

financings through state or federal agencies, and there is generally no third party review of the project scope, plans or specifications. Revenue bonds provide the most flexible financing option available to municipalities.

Generally, there are higher costs associated with the issuance of revenue bonds. The project team will consist of a bond underwriter, a bond counsel, and the services of a trustee bank or trust company. An independent financial advisor may also be retained, and additional work by both the municipality's solicitor and consulting engineer is generally necessary. However, these latter costs may not be any greater than those that might be incurred in satisfying the state or federal requirements associated with financing provided through a governmental program. The need to establish and fund a debt service reserve account will also generate some additional costs; however, these funds may be invested, so the additional cost should be minimal when viewed over the life of the bond issue.

The second method by which municipalities can access the public finance market is through a bond pool. Bond pools, like the one established by the Pennsylvania Local Government Investment Trust (PLGIT) issue large amounts of debt for the purpose of lending the proceeds to eligible borrowers. Bonds are generally issued by a tax exempt body. Other bond pools are available in Pennsylvania, but participation may be limited to specific types of borrowers or for specific purposes.

Generally bond pools will help lower the cost of issuance. Typically, they provide standardized documents to help reduce the legal cost associated with a bond issue, and there is no need for the municipality to retain a bond underwriter. The municipality may or may not choose to retain a financial advisor, depending upon the complexity of the transaction. There is usually no need to fund a debt service reserve account.

Not all potential borrowers are eligible to borrow from a particular bond pool. In addition, each participant in the pool must meet the minimum credit standards for the pool. Often, bond pools will offer only variable rates—although some pools provide an option for both fixed and variable. Bond insurance may be required. A portion of the loan proceeds may be used to currently refund outstanding debt, but advance refunding is generally not permitted.

Although bond pools offer attractive interest rates and typically lower costs of issuance, they may not serve the needs of all municipalities or be advantageous for all projects. They deserve to be evaluated like all other financing alternatives available to municipalities, but should not be pursued to the exclusion of other available options.

Need for Immediate or Phased Implementation of Alternatives

Phased implementation of any alternative is generally required to address any critical public health hazards pending completion of sewage facilities. As indicated earlier in this document the Borough of New Cumberland is fully sewered and there are no areas within

the Borough that have sewage disposal needs. Therefore, there is no need to phase the implementation of any of the potential alternatives.

Legal Authority Necessary for Plan Implementation

New Cumberland was incorporated as a Borough in 1831 and operates under the Pennsylvania Borough Code, the Commonwealth's official publication of rules and regulations. No additional organizations or legal authority is required to implement this Plan.

SECTION VII
INSTITUTIONAL EVALUATION

Existing Wastewater Treatment Authorities

Financial and Debt Status

The Borough of New Cumberland currently has no debt. However, in early December, 2008, the Borough of New Cumberland will finalize a loan from a local bank for $4,500,000.00. This money will fund the sewer repairs necessary to meet the goals of the Chapter 94 Corrective Action Plan to reduce the amount of I/I entering the sanitary sewer collection system throughout the southern section of the Borough. The Borough will borrow the money as needed as invoices become due. The loan will have a 2-year drawdown period with a 20-year payment term. During the first 2 years the Borough will be required to pay interest only on the loan which will be at a floating interest rate. For years 3 through 12, the interest rate will be fixed at around 4%. The interest rate will then float again for the remainder of the payment term. If the interest rate were to remain constant at 4% for the life of the loan, the annual debt service amount could be estimated at $330,000.00.

In anticipation of the costly repairs necessary to correct I/I issues and address the forthcoming, revised water quality standards, the Borough increased sewer rates. Borough Council authorized a 50% increase in rates starting January, 2008. They will raise the rates again in January, 2009 by another 50%. The Borough is metered and sewer bills are based on water consumption; however, an average quarterly bill used to be $50.00 prior to 2008. Starting January, 2009, the average quarterly sewer bill will be approximately $113.00.

Available Staff and Administrative Resources

Operation and maintenance activities related to the Borough's sanitary sewer collection system and treatment facility are handled by five full-time staffed, municipal employees. Three of the five staff members are licensed wastewater operators. All budget and management issues are handled by the Wastewater Superintendent under the guidance of the Borough Manager. All billing and collections are handled by the Borough staff in the Borough's municipal building. This arrangement has proven to be highly effective since the time that the Authority was disbanded and control of the system came under Borough Council.

Existing Legal Authority

The governing body of New Cumberland legally operates under the Pennsylvania Borough Code, the Commonwealth's official publication of rules and regulations for

establishing and operating boroughs. By acting in accordance with the Borough Code, the New Cumberland Borough Council has been and will continue to be fully capable of implementing all aspects related to the wastewater planning recommendations presented in this Plan.

Necessary Institutional Alternatives to Implement the Chosen Alternative

None of the proposed alternatives would require any new municipal departments or municipal authorities to be created. Any chosen alternative would operate and be managed in the same fashion that the existing system is operated.

Necessary Administrative and Legal Activities to Implement the Chosen Alternative

The only difference between the identified alternatives is the method of treatment. Since they all propose to collect and treat the Borough's wastewater in the same manner and location in which it currently does, the only additional administrative and legal costs would be those associated with financing the new alternative.

Proposed Institutional Alternative to Implement the Chosen Alternative

The New Cumberland Borough Council is fully capable of implementing any of the proposed alternatives. The management and administrative structure that Borough Council has created to operate the existing sewage system has proven to be very efficient. Therefore the same arrangement will be used to oversee the operations and maintenance of any of the proposed alternatives.

SECTION VIII
IMPLEMENTATION SCHEDULE AND JUSTIFICATION FOR SELECTED TECHNICAL & INSTITUTIONAL ALTERNATIVES

Justification of the Selected Technical Alternative

Existing Needs

The Borough of New Cumberland has no existing needs since the entire municipality is fully furnished with a public sanitary sewage collection and treatment system.

Future Needs

As mentioned earlier in this document, the capacity of the existing plant is sufficient to meet the needs of future development that is projected to occur within the next ten years, at the very least. Since none of the identified alternatives involve a decrease in capacity then any of the identified alternatives would be suitable options, based soled on future needs of the Borough.

O & M Considerations

When considering ease of operations, any of the identified alternatives would be acceptable from an operator's perspective. However, when evaluating costs associated with O&M for each alternative, it appears that the "No Treatment Change" alternative would be the most reasonable. (Please refer to the cost analysis presented in Appendix E.) But when assessing O&M costs for this alternative, one should consider the nutrient credit purchases necessary for this alternative to be viable. The amount of nutrient credits required from year to year to meet water quality standards with this alternative could fluctuate and may prove to be a problem. Without proven results of the success of the nutrient credit trading program, it is uncertain whether this will be a truly viable alternative.

When considering the O&M costs of the remaining alternatives, it appears that the Oxidation Ditch alternative would provide an advantage over the MBR alternative.

Cost Effectiveness

When reviewing the analysis of the projected cost per EDU per quarter, it appears as though the "No Treatment Change" alternative would be best. However, as stated several times in this document, this alternative carries a high degree of uncertainty that is associated with nutrient credit purchases that would be necessary to meet water quality standards. Furthermore, if water quality standards are lowered to the limits of technology

in years to come, credits may become scarce and highly expensive or completely unavailable and the Borough will be forced to upgrade their treatment technology at a later time which will inevitably be costlier in the long run.

Even though the MBR alternative would generate a far superior effluent than the other two alternatives and possess the ability to meet even lower water quality standards without the need for further construction, it is the most expensive alternative. In fact, it is roughly 35% more expensive than the least expensive alternative.

The best technical alternative, therefore, would be the Oxidation Ditch. The cost to the end user for this alternative is only 10% more than the least expensive alternative and will be a truly viable alternative with a guaranteed level of certainty to meet water quality standards for years to come. With some minor additional construction this alternative could also meet even lower water quality standards in the future, should it be necessary.

Available Management and Administration

The administration and management structure that the Borough Council has established has proven to be effective in operating the existing sewage collection and treatment facilities. Since all the identified alternatives propose a similar manner in which the sanitary sewage will be handled and treated, it is assumed that the current organization structure will be adequate to address the needs of any of the alternatives.

Available Financing

Any of the financing options discussed earlier in this document would be able to finance the Oxidation Ditch alternative, including PENNVEST since the total project cost is less than $11,000,000.00.

Environmental Soundness

All of the identified alternatives are environmentally sound as they will, in one way or another, be able to meet new water quality standards. Additionally, none of the alternatives are proposed to disturb any environmentally sensitive lands within the Borough.

Chosen Capital Financing Plan

Because of its ability to finance the project during the design phase, it is expected that the Borough will seek funding from RUS. Grants will also be sought after; however they can never be relied upon as a financing option. Should funding through RUS become unavailable, funding through PENNVEST may be a good back-up financing plan since the cost to the end user is projected to be roughly the same.

Proposed Plan Implementation Schedule

The following is an estimated implementation schedule for the construction of an oxidation ditch:

- DEP Approval – June, 2009
- Secure Funding and Complete Design – December, 2010
- Bid Project – January, 2011
- Start Construction – April, 2011
- Construction Complete and Start-Up – October 1, 2012

SECTION IX
ENVIRONMENTAL REPORT (ER) GENERATED FROM THE UNIFORM ENVIRONMENTAL REVIEW (UER) PROCESS

ER As Required by the UER Process

The UER process is intended to standardize the process for documenting the environmental effects of wastewater infrastructure projects requesting financial assistance from various federal funding sources in Pennsylvania. The specific financial assistance programs and agencies that can utilize the UER are:

- The Clean Water State Revolving Loan Fund (PENNVEST, DEP, EPA)
- The RUS Water and Waste Disposal Grant and Loan Program (USDA-RD)
- The Community Development Block Grant Program (DCED, HUD)
- Other Federal Funding Efforts (EPA)

The process is also designed to streamline and coordinate the environmental review of proposed projects so as to avoid major inconsistencies or duplication of effort, particularly where multiple sources of funding are involved.

National Environmental Policy Act

Each of the above mentioned funding programs is governed by federal law and regulations. In making funding decisions for specific projects, the agencies involved must determine consistency with the National Environmental Policy Act (NEPA). The state and federal agencies that provide funding under these programs have agreed to accept one uniform environmental review process, based on the NEPA requirements that are described below.

NEPA establishes the basic national charter for protection of the environment and for identifying a proposed project's environmental consequences and the measures which will be taken to reduce negative impacts.

The goals of NEPA have been extended through various Executive Orders for the protection of the environment, as well as additional Executive Orders for the protection of wetlands, floodplains, and the cultural environment. In order to achieve these goals, NEPA allows for a tiered approach to the environmental review. The first tier which is least complex in nature is the Categorical Exclusion (CE).

Categorical Exclusions

CE's are available for projects that will not have a significant effect on the quality of the human or natural environment, either individually, cumulatively over time, or in conjunction with other projects. Such projects can be exempted from the need for a detailed environmental assessment and impact statement.

Actions that may be considered for a categorical exclusion are those that involve minor rehabilitation of existing facilities, including construction of new facilities adjacent or appurtenant to existing facilities that do not affect the capacity of the existing facilities or significantly increase or decrease the degree of treatment.

Examples of projects that may be considered for a CE include:

- Infiltration and inflow correction in wastewater systems
- Repair or replacement of existing mechanical equipment, structures, or pipes
- On-site wastewater disposal technologies (single sites only)
- Actions that do not alter the purpose, operation, location, or design of existing facilities
- Technical assistance, planning, environmental analysis, management studies, or feasibility studies

Types of projects which are **not** eligible for granting a categorical exclusion:

- Actions which are known or expected to have a significant effect on the quality of the human environment, either individually, cumulatively over time, or in conjunction with other federal, state, local, tribal or private actions
- Actions which are known or expected to have significant, adverse effect (either directly or indirectly) on:
    a. Historic resource areas such as archaeological sites or historic structures
    b. Endangered or threatened species and their critical habitats
    c. Environmentally important natural resource areas such as floodplains, wetlands, important farmlands, sole source aquifer recharge zones
    d. Other resource areas identified by the funding agency

- Other specialized specific actions for which the funding agency is prohibited from granting a categorical exclusion

Since the project proposed for New Cumberland can be considered for a CE, then they may be exempted from the need for a detailed environmental assessment and impact statement. An Environmental Assessment Report will be furnished to any funding agency at the time the funding application is completed, should the chosen funding agency require one.

ORDINANCE NO. 444

AN ORDINANCE AMENDING "THE LAND SUBDIVISION ORDINANCE OF 1962" OF THE BOROUGH OF NEW CUMBERLAND, ORDINANCE NO. 284; TO PROVIDE FOR ADDITIONAL REGULATION OF SUBDIVISION AND DEVELOPMENT OF LANDS SUBJECT TO FLOODING, TO PROVIDE ADDITIONAL STANDARDS FOR CONSTRUCTION OF FACTILITIES FOR CONVEYANCE OF STORM WATERS, FOR WATER SUPPLY AND DISTRIBUTION, AND FOR SEWAGE COLLECTION AND TREATMENT; AND TO SET FORTH THE PROCEDURES FOR SUBMISSION AND APPROVAL OF SUBDIVISION AND DEVELOPMENT PLANS.

BE IT HEREBY ENACTED AND ORDAINED by the Council of the Borough of New Cumberland, Cumberland County, Pennsylvania, as follows:

ARTICLE I - GENERAL PROVISIONS

Section 1.0 - Purpose

The specific purpose of these provisions is:

A. to regulate the subdivision and/or development of flood-prone land areas in order to promote the general health, welfare, and safety of the community;

B. to require that each subdivision lot in flood-prone areas be provided with a safe building site with adequate access; and that public facilities which serve such uses be designed and installed to preclude flood damage at the time of initial construction;

C. to protect individuals from buying lands which are unsuitable for use because of flood hazards by prohibiting the subdivision and/or development of unprotected flood-prone lands.

Section 1.1 - Abrogation and Greater Restrictions

This Ordinance supersedes any ordinances currently in effect in flood-prone areas. However, any underlying ordinance shall remain in full force and effect to the extent that those provisions are more restrictive.

Section 1.2 - Municipal Liability

The grant of a permit or approval of a subdivision and/or land development plan shall not constitute a representation, guarantee, or warranty of any kind by the municipality or by any official or employee thereof of the practicability or safety of the proposed use, and shall create no liability upon the municipality, its officials or employees.

ARTICLE II - APPLICATION PROCEDURES AND PLAT REQUIREMENTS

Section 2.0 - Pre-application Procedures

Prospective developers shall consult the County Conservation District representative concerning erosion and sediment control and the effect of geologic conditions on the proposed development. At the same time a determination should be made as to whether or not any flood hazards either exist or will be created as a result of the subdivision or development.

Section 2.1 - Preliminary Plan Requirements

In addition to the information normally required by the Borough for review and approval of Preliminary Plans, the following information, prepared by a Registered Engineer or Surveyor, shall be required when any part of the proposed Subdivision or Land Development is within the area of the

protective works or measures planned for such lot and of all necessary access facilities.

B. Simultaneous with the execution of the agreement specified in (A) the developer offers a fiscal surety to guarantee performance of this agreement and installation of improvements by the developer/owners at their own expense in accordance with the approved plans, specifications, and schedules. The surety bond shall be in the full amount of the estimated costs. The surety agreement shall be conditioned upon final approval of the plat. The bond shall be offered by the developer, his agent or an authorized bonding firm. The bond shall consist of a certified check, escrow account, or irrevocable letter of credit in favor of the Borough of New Cumberland.

C. The developer agrees that the deposit in escrow may be applied by the governing body for the completion of improvements as agreed and may be held for a period of six (6) months after final completion of such improvements for the purpose of:

1. guaranteeing and securing the correction of any defect in material or workmanship furnished for such improvements latent in character, and not discernible at the time of final inspection or acceptance by the governing body, and
2. guaranteeing against any damage to such improvements by reason of the settling of the ground, base or foundation thereof.

Such agreement shall also provide that the bond may be applied by the Borough of New Cumberland for any amounts incurred correcting such defects. The balance of such deposit, if any, held at the end of such period shall be returned by the governing body to the depositor, or paid to the order of the depositor without payment of interest by the governing body.

D. Prior to offering any improvement to the governing body, the developer furnishes a written guarantee that all indebtedness incurred for supplies, material, labor furnished, or engineering and professional services in the construction of improvements shall have been paid in full and that there are no claims for damage or suits against the contractor involving such improvements.

ARTICLE III - DESIGN STANDARDS and IMPROVEMENTS

Section 3.0 - General

A. Where not prohibited by this or any other laws or ordinances, land located in flood-prone area(s) may be platted for development with the provision that the developer construct all buildings and structures to preclude flood damage in accordance with this and any other laws and ordinances regulating such development.

B. No subdivision and/or land development, or part thereof, shall be approved if the proposed development and/or improvements will, individually or collectively, increase the Regulatory Flood elevation more than one (1) foot at any point.

frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties. If Subdivision or Land Development Plans include any relocation or alteration of an existing water course, an analysis prepared by a Registered Engineer shall be submitted. The analysis shall show clearly the effect of the proposed relocation or alteration on the flood carrying capacity of the water course, and shall consider flooding of a magnitude up to and including one hundred year flood. No relocation or alteration will be approved if the flood carrying capacity of the water course in question is reduced.

Notify adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse, and submit copies of such specifications to the Administrator.

Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

Section 3.3 - Streets

The finished elevation of proposed streets shall be established with due consideration given to the need for access to developed properties during times of flooding. The Borough Council may require, where necessary, profiles and elevations of streets to determine compliance with this requirement. Drainage openings shall be sufficient to discharge flood flows without unduly increasing flood heights.

Section 3.4 - Sewer Facilities

All new or replacement sanitary sewer systems located within the Floodway or Flood Fringe Disticts, whether public or private, shall be floodproofed up to an elevation one (1) foot above the Regulatory Flood Elevation.

Section 3.5 - Water Facilities

All new or replacement water systems located in Floodway or Flood Fringe Districts, whether public or private, shall be floodproofed to a point one (1) foot above the Regulatory Flood Elevation.

Section 3.6 - Other Public Utilities and Facilities

All other new or replacement public and/or private utilities and facilities shall be elevated or floodproofed to a point one (1) foot above the Regulatory Flood elevation, except for individual services to existing structures, which shall meet the requirements of the Building Code.

Section 3.7 - Mobile Home Parks

For all new mobile home parks and mobile home subdivisions, for expansions to existing mobile home parks and mobile home subdivisions, and for existing mobile home parks and mobile home subdivisions where the repair, reconstruction, or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities, and pads before the repair, reconstruction or improvement has commenced, the following requirements shall be met for any construction within the Flood Fringe Zone:

A. Stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of each mobile home will be at least one foot above the Regulatory Flood Elevation.

B. Adequate surface drainage and access for a mobile home hauler shall

and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation.

One Hundred Year Flood - A flood that has one chance in one hundred or a one percent chance of being equaled or exceeded in any year. For the purposes of this ordinance, the one hundred year flood (base flood) as defined by Federal Insurance Administration, U. S. Department of Housing and Urban Development, in Flood Insurance Study, Borough of New Cumberland, Cumberland County, Pennsylvania. Also, the Regulatory Flood.

Regulatory Flood - The flood which has been selected as the basis for flood plain management regulations. For the purposes of this ordinance, the one hundred year flood (base flood) as defined by the Federal Insurance Administration, U. S. Department of Housing and Urban Development in Flood Insurance Study Borough of New Cumberland, Cumberland County, Pennsylvania.

Regulatory Flood Elevation - The elevation of the Regulatory Flood at a point. For the purposes of this ordinance, the one hundred year flood (base flood) elevation from Flood Insurance Study, Borough of New Cumberland which is shown on the New Cumberland Borough Official Flood Plain and Floodway Map.

Structure - For flood plain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a mobile home.

Subdivision - The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership or building or lot development: Provided, however, that the division of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street or easement of access, shall be exempted.

ARTICLE V - SEVERABILITY

Should any section or provision of this ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this ordinance as a whole, or of any other part thereof.

ARTICLE VI - WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that areas outside the flood plain districts, or that land uses permitted within such districts will be free from flooding or flood damages.

This ordinance shall not create liability on the part of the Borough of New Cumberland or any officer or employee thereof for any flood damages which result from reliance on this ordinance or any administrative decision lawfully made thereunder.

ORDINANCE NO. 445

AN ORDINANCE AMENDING THE NEW CUMBERLAND ORDINANCE NO. 359 TO INCLUDE REGULATIONS FOR THE USE OF LANDS SUBJECT TO FLOODING.

BE IT HEREBY ENACTED AND ORDAINED by the Council of the Borough of New Cumberland, Cumberland County, Pennsylvania, as follows:

ARTICLE I GENERAL PROVISIONS

Section 1.1 - Purpose

The purpose of these provisions is to prevent the loss of property and life, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditures of public funds for flood protection and relief.

A. regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities and frequencies,

B. restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding,

C. requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected and/or floodproofed against flooding and flood damage,

D. protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

Section 1.2 - Applicability

These provisions shall apply to all lands within the jurisdiction of the Borough of New Cumberland and shown on the Official Flood Plain and Floodway Map as being located within the boundaries of the Floodway and Flood-Fringe Districts.

Section 1.3 - Interpretation of District Boundaries

Where interpretation is needed concerning the exact location of any boundary of the Floodway or Flood-Fringe District, the Zoning Hearing Board shall make the necessary determination. The person questioning or contesting the location of the district boundary shall be given a reasonable opportunity to present his case to the Board and to submit his own technical evidence if he so desires.

Section 1.4 - Compliance

No structure or land shall hereafter be used and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this ordinance and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this ordinance.

Section 1.5 - Warning and Disclaimer of Liability

The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance [illegible]

or subdivision within the Floodway District, the owner or operator of the mobile home park or subdivision shall file with the Disaster Preparedness authorities of Cumberland County and the Borough of New Cumberland, an evacuation plan which indicates alternate vehicular access routes and escape routes.

In the Floodway District no structural development shall be permitted except where the effect of such development on flood heights is fully offset by accompanying stream improvements which have been approved by all appropriate local and/or State authorities. When a developer proposes to offset the effects of structural development in the Floodway District by construction of stream improvements, he shall submit an engineering study prepared by a Registered Professional Engineer which fully evaluates the effects of such construction. The report shall use the Base Flood as herein defined as the basis of analysis.

A. Permitted Uses

In the Floodway District the following uses and activities are permitted provided that they are in compliance with the provisions of the underlying district and are not prohibited by any other ordinance and provided that they do not require structures, fill, or storage of materials and equipment:

1. Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming and wild crop harvesting.
2. Public and private recreational uses and activities such as parks, day camps, picnic grounds, golf courses, boatlaunching and swimming areas, hiking and horseback riding trails, wildlife and nature preserves, game farms, fish hatcheries, trap and skeet ranges, and hunting and fishing areas.
3. Residential uses such as yard areas, gardens, play areas, and parking areas.
4. Industrial and commercial uses such as yard areas, parking and loading areas, airport landing strips, etc.

B. Uses Permitted by Special Exception

The following uses and activities may be permitted by Special Exception provided that they are in compliance with the provisions of the underlying district and are not prohibited by any other Ordinance:

1. Small structures generally considered necessary for the activities in Section A above.
2. Utilities and public facilities and improvements such as railroads, streets, bridges, transmission lines, pipe lines, water and sewage treatment plants, and other similar or related uses.
3. Water-related uses and activities such as marinas, docks, wharves, piers, etc. if designed to minimize impact on, and damages from flooding.
4. Extraction of sand, gravel, and other materials.
5. Temporary uses such as circuses, carnivals, and similar activities.

to construct a structure below the base flood level will result in increased premium rates for flood insurance. (ii) Such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions as required in paragraph (6) of this section; and

6. The Board shall (i) maintain a record of all variance actions, including justification for their issuance, and (ii) report such variances issued in its annual report submitted to the Federal Insurance Administrator.

ARTICLE V NONCONFORMITIES

A structure or use of a structure or land which lawfully existed before the the enactment of these provisions, but which is not in conformity with these provisions may be continued subject to the following conditions:

A. Existing nonconformities (structures and/or uses) located in the in the Floodway District shall not be expanded or enlarged (unless the effect of the proposed expansion or enlargement on flood heights is fully offset by accompanying stream improvements).

B. Any modification, alteration, repair, reconstruction, or improvement of any kind to a nonconformity (structure and/or use) located in the Floodway District to an extent or amount of less than fifty (50) percent of its value, should be elevated and/or floodproofed to the greatest extent possible.

C. The modification, alteration, repair, reconstruction, or improvement of any kind to a nonconformity (structure and/or use) regardless of location, to an extent or amount of fifty (50) percent or more of its value shall be undertaken only in full compliance with the provisions of this and any other applicable ordinance.

D. Uses or adjuncts thereof which are, or become, nuisances shall not be permitted to continue.

ARTICLE VI DEFINITIONS

1. Flood — a temporary inundation of normally dry land areas.

2. Flood Fringe — that portion of the flood plain outside the floodway.

3. Flood Plain — (1) a relatively flat or low land area adjoining a river, stream, or watercourse which is subject to partial or complete inundation; (2) an area subject to the unusual and rapid accumulation or runoff of surface waters from any source. For the purpose of this Ordinance, the 100 year flood plain as defined by HUD/FIA.

4. Floodway — the designated area of a flood plain required to carry and discharge flood waters of a given magnitude. For the purposes of this ordinance the floodway shall be capable of accommodating a flood of the one hundred (100) year magnitude, as defined by HUD/FIA without causing an increase in water surface elevation greater

ORDINANCE NO. 446

AN ORDINANCE AMENDING THE BOROUGH OF NEW CUMBERLAND BUILDING CODE OF 1943, ORDINANCE NO. 62, TO INCLUDE FLOOD DAMAGE CONTROLS FOR CONSTRUCTION OF NEW STRUCTURES OR SUBSTANTIAL IMPROVEMENT OF EXISTING STRUCTURES WITHIN THE BOROUGH'S FLOODWAY AND FLOOD FRINGE DISTRICTS.

BE IT HEREBY ORDAINED by the Council of the Borough of New Cumberland, Cumberland County, Pennsylvania, as follows:

ARTICLE I - FLOOD DAMAGE CONTROL REGULATIONS

In order to prevent excessive damage to buildings and structures due to conditions of flooding, the following restrictions shall apply to all new construction occurring in the designated Floodway and Flood Fringe Districts; and to construction of substantial improvements to existing structures in any such Districts:

Section 1.1 - Basements and First Floors

A. Lowest floors including basements in non-residential buildings may be constructed below the level of the one hundred (100) year flood, provided that they together with attendant utility and sanitary facilties are designed so that below the regulatory flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability to withstand the hydrostatic and dynamic load of the Regulatory Flood.

B. No basements shall be permitted in residential structures. Lowest floors in residential structures shall be constructed at or above an elevation of one foot above the Regulatory Flood Elevation.

Section 1.2 - Fill

If fill is used to raise the finished surface of the first floor one foot above the Regulatory Flood Elevation:

A. Fill shall extend beyond a structure for a sufficient distance to provide acceptable access. For residential structures, fill shall extend laterally fifteen (15) feet beyond the building line from all points. For non-residential structures, fill shall be placed to provide access acceptable for the intended use. At-grade access, with fill extending laterally fifteen (15) feet beyond the building line, shall be provided to a minimum of twenty-five (25) percent of the perimeter of a non-residential structure.

B. Fill shall consist of soil or rock materials only. Sanitary landfills shall not be permitted.

C. Fill material shall be compacted to provide the necessary stability and resistance to erosion, scouring, or settling.

D. Fill slopes shall be no steeper than one (1) vertical on two (2) horizontal, unless substantiating data justifying steeper slopes are submitted to and approved by the Building Inspector.

E. Fill shall be used only to the extent to which it does not adversely affect adjacent properties.

flammable, explosive, or in times of flooding could be injurious to human, animal, or plant life, shall be stored below an elevation one (1) foot above the Regulatory Flood Elevation.

ARTICLE II ADMINISTRATION

To insure that the aforementioned flood damage controls are being employed in all new construction or substantial improvement within the Floodway and Flood Fringe Districts, the Building Inspector shall provide the applicant information concerning the location of the District boundaries relative to his proposed construction and the water surface elevation of the one hundred (100) year flood at the proposed construction site. The source of this information shall be the New Cumberland Borough Official Flood Plain and Floodway Map.

When reviewing permit applications, the Building Inspector shall consider whether proposed work is designed and anchored to prevent flotation, collapse, or lateral movement; uses material and equipment resistant to flood damage; and uses construction methods that minimize flood damage.

Placement of a mobile home on a lot or in a mobile home park shall require a building permit under this ordinance.

Section 2.1 - Plan Requirements

The Building Inspector shall require the following specific information to be included as part of an application for a building permit for work within the Floodway or Flood Fringe Districts;

A. For structures to be elevated to an elevation at least one foot above the Regulatory Flood Elevation:

1. a plan showing the size of the proposed structures and its relation to the lot where it is to be constructed.

2. a determination of elevations of the existing ground, proposed finished ground, and lowest finished floors; certified by a Registered Professional Engineer, Surveyor, or Architect.

3. plans showing the method of elevating the proposed structure, including details of proposed fills, pile structures, retaining walls, foundations, erosion protection measures, etc. When required by the Building Inspector, these plans shall be prepared by a Registered Professional Engineer or Architect.

4. plans showing the methods used to protect utilities (including sewer, water, telephone, electric, gas, etc.) from flooding to an elevation at least one foot above the Regulatory Flood Elevation at the building site.

B. For structures to be floodproofed to an elevation at least one foot above the Regulatory Flood Elevation (non-residential structures only):

1. plans showing details of all floodproofing measures, prepared by a Registered Professional Engineer or Architect, and showing the size of the proposed structure and its relation to the lot where it is to be constructed.

This term does not apply to any work on a structure existing before the effective date of this ordinance.

ONE HUNDRED YEAR FLOOD - a flood that has one chance in one hundred or a one percent chance of being equaled or exceeded in any year. For the purposes of this ordinance, the one hundred year flood (base flood) as defined by the Federal Insurance Administration, U. S. Department of Housing and Urban Development, in Flood Insurance Study, Borough of New Cumberland, Cumberland County, Pennsylvania. Also, the Regulatory Flood.

REGULATORY FLOOD - the flood which has been selected as the basis for flood plain management regulations. For the purposes of this ordinance, the one hundred year flood (base flood) as defined by the Federal Insurance Administration, U. S. Department of Housing and Urban Development in Flood Insurance Study, Borough of New Cumberland, Cumberland County, Pennsylvania.

REGULATORY FLOOD ELEVATION - the elevation of the Regulatory Flood at a point. For the purposes of this ordinance, the one hundred year flood (base flood) elevation from Flood Insurance Study, Borough of New Cumberland which is shown on the New Cumberland Borough Official Flood Plain and Floodway Map.

START OF CONSTRUCTION - The first placement of permanent construction of a structure (other than a mobile home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivision, "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

STRUCTURE - for flood plain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a mobile home.

SUBSTANTIAL IMPROVEMENT - Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either,

(a) before the improvement or repair is started, or

(b) if the structure has been damaged, and is being restored, before the damage occurred.

For the purposes of this definition "substantial improvement" is

AN ORDINANCE NO. 480

AN ORDINANCE AMENDING ORDINANCE NO. 445, AND PROMULGATING CERTAIN RULES AND REGULATIONS FOR USES OF PROPERTY AND USES OF LANDS SUBJECT TO FLOODING.

BE IT ENACTED AND ORDAINED by the Council of the Borough of New Cumberland, Cumberland County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same:

SECTION I - The following provision is added as Section 3.1, subparagraph C, to Ordinance No. 445 (adopted February 2, 1977):

> Within the Floodway District, the production storage, or maintenance of a supply (more than 550 gallons or other comparable volume, or any amount of radioactive substances) of the following materials or substances shall be prohibited: Acetone, Ammonia, Benzene, Calcium carbide, Carbon Disulfide, Celluloid, Chlorine, Hydrochloric acid, Hydrocyanic acid, Magnesium, Nitric Acid and ozides of nitrogen, Petroleum products (gasoline, fuel oil, etc.), Phosphorus, Potassium, Sodium, Sulphur and sulphur products, Pesticides (including insecticides, fungicides and Rodenticides) and Radioactive substances, insofar as such substances are not otherwise regulated.

SECTION II - The following provision is added as Section 3.3 to Ordinance No. 445 (adopted February 2, 1977):

SECTION 3.2 - Flood-Fringe District (FF) -- Specific Instructions

> Any new or substantially improved structure which will be used for the production or storage of any of the following materials or substances, or which will be used for any activity requiring the maintenance of a supply (more than 550 gallons or other comparable volume, or any amount of radioactive substances) of any of the following materials or substances on the premises, shall be subject to the

Section 508. DESIGN STANDARDS IN FLOODPLAINS.

1. General Standards

   A. Where not prohibited by this or any other laws or ordinances, land located in flood-prone area(s) may be platted for development with the provision that the developer construct all buildings and structures to preclude flood damage in accordance with this and any other laws and ordinances regulating such development.

   B. No subdivision and/or land development, or part thereof, shall be approved if the proposed development and/or improvements will, individually or collectively, increase the Regulatory Flood elevation more than one (1) foot at any point.

   C. Building sites for residences or any other type of dwelling or accommodation shall not be permitted in any Floodway District. Sites for these uses may be permitted outside the Floodway District if the sites of dwelling units are elevated to a height at least one (1) foot above the elevation of the Regulatory Flood. If fill is used to raise the elevation of a site, the fill area shall extend out laterally for a distance of at least fifteen (15) feet beyond the limits of the proposed structures. No fill or other obstruction to the free flow of flood waters shall be placed in any Floodway District, except as provided by the Zoning Ordinance.

   D. Building sites or fill for structures or buildings other than for residential uses shall not be permitted in any Floodway District. Also such sites for structures or buildings outside the floodway shall be protected as provided for in (C) above. However, the Borough Council may allow the subdivision and/or development of areas or sites for commercial and industrial uses at an elevation less than one (1) foot above the Regulatory Flood if the developer otherwise protects the area to one (1) foot above or assures that the buildings or structures will be floodproofed at least up to that height, in conformance with the Building Code.

   E. If the Borough of New Cumberland determines that only a part of a proposed plat can be safely developed, it shall limit development to that part and shall require that development proceed consistent with this determination.

   F. When a developer does not intend to develop the plat himself and the Borough of New Cumberland determines that additional controls are required to insure safe development, it may require the developer to impose appropriate deed restrictions on the land. Such deed restrictions shall be inserted in every deed and noted on every recorded plat.

2. Excavation and Grading

   Where any excavation or grading is proposed or where any existing trees, shrubs or other vegetative cover will be removed, the developer shall consult the County Conservation District representative concerning plans for erosion and sediment control and to also obtain a report on the soil characteristics of the site so that a determination can be made as to the type and degree of development the site may accommodate. Before undertaking any excavation or grading, the developer shall

7. Other Public Utilities and Facilities

   All other new or replacement public and/or private utilities and facilities shall be elevated or floodproofed to a point one (1) foot above the Regulatory Flood elevation, except for individual services to existing structures, which shall meet the requirements of the Building Code.

8. Mobile Home Parks

   For all new mobile home parks and mobile home subdivisions, for expansions to existing mobile parks and mobile home subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds fifty percent (50%) of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced, the following requirements shall be met for any construction within the Flood Fringe Zone:

   A. Stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of each mobile home will be at least one (1) foot above the Regulatory Flood Elevation.

   B. Adequate surface drainage and access for a mobile home hauler shall be provided.

      When mobile homes are to be elevated on pilings, lots shall be large enough to permit steps, piles shall be placed in stable soil no more than ten (10) feet apart and reinforcement shall be provided for pilings more than six (6) feet above ground level.

STORMWATER MANAGEMENT ORDINANCE

BOROUGH OF NEW CUMBERLAND, CUMBERLAND COUNTY, PENNSYLVANIA

ORDINANCE NO. 621

AN ORDINANCE AMENDING AND MODIFYING THE CODE OF ORDINANCES OF THE BOROUGH OF NEW CUMBERLAND TO ESTABLISH STORM WATER MANAGEMENT REQUIREMENTS.

IT IS HEREBY ENACTED AND ORDAINED by the Borough Council of the Borough of New Cumberland, Cumberland County, Pennsylvania, as follows:

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APPENDICES

1: Minor Land Disturbance Application

2: Major Land Disturbance Application

3: Storm Water Management Plan Certificate

4: Storm Water Management Permit

5: Standard Computation Table and Chart

6. Sample Maintenance Agreement

ARTICLE I
Authority to Regulate Storm Water

§101. Adoption; Authority; Applicability. The Borough Council of the Borough of New Cumberland, pursuant to the Pennsylvania Storm Water Management Act, Act of October 4, 1978, P.L. 864, No. 167, as amended, the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, reenacted and amended by Act 170 of 1988, as amended, and the Pennsylvania Borough Code, Act of 1965, P.L. 1656, No. 581, as amended, 53 P.S. Section 46202(8) (entitled regulation of drains) and Section 46202 (17) (entitled Street and Sewer Regulations), hereby enacts and ordains this Part 3 of Chapter XV the Codification of the Ordinances of the Borough of New Cumberland to be known as the Borough of New Cumberland Storm Water Ordinance. This Ordinance is intended to apply to all land disturbance activities as defined herein both during and upon completion of a land disturbance activity.

(A New Part 3 is hereby inserted in Chapter XV to be known as Storm Water Management)

ARTICLE II
General Storm Water Management Provisions

§201. Title. This Part shall be known and may be cited as the "Borough of New Cumberland Storm Water Management Ordinance."

§202. Statement of Findings.

A. The Borough Council of the Borough of New Cumberland finds that inadequate management of storm water runoff modified by human activities increases downstream flooding, eroding and/or silts stream channels, pollutes water, overloads existing drainage facilities and reduces the groundwater table.

B. A comprehensive and reasonable program of storm water management regulations is fundamental to the public health, safety, and welfare and to the protection of the citizenry and environment. Public education on the impacts of pollution from stormwater is an essential component in successfully addressing stormwater.

C. Federal and state regulations require certain municipalities to implement a program of stormwater controls wherein permits may be necessary to obtain a federal permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).

D. Non-stormwater discharges to the Borough storm sewer systems may, without proper regulation, contribute to pollution of waters of the Commonwealth by persons residing and activities conducted within the Borough of New Cumberland.

§ 203. Purpose. The purpose of this Ordinance is to promote the public health, safety and welfare by minimizing the problems described in Section 202 by provisions designed to:

A. Manage storm water runoff, soil erosion and sedimentation, both during and upon completion of a land disturbance activity, by regulating activities which cause such problems.

B. Utilize and preserve existing natural drainage within the Borough of New Cumberland.

requirements for stormwater management, the specific requirements contained in this Ordinance shall be followed.

B. Nothing in this Ordinance shall be construed to affect any of the Borough of New Cumberland's requirements regarding stormwater matters which do not interfere with the provisions of this Ordinance, such as local stormwater management design criteria (e.g. inlet spacing, inlet type, collection system design and details, outlet structure design, etc.).

ARTICLE III
Definitions

§ 301. General. Words and phrases shall be presumed to be used in their ordinary context unless such word or phrase is defined or interpreted differently within this section.

§ 302. General Terms. In this Chapter when not inconsistent with the context:

A. Words in the present tense imply also the future tense.
B. The singular includes the plural.
C. The male gender includes the female gender.
D. The term "person" includes an individual, partnership, corporation, unincorporated association, estate, or any other legally recognized entity.
E. The term "shall" or "must" is always mandatory.
F. The term "may" is permissive.

§ 303. Specific Terms. The following words and phrases shall have the particular meaning assigned by this section of this Part. Additionally, the words and phrases which are used in this Part and not defined below shall have the meaning assigned the Borough of New Cumberland Subdivision and Land Development Ordinance.

Accelerated Erosion - The removal of the surface of the land through the combined action of human activities and the natural processes at a rate greater than would occur because of the natural process alone.

Agriculture - The tilling of the soil, the raising of crops, forestry, horticulture and gardening, including the keeping or raising of livestock, such as cattle, cows, hogs, horses, sheep, goats, poultry, rabbits, birds, fish, bees and other similar animals.

Alteration - As applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; the changing of surface conditions by causing the surface to be more or less impervious; or, earth disturbance.

Applicant - A landowner, developer or other person who has filed an application for approval, including a Project Plan under Article IV.

Borough - Borough of New Cumberland, Cumberland County, Pennsylvania.

Borough Council - The Borough Council of the Borough of New Cumberland, Cumberland County, Pennsylvania.

BMP (Best Management Practice) – Activities, facilities, designs, measures or procedures

Floodplain - An area of land adjacent to the channel of a watercourse which has been or is likely to be flooded, or any area subject to the unusual and rapid accumulation of runoff of surface waters from any source.

Groundwater Recharge - Replenishment of existing natural underground water supplies.

Hydrograph – A graphical comparison of runoff being discharged from any particular site (measured in cubic feet per second) on the vertical axis, versus time (measured as time into the storm event such as hour 1, 2, 3 etc.) on the horizontal axis.

Impervious Surface - Any material that covers the land which inhibits the percolation of storm water directly into the soil, including but not limited to buildings, pavement, stone areas, and storm water facilities that discharge storm water off the site.

Land Development – Any of the following activities:

(i) Earth Disturbance as defined herein, and

(ii) Land development as defined in Section 107(a) of the Municipalities Planning Code and the Subdivision and Land Development Ordinance of the Borough of New Cumberland, Cumberland County, Pennsylvania.

Land Disturbance Activity - The use of land for activities in the following categories:

a) Major Land Disturbance. The use of land involving:

(1) Installation of new impervious or semi-impervious surface that is either in excess of four thousand (4,000) square feet or one-half (1/2) of the total lot area, or

(2) Diversion or piping of any natural or manmade watercourse, or

(3) Removal of ground cover, grading, filling, or other excavation in excess of one (1) acre, except for the agricultural use of land when operated in accordance with a farm conservation plan approved by the Cumberland County Conservation District.

b) Minor Land Disturbance. The use of land involving:

(1) The installation of new impervious or semi-impervious surface between one thousand (1,000) and four thousand (4,000) square feet, or

(2) Removal of ground cover, grading, filling or excavation between four thousand (4,000) square feet and one (1) acre, except for the agricultural use of land when operated in accordance with a farm conservation plan approved by the Cumberland County Conservation District.

(For the purpose of defining minor and major land disturbances, area calculations are cumulative.)

NPDES - National Pollutant Discharge Elimination System, the federal government's system for issuance of permits under the Clean Water Act, which is delegated to the DEP.

Open Channel - A drainage element in which stormwater flows with an open surface. Open

a channel.

Soil Group, Hydrologic - A classification of soils by the Soil Conservation Service into four runoff categories. The groups range from A soils, which are very permeable and produce little runoff, to D soils, which are not very permeable and produce much more runoff.

State Water Quality Requirements - As defined under state regulations, including the protection of designated and existing uses (See 25 Pa. Code Chapters 93 and 96) - - including

a. Each stream segment in Pennsylvania has a "**designated use**", such as "cold water fishery" or "potable water supply", which are listed in Chapter 93.

b. "**Existing uses**" are those attained as of November, 1975, regardless whether they have been designated in Chapter 93. Land development and Regulated Earth Disturbance activity must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in special protection streams.

c. Water quality involves the chemical, biological and physical characteristics of surface water bodies. After land development these characteristics can be impacted by addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or rates. Therefore, discharges to surface waters must be designed and managed to protect the stream bank, stream bed and structural integrity of the waterway, to prevent these impacts.

Storm Frequency - The number of times that a given storm "event" occurs or is exceeded on the average in a stated period of years.

Storm Sewer - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basis, curbs, gutters, ditches, manmade channels, storm drains, system of pipes, open channels, streets and other conveyances) intended to carry stormwater runoff and other drainage, but excludes domestic sewage and industrial waste.

Storm Water - Rain, Snow (including snow melt) or other form precipitation reaching the ground surface.

Storm Water Management - A program of controls and measures designed to regulate the quantity and quality of storm water runoff from a development while promoting the protection and conservation of groundwaters and groundwater recharge.

Storm Water Management Facilities - Those controls and measures (e.g., storm sewers, berms, terraces, bridges, dams, basins, infiltration systems, swales, watercourses, and floodplains) used to effect a storm water management program.

Storm Water Runoff - Drainage runoff from the surface of the land resulting from precipitation or snow and ice melt.

Structure - Any manmade object having an ascertainable stationary location on or in land or water, whether or not affixed to the land.

Subdivision - The division or re-division of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the

Minor Land Disturbance (see Appendix No. 1), a filing fee in the amounts specified in the fee schedule as established by resolution or ordinance of the Borough Council and sketch plan of the proposed area and improvents showing any required stormwater details.

B. Major Land Disturbance. An application for a Storm Water Management Permit for a Land Disturbance Activity, as defined in this Part, shall include the following items:

(1) One (1) completed copy of the Application for a Storm Water Management Permit (see Appendix No. 2).

(2) Four (4) copies of the Storm Water Management Plan (see Section 404 for Plan contents).

(3) Filing fee in the amount specified in the fee schedule as established by resolution or ordinance of the Borough Council.

(4) Performance bond, when applicable (see Section 409 for specifications).

(5) Liability insurance, when applicable.

§ 404. Storm Water Management Plan Contents. Storm water management plans shall be prepared by professionals registered in the Commonwealth of Pennsylvania to perform such duties. Designs which entail engineering expertise shall be prepared by engineers with appropriate expertise. The plan shall show, be accompanied by, or be prepared in accordance with the following:

A. General Requirements for Project Plan:.

(1) Plan(s) of the project area shall be submitted on 24-inch x 36-inch sheets and shall be legible in every detail and prepared in a form that meets the requirements for recording purposes in the office of the Recorder of Deeds for Cumberland County, Pennsylvania, or other designated agency. The contents of the plan(s) shall include, but not be limited to:

a. Name and address of landowner, applicant, and individual who prepared the plan.

b. Plan date and date of latest revision to plan, north point, graphic scale and written scale.

c. Location map, drawn to scale, relating the property to at least two (2) intersections of existing road centerlines, including the approximate distance to the intersection of the centerlines of the nearest existing street intersection.

d. Note on plan indicating any area that is proposed to be offered for dedication to the Borough. Any area that is subject to an easement and not to be offered for dedication shall be identified along with a statement that the Borough is not responsible for the maintenance of any area not dedicated to and accepted for public use.

e. Certificate, signed and sealed by an individual registered in the Commonwealth of Pennsylvania and qualified to perform such duties, indicating compliance with the provisions of this Ordinance, and the following signature block for the Municipal Engineer:

"I, _____, (signature) on this date _____, have reviewed and hereby certify that the Drainage Plan meets all design

(5) Plans and profiles of proposed storm water management facilities including horizontal and vertical location. Additionally, a detail with all pertinent construction requirements shall be provided for outlet structures. This information shall be of the quality required for the construction of all facilities.

(6) The size, slope, capacity, material, elevation, and condition of the proposed storm water management system and other facility that may be used to convey storm flows. This information shall include invert elevations and top of grate elevations.

(7) Plans and profiles of all erosion and sedimentation control measures, temporary as well as permanent.

(8) Designation of the location of on-site sub-watersheds.

(9) Designation of the location of the time of concentration for the on-site sub-watersheds.

D. Written Report and Calculations.

(1) Calculations, assumptions, criteria, methodology, and references used in the design of storm water management facilities, the establishment of capacities, and the pre-development and post-development peak discharge. This information shall include data on all sub-watersheds. Applicants are encouraged to follow the Standard Computation Table provided in Appendix No. 5.

(2) For all basins, a plotting or tabulation of the storage volumes and discharge curves with corresponding water surface elevations, inflow hydrographs and outflow hydrographs.

(3) Soil structures and characteristics shall be provided for all proposed groundwater recharge systems, and detention or retention basins which (a) hold two (2) acre feet or more of water, or (b) have an embankment that is six (6) feet or more in height. Plans and data prepared by a registered professional experienced and educated in soil mechanics shall be submitted. This data shall provide design solutions for frost heave potential, spring-swell potential, soil bearing strength, water infiltration, soil settling characteristics, fill and back-filling procedures and soil treatment techniques as required to protect the improvements or structures.

The following requirements apply to all proposed groundwater recharge methods of storm water management, such as seepage pits, beds, trenches, leaching wells, and cisterns:

(a) Representative percolation tests must be made throughout the proposed area. At least one percolation test must be included in each soil group and at least one percolation test must be conducted for each five lots proposed for development. Testing, in general, should follow the same guidelines as though testing for an on-lot septic system.

(b) Seepage pits, beds or trenches shall not be permitted for any development of more than five lots, without prior approval of the Borough.

(4) Description of all erosion and sedimentation control measures, temporary as well as permanent, including the staging of land moving activities, sufficient in detail to clearly indicate their function. All erosion and sedimentation control measures shall conform to the requirements of the Pennsylvania Department of Environmental Protection, Soil Erosion and Sedimentation Control Manual.

(5) Description of an ownership and maintenance program, in a recordable form, that

public health, safety and welfare. The Borough Council may waive any mandatory provision of these regulations to the benefit of the applicant provided that the Borough Council determines that the waiver:

1. Is consistent with the purpose of this Ordinance as described in Section 103;

2. Will remove or reduce an unreasonable standard or undue hardship as it applies to the particular property, which is grossly disproportionate to any benefit derived from the standard, or when an alternative standard provides equal or better results; and

3. Provides for reasonable utilization of the property while securing the public interest. It shall be the burden of the applicant to demonstrate compliance with the above conditions.

B. Waiver Application. Notwithstanding the ability of the Borough Council to independently consider a waiver, all requests for waivers which are desired by the applicant shall be submitted to the designated Borough representative, at the Borough building, on any business day. A waiver request shall include twelve (12) copies of all applicable plans, reports and supplementary data and one (1) application form.

C. Distribution. One (1) copy of the waiver request will be distributed to the Borough Manager, Borough Planning Commission, Borough Zoning Officer, Borough Engineer, Borough Council and, if necessary, other officials.

D. Review of the Waiver. The waiver is reviewed by the Borough staff and Planning Commission. Recommendations are forwarded to the Borough Council.

E. Ruling on the Waiver. The Borough Council shall have the authority to approve or disapprove the waiver. In granting any waiver, the Borough Council may impose such conditions as will, in its judgment, secure substantially the objectives of the standards and requirements of this Part. Action on the waiver shall be entered in the minutes of the Borough Council and forwarded to the applicant. Failure of the Borough Council to render a decision and communicate it to the applicant as described herein shall not be a deemed approval of the waiver.

§407. Expiration of a Storm Water Management Permit. All Storm Water Management Permits shall expire twelve (12) months from the date of issuance unless an extension of time is approved. An extension of an unexpired Storm Water Management Permit shall be issued by the Borough Engineer following the submission of a written request if, in the opinion of the Borough Engineer, the following characteristics are present: (1) the subject property or affected surrounding area has not been altered in a manner which requires alteration to the Storm Water Management Plan, and (2) in the case where substantial improvements have not been completed, any new standard would not alter the application. The refusal of an extension of time shall cite the reasons for such refusal. A Storm Water Management Permit shall not expire while a request for an extension is pending, however any work or activity performed while such request is pending shall be done or performed at the risk of the owner and persons engaged in such activity.

§408. Schedule of Inspections. Inspections shall be required prior to the start of construction, during installation of materials and structures, and upon the completion of all improvements. Prior to the initiation of construction, the developer shall arrange a pre-construction meeting with the

the final determination on the continuing maintenance responsibilities prior to final approval of the Project Plan. The Governing Body reserves the right to accept or reject the ownership and operating responsibility for any or all of the stormwater BMPs.

§411. Maintenance Agreement and Inspection fees for Stormwater BMPs

A. Prior to final approval of the Project Plan, the property owner shall sign a maintenance agreement covering all stormwater BMPs that are to be privately owned. The agreement shall be approved by the Borough Solicitor and similar in form to the agreement in Appendix No. 6 of this Ordinance, and may be recorded as an encumbrance on the property in the office of the Recorder of Deeds for Cumberland County, Pennsylvania, or other designated agency office.

B. In addition to said maintenance agreement, persons installing accepted stormwater storage BMPs shall be required to pay a specified amount to a Municipal Stormwater Maintenance Fund to help defray costs of periodic inspections and maintenance expenses. The amount of the deposit shall be determined as follows:

1. If the BMP is to be owned and maintained by the Borough of New Cumberland, the deposit shall cover the estimated costs for maintenance and inspections for ten (10) years. The municipal engineer will establish the estimated costs utilizing information submitted by the Applicant.

2. The amount of the deposit to the fund shall be converted to present worth of the annual series values. The Municipal Engineer shall determine the present worth equivalents, which shall be subject to the approval of the municipal Governing Body.

3. If a BMP is proposed that also serves as a recreation facility (e.g. ball field, lake), the Borough of New Cumberland may reduce or waive the amount of the maintenance fund deposit based upon the value of the land for public recreation purpose.

C. If at some future time a BMP (whether publicly or privately owned) is eliminated due to the installation of storm sewers or another BMP, the unused portion of the maintenance fund deposit will be applied to the cost of abandoning the facility and connecting to the storm sewer system or other facility. Any amount of the deposit remaining after the costs of abandonment are paid will be returned to the depositor.

D. Other items may be included in the agreement where determined necessary to guarantee the satisfactory maintenance of all facilities. The maintenance agreement shall be subject to the review and approval of the municipal solicitor and Governing Body.

§412. Maintenance Guarantee. The Borough may, prior to issuing a storm water management permit, require the applicant to submit a maintenance guarantee for the structural integrity as well as function of any storm water management facility for a term not to exceed eighteen (18) months from the date of acceptance of dedication by the Borough Council. Said guarantee shall not exceed fifteen (15) percent of the actual cost of installation of said improvements and be of the same type of financial security.

§413. As-built Plans. Upon completion of all required improvements and prior to release of the performance bond, the applicant shall submit an as-built plan showing the location, dimension and elevation of all storm water management facilities. In addition, the plan shall

§ **415**. Right to Enter. The submission of any Application for a permit shall constitute irrevocable consent to the Borough, its officials, employees, Engineer, consultants and contractors, to enter the premises to perform any act necessary to insure compliance with this Chapter, including, but not limited to, inspections, completion of required work, remediation of work, maintenance, etc. Nothing herein shall be construed to place a duty, obligation or requirement on the Borough to do or perform any of the foregoing.

ARTICLE V
Design Standards

§501. General Design Standards. In the interest of reducing the total area of impervious surface, preserving existing features which are critical to storm water management, and reducing the concentration of storm water flow, the designer should consider imaginative design concepts and the flexibility provided by the waiver process. Maximum use should be made of the existing on-site natural and manmade storm water management facilities.

§502. Design Standards. The management of storm water, both during and upon completion of the disturbance associated with a land disturbance activity, shall be accomplished in accordance with the standards of this Part.

A. Pre-Development vs. Post-Development. The peak discharge of the calculated post-development runoff to an adjacent property shall be based upon the location of the property.

(1) The calculated post-development runoff from a property located within an Act 167 studied watershed shall be consistent with the peak outflow rates specified in the Act 167 Storm Water Management Plan. Areas below area requirements of a study must meet the provisions of paragraph C of this section.

(2) The calculated post-development runoff from property located within the Yellow Breeches Stream and Susquehanna River Watershed shall be designed so that the peak discharge of the calculated post-development runoff to an adjacent property does not exceed the peak discharge of the calculated pre-development runoff for a Type II storm event. The twenty-four (24) hour rainfall values are as follows:

Frequency	Rainfall
2 year	2.9"
10 year	4.7"
25 year	5.1"
100 year	6.4"

Runoff calculations for the pre- and post-development comparison shall be based upon the peak flow from a two (2), ten (10), twenty-five (25), and one hundred (100) year storm frequency. The peak discharges and volumes of runoff shall be determined by using the Rational Method for watersheds less than fifteen (15) acres, and for larger watersheds, the latest version of Technical Release No. 55, Urban Hydrology for Small Watersheds, or an acceptable engineering method, subject to Borough approval. For pre-development computations, all runoff coefficients within the project shall be based on meadow use. Off-site land use conditions used to determine storm flows for designing storm facilities shall be based on existing land uses.

B. Design Storm For Collection Facilities. The design of storm water management collection

G. Groundwater Recharge System. The use of groundwater recharge systems will only be permitted in cases where the applicant has demonstrated that alternative facilities are not possible and the area is not a known sinkhole-prone location.

H. Earth Fill Dams. Basins which are designed with earth fill dams shall be designed by a registered professional engineer with experience in earth-filled dams and shall incorporate the following minimum standards:

(1) The maximum water depth (measured from the base to the crest of the emergency spillway) shall not exceed six (6) feet, unless approved by waiver of the Borough.

(2) The minimum top width of all dams shall be five (5) feet, unless approved by waiver of the Borough.

(3) The side slopes of earth fill dams shall not be steeper than three (3) horizontal to one (1) vertical on both sides of the embankment.

(4) Basins without restricted access shall have impoundment areas with side slopes no greater than five (5) horizontal to one (1) vertical.

(5) A cutoff trench of impervious material shall be provided under all dams.

(6) All pipes and culverts through dams shall be reinforced concrete and have properly spaced concrete cutoff collars.

(7) All riser pipes shall be reinforced concrete.

(8) Minimum floor elevations for all structures that would be affected by a basin, other temporary impoundments, or open conveyance systems where ponding may occur shall be two (2) feet above the 100-year water surface and/or one (1) foot above the 500-year water surface. If basement or underground facilities are proposed, detailed calculations addressing the effects of storm water ponding on the structure and water-proofing and/or flood-proofing design information shall be submitted for approval.

The Borough may, upon recommendation of the Borough Engineer, impose additional requirements on earth fill dams for the safety and welfare of the Borough.

I. Capacities. The capacities of the pipes, gutters, inlets, culverts, outlet structures, and swales shall consider all possible hydraulic conditions. The following are minimum design standards:

(1) Grass swales and roadside gutters shall consider both the channel velocity and stability.

(2) The "n" factors to be used for paved or rip-rap swales or gutters shall be based on the latest edition of the Pennsylvania Department of Transportation Design Manual, Part 2, Highway Design, Chapter 10.

(3) The "n" factors for corrugated metal pipe shall be based upon the manufacturer's standard.

(4) The velocity to be used in the design of any piped storm water conveyance system shall be a minimum of two and one-half (2 1/2) feet per second.

(6) Grass-lined channels shall be considered stable if the calculated velocity does not exceed the allowable velocities shown below or if permitted by the Erosion and Sediment Pollution Control Program Manual as maintained or established by DEP.

(i) Three (3) feet per second where only sparse vegetation can be established and maintained because of shade or soil condition.

(ii) Four (4) feet per second where normal growing conditions exist and vegetation is to be established by seeding.

(iii) Five (5) feet per second where a dense, vigorous sod can be quickly established or where water can be temporarily diverted during establishment of vegetation. Netting and mulch or other equivalent methods for establishing vegetation shall be used.

(iv) Six (6) feet per second where there exists a well established sod of good quality. Where swale bends occur, the allowable velocities listed above shall be divided by the following factors:

Degree of Bend Velocity
0 to 30 1.50
30 to 60 1.75
60 to 90 2.00
90 and over 2.50

The above grass-lined channel flows may be exceeded if the designer can provide acceptable supportive design criteria as proof of erosion prevention.

(7) Where the velocity of storm water runoff exceeds the allowable velocity, erosion protection must be provided. The method of erosion protection proposed must be supported by the appropriate design information and/or references.

(8) Sump Pump discharges and roof drains will be directed to lawn areas away from residences, into areas that will surface drain to conveyance structures (e.g., swales and storm sewer collection systems).

P. Phasing Plans. When applications are submitted in phases, and if temporary facilities are required for construction of a phase, such facilities shall be included in the submitted plans. All phases of development must comply with the provisions of this Part. In the event temporary measures cannot adequately handle the storm water runoff, the main outfall line shall be included as part of the construction of the proposed phase.

Q. Erosion and Sedimentation. All land disturbance facilities shall conform to the requirements of the Cumberland County Soil Conservation District and the Pennsylvania Department of Environmental Protection, and with the following provisions:

(1) No Regulated Earth Disturbance activities within the Borough shall commence until it has approved an Erosion and Sediment Control Plan for construction activities.

(2) Any earth disturbance activity of 5,000 square feet or more shall require an Erosion and Sediment Control Plan submitted and approved in accordance with the Pennsylvania Department of Environmental Protection as set forth in 25 Pa. Code § 102.4(b) and any other pertinent regulations.

(2) Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by Borough Council.

(3) Stormwater management easements shall be provided where storm water or surface water drainage facilities are existing or proposed, whether located within or beyond the boundaries of the property. Easements for maintenance of pipes and culverts shall run from outlet to inlet. Normal lot grading will not require easements. Swales which receive runoff rom more than one other lot must be provided with an easement. Easements shall have a minimum width of twenty (20) feet and shall be adequately designed to provide area for (a) the collection and discharge of water, (b) the maintenance, repair, and reconstruction of the drainage facilities, and (c) the passage of machinery for such work. When considered appropriate, easements shall include a description of an ownership and maintenance program, in a recordable form, that clearly sets forth responsibility for all temporary and permanent storm water management facilities.

T. Ownership and Maintenance of Storm Water Management Facilities. The intent of these regulations is to provide private ownership and maintenance of storm water management facilities, erosion and sedimentation control facilities and floodplain control facilities. Under no circumstances does the Borough intend to accept dedication of erosion control and sedimentation basins. The Borough does not encourage the dedication of storm water management facilities that are located outside public street rights-of-way. Where the Storm Water Management Plan proposes that the Borough own or maintain a storm water management facility, a description of the methods, procedures, and the extent of maintenance shall be described in such an offer.

Maintenance of all storm water management facilities during development shall be the sole responsibility of the developer and shall include, but not be limited to:

(1) Removal of silt from all basins, traps or other structures or measures when thirty percent (30%) of capacity is filled with silt;

(2) Periodic maintenance of temporary control facilities as described in the soil erosion and sedimentation control plan such as replacement of silt fencing, straw filters or similar measures;

(3) Establishment or re-establishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not successfully been established;

(4) Installation of necessary controls to correct unforeseen problems caused by storm events within designed frequencies;

(5) Removal of all temporary measures and installation of permanent measures upon completion of the project; and

(6) Requirements of the Pennsylvania Department of Environmental Protection, Chapter 102 Regulations. Ownership of all storm water management facilities after construction shall be the sole responsibility of the developer or the private landowner as set forth in the plan. The only storm water management facilities which are to be controlled by the Borough shall be those facilities which have been offered for dedication and accepted for dedication by the Borough. Future offers for dedication can only be made for facilities which meet current Borough specifications.

ii. In conjunction with this requirement, the maximum slope allowed on the berm area to be planted is 10 to 1. This will lessen the destabilization of berm soils due to root growth.

iii. A long term maintenance schedule and management plan for the thermal control BMP's is to be established and recorded for all development project sites.

iv. The Applicant may, subject to approval of the Borough of New Cumberland, use any of the following stormwater credits, described in the following table, in computing the required Water Quality Volume:

G. Stormwater Credit Description

i. Preservation of Natural Areas

ii. Conservation of natural areas such as forest, wetlands, or other sensitive areas in a protected easement thereby retaining their pre-development hydrologic and water quality characteristics. Using this credit, a designer may subtract conservation areas from total site area when computing the required water quality volume.

iii. Disconnection of Rooftop Runoff. Credit is given when rooftop runoff is disconnected and then directed over a pervious area where it may either infiltrate into the soil or filter over it. Credit is typically obtained by grading the site to promote overland flow or by providing bioretention on single-family residential lots. If a rooftop area is adequately disconnected, the impervious area may be deducted from the total impervious cover.

iv. Disconnection of Non-Rooftop Runoff. Credit is given for practices that disconnect surface impervious cover by directing it to pervious areas where it is either infiltrated or filtered though the soil. As with rooftop runoff, the impervious area may be deducted from the total impervious cover thereby reducing the required water quality volume.

v. Stream Buffer Credit. Credit is given when a stream buffer effectively treats storm water runoff. Effective treatment constitutes capturing runoff from pervious and impervious areas adjacent to the buffer and treating the runoff through overland flow across a grass or forested area. Areas treated in this manner may be deducted from total site area.

vi. Grass Channel (Open Section Roads) Credit may be given when open grass channels are used to reduce the volume of runoff and pollutants during smaller storms. If designed according to appropriate criteria, these channels may meet water quality criteria for certain types of residential development.

vii. Environmentally Sensitive Rural. Credit is given when a group of environmental site design techniques are applied to low density or rural residential development.

H. The volume and rate of any stormwater discharges allowed under this Ordinance must be managed to prevent the physical degradation of receiving waters, such as by streambank scour and erosion. If a detention facility is proposed which is part of the BMPs approved for the

C 0.13

D 0.06

If more than one hydrologic soil group (HSG) is present at a site, a composite recharge volume shall be computed based upon the proportion of total site area within each HSG.

ii. In selecting the appropriate infiltration BMP's, the Applicant shall consider the following:

(a) Permeability and infiltration rate of the site soils.

(b) Slope and depth to bedrock.

(c) Seasonal high water table.

(d) Proximity to building foundations and well heads

(e) Erodibility of soils

(f) Land availability and topography

i. A detailed soils evaluation of the project site shall be performed to determine the suitability of infiltration BMPs. The evaluation shall be performed by a qualified professional, and at a minimum, address soil permeability, depth to bedrock, susceptibility to sinkhole formation, and sub-grade stability. The general process for designing the infiltration BMP shall be:

ii. Analyze hydrologic soil groups as well as natural and manmade features within the watershed to determine general areas of suitability for infiltration BMPs.

iii. Provide field testing data to determine appropriate percolation rate and/or hydraulic conductivity.

(iv) Design infiltration BMPs for required stormwater volume based on field-determined capacity at the level of the proposed infiltration surface

(g). Infiltration BMPs are particularly appropriate in hydrologic soil groups A and B, as described in the Natural Resources Conservation Service Manual TR-55.

(h) Low-Erodibility factors ("K" factors) are preferred for the construction of basins shall have.

(i) There must be a minimum depth of 48 inches between the bottom of any facility and the seasonal high water table and/or bedrock (limiting

and sealed by the Applicant's licensed engineer/surveyor/landscape/ architect/geologist if a detention facility is proposed: "I certify that the proposed facility is/is not underlain by limestone."

E. During the period of land disturbance, runoff shall be controlled prior to entering any proposed infiltration area, areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase, so as to maintain their maximum infiltration capacity

F. Infiltration BMPs shall not be constructed nor receive runoff until the entire contributory drainage area to the infiltration BMP has received final stabilization

§603. Design Criteria for Stormwater Management BMPs

A. Applicants may select a combination of runoff control techniques which are most suitable to control stormwater runoff from the site. All controls shall be subject to approval of the municipal engineer. The municipal engineer may request specific information on design and/or operating features of the proposed stormwater controls in order to determine their suitability and adequacy in terms of the standards of this Section.

B. The Applicant shall consider the effect of the proposed stormwater management techniques on any special soil conditions or geological hazards which may exist on the development site. In the event such conditions are identified on the site, the municipal engineer may require in-depth studies by a competent geo-technical Engineer.

C. The stormwater management BMPs shall be selected according to the following order of preference:

i. Site planning for locating proposed buildings, impervious areas and grading which minimizes disruption of the natural site characteristics

ii. Minimization of impervious areas and promotion of retentive grading

iii. Implementation of innovative non-structural measures.

iv. Infiltration of runoff on-site

v. Flow attenuation by use of open vegetated swales and natural depressions.

vi. Stormwater detention/retention structures.

D. Any BMP which is a dam, culvert, stream enclosure or outfall as defined in 25 Pa. Code Chapter 105 shall be designed according to the requirements in those regulations.

E. Any stormwater BMP, which does not constitute a dam under 25 Pa. Code Chapter 105, and is designed to store runoff and requiring a berm or earthen embankment (i.e. detention basin), shall be designed to satisfy the following:

i. Berms and earthen embankments shall be designed to provide an emergency

Rational "C" value, such as forested lands.

E. All calculations consistent with this Ordinance using the Soil Cover Complex method shall use the appropriate design rainfall depths for the various return period storms presented in this Ordinance. If a hydrologic computer model such as TR-20, PSRM or HEC-HMS is used for stormwater runoff calculations, then the duration of rainfall shall be 24 hours.

F. All calculations using the Rational Method shall use rainfall intensities consistent with appropriate times of concentration for overland flow and return periods from the Design Storm Curves from PA Department of Transportation Design Rainfall Curves (1986) . Times of concentration for overland flow shall be calculated using the methodology presented in Chapter 3 of Urban Hydrology for Small Watersheds, NRCS, TR-55 (as amended or replaced from time to time by NRCS). Times of concentration for channel and pipe flow shall be computed using Manning's equation.

G. Runoff Curve Numbers (CN) for both existing and proposed conditions to be used in the Soil Cover Complex method shall be required.

H. Runoff coefficient "C" for both existing and proposed conditions for use in the Rational Method shall be required.

I. Where uniform flow is anticipated, the Manning equation shall be used for hydraulic computations, and to determine the capacity of open channels, pipes, and storm sewers. Values for Manning's roughness coefficient (n) shall be consistent with this Ordinance.

J. Outlet structures for stormwater management facilities shall be designed to meet the performance standards of this Ordinance using any generally accepted hydraulic analysis technique or method.

K. The design of any stormwater detention facilities intended to meet the performance standards of this Ordinance shall be verified by routing the design storm hydrograph through these facilities using the Storage-Indication Method. For drainage areas greater than 20 acres in size, the design storm hydrograph shall be computed using a calculation method that produces a full hydrograph. The Borough of New Cumberland may approve the use of any generally accepted full hydrograph approximation technique, which shall use a total runoff volume that is consistent with the volume from a method that produces a full hydrograph.

L. The Borough of New Cumberland may require that computed existing runoff rates be reconciled with field observations and conditions. If the design professional can substantiate through actual physical calibration that more appropriate runoff and time-of-concentration values should be utilized at a particular site, then appropriate variations may be made upon review and recommendations of the Municipal Engineer. Calibration shall require detailed gauge and rainfall data for the particular site in question.

(ACCEPTABLE COMPUTATION METHODOLOGIES FOR STORMWATER MANAGEMENT PLANS- METHOD DEVELOPED BY APPLICABILITY)
TR-20 or commercial Package
Based on TR-20 USDA - NRCS when use of full model is desirable or necessary
Tr-55 OR Commercial
Package Based on TR-55 USDA - NRCS
Applicable for plans within the models limitations
HEC - 1 U.S. Army Corps of Eng.

§703. Notice to cease discharging. If at any time, the Borough determines that any of the discharges identified in Section 702 significantly contribute to the pollution of waters of the Commonwealth, or is so notified by the Commonwealth of Pennsylvania Department of Environmental Protection, the Borough will notify the responsible person to cease the discharge.

§704. Cessation of discharge. Upon notice provided by the Borough under Article VII, the discharger will have a reasonable time, as determined by the Borough, in its sole discretion, to cease the discharge consistent with the degree of pollution caused by the discharge.

§705. Discharge liability to remain unaffected. Notwithstanding the provisions of §702, nothing in this Chapter shall be construed to absolve, abrogate, discharge or release any liability of a discharger under any local, state or federal law, or any regulation promulgated thereunder.

§706. Prohibited Residential Connections.

A. General Prohibitions. Except as permitted under the provisions of §702 no drain or conveyance, whether on the surface or subsurface, shall allow any on-storm water discharge including sewage, process waste water, and wash water, to enter the separate storm sewer system. No indoor drain or sink shall connect to the storm drain system.

B. Roof Drains.

i. Roof drains shall not be directly connected to streets, sanitary or storm sewers or roadside ditches , except where it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted on a case by case basis by the engineer of the Borough of New Cumberland.

ii. Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

§707. Prohibited Commercial or industrial connections. No drain or conveyance shall be connected from a commercial or industrial land use to the separate storm sewer system unless upon prior approval by the Borough, and upon the further condition that such connection shall be documented in plans, maps, or equivalent records, placed on file with the Borough.

ARTICLE VIII
Administration

§801. Fees and Expenses The fees required by this Ordinance are the Stormwater Management Plan Review Fee and the Borough of New Cumberland Inspection Fee. The Stormwater Management Plan Review fee shall be established by the Borough of New Cumberland by resolution to defray review costs incurred by the Borough of New Cumberland and the Municipal Engineer. The Applicant shall pay all fees at stages required by resolution. The Borough of New Cumberland shall periodically update the Stormwater Management Plan Review Fee Schedule to ensure that review costs are adequately reimbursed.

§802. Expenses covered by review fees

B. Revoke a Storm Water Management Permit. Based upon a report from the Borough Engineer that the existing site condition or further construction is likely to endanger property or create hazardous conditions, the Borough may:

(1) Revoke a permit.

(2) Require protective measures to be taken and assign a reasonable time period for the necessary action.

(3) Authorize protective measures to be done and lien all cost of the work against the property on which work is required. A permit which has been revoked cannot be reinstated. The applicant may apply for a new permit in accordance with the processing procedures in Subtitle C of this part.

C. Notification of Suspension or Revocation of a Storm Water Management Permit. In the event of a suspension or revocation of a Storm Water Management Permit, the Borough shall provide written notification of the violation to the landowner and/or applicant and to any person who has or is engaged in performing, causing or conducting a Land Disturbance Activity at their last known addresses. Such notification shall:

(1) Cite the specific violation, describe the requirements which have not been met, and cite the provisions of the Part relied upon.

(2) Identify the specific protective measures to be taken.

(3) Assign a reasonable time period necessary for action or in the case of revocation, identify if the Borough has authorized protective measures to be performed at cost to the landowner.

(4) Identify the right to request a hearing before the Borough Council if aggrieved by the suspension or revocation.

D. Civil Remedies. Suits to restrain, prevent, or abate a violation of this Part may be instituted in equity or at law by the Borough. Such proceedings in equity or law may be initiated before any court of competent jurisdiction. In cases of emergency where, in the opinion of the court, the circumstances of the case require immediate abatement of the unlawful conduct, the court may, in its decree, fix a reasonable time during which the person responsible for the unlawful conduct shall correct or abate the same. The expense of such proceedings shall be recoverable from the violator in such manner as may now or hereafter be provided by law.

§804. Penalties. Any person who shall violate any of the provisions of this Ordinance, or who shall fail to comply with any written notice from Borough of New Cumberland which describes a condition of noncompliance shall be subject to a fine payable to Borough of New Cumberland of not more than one thousand ($1,000) dollars for each violation, recoverable with cost. After receipt of the written notice, each day's violation of any provision of this Ordinance shall constitute a separate violation. In addition, the Borough may institute injunctive, or any other appropriate action or proceeding of law or in equity for the enforcement of this Ordinance, including actions for the abatement of any public nuisance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, writs, or other appropriate forms of remedy or relief.

§805. Inspection of Property. Upon presentation of proper credentials, duly authorized

CERTIFICATE

I, Stephen C. Sultzaberger, Secretary of the Borough of New Cumberland, Cumberland County, Pennsylvania (the "Borough"), certify that: the foregoing is a true and correct copy of an Ordinance of the Council of the Borough of New Cumberland (the "Council"), which duly was enacted by affirmative vote of a majority of the members of the Council at a meeting held on August 3, 2005; being approved by the Mayor on August 3, 2005; said Ordinance duly has been recorded in the Ordinance Book of the Borough; said Ordinance duly has been published as required by law; and said Ordinance remains in effect, unaltered and unamended, as of the date of this Certificate.

IN WITNESS WHEREOF, I set my hand and affix the official seal of the Borough, this 3rd day of August, 2005.

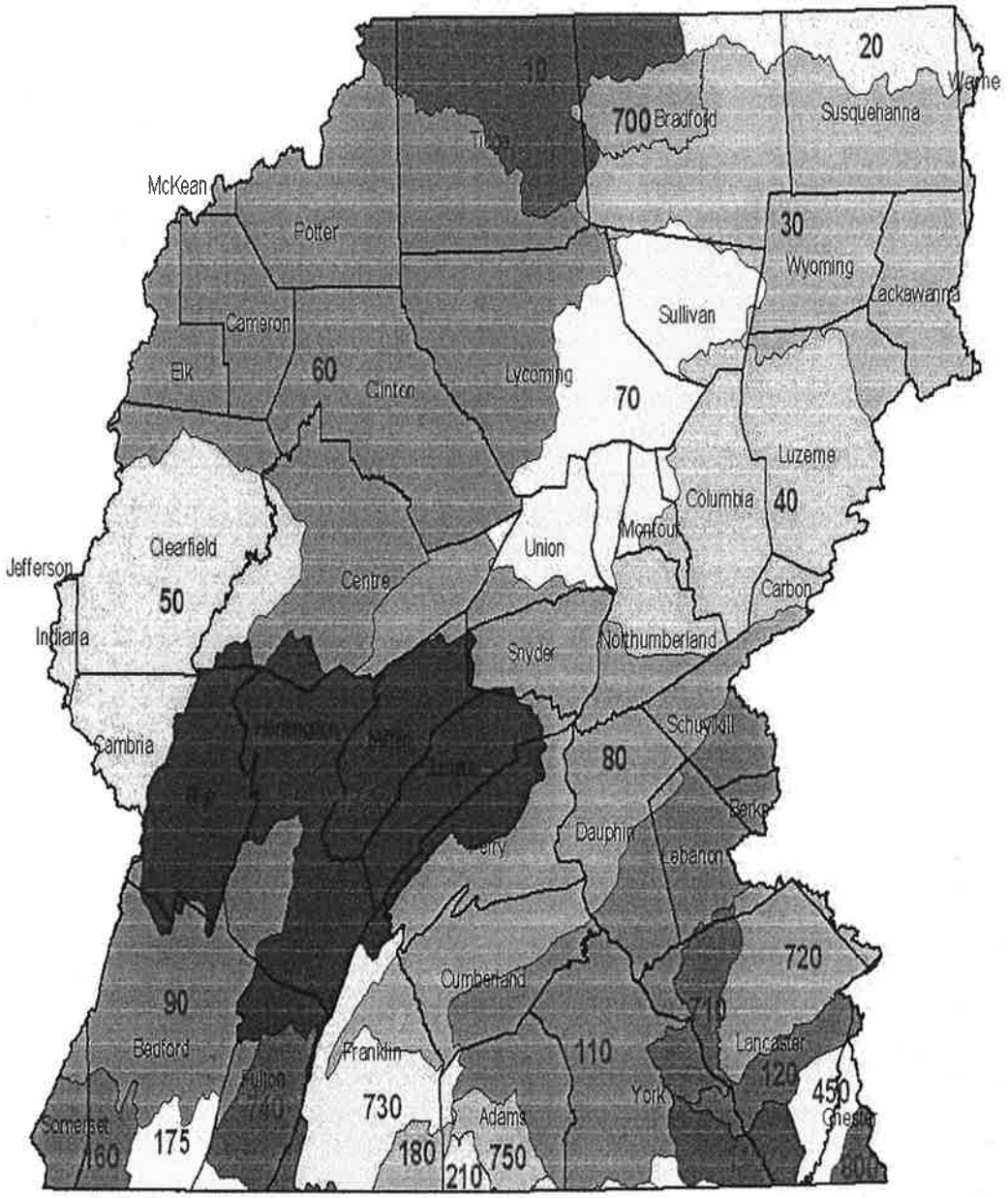
Stephen C. Sultzaberger

Secretary
(SEAL)

Delivery Ratio Map

This map is coded by colors and each color corresponds to a segment (the number in green). This segment number will then allow you to choose the appropriate nitrogen or phosphorous delivery ratio from the table listed on the second page.

So for example, if your property is in Bedford, you would be segment 90 which would give a nitrogen delivery ratio of 0.897 and a phosphorus delivery ratio of 0.436.



NITROGEN DELIVERY RATIO
2003 Implementation Model Run

SEGMENT	Nitrogen Delivery Ratio
10	0.474
20	0.495
30	0.733
40	0.871
50	0.836
60	0.930
70	0.941
80	0.951
90	0.897
100	0.880
110	0.961
120	0.960
140	0.990
160	0.583
175	0.700
180	0.819
210	0.720
450	1.000
470	1.000
700	0.700
710	0.970
720	0.891
730	0.683
740	0.749
750	0.627
800	1.000

PHOSPHORUS DELIVERY RATIO
2003 Implementation Model Run

SEGMENT	Phosphorus Delivery Ratio
10	0.436
20	0.436
30	0.436
40	0.436
50	0.436
60	0.436
70	0.436
80	0.436
90	0.436
100	0.436
110	0.436
120	0.436
140	0.436
160	0.670
175	0.670
180	0.670
210	0.669
450	1.000
470	1.000
700	0.436
710	0.436
720	0.436
730	0.670
740	0.670
750	0.670
800	1.000

Point Source Calculation Example

This example will look at calculating credits that could be generated and credits that would be needed for permit compliance.

XYZ facility is located in segment 110 which has the following delivery ratios, 0.961 (for nitrogen) and 0.436 (for phosphorus). This facility has a cap load of 18,265 lbs/yr of nitrogen and 2,435 lbs/yr of phosphorus.

In the first calculation, the facility is basing their calculation on past DMR information which showed that the facility was under the cap load and only discharged 17,562 lbs/yr of nitrogen. The second calculation shows the facility how to calculate credits that would be needed since they are over the cap load limit and the current discharge is 19,526 lbs/yr of nitrogen.

Credits Generated Calculation

Step 1: Cap load – Current Discharge Load
18,265 – 17,562= 703

Step 2: Step 1(Delivery Ratio)
703(0.961) = 675.58

Step 3: Step 2(Reserve Ratio)
333.22 (10%) = 67.56

Step 4: Step 2 – Step 3
675.58-67.56 = 608.02

XYZ would have 608 Nitrogen credits available for sale.
(Note: Same method would be followed for calculating Phosphorus credits.)

Credits Needed Calculation

Step 1: Cap Load – Current Discharge Load
18,265 – 19,526= -1261

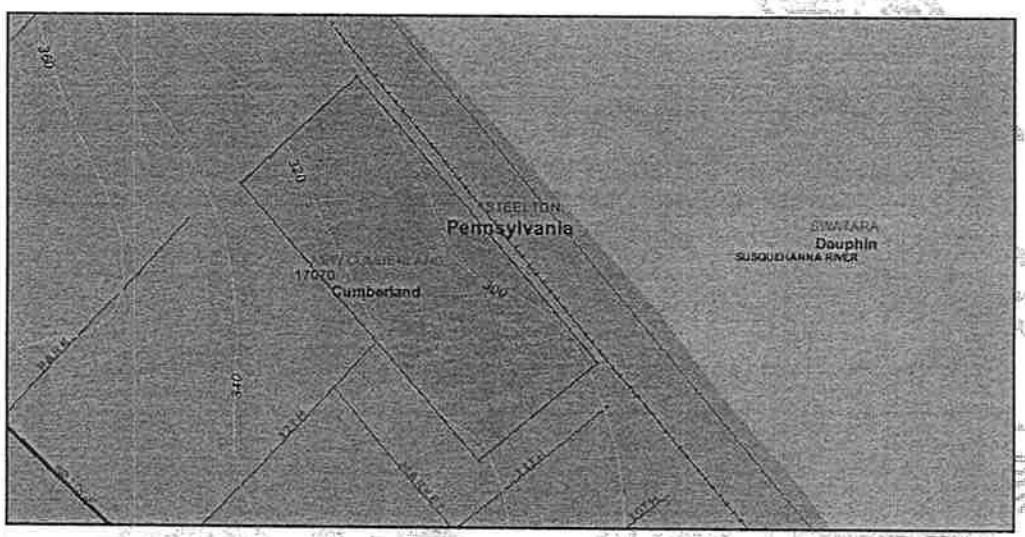
Step 2: Step 1 (Delivery Ratio)
1,261(0.961) = 1,211.82

XYZ would have to purchase 1,212 Nitrogen credits.
(Note: Same method would be followed for calculating Phosphorus credits.)

The information outlined in this document is intended to supplement existing requirements. Nothing in this shall affect regulatory requirements. The information herein is not an adjudication or a regulation. There is no intent on the part of the Department to give the rules in this document that weight or deference. This document establishes the framework, within which the Department will exercise its administrative discretion in the future. The Department reserves the discretion to deviate from this policy statement if circumstances warrant.

PNDI Project Environmental Review Receipt
Project Search ID: 20081001161291
Project Name: New Cumberland Boro Act 537
Date: 10/1/2008 2:05:51 PM

Project Location



Project Name: New Cumberland Boro Act 537
On Behalf Of: Local Government
Project Search ID: 20081001161291
Date: 10/1/2008 2:05:45 PM
# of Potential Impacts: 0
Jurisdictional Agency:
Project Category: Waste Transfer, Treatment, and Disposal,Liquid waste/Effluent,Sewage module/Act 537 plan
Project Location
Decimal Degrees: 40.23548 N, -76.8732 W
Degrees Minutes Seconds: 40° 14' 7.7" N, 76° 52' 23.6" W
Lambert: 315014.59274889, 451947.20327933 ft
ZIP Code: 17070
County: Cumberland
Township/Municipality: NEW CUMBERLAND
USGS 7.5 Minute Quadrangle ID: 262
Quadrangle Name: STEELTON
Project Area: 7.5 acres

Location Accuracy

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

0 Known Impacts

Under the Following Agencies' Jurisdiction:
None

Pennsylvania State Programmatic General Permit (PASPGP)

Please note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) are required by DEP to comply with the bog turtle habitat screening requirements of the PASPGP.

 APPLICANT INITIALS: dlw

PNDI Project Environmental Review Receipt

Project Search ID: 20081001161291
Project Name: New Cumberland Boro Act 537
Date: 10/1/2008 2:05:51 PM

Pennsylvania Natural Diversity Inventory (PNDI) records do **NOT** indicate any known impacts on special concern species and resources within the project area. DEP requires a signed copy of this receipt with permit applications being submitted as indication that an environmental review has been conducted and completed. See DEP PNDI policy at www.naturalheritage.state.pa.us for more information.

Based on the information you provided, no further coordination is required by the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, or the Pennsylvania Department of Conservation and Natural Resources with regard to special concern species, natural communities, or outstanding geologic features. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Based on the project-specific information you provided, no impacts to federally listed, proposed, or candidate species are anticipated. Therefore, no further consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.* is required with the U.S. Fish and Wildlife Service. Because no take of federally listed species is anticipated, none is authorized. For a list of species that could occur in your project area (but have not been documented in PNDI), please see the county lists of threatened, endangered, and candidate species. A field visit or survey may reveal previously undocumented populations of one or more threatened or endangered species with a project area. If it is determined that any federally listed species occur in your project area, the U.S. Fish and Wildlife Service requires that you initiate consultation to identify and resolve any conflicts. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

These determinations were based on the project-specific information you provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the information you provided does not accurately reflect this project, or if project plans change, DEP and the jurisdictional agencies require that another PNDI review be conducted.

This response represents the most up-to-date summary of the PNDI data files and is good for one(1) year from the date of this PNDI Project Environmental Review Receipt.

DISCLAIMER

The PNDI environmental review website is a preliminary environmental screening tool. It is not a substitute for information obtained from a field survey of the project area conducted by a biologist. Such surveys may reveal previously undocumented populations of species of special concern. In addition, the PNDI only contains information about species occurrences that have actually been reported to the Pennsylvania Natural Heritage Program.

TERMS OF USE

Upon signing into the PNDI environmental review website, and as a condition of using it, you agreed to certain terms of use. These are as follows:

The web site is intended solely for the purpose of screening projects for potential impacts on resources of special concern in accordance with the instructions provided on the web site. Use of the web site for any other purpose or in any other way is prohibited and subject to criminal prosecution under federal and state law, including but not limited to the following: Computer Fraud and Abuse Act of 1986, as amended, 18 U.S.C. Â§ 1030; Pennsylvania Crimes Code, Â§ 4911 (tampering with public records or information), Â§ 7611 (unlawful use of computer and other computer crimes), Â§ 7612 (disruption of service), Â§ 7613 (computer theft), Â§ 7614 (unlawful duplication), and Â§ 7615 (computer trespass).

 APPLICANT INITIALS: CW

PNDI Project Environmental Review Receipt

Project Search ID: 20081001161291
Project Name: New Cumberland Boro Act 537
Date: 10/1/2008 2:05:51 PM

The PNHP reserves the right at any time and without notice to modify or suspend the web site and to terminate or restrict access to it.

The terms of use may be revised from time to time. By continuing to use the web site after changes to the terms have been posted, the user has agreed to accept such changes.

This review is based on the project information that was entered. The jurisdictional agencies and DEP require that the review be redone if the project area, location, or the type of project changes. If additional information on species of special concern becomes available, this review may be reconsidered by the jurisdictional agency.

PRIVACY and SECURITY

This web site operates on a Commonwealth of Pennsylvania computer system. It maintains a record of each environmental review search result as well as contact information for the project applicant. These records are maintained for internal tracking purposes. Information collected in this application will be made available only to the jurisdictional agencies and to the Department of Environmental Protection, except if required for law enforcement purposesâ€"see paragraph below.

This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system consents to such monitoring and is advised that if such monitoring reveals evidence of possible criminal activity, system personnel may provide the evidence to law enforcement officials. See Terms of Use.
Print this Project Review Receipt using your Internet browser's print function and keep it as a record of your search.

Signature: Cynthia L. White

Date: 10/1/08

Project applicant on whose behalf this search was conducted:

APPLICANT

Contact Name: New Cumberland Borough
Address: 1120 Market St.
City, State, Zip: New Cumberland, PA 17070
Phone: 717-774-0404
Email:

PERSON CONDUCTING SEARCH (if not applicant)

Contact Name: FPE Consulting Engineers
Address: 100 S. Baltimore St.
City, State, Zip: Dillsburg, PA 17019
Phone: 717-432-2719
Email: fpeconsulting@aol.com

The following contact information is for the agencies involved in this Pennsylvania Natural Diversity Inventory environmental review process. Please read this entire receipt carefully as it contains instructions for how to contact these agencies for further review of this particular project.

APPLICANT INITIALS: clw

PNDI Project Environmental Review Receipt
Project Search ID: 20081001161291
Project Name: New Cumberland Boro Act 537
Date: 10/1/2008 2:05:51 PM



 APPLICANT INITIALS: clw

Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

October 29, 2008

FPE Consulting Engineers
100 S. Baltimore Street
Dillsburg, PA 17019

TO EXPEDITE REVIEW USE
BHP REFERENCE NUMBER

Re: File No. ER 2009-0024-041-A
USDA: Act 537-Wastewater Treatment Facility Upgrade, New Cumberland, Cumberland County

Dear Sir:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

There is a high probability that prehistoric and historic archaeological resources are located in this project area. In our opinion, the activity described in your proposal should have no effect on such resources. Should the scope of the project be amended to include additional ground disturbing activity this office should be contacted immediately and a Phase I Archaeological Survey may be necessary to locate all potentially significant archaeological resources.

In our opinion no evaluation of historic structures will be necessary for this project area.

If you need further information in this matter please consult Doug McLearen at (717) 772-0925.

Sincerely,

Douglas C. McLearen, Chief
Division of Archaeology & Protection

Cc: DEP, Southcentral Regional Office

DCM/tmw

Pennsylvania Historical & Museum Commission
Bureau for Historic Preservation

BHP Use Only
ER #

Request to Initiate Consultation in Compliance with the State History Code and Section 106 of the National Historic Preservation Act

Applicant Information (print neatly, this will be used in the return envelope)			
Applicant Name	New Cumberland Borough		
Street Address	1120 Market Street		
City	New Cumberland	Phone Number	717-774-0404
State/ZIP	Pennsylvania	17070	

Contact Person to Receive Response (if applicable) (print neatly, this will be used in the return envelope)			
Name/Company	FPE Consulting Engineers		
Street Address	100 S. Baltimore St.		
City	Dillsburg	Phone Number	717-432-2719
State/ZIP	Pennsylvania	17019	

Project Information			
Project Title	New Cumberland Borough Act 537 – Wastewater Treatment Facility Upgrade		
Project Location and/address	1201 12th St. , New Cumberland, PA 17070		
Municipality	New Cumberland	**County Name**	Cumberland

If this project was ever reviewed before, include previous ER # n/a

Project Type (Check all that apply)

Government Funded/Sponsored or On Government Land?

X☑ **Yes** ☐ **No** **Specify Agency and/or Program Name Below**

State Agency:		Local:	
Federal Agency:	USDA Loan (assumed)	Other:	

Permits or Approvals Required

X☑ **Yes** ☐ **No** **Specify Agency and/or Program Name Below**

Anticipated Permits:	N/A		
State Agency:		Program:	
Federal Agency:		Program:	

Agency Office to Receive Response (Check all that apply)

Army Corps of Engineers: ☐ Philadelphia X☑ Baltimore ☐ Pittsburgh

DEP Office: ☐ Central Office X☑ Regional Office: Southcentral

☐ District Mining Office: ☐ Oil & Gas Office:

☐ Other: (provide address)

Pennsylvania Historical & Museum Commission
Bureau for Historic Preservation

BHP Use Only
ER #

Required Project Information for BHP/SHPO Review

☑ Total Acres in the property under review: All within Township right of way: approx 5 acres

X☑ Total acres of earth disturbance for this proposed activity: <1 acre

X☑ Are there any buildings or structures within the project area? X☐ Yes ☐ No

Approximate age of buildings:

X☑ Project located in or adjacent to a historic district? ☐ Yes X ☐ No ☐ Unsure

Name of Historic District n/a

Submissions Must Also Include:

X☑ MAP LOCATION: A 7.5 USGS Map showing the project boundary and the Area of Potential Effect (APE). The APE should include indirect effects, such as visual and audible impacts. Federal Projects must provide an explanation of how the APE was determined.

☐ PHOTOS: Photos of all buildings or structures in the APE over 50 years old. If the property is over 50 years old submit a Historic Resource Form with this initial request. The forms are available at http://www.phmc.state.pa.us/bhp/inventories.

X☑ PROJECT DESCRIPTION NARRATIVE: Provide a detailed project description describing the project, any ground disturbance, any previous land use, and age of all effected buildings in the project area. Attach a site map showing the location of all buildings in the project area.

☑ I have reviewed all DEP Permit Exemptions listed on the DEP website www.dep.state.pa.us.

In addition, federal agencies must provide:

☐ Measures that will be taken to identify consulting parties including Native Americans.

☐ Measures that will be taken to notify and involve the public.

The information on this form is needed to determine whether potential historic or archaeological resources are present. Additional historic information or investigation may be requested to determine the significance of the resources or the effects of the project on those resources. ***Form and attachments must be submitted by mail. Submissions via e-mail will not be accepted.***

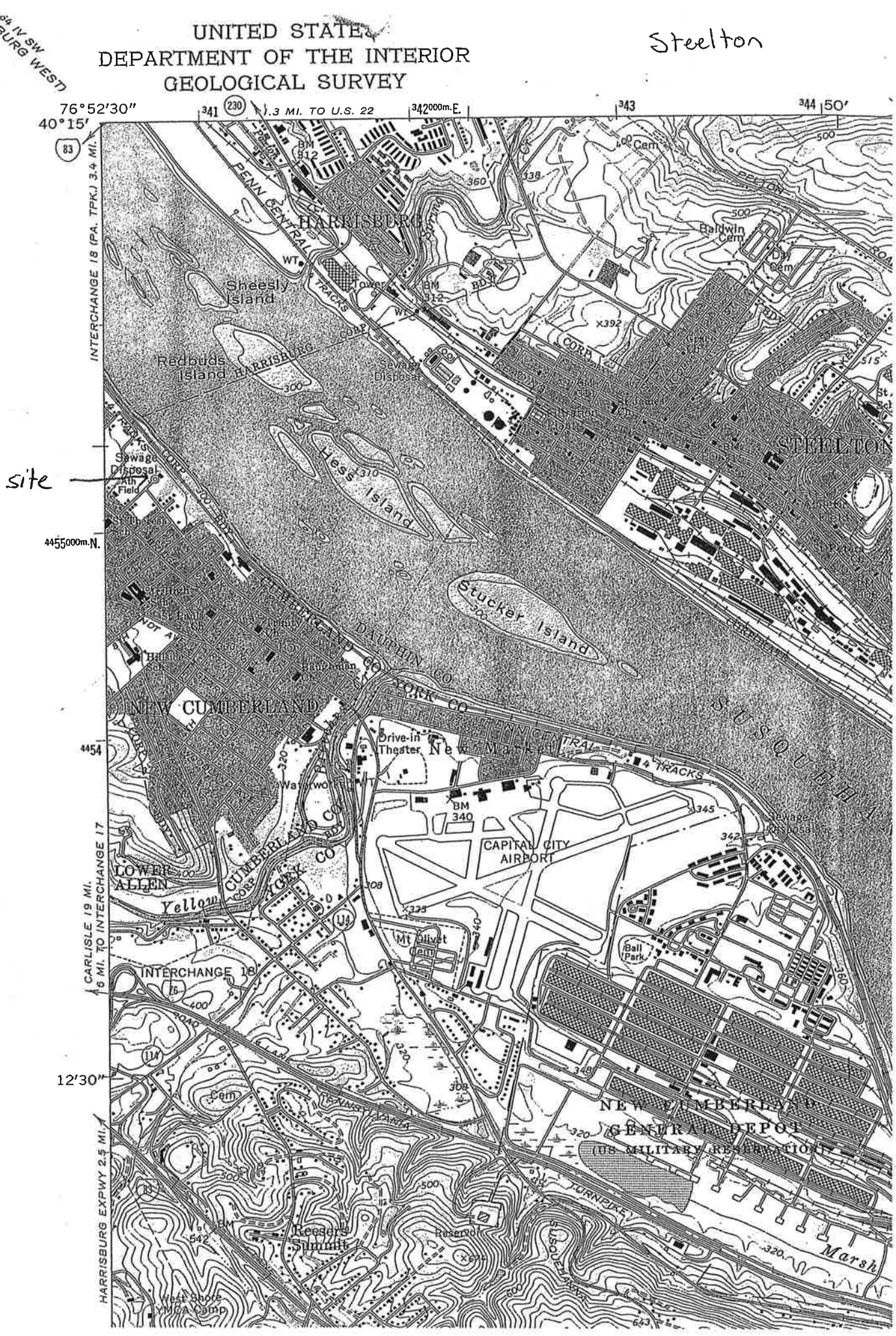
Signature Block

Cynthia L. White — Applicant's Signature

10/2/08 — Date

Please Print and Mail Completed Form and Required Information to:

PA Historical & Museum Commission
Bureau for Historic Preservation
400 North Street
Commonwealth Keystone Building 2nd Floor
Harrisburg, PA 17120-0093


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Steelton
ISBURG WEST)
76°52'30"
40°15'
341
342000m.E.
343
344 50'
1.3 MI. TO U.S. 22
INTERCHANGE 18 (PA. TPK.) 3.4 MI.
HARRISBURG
Sheesly Island
Redbuds Island
Hess Island
Stucker Island
Sewage Disposal
Sewage Disposal
Ath Field
site
STEELTON
NEW CUMBERLAND
LOWER ALLEN
Drive-in Theater
New Market
CAPITAL CITY AIRPORT
Mt Olivet Cem
Ball Park
INTERCHANGE 18
CARLISLE 19 MI.
6 MI. TO INTERCHANGE 17
HARRISBURG EXPWY 2.5 MI.
4455000m.N.
4454
12'30"
Reeders Summit
Reservoir
West Shore YMCA Camp
NEW CUMBERLAND GENERAL DEPOT
(US MILITARY RESERVATION)
Marsh
PENN CENTRAL TRACKS
4 TRACKS
TURNPIKE
SUSQUEHANNA RIVER
CUMBERLAND CO
DAUPHIN CO
YORK CO
Yellow
Baldwin Cem
Grace Cem
Cem

FPE Consulting Engineers
October 2, 2008

Project Description

The purpose of this project is to upgrade the existing wastewater treatment facility in New Cumberland Borough to satisfy the Chesapeake Bay treatment effluent limit requirements.

The existing wastewater treatment facility was built in the 1950's and was upgraded in the 1970's. The project includes new additions to the waste water treatment plant to provide additional treatment for the Borough's sanitary system. All proposed structures will be built inside the existing perimeter fence of the plant on property that is owned and operated by New Cumberland Borough.

The project will serve the wastewater and sewer needs for the entire Borough of New Cumberland.

	No Treatment Change	Oxidation Ditch	MBR
INITIAL EQUIPMENT			
Reactor Concrete Volume Estimate (cu.yd.)		1390	806
Concrete Cost Estimate, basins	$ -	$ 155,680.00	$ 90,272.00
Pump Station	$ -	$ 185,000.00	$ 185,000.00
Metal Building Enclosure (60' X 165')			$ 367,000.00
(3 Ton) Trolley Crane and Gantry			$ 12,000.00
Budget Price for Process	$ -	$ 650,000.00	$ 3,240,000.00
Additional Clarifiers		63'	
Concrete Volume Estimate/Cost Estimate	$ -	$ 37,300.00	$ -
Equipment (internals)	$ -	$ 142,900.00	$ -
Total Initial Equipment Costs (est.)	*$ -*	*$ 1,170,880.00*	*$ 3,894,272.00*
ADDITIONAL ITEMS NEEDED			
Headworks Building			
Replace doors	$ 10,008.00	$ 10,008.00	$ 10,008.00
Install new bar rack and automatic bar rake (for bypass)	$ 46,500.00	$ 46,500.00	$ 46,500.00
Paint walls and floor	$ 42,418.00	$ 42,418.00	$ 42,418.00
Labor to replace the following equipment	$ 17,592.00	$ 17,592.00	$ 17,592.00
Equipment Maintenance			
Replace classifier screw	$ 9,270.00	$ 9,270.00	$ 9,270.00
Replace classifier wear bars	$ 2,619.00	$ 2,619.00	$ 2,619.00
Replace grit screw	$ 9,270.00	$ 9,270.00	$ 9,270.00
Replace grit screw wear bars	$ 2,619.00	$ 2,619.00	$ 2,619.00
Total Cost to Revamp Headworks Building (est.)	*$ 140,296.00*	*$ 140,296.00*	*$ 140,296.00*
Operations Building			
Replace all aluminum wiring (all 3 breaker boxes are near max. allowed amps), Install new lights, Install in-plant communications system, replace main control panel, replace old emergency lights, connect emergency generator to additional equipment	$ 37,862.00	$ 37,862.00	$ 37,862.00
Replace windows	$ 15,295.00	$ 15,295.00	$ 15,295.00
Install central air conditioner, Upgrade heating - replace existing heaters, replace roof exhaust fans	$ 62,512.00	$ 62,512.00	$ 62,512.00
Upgrade office, locker, lunchroom, storage, and filing rooms	$ 7,819.00	$ 7,819.00	$ 7,819.00
Replace roof and install insulation	$ 41,195.00	$ 41,195.00	$ 41,195.00
Install new in-plant water pump system	$ 70,000.00	$ 70,000.00	$ 70,000.00
Install 2 new waste sludge pumps	$ 14,500.00	$ 14,500.00	
Install new alarm system	$ 1,900.00	$ 1,900.00	$ 1,900.00
New lab doors	$ 5,880.00	$ 5,880.00	$ 5,880.00
Paint interior of building	$ 47,164.00	$ 47,164.00	$ 47,164.00
Fix concrete in front of building	$ 855.00	$ 855.00	$ 855.00
Total Cost to Revamp Operations Building (est.)	*$ 304,982.00*	*$ 304,982.00*	*$ 290,482.00*
Operations Building Lab			
48" exhaust hood	$ 6,000.00	$ 6,000.00	$ 6,000.00
Dish washer	$ 6,000.00	$ 6,000.00	$ 6,000.00
Lab distiller	$ 6,800.00	$ 6,800.00	$ 6,800.00
Autoclave	$ 6,200.00	$ 6,200.00	$ 6,200.00
Fecal water bath	$ 2,000.00	$ 2,000.00	$ 2,000.00
Total Cost to Revamp Laboratory (est.)	*$ 27,000.00*	*$ 27,000.00*	*$ 27,000.00*
Blower Building			
Replace roof	$ 40,408.00	$ 40,408.00	$ 40,408.00
Install new windows	$ 16,996.00	$ 16,996.00	$ 16,996.00
Install new garage doors	$ 4,169.00	$ 4,169.00	$ 4,169.00
Install new electric heaters, exhaust fans for basement pump rooms, and new exhaust fans on roof	$ 9,602.00	$ 9,602.00	$ 9,602.00
Install 2 new alum pumps and equipment	$ 3,000.00	$ 3,000.00	$ 3,000.00
Install new blowers	$ 150,000.00	$ 180,000.00	$ 60,000.00
Replace electrical wiring from operation bldg. to blowers and electrical control panel, Install new emergency lighting, Install new lights	$ 38,406.00	$ 38,406.00	$ 38,406.00

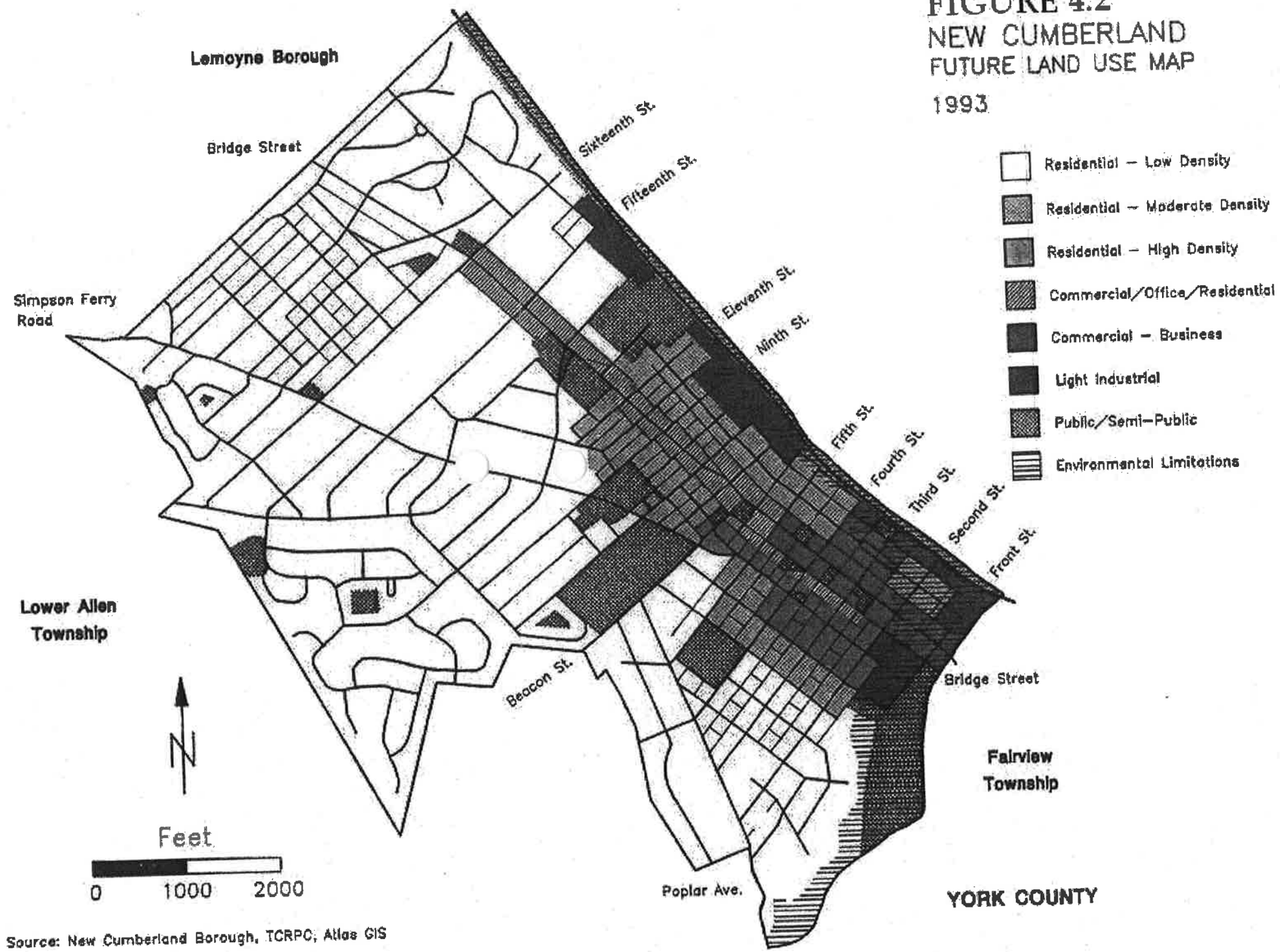
	No Treatment Change	Oxidation Ditch	MBR	
Install a one-ton electrical hoist with chain bag in chemical storage room capable of lifting 20'	$ 2,300.00	$ 2,300.00	$ 2,300.00	
Install roof ladder	$ 6,455.00	$ 6,455.00	$ 6,455.00	
Paint interior of building	$ 235,607.00	$ 235,607.00	$ 235,607.00	
Total Cost to Revamp Blower Building (est.)	*$ 506,943.00*	*$ 536,943.00*	*$ 416,943.00*	
Garage Building				
Install new control panel, Install new wiring and conduit from operations bldg., Install new lights	$ 20,454.00	$ 20,454.00	$ 20,454.00	
Install new windows	$ 12,110.00	$ 12,110.00	$ 12,110.00	
Install new heaters, Install new exhaust fans, Remove or replace old roof vent	$ 1,970.00	$ 1,970.00	$ 1,970.00	
Install new overhead doors	$ 25,240.00	$ 25,240.00	$ 25,240.00	
One ton I-beam hoist	$ 4,300.00	$ 4,300.00	$ 4,300.00	
Replace roof	$ 46,378.00	$ 46,378.00	$ 46,378.00	
Replace railings and install roof ladder	$ 14,070.00	$ 14,070.00	$ 14,070.00	
Paint interior of building	$ 58,625.00	$ 58,625.00	$ 58,625.00	
Total Cost to Revamp Garage Building (est.)	*$ 183,147.00*	*$ 183,147.00*	*$ 183,147.00*	
Clarifiers (Existing)				
Replace mechanisms	$ 181,500.00	$ 181,500.00		
Install new railings	$ 27,870.00	$ 27,870.00		
Paint	$ 160,665.00	$ 160,665.00		
Install new electrical wiring to Operation Building	$ 4,903.00	$ 4,903.00		
Total Cost to Revamp Existing Clarifiers (est.)	*$ 374,938.00*	*374,938.00*	*$ -*	
Scum Pit				
Install 2 new scum pumps	$ 11,000.00	$ 11,000.00		
New electrical wiring from Operations Bldg., New light fixture and outlets	$ 2,993.00	$ 2,993.00		
Paint interior	$ 42,103.00	$ 42,103.00		
Total Cost to Revamp Scum Pit (est.)	*$ 56,096.00*	*$ 56,096.00*	*$ -*	
Drying Beds				
Replace media	$ 35,225.00	$ 35,225.00		
Total Cost to Revamp Drying Beds (est.)	*$ 35,225.00*	*$ 35,225.00*	*$ -*	
Pump Stations				
Connect pump operations to plant's monitoring system	$ 5,235.00	$ 5,235.00	$ 5,235.00	
Install new alarm system	$ 3,600.00	$ 3,600.00	$ 3,600.00	
Install flow meters	$ 8,400.00	$ 8,400.00	$ 8,400.00	
Total Cost to Revamp Pumping Stations (est.)	*$ 17,235.00*	*$ 17,235.00*	*$ 17,235.00*	
Miscellaneous Equipment				
Digester				
Install overflow alarm system	$ 1,000.00	$ 1,000.00	$ 1,000.00	
Install new supernatent draw off pipe	$ 4,000.00	$ 4,000.00	$ 4,000.00	
Fencing	$ 43,795.00	$ 43,795.00	$ 43,795.00	
Plant new trees and bushes to accompany fencing	$ 10,000.00	$ 10,000.00	$ 10,000.00	
Install enclosure around UV control panel	$ 989.00	$ 989.00	$ 989.00	
Install new yard lights, to include new wiring and conduit	$ 20,000.00	$ 20,000.00	$ 20,000.00	
Install new inlet in front of Operations Building	$ 7,684.00	$ 7,684.00	$ 7,684.00	
New Vactor	$ 270,000.00	$ 270,000.00	$ 270,000.00	
New welder	$ 2,500.00	$ 2,500.00	$ 2,500.00	
Total Cost for Misc. Equipment (est.)	*$ 359,968.00*	*$ 359,968.00*	*$ 359,968.00*	
Centrifuge				
Unit price	$ 385,000.00	$ 385,000.00	$ 385,000.00	
Dumpster-Veyor (dumpster slide rail)	$ 50,000.00	$ 50,000.00	$ 50,000.00	
I-beam support and overhead rail system	$ 2,500.00	$ 2,500.00	$ 2,500.00	
One-ton I-beam hoist w/ chain bag	$ 4,300.00	$ 4,300.00	$ 4,300.00	
Total Cost for Centrifuge (est.)	*$ 441,800.00*	*$ 441,800.00*	*$ 441,800.00*	
Total Capital Costs (est.)	*$ 2,447,630.00*	*$ 3,648,510.00*	*$ 5,771,143.00*	
Total Construction Costs (est.)	*$ 2,447,630.00*	*$ 3,648,510.00*	*$ 5,771,143.00*	

	No Treatment Change	Oxidation Ditch	MBR
Legal and Engineering Fees (est.)	*$ 979,052.00*	*$ 1,459,404.00*	*$ 2,308,457.20*
TOTAL PROJECT COST (est.)	***$ 5,874,312.00***	***$ 8,756,424.00***	***$ 13,850,743.20***
ANNUAL DEBT SERVICE (est.) (assumes 40-yr loan @ 4.5%)	***$ 319,228.60***	***$ 475,851.63***	***$ 752,692.97***
ADDITIONAL ANNUAL O & M COSTS			
Treatment Process			
Maintenance		$ 1,800.00	$ 53,860.73
Energy Requirement (@ $0.08/kw-hr)		$ 33,640.00	$ 137,836.72
Centrifuge			
Maintenance	$ 620.00	$ 620.00	$ 620.00
Energy Requirement (@ $0.08/kw-hr)	$ 1,600.00	$ 1,600.00	$ 1,600.00
Polymer Consumption	$ 2,300.00	$ 2,300.00	$ 2,300.00
TOTAL ADDITIONAL ANNUAL O & M COSTS (est.)	***$ 4,520.00***	***$ 39,960.00***	***$ 196,217.45***
ANNUAL CREDIT PURCHASE COSTS (est.)	***$ 14,679.00***	***$ -***	***$ -***
TOTAL ADDITIONAL ANNUAL COSTS (est.)	***$ 338,427.60***	***$ 515,811.63***	***$ 948,910.42***
TOTAL ADDITIONAL COST PER EDU/MONTH	***$ 9.03***	***$ 13.77***	***$ 25.33***
AVG. MONTHLY SEWER RATE PER EDU (as of January, 2009)	***$ 37.50***	***$ 37.50***	***$ 37.50***
TOTAL PROJECTED MONTHLY SEWER RATE PER EDU	***$ 46.53***	***$ 51.27***	***$ 62.83***
TOTAL ADDITIONAL COST PER EDU/QTR.	***$ 27.10***	***$ 41.30***	***$ 75.99***
AVG. QUARTERLY SEWER RATE PER EDU (as of January, 2009)	***$ 112.50***	***$ 112.50***	***$ 112.50***
TOTAL PROJECTED QUARTERLY SEWER RATE PER EDU	***$ 139.60***	***$ 153.80***	***$ 188.49***

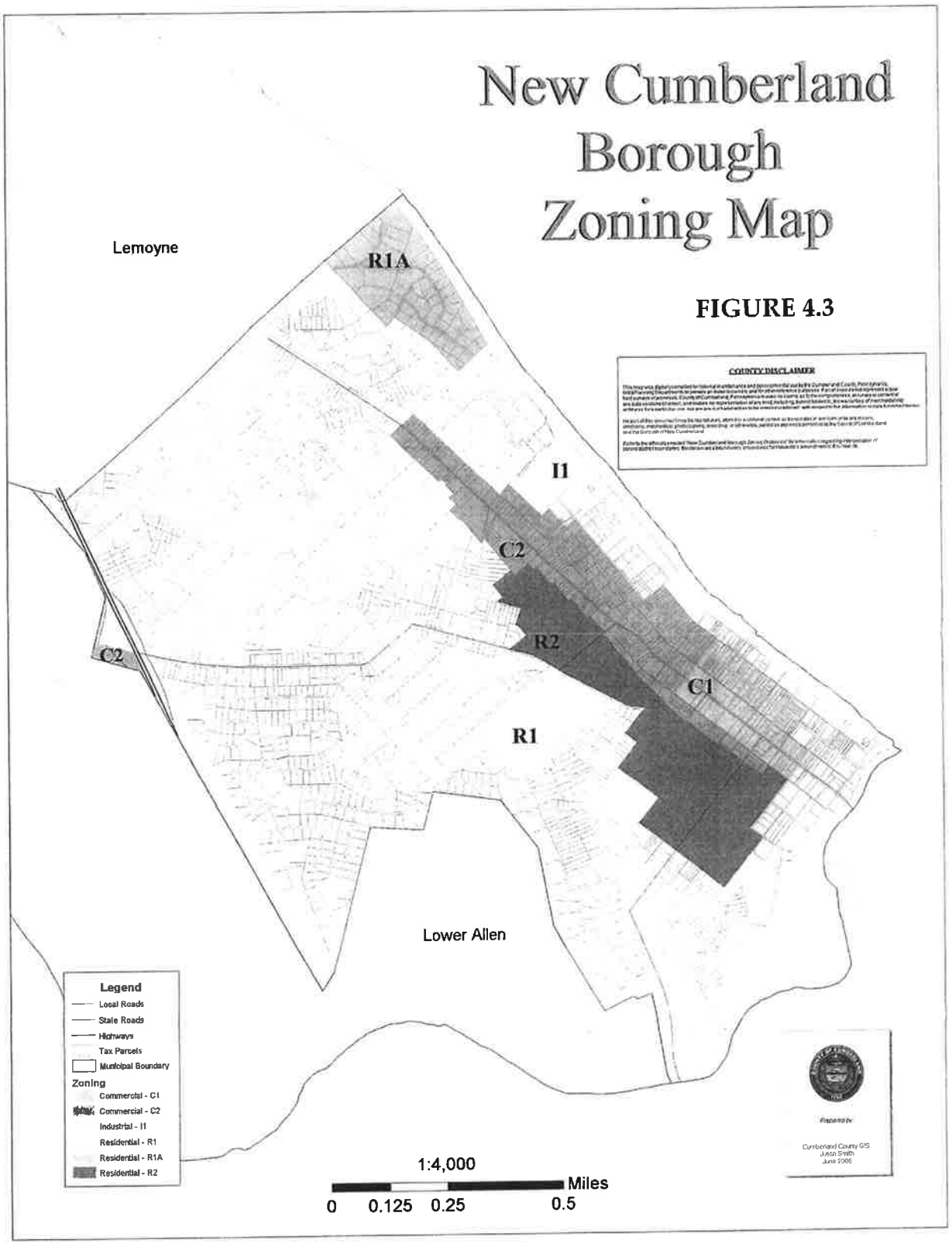


		SEWER COLLECTION SYSTEM MAP BOROUGH OF NEW CUMBERLAND – CUMBERLAND COUNTY – PENNSYLVANIA	DESIGNED BY RMG DRAWN BY RMG APPROVED BY JLS	DATE DECEMBER 1, 2008 REVISED DATE (S)	SCALE 1" = 350' FILE NO. 0654 SHEET NO. SHEET 1 OF 1	FPE CONSULTING ENGINEERS 100 S. Baltimore Street Dillsburg, PA 17019 Phone (717) 432-2719 Fax (717) 432-5368 Civil Engineering ~ Transportation Engineering Fire Protection Engineering ~ Sanitary Engineering Land & Topographic Surveys

FIGURE 4.2
NEW CUMBERLAND
FUTURE LAND USE MAP
1993



Source: New Cumberland Borough, TCRPC, Atlas GIS


New Cumberland Borough Zoning Map
FIGURE 4.3
COUNTY DISCLAIMER
Lemoyne
R1A
I1
C2
R2
C1
C2
R1
Lower Allen
Legend
Local Roads
State Roads
Highways
Tax Parcels
Municipal Boundary
Zoning
Commercial - C1
Commercial - C2
Industrial - I1
Residential - R1
Residential - R1A
Residential - R2
1:4,000
Miles
0
0.125
0.25
0.5
Cumberland County GIS
Justin Smith
June 2006

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-02. Please state whether the application complies with the DEP-approved Act 537 Official Sewage Facilities Plan for Lower Allen Township since the acquisition includes wastewater service to three residences in the Township.

RESPONSE: The application complies with the DEP-approved Act 537 plan for Lower Allen Township. See Attachment TUS Set 1, No. A-02.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

B. Braun

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
One Ararat Boulevard
Harrisburg, PA 17110

May 1, 1995

(717) 657-4590

Southcentral Regional Office

Lower Allen Township Supervisors
c/o Richard A. Grove, Secretary
1993 Hummel Avenue
Camp Hill, PA 17011-5938

Re: Planning Module for Land Development
Johnson/Swift/Spohn
Lower Allen Township, Cumberland County
DER Code No. A3-21912-116-3Z

Ladies and Gentlemen:

The Department of Environmental Resources has reviewed the proposed Official Plan revision submitted for the installation of three two-inch force mains to service three separate existing dwellings. The force mains will tie into an existing manhole in New Cumberland Borough. The sewage flow will ultimately be disposed of at the New Cumberland Borough Authority wastewater treatment plant. The dwellings are located on S.R. 2020 in Lower Allen Township, Cumberland County.

The plan revision is approved.

If you have any questions or comments, please call me.

Sincerely,

Paul Curry

Paul Curry
Water Quality Specialist
Water Management Program

cc: Cumberland County Planning Commission
Melvin Johnson
Grace Swift
Richard Spohn
Chris Hoover, P.E., Hartman & Associates

RECEIVED
MAY - 3 1995

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-03. Please clarify if the Application's proposed service territory for Pennsylvania-American Water Company - Wastewater Division (PAWC-WD) incorporates the properties of the three residences in Lower Allen Township that are current wastewater customers of the Borough.

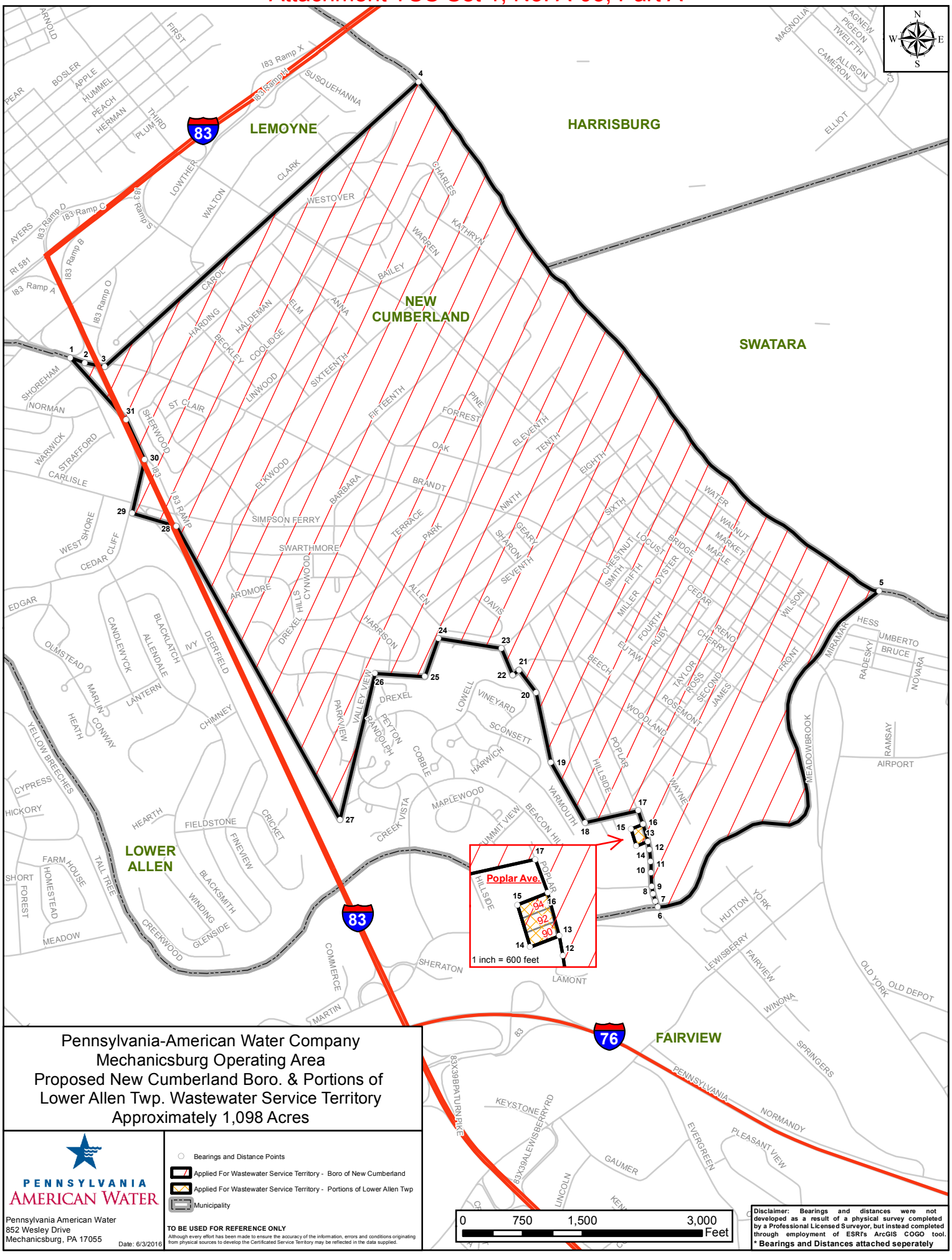
RESPONSE: Yes. PAWC's Application's proposed service territory includes the properties of the three residences located on Poplar Avenue in Lower Allen Township that are currently wastewater customers of the Borough. See Attachment TUS Set 1, No. A-03, Parts A, B.

Part A: Map depicting service territory application, including the Borough of New Cumberland and the three residences on Poplar Avenue, Lower Allen Township.

Part B: Metes and Bounds description for Lower Allen Township.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

Attachment TUS Set 1, No. A-03, Part A



Pennsylvania-American Water Company
Mechanicsburg Operating Area
Proposed New Cumberland Boro. & Portions of
Lower Allen Twp. Wastewater Service Territory
Approximately 1,098 Acres

PENNSYLVANIA AMERICAN WATER

Pennsylvania American Water
852 Wesley Drive
Mechanicsburg, PA 17055

Date: 6/3/2016

Bearings and Distance Points

Applied For Wastewater Service Territory - Boro of New Cumberland

Applied For Wastewater Service Territory - Portions of Lower Allen Twp

Municipality

TO BE USED FOR REFERENCE ONLY

Although every effort has been made to ensure the accuracy of the information, errors and conditions originating from physical sources to develop the Certificated Service Territory may be reflected in the data supplied.

Disclaimer: Bearings and distances were not developed as a result of a physical survey completed by a Professional Licensed Surveyor, but instead completed through employment of ESRI's ArcGIS COGO tool.
*** Bearings and Distances attached seperately**

Attachment TUS Set 1, No. A-03, Part B

Starting Point: The point at which Lower Allen Township, Lemoyne Borough, and New Cumberland Borough all intersect.

Sequence	From	To	Bearing	Distance(ft)
1	1	2	S70°56'09"E	193.52
2	2	3	S77°47'08"E	256.25
3	3	4	N47°44'35"E	5,313.85
4	4	5		
	From Point 4, follow the western shore of the Susquehanna River in a Southeasterly direction approximately 8,608 feet to point 5.			
5	5	6		
	From Point 5 (the confluence of the Susquehanna River and Yellow Breeches Creek),follow the Yellow Breeches Creek upstream in a general Southwesterly direction approximately 4,836 feet to point 6.			
6	6	7	N22°49'29"W	82.22
7	7	8	N15°35'59"W	95.30
8	8	9	N9°59'25"W	93.07
9	9	10	N3°06'49"W	176.52
10	10	11	N1°49'42"W	136.96
11	11	12	N7°17'38"W	150.45
12	12	13	N10°38'21"W	102.07
13	13	14	S68°54'40"W	155.87
14	14	15	N16°38'36"W	221.81
15	15	16	N68°10'58"E	162.51
16	16	17	N20°19'01"W	178.66
17	17	18	S77°27'30"W	681.92
18	18	19	N29°23'36"W	867.18
19	19	20	N12°09'55"W	894.90
20	20	21	N36°55'16"W	354.52
21	21	22	S52°58'02"W	102.08
22	22	23	N22°32'12"W	358.43
23	23	24	N80°54'47"W	802.57
24	24	25	S19°16'07"W	510.34
25	25	26	N85°58'18"W	624.42
26	26	27	S13°33'44"W	1,888.89
27	27	28	N29°07'16"W	4,212.47
28	28	29	N73°36'54"W	578.47
29	29	30	N13°12'38"E	691.53
30	30	31	N24°55'24"W	551.24
31	31	1	N41°57'47"W	1,047.19

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-04. The municipal boundaries depicted on the map in the Application's Exhibit K are not clear. Please clarify if PAWC-WD's proposed wastewater service territory depicted on the subject map is contained entirely within New Cumberland Borough.

RESPONSE: The Application's Exhibit K shows only the New Cumberland Borough, which is a part of PAWC's proposed wastewater service territory. By way of further clarification, PAWC's Application proposed service territory includes both the New Cumberland Borough and the three residences on Poplar Avenue, Lower Allen Township. Please see the response to A-03 for a map and further description of the proposed wastewater service territory for the three residences in Lower Allen Township.

Response Witness: Michael J. Guntrum, PE, PMP
Title: Senior Project Engineer

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-05. Please state the DEP permitted capacity of the Borough's wastewater treatment facility.

RESPONSE: The DEP permitted hydraulic design capacity of the Borough's wastewater treatment facility is 1.25 mgd.

Response Witness: Michael Guntrum, PA, PMP
Title: Senior Project Engineer

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-06. Please provide a copy of the DEP-issued National Pollution Discharge Elimination System (NPDES) permit for the Borough's wastewater system assets.

RESPONSE: Please see Attachment TUS Set 1, No. A-06.

Response Witness: Michael Guntrum PE, PMP
Title: Senior Project Engineer

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER MANAGEMENT PROGRAM

JAN 3 1 2011

CERTIFIED MAIL NO. 7008 1140 0002 4797 9140

Mr. Stephen Sultzaberger, Manager
New Cumberland Borough
1120 Market Street
New Cumberland, PA 17070

Re: Sewage
New Cumberland Borough STP
NPDES Permit No. PA0026654
APS ID No. 320043
Authorization No. 601383
New Cumberland Borough, Cumberland County

Dear Mr. Sultzaberger:

Your permit is enclosed. Read the permit and the special conditions carefully.

A Discharge Monitoring Report (DMR) and Supplemental Reporting Forms are included. The master DMR will be prepared and distributed by the U.S. Environmental Protection Agency (EPA) in the near future. Use the enclosed DMR form until you receive a master from Environmental Protection Agency. The reporting forms must be submitted to the Department and the EPA Regional Office as instructed in the permit and the enclosed Instruction Sheet.

We would like to bring your attention to the Department's new electronic DMR (eDMR) program. The program can be accessed through the internet at www.dep.state.pa.us/edmr and can be used in lieu of paper DMR and supplemental report submissions. Please find enclosed additional information concerning eDMR. We highly encourage your participation in this program.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions, please call Mr. Martin Ferry of the Permits Section at 717.705.4823.

Sincerely,

Lee A. McDonnell, P.E.
Program Manager
Water Management Program

Enclosures

cc: U.S. Environmental Protection Agency (w/NPDES)
John Shambaugh, FPE Consulting Engineers (w/enclosure)

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Electronic Discharge Monitoring Report (eDMR) System

Overview

As part of DEP's Electronic Government initiative, DEP is offering a new method for wastewater facilities to submit the monthly Discharge Monitoring Reports (DMR) and all supplemental forms as required by National Pollutant Discharge Elimination System (NPDES) permits and some Water Quality Management permits - permittees can now utilize DEP's electronic DMR (eDMR) system. Upon registration, permittees use an eDMR template generated specifically for their permit to enter parameter values for submission to DEP. The secure Website is accessed with a User Identification Number and Password. When permittees utilize eDMR, they no longer need to submit paper DMRs to DEP and EPA. All supplemental forms can be uploaded into the eDMR system. A user with authorization as a "Certifier" can submit the monthly package to DEP.

Eligible Types of Permit Holders

- Water Quality Management Permit, Industrial Waste and Sewage, Land Application
- NPDES Permit, Industrial Wastewater (Major and Minor)
- NPDES Permit, Industrial Stormwater (Individual Permits)
- NPDES Permit, Sewage, Municipal and Non-Municipal (Major and Minor)
- PAG-03, Stormwater Associated with Industrial Activities
- PAG-05, Discharges from Gasoline Contaminated Groundwater Remediation Systems
- PAG-10, Discharges from Hydrostatic Testing of Tanks and Pipelines

Access

The eDMR system is accessed through DEP's Website at: www.dep.state.pa.us/edmr. Access is restricted by authorized security for the following types of accounts:

Viewer - This role enables the user to view reporting requirements, the status of submitted eDMRs and the submitted data.

Preparer - This role provides the user with all privileges of the Viewer role plus the ability to complete and save the eDMR forms.

Certifier - This role provides the user with all privileges of the Viewer and Preparer roles plus the ability to submit eDMRs using a Personal Identification Number (PIN) as part of a digital signature.

Value and Benefits

- Reduction in paperwork and mailing costs for the facility.
- Reduction in manual data entry and filing by DEP.
- Submit reports right up to the deadline without concerns about delays with handling and associated civil penalty liability for late submissions.
- Electronic attachment functionality.
- Electronic receipt of all submissions.
- Track status and history of online submissions.
- Secure, convenient, and easy!

FACT SHEET

Record Retention

Regulations and permits require that records activities be retained by the permittee for a certain time, typically a minimum of three years. After submitting reports through eDMR, you may either print off a copy of the report and file it or save the report electronically to an on-site computer to satisfy retention requirements.

How to Participate

Permittees must first register with DEP. The following documents are needed to register:

- Registration Form (available on eDMR Website);
- Copies of the first page of the current (effective) permit and effluent limits tables in the permit; and
- eDMR Trading Partner Agreement (available on eDMR Website).

Submit these documents to:

PA DEP
Bureau of Water Standards and Facility Regulation
Rachel Carson State Office Building
PO Box 8466
Harrisburg, PA 17105-8466

You will receive your account information typically within 30 to 60 days, depending on the number of registration packages being processed.

Training

DEP schedules periodic classroom training for eDMR. Training schedules are posted on the eDMR Website (see Documents and Training link) and are typically held at DEP Regional Offices. Participation in the training typically qualifies licensed operators for 3.5 contact hours of continuing education toward recertification. Follow instructions on the Website to enroll in training. Please note that participation in training is not a prerequisite for registering for the eDMR program. While classroom training is encouraged to ensure proper use, it is not required. An eDMR User's Manual is available on the Website for guidance.

FOR MORE INFORMATION CONTACT:

PA Department of Environmental Protection
Bureau of Water Standards & Facility Regulations

Phone: 717-787-6744

For more information, visit www.depweb.state.pa.us, keyword: DMR.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 40° 14' 8" , **Longitude** 76° 52' 12" , **River Mile Index** 69.24 , **Stream Code** 06685

Discharging to Susquehanna River

which receives wastewater from wastewater treatment facility

1. The permittee is authorized to discharge during the period from February 1, 2011 through January 31, 2016.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH ((S.U.)	XXX	XXX	6.0	XXX		9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
CBOD5	260	417 Wkly Avg	XXX	25	40	50	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Suspended Solids	313	469 Wkly Avg	XXX	30	45	60	2/week	24-Hr Composite
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	2/week	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	XXX	2/week	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Total Phosphorus	21	XXX	XXX	2.0	XXX	4.0	2/week	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at discharge from facility.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR PUBLICLY OWNED TREATMENT WORKS (POTWs)

NPDES PERMIT NO: PA0026654

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

New Cumberland Borough
1120 Market Street
New Cumberland, PA 17070

is authorized to discharge from a facility known as **New Cumberland STP**, located in **New Cumberland Borough, Cumberland County**, to **Susquehanna River** in Watershed(s) **7-E** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON February 1, 2011

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON January 31, 2016

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 40 CFR 122.41(a)

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. 40 CFR 122.41(b), 122.21(d)

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. 25 Pa. Code 92.9

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED JAN 3 1 2011

DATE PERMIT AMENDMENT ISSUED _____

ISSUED BY _____
Lee A. McDonnell, P.E.
Water Management Program Manager

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

1. The discharger may not discharge floating materials, oil, grease, scum, foam, sheen and substances which produce color, taste, turbidity or settle to form deposits in concentrations or amounts sufficient to be, or creating a danger of being, inimical to the water uses to be protected or to human, animal, plant or aquatic life. 25 Pa. Code 92.51(6)

2. Except as otherwise specified in this permit, the 30-day average percent removal for carbonaceous biochemical oxygen demand and total suspended solids shall not be less than 85 percent. 25 Pa. Code 92.2c(b)(1)

3. Effective disinfection to control disease producing organisms from the period of May 1 to September 30 shall be the production of an effluent which will contain a concentration not greater than 200/100 ml of fecal coliform colonies as a geometric mean, nor greater than 1,000/100 ml of these colonies in more than 10 percent of the samples tested. 25 Pa Code 92.2c(b)(2)

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Supplemental Information

If the permit requires reporting of average weekly limitations use the following guideline. If the "maximum average concentration" and the "maximum average mass loading" does not occur within the same week, both the highest weekly average concentration and the highest weekly average mass load should be reported, regardless of whether they both occur during the same calendar week.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 001 , **Latitude** 40° 14' 8" , **Longitude** 76° 52' 12" , **River Mile Index** 69.24 , **Stream Code** 06685

Discharging to Susquehanna River

which receives wastewater from wastewater treatment facility

1. The permittee is authorized to discharge during the period from February 1, 2011 through September 30, 2013.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter (1)	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	1/week	24-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	2/week	24-Hr Composite
Net Total Nitrogen	Report	Report	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	Report	XXX	XXX	XXX	1/month	Calculation

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at discharge from facility.

Footnotes:
(1) See Part C for Chesapeake Bay Requirements.
(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events required.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. **For Outfall** 001 , **Latitude** 40° 14' 8" , **Longitude** 76° 52' 12" , **River Mile Index** 69.24 , **Stream Code** 06685

Discharging to Susquehanna River

which receives wastewater from wastewater treatment facility

1. The permittee is authorized to discharge during the period from October 1, 2013 through January 31, 2016.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter [1]	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum [2] Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	1/week	24-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	2/week	24-Hr Composite
Net Total Nitrogen	Report	22,831	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	3,044	XXX	XXX	XXX	1/month	Calculation

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at discharge from facility.

Footnotes:
(1) See Part C for Chesapeake Bay Requirements.
(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events required.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. 40 CFR 122.41(l)(4)(iii)

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. 25 Pa. Code 92.1

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. 40 CFR 122.41(m)(1)(i)

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended. (33 U.S.C.A. §§1251 to 1387).

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. EPA Form 2C

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. EPA Form 2C

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. 25 Pa. Code 92.1 and 40 CFR 122.2

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. 40 CFR 122.2

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the nth root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. EPA Form 2C

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. 40 CFR 122.2

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Indirect Discharger means a non-domestic discharger introducing pollutants to a Publicly Owned Treatment Works (POTW). 25 Pa. Code 92.1 and 40 CFR 122.2

Industrial User means a non-domestic discharger introducing pollutants to a Publicly Owned Treatment Works (POTW). 25 Pa. Code 92.1

Instantaneous Maximum means the highest allowable discharge of a concentration of a substance at any one time as measured by a grab sample. 25 Pa. Code 92.1

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Municipality means a city, town, borough, country, parish, district, association or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under §1288 of the Clean Water Act. 40 CFR 122.2

Publicly Owned Treatment Works (POTW) means a treatment works as defined by §212 of the Clean Water Act, owned by a municipality. The definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes or other conveyances if they convey wastewater to a POTW providing treatment. 25 Pa Code 92.1 and 40 CFR 122.2

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. 40 CFR 122.41(m)(1)(ii)

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. 25 Pa. Code 92.1

Stormwater Associated With Industrial Activity means the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw materials storage areas as defined at 40 CFR §122.26(b)(14) and 25 Pa. Code 92.1.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. 25 Pa. Code 92.1

Weekly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling 40 CFR 122.4(j)(1)

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Records Retention 40 CFR 122.41(j)(2)

Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results 40 CFR 122.41(j)(3)

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date and time of sampling or measurements.
b. The person(s) who performed the sampling or measurements.
c. The date(s) the analyses were performed.
d. The person(s) who performed the analyses.
e. The analytical techniques or methods used; and the associated detection level.
f. The results of such analyses.

4. Test Procedures 40 CFR 122.41(j)(4)

Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§4101-4113), relating to environmental laboratory accreditation. Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those approved under 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503 or Subpart J of 25 Pa. Code Chapter 271), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in this permit.

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. 40 CFR 122.41(e), 122.41(j)(3)

b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. 40 CFR 122.41(j)(4)

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. 40 CFR 122.41(e) and 40 CFR 122.44(i)(1)

2. Unless instructed otherwise in Part C of this permit, properly completed DMR(s) must be received by the agency(ies) below within 28 days after the end of each reporting period. The permittee shall

complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

Department of Environmental Protection
Water Management Program
909 Elmerton Avenue
Harrisburg, PA 17110-8200

NPDES Enforcement Branch (3WP42)
Office of Permits & Enforcement
Water Protection Division
U.S. EPA - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92.23:

   - For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
   - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
   - For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

   If signed by a person other than the above, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. 40 CFR 122.22(b)(3)

4. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. 40 CFR 122.41(l)(4)(ii)

C. Reporting Requirements

1. Planned Changes 40 CFR 122.41(l)(1) - The permittee shall give notice to DEP as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b).

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit.

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance

   The permittee shall give advance notice to DEP of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. 40 CFR 122.41(l)(2)

3. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall report incidents causing or threatening pollution in accordance with the requirements of 25 Pa. Code Section 91.33. If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger and if reasonable possible to do so, notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger. The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

(i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. Note see 40 CFR 122.44(g)

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. 40 CFR 122.41(l)(6)(iii).

4. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.3 of this section or specific requirements of compliance schedules, at the time DMRs are submitted. The reports shall contain the information listed in paragraph C.3.b.(ii) of this section. 40 CFR 122.41(l)(7)

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules 25 Pa. Code 92.55 and 40 CFR 122.47(a)

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. 40 CFR 122.47(a)(4)

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code 92.51(2) and 40 CFR 122.41(f).

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. 40 CFR 122.41(f)

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. 40 CFR 122.41(a)(1)

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. 40 CFR 122.41(h)

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. 25 Pa. Code 92.51(3)(ii) and 40 CFR 122.41(h)

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. 40 CFR 122.41(l)(8)

4. The permittee shall provide the following information in the annual Municipal Wasteload Management Report, required under the provisions of Title 25 Pa. Code Chapter 94 unless a more stringent time period is required by law, regulation or permit condition in which case the more stringent time period will apply.

   a. A new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging pollutants. 40 CFR 122.42(b)(1)

   b. A substantial change in the volume or character of pollutants being introduced into the POTW by an indirect discharger introducing pollutants into the POTW at the time of issuance of this permit. 40 CFR 122.42(b)(2)

   c. Information on the quality and quantity of the effluent introduced into the POTW by an industrial user or an indirect discharger and the anticipated impact of the change in the quality and quantity of effluent to be discharged from the POTW. 40 CFR 122.42(b)(3)

d. The identity of the industrial users served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the POTW shall also specify the total volume of discharge and estimate concentration of each pollutant discharged into the POTW by the industrial user. 25 Pa. Code 92.53(c)

e. The POTW shall require users of the treatment works subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act and regulations thereunder. 25 Pa. Code 92.53(c)

D. Proper Operation and Maintenance

1. The permittee shall employ operator's certified in compliance with the Water and Wastewater Systems Operators Certification Act (63 P.S. §§1001-1015.1).

2. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. 40 CFR 122.41(e)

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. 40 CFR 122.41(d)

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. 40 CFR 122.41(m)(2)

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." 40 CFR 122.41(m)(4)(i)(A)

b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. 40 CFR 122.41(m)(4)(i)(B)

c. The permittee submitted the necessary notice required in F.4.a. and b. below. 40 CFR 122.41(m)(4)(i)(C)

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2. above. 40 CFR 122.41(m)(4)(ii)

4. Notice

a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. 40 CFR 122.41(m)(3)(i)

b. Unanticipated Bypass

(i) The permittee shall submit immediate notice of an unanticipated bypass causing or threatening pollution. The notice shall be in accordance with Part A III.C.3.a.

(ii) The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.3.b.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR §122.4l(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in *18 Pa.C.S.A § 4904* and 40 CFR §122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 40 CFR 122.41(c)

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92 and 40 CFR §122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; 25 Pa. Code 92.51(3)(i) and 40 CFR 122.41(i)(1)

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; 25 Pa. Code 92.51(3)(ii) and 40 CFR 122.41(i)(2)

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and 40 CFR 122.41(i)(3)

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. 40 CFR 122.41(i)(4)

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. 40 CFR 122.61(a)

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; 25 Pa. Code 92.71a(1) and 40 CFR 122.61(b)(1)

   b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and 25 Pa. Code 92.71a(2) and 40 CFR 122.61(b)(2)

   c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section. 25 Pa. Code 92.71a(3) and 40 CFR 122.61(b)(3)

   d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with § 92.55 (relating to schedules of compliance) and other appropriate DEP regulations. 25 Pa. Code 92.71a(4)

3. In the event DEP does not approve transfer of this permit, the new owner or controller must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. 40 CFR 122.41(g)

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. 40 CFR 122.21(d)

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

PART C

I. CHESAPEAKE BAY SCHEDULE

A. **Timing For Effective Dates Of Effluent Limitations.** The following schedule applies to effluent limitations in this permit:

Provision Containing Effluent Limitation	Effective Date
Part A I.A.2	February 1, 2011 through January 31, 2016
Part A I.B.2	February 1, 2011 Date through September 30, 2013
Part A I.C.2	October 1, 2013 through January 31, 2016

The permittee shall achieve compliance with all other terms and conditions of this permit upon the effective date of the permit, unless otherwise specified.

B. **Compliance Schedule.** The permittee shall be in compliance with effluent limitations for Nitrogen and Phosphorus contained in Part A I.C.2, or terminate this discharge, in accordance with the following schedule:

Activity	Due Date
1. Submit Update to Act 537 Sewage FacilitiesPlan	Not Applicable
2. Submit WQM Part II Permit Application	March 1, 2011
3. Award Contract for Construction or Begin Implementation	October 1, 2011
4. Construction or Implementation Progress Report(s)	Quarterly
5. Issue Certification of Substantial Completion (Plant Fully Operational)	March 31, 2013
6. Compliance with effluent limitations	September 30, 2014

C. No later than 14 calendar days following the date identified in the above schedule of compliance, the permittee shall submit to the Department a written notice of compliance or non-compliance with the specific schedule requirement(s) to:

Department of Environmental Protection
Southcentral Regional Office
Water Management Program
Attn: Compliance Specialist
909 Elmerton Avenue
Harrisburg, PA 17110-8200

D. Each notice of non-compliance, at a minimum, shall include the following information:

1. A description of the noncompliance.
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.
3. A description of any factors which tend to explain or mitigate the noncompliance.
4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.
5. A revised schedule of compliance for Department approval.

E. The permittee should contact the compliance specialist indicated in the event of anticipated non-compliance with any of a compliance schedule activities listed, seven (7) days prior to the due date of the activity.

II. CHESAPEAKE BAY NUTRIENT REQUIREMENTS

A. General

1. The Net Total Nitrogen and Net Total Phosphorus mass load effluent limitations in Part A I.B and Part A I.C are required in order to meet the downstream water quality standards of the State of Maryland, as required by 25 Pa. Code Chapter 92, the federal Clean Water Act and implementing regulations. These effluent limitations do not reflect credits applied or sold or offsets applied, during this permit cycle.

2. The Total Nitrogen and Total Phosphorus Mass Load (actual mass load being discharged) shall be reported in the monthly Supplemental Discharge Monitoring Reports ("Supplemental DMR"). The total mass load will not equal the net total mass load if credits are applied or sold, or if offsets are applied. The mass loads for compliance purposes are "Net Total Nitrogen" and "Net Total Phosphorus" reported as pounds per year on the Discharge Monitoring Report. Instruction for tracking credits and offset can be found in Part C II.C.10 – Tracking Offsets and Credits. The number of credits purchased can be determined by viewing the Department's Nutrient Trading Website at http://www.dep.state.pa.us Keyword "Nutrient Trading". The number of credits applied or sold, or offsets applied may change during the compliance year and subsequent truing period.

3. The Definitions in paragraph B apply to terms used in Part A and in the Supplemental DMR forms.

4. The *Annual Nutrient Summary* form shall be submitted no later than November 28th following the end of a compliance year for determination of compliance with the Net Total Nitrogen and Net Total Phosphorus Effluent Limits.

B. Definitions

1. Monthly Total Mass Load (lbs) = The sum of the actual daily discharge loads (lb/d) divided by the number of samples per month multiplied by the number of days in the month. Daily discharge load (lb/d) = Daily flow (MGD) on the day of sampling, multiplied by that day's sample concentration (mg/l) multiplied by 8.34.

2. Annual Total Mass Load (lbs) = The sum of the Monthly Total Mass Loads for one year beginning October 1st and ending September 30th.

3. Total Nitrogen = Kjeldahl-N plus Nitrate-Nitrite as N.

4. Compliance Year = The year long period starting October 1 and ending September 30. The compliance year will be named for the year in which it ends. Example: The period of October 1, 2010 through September 30, 2011 is compliance year 2011.

5. Truing period = the time allowed at the end of each compliance year for any entity to come into compliance through the application of credits towards the Net Total Mass Loads. This truing period will start on October 1st and end on November 28th of the same calendar year. During this period, compliance for the specified year may be achieved by using registered credits that were generated during that compliance year. Example: Credits that are used to achieve compliance in compliance year 2011 must have been generated during compliance year 2011.

6. Monthly Net Mass Load = Monthly Total Mass Load + (Total Credits sold during the month / 0.951 (TN delivery ratio for facility) OR 0.436 (TP delivery ratio for facility) – (Total Credits applied during the month / 0.951 (TN delivery ratio for facility) OR 0.436 (TP delivery ratio for facility)) – (Offsets applied / 12)

7. Annual Net Mass Load (lb/year) = The sum of the Monthly Net Mass Loads for one year beginning October 1st and ending September 30th.

8. Certification: Written approval by the Department for the use of proposed or implemented activities to generate credits and/or offsets. Certifications are based on at least (1) a credit or offset proposal to be submitted describing the qualifying activities that will reduce the nutrient loadings delivered to the Chesapeake Bay, (2) the calculation to quantify the pounds of reductions expected and (3) a verification plan that, when implemented, ensures that the qualifying nutrient reduction activities have taken place.

9. Verification: Implementation of the verification plan contained in a certified credit or offset proposal as required by the Department. Verification plans require annual submittal of documentation to the Department that demonstrates that the qualifying nutrient reduction activities have taken place for the applicable compliance year.

10. Registration: Approval by the Department of the use of credits or offsets in a permit. Registration will not occur until credits have been certified and verified, and for credits a trading contract has been submitted to the Department. The Department will register credits on an annual basis for use during the compliance year in which the qualifying nutrient reduction activities have taken place, and provide such credits with an annual registry number for reporting and tracking purposes.

C. Nutrient Credits and Offsets

1. Credit = The unit of compliance that corresponds with a pound of reduction of TP, TN or sediment as recognized by the Department which, when registered by the Department, may be used to comply with effluent limits.

2. Offset = Verb - The act of reducing the aggregate production of nutrients from an action or activity by use of a complimentary action, activity or technology on that site or directly related to the activity. Noun - The load in pounds of nitrogen or phosphorus created by an action, activity or technology that is available to apply against the proposed load to be generated. Offsets are not the same as credits as they cannot be directly bought, sold or transferred between owners, projects, or properties.

3. The permittee is authorized to apply nitrogen and phosphorus credits to this permit in order to comply with the Net Total Nitrogen and Net Total Phosphorus annual mass load effluent limits, when the credits are recognized by the Department through a trading program administered by the Department pursuant to "Final Trading of Nutrient and Sediment Reduction Credits – Policy and Guidelines," including all Attachments and Appendices.

4. Credits may be applied to the compliance obligations of this permit up until November 28 of the calendar year at the end of the current compliance period (e.g., if the period is the 12 months following 9/30/2010, credits may be applied up until 11/28/2011).

5. Whenever credits are applied or sold report the following, using Supplemental DMR forms:

   - Provide the registry number and trade effective dates.
   - Provide the type (nitrogen, phosphorus) and the number of credits purchased or sold of each.

6. Any time a contract expires during the term of this permit, the Department must be notified 30 days prior to the contract expirations and either a new contract provided or a discussion on how compliance with this permit will be achieved.

7. All credit transactions must be on the DEP's Trading website which can be viewed at www.dep.state.pa.us *Keyword "Nutrient Trading"*.

8. Offsets approved by DEP are to be reported and used in calculating the net monthly mass load.

9. All credits must be certified by the Department and verified for the year in which they are used for compliance with this permit.

10. Tracking Offsets and Credits:

    a. Credits – the use of credits shall be tracked on Supplemental DMR forms provided with this permit. As identified on the forms entitled *Monthly Nitrogen Budget* (3800-FM-WSFR0445) and *Monthly Phosphorus Budget* (3800-FM-WSFR0446), the forms shall be submitted when a credit transaction occurs. Additionally, the form entitled *Annual Nutrient Summary* (3800-FM-WSFR0447) shall be submitted at the end of each compliance year. Credits are only for the compliance year in which they are used and must be reported each year.

    b. Offsets – the use of offsets shall be tracked on Supplemental DMR forms provided with this permit. As identified on the forms entitled *Monthly Nitrogen Budget* and *Monthly Phosphorus Budget*, the forms shall be submitted when offsets are claimed. Additionally, the *Annual Nutrient Summary* shall be submitted at the end of each compliance year. Some offsets will be deemed as permanent and can be claimed each year. Offsets must be reported each year during the permit cycle. Offsets deemed to be permanent can be used to adjust cap loads in future permits.

    If an offset is approved during the compliance year, the offset generated shall be divided by twelve and applied to each monthly net mass load after the offset is approved. For example, 40 homes formerly utilizing on-lot systems are placed on public sanitary sewer service. The nitrogen offset of 25 lbs/year per home would be applicable. The offsets are approved in May of the compliance year, so the offset would be applied as follows:

    (40 homes x 25 lbs / home) / 12 months = 83 lbs/month

    For each month following approval of the offset, 83 lbs of nitrogen will be applied as an offset each month to the Monthly Net Mass Load.

D. Offsets Granted by Connection of Retired On-Lot Systems

The permittee is responsible for maintaining records that show that the on-lot systems existed or were put in place prior to January 1, 2003, and eliminated by connecting the dwellings to the sewage conveyance system after January 1, 2003. These records must verify that the on-lot system existed or was put in place prior to January 1, 2003, when the on-lot system was taken out of service, and when the dwelling was connected to the sewage conveyance system. These records must be maintained by the permittee as long as the offsets are counted toward the permittee's cap load. The permittee must make these records available for public inspection.

III. OTHER REQUIREMENTS

A. No stormwater from pavements, areaways, roofs, foundation drains or other sources shall be admitted directly to the sanitary sewers associated with the herein approved discharge.

B. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

C. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 - 6018.1003), and in a manner equivalent to the requirements indicated in Chapters 271, 273, 275, 283, and 285 (relating to permits and requirements for landfilling, land application, incineration, and storage of sewage sludge), Federal Regulation 40 CFR Parts 501 and 503, The Clean Streams Law, and the Federal Clean Water Act and its amendments.

D. This permit is of interest to the U.S. Environmental Protection Agency (EPA) because it meets one or more of the following criteria:

- POTW with a design hydraulic flow of one mgd or more.
- POTW with a pretreatment requirement.
- Industrial Waste discharger not waived for review by the EPA/DEP Memorandum of Agreement.
- Facility considered a "Significant Discharger" within the Chesapeake Bay watershed.
- Facility with a waste load allocation in an EPA-approved Total Maximum Daily Load (TMDL).

A copy of the DMR shall be submitted to the EPA at the following address:

NPDES Discharge Monitoring Reports (3WP42)
Water Protection Division
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

E. The permittee shall conduct Acute/Chronic Whole Effluent Toxicity Testing within the final 18 months of this permit cycle, according to Federal Regulation 40 CFR § 122.21(j)(5). The results shall be submitted with the permittee's next NPDES Permit application. The appropriate biomonitoring protocol for the testing can be obtained from PA DEP at the following address:

Department of Environmental Protection
Water Management Program
909 Elmerton Avenue
Harrisburg, PA 17110-8200
Telephone: 717-705-4707

F. The permittee shall complete all Supplemental Reporting forms provided by the Department in this permit (or an approved equivalent), and submit the signed, completed forms to the Department on a monthly basis with the DMR, in accordance with Part A III.B of this permit.

G. The permittee shall not discharge hauled-in wastes to the treatment plant under the following conditions, unless otherwise approved by the Department in writing:

- When acceptance of hauled-in wastes would cause a hydraulic or organic overload as defined in Chapter 94.1 of the Department's regulations.
- When the treatment facility is considered to be in an existing hydraulic or organic overload condition, as determined by the permittee or the Department, as defined in Chapter 94.1 of the Department's regulations.
- When the instantaneous flow at the treatment facility exceeds 3.75 MGD (the Chapter 94 hydraulic design capacity of the facility multiplied by a peaking factor of three), and for 24 hours following exceedance of this threshold.

H. All flows reported on DMRs and Supplemental Reporting forms shall include septage and all other hauled-in wastes. In addition, all hauled-in wastes shall be recorded on a daily basis on the Supplemental DMR.

I. Influent BOD5 and TSS samples shall be collected and analyzed. Loading from hauled-in wastes must also be included in plant loading through analyses of the hauled-in wastes reported on DMR Supplemental Forms or influent composite sampling. If hauled-in wastes are not included in influent composite analyses, for each day in which hauled-in wastes are received at the facility, indicate the volume and combined loading of septage, sludge, and other wastes received during the day on the DMR Supplemental Form.

Loading from the hauled-in waste shall be based on a daily composite of grab samples from the individual truck loads.

J. Use of tertiary nutrient filtration to meet nutrient effluent limitations shall be subject to the following requirements. The tertiary nutrient filters shall be operated at all times and treat up to the design flow capacity of the tertiary nutrient filters. Tertiary nutrient filtration shall be designed to treat at a minimum, the annual average daily design flow used to determine effluent limitations for this facility. NPDES compliance sampling for TN and TP shall be conducted in accordance with the nutrient requirements in Part A on any day the wastewater flow is diverted around the tertiary nutrient filters. To clarify, this may require sampling more often than is specified in Part A of this permit. The information shall be reported on DMR Supplemental Reporting forms.

IV. Supplemental Information

A. The hydraulic design capacity of 1.25 million gallons per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to help determine whether a "hydraulic overload" situation exists, as defined in Title 25 Pa. Code Chapter 94.

B. The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 1.25 MGD.

C. The organic design capacity of 2710.50 lbs BOD_5 per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to determine whether an "organic overload" condition exists, as defined in 25 Pa. Code Chapter 94.

V. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. Prohibition of Non-Stormwater Discharges

1. Except as provided in A.2, all discharges to Stormwater Outfalls S01 shall be composed entirely of stormwater.

2. The following non-polluting water discharges may be authorized, provided the discharge is in compliance with D.2.b: discharges from fire fighting activities; fire hydrant flushings, potable water sources including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Spills

This permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a PPC Plan as stated in Section D below.

C. This permit does not authorize any discharge (stormwater or non-stormwater) containing any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.

D. Preparedness, Prevention and Contingency Plans

1. Development of Plan

Operators of facilities shall have developed a Preparedness, Prevention and Contingency (PPC) Plan in accordance with 25 Pa. Code § 91.34 and the "Guidelines for the Development and Implementation of Environmental Emergency Response Plans". The PPC Plan shall identify potential sources of

pollution that may reasonably be expected to affect the quality of stormwater discharges from the facility. In addition, the PPC Plan shall describe the BMPs that are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit. The PPC Plan shall be submitted to the Southcentral Field Office within 90 days from the permit effective date.

2. Non-Stormwater Discharges

   a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of non-stormwater discharges. The certification shall include the identification of potential significant sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the stormwater discharge does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the Department within 180 days of the effective date of this permit.

   b. Except for flows from fire fighting activities, sources of non-stormwater listed in A.2. (authorized non-stormwater discharges) that are combined with stormwater discharges must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.

3. Comprehensive Site Compliance Evaluations and Record Keeping

   Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

   a. Visual inspection and evaluation of areas contributing to a stormwater discharge for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

   b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC plan, and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 90 days after the inspection.

   c. A report summarizing the scope of the inspection, using the DEP's Annual Inspection Form shall be completed and made available upon request and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

E. Stormwater Management Best Management Practices (BMPs)

The permittee shall implement at least the following BMPs:

1. Manage sludge in accordance with all applicable permit requirements.

2. Store chemicals in secure areas on impervious surfaces away from storm drains.

3. Consider routing stormwater contaminated within the treatment facility to the treatment facility or cover exposed materials (i.e., from the following areas: grit, screenings and other solids handling, storage or

pollution that may reasonably be expected to affect the quality of stormwater discharges from the facility. In addition, the PPC Plan shall describe the BMPs that are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit. The PPC Plan shall be submitted to the Southcentral Field Office within 90 days from the permit effective date.

2. Non-Stormwater Discharges

   a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of non-stormwater discharges. The certification shall include the identification of potential significant sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the stormwater discharge does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the Department within 180 days of the effective date of this permit.

   b. Except for flows from fire fighting activities, sources of non-stormwater listed in A.2. (authorized non-stormwater discharges) that are combined with stormwater discharges must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.

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   Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

   a. Visual inspection and evaluation of areas contributing to a stormwater discharge for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

   b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC plan, and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 90 days after the inspection.

   c. A report summarizing the scope of the inspection, using the DEP's Annual Inspection Form shall be completed and made available upon request and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

E. Stormwater Management Best Management Practices (BMPs)

The permittee shall implement at least the following BMPs:

1. Manage sludge in accordance with all applicable permit requirements.

2. Store chemicals in secure areas on impervious surfaces away from storm drains.

3. Consider routing stormwater contaminated within the treatment facility to the treatment facility or cover exposed materials (i.e., from the following areas: grit, screenings and other solids handling, storage or

disposal areas; sludge drying beds; dried sludge piles; composite piles, septage or hauled waste receiving station).

4. Efficiently use pesticides for weed control; where practicable investigate use of the least toxic pesticides; do not apply during windy conditions.

F. Stormwater Outfalls

1. The following table describes the outfall locations and drainage areas:

Outfall No.	Acreage	Latitude	Longitude	Area Description	Receiving Stream
S01	---	40° 14' 08 "	76° 52' 12 "	Office	Susquehanna River

VI. SOLIDS MANAGEMENT

A. The permittee shall manage and properly dispose of sewage sludge and/or biosolids, produced by the system, by balancing the amount of solids maintained within the treatment system. The permittee shall develop a scheduled sludge wasting rate that maintains an appropriate mass balance for the specific treatment process type and system loadings and maintains compliance with permit effluent conditions. Holding excess sludge within clarifiers or in the disinfection process is not acceptable. The permittee shall compute and set the wasting rate and time so as to maintain an appropriate balance of sludge in the system. Seasonal variations shall be considered in developing sludge wasting rates.

B. The permittee shall submit the Supplemental Reports entitled, "Supplemental Report – Sewage Sludge/Biosolids Production and Disposal" (Form No. 3800-FM-WSFR0438) and "Supplemental Report – Influent & Process Control" (Form No. 3800-FM-WSFR0436), as attachments to the DMR on a monthly basis. When applicable, the permittee shall submit the Supplemental Reports entitled, "Supplemental Report – Hauled In Municipal Wastes" (Form No. 3800-FM-WSFR0437) and "Supplemental Report – Hauled In Residual Wastes" (Form No. 3800-FMWSFR0450), as attachments to the DMR.

C. By March 31 of each year, the permittee shall submit a "Sewage Sludge Management Inventory" that summarizes the amount of sewage sludge and/or biosolids produced and wasted during the calendar year from the system. The "Sewage Sludge Management Inventory" may be submitted with the Municipal Wasteload Management Report required by Chapter 94. This summary shall include the expected sewage sludge production (estimated using the methodology described in the U.S. EPA handbook, "Improving POTW Performance Using the Composite Correction Approach" (EPA-625/6-84-008), compared with the actual amount disposed during the year. Sludge quantities shall be expressed as dry weight in addition to gallons or other appropriate units.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME: New Cumberland Borough
ADDRESS: 1120 Market Street
New Cumberland, PA 17070
FACILITY: New Cumberland STP
LOCATION: New Cumberland Borough
Cumberland County
WATERSHED: 7-E

PA0026654	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: February 1, 2011
DMR Effective To: January 31, 2016
Permit Expires: January 31, 2016
Permit Application Due: August 4, 2015

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT				*****	*****	*****				
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	MGD	*****	*****	*****	*****		Continuous	Measured
pH	SAMPLE MEASUREMENT	*****	*****			*****					
	PERMIT REQUIREMENT	*****	*****	*****	6.0 Min	*****	9.0 IMAX	S.U.		1/day	Grab
Dissolved Oxygen	SAMPLE MEASUREMENT	*****	*****			*****	*****				
	PERMIT REQUIREMENT	*****	*****	*****	5.0 Min	*****	*****	mg/L		1/day	Grab
CBOD5	SAMPLE MEASUREMENT				*****						
	PERMIT REQUIREMENT	260 Avg Mo	417 Wkly Avg	lbs/day	*****	25 Avg Mo	40 Wkly Avg	mg/L		2/week	24-Hr Composite
BOD5 Raw Sewage Influent	SAMPLE MEASUREMENT				*****		*****				
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	lbs/day	*****	Report Avg Mo	*****	mg/L		2/week	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	SAMPLE MEASUREMENT				*****		*****				
	PERMIT REQUIREMENT	Report Avg Mo	Report Daily Max	lbs/day	*****	Report Avg Mo	*****	mg/L		2/week	24-Hr Composite
Total Suspended Solids	SAMPLE MEASUREMENT				*****						
	PERMIT REQUIREMENT	313 Avg Mo	469 Wkly Avg	lbs/day	*****	30 Avg Mo	45 Wkly Avg	mg/L		2/week	24-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-PM-WSFR0462 Rev. 3/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS

NAME: New Cumberland Borough
ADDRESS: 1120 Market Street
New Cumberland, PA 17070
FACILITY: New Cumberland STP
LOCATION: New Cumberland Borough
Cumberland County
WATERSHED: 7-E

PA0026654	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: February 1, 2011
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		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Fecal Coliform May 1 - Sep 30	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	CFU/ 100 ml			
	PERMIT REQUIREMENT	*****	*****		*****	200 Geo Mean	*****			2/week	Grab
Fecal Coliform Oct 1 - Apr 30	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****	CFU/ 100 ml			
	PERMIT REQUIREMENT	*****	*****		*****	2,000 Geo Mean	*****			2/week	Grab
Total Phosphorus	SAMPLE MEASUREMENT		*****	lbs/day	*****		*****	mg/L			
	PERMIT REQUIREMENT	21 Avg Mo	*****		*****	2.0 Avg Mo	*****			2/week	24-Hr Composite
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-PM-WSPR0402 Rev. 3/2010

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PA0026654	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: February 1, 2011
DMR Effective To: January 31, 2016
Permit Expires: January 31, 2016
Permit Application Due: August 4, 2015
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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Ammonia---N	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	Report Avg Mo	*****			1/week	24-Hr Composite
Kjeldahl---N	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	Report Avg Mo	*****			1/week	24-Hr Composite
Nitrate-Nitrite as N	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	Report Avg Mo	*****			1/week	24-Hr Composite
Total Nitrogen	SAMPLE MEASUREMENT		*****		*****		*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	Report Avg Mo	*****			1/month	Calculation
Total Phosphorus	SAMPLE MEASUREMENT		*****		*****	*****	*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	*****	*****	*****		1/month	Calculation
Net Total Nitrogen	SAMPLE MEASUREMENT		*****		*****	*****	*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	*****	*****	*****		1/month	Calculation
Net Total Phosphorus	SAMPLE MEASUREMENT		*****		*****	*****	*****				
	PERMIT REQUIREMENT	Report Total Mo	*****	lbs	*****	*****	*****	*****		1/month	Calculation

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).						
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-PM-WSPR0402 Rev. 3/2010

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PA0026654	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY		YEAR	MO	DAY
			TO			

INTERIM

Reporting Frequency: Annually
DMR Effective From: February 1, 2011
DMR Effective To: September 30, 2013
Permit Expires: January 31, 2016
Permit Application Due: August 4, 2015

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

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		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Ammonia---N	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Total Nitrogen	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Total Phosphorus	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Net Total Nitrogen	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Net Total Phosphorus	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			year	Calculation
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).						
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-WSFR0462 Rev. 3/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

FINAL

PERMITTEE NAME/ADDRESS

NAME: New Cumberland Borough
ADDRESS: 1120 Market Street
New Cumberland, PA 17070
FACILITY: New Cumberland STP
LOCATION: New Cumberland Borough
Cumberland County
WATERSHED: 7-E

PA0026654	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Annually
DMR Effective From: October 1, 2013
DMR Effective To: January 31, 2016
Permit Expires: January 31, 2016
Permit Application Due: August 4, 2015

___ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING VALUE	QUANTITY OR LOADING VALUE	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION VALUE	QUALITY OR CONCENTRATION VALUE	QUALITY OR CONCENTRATION VALUE	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Ammonia---N	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Total Nitrogen	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Total Phosphorus	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	Report Total Annual		*****	*****	*****			1/year	Calculation
Net Total Nitrogen	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	22,831 Total Annual		*****	*****	*****			1/year	Calculation
Net Total Phosphorus	SAMPLE MEASUREMENT	*****		lbs	*****	*****	*****	*****			
	PERMIT REQUIREMENT	*****	3,044 Total Annual		*****	*****	*****			1/year	Calculation
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATIONS

INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be received by the Department on the 28th day of the month following the end of the reporting period.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-WSFR0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744. **DO NOT make changes to DMRs issued to you.**
- You may use computer-generated replicas of Form No. 3800-FM-WSFR0462 or of EPA's DMR if you receive prior approval from DEP and EPA. **DEP reserves the right to instruct you to discontinue the submission of computer-generated DMRs if the permit requirements you entered on the form are inaccurate.**

Instructions

1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that all violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-WSFR0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was no discharge at all from an outfall during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

A Use if you are exempted from monitoring the parameter because of a General Permit condition.

E Use if all samples or results are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.

GG Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).

FF Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the maximum weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of *n* sample results given by the *n*th root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1{,}200{,}000{,}000} = (1{,}200{,}000{,}000)^{1/5} = \mathbf{65}$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use a value of one-half (0.5)* the reporting limit for non-detect data. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. Calculate the average value by assigning 0.5 to the non-detect values of < 1.0, resulting in an average of 1.0.

To report average and maximum values where all results are non-detect for the reporting period, use the highest reporting limit and include the less than (<) symbol. For example, if four sample results are < 1.0, < 2.0, < 1.0, and < 1.0, report the average and maximum results as < 2.

* Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of one-half, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., >2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both">" and"<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – Four results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as < $(2 \bullet 10 \bullet 20 \bullet 30)^{0.25}$ = < 10. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as > $(2 \bullet 1{,}000 \bullet 2{,}000)^{0.33}$ = > 159.

Rounding and Precision

Results should be reported at the same level of precision as the effluent limitation. For example, if a limit is 1.1 and the average value of your results is 1.05, report the value as 1.1. If there is no effluent limitation ("Monitor and Report" only), report the value to the same level of precision as reported by the laboratory or as recommended by the equipment manufacturer.

For more information please see the documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262), available on DEP's Web site.

3800-FM-WSFR0435 7/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E
Laboratories:

Month: Year:
NPDES Permit No.: PA0026654 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

Day	Effluent Parameters																	
	Flow		pH		DO		CBOD5		TSS		Fecal Coliform		Ammonia		Total Phosphorus			
	Q	*MGD*	Q	*S.U.*	Q	*mg/L*	Q	*mg/L*	Q	*mg/L*	Q	*CFU/100 ml*	Q	*mg/L*	Q	*mg/L*	Q	
1																		
2																		
3																		
4																		
5																		
6																		
7																		
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26																		
27																		
28																		
29																		
30																		
31																		
Avg																		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

3800-FM-WS[illegible]0436 8/2009

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – INFLUENT & PROCESS CONTROL

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E

Month: _____ Year: _____
NPDES Permit No.: PA0026654
This permit will expire on January 31, 2016

Day	Influent					Process Control				
	Flow (MGD)	BOD5 (mg/l)	BOD5 (lbs)	TSS (mg/l)	TSS (lbs)	Aeration MLSS (mg/l)	Aeration DO (mg/l)	Sludge Wasted (gallons)		
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
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28										
29										
30										
31										
Avg										
Max										

Check if there were no ☐ biosolids removed from the plant, ☐ hauled-in municipal wastes received, ☐ hauled-in residual wastes received, or ☐ non-compliance incidents during the month **(otherwise attach the appropriate forms).**

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Prepared By: _____ Signature: _____

Title: _____ Date: _____

3800-FM-WSFR0437 8/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT – HAULED IN MUNICIPAL WASTES

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough
Watershed: 7-E
County: Cumberland

Month: _____ Year: _____
NPDES Permit No.: PA0026654
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

Day	SEPTAGE				SLUDGE				OTHER (specify):				DAILY TOTALS	
	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (mg/l)	BOD_5 (lbs)	Disposal Location	Gallons	BOD_5 (lbs)
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
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22														
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25														
26														
27														
28														
29														
30														
31														
Avg												Monthly Totals:		

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Prepared By: _____ Signature: _____

Title: _____ Date: _____

3800-FM-WSFR0438 Rev. 7/2010

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E

Month: _____ Year: _____
NPDES Permit No.: PA0026654
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

SEWAGE SLUDGE/BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

Date	Liquid Sewage Sludge/Biosolids Hauled Off-site			Dewatered Sewage Sludge/Biosolids Hauled Off-site			Sewage Sludge/Biosolids Dewatered and Incinerated On-site		
	Gallons	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons
		TOTAL:			TOTAL:			TOTAL:	

SEWAGE SLUDGE/BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
(Identify all sites where sewage sludge/biosolids or ash were disposed or land applied)

Site Name				
Municipality				
County				
DEP Permit No.				
Type of Material*				
Dry Tons Applied/Disposed				
Type of Disposal/Use*				
Hauler Name				

*See Instructions for explanation

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Prepared By: _____ Signature: _____

Title: _____ Date: _____

3800-FM-WSFR0444 7/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CHESAPEAKE BAY SUPPLEMENTAL REPORT
NUTRIENT MONITORING

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E

Month: _____ Year: _____
NPDES Permit No.: PA0026654 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

DAY	FLOW	Total P		NH_3-N		TKN		NO_2+NO_3 as N		Total N	
	MGD	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day
1											
2											
3											
4											
5											
6											
7											
8											
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22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
Avg											
Monthly Total Loads (lbs):											

(Avg result x No. days in month)

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

3800-FM-WSFR0445 Rev. 7/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CHESAPEAKE BAY SUPPLEMENTAL REPORT
MONTHLY NITROGEN BUDGET

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E
Total N Credits Purchased During Month: _____ lbs
Total N (TN) Delivery Ratio: 0.951

Month: _____ Year: _____
NPDES Permit No.: PA0026654 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

Total Nitrogen – Pounds				
Registry Number	Contract Effective Date	Credits Applied / 0.951 (lbs)*	Credits Sold / 0.951 (lbs)	DEP Approval Date
Monthly Total (lbs):				

Total Nitrogen – Offsets		
Source	Amount (lbs)	DEP Approval Date
Monthly Total (lbs):		

** Indicate the credits that you wish to apply this month toward compliance with annual load limitations.*

Monthly Total Nitrogen Load (lbs): _____ (Actual Load Discharged)
Monthly Net Nitrogen Load (lbs): _____ (Actual Load + (Credits Sold / TN Delivery Ratio) – (Credits Applied / TN Delivery Ratio) – Offsets)

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Prepared By: _____ Signature: _____
Title: _____ Date: _____

3800-FM-WSFR0446 Rev. 9/2010

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CHESAPEAKE BAY SUPPLEMENTAL REPORT
MONTHLY PHOSPHORUS BUDGET

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E
Total P Credits Purchased During Month: _____ lbs
Total P (TP) Delivery Ratio: 0.436

Month: _____ Year: _____
NPDES Permit No.: PA0026654 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

Total Phosphorus – Pounds				
Registry Number	Contract Effective Date	Credits Applied / 0.436 (lbs)*	Credits Sold / 0.436 (lbs)	DEP Approval Date
Monthly Total (lbs):				

Total Phosphorus – Offsets		
Source	Amount (lbs)	DEP Approval Date
Monthly Total (lbs):		

** Indicate the credits that you wish to apply this month toward compliance with annual load limitations.*

Monthly Total Phosphorus Load (lbs): _____ (Actual Load Discharged)

Monthly Net Phosphorus Load (lbs): _____ (Actual Load + (Credits Sold / TP Delivery Ratio) – (Credits Applied / TP Delivery Ratio) – Offsets)

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Prepared By: _____ Signature: _____

Title: _____ Date: _____

Pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

CHESAPEAKE BAY SUPPLEMENTAL REPORT
ANNUAL NUTRIENT SUMMARY

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E
Total N Credits Purchased During Year: _____ lbs
Total P Credits Purchased During Year: _____ lbs

For Compliance Year: 10/1/20 to 9/30/20
NPDES Permit No.: PA0026654 Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on: January 31, 2016
Delivery Ratios: Total N: 0.951 Total P: 0.436

MONTH	Monthly Total Mass Loads (lbs)		Credits Sold / Delivery Ratios (lbs)		Credits Applied / Delivery Ratios (lbs)		Offsets (lbs)		Monthly Net Mass Loads (lbs)	
	Total N	Total P	Total N	Total P	Total N	Total P	Total N	Total P	Total N	Total P
October										
November										
December										
January										
February										
March										
April										
May										
June										
July										
August										
September										
Totals:										
Truing Period Calculations:	**Annual Total Mass Loads (lbs)**		**Credits Sold / Delivery Ratios (lbs)**		**Credits Purchased / Delivery Ratios (lbs)**				**Annual Net Mass Loads (lbs)**	
	Truing Period Adjustments (Oct 1 – Nov 28)									

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____
Title: _____ Date: _____

3800-FM-WSFR0450 1/2010

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL REPORT
HAULED IN RESIDUAL WASTES

Facility Name: New Cumberland STP
Municipality: New Cumberland Borough County: Cumberland
Watershed: 7-E

Month: _____ Year: _____
NPDES Permit No.: PA0026654
Renewal application due **180 days** prior to expiration
This permit will expire on January 31, 2016

Date	Volume Received *(gallons)*	License Plate No.	Well Permit No.	Source of Residual Waste			Wastewater Type	Chemical Analysis *(Yes/No)*
				Generator	*Address*	*State*		

3800-FM-WSFR0189 3/2009

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

SUPPLEMENTAL LABORATORY ACCREDITATION FORM[1]

Permittee Name: New Cumberland Borough Cumberland County

Address: 1120 Market Street
New Cumberland, PA 17070

PERMIT NUMBER	MONITORING PERIOD Year/Month/Day						
PA0026654				TO			

PARAMETER	ANALYSIS METHOD	LAB NAME	LAB ID NUMBER[2]

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 possibly of fine and imprisonment for knowing violations.

Name/Title Principal Executive Officer _____

Phone: _____

Signature of Principal Executive Officer or Authorized Agent _____

Date: _____

[1] Submit this form with the first Discharge Monitoring Report (DMR), Annual Report or Recordkeeping and Reporting Form, where sample results are submitted to the Department for compliance purposes. You do not need to send this form to the Department again UNLESS there has been a change to the lab or method of analysis.

[2] For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.

3800-FM-WSFP0440 Rev. 7/2010

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). **Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.** If you are reporting other non-compliance events, and the reporting deadline does not coincide with your submission of the DMR, it should be submitted separately to the Department by the reporting deadline set forth in the permit. See instructions for more information.

Facility Name: New Cumberland STP Month: _____ Year: _____

Municipality: New Cumberland Borough County: Cumberland Permit No.: PA0026654

☐ **Violations of Permit Effluent Limitations***

Date	Parameter	Permit Limit	Units	Statistical Code	Result	Units	Cause of Violation	Corrective Action Taken

☐ **Sanitary Sewer Overflows and Other Unauthorized Discharges***

Event Date	Substance Discharged	Location	Volume (gals)	Duration (hrs)	Receiving Waters	Impact on Waters	Cause of Discharge	Date DEP Notified

☐ **Other Permit Violations***

- ☐ Sample collection less frequent than required Explain _____
- ☐ Sample type not in compliance with permit Explain _____
- ☐ Violation of permit schedule Explain _____
- ☐ Other Explain _____
- ☐ Other Explain _____

*** If the space provided is not sufficient to record all information, please attach additional sheets.**

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

INSTRUCTIONS FOR COMPLETING DMR SUPPLEMENTAL REPORTS

DAILY EFFLUENT MONITORING REPORT

Use this form to report daily monitoring results for the parameters that must be monitored in effluent for compliance with the permit. Results for influent parameters should be reported on Form 3800-FM-WSFR0436.

1. Enter Facility Name, Municipality, County, Watershed No., Laboratories, Month, Year, NPDES Permit No., Outfall No., and Permit Expiration Date (it is noted that this information may be pre-populated if you have received this form with your permit). For Laboratories, list the names of all laboratories where samples were analyzed during the month, including on-site analysis.

2. In the column headers, below "Effluent Parameters," enter the names of parameters in the permit. Since limited space is provided, abbreviation may be necessary. If there are more parameters for an outfall than columns provided on the form, attach an additional sheet.

3. Below parameter names, and to the right of "Q" (Qualifier) column headers, enter the units associated each parameter (it is noted that this information may be pre-populated if you have received this form with your permit).

4. Enter monitoring results for parameters in the rows corresponding to the day of the month in which samples were collected. Enter results exactly as reported by the laboratory, or if measured with on-site equipment, to the level of precision recommended by the equipment manufacturer. Enter data qualifiers such as "<," ">," "J," and others in the "Q" column.

5. Calculate and report average values at the bottom of the table in accordance with the DMR Instructions (3800-FM-WSFR0463). Note – for bacteria, calculate and report the geometric mean value.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

INFLUENT AND PROCESS CONTROL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For **Influent**, enter daily average Influent Flow (MGD) (if an influent flow meter is in use), daily influent BOD_5 concentrations (mg/l) and loads (lbs), and daily influent TSS concentrations (mg/l) and loads (lbs). If an influent flow meter is not in use, you may use results from an effluent flow meter.

3. For **Process Control**, enter daily average Mixed Liquor Suspended Solids (MLSS) (mg/l) and daily average Aeration Dissolved Oxygen (DO) for aerobic biological treatment systems, and total daily Sludge Wasted (removed from biological treatment), in gallons, for all treatment system types. If a parameter does not apply to your facility, leave the column blank. Information for other parameters such as Return Activated Sludge (RAS) Rate, Recirculation Rate (for fixed media treatment systems), Sludge Blanket Thickness, Sludge Volume Index, and others may be requested by the DEP office that issued the permit.

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

HAULED IN MUNICIPAL WASTES REPORT

This form is intended for documenting the receipt of municipal wastes including sewage sludge, septage and other wastewaters hauled in from other facilities for processing and/or disposal at your facility. This form should not be used for reporting receipt of residual wastes (e.g., food processing wastes, oil and gas wastewater, landfill leachate, etc.) - please use Form 3800-FM-WSFR0450 for reporting this information.

INSTRUCTIONS FOR COMPLETING DMR SUPPLEMENTAL REPORTS

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. For septage, biosolids and other wastewaters (specify type in the space provided), record the daily volume received in gallons, the daily BOD_5 concentration (average), the daily BOD_5 load in lbs (average), and the disposal location. For disposal location, specify the plant location or tank receiving hauled in wastes (e.g., headworks, primarily clarifier, digester, etc.).

3. Determine daily BOD_5 concentrations in mg/l by sampling loads in accordance with the permit or otherwise as determined by the facility. Periodic sampling of loads is encouraged to improve confidence in reported results.

4. Calculate the average, daily total and monthly total values and report the values in the spaces provided.

5. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

BIOSOLIDS PRODUCTION AND DISPOSAL FORM

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

Biosolids Production Information

2. For each off-site removal event for liquid sewage sludge or biosolids and for dewatered sewage sludge or biosolids, and for each event where dewatered sewage sludge or biosolids are incinerated on-site, list the date of the event, identify the gallons (liquid) or tons (dewatered) removed or incinerated and the percent solids (e.g., 10%, 20%, etc.) Report only sewage sludge or biosolids that have been removed from the plant digesters and other solids which have been **permanently** removed from the treatment process. Do **not** include sewage sludge or biosolids from other facilities that are processed at your facility. (If there were no off-site removal events during the month, check the box above the table).

   Calculate dry tons for liquid sewage sludge or biosolids by multiplying the volume (gallons) by the percent solids and by a conversion factor of 0.0000417. For example, if 2,500 gallons of liquid biosolids is removed, and the percent solids is 3.0%, dry tons is calculated as:

   2,500 gallons x 3.0% x 0.0000417 = 0.31 dry tons

   Calculate dry tons for dewatered sewage sludge or biosolids by multiplying the tons dewatered by the percent solids and by a conversion factor of 0.01. For example, if 5 tons of dewatered biosolids is removed, and the percent solids is 50%, dry tons is calculated as:

   5 tons x 50% x 0.01 = 2.5 dry tons

   The **% Solids** of liquid or dewatered sewage sludge or biosolids must be determined periodically through laboratory testing. Do not estimate or guess this value. An acceptable test method is method 2540B in *Standard Methods for the Examination of Water and Wastewater*, 18th edition, where samples are dried at 103-105°C. Other references such as ASTM may have equivalent tests which are also acceptable.

Biosolids and Incinerator Ash Disposal and Beneficial Use Information

3. Report sewage sludge, biosolids, and ash disposal and beneficial use information by disposal/application site. There are columns for four possible sites per month - if more sites are needed, attach additional pages. For each Site Name, listed at the top of the column, enter the Municipality and County of the site, the DEP Permit No. (i.e., Biosolids

permit number for land application, landfill waste management permit number, etc.), Type of Material (sewage sludge, biosolids, or incinerator ash), Dry Tons Applied/Disposed at the site for the month, Type of Disposal/Use (e.g., reed beds, agricultural utilization, composting, landfill, other treatment plant, etc.) and the name of the hauler (company or individual name).

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). If you are reporting other non-compliance events, and the deadline for a written report (e.g., 5 days) does not coincide with your submission of the DMR, this form should be submitted separately to the Department by the reporting deadline set forth in the permit.

If you are unsure of whether an incident constitutes non-compliance that may endanger health or the environment, it is recommended that you notify the Department verbally as soon as possible after you become aware of the incident. Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.

Instructions:

1. Enter the name of the facility, the municipality and county where it is located, the month and year when violations occurred, and the NPDES or WQM permit number for the facility.

2. If there were violations of permit effluent limitations during the month, check the box next to "Violations of Permit Effluent Limitations." (Note – if using the electronic version of this form, check the boxes first, and then select Tools – Unprotect Document to enter additional information). Enter the date of the violation (if a violation of a minimum or maximum limit, the date of sample collection, or if a violation of an average limit, the end of the monitoring period), the parameter name, the permit limit and units, the statistical code (e.g., "MIN", "MAX", "MO AVG", etc.), the measured result and units, the cause of the violation and the corrective action taken. **If there are more than two violations during the monitoring period and/or if the space provided is insufficient to explain the cause or corrective action, please attach additional pages.**

3. If there are Sanitary Sewer Overflow (SSO) discharges or other unauthorized discharges from the facility (e.g., spills, leaks, etc.) that enter or have the potential to enter waters of the Commonwealth, including groundwater, notify DEP by phone as soon as possible, and document the discharge on this form by checking the box next to "Sanitary Sewer Overflows and Other Unauthorized Discharges." Record the event (discharge) date, the substance discharged (e.g., sewage, on-site chemicals, etc.), the location where the discharge occurred (e.g., manhole number, pump station name, equipment description, etc.), the volume discharged (gallons), the approximate duration of the discharge (hours), the receiving waters (name of stream or groundwater), the impact on the receiving waters, if observed (e.g., solids deposition, foam, fish kill, etc.), the cause of the discharge, and the date on which the Department was verbally notified. **If there are more than two discharge events during the monitoring period and/or if the space provided is insufficient to explain the discharge, please attach additional pages.**

4. If there are other violations of the permit, check the box next to "Other Permit Violations," and check the appropriate box that describes the violation type. If not identified on the form, check the box next to "Other" and provide a written explanation. **If the space provided is insufficient to explain the violation, please attach additional pages.**

5. Type your name and title and sign and date the form after reading the certification statement.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

INSTRUCTIONS FOR COMPLETING DMR SUPPLEMENTAL REPORTS

If you have questions about completing this form, contact the Water Management Operations Section of the Department in your region:

Southeast Region – (484) 250-5970
Northeast Region – (570) 826-2553
Southcentral Region – (717) 705-4707
Northcentral Region – (570) 327-3661
Southwest Region – (412) 442-4000
Northwest Region – (814) 332-6942

NUTRIENT MONITORING REPORT

Use this form to report daily monitoring results and monthly calculations for Total Phosphorus and the Nitrogen series, where such monitoring is required by the permit.

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., Outfall No., and Permit Expiration Date.

2. Enter daily monitoring data for Flow (MGD) and Nutrient parameter concentrations (mg/l) and loading (lbs/day). Concentrations for Total Nitrogen are computed by summing the concentrations for TKN and NO_2 + NO_3 as N. Calculate loading by multiplying Flow by concentration and by the conversion factor 8.34. If no monitoring data are available for the day, leave the row blank. If you receive a "non-detect" (i.e., < "reporting limit") result, enter the result as reported by the laboratory, but use one-half the reporting limit for calculating the loading (lbs/day).

3. At the bottom of the table, calculate average monthly concentrations, loadings and total monthly loads.

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

NITROGEN AND PHOSPHORUS NUTRIENT BUDGET REPORTS

Use this form to report Nitrogen and Phosphorus credit transactions and offsets applied during a month, and monthly Nitrogen and Phosphorus loads. **If no credits are sold or applied and there are no offsets to report for a month, these forms should not be submitted.**

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., Outfall No., the number of Nitrogen and Phosphorus credits purchased during the month (lbs), Total Nitrogen (TN) and Total Phosphorus (TP) Delivery Ratios for the facility, and Permit Expiration Date. (If you receive this form with your permit, this information should be pre-populated).

2. Use the tables "Total Nitrogen - Pounds" and "Total Phosphorus – Pounds" to report all credits that you wish to apply for permit compliance and all credits sold. You do not need to apply credits that you purchased during the month toward permit compliance, but if you choose to do so, report the number you wish to apply in this table. Any remaining credits that you purchase can be applied another month or during the Truing Period (Oct 1 - Nov 28). List the registry number, contract effective date and DEP approval date for all credits applied or sold during the month. Divide the Credits Applied and Credits Sold by the TN and TP Delivery Ratios for your facility.

3. Use the tables "Total Nitrogen - Offsets" and "Total Phosphorus – Offsets" to report all offsets for the month. For septage (only septage, not holding tank or other hauled in wastes), divide the total gallons of septage received by 1,000 and multiply by 3 to determine the total amount (lbs) of offsets to report in the Total Nitrogen - Offsets table. For all other offsets, list the source, approved amount and DEP approval date.

4. Report the Monthly Total and Monthly Net Nitrogen Loads (lbs) and Monthly Total and Monthly Net Phosphorus Loads (lbs) below the respective tables.

Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

ANNUAL NUTRIENT SUMMARY REPORT

Use this form to document annual loads where the permit requires monitoring and reporting of annual loads for Total Phosphorus and Total Nitrogen.

1. Enter Facility Name, Municipality, County, Watershed No., Compliance Year (e.g., 10/1/09 to 9/30/10), NPDES Permit No., Outfall No., the Total Nitrogen (TN) and Total Phosphorus (TP) credits purchased during the year, the Delivery Ratios for the facility for TN and TP, and Permit Expiration Date. (If you receive this form with your permit, this information should be pre-populated).

2. For each month, enter the Monthly Total Mass Loads (Actual Loads Discharged), Credits Sold / Delivery Ratios for TN and TP, Credits Applied / Delivery Ratios for TN and TP, Offsets, and Monthly Net Mass Loads, as reported on Monthly Nitrogen and Phosphorus Budget worksheets submitted throughout the year. Credits Sold / Delivery Ratios and Credits Applied / Delivery Ratios recorded in the table for TN and TP should match the values recorded on the Monthly Nitrogen Budget and Monthly Phosphorus Budget Forms (3800-FM-WSFR0445 and 3800-FM-WSFR0446, respectively).

3. If there were credits sold or purchased during the Truing Period (Oct 1 - Nov 28), divide the amount of credits sold or purchased by the Delivery Ratios for the facility and report these values in the columns next to "Truing Period Adjustments." Complete Nitrogen and Phosphorus Budget worksheets to report the registry numbers, contract effective dates, amounts, and DEP approval dates for all credits purchased or sold during the Truing Period, and include these forms with your submission. The Annual Net Mass Loads are to be used for permit compliance (if a limit is in your permit).

4. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

HAULED IN RESIDUAL WASTES REPORT

Use this form to document receipt of residual wastes at your treatment facility (e.g., food processing waste, landfill leachate, oil and gas wastewaters). Municipal wastes such as sewage sludge and septage should be documented on the Hauled in Municipal Wastes Supplemental Report (3800-FM-WSFR0437).

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., and Permit Expiration Date.

2. Enter the date for each day in which the facility receives residual wastes. If wastewater is received from more than one generator on the same day, repeat the date in a separate row.

3. Report the total volume received each day from each generator (source), in whole gallons.

4. Report the license plate number of the vehicle hauling the wastewater to the treatment facility. If more than one vehicle is used by a generator, report the date and total volume hauled by each vehicle daily (use separate rows as necessary).

5. For oil and gas wastewaters, enter the permit number of the well from which the wastewater was generated. For other wastewaters, this column may remain blank.

6. Report the source of each load of residual waste, including the generator name, address, and state. For oil and gas wastewaters, report the location of the well(s) generating the wastewater.

7. Enter Wastewater Type, typically frac water, drilling fluids or production water for oil and gas wastewaters, or other types such as food processing waste or leachate.

8. If the wastewater has been analyzed and reported on a Residual Waste Form 26R, or a separate waste characterization using the parameters from Form 26R, enter "Yes" under the column "Chemical Analysis", otherwise enter "No".

9. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-07. Please provide a 5-year compliance history with DEP for New Cumberland Borough's wastewater collection and treatment system that includes an explanation for any violations.

RESPONSE: PAWC currently has no information that would indicate there have been any violations or compliance issues with DEP for New Cumberland Borough's wastewater collection and treatment system in the past 5 years.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-08. Please provide a copy of the Borough's Chapter 94 Municipal Wasteload Management Report that was most recently submitted to the Pennsylvania Department of Environmental Protection (DEP).

RESPONSE: See Attachment TUS Set 1, No. A-08.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

HRG
Herbert, Rowland & Grubic, Inc.
Engineering & Related Services
AN EMPLOYEE-OWNED COMPANY

369 East Park Drive
Harrisburg, PA 17111
(717) 564-1121
www.hrg-inc.com

MARCH 2016

CHAPTER 94
WASTELOAD MANAGEMENT REPORT
FOR
CALENDAR YEAR 2015

NEW CUMBERLAND WWTF
CUMBERLAND COUNTY, PENNSYLVANIA

HRG Project No. 004723.0425

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March 11, 2016

RECEIVED
MAR 1 1 2016
ADMINISTRATION
DEP-SOUTHCENTRAL REGION

Pramod Patel
PA Department of Environmental Protection
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, Pennsylvania 17110

Re: New Cumberland Borough
Municipal Wasteload Management Report
Calendar Year 2015

Dear Mr. Patel:

On behalf of the Borough of New Cumberland, please find enclosed two (2) copies of the 2015 Municipal Wasteload Management Report for the New Cumberland WWTF.

Please feel free to contact me should you have any questions or concerns.

Respectfully,

Herbert, Rowland & Grubic, Inc.

Alex Greenly, E.I.T
Staff Professional

ARG/lt
004723.0425
P:\0047\004723_0425\Admin\Chapter 94 Reports\2015 Chapter 94 Report\00. Cover Letter to DEP_2015.doc

Enclosures

c: Terry Filson, New Cumberland Borough (w/Encl.)
File (w/Encl.)

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year:

☒ Permittee is owner and/or operator of a POTW or other sewage treatment facility
☐ Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

GENERAL INFORMATION			
Permittee Name:	**Borough of New Cumberland**	Permit No.:	**PA0026654**
Mailing Address:	**1120 Market Street**	Effective Date:	**02/02/2011**
City, State, Zip:	**New Cumberland**	Expiration Date:	**01/31/2016**
Contact Person:	**Terry Filson**	Renewal Due Date:	**08/04/2015**
Title:	**Sewer Superintendent**	Municipality:	**New Cumberland**
Phone:	**717-774-7826**	County:	**Cumberland**
Email:	**sewer@newcumberlandborough.com**	Consultant Name:	**Herbert, Rowland & Grubic, Inc.**

CHAPTER 94 REPORT COMPONENTS

1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (25 Pa. Code § 94.12(a)(1))

   Check the appropriate boxes:
   ☒ Line graph for flows attached (**Attachment A**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment A**)
   ☐ Section 1 is not applicable (report is for a collection system).

2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (25 Pa. Code § 94.12(a)(2))

   Check the appropriate boxes:
   ☒ Line graph for organic loads attached (**Attachment A**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment A**)
   ☐ Section 2 is not applicable (report is for a collection system).

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

Based on the projected hydraulic and organic loadings for the next five years, no overload is expected at the New Cumberland WWTF. Therefore, there is no need to expand the plant at this time. See attachment A for Hydraulic and Organic loading projections.

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

Check the appropriate boxes:

- ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment**)
- ☐ List summarizing each extension or project attached (**Attachment**)
- ☐ Schedules describing how each project will be completed over time and effects attached (**Attachment**)

Comments:

N/A - No extension planned in the next five years, as the Borough is fully sewered.

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

The Borough of New Cumberland is responsible for the operation and maintenance of the wastewater collection and conveyance system as well as the WWTF. The Borough employs staff of certified operators and skilled professionals who perform routine monitoring and required maintenance on the WWTF, the Borough's three (3) pumping stations, as well as the collection and conveyance system. See attachment B for details of maintenance and repair tasks perofrmed on the sewer system in 2015.

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

Check the appropriate boxes:

☐ System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

The collection and conveyance system is monitored on a regular basis through preventative maintenance activities to optimize the operation of the system and to minimize the occurrence of system failures. There is sufficient capacity within the collection and conveyance system, and capacity is not expected be exceeded within the next 5 years. While no overloading of the sewer system ocurred in 2015, the system has in rare cases of extreme rainfall events, experienced surcharging of manholes. This last occurred in October of 2013 as a result of a 8.91 inch, 24 hour rain event. The Borough has conducted sewer lining projects over the past five years to help reduce the amount of inflow and infiltration entering the sanitary sewer system during heavy rain events.

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

Check the appropriate boxes:

☐ The collection system does not contain pump stations

☒ The collection system does contain pump stations (Number – **3**)

☒ Discussion of condition of each pump station attached (**Attachment C**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

   a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.

   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.

   c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 8 a., b. and c. attached (**Attachment**)

☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

9. Existing or Projected Overload.

Check the appropriate boxes:

- ☐ This report demonstrates an existing hydraulic overload condition.
- ☐ This report demonstrates a projected hydraulic overload condition.
- ☐ This report demonstrates an existing organic overload condition.
- ☐ This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

☐ Corrective Action Plan attached (**Attachment**)

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

☒ Sewage Sludge Management Inventory attached (**Attachment D**)

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

☐ Annual CSO Report attached (**Attachment**)

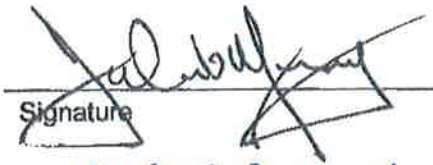
12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

☒ Flow calibration report attached (**Attachment E8**)

RESPONSIBLE OFFICIAL CERTIFICATION

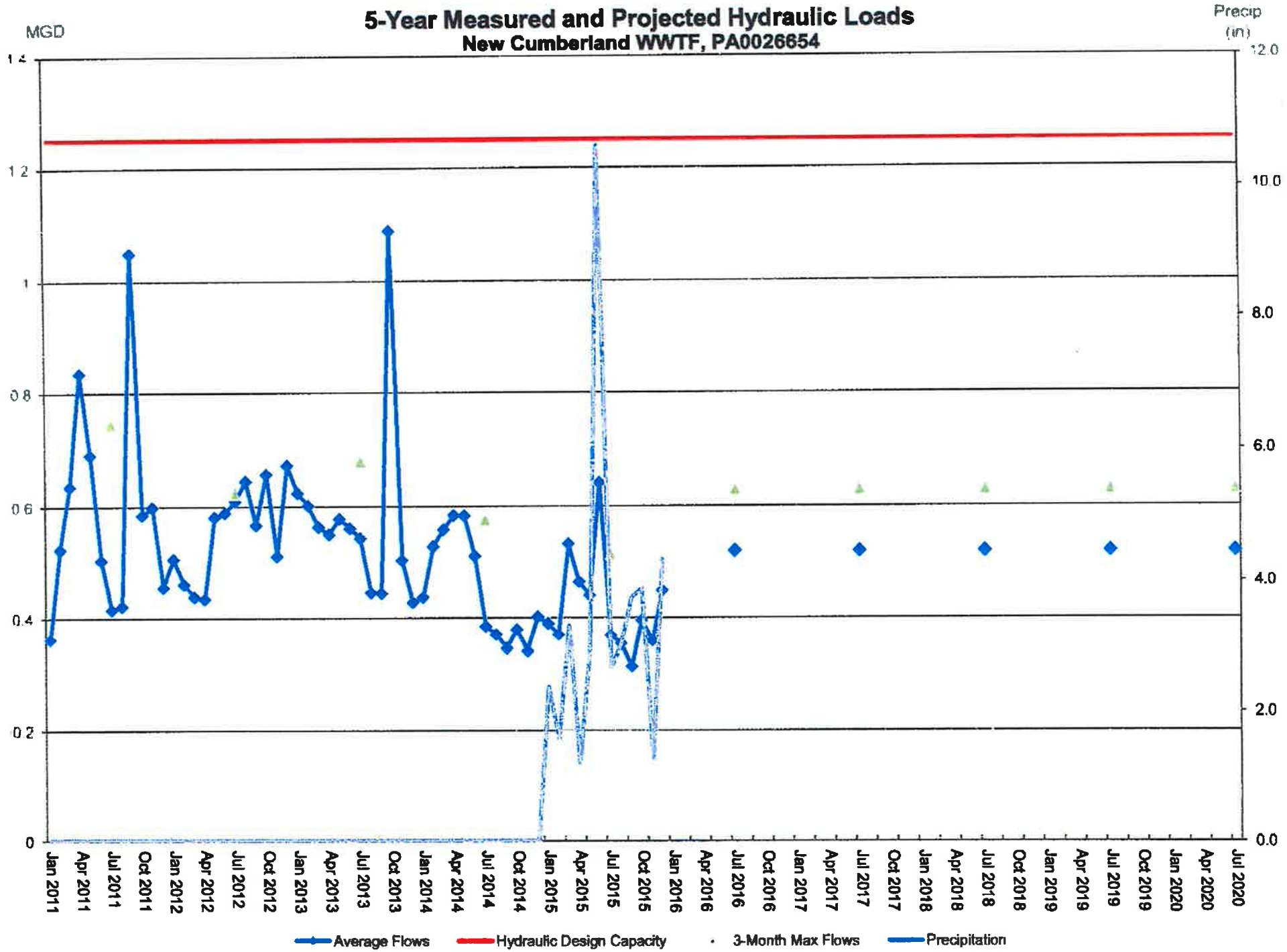
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

John R. Murray, Council President
Name of Responsible Official


Signature

717-774-0404
Telephone No.

MARCH 2, 2016
Date


5-Year Measured and Projected Hydraulic Loads
New Cumberland WWTF, PA0026654
MGD
Precip (in)
1.2
1
0.8
0.6
0.4
0.2
0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Jan 2011
Apr 2011
Jul 2011
Oct 2011
Jan 2012
Apr 2012
Jul 2012
Oct 2012
Jan 2013
Apr 2013
Jul 2013
Oct 2013
Jan 2014
Apr 2014
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Jan 2018
Apr 2018
Jul 2018
Oct 2018
Jan 2019
Apr 2019
Jul 2019
Oct 2019
Jan 2020
Apr 2020
Jul 2020
Average Flows
Hydraulic Design Capacity
3-Month Max Flows
Precipitation

CONTROL SYSTEMS 21

Tel: (717) 432-7550

Date: 1/8/15

Circle One

Trouble Call

Residential

Job Call

Yes

No

Customer Name

Location (City, State)

SO#

Is Job Complete?

If not complete, additional materials needed

Parts/Materials Used

Qty	Description	Qty	Description/Part Number	Price to Owner/Time to Client?

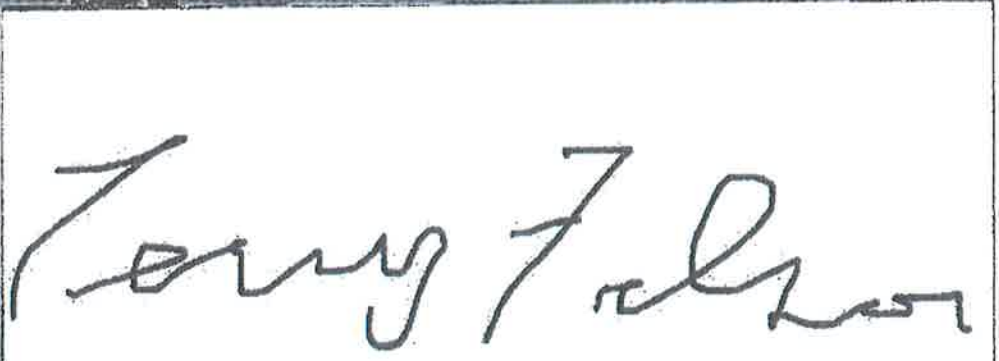
Miles

Charges

1 of

Control Systems 21
713 Range End Rd
Dillsburg, PA 17019
Office:717-432-5511
Fax:717-432-7550
www.controlsystems21.com

Visit Record - Monday, [illegible] 1:48:46 PM [illegible]	
User Name	SAM HACKENBERGER
	1
Form Started	2/9/2015 1:48:46 PM
	020915srh-1
Date	Monday, February 09, 2015
	Borough of New Cumberland
Is Job# Needed or Associated With This Visit?	No
	sewer@newcumberlandborough.com
Technicians:	Sam Hackenberger,Chris Waldron
	Service Call
Parts/Materials Used:	
Parts/Materials Needed:	
Repair Needed:	
	Yes
Description Of Work Performed:	Service and calibration of the following: Influent/ Effluent flow meters; Effluent pH meter; effluent recorder. WAS/RAS/TRANSFER mag meters. Also replaced DO cap on DO probe(used customer spare). Also troubleshot effluent recorder automatic print problems and discussed future options for additional channel inputs.
Attachments	



CONTROL SYSTEMS 21
718 Range End Road
Dillsburg, PA 17019
(717) 432-5531 Fax: (717) 432-7550
www.controlsystems21.com

Date: 3/15

Customer PO#:

Customer Name: New Cumberland WWTP

Location (City, State):

SO#:

Circle One: Trouble Call / Service/Cal. / Job/Proj.

Is Job Completed? Yes / No

Job#:

If not complete - additional materials needed

Part/Materials Used

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order?
2	Hach 579 1100 DO Cap For Stock at Facility			

Work Performed

Service / Cal of the following equipment

Influent / Effluent Flow Meter, Effluent pH & DO probes

All instruments are working correctly at this time

Thanks

Hours

Miles

Overtime

4/30/15

CS21 Representative: CW

Customer Signature: Tony Fiker

Next calibration Due:

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7550
www.controlsystems21.com

Date: 4/14/15

Customer PO#	Circle One	Job#
Customer Name: New Cumberland Water	Trouble Call	
Location (City, State)	Service/Cal	
SO#	Job/Proj	
	Is Job Completed? Yes	No

Part/Materials Used — If not complete - additional materials needed

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order

Work Performed

The following have been calibrated and are working correctly at this time

Effluent & Influent Flow

Effluent PH & DO

Diester B

Diester A Do probe failure to be evaluated

Thanks
M. Eckert

Hours | Miles | Overtime

CS21 Representative: [signature]

Customer Signature: Terry Fiber

Next calibration Due: 5/30/15

Control Systems 21
915 Kingsland Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7550
www.controlsystems21.com

Date: 5/6/15

Circle One: Trouble Call / Service Call / Job Proj.

Initial

Customer PO#

Customer Name: [illegible]

Location (City, State)

Is Job Completed? Yes / No

If not complete - additional materials required?

Parts/Materials Used

Qty	Description	Qty	Description/Part Number	Client to Order or Tech to Order?

Work Performed

Monthly calibration of effluent flow Meter
Replace DO probe in effluent flow Meter. Trouble shoot
Replace DO probe, Wand sensor to be used
Reset the totalizer, Level meter

thanks
CL

Hours

Miles

Overtime
4 hr/15

Customer Signature

Next calibration Due:

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7550
www.controlsystems21.com

Date: 6/3/15

	Circle One	Job#
Customer PO#	Trouble Call	
Customer Name: Law Cumberland WWTP	Service/Cal.	
Location (City, State)	Job/Proj.	
SO# / Is Job Completed?	Yes	No

Part/Materials Used — If not complete - additional materials needs

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order?
	/			
	—			

Work Performed:

Monthly Service on 20 : pH probes, influent and effluent
Flow Meters & Recorders

All instruments are working correctly at this time.

Hours | Miles | Overtime

CS21 Representative: [signature]

Customer Signature:

Next calibration Due: 7/31/15

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7559
www.controlsystems21.com

Date: 7/9/15

Customer PO#	Circle One	Job#
Customer Name Low Conewago WWTP	Trouble Call	
Location (City, State)	Service/Cal	
SO#	Job/Proj.	
	Is Job Completed? Yes	No

Part/Materials Used — If not complete - additional materials needed

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order?

Work Performed

Monthly Service and cal on
Influent flow Meter
Effluent flow Meter & Recorder
PH & DO probes
All items are working correctly at this time.

Thanks
CL

Hours | Miles | Overtime

CS21 Representative: CW

Customer Signature:

Next calibration Due: 9/21/15

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7550
www.controlsystems21.com

Date: 8-7-15

	Circle One	Job#
Customer PO#	Trouble Call	
Customer Name: NEW CUMBERLAND WWTP	Service Call	
Location (City, State)	Job/Proj.	
SO#	Is Job Completed? Yes	No

Part/Materials Used — If not complete - additional materials needed

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order?

Work Performed

- ROUTINE SERVICE AND CALIBRATION OF THE FOLLOWING:
  - EFFLENT FLOW METER
  - EFFLUENT RECORDER
  - EFFLUENT pH METER /DO METER
- THIS MONTH'S ROTATION FOR CALIBRATION WAS 3 TOSHIBA M46S AT THE PLANT. THEY ARE AS FOLLOWS:
  - WAS METER
  - RAS METER
  - TRANSFER METER
- THE ABOVE HAVE BEEN CLEANED CALIBRATED AND ARE FUNCTIONING PROPERLY AT THIS TIME.

THANKS!
GALEN

Hours | Miles | Overtime

CS21 Representative: | Customer Signature: | Next calibration Due: 9-30-15

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax (717) 432-7580
www.controlsystems21.com

Date: 7-4-15

Customer PO#:

Customer Name: CUMBERLAND VALLEY

Location (City, State):

Site#:

Job#:

Circle One: Trouble Call / Service Call / Job/Proj.

Is Job Completed? Yes / No

If not complete, additional materials ne

Parts/Materials Used:

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Or

Work Performed:

- EXISTING SERVICE AND INSTRUMENTATION OF THE FOLLOWING
- INFLUENT FLOW
- EFFLUENT FLOW
- EFFLUENT pH
- EFFLUENT ORP
- EFFLUENT TURBIDITY
- SOUTH FIST CHLORINE (CHLORINE LINES CUT AT SITE)
- DIESEL TANK LEVEL
- CEDAR CLIFF TANK LEVEL

- THE ABOVE LISTED ITEMS WERE CALIBRATED AND FUNCTIONING PROPERLY AT THIS TIME.

THANKS!
CALEB & EVAN

Hours:

Miles:

Overtime:

CSI Representative:

Customer Signature:

Next calibration Due:

Control Systems 21
713 Range End Rd
Dillsburg, PA 17019
Office:717-432-5511
Fax:717-432-7550
www.controlsystems21.com

User Name	Galen Anderson
Form Started	10/29/2015 12:23:01 PM
Date	Thursday, October 29, 2015
Is Job# Needed or Associated With This Visit?	No
Technicians:	Chris Waldron,Galen Anderson
Parts/Materials Used:	
Repair Needed:	
Description Of Work Performed:	Routine service and calibration of the following: Effluent Flowmeter, Effluent Recorder, Effluent pH/DO, Digester A & B pH Probes, Influent Flowmeter. The above have been serviced, calibrated and are functioning properly at this time.

CS21 found SC200 on digester on top of building to have a w[illegible] out LCD screen. Also found both pH and DO probes out of water. E[illegible] probe may be non-functioning because of sun exposure. Recomme[illegible] keep [illegible] bes submerged. CS21 will also return next mon[illegible] new [illegible] to experiment with parking lot di[illegible] p[illegible] -alh

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7550
www.controlsystems21.com

Date: 11/18 11/19

Customer PO#	Circle One	Job#
Customer Name New Cumberland W.T.P.	Trouble Call	
Location (City, State)	Service/Cal.	
	Job/Proj.	
SO#	Is Job Completed? Yes	No

Part/Materials Used — If not complete - additional materials needed

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order?
1	Sensor Mfg 5000			

Work Performed

Factory recalibration and service of Effluent & Influent Flow Meters Effluent DO, probe & PH meter.

Trouble Shoot Digester A DO probe. Probe has a bad temp Sensor will require replacement

Quote Replacement Endress+Hauser 200 & Transducer CPS0 for Effluent Tank with quote Depth Head & New Ultrasonic ranges

1,958.95
422.40

Send Cable for DO probe
Adjusted Main Flow Meter To Compensate

CL

Hours | Miles | Overtime

CS21 Representative: CW

Customer Signature: D. Bogar

Next calibration Due: 12/21/15

CONTROL SYSTEMS 21
713 Range End Road
Dillsburg, PA 17019
(717) 432-5511 Fax: (717) 432-7550
www.controlsystems21.com

Date: 12/5/15

Circle One	Job#
Trouble Call	
Service/Cal.	
Job/P.O.	
Yes	No

Customer PO#

Customer Name: New Cumberland WWTP

Location (City, State)

SO#

Is Job Completed?

If not complete - additional materials needed

Part/Materials Used

Qty	Description	Qty	Description/Part Number	Office to Order or Tech to Order?

Work Performed:

Annual Calibration of the following

5867 Thermo

Semi Annual

5919 Thermo

EH RAS Return

1760 Thermo

Flow

5999745 DO Thermo

0159 Thermo

1247 Thermo

2001001x2627 pH Thermo

105993037874S Summer Cent. Temp

03032593 Orion Cent Temp

6-82-1731 Auto Clave

Monthly Service Influent Effluent Flow

Effluent pH & DO

Thanks

CL

Hours

Miles

Overtime

12/31/14

CS21 Representative: CW

Customer Signature: Tracy Filson

Next calibration Due:

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-09. Please identify the pipe sizes, lengths and corresponding material types that comprise the Borough's wastewater collection system. Please also quantify the manholes in the Borough's wastewater collection system.

RESPONSE: The following information was contained in documentation that the Borough provided to PAWC as follows:

Pipe Size	Length
4"	560
6"	2,180
8"	126,330
10"	13,500
12"	2,050
15"	3,680
18"	2,850
21"	300
42"	310
Manholes	608

The above pipe is not detailed by material type. The majority of the collection system is comprised of vitrified clay pipe. There is some PVC pipe that has been installed in recent years.

Response Witness: Scott D. Fogelsanger
Title: Senior Manager, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-10. Please state the total number of pumping stations in the Borough's wastewater collection system as well as identify their locations.

RESPONSE: There are three sewer pumping stations (or lift stations) located in the collection system – the Southeast station (aka Walnut Alley Sewer Pumping Station), Cedar Cliff station (aka Carlisle Road Sewer Pumping Station), and Drexel Hills station (aka Drexel Hills Park Sewer Pumping Station).

Response Witness: Michael Guntrum PE, PMP
Title: Senior Project Engineer

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-11. Please state whether the Borough charges its customers a tapping fee for connecting to the Borough's wastewater collection and treatment system.

RESPONSE: The Borough of New Cumberland charges a $500 sewer connection charge. Please refer to Section 4. "Sewer Connection Charges" of the Borough's Ordinance No. 665, which is provided in response to the DR Set 1, No. A-14.

Response Witness: John R. Cox
Title: Manager of Rates and Regulations

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-12. Please clarify whether the Borough utilizes the term Equivalent Dwelling Units (EDU). If so, please state the Borough's definition of an EDU.

RESPONSE: The Borough of New Cumberland does not use the term Equivalent Dwelling Units (EDU). The Borough of New Cumberland does utilize the term "Dwelling Unit". Please refer to Ordinance No. 665, which is provided in response to the DR Set 1, No. A-14 for the Borough's definition of Dwelling Unit.

Response Witness: John R. Cox
Title: Manager of Rates and Regulations

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-13. Please state if the Borough currently requires any customers to pretreat wastewater prior to discharging to the Borough's wastewater system.

RESPONSE: The Borough currently has no customers that pretreat wastewater prior to discharging to the Borough's wastewater system.

Response Witness: Michael Guntrum PE, PMP
Title: Senior Project Engineer

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-14. Please provide a complete copy of the Borough's wastewater rules and regulations.

RESPONSE: Please see Attachment TUS Set 1, No. A-14.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

BOROUGH OF NEW CUMBERLAND

CUMBERLAND COUNTY, PENNSYLVANIA

ORDINANCE NO. 665

AN ORDINANCE ESTABLISHING SEWER CONNECTION CHARGES AND SEWER RENTAL/USER RATES AND CHARGES TO BE COLLECTED FROM THE OWNER OF EACH IMPROVED PROPERTY SERVED OR TO BE SERVED BY THE SEWER SYSTEM IN THE BOROUGH OF NEW CUMBERLAND, PROVIDING FOR THE COLLECTION OF SUCH RATES AND CHARGES, ESTABLISHMENT OF FINES AND PENALTIES FOR VIOLATION

BE IT ENACTED AND ORDAINED by the Council of the Borough of New Cumberland, Cumberland County, Pennsylvania, and it is hereby enacted and ordained by the authority of same as necessary for the protection, benefit and preservation of health, safety and welfare of the residents and property owners of the Borough:

Section 1. AUTHORITY This Ordinance is enacted pursuant to the Borough Code, Act of February 1, 1966, P.L. 1656 (1965), as amended, 53 P.S. Section 47001, et seq., (SANITARY SEWERS), 53 P.S. Section 48301, et seq. (GENERAL POWERS, ENFORCEMENT) and the Act of May 16, 1923, P.L. 207, Section 7, as amended, 53 P.S. Section 7101 et seq, as amended (MUNICIPAL CLAIMS AND TAX LIENS).

Section 2. DEFINITIONS.

As used in this Ordinance, the following terms shall have the meanings indicated:

"Borough" shall mean the Borough of New Cumberland.

"Borough Council" shall mean the Borough Council for the Borough of New Cumberland.

"Commonwealth" shall mean the Commonwealth of Pennsylvania.

"Dwelling Unit" shall mean any room, group of rooms, building or other enclosure

connected, directly or indirectly, to the Sewer System and occupied or intended for occupancy as living quarters by an individual, a single family discrete group of persons, excluding institutional dormitories.

"Improved Property" shall mean any property upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which structure Sanitary Sewage shall be or may be discharged, which is located within the area subject to mandatory connection provisions of this Ordinance.

"Multiple Use Improved Property" shall mean any Improved Property upon which there shall exist any combination of a Dwelling Unit, Commercial Establishment, Industrial Establishment, Educational Establishment or Institutional Establishment.

"New Cumberland" shall mean the Borough of New Cumberland, Cumberland County, Pennsylvania, a municipal corporation of the Commonwealth.

"Owner" shall mean any person vested with title, legal or equitable, sole, joint or partial, of any Improved Property.

"Person" shall mean any individual, partnership, company, limited liability company, limited liability partnership, association, trust, society, corporation or other group or entity, including municipalities, municipal authorities, school districts and other units of government.

"Rental Charge" shall mean the quarterly rental or charge imposed by the Borough, as amended from time to time, against the Owner of each Improved Property, for the use or availability or use of the Sewer System. This term shall be used interchangeably with "User charge".

"Sanitary Sewage" shall mean normal water-carried household and toilet wastes from any Improved Property.

"Sewer" shall mean any pipe, conduit or appurtenance constituting a part of the Sewer System used or usable for collection of Sanitary Sewage and/or Industrial Wastes.

"Sewer System" shall mean all facilities, at any particular time, acquired, constructed and owned by the Borough or its predecessor (New Cumberland Borough Authority) for operation and use for the purpose of collection, pumping, transporting, treating and/or disposing of Sanitary Sewage and/or Industrial Wastes.

"User" shall mean any person who contributes, causes or permits the contribution of wastewater into the Sewer System or the treatment plant from an Improved Property.

"User Charge" shall mean the quarterly rental or charge imposed by the Borough, as amended from time to time, against the Owner of each Improved Property, for the use of availability or use of the Sewer System. This term shall be used interchangeably with "Rental Charge".

Section 3. GENERAL REQUIREMENTS

(a) All owners of any Improved Property connecting with the sanitary sewer and Sewer System in the Borough of New Cumberland shall pay connection fees and quarterly Rental or User charges as hereinafter provided, for the use, whether directly or indirectly, of the Sewer System, as provided herein. At the discretion of the Borough, such Rental or User charge may be imposed upon the Owner of an Improved Property who improperly fails or refuses to connect such Improved Property to the Sewer System, as compensation for the availability of service by the Borough in connection with the Sewer System.

(b) The Rental or User charge shall be payable by the Owner of each Improved Property commencing the earlier of:

(i) the date of actual, physical connection of an Improved Property to the Sewer System; or

(ii) Sixty (60) days from the date of issuance of any notice to connect; or

(iii) such other date established by the Borough for commencement of the Rental or User charge.

Section 4. SEWER CONNECTION CHARGES

All connections to the Borough Sewer System and Sewage Treatment facility shall be made only after paying a (Five Hundred) $500.00 connection charge to the Borough. Sewer connection charges shall be due and payable at the time application for permit to

made such connection is made to the Borough.

Section 5. **SEWER RENTAL/USER CHARGES AND RATES**

Rental and User charges applicable to any Improved Property hereby imposed shall be calculated on the basis of water consumption on the Improved Property to be charged, as determined by the amount of water supplied to the Improved Property as measured by the water meter or meters of the water utility serving the Borough (currently the Pennsylvania American Water Company). Rental and User charges shall be assessed and collected in accordance with the following schedule:

Rate where measured in gallons

First 9,000 gallons - $12.27	per thousand gallons or portion thereof.
Next 9,000 gallons - $10.22	per thousand gallons or portion thereof.
Next 49,000 gallons - $8.18	per thousand gallons or portion thereof.
Next 157,000 gallons - $6.15	per thousand gallons or portion thereof.
Next 450,000 gallons - $5.14	per thousand gallons or portion thereof.
All additional gallons - $5.14	per thousand gallons or portion thereof.

Section 6. **QUARTERLY MINIMUM BILLS**

There shall be a quarterly minimum rental charge of $76.64 assessed against and collected from every dwelling unit on an Improved Property which is connected to the Sewer System.

Section 7. **APPLICATION OF RENTAL RATES**

The foregoing sewer Rental and User charges shall apply to all billings for sewer rentals or charges assessed and occurring on and after January 1, 2012.

Section 8. **BILLING AND PAYMENT OF SEWER CONNECTION CHARGES AND SEWER RENTALS; COLLECTION CHARGES; ATTORNEY FEES AND CHARGES**

(a) Charges for sewer connections. Charges for first time connection sewer rental and user fees will be sent out for the first quarterly period or portion thereof after the date of connection to the sewer system. The owner of an Improved Property connecting during a quarterly period shall pay a pro rata charge of service for the balance of said period.

(b) Quarterly sewer rentals. Sewer rental and surcharges, as applicable, shall be due and payable quarterly, during the months of February, May, August and November, as indicated by the billing date on each respective bill, in each year, and shall cover a billing consisting of the quarterly period immediately preceding the date of the bill.

(c) Payments. Payment of sewer rentals and any applicable surcharges shall be due and payable upon the applicable billing date, at the Borough offices, in the appropriate amount, computed in accordance with this Ordinance, which shall constitute the net bill. If any sewer or applicable surcharge is not paid within thirty (30) calendar days after the applicable billing date, an additional sum of five (5) percent shall be added to such net bill, which net bill, plus such additional sum, shall constitute the gross bill. Payment made at the Borough Offices or mailed and postmarked on or before the last day of such thirty (30) day calendar period shall constitute payment within such period. Any and all payments received on account of delinquent accounts shall be applied first to the oldest outstanding gross bill, including any accumulated fee.

(d) Mailing address: Owner responsibility. It shall be the responsibility of each

Owner of an Improved Property to provide the Borough with, and thereafter keep the Borough continuously advised of the correct mailing address of such Owner. Failure of an owner to receive bill for charges due and payable shall not be considered an excuse for non-payment, nor shall such failure result in an extension of the period of time during which the net bill shall be payable.

(e) Owner liability for Rental and User charges. Every owner of Improved Property shall remain liable for the payment of sewer rentals and applicable surcharges and penalties until the later of (a) receipt by the Borough of written notice by such owner that the property has been sold, containing the correct name and mailing address of the new Owner, or (2) the date on which title to the Improved Property is transferred to a new or successor Owner. Failure to provide notice to the Borough renders an Owner continuously liable for any charges that may accrue until such time as the Borough has been properly notified of any change in ownership as described above.

(f) Separate Agreements. Nothing herein shall be construed or deemed to prohibit the Borough from entering into separate or special agreements with an Owner of an Improved Property or other persons with respect to Rental and User charge or surcharge to be imposed in those circumstances where, due to special or unusual circumstances, the Rental and User charge set forth herein shall be deemed by the Borough, in its sole discretion, to be inequitable, or where it is in the best interest of the Borough. No officer or employee of the Borough is authorized to reduce, vary or exempt the Rental and User charge as provided in this Ordinance without official action by the Borough Council.

Section 9. ENFORCEMENT OF COLLECTIONS/ DELINQUENT RENTAL AND USER CHARGES

(a) Establishment of lien or claim. All delinquent sewer Rental/User charges, including all late fees and penalties thereon, shall constitute a municipal claim and lien on the Improved Property served until fully paid or satisfied.

(b) Recovery of lien or claim. All delinquent sewer Rentals/User charges, including late fees and penalties thereon, shall be a lien on the Improved Property benefited and served, and may be entered as a lien against such Improved Property in the Office of the Prothonotary of Cumberland County, Pennsylvania, and further may be collected in the manner provided by the law for filing and collection of municipal claims and liens. In addition, the Borough shall have further authority and power to pursue an action in assumpsit to collect delinquent sewer rental and user charges, costs, interest and attorney fees as permitted by law.

(c) Attorney Fees. Where attorney fees are sought to be collected or incurred in the collection of a delinquent account(s), said fees are hereby approved at an hourly rate of $85.00 per hour, or any subsequent amount established by Resolution of Borough Council, with said fees to be calculated upon said hourly rate at time increments of no less than one-tenth (1/10) of an hour, based upon the time expended by the Borough Solicitor or any other attorney designated from time to time by Council to collect upon any delinquent account and/or representing the Borough in actions involving claims arising out of delinquent sewer and user accounts, including those claims arising out of the Municipal Claim and Tax lien Act, as amended.

(d) Notice Requirements. Where attorney fees are sought to be collected or

incurred in the collection of delinquent account(s), at least thirty (30) days prior to assessing or imposing attorney fees in connection with any delinquent account(s), the Borough shall, by United States certified mail, return receipt requested, postage prepaid, mail to the owner of the Improved Property a notice of intent to impose attorney fees for recovery of the delinquent account(s). The notice of intent to the owner of the Improved Property shall include a statement of the Borough's intent to impose or assess attorney fees within thirty (30) days of mailing the notice when notice is received by the owner of the Improved Property, or within no earlier than ten (10) days of the mailing of the notice when such notice of intent is refused or unclaimed as set forth above. Any notice of intent required by this Section shall be mailed to the Owner's last known post office address by virtue of the knowledge and information possessed by the Borough and county office responsible for assessments and revision of taxes. The Borough shall use the Owner(s)' last known post office address known to the appropriate agent of the Borough and county assessment office. The assessment of attorney fees shall thereafter be charged, assessed, imposed and recovered in accordance with the manner of collection of the underlying municipal claim or lien, or other duly authorized procedure for collection of delinquent sewer and rental user charges.

Section 10. MISCELLANEOUS

(a) The Borough shall have the right of access, at all reasonable times after reasonable notice, to inspect any part of the Improved Property, including any and all lateral sewer or pipe lines connecting to the Sewer System, as may be necessary for purposes of inspection, observation, measurement, sampling and testing and for the

performance of other functions relating to sewer services rendered by the Borough.

(b) The Owner of any Improved Property, upon direction of the Borough, shall acquire, install, own and operate, at such Owner's sole cost and expense, a grinder pump or similar apparatus satisfactory to the Borough in the manner and location directed by the Borough. Such grinder pump or similar apparatus shall be installed at the time such Improved Property is connected to the Sewer System and shall be subject to inspection and approval together with the remainder of the sewer system benefiting the Improved Property, including lateral sewer or pipe lines connecting the Improved Property to the Sewer System.

(c) The Owner of any Improved Property shall be held liable for all acts of tenants or other occupants of such Improved Property, as may be permitted by law, in so far as such acts of tenants or other occupants of such Improved Property shall be governed by this Ordinance.

(d) Any person who violates any provision of this Ordinance shall be subject, upon conviction thereof, and for each subsequent conviction, to a fine of not more than One Thousand Dollars ($1,000.00), together with the costs of prosecution in each case and conviction. Each day that a violation continues shall be deemed and shall be taken as a separate offense and shall be punishable as permitted by law.

Section 11. CONTINUATION

The provisions of this Ordinance, so far as they are the same as those Ordinances in force immediately prior to the enactment of this Ordinance are intended as a continuation of such Ordinances and not as new enactments. Provisions of this

Ordinance shall not affect any act done or liability incurred, nor shall they affect any suit or prosecution pending or to be instituted to enforce any right or penalty to punish any offense under the authority of any Ordinance repealed by this Ordinance.

Section 12. REPEALER

All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

Section 13. SEVERABILITY

The provisions of this Ordinance are declared to be severable. If any section, sentence, clause, or phrase of this Ordinance shall for any reason be held to be invalid or unconstitutional by a court of competent jurisdiction, such decisions shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance, but they shall remain in effect; it being the legislative intent that this Ordinance shall remain in effect notwithstanding the invalidity of any part.

Section 14. EFFECTIVE DATE.

This Ordinance shall take effect and be in force after its enactment by the Council of the Borough of New Cumberland at the earliest date permitted by law.

ENACTED AND ORDAINED, this 28th day of December, 2011.

COUNCIL OF THE BOROUGH OF NEW CUMBERLAND

By _____
John R. Murray, President

ATTEST:

_____
Stephen C. Sultzaberger, Secretary

APPROVED this 28th day of December, 2011.

By _____
D.J. Landis, Mayor

CERTIFICATE

I, Stephen C. Sultzaberger, Secretary of the Borough of New Cumberland, Cumberland County, Pennsylvania (the "Borough"), certify that: the foregoing is a true and correct copy of an Ordinance of the Council of the Borough of New Cumberland (the "Council"), which duly was enacted by affirmative vote of a majority of the members of the Council at a meeting held on December 28, 2011; being approved by the Mayor on December 28, 2011; said Ordinance duly has been recorded in the Ordinance Book of the Borough; said Ordinance duly has been published as required by law; and said Ordinance remains in effect, unaltered and unamended, as of the date of this Certificate.

IN WITNESS WHEREOF, I set my hand and affix the official seal of the Borough, this 28th day of December, 2011.

Stephen C. Sultzaberger, Secretary

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-15. Please identify all contributions-in-aid of construction for the wastewater assets to be acquired as part of the Application's Asset Purchase Agreement (APA).

RESPONSE: As noted in Paragraphs 10 and 17 of the PUC Application, prior to its next base rate case, Pennsylvania-American will undertake an original cost study to determine the original cost and accumulated depreciation of the Authority's wastewater utility plant in service. As part of the study, all funding sources for the construction of the wastewater utility assets will be reviewed and any funding identified as contribution in aid of construction will be reflected.

Response Witness: Scott D. Fogelsanger
Title: Senior Manager, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-16. The Application states that the Borough does not keep an unaudited internal balance sheet or an unaudited income statement relating to the operation of its wastewater system. Please provide copies of the Borough's 2015 and 2016 Budget Summaries and identify and explain all revenues, expenses, and funds related to the Borough's wastewater system.

RESPONSE: The Borough of New Cumberland's Wastewater budget is incorporated and part of the Borough's annual budget that includes their General Fund, Capital Improvement Fund, Liquid Fuels Fund, and Sewer Revenue/Capital Reserve Fund.

Please refer to Attachments TUS Set 1, No. A-16, Parts A and B (2015 and 2016, respectively) for wastewater budget and expense detail.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

BOROUGH OF

NEW CUMBERLAND

2015 BUDGET

GENERAL FUND

CAPITAL IMPROVEMENT FUND

LIQUID FUELS FUND

SEWER REVENUE/CAPITAL RESERVE FUND

RECEIPTS

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
301.10	Real Estate Tax	$ 1,990,000	$1,990,592	$ 1,990,000
310.01	Per Capita Tax	-0-	2,936	-0-
310.03	Real Estate Transfer Tax	72,000	88,916	78,000
310.07	Earned Income Tax	800,000	824,638	810,000
320.01	Beverage License Fees	1,200	1,200	1,200
320.02	Building & Zoning Permits	3,000	2,840	2,800
320.06	Street Cut Permits	2,000	2,460	2,000
321.02	Building Code Compliance Fees	10,000	3,818	3,000
321.08	Cable TV Franchise Fees	134,000	141,177	137,000
330.01	Motor Vehicle Fines	13,000	14,385	13,000
330.02	Borough Ordinance Fines	12,000	16,500	14,000
340.01	Interest on Investments	900	955	900
340.01A	Interest on Earned Income Tax	800	1,874	850
340.02	Rental of Facilities	2,000	2,370	2,000
350.02	State & Federal Grants/Allocations	206,930	197,621	193,700
350.04	Library Board Reimbursement	357,277	357,277	374,616
360.01	Refuse Collection Fees	480,000	480,983	480,000
360.02	Zoning Hearing Board Fees	900	600	900
360.03	Engineering Fees (Reimbursed)	1,000	500	1,000
360.04	Curbing and Sidewalk Assessments	1,000	1,000	1,000
360.05	Police and School Crossing Services	51,000	52,530	53,952
360.08	Sewer Rental Fees	764,539	764,539	748,516
360.09	Sewer Connection Fees	1,000	900	1,000
370.04	Miscellaneous Receipts	5,000	5,086	5,000
	TOTAL RECEIPTS	4,909,546	4,955,697	4,914,434
	BEGINNING BALANCE	1,498,976	1,683,934	1,856,747
	TOTAL BUDGET	$ 6,408,522	$6,639,631	$ 6,771,181

RECEIPTS

301.10	**Real Estate Taxes**		$ 1,990,000
	3.9 mills x $522,158 less discounts and delinquents plus prior years		
310.01	**Per Capita Tax**		-0-
	Eliminated effective 1/1/14		
310.03	**Real Estate Transfer Tax**		78,000
	Receive 1/2% on sale of property		
310.07	**Earned Income Tax**		810,000
	Receive 1/2% on gross wages or net profits, etc.		
320.01	**Beverage License Fees**		1,200
	Liquor License fees received from the State		
320.02	**Building & Zoning Permits**		2,800
	Fees paid for permit applications and filing subdivision/land development plans		
320.06	**Street Cut Permits**		2,000
	$20 fee to excavate Borough streets		
321.02	**Building Code Compliance Fees**		3,000
	Reimbursements received for third party consulting services		
321.08	**Cable Television Franchise Fees**		137,000
	5% of gross revenues from operating cable systems		
330.01	**Motor Vehicle Fines**		13,000
	State Motor Vehicle Code fines returned to Borough, parking tickets, traffic fines		
330.02	**Borough Ordinance Fines**		14,000
	All fines collected for violations of Borough Ordinances including animal control fees collected		
340.01	**Interest on Investments**		900
	Interest earned on General Fund investments		
340.01A	**Investment Interest on Earned Income Tax**		850
340.02	**Rental Facilities**		2,000
	Fees received for use of park pavilions and gazebo		
350.02	**State & Federal Grants/Allocations**		193,700
	Utility Realty Tax Refund	$ 4,012	
	Municipal Pension Allocation	$ 127,798	
	Firemens' Relief Association	$ 46,387	
	Snow and Ice Agreement	$ 6,548	
	DEP Recycling Grant	$ 8,955	

RECEIPTS (continued)

350.04	**Library Board Reimbursement** Library Board Reimbursement for expenses less fixed allocation	374,616
360.01	**Refuse Collection Fees** Residential charges for refuse collection and recycling services	480,000
360.02	**Zoning Hearing Board Fees** Application fees	900
360.03	**Engineering Fees (Reimbursed)** Reimbursements from applicants for plan review fees and inspection charges in planning and zoning issues	1,000
360.04	**Curbing and Sidewalk** Assessments for work completed by Borough and billed to property owner	1,000
360.05	**Police and School Crossing Services** Crossing Guard costs reimbursed by West Shore School District $51,082 Accident reports $2870	53,952
360.08	**Sewer Rental Fees** Portion of gross receipts, estimated at $1,682,503 (remainder transferred to Sewer Revenue/Capital Reserve Fund)	748,516
360.09	**Sewer Connection Fees** Connection permits to tap into sanitary sewer mainline and inspection fees	1,000
370.04	**Miscellaneous Receipts** Other including dog licenses, bike licenses, sale of maps, ordinances, copies, and bid specifications; handicapped parking permits, bad check fees, etc.	5,000
	TOTAL RECEIPTS	4,914,434
	BEGINNING BALANCE	1,856,747
	TOTAL BUDGET	$ 6,771,181

EXPENDITURES

GENERAL GOVERNMENT

ADMINISTRATION

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
400.01	Salaries of Council	$ 6,400	$ 6,400	$ 6,400
400.02	Salary of Mayor	1,200	1,200	1,200
400.04	Salary of Treasurer/Billing Clerk	60,049	60,049	61,850
400.06	Salary of Manager/Secretary	100,689	100,689	103,710
400.07	Salary of Bookkeeper/Payroll Clerk	46,738	46,738	48,140
400.08	Salary of Clerk/Typist	33,763	33,763	34,776
400.10	Materials and Supplies	10,500	10,580	10,500
400.20	Association Dues and General Expenses	9,621	7,318	15,536
400.21	Advertising, Postage, Printing & Newsletter	18,800	15,639	18,800
400.24	Engineering Services	7,000	2,032	7,000
400.28	Auditing Services	19,800	19,300	19,800
400.29	Legal Services	25,000	27,649	28,000
400.30	Communication Services	5,000	3,752	5,000
400.40	Equipment Maintenance & Repair	22,000	17,456	22,000
401.03	Tax Collector's Commission	19,900	19,196	19,900
401.10	Tax Materials, Supplies, Postage	2,800	2,122	2,800
	TOTAL ADMINISTRATION	$ 389,260	$ 373,883	$ 405,412

BOROUGH BUILDINGS

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
402.05	Janitorial Service - contract	$ 3,800	$ 2,850	$ 3,800
402.10	Building Materials and Supplies	1,100	841	1,100
402.11	Fuel, Electric, Gas and Water	30,000	25,259	30,000
402.40	Maintenance and Repair	7,000	5,603	7,000
	TOTAL BOROUGH BUILDINGS	41,900	34,553	41,900
	TOTAL GENERAL GOVERNMENT	$ 431,160	$ 408,436	$ 447,312

GENERAL GOVERNMENT - ADMINISTRATION

400.01 Salaries of Council $ 6,400

1	President	1	@	$ 1,000	=	$	1,000
6	Councilpersons	6	@	$ 900	=	$	5,400

400.02 Salary of Mayor 1,200

400.04 Salary of Treasurer/Billing Clerk 61,850

400.06 Salary of Manager/Secretary 103,710

400.07 Salary of Bookkeeper/Payroll Clerk 48,140

400.08 Salary of Clerk/Typist 34,776

400.10 Materials and Supplies 10,500

General office supplies (paper, pencils, files, envelopes, billing cards, payroll forms, job applications, etc.) Also includes billing supplies and meter readings from water company for sewer billing.

400.20 Association Dues/General Expenses 15,536

PSAB Membership Dues	$	1,359
PSAB conferences	$	1,800
Cumberland-Franklin Counties Boroughs Assoc. dues	$	50
Seminars, training, meetings	$	760
ICMA dues	$	950
PA Municipal Mgmt. dues	$	165
PA Secretary Assoc. dues	$	125
River Rescue (Halloween Parade)	$	1,000
Animal Control	$	1,362
Capital Region COG	$	1,500
PSAB publications	$	170
Borough Council Association dues	$	25
Bank Fees	$	5,940
Mileage	$	330

400.21 Advertising, Postage, Printing & Newsletter 18,800

Advertising	$	2,200
Postage	$	13,200
Printing	$	400
Newsletter	$	3,000

400.24 Engineering Services $ 7,000

Covers all engineering services and fees for Borough Engineer services such as surveying, drafting, storm drainage, traffic analysis, floodplain management, projects, mapping, etc. Does not include work related to street projects, sewer projects, or plan review fees for Planning Commission items.

400.28 Auditing Services 19,800

Annual audit reports for Borough	$	12,550
Annual audit reports for Library	$	2,550
Other authorized financial consulting services	$	4,700

400.29 Legal Services 28,000

Borough Solicitor fees	$	12,000
Other legal and special counsel	$	16,000

400.30 Communication Services (telephone and radio) 5,000

Covers telephone and radio expenses for the Borough Office and Highway Garage. Includes local phone service and long distance. Covers office and garage radio maintenance and repairs. Does not include vehicles. (Computer internet service provided through Comcast Cable franchise agreement at no charge.)

400.40 Equipment Maintenance & Repair 22,000

Covers service to Borough Office equipment such as calculators, typewriters, cash register, recorders, copier, and postage meter rental. Includes computer software maintenance agreements, network support services, and website management.

401.03 Tax Collector Commission 19,900

1% on Real Estate Taxes collected. Rate set by ordinance effective January 1, 2002.

401.10 Tax Collector Materials and Supplies 2,800

Covers the Borough's share of the tax collector's expenses for postage, forms, computer time, and bond.

TOTAL ADMINISTRATION $ 405,412

GENERAL GOVERNMENT - BOROUGH BUILDING

402.05	**Janitorial Service**			$ 3,800
	Cleaning of Borough Office, Council Chambers, and Police Department			
402.10	**Building Materials and Supplies**			1,100
	Includes paper products and cleaning supplies for Borough Office and Police Department.			
402.11	**Utilities (Borough Building and Highway Garage)**			30,000
	Heating oil (garage only)	$	2,100	
	Electric	$	14,000	
	Gas	$	7,000	
	Water	$	4,300	
	(Includes water for Firehouse (1300) and River Rescue Building (350)			
	Consortium Fees	$	2,600	
402.40	**Maintenance and Repair (Borough Building)**			7,000
	Includes routine maintenance, general repair, pest control service for quarterly treatments, and fire alarm system service contract.			
	Routine maintenance and general repair	$	4,688	
	Pest control	$	720	
	Fire alarm service	$	1,167	
	Heating /cooling service contract	$	425	
	TOTAL BOROUGH BUILDING			41,900
	TOTAL GENERAL GOVERNMENT			$ 447,312

PROTECTION TO PERSONS & PROPERTIES (POLICE)

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
410.01 Salary of Chief	$ 91,648	$ 91,648	$ 91,848
410.02 Wages of Corporal	87,739	87,200	87,739
410.03 Wages of Patrolmen	499,096	426,299	579,834
410.04 Wages of Crossing Guards	81,151	81,151	85,443
410.05 Wages of Special Police	900	400	900
410.06 Salary of Secretary	33,930	33,930	34,948
410.07 Wages of Community Service Officers	20,000	11,277	20,000
410.10 Materials and Supplies	4,675	4,675	5,000
410.12 Uniforms	11,200	10,000	15,474
410.20 General Expenses	25,160	20,300	40,275
410.30 Communications (Telephone Service)	6,000	5,100	6,936
410.31 Communications (Radio System)	2,000	1,200	4,700
410.46 Traffic Signal System	10,000	11,405	11,200
410.60 Minor Equipment Purchases	4,000	4,433	4,360
411.44 Vehicle Maintenance and Repair	5,500	4,500	5,500
411.51 Gas, Oil, and Vehicle Supplies	13,000	14,349	14,000
TOTAL POLICE	$ 895,999	$ 807,867	$ 1,008,157

POLICE

410.01	**Salary of Chief**							$	91,848
	Salary	1	@	$ 88,973	=	$	88,973		
	Longevity 20th year	1	@	$ 2,875	=	$	2,875		
410.02	**Wages of Corporal**								87,739
	Wages	1	@	$ 76,773	=	$	76,773		
	Longevity 24th year	1	@	$ 3,150	=	$	3,150		
	Holiday / O.T.	1	@	$ 7,816	=	$	7,816		
410.03	**Wages of Patrolmen**								579,834
	Wages (5+ years)	4	@	$ 74,194	=	$	296,776		
	Wages (3+ years)	1	@	$ 72,194	=	$	72,194		
	Probationary	2	@	$ 69,194	=	$	138,388		
	Longevity								
	Completing 24nd year	1	@	$ 3,150	=	$	3,150		
	Completing 14th year	1	@	$ 1,625	=	$	1,625		
	Completing 9th year	1	@	$ 875	=	$	875		
	College Pay	3	@	$ 600	=	$	1,800		
	Holiday / OT	7	@	$ 7,500	=	$	52,500		
	Health Ins. Opt Out	1	@	$12,526	=	$	12,526		
410.04	**Wages of Crossing Guards**								85,443
	Crossing Guards	8	@	$13.66	per hourly (base hourly wage)				
			x	4.25	hours per day				
			x	8	locations				
			x	180	school days		83,599		
		3	@	$13.99					
			x	0.25	hours per day				
			x	3	locations				
			x	180	school days		1,844		
410.05	**Wages of Special Police**								900
	Cost of Special Police @ $12.34 /hour								
410.06	**Salary of Administrative Assistant**								34,948
410.07	**Wages of Community Service Officers**								20,000
	Cost of CSO @ $12.63/hour								
410.10	**Materials and Supplies**								5,000
410.12	**Uniforms**								15,474
	Uniform replacement	9	@	$ 400	=	$	3,600		
	Cleaning	9	@	$ 500	=	$	4,500		
	Equipment replacement			$ 7,374	=	$	7,374		

POLICE (continued)

410.20 General Expenses				40,275
Records management system (RMS)		$	8,750	
Dues		$	225	
Subscriptions		$	3,900	
Training		$	2,000	
Maintenance agreements		$	2,000	
Equipment repair		$	1,400	
Computer support		$	6,000	
College tuition		$	16,000	
1 request 2,500/class x 2 classes	5,000			
2 request 2,750/class x 4 classes	11,000			
410.30 Communications (Telephone)				6,936
Average land line	276 x 12 mos		3,312	
Cellular telephone service	125 x12 mos		1,500	
Mobile data terminal service	120 x 12 mos		1,440	
Vehicle GPS service	57 x 12 mos		684	
410.31 Communications (Radio)				4,700
Radio maintenance contract, parts, labor and other miscellaneous equipment,				
Additional portable radio for 9th police officer			2,700	
410.46 Traffic Signal System				11,200
Repair, maintenance and electrical service for school warning devices and three traffic signals				
410.60 Minor Equipment Purchases				4,360
Firearms equipment		$	2,000	
Fingerprint supplies		$	-	
Investigation equipment		$	200	
Office equipment		$	650	
Other misc. equipment		$	940	
Parking tickets		$	470	
Photography equipment		$	-	
School crossing equipment		$	100	
Temporary parking signs		$	-	
411.44 Vehicle Maintenance & Repair				5,500
411.51 Gasoline, Oil and Vehicle Supplies				14,000
TOTAL POLICE				$ 1,008,157

PROTECTION TO PERSONS & PROPERTIES (FIRE)

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
413.01 Salary of Fire Chief	$ 1,500	$ 1,500	$ 2,000
413.02 Salaries of Deputy Chiefs	1,200	1,200	1,500
413.14 Fire Hydrant Rental	28,923	28,681	28,923
413.20 General Expenses	2,300	2,300	2,300
413.30 Communications (Radio & Alarms)	2,000	2,000	2,000
413.40 Maintenance & Repair - Firehouse	20,500	20,500	25,000
413.41 Fire Extinguisher (Maintenance/Refill)	1,250	1,007	1,250
413.60 Minor Equipment Purchases	15,000	14,307	15,000
414.40 Fire Vehicle Maintenance/Gas/Repairs	30,000	21,073	30,000
TOTAL FIRE	$ 102,673	$ 92,568	$ 107,973

PLANNING, BUILDING & ZONING

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
416.00	Zoning Officer/Building Code Official	$ 15,000	$ 18,498	$ 18,000
416.10	Materials and Supplies	450	200	450
416.20	General Expense/Advertisements	2,000	900	2,000
416.29	Legal Services and Agreements	3,800	1,600	3,800
416.40	Engineering Fees	3,900	1,034	3,900
416.41	Building Code Compliance Fees	10,000	5,453	3,000
416.90	Agreement with Tri-County Planning Commission (-0-) & Updating Ordinances	2,000	-0-	2,000
	TOTAL PLANNING & ZONING	$ 37,150	$ 27,685	$ 33,150

OFFICE OF EMERGENCY MANAGEMENT

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
417.20	General Expense and Dues	$ 150	-0-	$ 150
417.21	Materials, Supplies, and Printing	25	-0-	25
417.40	Minor Equipment Maintenance/Repair	100	-0-	100
417.60	Minor Equipment Purchases	25	-0-	25
	TOTAL OFFICE OF EMERGENCY MGMT	$ 300	-0-	$ 300

SEWAGE TREATMENT

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
421.00 Wages of Full-Time Employees	$ 300,789	$ 300,345	$ 309,816
421.01 Overtime Wages	4,000	4,672	4,000
421.02 Wages of Temporary Employees	11,700	10,658	11,700
421.23 Equipment Rental	3,500	200	3,500
421.24 Sludge Disposal	124,000	77,692	68,600
421.30 Laboratory Analysis	27,500	29,869	36,600
421.40 Lateral Replacement/Repair	2,500	-0-	2,500
421.41 Main Replacement/Repair	21,000	31,542	33,000
421.43 Maintenance of Pump Stations	8,200	9,215	8,200
422.10 Materials & Supplies/Chemicals	58,000	48,309	58,000
422.11 Fuel & Water	10,750	7,147	12,500
422.12 Electric Power	123,500	119,079	127,000
422.20 Association Dues & General Expenses	3,800	3,454	5,100
422.30 Telephone/Radio	5,500	5,508	6,200
422.40 Maintenance/Repair of Plant	40,500	39,549	42,000
422.50 Maintenance/Repair of Vehicles/Equipment	9,100	8,800	9,100
422.51 Gasoline for Vehicles/Equipment	6,000	6,476	6,500
422.60 Purchase of Minor Equipment	3,000	2,617	3,000
423.24 Consulting Engineer	1,200	1,200	1,200
TOTAL SEWAGE TREATMENT	$ 764,539	$ 706,332	$ 748,516

SEWAGE TREATMENT PLANT

421.00	**Wages of Full-time Employees**		$ 309,816
	Superintendent:	$74,860	
	Assistant Superintendent:	$67,600	
	Operations Supervisor:	$63,814	
	Operator Class II	$55,078	
	Operator Trainee	$48,464	
421.01	**Overtime Wages**		4,000
421.02	**Wages of Temporary Employees**		11,700
	Two (2) summer workers at the plant		
421.23	**Equipment Rental**		3,500
	Rental of backhoe, dump trucks, tank trucks & other equipment		
421.24	**Sludge Disposal**		68,600
	Includes sludge disposal and permit fees		
421.30	**Laboratory Analysis**		36,600
	Includes sludge analysis and outsourcing of all DEP required testing to certified labs		
421.40	**Lateral Replacement/Repair**		2,500
421.41	**Main Replacement/Repair**		33,000
421.43	**Maintenance of Pump Stations**		8,200
422.10	**Materials and Supplies/Chemicals**		58,000
	Chemicals, laboratory materials & related products		
422.11	**Fuel and Water**		12,500
	(Fuel is diesel fuel for emergency generator)		
422.12	**Electric Power**		127,000
422.20	**Association Dues and Expenses**		5,100
	(Includes PA-1 Call System membership, professional association dues, license renewals, training and seminars, etc.)		
422.30	**Telephone and Radio**		6,200

SEWAGE TREATMENT PLANT (continued)

422.40	**Maintenance/Repair of Plant** Includes instrumentation maintenance agreement.	42,000
422.50	**Maintenance/Repair of Vehicles and Equipment**	9,100
422.51	**Gasoline for Vehicles and Equipment**	6,500
422.60	**Purchase of Minor Equipment/Tools** Safety equipment, hand tools, power tools, protective clothing, rain gear, work boots, etc.	3,000
423.24	**Consulting Engineer** Annual Retainer for sanitary engineer	1,200
	TOTAL SEWAGE TREATMENT	$ 748,516

REFUSE COLLECTION/RECYCLING

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
424.20 General Expenses	$ 2,000	$ 2,000	$ 2,000
424.26 Refuse Collection and Recycling Contract	479,961	479,961	479,961
TOTAL REFUSE COLLECTION	$ 481,961	$ 481,961	$ 481,961

HIGHWAYS

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
430.00	Wages of Full-time Employees	$ 408,242	$ 407,473	$ 425,880
430.01	Overtime Wages	12,000	12,500	12,000
430.23	Rental of Equipment	5,000	4,485	5,000
430.40	Equipment & Vehicle Maintenance/Repairs	35,000	28,000	35,000
430.51	Gas, Oil & Operating Expense	27,000	28,777	28,000
430.60	Purchase of Minor Equipment & Tools	3,200	3,125	3,200
433.00	Street Signs & Markings	5,000	8,872	5,500
434.00	Street Lighting Costs	115,000	110,000	115,000
436.40	Maintenance/repair of buildings and facilities	2,000	2,998	2,000
438.00	Maintenance/Repair of Streets/Alleys	22,000	31,990	22,000
438.04	Stormwater Drainage System	37,500	60,000	40,000
439.01	Construction/Rebuilding of Sidewalks/Curbs	2,000	4,500	2,000
	TOTAL HIGHWAYS	$ 673,942	$ 702,720	$ 695,580

HIGHWAYS

430.00	**Wages of Full-time Employees**						$ 425,880
	Superintendent	1	@	$72,696	=	$ 72,696	
	Assistant Superintendent	1	@	$61,464	=	$ 61,464	
	Laborer Class I	5	@	$58,344	=	$ 291,720	
430.01	**Overtime Wages**						12,000
430.23	**Rental of Equipment**						5,000
	Rental of backhoe, dump trucks, paving machine, milling machine, barricades & other miscellaneous equipment						
430.40	**Equipment and Vehicle Maintenance/Repair**						35,000
	Repair & maintenance of equipment and vehicles						
430.51	**Gasoline, Oil & Operating Expenses**						28,000
	Includes gas or diesel fuel for highway department vehicles and manager's car						
430.60	**Purchase of Minor Equipment & Tools**						3,200
	Includes safety equipment, power tools, hand tools, hardware, rain gear and work boots allowance						
433.00	**Street signs and markings**						5,500
	Includes traffic paint, tape, and sign materials						
434.00	**Street Lighting Costs**						115,000
	Street lighting					$ 112,260	
	Electric for tree lights and holiday decorations.					$ 1,420	
	Downtown lights and clock.					$ 1,320	
436.40	**Maintenance/Repair of Buildings and Facilities**						2,000
	Includes Highway Garage, Pole Building, and Fuel Pumps						
438.00	**Maintenance/Repair of Streets/Alleys**						22,000
	Includes stone products, blacktop, patch materials, and sealer						
438.04	**Stormwater Drainage System**						40,000
	Maintenance/Repair						
	MS-4 program Engineering/Administration						
439.01	**Construction/Rebuilding of Sidewalks and Curbs**						2,000
	TOTAL HIGHWAYS						$ 695,580

LIBRARY

		BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
440.01	Salaries of Full-time Staff	$ 129,450	$ 129,452	$ 133,334
440.02	Wages of Part-time Staff	100,460	96,669	100,676
440.10	Materials & Supplies	-0-	-0-	-0-
440.11	Utilities (Electric, Gas & Water)	28,000	29,696	30,000
440.15	Library Materials	-0-	-0-	-0-
440.16	Building Supplies	400	-0-	200
440.20	General Miscellaneous (Expenses)	-0-	-0-	-0-
440.30	Communications (Telephone)	3,600	1,365	2,700
440.40	Building & Grounds Maintenance	20,000	20,000	30,000
440.60	Minor Equipment Service Agreements	-0-	-0-	-0-
	TOTAL LIBRARY	$ 281,910	$ 277,182	$ 296,910

Note: Other Library expenditures to be paid in 2015 from other sections of the Borough's General Fund Budget

400.28	Auditing Service	$ 2,550
470.00	Social Security	$ 17,902
470.01	Pension Plan	$ 13,720
470.02	Life & Disability Insurance	$ 925
470.04	Blue Cross	$ 39,226
470.07	Unemployment Compensation	$ 6,256
471.00	Fire & Liability Insurance	$ 5,841
471.00	Library Treasurer Bond	$ 158
471.01	Workers Compensation	$ 850

Sub-Total	87,428
TOTAL BOROUGH EXPENDITURES	384,338
(Less) Borough support	9,722
Amount of reimbursement from Library Board to Borough $31,218 per month	$ 374,616

LIBRARY

440.01	**Salaries of Full-time Employees**		$ 133,334
	Director/Dir. of Facilities/Programming Dir.	$52,918	
	Children's Director	$37,306	
	Local System Administrator	$43,110	
440.02	**Wages of Part-time Staff**		100,676
	Part-time positions		
440.10	**Materials and Supplies**		-0-
440.11	**Utilities - Electric, Gas and Water**		30,000
440.15	**Library Materials - books, magazines, audio visuals**		-0-
440.16	**Building Supplies**		200
440.20	**General Expense**		-0-
	Postage, petty cash, miscellaneous expense, transportation, conferences		
440.30	**Communications - Telephone**		2,700
440.40	**Building & Grounds Maintenance**		30,000
	Includes Otis Elevator service contract		
	Includes heat and air conditioning service contract		
	Includes janitorial service contract		
440.60	**Minor Equipment Service Agreements**		-0-
	Photocopier, copying machine, and typewriters		
	TOTAL LIBRARY		$ 296,910

SENIOR CITIZEN CENTER

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
450.90 Grant to Senior Citizens Center	$ 9,260	$ 9,260	$ 9,260
TOTAL SENIOR CITIZEN CENTER	$ 9,260	$ 9,260	$ 9,260

PARKS AND RECREATION

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
451.00 Wages of Summer Workers	$ 10,920	$ 10,855	$ 10,920
451.10 Materials & Supplies	3,200	3,000	3,200
451.11 Utility Costs (Electric & Water)	3,900	3,872	3,900
451.40 Maintenance & Repair	10,000	10,000	10,000
451.80 Construction or Extension of Facilities	2,000	975	2,000
451.90 West Shore Recreation Commission	18,193	18,193	18,193
451.91 Holiday Decorations/Town Band	1,600	1,200	1,600
TOTAL PARKS AND RECREATION	$ 49,813	$ 48,095	$ 49,813

PARKS AND RECREATION

451.00	**Wages of Summer Workers** Provides for 2 summer employees		$ 10,920
451.10	**Materials and Supplies** Includes paper products, cleaning and janitorial supplies, and other minor materials		3,200
451.11	**Utilities** Includes water and electric		3,900
451.40	**Maintenance and Repair** Includes all park buildings, facilities, playground equipment, geese abatement, ball fields, and Memorial Field lease		10,000
451.80	**Construction or Extension of Facilities** New construction, additions, renovations or capital expenditures for park buildings, facilities or equipment		2,000
451.90	**West Shore Recreation Commission** Contribution to the West Shore Recreation Commission		18,193
451.91	**Holiday Decorations/Town Band**		1,600
	Includes all materials and supplies for street Christmas decorations and tree lighting ceremony, American Flags, brackets, etc.	$1,200	
	Includes contribution to Town Band for concerts on Borough property	$400	
	TOTAL PARKS AND RECREATION		$ 49,813

EMPLOYEE PAYROLL TAXES & BENEFITS

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
470.00 Social Security Taxes & Medicare Ins.	$ 112,941	$ 113,309	$ 118,684
470.01 Nonuniformed Employee Pension Plan	122,993	121,552	127,443
470.02 Employee Life & Disability Insurance	13,943	17,745	17,745
470.04 Employee Health Insurance	505,648	537,731	627,688
470.05 Police Pension Plan	160,200	160,200	159,996
470.06 Transfer to Firemen's Relief Fund	49,118	46,387	46,387
470.07 Unemployment Compensation	21,073	20,997	21,908
TOTAL EMP PAYROLL TAXES & BENEFITS	$ 985,916	$1,017,921	$ 1,119,851

INSURANCE

	BUDGETED 2014	ESTIMATED 2014	PROPOSED 2015
471.00 Property, Vehicle & Liability Insurance	$ 114,042	$ 116,386	$ 118,587
471.01 Workers Compensation Insurance	60,000	76,471	79,347
TOTAL INSURANCE	$ 174,042	$ 192,857	$ 197,934
TOTAL EXPENDITURES	$ 4,888,665	$4,772,884	$ 5,196,717
TRANSFER TO CAPITAL IMPROVEMENT FUND	10,000	10,000	330,000
TRANSFER TO SEWER REVENUE/CAPITAL RESERVE FUND	-0-	-0-	500,000
TOTAL DISBURSEMENTS	4,898,665	4,782,884	6,026,717
ENDING BALANCE	1,509,857	1,856,747	744,464
TOTAL BUDGET	$ 6,408,522	$6,639,631	$ 6,771,181

EMPLOYEE PAYROLL TAXES & BENEFITS

470.00	**Social Security and Medicare (Borough Share)** 6.2% on covered wages except police (includes elected officials). Also, 1.45% medicare insurance on above plus all police hired after August 1984	$ 118,684
470.01	**Employee Pension Plan (Nonuniformed)** Borough share of nonuniformed employees pension. Minimum Municipal Obligation is $127,443	127,443
470.02	**Employee Life and Disability Insurance** Term life insurance and disability insurance	17,745
470.04	**Employee Health Insurance Premium** PPO and Prescription Drug Plans. Dental Insurance. Vision Insurance. Projected Maximum cost $610,728 Estimated Minimum surplus distribution $35,000 Includes quarterly drug and alcohol testing for CDL operators and pre-employment test.	627,688
470.05	**Police Pension Fund** Minimum Municipal Obligation is $159,996	159,996
470.06	**Transfer to Firemen's Relief Fund** Allocation from the state for Firemen's Relief Fund. Received by Borough and distributed to Relief Association.	46,387
470.07	**Unemployment Compensation** 4.9% of gross wages up to $9,000. Coverage through PSAB plan.	21,908
	TOTAL EMPLOYEE PAYROLL TAXES & BENEFITS	$ 1,119,851

INSURANCE

471.00	**Property, vehicle, and liability insurance**		$ 118,587
a.	Package policy includes: - property, vehicle and general liability insurances - errors and omissions coverage - excess liability - police professional liability	$ 115,258	
b.	Borough Manager's Bond	$ 252	
c.	Borough Treasurer's Bond	$ 488	
d.	Employee Blanket Bond	$ 414	
e.	Library Board Treasurer's Bond	$ 175	
f.	Fire Department portable equipment policy	$ 2,000	
471.01	**Workers Compensation Insurance**		79,347
	Borough through Susquehanna Municipal Trust 59,347		
	Fire Department through State Workers Insurance Fund 20,000		
	TOTAL INSURANCE		$ 197,934
	TOTAL EXPENDITURES		$ 5,196,717
	TRANSFER TO CAPITAL IMPROVEMENT FUND		330,000
	TRANSFER TO SEWER REVENUE/CAPITAL RESERVE FUND		500,000
	TOTAL DISBURSEMENTS		$ 6,026,717
	ENDING BALANCE		$ 744,464
	TOTAL BUDGET		$ 6,771,181

2015

CAPITAL IMPROVEMENT FUND

Receipts

Balance: January 1, 2015	$ 180,521
Rental Income: AT&T Wireless (cell tower site)	29,030
Interest Income	50
Transfer from General Fund	330,000
TOTAL	$ 539,601

Expenditures

Debt service on fire truck - principal payment	30,000
Exterior renovations to fire station	150,000
Snow removal/road salt	37,875
Street paving & project engineering (Note #1)	150,000
USDA - Geese Management contract (Note#2)	4,760
Electrical system replacement for Fuel Tanks and Roofing covering	50,000
Unallocated balance	116,966
TOTAL	$ 539,601

Note #1: This is a supplement to the paving funds available in the Liquid Fuels Budget and includes $12,000 of Project Engineering & Administrative costs.

Note #2: There will be $1,600 remaining of Effie Hoyer's $10,000 donation made on February 7, 2007 after 2014 and 2015's USDA contracts are paid.

Note #3: The balance includes donations from the NC Women's Club in the amount of $4,500 for playground equipment made in July of 2014 and from the OTA's Apple Festival Committee in the amount of $750 from November.

2015

LIQUID FUELS FUND

Receipts

Balance: January 1, 2015	$ 100,056
State Allocation (Act 655)	168,720
Interest Income	50
TOTAL	$ 268,826

Expenditures

Street paving	200,000
Unallocated balance	68,826
TOTAL	$ 268,826

2015

SEWER REVENUE-CAPITAL RESERVE FUND

Receipts

Balance: January 1, 2015		$ 156,138
Sewer Rental Fees		917,964
(remaining portion of actual receipts)		
Interest Income		100
Transfter from General Fund		500,000
TOTAL		$ 1,574,202

Expenditures

Debit Service Payments		$ 1,154,542
General Obligation Bond Series 2011	274,784	
General Obligation Bond Series 2012	652,843	
General Obligation Bond Series 2013	226,365	
Paying agent service fee	550	
NPDES Plant Permit Renewal Application - Engineering		10,000
Corrective Action Plan - Engineering		5,000
Emergency Generator at Cedar Cliff Pump Station - Completion		49,000
Treatment Plant Projects		37,200
Mainline sliplining/repairs including Engineeer & Administration		138,000
Unallocated Reserve		180,460
TOTAL		$ 1,574,202

BOROUGH OF

NEW CUMBERLAND

ADOPTED

2016 BUDGET

DECEMBER 21, 2015

GENERAL FUND

CAPITAL IMPROVEMENT FUND

LIQUID FUELS FUND

SEWER REVENUE/CAPITAL RESERVE FUND

RECEIPTS

		BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
301.10	Real Estate Tax	$ 1,990,000	$1,990,318	$ 1,990,000
310.01	Per Capita Tax	-0-	22	-0-
310.03	Real Estate Transfer Tax	78,000	92,118	81,000
310.07	Earned Income Tax	810,000	882,762	830,000
320.01	Beverage License Fees	1,200	1,200	1,000
320.02	Building & Zoning Permits	2,800	2,780	2,800
320.06	Street Cut Permits	2,000	1,460	2,000
321.02	Building Code Compliance Fees	3,000	-0-	-0-
321.08	Cable TV Franchise Fees	137,000	145,277	142,000
330.01	Motor Vehicle Fines	13,000	13,891	13,000
330.02	Borough Ordinance Fines	14,000	11,714	14,000
340.01	Interest on Investments	900	294	700
340.01A	Interest on Earned Income Tax	850	288	600
340.02	Rental of Facilities	2,000	2,300	2,000
350.02	State & Federal Grants/Allocations	193,700	198,672	196,243
350.04	Library Board Reimbursement	374,616	373,429	394,364
360.01	Refuse Collection Fees	480,000	505,666	505,666
360.02	Zoning Hearing Board Fees	900	300	900
360.03	Engineering Fees (Reimbursed)	1,000	3,300	1,000
360.04	Curbing and Sidewalk Assessments	1,000	-0-	1,000
360.05	Police and School Crossing Services	53,952	55,652	54,125
360.08	Sewer Rental Fees	748,516	748,516	764,507
360.09	Sewer Connection Fees	1,000	1,175	1,000
370.04	Miscellaneous Receipts	5,000	4,128	5,000
	TOTAL RECEIPTS	4,914,434	5,035,262	5,002,905
	BEGINNING BALANCE	1,856,747	1,934,321	1,201,460
	TOTAL BUDGET	$ 6,771,181	$6,969,583	$ 6,204,365

RECEIPTS

301.10	**Real Estate Taxes**		$ 1,990,000
	3.9 mills x $ 521,818 less discounts and delinquents plus prior years		
310.01	**Per Capita Tax**		-0-
	Eliminated effective 1/1/14		
310.03	**Real Estate Transfer Tax**		81,000
	Receive 1/2% on sale of property		
310.07	**Earned Income Tax**		830,000
	Receive 1/2% on gross wages or net profits, etc.		
320.01	**Beverage License Fees**		1,000
	Liquor License fees received from the State		
320.02	**Building & Zoning Permits**		2,800
	Fees paid for permit applications and filing subdivision/land development plans		
320.06	**Street Cut Permits**		2,000
	$20 fee to excavate Borough streets		
321.02	**Building Code Compliance Fees**		-0-
	Reimbursements received for third party consulting services		
321.08	**Cable Television Franchise Fees**		142,000
	5% of gross revenues from operating cable systems		
330.01	**Motor Vehicle Fines**		13,000
	State Motor Vehicle Code fines returned to Borough, parking tickets, traffic fines		
330.02	**Borough Ordinance Fines**		14,000
	All fines collected for violations of Borough Ordinances including animal control fees collected		
340.01	**Interest on Investments**		700
	Interest earned on General Fund investments		
340.01A	**Investment Interest on Earned Income Tax**		600
340.02	**Rental Facilities**		2,000
	Fees received for use of park pavilions and gazebo		
350.02	**State & Federal Grants/Allocations**		196,243
	Utility Realty Tax Refund	$ 3,447	
	Municipal Pension Allocation	$ 133,308	
	Firemens' Relief Association	$ 44,619	
	Snow and Ice Agreement	$ 6,669	
	DEP Recycling Grant	$ 8,200	

RECEIPTS (continued)

350.04	**Library Board Reimbursement** Library Board Reimbursement for expenses less fixed allocation	394,364
360.01	**Refuse Collection Fees** Residential charges for refuse collection and recycling services	505,666
360.02	**Zoning Hearing Board Fees** Application fees	900
360.03	**Engineering Fees (Reimbursed)** Reimbursements from applicants for plan review fees and inspection charges in planning and zoning issues	1,000
360.04	**Curbing and Sidewalk** Assessments for work completed by Borough and billed to property owner	1,000
360.05	**Police and School Crossing Services** Crossing Guard costs reimbursed by West Shore School District $51,625 Accident reports $2,500	54,125
360.08	**Sewer Rental Fees** Portion of receipts estimated at $1,654,947 (remainder transferred to Sewer Revenue/Capital Reserve Fund)	764,507
360.09	**Sewer Connection Fees** Connection permits to tap into sanitary sewer mainline and inspection fees	1,000
370.04	**Miscellaneous Receipts** Other including dog licenses, bike licenses, sale of maps, ordinances, copies, and bid specifications; handicapped parking permits, bad check fees, etc.	5,000
	TOTAL RECEIPTS	5,002,905
	BEGINNING BALANCE	1,201,460
	TOTAL BUDGET	$ 6,204,365

EXPENDITURES

GENERAL GOVERNMENT

		BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
	ADMINISTRATION			
400.01	Salaries of Council	$ 6,400	$ 6,400	$ 6,400
400.02	Salary of Mayor	1,200	1,200	1,200
400.04	Salary of Treasurer/Billing Clerk	61,850	62,851	49,440
400.06	Salary of Manager/Secretary	103,710	103,710	106,821
400.07	Salary of Bookkeeper/Payroll Clerk	48,140	48,140	49,584
400.08	Salary of Clerk/Typist	34,776	39,408	35,535
400.10	Materials and Supplies	10,500	9,592	10,500
400.20	Association Dues and General Expenses	15,536	12,989	15,536
400.21	Advertising, Postage, Printing & Newsletter	18,800	14,938	18,800
400.24	Engineering Services	7,000	2,468	7,000
400.28	Auditing Services	19,800	18,975	19,800
400.29	Legal Services	28,000	36,276	34,000
400.30	Communication Services	5,000	3,015	5,000
400.40	Equipment Maintenance & Repair	22,000	18,620	22,000
401.03	Tax Collector's Commission	19,900	19,587	19,900
401.10	Tax Materials, Supplies, Postage	2,800	2,046	2,800
	TOTAL ADMINISTRATION	$ 405,412	$ 400,215	$ 404,316

BOROUGH BUILDINGS

		BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
402.05	Janitorial Service - contract	$ 3,800	$ 1,900	$ 3,800
402.10	Building Materials and Supplies	1,100	744	1,100
402.11	Fuel, Electric, Gas and Water	30,000	25,029	30,000
402.40	Maintenance and Repair	7,000	4,688	7,000
	TOTAL BOROUGH BUILDINGS	41,900	32,361	41,900
	TOTAL GENERAL GOVERNMENT	$ 447,312	$ 432,576	$ 446,216

GENERAL GOVERNMENT - ADMINISTRATION

400.01 Salaries of Council — $ 6,400

1	President	1	@	$ 1,000	=	$	1,000
6	Councilpersons	6	@	$ 900	=	$	5,400

400.02 Salary of Mayor — 1,200

400.04 Salary of Treasurer/Billing Clerk — 49,440

400.06 Salary of Manager/Secretary — 106,821

400.07 Salary of Bookkeeper/Payroll Clerk — 49,584

400.08 Salary of Clerk/Typist — 35,535

400.10 Materials and Supplies — 10,500

General office supplies (paper, pencils, files, envelopes, billing cards, payroll forms, job applications, etc.) Also includes billing supplies and meter readings from water company for sewer billing.

400.20 Association Dues/General Expenses — 15,536

PSAB dues/Council Assoc. dues	$	1,384
PSAB conferences	$	1,800
Cumberland-Franklin Counties Boroughs Assoc. dues	$	50
Seminars, training, meetings	$	860
ICMA dues	$	912
PA Municipal Mgmt. dues	$	165
PA Assoc. of Municipal Adm.	$	140
River Rescue (Halloween Parade)	$	1,000
Animal Control	$	1,300
Capital Region COG	$	1,500
PSAB publications	$	170
Borough Mgmt. Caucus	$	25
Bank Fees	$	5,900
Mileage	$	330

400.21 Advertising, Postage, Printing & Newsletter — 18,800

Advertising	$	2,200
Postage	$	13,200
Printing	$	400
Newsletter	$	3,000

GENERAL GOVERNMENT - ADMINISTRATION (continued)

400.24 Engineering Services — $ 7,000

Covers all engineering services and fees for Borough Engineer services such as surveying, drafting, storm drainage, traffic analysis, floodplain management, projects, mapping, etc. Does not include work related to street projects, sewer projects, or plan review fees for Planning Commission items.

400.28 Auditing Services — 19,800

Annual audit reports for Borough	$	12,550
Annual audit reports for Library	$	2,550
Other authorized financial consulting services	$	4,700

400.29 Legal Services — 34,000

Borough Solicitor fees	$	20,000
Other legal and special counsel	$	14,000

400.30 Communication Services (telephone and radio) — 5,000

Covers telephone and radio expenses for the Borough Office and Highway Garage. Includes local phone service and long distance. Covers office and garage radio maintenance and repairs. Does not include vehicles. (Computer internet service provided through Comcast Cable franchise agreement at no charge.)

400.40 Equipment Maintenance & Repair — 22,000

Covers service to Borough Office equipment such as calculators, typewriters, cash register, recorders, copier, and postage meter rental. Includes computer software maintenance agreements, network support services, and website management.

401.03 Tax Collector Commission — 19,900

1% on Real Estate Taxes collected. Rate set by ordinance effective January 1, 2002.

401.10 Tax Collector Materials and Supplies — 2,800

Covers the Borough's share of the tax collector's expenses for postage, forms, computer time, and bond.

TOTAL ADMINISTRATION — $ 404,316

GENERAL GOVERNMENT - BOROUGH BUILDING

402.05	**Janitorial Service** Cleaning of Borough Office, Council Chambers, and Police Department			$ 3,800
402.10	**Building Materials and Supplies** Includes paper products and cleaning supplies for Borough Office and Police Department.			1,100
402.11	**Utilities (Borough Building and Highway Garage)**			30,000
	Heating oil (garage only)	$	2,100	
	Electric	$	14,000	
	Gas	$	7,000	
	Water	$	4,300	
	(Includes water for Firehouse (1300) and River Rescue Building (350)			
	Consortium Fees		$2,600	
402.40	**Maintenance and Repair (Borough Building)**			7,000
	Routine maintenance and general repair	$	4,688	
	Pest control	$	720	
	Fire alarm service	$	1,167	
	Heating /cooling service contract	$	425	
	TOTAL BOROUGH BUILDING			41,900
	TOTAL GENERAL GOVERNMENT			$ 446,216

PROTECTION TO PERSONS & PROPERTIES (POLICE)

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
410.01 Salary of Chief	$ 91,848	$ 94,517	$ 97,341
410.02 Wages of Corporal and Sergeant	87,739	92,705	192,037
410.03 Wages of Patrolmen	579,834	487,532	547,470
410.04 Wages of Crossing Guards	85,443	84,000	88,009
410.05 Wages of Special Police	900	500	900
410.06 Salary of Secretary	34,948	34,948	35,996
410.07 Wages of Community Service Officers	20,000	12,630	20,000
410.10 Materials and Supplies	5,000	4,500	5,000
410.12 Uniforms	15,474	10,000	14,100
410.20 General Expenses	40,275	31,000	44,410
410.30 Communications (Telephone Service)	6,936	6,000	6,504
410.31 Communications (Radio System)	4,700	4,700	2,000
410.46 Traffic Signal System	11,200	5,000	11,200
410.60 Minor Equipment Purchases	4,360	4,360	3,800
411.44 Vehicle Maintenance and Repair	5,500	4,500	6,500
411.51 Gas, Oil, and Vehicle Supplies	14,000	10,400	14,000
TOTAL POLICE	$ 1,008,157	$ 887,292	$ 1,089,267

POLICE

410.01	**Salary of Chief**							$ 97,341
	Salary	1	@	$ 94,391	=	$ 94,391		
	Longevity 22nd year	1	@	$ 2,950	=	$ 2,950		
410.02	**Wages of Sergeant and Corporal**							192,037
	Sergeant							
	Wages	1	@	$ 87,437	=	$ 87,437		
	Holiday/OT	1	@	$ 8,488	=	$ 8,488		
						$ 95,925		
	Corporal							
	Wages	1	@	$ 84,586	=	$ 84,586		
	Longevity 26th year	1	@	$ 3,150	=	$ 3,150		
	Holiday / O.T.	1	@	$ 8,376	=	$ 8,376		
						$ 96,112		
410.03	**Wages of Patrolmen**							547,470
	Wages (5+ years)	4	@	$ 81,735	=	$ 326,940		
	Wages (1+ years)	1	@	$ 77,588	=	$ 77,588		
	Probationary	1	@	$ 76,551	=	$ 76,551		
	Longevity							
	Completing 25th year	1	@	$ 3,150	=	$ 3,150		
	Completing 15th year	1	@	$ 1,775	=	$ 1,775		
	Completing 10th year	1	@	$ 1,025	=	$ 1,025		
	Completing 6th yr	1	@	$ 500		$ 500		
	College Pay	3	@	$ 600	=	$ 1,800		
	Holiday / OT	6	@	$ 7,500	=	$ 45,000		
	Health Ins. Opt Out	1	@	$13,141	=	$ 13,141		
410.04	**Wages of Crossing Guards**							88,009
	Crossing Guards	8	@	$14.07	per hourly (base hourly wage)			
			x	4.25	hours per day			
			x	8	locations			
			x	180	school days		86,109	
		3	@	$14.07	per hourly (base hourly wage)			
			x	$0.25	hours per day			
			x	3	locations			
			x	180	days		1,900	
410.05	**Wages of Special Police**							
	Cost of Special Police @ 12.71/hour							900
410.06	**Salary of Secretary**							35,996
410.07	**Wages of Community Service Officers**							
	Cost of CSO @ $13.01/hour							20,000
410.10	**Materials and Supplies**							5,000
410.12	**Uniforms**							14,100
	Uniform replacement	9	@	$ 400	=	$ 3,600		
	Cleaning	9	@	$ 500	=	$ 4,500		
	Equipment replacement			$ 6,000	=	$ 6,000		

POLICE (continued)

410.20 General Expenses				44,410
Records management system (RMS) and CNET			$ 8,750	
Dues			$ 225	
Subscriptions			$ 3,900	
Training			$ 2,000	
Maintenance agreements			$ 3,425	
Equipment repair			$ 1,400	
Computer support			$ 6,000	
College tuition				
1 request 2,570/class x 3 classes		7,710		
2 request 2,750/class x 4 classes		11,000	18,710	
410.30 Communications (Telephone)				6,504
Average land line	276 x 12 mos.		3,312	
Cellular telephone service	70 x 12 mos.		840	
Mobile Data Terminal service	120 x 12 mos.		1,440	
Vehicle GPS service	76 x 12 mos.		912	
410.31 Communications (Radio)				2,000
Radio maintenance contract, parts, labor and other miscellaneous equipment				
410.46 Traffic Signal System				11,200
Repair, maintenance and electrical service for school warning devices and three traffic signals				
410.60 Minor Equipment Purchases				3,800
Firearms equipment			$ 2,000	
Fingerprint supplies			$ -0-	
Investigation equipment			$ 200	
Office equipment			$ 650	
Other misc. equipment			$ 600	
Parking tickets			$ 250	
Photography equipment			$ -0-	
School crossing equipment			$ 100	
Temporary parking signs			$ -0-	
411.44 Vehicle Maintenance & Repair				6,500
411.51 Gasoline, Oil and Vehicle Supplies				14,000
TOTAL POLICE				$ 1,089,267

PROTECTION TO PERSONS & PROPERTIES (FIRE)

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
413.01 Salary of Fire Chief	$ 2,000	$ 2,000	$ 2,000
413.02 Salaries of Deputy Chiefs	1,500	1,500	1,500
413.14 Fire Hydrant Rental	28,923	28,707	28,923
413.20 General Expenses	2,300	1,500	2,300
413.30 Communications (Radio & Alarms)	2,000	1,200	2,500
413.40 Maintenance & Repair - Firehouse	25,000	27,544	27,500
413.41 Fire Extinguisher (Maintenance/Refill)	1,250	1,069	1,250
413.60 Minor Equipment Purchases	15,000	12,000	15,000
414.40 Fire Vehicle Maintenance/Gas/Repairs	30,000	29,996	30,000
TOTAL FIRE	$ 107,973	$ 105,516	$ 110,973

PLANNING, BUILDING & ZONING

		BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
416.00	Zoning Officer/Building Code Official	$ 18,000	$ 17,914	$ 18,000
416.10	Materials and Supplies	450	150	450
416.20	General Expense/Advertisements	2,000	1,055	2,000
416.29	Legal Services and Agreements	3,800	1,600	3,800
416.40	Engineering Fees	3,900	3,040	3,900
416.41	Building Code Compliance Fees	3,000	300	1,000
416.90	Agreement with Tri-County Planning Commission (-0-) & Updating Ordinances	2,000	-0-	2,000
	TOTAL PLANNING & ZONING	$ 33,150	$ 24,059	$ 31,150

OFFICE OF EMERGENCY MANAGEMENT

		BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
417.20	General Expense and Dues	$ 150	-0-	$ 150
417.21	Materials, Supplies, and Printing	25	-0-	25
417.40	Minor Equipment Maintenance/Repair	100	-0-	100
417.60	Minor Equipment Purchases	25	-0-	25
	TOTAL OFFICE OF EMERGENCY MGMT	$ 300	-0-	$ 300

SEWAGE TREATMENT

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
421.00 Wages of Full-Time Employees	$ 309,816	$ 309,283	$331,387
421.01 Overtime Wages	4,000	2,149	4,000
421.02 Wages of Temporary Employees	11,700	9,833	11,700
421.23 Equipment Rental	3,500	926	3,500
421.24 Sludge Disposal	68,600	38,524	48,800
421.30 Laboratory Analysis	36,600	36,513	31,320
421.40 Lateral Replacement/Repair	2,500	158	2,500
421.41 Main Replacement/Repair	33,000	66,445	49,000
421.43 Maintenance of Pump Stations	8,200	6,457	8,200
422.10 Materials & Supplies/Chemicals	58,000	51,777	58,000
422.11 Fuel & Water	12,500	12,158	16,000
422.12 Electric Power	127,000	124,275	127,000
422.20 Association Dues & General Expenses	5,100	3,373	5,100
422.30 Telephone/Radio	6,200	4,624	6,200
422.40 Maintenance/Repair of Plant	42,000	43,375	42,000
422.50 Maintenance/Repair of Vehicles/Equipment	9,100	8,608	9,100
422.51 Gasoline for Vehicles/Equipment	6,500	5,725	6,500
422.60 Purchase of Minor Equipment	3,000	2,425	3,000
423.24 Consulting Engineer/Legal Services	1,200	1,200	31,200
TOTAL SEWAGE TREATMENT	$ 748,516	$ 727,828	$ 794,507

SEWAGE TREATMENT PLANT

421.00	**Wages of Full-time Employees**		$331,387
	Superintendent:	$80,071	
	Assistant Superintendent:	$72,317	
	Operations Supervisor:	$68,256	
	Operator Class II	$58,903	
	Operator Trainee	$51,840	
421.01	**Overtime Wages**		4,000
421.02	**Wages of Temporary Employees**		11,700
	Two (2) summer workers at the plant		
421.23	**Equipment Rental**		3,500
	Rental of backhoe, dump trucks, tank trucks & other equipment		
421.24	**Sludge Disposal**		48,800
	Includes sludge disposal and permit fees		
421.30	**Laboratory Analysis**		31,320
	Includes sludge analysis and outsourcing of all DEP required testing to certified labs		
421.40	**Lateral Replacement/Repair**		2,500
421.41	**Main Replacement/Repair**		49,000
421.43	**Maintenance of Pump Stations**		8,200
422.10	**Materials and Supplies/Chemicals**		58,000
	Chemicals, laboratory materials & related products		
422.11	**Fuel and Water**		16,000
	(Fuel is diesel fuel for emergency generator)		
422.12	**Electric Power**		127,000
422.20	**Association Dues and Expenses**		5,100
	(Includes PA-1 Call System membership, professional association dues, license renewals, training and seminars, etc.)		
422.30	**Telephone and Radio**		6,200

SEWAGE TREATMENT PLANT (continued)

422.40	**Maintenance/Repair of Plant** Includes instrumentation maintenance agreement.	42,000
422.50	**Maintenance/Repair of Vehicles and Equipment**	9,100
422.51	**Gasoline for Vehicles and Equipment**	6,500
422.60	**Purchase of Minor Equipment/Tools** Safety equipment, hand tools, power tools, protective clothing, rain gear, work boots, etc.	3,000
423.24	**Consulting Engineer/Legal Services** Professional services pertaining to Wastewater Treatment Facilities	31,200
	TOTAL SEWAGE TREATMENT	$794,507

REFUSE COLLECTION/RECYCLING

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
424.20 General Expenses	$ 2,000	490	$ 2,000
424.26 Refuse Collection and Recycling Contract	479,961	499,237	505,666
TOTAL REFUSE COLLECTION	$ 481,961	$ 499,727	$ 507,666

HIGHWAYS

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
430.00 Wages of Full-time Employees	$ 425,880	$ 425,231	$ 455,520
430.01 Overtime Wages	12,000	15,595	12,000
430.23 Rental of Equipment	5,000	805	5,000
430.40 Equipment & Vehicle Maintenance/Repairs	35,000	33,000	35,000
430.51 Gas, Oil & Operating Expense	28,000	26,060	28,000
430.60 Purchase of Minor Equipment & Tools	3,200	3,090	3,200
433.00 Street Signs & Markings	5,500	5,450	5,500
434.00 Street Lighting Costs	115,000	112,133	115,000
436.40 Maintenance/repair of buildings and facilities	2,000	3,600	2,000
438.00 Maintenance/Repair of Streets/Alleys	22,000	38,000	22,000
438.04 Stormwater Drainage System	40,000	43,000	43,000
439.01 Construction/Rebuilding of Sidewalks/Curbs	2,000	-0-	2,000
TOTAL HIGHWAYS	$ 695,580	$ 705,964	$ 728,220

HIGHWAYS

430.00	**Wages of Full-time Employees**						$ 455,520
	Superintendent	1	@	$77,760	=	$ 77,760	
	Assistant Superintendent	1	@	$65,750	=	$ 65,750	
	Laborer Class I	5	@	$62,402	=	$ 312,010	
430.01	**Overtime Wages**						12,000
430.23	**Rental of Equipment**						5,000
	Rental of backhoe, dump trucks, paving machine, milling machine, barricades & other miscellaneous equipment						
430.40	**Equipment and Vehicle Maintenance/Repair**						35,000
	Repair & maintenance of equipment and vehicles						
430.51	**Gasoline, Oil & Operating Expenses**						28,000
	Includes gas or diesel fuel for highway department vehicles and manager's car						
430.60	**Purchase of Minor Equipment & Tools**						3,200
	Includes safety equipment, power tools, hand tools, hardware, rain gear and work boots allowance						
433.00	**Street signs and markings**						5,500
	Includes traffic paint, tape, and sign materials						
434.00	**Street Lighting Costs**						115,000
	Street lighting					$ 112,260	
	Electric for tree lights and holiday decorations.					$ 1,420	
	Downtown lights and clock.					$ 1,320	
436.40	**Maintenance/Repair of Buildings and Facilities**						2,000
	Includes Highway Garage, Pole Building, and Fuel Pumps						
438.00	**Maintenance/Repair of Streets/Alleys**						22,000
	Includes stone products, blacktop, patch materials, and sealer						
438.04	**Stormwater Drainage System**						43,000
	Maintenance/Repair					$ 13,000	
	MS-4 program Engineering/Administration					$ 30,000	
439.01	**Construction/Rebuilding of Sidewalks and Curbs**						2,000
	TOTAL HIGHWAYS						$ 728,220

LIBRARY

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
440.01 Salaries of Full-time Staff	$ 133,334	$ 133,334	$137,334
440.02 Wages of Part-time Staff	100,676	100,676	114,396
440.10 Materials & Supplies	-0-	-0-	-0-
440.11 Utilities (Electric, Gas & Water)	30,000	23,000	27,000
440.15 Library Materials	-0-	-0-	-0-
440.16 Building Supplies	200	300	300
440.20 General Miscellaneous (Expenses)	-0-	-0-	-0-
440.30 Communications (Telephone)	2,700	3,500	3,700
440.40 Building & Grounds Maintenance	30,000	26,550	30,000
440.60 Minor Equipment Service Agreements	-0-	-0-	-0-
TOTAL LIBRARY	$ 296,910	$ 287,360	$ 312,730

Note: Other Library expenditures to be paid in 2016 from other sections of the Borough's General Fund Budget

400.28	Auditing Service	$ 2,550
470.00	Social Security	$ 19,256
470.01	Pension Plan	$ 14,132
470.02	Life & Disability Insurance	$ 925
470.04	Blue Cross	$ 43,259
470.07	Unemployment Compensation	$ 4,072
471.00	Fire & Liability Insurance	$ 6,016
471.00	Library Treasurer Bond	$ 158
471.01	Workers Compensation	$ 988

Sub-Total	91,356
TOTAL BOROUGH EXPENDITURES	404,086
(Less) Borough support	9,722
Amount of reimbursement from Library Board to Borough $ 32,863 per month	$ 394,364

LIBRARY

440.01	**Salaries of Full-time Employees**		$137,334
	Director/Dir. of Facilities/Programming Dir.	$54,506	
	Children's Director	$38,425	
	Local System Administrator	$44,403	
440.02	**Wages of Part-time Staff**		
	Part-time positions		114,396
440.10	**Materials and Supplies**		-0-
440.11	**Utilities - Electric, Gas and Water**		27,000
440.15	**Library Materials - books, magazines, audio visuals**		-0-
440.16	**Building Supplies**		300
440.20	**General Expense**		-0-
	Postage, petty cash, miscellaneous expense, transportation, conferences		
440.30	**Communications - Telephone**		3,700
440.40	**Building & Grounds Maintenance**		30,000
	Includes Otis Elevator service contract		
	Includes heat and air conditioning service contract		
	Includes janitorial service contract		
440.60	**Minor Equipment Service Agreements**		-0-
	Photocopier, copying machine, and typewriters		
	TOTAL LIBRARY		$ 312,730

SENIOR CITIZEN CENTER

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
450.90 Grant to Senior Citizens Center	$ 9,260	$ 9,260	$ 9,260
TOTAL SENIOR CITIZEN CENTER	$ 9,260	$ 9,260	$ 9,260

PARKS AND RECREATION

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
451.00 Wages of Summer Workers	$ 10,920	$ 7,443	$ 10,920
451.10 Materials & Supplies	3,200	3,249	3,500
451.11 Utility Costs (Electric & Water)	3,900	3,979	4,000
451.40 Maintenance & Repair	10,000	9,985	10,000
451.80 Construction or Extension of Facilities	2,000	1,528	2,000
451.90 West Shore Recreation Commission	18,193	18,193	18,193
451.91 Holiday Decorations/Town Band	1,600	1,000	1,600
TOTAL PARKS AND RECREATION	$ 49,813	$ 45,377	$ 50,213

PARKS AND RECREATION

451.00 Wages of Summer Workers			$ 10,920
Provides for 2 summer employees			
451.10 Materials and Supplies			3,500
Includes paper products, cleaning and janitorial supplies, and other minor materials			
451.11 Utilities			4,000
Includes water and electric			
451.40 Maintenance and Repair			10,000
Includes all park buildings, facilities, playground equipment, geese abatement, ball fields, and Memorial Field lease			
451.80 Construction or Extension of Facilities			2,000
New construction, additions, renovations or capital expenditures for park buildings, facilities or equipment			
451.90 West Shore Recreation Commission			18,193
Contribution to the West Shore Recreation Commission			
451.91 Holiday Decorations/Town Band			1,600
Includes all materials and supplies for street Christmas decorations and tree lighting ceremony, American Flags, brackets, etc.		$1,200	
Includes contribution to Town Band for concerts on Borough property		$400	
TOTAL PARKS AND RECREATION			$ 50,213

EMPLOYEE PAYROLL TAXES & BENEFITS

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
470.00 Social Security Taxes & Medicare Ins.	$ 118,684	$ 119,566	$ 124,404
470.01 Nonuniformed Employee Pension Plan	127,443	120,406	136,592
470.02 Employee Life & Disability Insurance	17,745	15,559	17,745
470.04 Employee Health Insurance	627,688	530,414	609,182
470.05 Police Pension Plan	159,996	159,996	150,454
470.06 Transfer to Firemen's Relief Fund	46,387	44,619	44,619
470.07 Unemployment Compensation	21,908	22,691	13,077
TOTAL EMP PAYROLL TAXES & BENEFITS	$ 1,119,851	$1,013,251	$ 1,096,073

INSURANCE

	BUDGETED 2015	ESTIMATED 2015	PROPOSED 2016
471.00 Property, Vehicle & Liability Insurance	$ 118,587	$ 118,000	$ 123,475
471.01 Workers Compensation Insurance	79,347	81,919	81,077
TOTAL INSURANCE	$ 197,934	$ 199,919	$ 204,552
TOTAL EXPENDITURES	$ 5,196,717	$4,938,123	$ 5,381,127
TRANSFER TO CAPITAL IMPROVE. FUND	330,000	330,000	-0-
TRANSFER TO SEW REV/CAP RESV FUND	$ 500,000	$ 500,000	150,000
TOTAL DISBURSEMENTS	$ 6,026,717	$5,768,123	5,531,127
ENDING BALANCE	744,464	1,201,460	673,238
TOTAL BUDGET	$ 6,771,181	$6,969,583	$ 6,204,365

EMPLOYEE PAYROLL TAXES & BENEFITS

470.00	**Social Security and Medicare (Borough Share)** 6.2% on covered wages except police (includes elected officials). Also, 1.45% medicare insurance on above plus all police hired after August 1984	$ 124,404
470.01	**Employee Pension Plan (Nonuniformed)** Borough share of nonuniformed employees pension. Minimum Municipal Obligation is $129,385 Administrative Fees are 7,212	136,592
470.02	**Employee Life and Disability Insurance** Term life insurance and disability insurance	17,745
470.04	**Employee Health Insurance Premium** PPO and Prescription Drug Plans. Dental Insurance. Vision Insurance. Projected Maximum rate increases $643,782 Estimated Minimum surplus distribution $ 35,000 Quarterly drug and alcohol testing for CDL operators $400	609,182
470.05	**Police Pension Fund** Minimum Municipal Obligation is $150,454	150,454
470.06	**Transfer to Firemen's Relief Fund** Allocation from the state for Firemen's Relief Fund. Received by Borough and distributed to Relief Association.	44,619
470.07	**Unemployment Compensation** 2.85% of gross wages up to $9,500 Coverage through PSAB plan.	13,077
	TOTAL EMPLOYEE PAYROLL TAXES & BENEFITS	$ 1,096,073

INSURANCE

471.00	**Property, vehicle, and liability insurance**			$ 123,475
a.	Package policy includes: - property, vehicle and general liability insurances - errors and omissions coverage - excess liability - police professional liability	$	120,146	
b.	Borough Manager's Bond	$	252	
c.	Borough Treasurer's Bond	$	488	
d.	Employee Blanket Bond	$	414	
e.	Library Board Treasurer's Bond	$	175	
f.	Fire Department portable equipment policy	$	2,000	
471.01	**Workers Compensation Insurance**			81,077
	Borough through Susquehanna Municipal Trust		59,077	
	Volunteer Firemen obtained through State Workers Insurance Fund		20,000	
	TOTAL INSURANCE			$ 204,552
	TOTAL EXPENDITURES			$ 5,381,127
	TRANSFER TO CAPITAL IMPROVEMENT FUND			-0-
	TRANSFER TO SEWER REVENUE/CAPITAL RESERVE FUND			150,000
	TOTAL DISBURSEMENTS			$ 5,531,127
	ENDING BALANCE			$ 673,238
	TOTAL BUDGET			$ 6,204,365

2016

CAPITAL IMPROVEMENT FUND

Receipts

Balance: Janu ary 1,2016	$ 283,771
Rental Income: AT&T Wireless (cell tower site)	29,030
Interest Income	50
Transfer from General Fund	-0-
TOTAL	$ 312,851

Expenditures

Police- Mobile Data Terminals	$ 14,157
Police- Mobile Radio	10,340
Fire- Debt Service on Fire Truck-Toward Principal	35,000
Highway- Snow removal/Road Salt	56,040
Highway- Salt spreader replacement	3,500
Highway- Fuel pump roof	25,000
Highway- Street paving/ Engineer	10,000
Park- USDA Geese Mgmt	5,000
Unallocated reserve	153,814
TOTAL	$ 312,851

2016

LIQUID FUELS FUND

Receipts

Balance: January 1, 2016	$ 74,402
State Allocation (Act 655)	198,280
Interest Income	30
TOTAL	$ 272,712

Expenditures

Street paving project Available for Street paving	$ 200,000
Unallocated Reserve	72,712
TOTAL	$ 272,712

2016

SEWER REVENUE-CAPITAL RESERVE FUND

Receipts

Balance: Janu ary 1,2016		$ 223,376
Sewer Rental Fees		890,440
(remaining portion of actual receipts)		
Interest Income		50
Transfer from General Fund		150,000
TOTAL		$ 1,263,866

Expenditures

Debt service payments		1,158,007
General Obligation Bond Series 2011	272,659	
General Obligation Bond Series 2012	654,188	
General Obligation Bond Series 2013	230,060	
Paying agent service fee	1,100	
Corrective Action Plan- Engineering		2,500
Cedar Cliff Force Mains - Engineering		80,000
Unallocated Reserve		23,359
TOTAL		$ 1,263,866

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-17. Please provide a copy of the Borough's most recent annual financial statement and identify all entries related to the operation of the Borough's wastewater system.

RESPONSE: See Attachment TUS Set 1, No. A-17 (Borough's December 31, 2014 Audited Financial Statement).

See pages 46 and 47 for the Borough of New Cumberland's Statement of Revenues, Expenditures and Fund Balances.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

FINANCIAL STATEMENTS
With Required Supplementary Information

YEAR ENDED DECEMBER 31, 2014

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

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BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

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INDEPENDENT AUDITORS' REPORT

To the Borough Council
Borough of New Cumberland
Cumberland County, Pennsylvania
New Cumberland, Pennsylvania 17070

Report on the Financial Statements

We have audited the accompanying modified cash basis financial statements of the governmental activities and each major fund of **Borough of New Cumberland, Cumberland County, Pennsylvania** (the Borough) as of and for the year ended December 31, 2014, and the related notes to the financial statements, which collectively comprise the Borough's basic financial statements, as listed on the Table of Contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the modified cash basis of accounting, as described in Note 1; this includes determining that the modified cash basis of accounting is an acceptable basis for the preparation of the financial statements in the circumstances. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

Auditors' Responsibility (Continued)

In making those risk assessments, the auditors consider internal control relevant to the Borough's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Borough's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the modified cash basis financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and each major fund of **Borough of New Cumberland, Cumberland County, Pennsylvania** as of December 31, 2014, and the respective changes in its financial position for the year then ended in accordance with the modified cash basis of accounting described in Note 1.

Basis of Accounting

We draw attention to Note 1 of the financial statements, Page 23, *"Basis of Accounting."* The financial statements are prepared on the modified cash basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on Pages 4 through 12 and budgetary comparison information on Pages 42 through 47, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historic context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report, dated August 26, 2015, on our consideration of the Borough's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of the audit performed in accordance with *Government Auditing Standards* in considering the Borough's internal control over financial reporting and compliance.

SF&Company

Harrisburg, Pennsylvania
August 26, 2015

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

MANAGEMENT'S DISCUSSION AND ANALYSIS
YEAR ENDED DECEMBER 31, 2014

Our discussion and analysis of Borough of New Cumberland, Cumberland County, Pennsylvania's (the Borough's) financial performance provides an overview of our financial activities as of and for the year ended December 31, 2014, with comparative information as of and for the years ended December 31, 2013 and 2012. Please read this information in conjunction with the Borough's Financial Statements, which begin on Page 13 and the Notes to the Financial Statements, which begin on Page 20.

Using this Annual Report

Management of the Borough offers the readers of these financial statements a narrative overview and analysis of the Borough's Government-Wide and Governmental Funds financial position and activities.

Overview of the Statements

The Management's Discussion and Analysis is intended to serve as an introduction to the basic financial statements. The basic financial statements are comprised of the following components: (1) Government-Wide Financial Statements, (2) Governmental Funds Financial Statements, and (3) Fiduciary Fund Financial Statements, and (4) Notes to the Financial Statements. These financial statements report the financial information on a modified cash basis of accounting. Under the full cash basis, only the Borough's cash and investments and equity would be reported and all financial activities would report only revenue received, rather than when due or earned, and expenses when they are paid, rather than when a liability or obligation to pay exists. Further, under the cash basis, all capital assets are expensed when purchased and all debt incurred is reported as a cash inflow, without the corresponding obligation to pay. Principal and interest payments that are paid, therefore, are also expensed when paid, rather than applied to the corresponding debt balance.

The Borough has modified this basis, but only to show the value of its inventory on hand and the liability associated with payroll tax withholdings and interfund receivables and payables.

This report also contains required supplementary information in addition to the basic financial statements and notes.

The Government-Wide Financial Statements are designed to provide a broad overview of the Borough's finances, in a manner similar to the private sector. All of the funds are combined in this presentation.

The Statement of Net Position - Modified Cash Basis - Government-Wide (Balance Sheet), which appears on Page 13, presents information on the Borough's cash and cash equivalents, investments, and inventory, and the payroll tax withholdings (liabilities), and net position (equity).

Overview of the Statements (Continued)

The Government-Wide Financial Statements (Continued)

Below is the comparison between the information at December 31:

	2014	2013	2012
Assets			
Cash and Cash Equivalents	$ 3,225,618	$ 3,999,682	$ 6,198,534
Investments	406,023	388,521	351,933
Inventory	17,045	15,291	17,257
Total Assets	$ 3,648,686	$ 4,403,494	$ 6,567,724
Liabilities			
Payroll Tax Withholdings	$ 9,779	$ 8,252	$ 1,660
Net Position			
Restricted	1,693,252	2,700,124	5,298,921
Unrestricted	1,945,655	1,695,118	1,267,143
Total Net Position	3,638,907	4,395,242	6,566,064
Total Liabilities and Net Position	$ 3,648,686	$ 4,403,494	$ 6,567,724

The Borough's cash and cash equivalents have decreased over the past three years. Part of the decrease relates to the amount of restricted cash on hand that was generated by debt funding of the sewer system improvements, which has been spent down as the project was completed during 2014.

The Statement of Activities - Modified Cash Basis - Government-Wide, which appears on Page 14, presents information showing how the Borough's net position (equity) has changed during the most recent fiscal year. The presentation of this statement allows for the reader to see to what extent the Borough's expenses, by department, are offset with fees, grants, and contributions, which are collected specifically for the purposes of that department.

Overview of the Statements (Continued)

The Government-Wide Financial Statements (Continued)

The following table shows a summary of the Statement of Activities - Modified Cash Basis - Government-Wide, showing the revenue that is specific to offset the expenses of the government, by department, and general revenue, utilized to offset any and all remaining expenses. Below is the comparison between the information for the years ended December 31:

	2014	2013	2012
Revenue			
Offsetting Income Streams			
Charges for Services	$ 2,240,557	$ 2,250,513	$ 2,263,767
Operating Grants and Contributions	842,332	872,243	1,052,695
Capital Grants and Contributions	0	84,669	25,500
Total Offsetting Income Streams	3,082,889	3,207,425	3,341,962
General Revenue			
Taxes	2,962,458	3,065,376	2,841,632
Licenses, Permits, and Fees	152,987	163,301	164,079
Fines and Forfeitures	50,368	52,015	46,360
Charges for Services	13,956	6,760	12,095
Intergovernmental	17,124	1,315	24,368
Interest and Rents	64,210	89,255	70,937
Proceeds from Issuance of Long-Term Debt	0	3,500,000	9,780,782
Total General Revenue	3,261,103	6,878,022	12,940,253
Total Revenue	$ 6,343,992	$ 10,085,447	$ 16,282,215

Charges for services offset the expenses of the Public Safety, Public Works, and Public Library Funds. Operating grants and contributions are used to offset most departments, with these grants and contributions funding a variety of projects. The contributions are provided largely to the Pubic Library Fund, from various supporters of the public library. Capital grants are specific to capital purchases and/or capital projects, which are not received every year. Most of the differences between years in the general revenue relate to timing. Under the modified basis of accounting, revenue is recognized when received, rather than when earned or due to the Borough. During 2012 and 2013, the Borough was issuing debt in order to fund the renovations at the sewer plant.

Overview of the Statements (Continued)

The Government-Wide Financial Statements (Continued)

Below is the comparison for expenses, by department, and the changes in net position (income (loss)) for the years ended December 31:

	2014	2013	2012
Expenses			
General Government	$ 402,104	$ 508,835	$ 387,807
Public Safety	1,023,000	995,456	1,023,218
Public Works	2,920,447	8,326,415	9,575,827
Library and Recreation	428,598	425,583	418,712
Payroll Taxes, Benefits and Insurance	1,170,461	1,001,184	934,608
Debt Service	1,155,717	998,796	369,302
Total Expenses	7,100,327	12,256,269	12,709,474
Changes in Net Position	$ (756,335)	$ (2,170,822)	$ 3,572,741

The most significant expenses and expense fluctuations can be seen in the public works department, which captures the expenses related to the sewer treatment plant and debt service. The expenses related to the sewer treatment plant renovation are not capitalized under the modified cash basis of accounting. Similarly, under this basis, both the principal and interest payments on the Borough's debt appear as expenses.

The net loss during 2013 is offset to some degree by the net income during 2012. This is because funds from the 2012 Bonds issuance were recognized during 2012, while expenses during 2013 were paid from these funds. In 2014, public safety expenses include the wrap up of the sewer system update, and also show the increase in debt service, because the Borough is now beginning principal and interest payments on the construction debt, which was interest only during construction.

The Governmental Funds Financial Statements: A "fund" is a group of related accounts, which are used to maintain control over resources that are earmarked for a specific activity. All of the Borough's funds can be divided into two categories: Governmental Funds and Fiduciary Funds. Governmental Funds include the General Fund, two special revenue funds (the Liquid Fuels Tax Fund and the Public Library Fund), and three capital project funds (the Sewer Capital Reserve, Capital Construction Fund, and Capital Improvement Fund).

Overview of the Statements (Continued)

The Governmental Funds Financial Statements (Continued)

Since both the government-wide financial statements and the governmental funds financial statements are presented on the modified cash basis of accounting, there are not significant differences in the balances presented in total for these funds. The difference is in the presentation. The governmental funds financial statements present much more detail of the activity in each fund. If the financial statements were presented in accordance with accounting principles generally accepted in the United States of America, the government-wide financial statements would present the information on the full accrual basis of accounting, the governmental funds financial statements would present the information on the modified cash basis of accounting, and there would be a reconciliation of the differences in the balances presented.

The Balance Sheet - Modified Cash Basis - Governmental Funds, which appears on Page 15, presents information on the Borough's fund accounts. Below is the comparison between the information at December 31:

	2014		
	Assets	Liabilities	Fund Balances
General Fund	$ 1,961,245	$ 15,590	$ 1,945,655
Liquid Fuels Tax Fund	100,066	0	100,066
Public Library Fund	1,225,346	0	1,225,346
Sewer Capital Reserve Fund	167,573	0	167,573
Capital Construction Fund	15,745	0	15,745
Capital Improvement Fund	184,522	0	184,522
Total	$ 3,654,497	$ 15,590	$ 3,638,907

	2013		
	Assets	Liabilities	Fund Balances
General Fund	$ 1,707,785	$ 12,667	$ 1,695,118
Liquid Fuels Tax Fund	111,107	0	111,107
Public Library Fund	1,118,055	0	1,118,055
Sewer Capital Reserve Fund	634,190	0	634,190
Capital Construction Fund	609,136	0	609,136
Capital Improvement Fund	227,636	0	227,636
Total	$ 4,407,909	$ 12,667	$ 4,395,242

Overview of the Statements (Continued)

The Governmental Funds Financial Statements (Continued)

	2012		
	Assets	Liabilities	Fund Balances
General Fund	$ 1,273,074	$ 5,931	$ 1,267,143
Liquid Fuels Tax Fund	173,147	0	173,147
Public Library Fund	948,072	0	948,072
Sewer Capital Reserve Fund	1,041,995	0	1,041,995
Capital Construction Fund	2,864,444	0	2,864,444
Capital Improvement Fund	271,263	0	271,263
Total	$ 6,571,995	$ 5,931	$ 6,566,064

The Statement of Revenue, Expenditures, and Changes in Fund Balances - Modified Cash Basis - Governmental Funds, which appears on Page 16, presents the revenue, expenses, other income (expense), and changes in fund balances (net income (loss)) for the funds. Below is the comparison between the information for the years ended December 31:

	2014			
	Revenue	Expenses	Other Income (Expense)	Net Income (Loss)
General Fund	$ 5,608,280	$ 4,400,459	$ (957,284)	$ 250,537
Liquid Fuels Tax Fund	158,357	169,398	0	(11,041)
Public Library Fund	542,317	444,748	9,722	107,291
Sewer Capital Reserve Fund	263	1,404,442	937,562	(466,617)
Capital Construction Fund	361	593,752	0	(593,391)
Capital Improvement Fund	34,414	87,528	10,000	(43,114)
Total	$ 6,343,992	$ 7,100,327	$ 0	$ (756,335)

Overview of the Statements (Continued)

The Governmental Fund Financial Statements (Continued)

	2013			
	Revenue	Expenses	Other Income (Expense)	Net Income (Loss)
General Fund	$ 5,806,777	$ 4,200,106	$ (1,178,696)	$ 427,975
Liquid Fuels Tax Fund	147,110	209,150	0	(62,040)
Public Library Fund	596,067	435,806	9,722	169,983
Sewer Capital Reserve Fund	1,090	1,382,869	973,974	(407,805)
Capital Construction Fund	4,926	5,760,234	3,500,000	(2,255,308)
Capital Improvement Fund	29,477	268,104	195,000	(43,627)
Total	$ 6,585,447	$ 12,256,269	$ 3,500,000	$ (2,170,822)

	2012			
	Revenue	Expenses	Other Income (Expense)	Net Income
General Fund	$ 5,509,889	$ 4,118,409	$ (1,329,232)	$ 62,248
Liquid Fuels Tax Fund	149,452	188,099	98,354	59,707
Public Library Fund	761,092	406,470	9,722	364,344
Sewer Capital Reserve Fund	9,625	950,738	999,510	58,397
Capital Construction Fund	11,209	6,927,547	9,780,782	2,864,444
Capital Improvement Fund	60,166	118,211	221,646	163,601
Total	$ 6,501,433	$ 12,709,474	$ 9,780,782	$ 3,572,741

In comparing the three years, revenue is fairly consistent year-to-year, with fluctuations largely related to timing. The expenses fluctuate in the Capital Construction and Improvement Funds and in the Sewer Capital Reserve Fund. These fluctuations largely relate to improvements at the sewage plant.

The "Other Income (Expense)" category captures transfers between funds, which net to zero, and the recognition of income from debt issues during 2012 and 2013.

Fiduciary Funds are used to account for resources that are held for the benefit of the Borough's employees in the pension trust funds. The fiduciary funds are not available to support the Borough's programs. The basic fiduciary fund statements are presented on Pages 17 and 18 of these financial statements.

Overview of the Statements (Continued)

The Governmental Fund Financial Statements (Continued)

Notes to the Financial Statements provide additional information about the data that appears on the face of the financial statements in more detail to provide a better understanding of the more significant numbers on the statements. Of particular interest for the Borough is Note 4, which provides information about the Borough's debt. Under the modified cash basis of accounting, the debt balances do not appear on the face of the financial statements, but nonetheless, is important information for the readers.

Budget to Actual Comparative Information

The Borough prepares its budgets on the modified cash basis of accounting. Budget to actual comparisons for each fund, except the Capital Construction Fund, appear on Pages 42 through 47.

The General Fund's revenue was in excess of the budget by $118,448. Most of this variance was in the collection of real estate, transfer tax, and earned income taxes, where fluctuations from year-to-year are normal. The General Fund's expenses were under budget by $117,297. The most significant savings was in the sewage treatment line item and the police protection expense.

The Liquid Fuels allocation was higher than budgeted in the current year. The street paving project was an expense that came in higher than was budgeted.

For the Public Library Fund, expenditures are paid by the Borough and reimbursed to the General Fund from the Public Library Fund. The public library receives grants from the state library system, and contributions and bequests. Contributions are difficult to budget, and in the current year, the public library received significantly more contributions than expected.

The Sewer Capital Reserve Fund's upgrades came in over budget by approximately $22,000, and the total cost of the emergency generator budgeted was not incurred during 2014.

In the Capital Improvement Fund, the police computer upgrades and the fire department exterior renovation that was originally budgeted did not occur during 2014.

Capital Construction Project

The Federal Clean Water Act required the Borough to upgrade the wastewater treatment facilities to meet new water quality standards in an effort to achieve a 40.0 percent reduction in nutrients and sediment. The Department of Environmental Protection is implementing and enforcing the Chesapeake Bay Initiative.

During February 2012, construction began on the Borough's wastewater plant, pumping station, and forced main. The total cost was estimated to be $13 million.

Construction financing was obtained by issuing General Obligation Municipal Bonds, Series 2012 in the amount of $10,000,000 and Series 2013 in the amount of $3,500,000. At December 31, 2014, this project has been completed.

Debt Owed by the Borough

At December 31, 2014, the Borough had balances outstanding in the amount of $3,515,000, under the Series of 2011 Bonds. The interest rate is variable on this debt, ranging from 0.55 percent to 3.80 percent. Principal and interest payments are paid bi-annually. The Bonds mature during 2031.

During 2012, the Borough issued the Series of 2012 Bonds, in the amount of $10,000,000. The interest rate ranges from 0.45 percent to 3.375 percent. Principal and interest payments are paid bi-annually. The balance on this debt was $9,145,000 at December 31, 2014. The Bonds mature during 2032.

During 2013, the Borough issued the Series of 2013 Bonds, in the amount of $3,500,000. The interest rate ranges from 0.70 percent to 3.00 percent over a twenty-year term. Principal and interest payments are paid bi-annually. Payments on this debt began during 2014. At December 31, 2014, the balance owed was $3,355,000. The Bonds mature during 2033.

More specific information on the Borough's debt can be found in Note 4 of the financial statements.

Request for Information

This financial report is designed to provide a general overview of the Borough's finances. Questions concerning any of the information provided in this report or request for additional information should be addressed to:

New Cumberland Borough, New Cumberland
New Cumberland, Pennsylvania 17070

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF NET POSITION - MODIFIED CASH BASIS - GOVERNMENT-WIDE
DECEMBER 31, 2014

ASSETS

ASSETS	
Cash and Cash Equivalents	$ 3,225,618
Investments	406,023
Inventory	17,045
TOTAL ASSETS	$ 3,648,686

LIABILITIES AND NET POSITION

LIABILITIES	
Payroll Tax Withholdings	$ 9,779
NET POSITION	
Restricted Uses	
Library	1,225,346
Highways and Streets	100,066
Capital Projects	367,840
Total Restricted	1,693,252
Unrestricted	1,945,655
TOTAL NET POSITION	3,638,907
TOTAL LIABILITIES AND NET POSITION	$ 3,648,686

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA
STATEMENT OF ACTIVITIES - MODIFIED CASH BASIS - GOVERNMENT-WIDE
YEAR ENDED DECEMBER 31, 2014

Function/Programs	Expenses	Charges for Services	Operating Grants and Contributions	Capital Grants and Contributions	Net (Expenses) Revenue and Changes in Net Assets Total Governmental Activities
Governmental Activities					
General Government	$ 402,104	$ 0	$ 5,250	$ 0	$ (396,854)
Public Safety	1,023,000	52,406	50,400	0	(920,194)
Public Works - Highways and Streets	920,069	0	158,246	0	(761,823)
Public Works - Sanitation	2,000,378	2,185,395	8,955	0	193,972
Library and Recreation	428,598	2,756	491,683	0	65,841
Payroll Taxes, Benefits, and Insurance	1,170,461	0	127,798	0	(1,042,663)
Debt Service	1,155,717	0	0	0	(1,155,717)
Total Governmental Activities	$ 7,100,327	$ 2,240,557	$ 842,332	$ 0	(4,017,438)
General Revenue					
Taxes					2,962,458
Licenses, Permits, and Fees					152,987
Fines and Forfeitures					50,368
Charges for Services					13,956
Intergovernmental Revenue					17,124
Interest and Rents					64,210
Total General Revenue					3,261,103
Changes in Net Position					(756,335)
Net Position - Beginning					4,395,242
Net Position - Ending					$ 3,638,907

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

BALANCE SHEET - MODIFIED CASH BASIS - GOVERNMENTAL FUNDS
DECEMBER 31, 2014

	General Fund	Liquid Fuels Tax Fund	Public Library Fund	Sewer Capital Reserve Fund	Capital Construction Fund	Capital Improvement Fund	Total Governmental Funds
			ASSETS				
ASSETS							
Cash and Cash Equivalents	$ 1,944,200	$ 100,066	$ 813,512	$ 167,573	$ 15,745	$ 184,522	$ 3,225,618
Investments	0	0	406,023	0	0	0	406,023
Inventory	17,045	0	0	0	0	0	17,045
Due from Other Funds	0	0	5,811	0	0	0	5,811
TOTAL ASSETS	$ 1,961,245	$ 100,066	$ 1,225,346	$ 167,573	$ 15,745	$ 184,522	$ 3,654,497
			LIABILITIES AND FUND BALANCES				
LIABILITIES							
Payroll Withholdings	$ 9,779	$ 0	$ 0	$ 0	$ 0	$ 0	$ 9,779
Due to Other Funds	5,811	0	0	0	0	0	5,811
TOTAL LIABILITIES	15,590	0	0	0	0	0	15,590
FUND BALANCES							
Nonspendable	17,045	0	5,811	0	0	0	22,856
Restricted	0	100,066	406,023	0	0	0	506,089
Assigned	0	0	0	167,573	15,745	184,522	367,840
Unassigned	1,928,610	0	813,512	0	0	0	2,742,122
TOTAL FUND BALANCES	1,945,655	100,066	1,225,346	167,573	15,745	184,522	3,638,907
TOTAL LIABILITIES AND FUND BALANCES	$ 1,961,245	$ 100,066	$ 1,225,346	$ 167,573	$ 15,745	$ 184,522	$ 3,654,497

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA
STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS - GOVERNMENTAL FUNDS
YEAR ENDED DECEMBER 31, 2014

	General Fund	Liquid Fuels Tax Fund	Public Library Fund	Sewer Capital Reserve Fund	Capital Construction Fund	Capital Improvement Fund	Total Governmental Funds
REVENUE							
Taxes	$ 2,962,458	$ 0	$ 0	$ 0	$ 0	$ 0	$ 2,962,458
Licenses, Permits, and Fees	151,787	0	0	0	0	0	151,787
Fines	31,479	0	18,889	0	0	0	50,368
Charges for Services	2,238,424	0	2,756	0	0	0	2,241,180
Intergovernmental Revenue	205,477	158,246	299,556	0	0	5,250	668,529
Interest and Rents	5,322	111	28,989	263	361	29,164	64,210
Contributions and Donations	0	0	192,127	0	0	0	192,127
Miscellaneous Revenue	13,333	0	0	0	0	0	13,333
TOTAL REVENUE	5,608,280	158,357	542,317	263	361	34,414	6,343,992
EXPENDITURES							
General Government	397,487	0	0	4,617	0	0	402,104
Public Safety	985,617	0	0	0	0	37,383	1,023,000
Public Works - Highways and Streets	700,526	169,398	0	0	0	50,145	920,069
Public Works - Sanitation	1,162,518	0	0	244,108	593,752	0	2,000,378
Library and Recreation	57,896	0	370,702	0	0	0	428,598
Payroll Taxes, Benefits, and Insurance	1,096,415	0	74,046	0	0	0	1,170,461
Debt Service	0	0	0	1,155,717	0	0	1,155,717
TOTAL EXPENDITURES	4,400,459	169,398	444,748	1,404,442	593,752	87,528	7,100,327
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENDITURES	1,207,821	(11,041)	97,569	(1,404,179)	(593,391)	(53,114)	(756,335)
OTHER FINANCING SOURCES (USES)							
Transfers In	0	0	9,722	937,562	0	10,000	957,284
Transfers Out	(957,284)	0	0	0	0	0	(957,284)
TOTAL OTHER FINANCING SOURCES (USES)	(957,284)	0	9,722	937,562	0	10,000	0
NET CHANGES IN FUND BALANCES	250,537	(11,041)	107,291	(466,617)	(593,391)	(43,114)	(756,335)
FUND BALANCES - BEGINNING	1,695,118	111,107	1,118,055	634,190	609,136	227,636	4,395,242
FUND BALANCES - ENDING	$ 1,945,655	$ 100,066	$ 1,225,346	$ 167,573	$ 15,745	$ 184,522	$ 3,638,907

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF FIDUCIARY NET POSITION - PENSION TRUST FUNDS
DECEMBER 31, 2014

	Non-Uniformed Employees Pension Plan	Police Pension Plan	Total
ASSETS			
Guaranteed Interest Accounts	$ 526,979	$ 0	$ 526,979
Investments - At Fair Value	4,988,538	4,736,197	9,724,735
TOTAL ASSETS	$ 5,515,517	$ 4,736,197	$10,251,714
NET POSITION			
Held in Trust for Pension Benefits	$ 5,515,517	$ 4,736,197	$10,251,714

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION - PENSION TRUST FUNDS
YEAR ENDED DECEMBER 31, 2014

	Non-Uniformed Employees Pension Plan	Police Pension Plan	Total
ADDITIONS			
Contributions			
State Aid	$ 0	$ 127,798	$ 127,798
Members	55,694	30,556	86,250
Employer	86,417	32,402	118,819
Total Contributions	142,111	190,756	332,867
Investment Returns	380,037	256,096	636,133
Investment Expense	(318)	(5,000)	(5,318)
TOTAL ADDITIONS	521,830	441,852	963,682
DEDUCTIONS			
Pension Payments	0	150,340	150,340
Administrative Expense	0	22,866	22,866
TOTAL DEDUCTIONS	0	173,206	173,206
CHANGES IN NET POSITION	521,830	268,646	790,476
NET POSITION - BEGINNING	4,993,687	4,467,551	9,461,238
NET POSITION - ENDING	$ 5,515,517	$ 4,736,197	$10,251,714

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF CHANGES IN NET PENSION LIABILITY - POLICE DEFINED BENEFIT RETIREMENT PLAN YEAR ENDED DECEMBER 31, 2014

	Total Pension Liability	Fiduciary Net Position	Net Pension Liability
BALANCE - BEGINNING OF PERIOD	$ 4,292,139	$ 4,467,551	$ (175,412)
Changes for the Year			
Service Cost	113,270	0	113,270
Interest	294,295	0	294,295
Benefit Payments	(150,340)	(150,340)	0
Difference Between Expected and Actual Experience	29,480	0	29,480
Changes in Assumptions	34,301	0	34,301
Employees Contributions	0	30,556	(30,556)
Employer Contributions	0	32,402	(32,402)
State Aid	0	127,798	(127,798)
Net Investment Income	0	251,096	(251,096)
Administrative Expenses	0	(22,866)	22,866
CHANGES IN NET POSITION LIABILITY	321,006	268,646	52,360
BALANCE - END OF PERIOD	$ 4,613,145	$ 4,736,197	$ (123,052)

SENSITIVITY TO CHANGES IN DISCOUNT RATE

Discount Rate		
1% Decrease	7%	1% Increase
$ 469,717	$ (1,231)	$ (616,774)

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

NOTES TO FINANCIAL STATEMENTS - MODIFIED CASH BASIS
YEAR ENDED DECEMBER 31, 2014

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Financial Reporting Entity

Borough of New Cumberland, Cumberland County, Pennsylvania (the Borough) was incorporated during 1831. The Borough operates under a Council Manager type of Government and provides the following services as authorized by its Charter: Public Safety - Police and Fire; Highways and Streets; Sanitation; Health and Social Services; Culture and Recreation (including the Public Library); Public Improvements; Planning and Zoning; and General Administrative Services.

Accounting Pronouncements

The financial statements are presented on the modified cash basis of accounting. The modified cash basis of accounting differs from accounting principles generally accepted in the United States of America (GAAP). GAAP includes all relevant Governmental Accounting Standards Board (GASB) pronouncements.

Basis of Presentation

Government-Wide Financial Statements

The Statement of Net Position - Modified Cash Basis and the Statement of Activities - Modified Cash Basis display information about the reporting entity as a whole. They include all funds of the reporting entity except for the fiduciary funds. The statements distinguish between governmental and business-type activities. Governmental activities generally are financed through taxes, intergovernmental revenue, and other non-exchange revenue. Business-type activities are financed in whole or in part by fees charged to external parties for goods and services.

The Statement of Activities - Modified Cash Basis demonstrates the degree to which the direct expenses of a given function, or segment, are offset by program revenue. Direct expenses are those that are clearly identifiable with a specific program or function. Program revenue includes (1) charges to customers or applicants, who purchase, use, or directly benefit from goods, services, or privileges provided by a given function, or segment, and (2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenue are reported instead as general revenue.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Basis of Presentation (Continued)

Governmental Funds Financial Statements

The funds financial statements of the reporting entity are organized into funds, each of which is considered to be a separate accounting entity. Each fund is accounted for by providing a separate set of self-balancing accounts, which constitute its assets, liabilities, fund equity, revenue, and expenditures/expenses. Funds are organized into three major categories; governmental, proprietary, and fiduciary. An emphasis is placed on major funds within the governmental and proprietary categories.

A fund is considered major, if it is the primary operating fund of the municipality or meets the following criteria:

a. Total assets, liabilities, revenue, or expenditures/expenses of the individual governmental or enterprise fund are at least 10.0 percent of the corresponding total for all funds of that category or type.

b. Total assets, liabilities, revenue, or expenditures/expenses of the individual governmental or enterprise fund are at least 5.0 percent of the corresponding total for all governmental and enterprise funds combined.

Management has elected to classify its funds as major for consistency in reporting from year-to-year, because the number of the Borough's funds is not significant and because of public interest in each of the fund's financial activity.

The funds of the Borough are described below:

General Fund - The general fund is the general operating fund of the Borough. It is used to account for all financial resources except those required to be accounted for in another fund. The general fund is always considered to be a major fund.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Basis of Presentation (Continued)

Governmental Funds Financial Statements (Continued)

Special Revenue Funds - The special revenue funds are used to account for the proceeds of specific revenue sources, other than trusts for individuals, private organizations, or other governments or for major capital projects, which are legally restricted to expenditures for specified purposes. Included in this fund type are the Liquid Fuels Tax Fund and the Public Library Fund.

Capital Project Funds - The capital project funds are used to account for financial resources to be used for the acquisition of fixed assets or construction of major capital projects. The capital project funds include the Sewer Capital Reserve Fund and the Capital Improvement Fund. Funds for the sewer system project were received from the issuance of the General Obligation Note, Series of 2008. The note was satisfied in full with the issuance of the General Obligation Bonds, Series of 2011.

In addition, the Borough reports the following fiduciary funds:

Pension Trust Funds - The pension trust funds account for assets held by the government under the terms of a formal trust agreement. The pension trust funds are used to account for the non-uniformed employees pension and police pension trust plans. The Non-Uniform Employees Retirement Plan is a defined contribution plan administered by the Borough. The Police Retirement Plan is a single-employer defined benefit retirement plan administered by the Borough.

Measurement Focus and Basis of Accounting

Measurement focus is a term used to describe *"how"* transactions are recorded within the various financial statements. Basis of accounting refers to *"when"* revenue and expenditures/expenses are recognized in the accounts and reported in the financial statements, regardless of the measurement focus.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

NOTES TO FINANCIAL STATEMENTS - MODIFIED CASH BASIS
YEAR ENDED DECEMBER 31, 2014

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Measurement Focus

In the government-wide financial statements, the Statement of Net Position - Modified Cash Basis and the Statement of Activities - Modified Cash Basis, the governmental activities are presented using the "economic resources" measurement focus, applied within the limitations of the modified cash basis of accounting, as defined below.

In the governmental funds financial statements, the Balance Sheet - Modified Cash Basis and the Statement of Revenue, Expenditures, and Changes in Fund Balances - Modified Cash Basis, the governmental funds are presented using the "current financial resources" measurement focus or the "economic resources" measurement focus, applied within the limitations of the modified cash basis of accounting, as defined below.

Basis of Accounting

In the government-wide financial statements and in the governmental funds financial statements, government activities are presented using the modified cash basis of accounting. The pension trust fund is presented using the accrual basis of accounting.

The modified cash basis of accounting involves the measurement of cash and cash equivalents and changes in cash and cash equivalents resulting from cash receipts and disbursement transactions. Under the modified cash basis of accounting transactions are recorded in the accounts when cash and/or cash equivalents are received or disbursed and assets and liabilities are recognized to the extent that cash has been received or disbursed.

As a result of the use of the modified cash basis of accounting, certain assets and their related revenue, such as accounts receivable and revenue for billed or provided services, but not yet completed; and certain liabilities and their related expenses, such as accounts payable and expenses for goods or services received, but not yet paid; and accrued expenses and liabilities are not recorded in the financial statements.

If the Borough applied GAAP, the fund financial statements for governmental funds would use the modified accrual basis of accounting. All government-wide financial statements would be presented on the accrual basis of accounting.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

NOTES TO FINANCIAL STATEMENTS - MODIFIED CASH BASIS
YEAR ENDED DECEMBER 31, 2014

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Budget and Budgetary Basis of Accounting

The Borough follows the following procedures in establishing the budgetary data reflected in the financial statements.

a. The Borough Manager submits to the Borough Council a proposed operating budget for the fiscal year commencing the following January 1st. The operating budget includes proposed expenditures and the means of financing them. The proposed budget is kept on file with the Borough Secretary and made available for public inspection for a period of ten days.

b. The budget is passed by motion and the tax levies are legally enacted through passage of an ordinance.

c. The budget may be amended during the month of January, following the year of a municipal election.

The Borough prepares budgets for the following funds:

a. General Fund
b. Liquid Fuels Tax Fund
c. Public Library Fund
d. Sewer Capital Reserve Fund
e. Capital Improvement Fund

The Capital Construction Fund was not budgeted, as it is exclusively used to capture the financing and construction of a specific improvement project and expenditures are guided by the construction contract.

The budget to actual comparison schedules show the Borough's adopted budgets in a more summarized format than the adopted budgets.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Cash and Cash Equivalents

For the purpose of financial reporting, cash and cash equivalents include all demand and savings accounts and certificates of deposit or short-term investments, with a term to maturity at the date of acquisitions of three months or less.

Capital Assets

Under the modified cash basis of accounting, capital assets arising from cash transaction acquired for use in governmental funds operations are accounted for as capital outlay expenditures of the fund when paid in cash. If the Borough applied GAAP, capital assets reported in the government-wide financial statements would be accounted for as assets on the Statement of Net Position and on the Statement of Activities, depreciation of all exhaustible capital assets would be recorded as allocated expenses, with accumulated depreciation reflected on the Statement of Net Position.

Compensated Absences

The Borough's employees accumulate a limited amount of earned, but unused, vacation and sick leave hours for subsequent use or for payment upon termination, death, or retirement. Vacation and sick leave, which are liquidated with expendable available financial resources, are reported as expenditures of the Borough as paid. Under the modified cash basis of accounting, the liabilities for compensated absences are not reported since they do not represent liabilities arising from cash transactions. If reported under GAAP, the compensation absences liability would have been $107,127 at December 31, 2014.

Long-Term Debt

Under the modified cash basis of accounting, cash proceeds from long-term debt issuances are recorded as revenue, while payments to creditors to reduce long-term debt are reported as expenses. If the Borough applied GAAP, long-term debt reported in the governmental-wide and proprietary funds financial statements would be reported as liabilities on the Statement of Net Position.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Program Revenue

Program revenue derives directly from the program itself or from parties other than the Borough's taxpayers or citizenry, as a whole. Program revenue is classified into three categories as follows:

Charges for Services - These arise from charges to customers, applicants, or others, who purchase, use, or directly benefit from the goods, services, or privileges provided or are otherwise directly affected by the services.

Program-Specific Operating Grants and Contributions - These arise from mandatory and voluntary non-exchange transactions with other governments, organizations, or privileges provided or are otherwise directly affected by the services.

Program-Specific Capital Gains and Contributions - These arise from mandatory and voluntary non-exchange transactions with other governments, organizations, or individuals, which are restricted for the acquisition of capital assets for use in a particular program.

When both restricted and unrestricted resources are available for use, it is the Borough's general policy to use restricted resources first, then unrestricted resources as they are needed.

Equity Classifications

Government-Wide Financial Statements

Government-wide's equity is classified as net position and is displayed in two components:

Restricted - Consists of net positions with constraints placed on their use either for (a) external groups such as creditors, grantors, contributions, or laws and regulations of other governments or (b) law through constitutional provisions or enabling legislation.

Unrestricted - All other net positions, which do not meet the definition of restricted.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Equity Classifications (Continued)

Governmental Funds Financial Statements

Governmental funds' equity is classified as fund balances and is reported as one of the following five categories:

Nonspendable - Amounts that cannot be spent because they are either (1) not in spendable form or (2) legally or contractually required to be maintained intact.

Restricted - Amounts that have constraints placed on the use of resources by either (1) externally imposed by creditors, such as through debt covenants, grantors, contributors, or law or regulations of other governments or (2) imposed by law through constitutional provisions or enabling legislation.

Committed - Amounts that can only be used for specific purposes pursuant to constraints imposed by formal action of the government's highest level of decision-making authority.

Assigned - Amounts that are constrained by the government's intent to be used for specific purposes, but are either restricted or committed.

Unassigned - Amounts that have not been assigned to other funds and that have not been restricted, committed, or assigned to specific purposes within the general fund.

Fiduciary Fund

Fiduciary fund's equity is reported as net position held in trust for other purposes.

Eliminations

The effect of interfund activity has been eliminated from the government-wide financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Emerging Accounting Standards

During June 2012, GASB issued Statement No. 67, *"Financial Reporting for Pension Plans."* This statement replaces the requirements of GASB Statement No. 25, *"Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans,"* and Statement No. 50, *"Pension Disclosures,"* as they relate to pension plans administered through trusts or equivalent arrangements. The provisions of this statement are effective for the current year.

During June 2012, GASB issued Statement No. 68, *"Accounting and Financial Reporting for Pensions,"* - an Amendment of GASB Statement No. 27. The objective of this statement is to improve accounting and reporting by state and local governments for pensions and support for pensions that is provided by other entities, as they relate to pension plans administered through trusts or equivalent arrangements. The provisions of this statement are effective for financial statements for years beginning after June 15, 2014.

Subsequent Events

The Borough has evaluated subsequent events through August 26, 2015, which is the date the financial statements were available to be issued. Management is not aware of any subsequent events that would require recognition or disclosure in the financial statements.

2. CASH DEPOSITS AND INVESTMENTS

Pennsylvania statutes provide for investments of governmental funds into certain authorized investments, including any of the following: United States Treasury Bills; short-term obligations of the United States and Pennsylvania Government or its agencies or instrumentalities; and obligations of the United States or any of its agencies or instrumentalities, insured or collateralized time deposits, and certificates of deposit. However, they do allow the pooling of governmental funds for investment purposes.

The deposits and investment activities of the Borough adhere to state statutes. Deposits of the government funds are either maintained in demand deposits or certificates of deposit. In the pension funds, where prudent investor rules apply to these fiduciary funds, investments are not specifically restricted. The Borough does not have formal policies that address risk with respect to risks associated with its pension investments.

2. CASH DEPOSITS AND INVESTMENTS (Continued)

Custodial Credit Risk - Deposits

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the Borough will not be able to recover its deposits or will not be able to recover collateral securities. The Borough does not have a deposit policy for custodial credit risk. The Federal Deposit Insurance Corporation (FDIC) insures for each official government account, up to $250,000 of demand deposits per custodian, per depository.

At December 31, 2014, $542,026 of the Borough's $3,110,587 bank balances was insured by the Federal Depository Insurance Corporation. The remaining bank balance of $2,568,561 was exposed to custodial credit risk. The deposits have carrying amounts of $3,225,618 at December 31, 2014.

Custodial Credit Risk - Investments

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to an investment transaction, the Borough will not be able to recover the value of investment or collateral securities, which are in the possession of an outside party. The Borough does not have exposure for custodial credit risk in investments as the investments are held in the name of the Borough's Public Library, in trust.

Interest Rate Risk - Investments

Interest rate risk for investments is the risk resulting from exposure to a fair value loss arising from increasing interest rates over time. Average maturities of the Borough's investments are shown below:

Investment Type	Fair Value	Average Maturities from December 31, 2014				Weighted Ave. Maturity Years
		< 1 Year	1 - 5 Years	6 - 10 Years	> 10 Years	
Borough Investments - Public Library						
Fixed Income Mutual Funds	$ 163,481	$ 0	$ 59,802	$ 103,679	$ 0	5.87
Equities	232,491					
Short-Term Funds	10,051					
Total Borough Investments	$ 406,023					

2. CASH DEPOSITS AND INVESTMENTS (Continued)

Interest Rate Risk - Investments (Continued)

Investment Type	Fair Value	Average Maturities from December 31, 2014 < 1 Year	1 - 5 Years	6 - 10 Years	> 10 Years	Weighted Ave. Maturity Years
Pension Investments						
Government/Agency Mutual Funds	$ 345,655					
Corporate Fixed Income Funds	1,919,193					
Total	2,264,848	$ 0	$ 0	$2,264,848	$ 0	7.87
Fixed Income Unrated	453,062					
Balanced Asset Allocation Fund	207,839					
Equity Mutual Funds	6,056,600					
Principal Financial Grp, Inc. Stock	649,379					
Short-Term Funds	93,007					
Total Pension Investments	$9,724,735					

Concentration of Credit Risk

Concentration of credit risk is the risk of loss resulting from the magnitude of the Borough's investment in securities of a single issuer. None of the Borough's investments in any one issuer exceeds 5.0 percent of the portfolio value, with the exception of the pension plan investments. Both the Borough's Police Pension Funds and the Borough's Non-Uniform Pension Funds are managed by Principal Financial Group, Inc. Within these investments, $649,379 is invested in Principal Financial Group, Inc.'s Stock.

Credit Risk

Credit risk for investments is the risk that an issuer of debt securities or other counterparty to an investment will not fulfill its obligations. Separate accounts held with Principal Financial Group, Inc. for pension benefits are co-mingled pools, rather than individual securities and as such, are not rated.

2. CASH DEPOSITS AND INVESTMENTS (Continued)

Credit Risk (Continued)

Credit ratings for the Borough's investment vehicles are shown below.

Borough Investments (Public Library)	Total	AAA	AA	BBB	BB
Rated Investments	$ 94,677	$ 38,341	$ 43,300	$ 13,036	$ 0
Unrated Investments	311,346				
Total	$ 406,023				
Pension Investments					
Rated Investments	$ 2,717,911	$ 716,004	$ 0	$ 1,966,167	$ 35,740
Unrated Investments	7,006,824				
Total	$ 9,724,735				

Foreign Currency Risk

Foreign currency risk is the risk that the fair value of securities would be adversely affected by changes in international exchange rates. Approximately $508,736 of the Borough's Police Pension Funds is invested in international equity mutual funds.

3. PROPERTY TAXES

The Borough's real estate tax is levied each March 1st on the assessed value listed as of January 1st on all taxable real property located in the Borough. The Tax Levy Ordinance for 2014 was passed by the Borough Council during December 2013. The real estate tax rate for the year ended December 31, 2014 was 3.9 mils. Current tax collection for the year then ended was 96.8 percent of the tax levied.

Cumberland County, which includes New Cumberland Borough, is responsible for assessment and collection of delinquent real property taxes. Delinquent 2014 real property taxes in the amount of $64,304 were turned over to Cumberland County during January 2015.

3. PROPERTY TAXES (Continued)

The full year property tax calendar is as follows:

Assessment Date	January
Property Tax Bills Rendered, Lien Date	March 1st
Bills Paid During March and April are Granted a 2.0 Percent Discount	April 30th
Gross Amount of Levy is Due	June 30th
Taxes Delinquent and Interest of 10.0 Percent of the Face Amount is Charged	July 1st
Delinquent Real Property Taxes are Turned over to Cumberland County	December 31st

4. LONG-TERM DEBT

General obligation bonds are backed by the full faith, credit, and taxing power of the Borough. The Borough's general obligation bonds issued and bonded debt activity is as follows for the year ended December 31, 2014:

General Obligation Bonds	a. Series of 2011	b. Series of 2012	c. Series of 2013	Total
Balance - January 1, 2014	$ 3,680,000	$ 9,575,000	$ 3,500,000	$ 16,755,000
Principal Paid	(165,000)	(430,000)	(145,000)	(740,000)
Balance - December 31, 2013	$ 3,515,000	$ 9,145,000	$ 3,355,000	$ 16,015,000

a. On December 31, 2011, the Borough issued General Obligation Bonds, Series of 2011 in the amount of $4,010,000. The proceeds of the Bonds were used to refund a General Obligation Note, Series of 2008. The Bonds bear interest payable on June 1st and December 1st each year, beginning on June 1, 2012. Interest rates on the Bonds range from 0.55 percent for Bonds maturing during 2012 to 3.80 percent for Bonds maturing during 2031.

b. On March 20, 2012, the Borough issued General Obligation Bonds, Series of 2012, in the amount of $10,000,000. The proceeds of the Bonds were used for federally mandated upgrades and improvements to the Borough's sanitary sewer treatment plant. The Bonds accrued interest only through August 31, 2013, paid bi-monthly, beginning on September 1, 2012. Bi-monthly principal and interest began September 1, 2013 through September 1, 2032. Interest rates range from 0.45 percent for Bonds maturing during 2013 to 3.375 percent for Bonds maturing during 2032.

4. LONG-TERM DEBT (Continued)

c. On January 15, 2013, the Borough issued General Obligation Bonds, Series of 2013 in the amount of $3,500,000. The proceeds of the Bonds were issued for the purpose of financing the completion of the federally mandated upgrades and improvements to the Borough's sanitary sewer treatment plant. The Bonds require principal and interest payments due on June 1st and September 1st each year. Interest rates range from 0.70 percent to 3.0 percent over a twenty-year term, and mature during 2033.

The debt service schedule for repayment of the bonds is as follows at December 31:

	Principal	Interest	Total
2015	$ 745,000	$ 408,991	$ 1,153,991
2016	755,000	401,906	1,156,906
2017	765,000	393,294	1,158,294
2018	775,000	382,063	1,157,063
2019	785,000	369,010	1,154,010
2020-2024	4,195,000	1,584,978	5,779,978
2025-2029	4,790,000	1,051,790	5,841,790
2030-2033	3,205,000	246,528	3,451,528
Total	$ 16,015,000	$ 4,838,560	$ 20,853,560

5. POLICE PENSION RETIREMENT PLAN

Plan Description

The plan is a single employer, defined benefit pension plan controlled by the provisions of Ordinance 465 adopted pursuant to Act 600. The plan is governed by the Borough, which may amend the plan's provisions and is responsible for the management of the plan's assets. The Borough has delegated the authority to manage certain plan assets to Principal Life Insurance Company. There are no non-employer contributing entities and there are no special funding situations for this plan (as defined by GASB 67 and 68).

5. POLICE PENSION RETIREMENT PLAN (Continued)

Summary of Significant Accounting Policies

Basis of Accounting

Financial information of the plan is presented on the accrual basis of accounting. Contributions to the plan are recognized when due, as required by the Act. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. For purposes of measuring the net pension liability and pension expense for the Borough, information about fiduciary net pension and additions to/deductions from the retirement plan's fiduciary net pension have been determined on the same basis.

Method Used to Value Investments

Investments in separate accounts held at Principal Financial Group, Inc. are commingled pools, rather than individual securities. These investments are valued at fair value as of the measurement date.

Plan Membership

The Police Retirement Plan's membership consists of the following members:

Active Plan Members	7
Inactive Plan Members Entitled to but not yet Receiving Benefits	2
Retired Plan Members or Beneficiaries Currently Receiving Benefits	10
Total	19

Contributions

Act 205 requires that annual contributions to the plan be based upon the plan's Minimum Municipal Obligation (MMO), which is based on the plan's biennial actuarial valuation. The MMO is based on the actuarially determined rate calculated in the plan's biennial actuarial valuation report. The MMO is the estimated amount necessary to finance the cost of benefits earned by the plan members during the year, with additional amounts to finance any unfunded accrued liability and plan administrative expenses.

The Borough may be eligible to receive an allocation of State Aid from the General Municipal Pension System State Aid Program, which must be used for pension funding. State Aid is not a Special Funding Situation and is not a Non-Employer Contributing Entity contribution because it is not deposited directly to the pension plan, according to GASB 67 and 68 definitions.

5. POLICE PENSION RETIREMENT PLAN (Continued)

Contributions (Continued)

Any funding requirements established by the MMO in excess of employee contributions and State Aid must be paid by the Borough in accordance with Act 205.

In accordance with the plan's governing documents, employees may be required to contribute to the plan, and currently, employees are contributing 5.0 percent of their salary.

The actuarially determined contribution for the measurement period ending December 31, 2014 was $160,200 for employer's contributions and $29,473 for employees' contributions.

Investment Policy

Principal Financial Advisors, Inc., a registered investment advisor and wholly-owned subsidiary of Principal Financial Group, Inc., has been hired to manage the asset allocation strategy for the Borough.

Money-Weighted Rate of Return

The money-weighted rate of return is calculated as a rate of return on pension plan investments incorporating the timing and amount of cash flows. The return is calculated, net of investment expenses. The annual money-weighted rate of return for the plan's investments for the measurement period is 5.68 percent.

Net Pension Liability

Cost Method

The entry age actuarial cost method is used for this disclosure. Under this method, the present value of the projected benefits of each individual included in the actuarial valuation is allocated on a level basis over the earnings between entry age and assume exit age. The portion of the present value allocated to a year is the service cost. Projected benefits are based on projected salary and projected service.

Measurement Date

A measurement period of January 1, 2014 to December 31, 2014 has been used for the plan year ended December 31, 2014 for GASB 67 and for the year ending December 31, 2015 for GASB 68 reporting.

5. POLICE PENSION RETIREMENT PLAN (Continued)

Assumptions

Total pension liability, end of period was determined using the assumptions and methods described below. The total pension liability, beginning of period was determined using the same assumptions and methods, with the following exceptions:

a. The mortality table has been updated to reflect the annual changes to the Internal Revenue Service (IRS) Prescribed Mortality Tables.
b. The salary scale was increased to reflect the plan's past experience and expected level of further salary increases.

Assumptions Utilized to Calculate Net Pension Liability

Asset Method	Market Value as of the Measurement Date
Discount Rate	7.00%
Discount Rate Basis	Long-Term Rate of Return Assumption
Muni Bond Rate Basis	Barclays Municipal Government Obligations Long-Term Index Rate for Twenty-Year, Tax Exempt Municipal Bonds with AA/Aa or Higher as of the Measurement Date
Cost Method	Entry Age Cost Method, Level Percent of Pay. Attribution is made on an Individual Basis, Beginning with the First Period the Employee's Service Accrues Benefits, Through all Assumed Exit Ages, Through Retirement
Long-Term Rate of Return	7%
Mortality	2014 IRS Prescribed Mortality
Salary Increases	4.5% Increase Each Year Until Retirement
Long Term Inflation	2.25%
Marriage	100.0% Married; Male 3 Years Older than Female
Retirement	Normal Retirement Age
Form of Benefits	Normal Form at Assumed Retirement Age
Expected Distributions for Current and Future Annuitants	Stream of Payments at Retirement
Interest Rate for Employee Accumulations	5.00%
Compensation Limit Increase	2.25% Increase Per Year
Cost of Living Adjustment	2.25% Increase Per Year

5. POLICE PENSION RETIREMENT PLAN (Continued)

Assumptions for Calculating Discount Rate

Participant Group	Census as of December 31, 2014
Future Contributions	Assume Employee's Contributions Continue at 5.00%
Interest Rate	7.00%
Funding Policy	Assume 100.0% of the Actuarially Determined Contribution Amount Contributed Midway During Each Projection Period
Future Employer Contributions	Employer Normal Cost Assumed to Continue at 15.37% of Payroll, Based on the 01/01/15 Actuarial Valuation Report

Long-Term Rate of Return

The expected long-term rate of return for the plan's investments is 7.00 percent. The long-term rate of return assumption for the prior measurement period was 7.00 percent. The expected long-term return on plan assets assumption was developed as a weighted average rate based on the target asset allocation of the plan and the Long-Term Capital Market Assumptions (CMA) for 2014. The capital market assumptions were developed with primary focus on forward-looking valuation models and market indicators. The key fundamental economic inputs for these models are future inflation, economic growth, and interest rate environment. Due to the long-term nature of pension obligations, the investment horizon for the CMA 2014 is twenty to thirty years. In addition to forward looking models, historical analysis of market data and trends was reflected, as well as the outlook of recognized economists, organizations, and consensus CMA from other credible studies.

Discount Rate

The discount rate used to determine net pension liability was 7.00 percent. The discount rate used for the prior measurement date was 7.00 percent. The plan's fiduciary net position and benefit payments were projected to determine if the plan's fiduciary net position was greater than or equal to the expected benefit payments for each period from 2014 to 2099. Benefit payments after 2099 are projected to be $0. The long-term rate of return of 7.00 percent is used to calculate the actuarial present value of the projected payments for each future period when the projected fiduciary net position is greater than the projected expected benefit payments. Otherwise, a municipal bond rate of 4.05 percent is used. The municipal bond index, which includes twenty-year, tax exempt general obligation municipal bonds, with an average rating of AA/Aa or higher, as of the measurement date. The discount rate of 7.00 percent is a single rate that incorporates the long-term rate of return and municipal bond rate assumptions as described above.

6. NON-UNIFORMED EMPLOYEES PENSION PLAN

Plan Description

The Borough's Non-Uniformed Employees Pension Plan is a single employer, defined contribution pension plan controlled by the provisions of the Municipal Pension Plan Funding Standard and Recovery Act of December 18, 1984, P.L., 1005, No. 205, as amended, 53 P.S. 895.101, et. seq. (Act 205). The plan is governed by the Borough, which may amend the plan's provisions and is responsible for the management of plan's assets. The Borough has delegated the authority to manage certain plan assets to Principal Financial Group, Inc. The plan provides for retirement, disability, and death benefits to plan members and their beneficiaries. Significant provisions of the pension plan are as follows:

Active members are required to contribute 2.0 percent to the plan. The Borough is required to contribute through yearly contributions 10.29 percent of the member's annual compensation into an account maintained for the member. The plan may also be eligible to receive an allocation of State Aid from the General Municipal Pension System State Aid Program, which must be used to reduce or eliminate the required municipal contribution.

Any non-uniformed, full-time employee, minimum of 1,000 hours annually, of the Borough is eligible for plan participation after completing one year of eligibility services.

Vesting

Any account share attributable to the members' voluntary contributions is always 100.0 percent vested. All other accounts will vest according to the cause of termination. In the case of death, disability, or retirement, the vesting is 100.0 percent and in case of termination for any reason, a member will vest as follows:

Years of Service	Vesting Percentage
Less than 3	0.0 %
3 - But Less than 4	20.0%
4 - But Less than 5	40.0%
5 - But Less than 6	60.0%
6 - But Less than 7	80.0%
7 or More	100.0%

7. POST-EMPLOYMENT HEALTH CARE BENEFITS

Retired police officers are permitted to retain the current medical insurance coverage between the ages of fifty and sixty-five. The retired police officers shall pay one-half, retired prior to January 1, 2000, or one-forth, retired after December 31, 1999, with the Borough covering the remaining premium.

The provision for health insurance for retired police officers is applicable only in instances in which retired police officers do not have reasonably equivalent alternate coverage to the Borough's health insurance plan, either through coverage resulting from the retired police officer's employment or spousal coverage resulting from the retired police officer's spouse's employment benefits. Should an officer become ineligible for the coverage due to alternate coverage and later find themselves without that alternative coverage, they will automatically become eligible for coverage under the provision. At December 31, 2014, there were no retired police officers eligible to participate in the benefit.

8. INTERFUND BALANCES AND TRANSFERS

The composition of interfund balances are as follows at December 31, 2014:

	Interfund Receivables	Interfund Payables
General Fund	$ 0	$ 5,811
Public Library Fund	5,811	0
Total	$ 5,811	$ 5,811

The composition of interfund transfers are as follows for the year ended December 31, 2014:

	Transfers Out	Transfers In
General Fund	$ 957,284	$ 0
Public Library Fund	0	9,722
Sewer Capital Reserve Fund	0	937,562
Capital Improvement Fund	0	10,000
Total	$ 957,284	$ 957,284

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

NOTES TO FINANCIAL STATEMENTS - MODIFIED CASH BASIS
YEAR ENDED DECEMBER 31, 2014

9. OPERATIONS OF THE PUBLIC LIBRARY

The public library, a department of the Borough, reimburses the General Fund for expenses of the pubic library paid from the General Fund, from amounts collected through operations of the public library. A summary of the activity, between the Borough's General Fund and Public Library Fund, is as follows for the year ended December 31, 2014:

Actual Expenses Paid by the General Fund on Behalf of the Public Library	$ 361,187
Annual Support Provided to the Public Library from the General Fund	(9,722)
Net Public Library Expenses Paid from the General Fund	351,465
Actual Reimbursements from the Public Library to the General Fund	(357,276)
Total Excess Reimbursements to the General Fund	$ (5,811)

10. GENERAL FUND EXPENSES ON THE BUDGETARY BASIS

The Borough nets the income from sewer customers with the transfer to the sewer fund, and budgets income from the Library which is used to cover Library expenses. The reconciliation is as follows:

Revenue in General Fund (Page 16)	$ 5,608,280
Sewage Charges Captured in the General Fund	(937,562)
Library Income Budgeted	357,276
Total General Fund Actual Revenue - Budgetary Basis	$ 5,027,994

For financial statement reporting purposes, the public library is shown as a major fund of the Borough. The Sewer Fund is also shown separately. For this reason, the revenue and expenses for the General Fund on Pages 42 and 43, do not agree to revenue and expenses for the general fund on Page 16. The reconciliation is as follows:

Expenses in General Fund (Page 16)	$ 4,400,459
Public Library Expenses Included in General Fund Budget	
Administration	9,065
Salaries	279,004
Employee Taxes and Benefits	73,118
Total General Fund Actual Expenses - Budgetary Basis	$ 4,761,646

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

NOTES TO FINANCIAL STATEMENTS - MODIFIED CASH BASIS
YEAR ENDED DECEMBER 31, 2014

11. RISK FINANCING

The Borough is exposed to various risks of loss, including general liability, property, and casualty, auto and physical damage, and workers' compensation. There have been no significant reductions in insurance coverage in the last year. Settled claims have not exceeded commercial coverage in the last three years.

12. CONTINGENCIES

Grant Programs

The Borough participates in state and federal assisted grant programs. These programs are subject to program compliance audits by the grantors or their representatives. The Borough is potentially liable for any expenditure that may be disallowed pursuant to the terms of these grant programs.

Litigation

In the normal course of operations, the Borough is exposed to various civil disputes. Currently, there are two cases pending, both of which have been referred to the Borough's insurance carrier. The final disposition of these cases has not yet occurred. In the opinion of management, any outcome from these actions would not have a material effect on the Borough's financial position, as their exposure is limited to the $15,000 deductible on their insurance policy.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS BUDGET TO ACTUAL - GENERAL FUND YEAR ENDED DECEMBER 31, 2014

	Original and Final Budget	Actual	Variance Over (Under)
REVENUE			
Real Estate Taxes	$ 1,990,000	$ 2,019,862	$ 29,862
Per Capita Taxes	0	3,009	3,009
Real Estate Transfer Tax	72,000	104,715	32,715
Earned Income Tax	800,000	834,872	34,872
Beverage and License Fees	1,200	1,200	0
Building and Zoning Permits	3,000	3,040	40
Street Cut Permits	2,000	2,760	760
Building Code Compliance Fees	10,000	3,618	(6,382)
Cable TV Franchise Fees	134,000	142,369	8,369
Motor Vehicle Fines	13,000	14,100	1,100
Borough Ordinances	12,000	17,379	5,379
Interest	1,700	2,952	1,252
Rental of Facilities	2,000	2,370	370
State and Federal Grants/Allocations	206,930	204,277	(2,653)
Public Library Board Reimbursement	357,277	357,276	(1)
Refuse Collection Fees	480,000	481,744	1,744
Zoning Hearing Board Fees	900	600	(300)
Engineering Fees Reimbursed	1,000	0	(1,000)
Curbing and Sidewalk Assessments	1,000	23	(977)
Police and School Crossing Services	51,000	52,406	1,406
Sewer Rental Fees	764,539	764,539	0
Sewer Connection Fees	1,000	1,550	550
Miscellaneous Revenue	5,000	13,333	8,333
TOTAL REVENUE	$ 4,909,546	$ 5,027,994	$ 118,448

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS BUDGET TO ACTUAL - GENERAL FUND YEAR ENDED DECEMBER 31, 2014

	Original and Final Budget	Actual	Variance Over (Under)
EXPENDITURES			
General Government			
Administration	$ 389,260	$ 366,859	$ (22,401)
Borough Buildings	41,900	33,128	(8,772)
Police Protection	895,999	805,528	(90,471)
Fire Protection	151,791	155,461	3,670
Planning, Building, and Zoning	37,150	24,628	(12,522)
Emergency Management	300	0	(300)
Sewage Treatment	764,539	682,557	(81,982)
Refuse Collection/Recycling	481,961	479,961	(2,000)
Highways	673,942	700,526	26,584
Library	272,188	279,004	6,816
Senior Center	9,260	9,230	(30)
Parks and Recreation	49,813	48,666	(1,147)
Employee Taxes and Benefits	936,798	978,159	41,361
Insurance	174,042	197,939	23,897
Total	4,878,943	4,761,646	(117,297)
Transfer to Other Funds	19,722	19,722	0
TOTAL EXPENDITURES	$ 4,898,665	$ 4,781,368	$ (117,297)

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS BUDGET TO ACTUAL - LIQUID FUELS TAX FUND YEAR ENDED DECEMBER 31, 2014

	Original and Final Budget	Actual	Variance Over (Under)
REVENUE			
Allocation from State	$ 141,369	$ 158,246	$ 16,877
Interest Income	50	111	61
TOTAL REVENUE	141,419	158,357	16,938
EXPENDITURES			
Major Equipment Purchases	28,273	0	(28,273)
Street Paving Project	130,000	169,398	39,398
TOTAL EXPENDITURES	158,273	169,398	11,125
NET CHANGES IN FUND BALANCES	(16,854)	(11,041)	5,813
FUND BALANCES - BEGINNING	111,080	111,107	27
FUND BALANCES - ENDING	$ 94,226	$ 100,066	$ 5,840

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS BUDGET TO ACTUAL - PUBLIC LIBRARY FUND YEAR ENDED DECEMBER 31, 2014

	Original and Final Budget	Actual	Variance Over (Under)
REVENUE			
Government Grants	$ 301,513	$ 299,556	$ (1,957)
Contributions, Legacies, and Bequests	72,500	192,127	119,627
Interest Income and Gain on Investments	13,000	28,989	15,989
Service Fees and Fines	23,700	21,645	(2,055)
TOTAL REVENUE	410,713	542,317	131,604
EXPENDITURES			
Salaries and Benefits	302,792	301,474	(1,318)
Books, Periodicals, and Supplies	52,600	50,767	(1,833)
Programs	5,100	3,651	(1,449)
Occupancy Expense	30,000	31,933	1,933
Office Expense	10,000	9,940	(60)
Professional Fees	2,600	2,658	58
Equipment and Furniture Purchases	8,000	9,653	1,653
Building and Grounds	26,900	34,672	7,772
TOTAL EXPENDITURES	437,992	444,748	6,756
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENDITURES	(27,279)	97,569	124,848
OTHER FINANCING SOURCES			
Interfund Transfers In	9,722	9,722	0
NET CHANGES IN FUND BALANCES	$ (17,557)	107,291	$ 124,848
FUND BALANCES - BEGINNING		1,118,055	
FUND BALANCES - ENDING		$ 1,225,346	

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS BUDGET TO ACTUAL - SEWER CAPITAL RESERVE FUND YEAR ENDED DECEMBER 31, 2014

	Original and Final Budget	Actual	Variance Over (Under)
REVENUE			
Interest Income	$ 300	$ 263	$ (37)
EXPENDITURES			
Mainline Repairs/Sliplining	75,000	78,639	3,639
Upgrade Plant	60,000	82,339	22,339
Corrective Action Plan	3,000	4,617	1,617
Emergency Generator - Cedar Cliff	78,000	21,837	(56,163)
Hycor Unit Repair	70,000	61,293	(8,707)
Debt Service GOB 2011	271,599	272,699	1,100
Debt Service GOB 2012	655,638	655,638	0
Debt Service GOB 2013	227,380	227,380	0
TOTAL EXPENDITURES	1,440,617	1,404,442	(36,175)
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENDITURES	(1,440,317)	(1,404,179)	36,138
OTHER FINANCING SOURCES			
Interfund Transfers In	944,366	937,562	(6,804)
NET CHANGES IN FUND BALANCES	(495,951)	(466,617)	29,334
FUND BALANCES - BEGINNING	622,937	634,190	11,253
FUND BALANCES - ENDING	$ 126,986	$ 167,573	$ 40,587

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF REVENUE, EXPENDITURES, AND CHANGES IN FUND BALANCES - MODIFIED CASH BASIS BUDGET TO ACTUAL - CAPITAL IMPROVEMENT FUND YEAR ENDED DECEMBER 31, 2014

	Original and Final Budget	Actual	Variance Over (Under)
REVENUE			
Interest Income	$ 50	$ 134	$ 84
Rental Income - Cell Tower	29,030	29,030	0
Contributions	0	5,250	5,250
TOTAL REVENUE	29,080	34,414	5,334
EXPENDITURES			
Police Vehicle	36,000	34,620	(1,380)
Police Computer Upgrades	29,000	0	(29,000)
Snow Removal/Road Salt	32,000	32,000	0
Street Restoration, 16th/Kathryn	15,000	14,504	(496)
Fire Department Exterior Renovation	100,000	2,763	(97,237)
Geese Management	0	3,641	3,641
TOTAL EXPENDITURES	212,000	83,887	(128,113)
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENDITURES	(182,920)	(49,473)	133,447
OTHER FINANCING SOURCES			
Interfund Transfers In	10,000	10,000	0
NET CHANGES IN FUND BALANCES	(172,920)	(39,473)	133,447
FUND BALANCES - BEGINNING	184,030	227,636	43,606
FUND BALANCES - ENDING	$ 11,110	$ 188,163	$ 177,053

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

POLICE RETIREMENT PLAN
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
MEASUREMENT DATE OF DECEMBER 31, 2014

Total Pension Liability	
Service Cost	$ 113,270
Interest	294,295
Benefit Payments	(150,340)
Differences in Experience	29,480
Changes in Assumptions	34,302
Changes in Benefit Terms	0
Net Change in Total Pension Liability	321,007
Pension Liability Beginning of Period	4,292,139
Pension Liability End of the Period	$ 4,613,146
Fiduciary Net Position	
Employee Contributions	$ 30,556
Employer Contributions	32,402
State Aid	127,798
Net Investment Income	251,096
Benefit Payments	(150,340)
Administrative Expenses	(22,866)
Net Change in Fiduciary Net Position	268,646
Net Position Beginning of Period	4,467,551
Net Position End of Period	$ 4,736,197
Net Pension Liability	$ (123,051)
Fiduciary Net Position as a Percentage of Total Pension Liability	102.67%
Covered Employee Payroll	$ 611,128
Net Pension Liability as a Percentage of Covered Payroll	-20.14%
Notes to Schedules	
Long-Term Rate of Return	7.00%
Discount Rate	7.00%
Salary Increase Assumption	4.50%
COLA Increase Assumption	2.25%
Retirement Age Assumption	NRA

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

POLICE RETIREMENT PLAN
SCHEDULE OF EMPLOYER CONTRIBUTIONS
YEAR ENDED DECEMBER 31, 2014

Actuarially Determined Contributions (Employer)	$ 160,200
Employer Contributions*	160,200
Contribution Deficiency (Excess)	$ 0
Covered Employee Payroll	$ 611,128
Contributions as a Percentage of Covered Employee Payroll	26.21%

Notes to Schedule

Long-Term Rate of Return on Assets	7.00%
Discount Rate	7.00%
Salary Increase Assumption	4.50%
COLA Increase Assumption	2.25%
Retirement Age Assumption	NRA

* Employer Contributions Received Includes State Aid

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

BOROUGH OF NEW CUMBERLAND POLICE RETIREMENT PLAN
SCHEDULE OF MONEY-WEIGHTED INVESTMENT RETURN
DECEMBER 31, 2014

Annual Money-Weighted Rate of Return on Plan Investments Net of Investment	5.68%

See independent auditors' report and accompanying notes.

BOROUGH OF NEW CUMBERLAND
CUMBERLAND COUNTY, PENNSYLVANIA

STATEMENT OF INVESTMENTS BY ASSET CLASS -
POLICE AND NON-UNIFORM EMPLOYEES PENSION FUNDS
YEAR ENDED DECEMBER 31, 2014

Investments	Police Pension Plan	Non-Uniform Employees Pension Plan	Total
Cash and Cash Equivalents	$ 0	$ 93,007	$ 93,007
Large U.S. Equity Funds	1,253,076	1,806,831	3,059,907
Small/Mid U.S. Equity Funds	322,690	1,677,276	1,999,966
International Equity Funds	508,736	487,991	996,727
Balanced Asset Allocation Fund	207,839	0	207,839
Fixed Income Funds	1,858,442	859,468	2,717,910
Investment in Principal Financial Group, Inc.'s Stock	585,414	63,965	649,379
Total Investments	$ 4,736,197	$ 4,988,538	$ 9,724,735

See independent auditors' report and accompanying notes.

REQUIRED SUPPLEMENTARY INFORMATION

Seligman, Friedman & Company, P.C.
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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Borough Council
Borough of New Cumberland
Cumberland County, Pennsylvania
New Cumberland, Pennsylvania 17070

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, each major fund of the **Borough of New Cumberland, Cumberland County, Pennsylvania** (the Borough) as of and for the year ended December 31, 2014, and the related notes to the financial statements, which collectively comprise the Borough's basic financial statements, as listed on the Table of Contents, and have issued our report thereon dated August 26, 2015.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Borough's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing an opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Borough's internal control. Accordingly, we do not express an opinion on the effectiveness of the Borough's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the Borough's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Internal Control over Financial Reporting (Continued)

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Borough's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Borough's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Borough's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Harrisburg, Pennsylvania
August 26, 2015

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-18. Please state whether the Borough has any outstanding loans (e.g., Penn VEST, etc.) for its wastewater system assets. If so, state the nature, terms, and payment history for each.

RESPONSE: The Borough of New Cumberland has no outstanding loans that mortgages, liens or places an encumbrance of any kind on the wastewater system Assets to be acquired by PAWC under the Asset Purchase Agreement ("Agreement"). As shown below, the Borough of New Cumberland has three General Obligation Bonds that were issued for the purpose of funding improvements to the Borough's wastewater system. However, in accordance with the Agreement's Section 1.3, PAWC is not assuming any liability relating to the Bonds and shall not be responsible for repayment of any outstanding amounts owed on the Borough's Bonds. The Borough's liabilities and obligations with respect to the Bonds shall remain the sole responsibility of the Borough.

	Issuance Date	Principle Amount	Purpose
2011 Bond	2011	$4,010,000	Funds allocated to make repairs, improvements and replacements to the Borough's sewer system and sewer lines
	2012	$10,000,000	Funding of the wastewater treatment plant improvements and the payment of costs, fees and expenses with respect to the bond issuance.
	2013	$3,500,000	Funding of the remaining wastewater treatment plant improvements and the payment of costs, fees and expenses with respect to the bond issuance.

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-19. Please explain why the Application does not comply with 52 Pa. Code § 3.501(a)(1)(ii)(A) which requires an original cost by year and major plant category, of used and useful plant in service and related accrued depreciation.

RESPONSE: The Company has indicated on page 4 of its application under paragraph 10, that by its next base rate case it would undertake an original cost study to determine the original cost and accumulated depreciation of the Borough's wastewater utility plant in service. The practice of providing the original cost study after the application has been approved by the Commission and is consistent with previous Commission orders (docket numbers can be provided upon request).

Response Witness: Bernard Grundusky
Title: Director, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-20. If the PAWC-WD did not rely on information such as the depreciated original cost of the wastewater system to be acquired, please provide the calculation or procedure used by PAWC-WD to arrive at the purchase price of $23 Million.

RESPONSE: The basis of the purchase price was a competitive bid process administered by the Borough for the purpose of selling the Borough's wastewater system assets.

Response Witness: Bernard Grundusky
Title: Director, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-21. If available, please provide a complete inventory of all property utilized by the Borough to provide wastewater service.

RESPONSE: The Borough of New Cumberland's collection system is a typical sanitary sewer system with approximately 27 miles of pipe ranging from 6 to 21-inch diameter. The majority of the system was constructed in the 1950's with terra cotta mains and brick manholes. The New Cumberland wastewater collection system contains three lift stations (or sewer pumping stations).

The lift stations are all float controlled and are locally operated. Autodialers are provided for remote notification of alarms. The main lift station is the Southeast station (aka Walnut Alley Sewer Pumping Station) which pumps approximately 80% of the flows that enter the treatment plant. The Southeast lift station is provided with two sets of pumping trains, each pump train consists of two pumps located in series. The Southeast station and Cedar Cliff station (aka Carlisle Road Sewer Pumping Station) have emergency generators. All three lift stations have connections for portable pumps. The lift station characteristics are provided below:

Lift Station Characteristics

Lift Station	No.	Type	Capacity (gpm)
Southeast (Walnut Alley)	2	Gorman Rupp	2,400
Cedar Cliff (Carlisle Road)	2	Gorman Rupp	260
Drexel Hills	2	Gorman Rupp	100

The Borough of New Cumberland Sewer's wastewater treatment plant was a Contact Stabilization process originally constructed in the 1950's and upgraded to 1.25 mgd design capacity in the 1970's. On June 23, 2010 the Borough received a copy of the new draft NPDES permit. The new permit has the same limits as the previous permit, but also includes net total nitrogen and phosphorus load limits of 22,831 pounds and 3,044 pounds per year respectively. In order to meet the new load limits the Borough upgraded the wastewater treatment facility. In general, the wastewater treatment plant appears to be well designed, maintained, and in good physical condition.

The wastewater treatment plant influent flows through the headworks that contain a screenings and degritting. From there the flow is treated in an oxidation ditch system similar to the system at the Coatesville treatment plant. Clarifiers are used for settling out solids. Effluent from the secondary clarifiers passes through two banks of ultraviolet (UV) light for disinfection prior to being discharged into the Susquehanna River. Treated solids are transferred from the secondary clarifiers to an aerated sludge digester. The clarifier effluent flows through two banks (arranged in series) of UV lights for disinfection. Solids are dewatered with an Andritz centrifuge. Dewatered solids are then conveyed to a roll-off dumpster. Penn Waste hauls the dewatered solids to a municipal landfill.

The Borough has ordinances that regulate discharges into the sanitary sewage system. Currently there are no industrial waste dischargers in the Borough nor is the wastewater treatment facility experiencing any treatment difficulties commonly associated with industrial waste discharges in a primarily domestic waste system.

In addition to the collection system, lift stations and wastewater treatment plant, please see Attachment TUS Set 1, No. A-21 for a non-exhaustive list of equipment and tools utilized by the Borough to provide wastewater service that are being acquired by PAWC as part of the Assets.

PAWC is also acquiring the real properties and easements and rights-of-way utilized by the Borough to render wastewater services as well as acquiring the rights of access to all Borough-owned or controlled public rights-of-way necessary for the operation of the System. Please find below a list of all real properties utilized by the Borough to render wastewater services that are being acquired by PAWC as part of the Assets:

<u>New Cumberland Borough Wastewater Treatment Plant Site</u>

- **Parcel B ID# 26-23-0541-225EX (to be subdivided and separated from Borough's larger parcel); Deed Book 0029F, page 845, Tract No. 3**
- **Parcel C ID# 26-23-0541-225EX; Deed Book 00228-00221 (1.23 acres added)**

<u>Southeast Lift Station (aka Walnut Alley Sewer Pumping Station)</u>

- **Parcel ID# 25-25-006-338EX; Deed Book 0029F-00845, Tract No. 2 (reference Deed Book 0014P-00165)**

Cedar Cliff Lift Station (aka Carlisle Road Sewer Pumping Station)

- **Parcel ID# 13-23-0545-344EX; Deed Book 0029F-00849**

Drexel Hills Lift Station (aka Drexel Hills Park Sewer Pumping Station)

- **Parcel ID#26-24-0809-227EX; Deed Book 0029F-00845, Tract No. 1**

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

NEW CUMBERLAND WWTP EQUIPMENT LIST

OFFICE

1. Seven Office Desks
2. One Brother Intelli Fax 4100e
3. Computer – Connected to Plant's Chart Recor
   - Tower – Dell Optiplex 380
   - Monitor – Dell
   - Printer – HP Office Jet 6100
4. Computer
   - Tower – Dell Optiplex 7010
   - Monitor – Dell
5. Computer
   - Tower – Dell Optiplex 3010
   - Monitor – Dell
   - Printer – HP Office Jet Pro 8620
6. SCADA
   - Tower – Dell Inspiron
   - Monitor – Dell
   - Printer – Dell V525W

Schedule 1.2 (d)

LAB

1. Precision Scientific Coliform Incubator
2. Auto-Clave – Heinicke Company
3. Revco BOD Incubator
4. YSI Dissolved Oxygen Meter
5. Hach – PH Meter
6. Lab Line Oven
7. Thermolyne Furnace
8. Mettler H31 Scale
9. Small Whirlpool Fridge
10. Corning MP-3A Distiller

TOOLS

1. Flat Shovels, Snow Shovels, and Spade Shovels
2. Rakes
3. Picks
4. Ratchet Sets
5. Pipe Wrenches
6. Miscellaneous Hand Tools
7. Craftsman Tool Box
8. Drill Press
9. Chop Saw
10. Valve Keys
11. Dewalt Battery Operated Drills

4/5/16

NEW CUMBERLAND WWTP EQUIPMENT LIST

VEHICLES

1. 2000 Ford Sedan
2. 2011 Chevrolet 2500 Silverado Utility Truck with Meyer 8 foot Plow
3. 2012 Chevrolet 3500 Pick-Up Truck with Meyer 8 foot Plow
4. 2012 International Vac-Con Truck

COLLECTION INSPECTION SYSTEM

1. 2006 Pace American Tandem Axel Trailer – 7 Feet X 14 Feet
2. Aries TV Pipe Line Inspection System with Camera Crawler
3. Aries TV Lateral Launcher with Camera, Reel and Controller
4. Hand Push Camera with 200 feet Cable Reel
5. Three Flow-Dar Manhole Meters and Loggers

PORTABLE PUMPS

1. 6" Gorman Rupp Pump
2. Two 4" Gorman Rupp Pumps
3. Two 3" Gorman Rupp Pumps
4. Two 2" Gorman Rupp Pumps

SAFETY EQUIPMENT

1. Five MAS Air Packs – MDL 54471 with 9 Cylinders
2. One NMAS Air Pack – MDL 74471
3. Three Safety Harnesses

YALE FORKLIFT – 4,650 Pounds Maximum Lift

MISCELLANEOUS EQUIPMENT

1. MSA Gas Meter
2. Tri-Pod with Winch
3. Metal and Wood Ramps
4. Wheel Barrows
5. Ladders
6. Scaffolding
7. Large Portable Fan
8. Power Smoker for Smoke Testing Collection System
9. Wright Way Electric Hoist
10. Portable I Beam – 2,000 Pounds Capacity
11. Hydraulic Lifting Table – 2,000 Pounds Capacity
12. Craftsman 33 Gallon Air Compressor
13. Acetylene Gas Torches
14. Airco Welder
15. Gas Power Valve Operator
16. Small Sump Pumps
17. Weed Trimmers

NEW CUMBERLAND WWTP EQUIPMENT LIST

18. Bush Trimmer
19. Gas Blower
20. Husqvarna Chain Saw
21. Hand Dolly
22. 10 Ton Hydraulic Body Repair Kit
23. Manhole Samplers
24. Pump Hoses
25. Miscellaneous Plastic Pipe
26. Shop Vacs
27. Electric Battery Charger
28. Portable Battery Charger
29. Portable Tri-Stand / Pipe Threader and Pipe Oiler
30. Creepers
31. Hobart Welder
32. Two Small Toro Snow Blowers
33. Honda Track Snow Blower
34. Two Push Mowers
35. John Deere Riding Mower 727
36. Two Pressure Washers
37. Two Electric Hoists
38. One Two Ton Manual Hoist
39. One Portable Hoist
40. Ridgid Electric Drain Opener
41. No Parking Signs
42. Miscellaneous Ferrnco Pipe Couplers
43. Miscellaneous Plastic Sewer Main Pipe Couplers
44. Spare GR Pump Parts
45. Spare EQ Sump Pump
46. Spare Scum Pit Pump
47. Spare Rotating Assemblies
48. Spare Ditch Mixer
49. Spare Anaerobic Mixer
50. Spare Anoxic Mixer
51. Miscellaneous Pipe Plug Sizes – 10 inch, 8 inch, 6 inch and 4 inch
52. Different Size Pump Hoses
53. 10 Ton Bearing Press
54. ELECTRIC CABLE REEL
55. SHORING & PUMP V-F-46

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-22. Section 4.1(k) of the Application's APA references agreements with multiple entities held by the Borough. Please provide copies of the agreements listed in Schedule 4.1(k) that PAWC-WD has agreed to assume following closing.

RESPONSE: See Attachments TUS Set 1, No. A-22, Parts A – I as follows:

Part A:	**Capital Region Water Waste Hauling**
Part B:	**Penn Waste, Inc.**
Part C:	**Modern Landfill Disposal (See Note below)**
Part D:	**Suburban Testing Labs**
Part E:	**Kruger, Inc.**
Part F:	**WIN-911 Licensing Agreement**
Part G:	**DynaTech Industries Ltd.**
Part H:	**Red Shield Roofing System Limited Warranties**
Part I:	**Sewer Agreement with Lower Allen Township and #90, #92, and #94 Poplar Avenue Residents**

Note: The Modern Landfill Disposal Agreement expired on May 3, 2016, and as explained on Schedule 4.1(k) to the Asset Purchase Agreement, Borough is to maintain the waste material disposal arrangement with Modern Landfill on an as-needed basis through and until the Closing Date (for example, on a "pay-as-you-go" basis as opposed to entering into another contract for a specific term).

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

CAPITAL REGION WATER

CONTRACT WASTE HAULING PERMIT

CAPITAL REGION
WATER

October 2, 2015

Terry Filson
Borough of New Cumberland WWTP
1120 Market Street
P.O. Box 220
New Cumberland, PA 17070

Re: Waste from the Borough of New Cumberland WWTP
Permit No. WH-0916-18

Dear Mr. Filson:

Permission is hereby granted to discharge process waste from the Borough of New Cumberland WWTP to Capital Region Water's Advanced Wastewater Treatment Facility (AWTF) in accordance with all terms and conditions of Permit No. WH-0916-18.

All plans, waste analysis, and other data supplied to the AWTF in support of your application are on file and considered as part of this permit together with the attached terms and conditions.

The terms and conditions of the permit shall be final unless any comment or request for reconsideration is forwarded to the Harrisburg AWTF's superintendent, in writing, within thirty (30) days following the effective date of the permit. If no comment or request for reconsideration is received within the stated time frame, the permit terms and conditions shall be deemed final.

Finally, this permit may not be undersigned, transferred, or sold to a new owner, user, different premises, or a changed operation.

Should you have any questions regarding this letter, please contact me (717) 939-7270 ext. 207.

Sincerely yours,

Randy L. Schaffer

Randy L. Schaffer, Pretreatment Coordinator
Capital Region Water, AWTF

Enclosure (1)
cc: File

CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY
1662 South Cameron Street
Harrisburg, Pennsylvania 17104

CONTRACT WASTE HAULING PERMIT

Company Name:	**Borough of New Cumberland WWTP**
Division Name:	-
Mailing Address:	**P.O. Box 220** **New Cumberland, PA 17070**
Facility Address:	**1120 Market Street** **New Cumberland, PA 17070**
Principal Signatory:	**Terry Filson**

The above **Contract Waste Hauler** is hereby authorized to discharge **Process Waste** to Capital Region Water's Advanced Wastewater Treatment Facility (AWTF) in compliance with the Harrisburg Ordinance Title Nine, Part Five, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This Contract Waste Hauler Permit is granted in accordance with the application filed on **August 24, 2015** in the office of the AWTF and in conformity with plans, specifications, and other data submitted in support of the above application.

Effective Date: **September 30, 2015** Expiration Date: **September 29, 2016**

The Contract Waste Hauler shall not discharge after the date of expiration. If the Contract Waste Hauler wishes to continue to discharge after this expiration date, an application must be filed for reissuance of this permit in accordance with the requirements of the Harrisburg Ordinance Title Nine, Part Five, a minimum of ninety (90) days prior to the expiration date.



Superintendent, Capital Region Water

Part I - COMPENSATION, DISCHARGE THRESHOLD LIMITATIONS, GENERAL LIMITATIONS, PROHIBITED DISCHARGES AND OTHER CONSIDERATIONS

COMPENSATION:

Rate of compensation to be paid to Capital Region Water:

$0.045 Per Gallon

The rate of compensation is based on (2.5) percent solids.

Should the average percent solids vary plus or minus 1.5 percent during the period of this permit, the hauler will be notified and the rate of compensation will be adjusted accordingly.

DISCHARGE THRESHOLD LIMITATIONS:

Threshold Limits	1. Cadmium	39 mg/kg
	2. Chromium	1200 mg/kg
	3. Copper	1500 mg/kg
	4. Lead	300 mg/kg
	5. Mercury	17 mg/kg
	6. Nickel	420 mg/kg
	7. Zinc	1500 mg/kg

GENERAL LIMITATIONS:

pH	5.0 - 10 Std. Units
TVS (Process only)	55% Minimum
Oil/Grease	100 mg/L
Ammonia Nitrogen (April 1 thru October 31)	500 mg/L

PROHIBITED DISCHARGES:

Grease trap waste
Medical, infectious or biohazard waste
Priority pollutant waste
Characteristic or listed hazardous waste
Digester, lagoon or tank cleaning……waste, grit or mat.

CONSIDERATIONS:

Waste Transporter: Kline's Services, Inc.

Hauler will not exceed (30,000) gallons discharged per (Day)

Waste to be delivered from the (Borough of New Cumberland's Wastewater Treatment Plant) ONLY.

Part II - SPECIAL CONDITIONS/COMPLIANCE

1. Such waste to be accepted by Capital Region Water will be only that material previously approved by the Advanced Wastewater Treatment Facility. Any other form of waste from any other treatment system may not be discharged into the AWTF. **Discharge of such non-approved wastes** into the AWTF will constitute a violation of the terms of this permit, will render said permit null and void, and will subject the Hauler to the penalties provided in Title Nine, Part Five of the Harrisburg Codified Ordinances. In addition, the Contract Waste Hauler will be charged at the compensatory rate of **$0.182 per gallon for the non-approved discharge.**

2. The **AWTF will accept the discharges between the hours of 7:00 A.M. and 7:00 P.M.**, Monday through Friday, only at the discharge point specified by the AWTF. After hours or weekend discharges will be considered upon special request by the Hauler.

3. The **compensation to be paid by the Hauler to the AWTF** for such use of the facilities shall be determined by the AWTF and listed under Part I "Compensation, Discharge Threshold Limitations, General Limitations, Prohibited Discharges and Other Considerations", of this permit. The AWTF will bill the Hauler monthly, predicated on a minimum waste volume of 1,000 gallon per load or the maximum capacity of the tanker. **Payment must be made within 30 days of receipt of the bill.**

4. Hauler agrees to keep very accurate records regarding the volumes discharged into the AWTF's system and to have these records available and open for inspection and audit by designated representatives of the AWTF.

5. Prior to each discharge, the Hauler shall relinquish to AWTF personnel a **Contract Waste Hauling Manifest.** The manifest is to be completed in its entirety as well as include the list of all customers, customer addresses and approximate volumes.

6. Upon demand, hauler will furnish the AWTF with a representative sample of the material to be discharged into the system. The sample will be preserved, if necessary, to provide a valid result when analyzed. Preservation of samples will follow commonly accepted practices for sampling. The AWTF will have the submitted sample analyzed to establish the concentration of contamination present. A copy of the analysis will be supplied to the Hauler. If the analysis of the sample proves not to be within the threshold limits, the Hauler agrees to meet with the AWTF to determine future discharges.

7. The AWTF's laboratory will analyze or designate a contract laboratory to analyze any samples in question.

8. Upon 30 days written notice or at the expiration of this permit, the AWTF may change the schedule of rates to reflect any increase in operational costs. This is in addition to any adjustments to the rates specified in Part I "Compensation, Discharge Threshold Limitations, General Limitations, Prohibited Discharges and Other Considerations".

Part III - STANDARD CONDITIONS

1. The Contract Waste Hauler shall comply with all the general prohibitive discharge standards in Title Nine, Part Five of the Harrisburg Ordinances. Namely, the Contract Waste Hauler shall not discharge waste to the AWTF:

   a) Having heat in such quantities that the discharge causes the temperature at the AWTF to exceed one hundred and four degrees Fahrenheit (104°F).

   b) Containing fats, wax, grease or oils of petroleum origin whether emulsified or not in excess of 100 mg/L, or petroleum oil, nonbiodegradable cutting oil, or petroleum products of mineral origin in amounts that will cause interference or pass through at the AWTF unless a variance is granted.

   c) Containing any gasoline, benzene, naphtha, fuel oil or other explosive liquids, solids or gases or any other pollutants which will create a fire or explosion hazard, including but not limited to wastestreams with closed cup flashpoint of less than one hundred and forty degrees Fahrenheit (140°F) using the test methods specified in 40 CFR Part 261.21.

   d) Containing any garbage that has not been ground by household type or other suitable garbage grinders.

   e) Containing any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch, manure, or any other solids or viscous substances capable of causing obstructions or other interferences with proper operation of the sewer system.

   f) Having a pH lower than 5.0 or higher than 10.0 standard units or having any other corrosive property capable of causing damage or hazards to structures, equipment or personnel of the sewer system unless a variance is granted.

   g) Containing toxic or poisonous substances in sufficient quantity to injure or interfere with any wastewater treatment process, or to constitute hazards to humans or animals, or to create any hazard in waters which receive treated effluent from the sewer system treatment plant. Toxic wastes shall include, but not by way of limitation, wastes containing cyanide, chromium, cadmium, mercury, copper or nickel or any characteristic or listed hazardous waste.

   h) Containing noxious or malodorous gases or substances capable of creating a public nuisance.

   i) Containing solids of such character and quantity that special and unusual attention is required for their handling.

   j) Containing any substance which may affect the AWTF's effluent and cause violation of the NPDES Permit requirements.

   k) Containing any substance which would cause the AWTF to be in noncompliance with sludge use, recycle, or disposal criteria pursuant to guidelines or regulations developed under Section 405 of the Federal Act, the Clean Air Act or regulations criteria for sludge management and disposal as required by the PA DEP.

l) Containing color which is not removed in the treatment processes.

m) Containing any radioactive wastes or isotopes.

n) Containing any pollutant, including conventional pollutants, released at a flow rate and/or pollutant concentration which would cause interference with the AWTF.

o) Containing substances which may solidify or become viscous at temperatures between thirty-two degrees Fahrenheit (32°F) and one hundred and forty degrees Fahrenheit (140°F).

p) Containing chemical constituents which alone or in combination result in the release of toxic gases, vapors, or fumes in a quantity that may cause acute worker health and safety problems.

2. RIGHT OF INSPECTION AND ENTRY

The Contract Waste Hauler shall provide the AWTF or its representatives, exhibiting proper credentials and identification, with whatever is necessary to enter the premises, without delay, for the purpose of performing inspection, sampling, record inspection or any other duties and responsibilities. The premises shall mean, but not be limited to, the Contract Waste Hauler's business office or the location from which the waste was generated.

3. RECORDS RETENTION

The Contract Waste Hauler shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by or in behalf of the user in connection with its discharge. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the AWTF shall be retained and preserved by the Contract Waste Hauler until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

4. CONFIDENTIAL INFORMATION

Except for data determined to be confidential under Title Nine, Part Five of the Harrisburg Ordinances, all reports required by this permit shall be available for public inspection at the office of the AWTF.

5. RECORDING OF MONITORING RESULTS

For each measurement or sample taken pursuant to the requirements of Part I and II of this permit, the Contract Waste Hauler shall record the following information:

a) The exact place, date, and time of sampling,
b) The person(s) who collects the sample(s),
c) Sample type (Composite or Grab),
d) The dates the analyses were performed,
e) The person(s) who performed the analyses,

f) The analytical techniques or methods used,
g) The results of all required analyses, and
h) Chain of custody.

6. MONITORING PERFORMED BY THE AWTF

Monitoring will be performed by the AWTF based on the type of waste, type and concentrations of pollutants in the discharge, and the past performances of and compliance by the Contract Waste Hauler. Examples of analysis include, but are not limited to, a permit scan, surveillance scans or random analysis.

When monitoring occurs, the following itemized charges will be levied against the Contract Waste Hauler:

Parameter	Unit Cost
Arsenic as As, (T)	35.00
Cyanide as CN, (T)	35.00
Cadmium as Cd, (T)	20.00
Chromium as Cr, (T)	20.00
Copper as Cu, (T)	20.00
Lead as Pb, (T)	20.00
Mercury as Hg, (T)	40.00
Nickel as Ni, (T)	20.00
Zinc as Zn, (T)	20.00
Total Toxic Organics	
Volatile Organic Compounds GC/MS	$220.00
Acid Extractables/Base Neutrals GC/MS	460.00
Pesticides/PCB's	160.00
Dioxins (Qualitative)	150.00
pH	5.00
BOD_5	25.00
COD	20.00
TS/TVS	10.00
TSS/VSS	10.00
Ammonia Nitrogen as N	25.00
Total Nitrogen as N	55.00
Phosphorous as P, (T)	15.00
Oil and Grease	30.00
Temperature, °C	-
Phenols, (T)	30.00

All prices subject to change upon notification.

7. ESTABLISHED TEST PROCEDURES

The measurement of specified pollutants by Capital Region Water and Contract Waste Hauler will be consistent with Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 CFR Part 136 or Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 40 CFR Part 261, Appendix III. Test procedures will include a Quality Assurance and Sample Preservation Program referenced to United States Environmental Protection Agency (US EPA), Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemists (AOAC), or United States Geological Survey (USGS) texts or manuals.

8. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a responsible corporate officer, ranking public official, a general partner, proprietor or duly authorized representative of that individual. Any change in signatory identified on page 1 of this permit shall be submitted to the Superintendent, in writing within thirty (30) days after the change.

9. REVOCATION OF PERMIT

The permit issued to the Contract Waste Hauler by Capital Region Water may be revoked when, after inspection, monitoring or analysis it is determined that the discharge of waste to the Harrisburg AWTF is considered by AWTF personnel to be detrimental to the plant processes or equipment, or is in violation of Federal, State, or local laws, ordinances, or regulations. Falsification or intentional misrepresentation of data or statements pertaining to the permit application or any other required reporting form shall be cause for permit revocation. Also, non-payment of permit fees or disposal charges shall be cause for permit revocation.

10. LIMITATION OF PERMIT TRANSFER

Contract Waste Hauler permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of Capital Region Water. Sale of the Contract Waste Hauler's business shall obligate the purchaser to seek prior written approval of the Authority for continued discharge to the sewerage system.

11. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING

Knowingly making any false statement on any report, manifest or other document required by this permit or knowingly rendering any sample for analysis inaccurate, may result in punishment under the criminal laws, as well as being subjected to civil penalties and relief.

12. PERMIT MODIFICATION OR REVISION

a) The terms and conditions of this permit may be subject to modification by the AWTF at any time as limitations or requirements identified in the Harrisburg Ordinances are modified or other just cause exists.

b) This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.

c) The terms and conditions may be modified as a result of Federal, State or local promulgation of new pretreatment standards or requirements.

d) Any permit modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance if necessary.

e) The permit may be modified as a result of any modification or requirement of Capital Region Water's NPDES Permit.

13. DUTY TO COMPLY

The Contract Waste Hauler must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief, and summary abatements.

14. DUTY TO MITIGATE

The Contract Waste Hauler shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of a waste for discharge.

15. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

16. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringements of Federal, State or local regulations.

17. CIVIL PENALTY

If the Contract Waste Hauler violates any of the terms, provisions or requirements of Harrisburg Ordinance Title Nine, Part Five or any of the applicable rules and regulations, or whoever fails to comply with any notice given pursuant to this ordinance to such person, or whoever obstructs or interferes with any person in the enforcement of this ordinance shall, upon conviction thereof, severally for each and every such violation or noncompliance respectively be fined not more than twenty-five thousand dollars ($25,000.00) per day of violation. Each twenty-four (24) hour period during which a violation continues shall be considered a separate offense and punishable as such.

18. CRIMINAL PENALTY

If the Contract Waste Hauler knowingly or negligently violates any of the terms, provisions or requirements of Harrisburg Ordinance Title Nine, Part Five or any of the applicable rules and regulations, or whoever refuses to comply with any notice given pursuant to this ordinance to such

person, or whoever obstructs or interferes with any person in the enforcement of this ordinance shall, upon conviction thereof, severally for each and every such violation or noncompliance respectively be fined not more than one thousand dollars ($1,000.00) or imprisoned for a term not exceeding ninety (90) days, or both. Each twenty-four (24) hour period during which a violation continues shall be considered a separate offense and punishable as such.

19. CIVIL LIABILITY

The Contract Waste Hauler shall be liable for any and all damages to the treatment plant and sewer system resulting from said Contract Waste Hauler's discharge and indemnify Capital Region Water for any and all fines or penalties incurred by the AWTF resulting from said Contract Waste Hauler's discharge. Nothing in this permit shall be construed to relieve the Contract Waste Hauler from civil and/or criminal penalties for noncompliance.

20. RECOVERY OF COSTS INCURRED

In addition to civil and criminal liability, the Contract Waste Hauler violating any of the provisions of this permit or Harrisburg Ordinance Part Nine, Title Three or causing damage to or otherwise inhibiting the AWTF's treatment system shall be liable to Capital Region Water for any expense, loss, or damage caused by such violation or discharge. Capital Region Water shall bill the Contract Waste Hauler for the costs incurred for any cleaning, repair, or replacement work caused by the violation or discharge.

PENN WASTE – DISPOSAL OF CENTRIFUGE SOLIDS

BID FORM

To: Borough of New Cumberland
1120 Market Street
New Cumberland, Pennsylvania 17070

For: Aerobically Digested Dewatered Sludge, Screenings and Grit Disposal from the Wastewater Treatment Facility

Pursuant to and in compliance with the request for bids on the above captioned Work, the undersigned offers to furnish all labor, superintendence, materials, supplies, equipment, plan and other to perform all work necessary or incidental to the disposal of the indicated wastes, complete in every respect, in strict accordance with the Contract Documents.

Lump Sum Prices named in the following schedule of Alternates.

SCHEDULE OF ALTERNATES

ALTERNATE NO. 1 – THREE (3) YEAR DISPOSAL CONTRACT

20 cubic yard box Estimated quantity of Dewatered Sludge/Screenings/Grit	Unit Price per Ton
720 Tons/Year ± (wet)	at $ 70.00

Description: Remove processed biosolids, screenings and grit from treatment plants; dispose of at Modern Landfill, 4400 Mount Pisgah Road, York, PA 17406 in a PA DEP approved manner. Price to be complete, per wet ton for the unit price.

ALTERNATE NO. 2 – FIVE (5) YEAR DISPOSAL CONTRACT

20 cubic yard box Estimated quantity of Dewatered Sludge/Screenings/Grit	Unit Price per Ton
720 Tons/Year ± (wet)	at $ 72.00

Description: Remove processed biosolids, screenings and grit from treatment plans; dispose of at Modern Landfill, 4400 Mount Pisgah Road, York, PA 17406 in a PA DEP approved manner. Price to be complete, per wet ton for the unit price.

It is estimated that the Wastewater Treatment facility will generate approximately 720 wet tons of dewatered sludge in 2014. This is an estimate as there is no historical data on dewatered sludge from the Facility.

It is understood that Bidders shall include, in the appropriate spaces above, a price for each Alternate. The Owner shall choose only one (1) alternate for its successful Bid.

The undersigned Bidder understands that the estimated quantities shown above are approximations based on the Owner's estimated extent of plant operations. Quantities of sludge may vary in amount or frequency of disposal and may or may not exceed the estimated quantities listed in this Bid Form.

The Bidder must dispose of the wastes for which evidence of an agreement(s) and/or regulatory approval for disposal accompanies this Bid:

Submitted this 25TH day of MARCH, 2014.

AN INDIVIDUAL

By: _____ _____
(Typed Name) (Signature)

Doing Business As:
Business Address: _____

Telephone: _____

A PARTNERSHIP

Firm Name: _____

By: _____ _____
(Partner) (Partner)

Business Address: _____

Telephone: _____

A CORPORATION

Corporation Name: PENN WASTE, INC.

State of Incorporation: PA

By: _____ President
(Person Authorized to Sign) (Title)

SCOTT R. WAGNER
PRESIDENT
PENN WASTE INC.

Attest: Edward T Ward
(Corporate Secretary) Assistant

(CORPORATE SEAL)

Business Address: 3955 N. George St. Extd, Manchester, PA 17345

Telephone: (717) 718-7568

NOTICE TO PROCEED

To: Penn Waste, Inc.
P.O. Box 3066
York, PA 17402-0066

Date: April 28, 2014

Project: Disposal of Dewatered Sludge, Screenings and Grit from the Wastewater Treatment Facility — Bid Ltr

You are hereby notified to commence WORK in accordance with the Agreement dated April 16, 2014 on or before May 1, 2014. The date of completion of all WORK is May 1, 2019.

Borough of New Cumberland

By: _____

John R. Murray

Title: Council President

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

_____

this the _____day of _____. 20_____.

Title _____

SECTION 00500 – AGREEMENT

THIS AGREEMENT, is entered into this 16th day of APRIL, 2014

By and between the Borough of New Cumberland hereinafter called OWNER, and a Corporation known as PENN Waste, INC

Organized and existing under the laws of the State of PA

OR

A Partnership known as _____

Consisting of the following members: _____

_____

OR

An Individual _____

Trading as _____

Hereinafter called CONTRACTOR.

WITNESSETH that OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 – WORK

CONTRACTOR shall complete all Work as specified and indicated in the Contract Documents for disposal of residual wastes, namely sludge and screenings and grit for the Borough of New Cumberland Wastewater Treatment Facility.

ARTICLE 2 – N/A

ARTICLE 3 – CONTRACT TIME

3.1 Work shall begin following the Notice to Proceed and shall continue for the duration given in the Alternate selected by the OWNER and provided by the successful Bidder.

CANCELLATION OR TERMINATION OF CONTRACT:

If the work under this contract shall be abandoned by the CONTRACTOR or if at any time the OWNER shall be of the opinion, and so certify in writing (which certificate shall be final, binding and conclusive on the CONTRACTOR) that the performance of the contract is being unnecessarily or unreasonably delayed, or that the CONTRACTOR is violating any of the conditions or covenants of this contract, or the specifications thereof, or is executing the same in bad faith, or not in accordance with the terms thereof, the OWNER may cancel and terminate this contract by a written notice, to be served upon the CONTRACTOR either personally or by leaving it at his residence or office, and the OWNER shall thereupon have the power and is hereby authorized to procure in the manner prescribed by law such and so much of said work to be performed as may be necessary to fulfill this contract and in such cases, the OWNER shall have the power and is hereby authorized to charge to the CONTRACTOR the amount of loss suffered by the OWNER.

ARTICLE 4 – CONTRACT PRICE

OWNER shall pay CONTRACTOR for performance of the Work in accordance with the Contract Documents in lawful money of the United States of America in accordance with the Unit Prices. Payments shall be made via a monthly invoice from the CONTRACTOR for the amount of wastes disposed within said month.

ARTICLE 5 – PAYMENT

CONTRACTOR shall submit invoices for Payment in accordance with the Unit Price as provided in the General Conditions.

Unit Price shall represent all costs associated with disposal including, but not limited to, pull fees, disposal fees, any permit fees.

ARTICLE 6 – CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, work, locality and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

6.2 CONTRACTOR further covenants and warrants that he has had sufficient time to examine the site of the Work; that he has examined the site of the Work; and that he has based the within contract prices on his own independent examination and investigation of the site and conditions and has not relied on any information furnished to him by the OWNER.

6.3 CONTRACTOR has correlated the results of such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.

6.4 CONTRACTOR has given OWNER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to CONTRACTOR.

ARTICLE 7 – CONRACT DOCUMENTS

The Contract Documents that comprise the entire Agreement between OWNER and CONTRACTOR are attached to this Agreement by reference, made a part thereof and consist of the following:

7.1 This Agreement

7.2 Bid Bond

7.3 General Conditions

7.4 Specifications

7.5 Addenda numbers____ through ____, inclusive

7.6 CONTRACTOR'S Bid

7.7 Documentation submitted by CONTRACTOR prior to Notice of Award.

7.8 Any modification, including Change Orders, duly delivered after execution of Agreement

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be altered, amended or repealed by a Modification (as defined in Article 1 of the General Conditions).

ARTICLE 8 – MISCELLANEOUS

8.1 Terms used in this Agreement that are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.

8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law) and unless specifically stated to the contrary in any written consent to an assignment no assignment

will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.3 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the parties hereto have signed three (3) copies of this Agreement. One duplicate original each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on MAY 1, 2014.

OWNER:

Council President

(CORPORATE SEAL)

CONTRACTOR:

President

SCOTT R. WAGNER
PRESIDENT
PENN WASTE INC.

(CORPORATE SEAL)

Attest:
Borough Manager

Attest:
Secretary

Address for Giving Notices:

Penn Waste, Inc
P.O. Box 3066
York, PA 17402-0066
(717) 718-7568
Phone
(717) 801-4684
FAX

Sludge bid file

Penn Waste, Inc.
Contact List

Name	Department	Phone #	Email Address
Jeff Sentz	Sales	717-718-7568	jsentz@pennwaste.com
Paula Sipe	Customer Service	717-718-1569	psipe@pennwaste.com
Tracy Ruby	Customer Service	717-801-4692	truby@pennwaste.com
Andy Miller	Dispatch	717-718-1561	amiller@pennwaste.com

PENN

Penn Waste, Inc., P.O. Box 3066, York, PA 17402 ◆ 717-767-4456 ◆ Fax: 717-801-4684 ◆ www.pennwaste.com

RECEIVED APR 29 2015

April 27, 2015

Steve Sultzaberger
New Cumberland Borough
1120 Market St.
New Cumberland, PA 17070

Dear Steve:

Enclosed is your copy of the Performance Bond renewal for the Disposal of Aerobically Digested Stabilized Sludge, Screenings and Grit from the New Cumberland Borough Wastewater Facility for the upcoming contract year.

If you should have any questions, please contact me directly at 717-718-1565.

Sincerely,

Jeff Sentz

Director of Sales

Enclosure

Annually Renewable Performance Bond

Bond No. 0640910

KNOW ALL MEN BY THESE PRESENTS: That Penn Waste, Inc., (hereinafter called the Principal), and International Fidelity Insurance Company, (hereinafter called the Surety), are held and firmly bound unto Borough of New Cumberland, (hereinafter called the Obligee), in the full and just sum of Twenty Eight Thousand Eight Hundred Dollars and 00/100 Dollars ($28,800.00), the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, and each of their heirs, administrators, executors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has by written agreement dated the 1st day of May, 2014, entered into a Contract with the Obligee for Disposal of Aerobically Digested Stabilized Sludge, Screenings and Grit from the New Cumberland Borough Wastewater Facility for a period of five (5) years which contract is hereby referred to and made a part hereof.

WHEREAS, the Obligee has agreed to accept a bond guaranteeing the performance of said contract for a period of one year.

NOW, THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATION IS SUCH, that if the Principal shall well and truly perform each and every obligation in said Contract at the time and in the manner specified during the term of this bond, and shall reimburse said Obligee for any loss which said Obligee may sustain by reason of failure or default on the part of said Principal, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, That this bond is subject to the following conditions:

1. This bond is for the term beginning May 1, 2015 and ending April 30, 2016. The bond may be extended for additional terms at the option of the Surety, by continuation certificate executed by the Surety. Neither non-renewal nor failure, nor inability of the Principal to file a replacement bond shall constitute a loss to the Obligee recoverable under this bond.
2. In the event of default, the Surety will have the right and opportunity, at its sole discretion, to: a) cure the defaults; b) assume the remainder of the Contract and to perform or sublet same; c) or to tender to the Obligee funds sufficient to pay the cost of completion less the balance of the Contract price up to an amount not to exceed the penal sum of the bond. In no event shall the Surety be liable for fines, penalties, liquidated damages, or forfeitures assessed against the Principal.
3. No claim, action, suit, or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety on this instrument unless same be brought or instituted upon the Surety within one year from termination or expiration of the bond term.
4. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrators or successors of Obligee.
5. The aggregate liability of the Surety is limited to the penal sum stated herein regardless of the number or amount of claims brought against this bond and regardless of the number of years this bond remains in force.

6. If any conflict or inconsistency exists between the Surety's obligation or undertakings as described in this bond and as described in the underlying document, then the terms of this bond shall prevail.

Signed and sealed this 21st day of April, 2015.

Principal:

Penn Waste, Inc. (seal)

By: _____

(SCOTT R. WAGNER
PRESIDENT
PENN WASTE INC.)

Surety:

International Fidelity Insurance Company (seal)

By: _____

Attorney-in-Fact
Arthur L. Colley

Surety Telephone Number 704-362-3991

Tel (973) 624-7200

POWER OF ATTORNEY

INTERNATIONAL FIDELITY INSURANCE COMPANY
ALLEGHENY CASUALTY COMPANY

ONE NEWARK CENTER, 20TH FLOOR NEWARK, NEW JERSEY 07102-5207

KNOW ALL MEN BY THESE PRESENTS: That **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and **ALLEGHENY CASUALTY COMPANY**, a corporation organized and existing under the laws of the State of Pennsylvania, having their principal office in the City of Newark, New Jersey do hereby constitute and appoint

BONNIE T. ATNIP, ARTHUR L. COLLEY, NICOLE M. COLLEY

Charlotte, NC.

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed and may be revoked, pursuant to and by authority of the By-Laws of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY and is granted under and by authority of the following resolution adopted by the Board of Directors of INTERNATIONAL FIDELITY INSURANCE COMPANY at a meeting duly held on the 20th day of July, 2010 and by the Board of Directors of ALLEGHENY CASUALTY COMPANY at a meeting duly held on the 15th day of August, 2000:

"RESOLVED, that (1) the President, Vice President, Chief Executive Officer or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity, or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY have each executed and attested these presents on this 22nd day of July, 2014.

INTERNATIONAL FIDELITY INSURANCE COMPANY CORPORATE SEAL 1904 NEW JERSEY

STATE OF NEW JERSEY
County of Essex

ROBERT W. MINSTER
Chief Executive Officer (International Fidelity Insurance Company) and President (Allegheny Casualty Company)

ALLEGHENY CASUALTY COMPANY 1936 PENNSYLVANIA

On this 22nd day of July 2014, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY, that the seals affixed to said instrument are the Corporate Seals of said Companies, that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

CATHY CRUZ NOTARY PUBLIC COMMISSION EXPIRES 04-16-2019 STATE OF NEW JERSEY

A NOTARY PUBLIC OF NEW JERSEY
My Commission Expires April 16, 2019

CERTIFICATION

I, the undersigned officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 21st day of April, 2015.

MARIA BRANCO, Assistant Secretary

MODERN LANDFILL

FOR DISPOSAL OF CENTRIFUGE SOLIDS

Modern Landfill
4400 Mt. Pisgah Road
York, PA 17406
Phone: 717-246-2686
Fax: 717-244-5588

RECEIVED MAR 2 8 2016

March 17, 2016

Borough of New Cumberland WWTF
PO Box 220
1120 Market Street
New Cumberland, PA 17070-0220

Attn: Terry Filson

Modern ID# 10-6249
Waste: Municipal Sludge
Expiration: May 3, 2016

Dear Terry:

The referenced waste material is currently approved for disposal at Modern Landfill. Pursuant to Pennsylvania Department of Environmental Protection requirements, our company reviews the acceptance of your waste stream on an annual basis. If you wish to continue disposal of the referenced waste material at our facility, please follow the steps listed below:

1. Provide a letter stating that the waste stream's characteristics have not changed during the past year. If they have changed, please include a description of the changes that may have occurred.

2. **Complete the enclosed PADEP Form 26R. Make sure when filling out the 26R that you write in the complete process description and schematic. This is an annual PADEP residual waste requirement pursuant to the residual waste regulations. If you have already completed the form for 2015, please disregard the enclosed 26R and provide us a copy of the one you have completed. **

Please help us prevent rejected waste shipments by **returning all requested renewal material prior to the expiration date listed above.** (Please allow a minimum of 2 weeks before expiration.) We will evaluate the information and if there are any changes to the waste's disposal status, we will notify you.

Sincerely,

James Kuhn
Environmental Specialist
JK/tfw

SUBURBAN TESTING LABS – NPDES ANALYSIS

SUBURBAN TESTING LABS

Contact Information

Terry Filson
Borough of New Cumberland
717-774-7826
sewer@newcumberlandborough.com

Analysis

The following analysis will be provided as agreed upon in advance.

Test	Sample location	Frequency	No. of Samples	No. of Samples Per Year	Unit Price	Total Price
Biochemical Oxygen Demand	Influent	104	1	104	$ 18.00	$ 1,872.00
Total Suspended Solids	Influent/Effluent	104	2	208	$ 10.00	$ 2,080.00
Total Phosphorous	Influent/Effluent	104	2	208	$ 14.00	$ 2,912.00
Ammonia as N	Influent/Effluent	104	2	208	$ 14.00	$ 2,912.00
Nitrate/Nitrite	Influent/Effluent	104	2	208	$ 20.00	$ 4,160.00
Total Kjeldahl Nitrogen	Influent/Effluent	104	2	208	$ 23.00	$ 4,784.00
Carbonaceaus BOD	Effluent	104	1	104	$ 18.00	$ 1,872.00
Fecal Coliform	Effluent Grab	104	1	104	$ 16.00	$ 1,664.00
Sample Pick up		104		104	$ 15.00	$ 1,560.00
Total Cost						**$ 23,816.00**

5 to 10 Business Days - Turn around

Quote Comments

- Many tests listed are either short holding time analyses, and/or require specialized media – please alert the laboratory of testing needs with advanced notice when possible.
- Additional testing capabilities not covered under this quotation available upon request.
- Sample pickups can be accommodated with little notice, however scheduling within 48hrs of need will allow significant cost savings. Waiver of pickup fees may be possible for batch submittals of $200 or more.
- Packing and shipping services are itemized under the Pricing Table. Waiver of packing fees may be possible for batch submittals of $200 or more. Please note that shipment costs (FedX/UPS) from STL to designated facility are at client's expense.
- Standard TAT for most testing is 3-6 business days; additional RUSH capabilities are available – please call to schedule and obtain surcharge pricing.

KRUGER PLC AGREEMENT

KRÜGER

DISCLOSURE AGREEMENT

WHEREAS, I. Kruger Inc., a North Carolina corporation having a place of business at 4001 Weston Parkway, Cary, NC 27513 ("Kruger") has created an instrumentation and controls program ("Program") in connection with certain equipment it has sold ("Equipment") to below-signed customer ("Customer");

WHEREAS, Kruger created the Program using specialized software ("Software") for which it holds a valid license to use ("License");

WHEREAS, the Program is to be or has been uploaded into a PLC panel at Customer's plant ("Facility") in order to operate and control the Equipment;

WHEREAS, the Customer desires that Kruger provide the Program itself to the Customer;

NOW, THEREFORE, in consideration of the above:

1. The Program shall be and remain Customer's sole property.
2. The custom-written computer code in the Program is confidential information ("Confidential Information"), as it contains Kruger's formulae and calculations relating to the Equipment. The Confidential Information shall not be shared or used outside of the Customer's firm or organization except for the purpose of controlling the Equipment in accordance with which it was purchased ("Authorized Purpose").
3. Kruger is not transferring any rights related to the License it holds to the Software used to write the Program. If the Customer seeks to use the Software, it must purchase its own license thereto.
4. The Program may only be used, however so modified by the Customer, in connection with the Equipment with which it was bought. It may not be used to effectively preclude future Kruger sales to the same or a different plant or facility.
5. The Customer shall ensure that any of its employees or agents (e.g., a hired systems integrator independent contractor) agree to be bound by these limitations on disclosure and use.

Signed by a duly authorized individual, so as to represent its intent to be legally bound by the above terms and conditions:

Customer: New Cumberland Borough

Address: 1120 Market Street
P.O. Box 220
New Cumberland, PA 17070

Authorized Signature: [signature]

Name: John R. Murray

Title: Borough Council President

Date: June 24, 2014

I. Kruger Inc.
4001 Weston Parkway
Cary, NC 27513 USA
Tel: 919-677-8310 • Fax: 919-677-0082
Web site: www.krugerusa.com

VEOLIA WATER
Solutions & Technologies

WIN-911 ALARM CALL OUT – ANNUAL RENEWAL

Licensing

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CopyShield Overview

CopyShield Overview

The copyright on this software product is enforced by CopyShield, a node-locked software licensing scheme. There are two types of licenses: Evaluation licenses and Permanent licenses.

Evaluation Licenses

An evaluation license is valid on any machine for a specific range of dates. Before the start date and after the end date, the license is expired. At the discretion of the software publisher, an evaluation license can be automatically installed the first time the application is launched. The set of product options enabled by an evaluation license is also at the discretion of the software publisher. When an application is launched with an evaluation license, the CopyShield Administrator dialog will be displayed as a reminder that you have an evaluation license and to allow you to Request a License or Install a License. In addition, once a day at midnight a CopyShield License Expiration dialog will be displayed as a reminder of the number of days left before the evaluation license expires. If you allow the evaluation license to expire, the application will be shut down and you will not be able to launch it again until you have installed a new license.

Permanent Licenses

A permanent license is valid for a given set of product options on a specific machine. If you install this product on another machine or require a different set of product options, then you must obtain a new license. There is one exception to this rule: if an Ethernet adapter is used to identify your machine, then this product, along with the license and Ethernet adapter, can be installed on another machine. A permanent license never expires.

CopyShield Administrator

CopyShield Administrator

The CopyShield Administrator dialog displays and facilitates administration of your software license. In addition to viewing your current license, you may Request a License, Install a License, and launch the application.

Note: Once a permanent license has been installed, the Administrator dialog will not be displayed automatically. Display of the Administrator dialog can be forced by holding the Ctrl key down while launching the application. This procedure is required for making modifications to an existing license, such as adding additional product options.

Fields and Controls

- **Product**

  The name of the licensed product. A product specifies the software application and may include information which limits the versions of the application that are licensed.

- **Publisher**

  The name of the company that publishes the software application.

- **Type**

  The type of license, either 'Evaluation' or 'Permanent'.

- **Status**

  The current status of your license. A permanent license will show a status of 'Permanent'. An active evaluation license will show a status of 'nn days left', indicating the number of days until the license expires. An expired evaluation license will show a status of 'Expired'. A corrupt or missing license will show a status of 'Invalid'.

- **Start Date / End Date**

  For evaluation licenses, the range of dates for which the license is valid. Before the start date and after the end date, an evaluation license is expired.

- **Unlock Code**

  This code is generated by the software publisher and is used to determine the validity of the license.

- **Request a License**

  Used to Request a License.

- **Install a License**

Used to Install a License.

- **Help**

  Displays this help screen.

- **Exit**

  Exits the license dialog without launching the application.

- **Launch Application**

  Exits the license dialog and (if the license is valid) launches the application.

Request a License

Request a License

You must request a license in order to:

- Extend an evaluation license
- Obtain a permanent license
- Move your application to a different machine (except when using an Ethernet adapter as the machine identifier)
- Upgrade to enable additional product options

Step by Step Instructions

- From the CopyShield Administrator dialog, click the Request a License button.
- The CopyShield Registration dialog will be displayed. It is important that the registration information be as complete and accurate as possible to avoid delay in issuing your new license. When you have entered and/or reviewed the registration information, click the OK button.
- A series of dialogs will be presented starting with the CopyShield License Type dialog. These dialogs are presented in a wizard style that provides on screen instructions. The exact sequence of dialogs is dependent on the type of license selected. Use the Next and Previous buttons to navigate through the dialogs. Click the Finish button to complete the license information.
- The CopyShield License Request dialog will be presented giving instructions for submitting a license request.

CopyShield Registration

The registration dialog displays and facilitates administration of your software registration. This information will be included when you Request a License. The process of obtaining a license will go more smoothly if this information is accurate and complete.

Fields and Controls

- **CD Tracking Number**

  Enter this number from your original software installation CD. If you have an evaluation CD, either obtain a tracking number from the software publisher or leave this field blank. For permanent licenses, this field determines which application options are enabled.

- **End User Contact Name**

  The name of a person working for the company which owns the software. This is the person who will be contacted with any license or application issues that may arise.

- **End User Company Name**

  The name of the company which owns the software.

- **Street Address Line 1**
  Street Address Line 2
  City
  State/Province/Region
  Zip/Postal Code
  Country

  The mailing address of the contact at the company which owns the software.

- **Phone Number**

  The phone number of the contact at the company which owns the software.

- **Cell Number**

  The cell number of the contact at the company which owns the software.

- **Email Address**

  The email address of the contact at the company which owns the software.

- **Preferred SCADA**
  Please select the SCADA system that WIN-911 will be receiving alarms from.

CopyShield License Request

The License Request dialog provides instructions for submitting a license request. These instructions are specified by the software publisher. Click the OK button to dismiss the dialog.

Fields and Controls

- **OK**

  Dismiss the dialog.

Install a License

Install a License

Install a new software license. A license can be imported from a CopyShield License (.CSL) file or installed manually. If you have a CSL file, you should import it. If you do not have a CSL file, you must install manually. Note that attempting to install an invalid license will cause the CopyShield Invalid License dialog to be presented and the current license will remain in effect.

Installing from a CSL file

- Put your CSL file in an accessible location. By default, the browser will search for CSL files in the License folder of the application directory. This file must be obtained from the software publisher.
- From the CopyShield Administrator dialog, click the Install a License button.
- The CopyShield License Install dialog will be presented. Click the Import a License File button.
- A file Open dialog will be presented. Browse to and select the new license file. When you have finished your selection, click the Open button.

Installing Manually

- Have your license information handy. This information must be obtained from the software publisher.
- From the CopyShield Administrator dialog, click the Install a License button.
- The CopyShield License Install dialog will be presented. Click the Manually Install a License button.
- A series of dialogs will be presented starting with the CopyShield License Type dialog. These dialogs will guide you through the installation process. The exact sequence of dialogs is dependent on the type of license selected. Use the Next and Previous buttons to navigate through the dialogs. Enter the license information provided by the software publisher. Click the Finish button to complete the license specification.
- The CopyShield License Unlock Code dialog will be presented. Enter the unlock code provided by the software publisher and then click the OK button.

CopyShield License Install

The License Install dialog facilitates importing a CSL license file or manually installing a license. If you have a CSL file, click the Import a License File button, otherwise click the Manually Install a License button.

Fields and Controls

- **Import a License File**

  Launches a file browser for selection of the CSL license file to import.

- **Manually Install a License**

  Launches a series of dialogs which guide you through the installation process.

CopyShield Invalid License

Displayed when attempting to install an invalid license. The current license will remain in effect.

Fields and Controls

- **OK**

  Dismiss the dialog.

CopyShield License Unlock Code

Enter a license unlock code when installing a license. This code can only be provided by the software publisher and is used to validate your software license.

Fields and Controls

- **Unlock Code**

  Enter the 8 digit hexidecimal unlock code provided by the software publisher.

- **OK**

  Install the new license.

- **Cancel**

  Abort the license install and return to the CopyShield Administrator dialog.

CopyShield License Type

Select a license type when requesting or installing a license.

Fields and Controls

- **License Type**

  The default selection is Permanent.

  Select Permanent if you own or intend to own the software and are installing the license on the machine where it will be permanently located. A permanent license is valid for a given set of product options and never expires.

  Select Evaluation if you wish to obtain or extend an evaluation license. An evaluation license is valid for a specific range of dates. Before the start date and after the end date, the license is expired. The set of application options enabled by an evaluation license is also at the discretion of the software publisher.

- **Cancel**

  Abort the license request/install and return to the CopyShield Administrator dialog.

- **Next**

  Advance to the next dialog in the request/install sequence.

  Permanent licenses continue with the CopyShield License Options dialog.

  Evaluation licenses continue with the CopyShield License Start End Dates dialog.

CopyShield License Start End Dates

Select starting and ending dates when requesting or installing an evaluation license. An evaluation license is valid for a specific range of dates.

Fields and Controls

- **Start Date**

  The default selection is the current date.

  This is the first day that the evaluation license will be valid. Before this date the evaluation license will be expired.

- **End Date**

  The default selection is 30 days from the current date.

  This is the last day that the evaluation license will be valid. After this date the evaluation license will be expired.

- **Previous**

  Return to the CopyShield License Type dialog.

- **Cancel**

  Abort the license request/install and return to the CopyShield Administrator dialog.

- **Finish**

  When requesting a license, advance to the CopyShield License Request dialog.

  When installing a license, advance to the CopyShield License Unlock Code dialog.

CopyShield License Options

Enter product options when requesting or installing a permanent license. A permanent license is valid for a specific set of product options. The software publisher defines the set of valid option strings. The options are represented by the last 2 or 3 digits or characters of the CD Tracking #.

Fields and Controls

- **CD Tracking Number**

  The default selection is the CD Tracking Number entered in the CopyShield Registration dialog.

  The CD Tracking Number can be found on your original software installation CD and determines the product options that will be enabled.

  If you have a demo CD or you are requesting additional product options, you must obtain a CD Tracking Number from the software publisher.

- **Previous**

  Return to the CopyShield License Type dialog.

- **Cancel**

  Abort the license request/install and return to the CopyShield Administrator dialog.

- **Next**

  Advance to the CopyShield License Machine ID dialog.

CopyShield License Machine ID

Select machine ID when requesting or installing a permanent license. The machine identifier is either the MAC address of an installed Ethernet adapter or the serial number of your hard disk drive. A permanent license is locked to a single machine based on this value.

Fields and Controls

- **Machine ID**

  The default selection is the first Ethernet controller's MAC address, or the volume ID of the hard disk drive if no Ethernet controllers are found.

  It is highly recommended that you install and select the Hard Disk Drive prior to requesting a permanent license. Note: Selecting the Hard Disk Drive will require a new unlock code if you should have to reformat or replace your disk drive.

  By selecting an Ethernet adapter, your license will be independent of the disk drive from which the application is launched. This option is not recommended.

- **Previous**
- Return to the CopyShield License Options dialog.
- **Cancel**

  Abort the license request/install and return to the CopyShield Administrator dialog.

- **Finish**

  When requesting a license, advance to the CopyShield License Request dialog.

  When installing a license, advance to the CopyShield License Unlock Code dialog.

CopyShield License Expiration

The license expiration dialog provides a daily reminder that the application is running under an evaluation license and will soon expire.

Fields and Controls

Continue

Dismiss the dialog.

DYNATECH- GENERATOR AGREEMENT

DynaTech Industries Ltd.
120 N. 25th Street, Suite 300
Lebanon, PA 17042

Phone: 717-274-8899
800-779-8809
Fax: 717-274-5003

Website: www.dynatechgenerators.com
eMail: service@dynatechgenerators.com

Agreement #: CNR-02674-H9L4

Agreement Date: 10/1/2015

Owner/Agent:	NEWCUB New Cumberland Borough P.O. Box 220 1120 Market St. New Cumberland, PA 17070	**Contact Person:** **Main Phone:** (717) 774-7826

This planned maintenance agreement is entered into by DYNATECH INDUSTRIES of Lebanon, PA, and the owner/agent of the equipment named below to perform the services listed below if applicable:

Silver - Annual Visit

One full PM Service per year to include as applicable:

1. Lubrication System: Complete check of engine lube system, including changing oil and filter during the full PM service
2. Fuel System: Complete check of fuel system, including fuel lines, tanks and pumps, and changing fuel filter(s) during the PM service
3. Cooling System: Complete check of cooling system and radiator, including hoses, belts, and change coolant filters during the full PM Service
4. Batteries: Complete check of engine batteries, including cold cranking amps, cranking voltage drop, charger output, and cable connections
5. Engine Components: Complete check of all engine components, including block heater, starters, turbochargers, governors, exhaust and air inlet operation
6. Air System: Complete check of air intake and air exhaust system, including louvers/shutters for correct operation. *Air filters will be inspected and replaced as required
7. Exhaust System: Complete check of exhaust system and muffler, including exhaust restrictions, draining condensation traps, rain caps, and checking for exhaust leaks
8. Generator Set Operation: Complete check of generator set operation, including oil, fuel, coolant, and exhaust mounting systems. Check for stable voltage and governor operation. Check all control panel functions/instrumentation, circuit breaker and safety shutdowns. Test system under load as conditions allow
9. Automatic Transfer Switch (ATS) Operation: Complete check of ATS operation including positive start/stop, connections, sequencing and exercising
10. Disposal: Dispose of all waste products, including, but not limited to, used oil, used coolant, used parts, used gaskets, and other waste material used to perform PM services in accordance with EPA/DEP guidelines
11. Report: Submit the PM checklist as a written report describing work performed and any additional recommended items not covered by PM Agreement
12. Options/Notes:
    *Air filter at extra cost. Usually only needed every 3 years.

On acceptance of this agreement, DYNATECH will render the services listed on the equipment listed below at the rate of **$2,150.00 per year.**

EQUIPMENT COVERED

Name	*Manufacturer*	*Model No*	*Serial No*	*Location Name*
Generator	Kohler	50REZGB	SGM32C8SX	Cedar Cliff Pump Station - $550.00
Generator	Kohler	200REOZJF	SGM3233W7	South East Pump Station - $700.00
Generator	Kohler	500REOZJ		Sewer Treatment Plant - $900.00

DynaTech Industries Ltd.
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Lebanon, PA 17042

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Agreement #: CNR-02674-H9L4

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Owner/Agent:	NEWCUB New Cumberland Borough P.O. Box 220 1120 Market St. New Cumberland, PA 17070	**Contact Person:** **Main Phone:** (717) 774-7826

ADDITIONAL SERVICES AND REPAIRS

Any additional repairs, parts, or services which are required will be brought to the attention of the customer, if possible. Repairs will only be made after the proper authorization from the customer is given to DynaTech Industries, unless prior authorization is given by signing the space provided below. Any additional repairs, maintenance, or service will be performed at DynaTech Industries' list prices LESS 15%. Emergency services between regular inspections will be provided at DynaTech Industries' rates and travel charges as outlined below.

It is understood that this agreement only includes parts and labor specified herein. It does NOT include expenses to repair damage caused by abuse, accident, theft, acts of a third person, forces of nature, altering the equipment. DynaTech Industries shall not be responsible for failure to render the service for causes beyond its control

RATES AND TRAVEL CHARGES

These charges are for work NOT covered under our PLANNED MAINTENANCE AGREEMENT:

- Service Technician during normal hours..... $98.00 per hour
- Service Technician during overtime..... $147.00 per hour
- Service Technician on Sundays and Holidays ..... $184.00 per hour
- Mileage charges are based on $1.50 per mile, portal to portal
- Driving time labor is figured round-trip at the above labor rates per man
- Minimum local service call is $120.00 (within approximately 0-15 miles)

TERMS AND CONDITIONS

The periodic inspections will start in October 2015 and continue at annual intervals

- Travel expenses and labor are allowed to perform indicated services only
- If additional labor, parts, or travel is required, the above rates apply
- This agreement supercedes all previous contracts. All rates are subject to change without notice
- This agreement is not assignable without the written consent of DynaTech Industries, and will automatically be renewed annually until cancelled by either party through written notice to the other. Written notice shall be received 30 days prior to service due date
- DynaTech Industries warrants (see limited warranty) and agrees that all of its personnel performing services pursuant to this contract shall be trained for the services they perform, and that all parts and materials installed pursuant hereto shall be suitable for the use intended
- An invoice will be submitted after each service with payment terms of Net 30 with approved credit
- Service Charges of 1.50% per month (18% yearly) with $3.00 minimum will be charged on past due accounts
- DynaTech Industries reserves the right to schedule this job with other jobs in the same area. Otherwise, a surcharge may apply

SEALS

OWNER _____
(Please Type or PRINT)

Authorized Signature _____

Title _____

Date _____

*AUTHORIZATION FOR ADDITIONAL REPAIRS

_____

_____

DynaTech Industries Authorization _____
Scott Roda, Power ClientCare

Date _____

DynaTech Industries Ltd.
120 N. 25th Street, Suite 300
Lebanon, PA 17042

Phone: 717-274-8899
800-779-8809
Fax: 717-274-5003

Website: www.dynatechgenerators.com
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Agreement #: CNR-02674-H9L4

Agreement Date: 10/1/2015

Owner/Agent:	NEWCUB New Cumberland Borough P.O. Box 220 1120 Market St. New Cumberland, PA 17070	**Contact Person:** **Main Phone:** (717) 774-7826

SERVICE & REPAIR WORK

90 Day Limited Warranty on Service and Repair

1. ***Parts and Material***

   DynaTech Industries does not warrant any parts or material. Only the manufacturer warranty is applicable

2. ***Service, Repair, and Workmanship***

   DynaTech Industries warrants service and repairs as free from defects in workmanship for ninety (90) days following completion of the work order. For this purpose, the day of the invoice is the first day of the ninety (90) day period, and all claims must be made within the ninety (90) day period.

3. ***Limit of Liability***

   Limit of liability of DynaTech Industries and the remedy of the owner for defects in workmanship is limited to repair of the goods upon return to DynaTech Industries, 120 North 25 Street, Suite 300, Lebanon, PA 17042, freight prepaid. In no event is DynaTech Industries liable for incidental or consequential damages due to defective service, repair, workmanship, parts, or material.

4. ***Remote Service***

   Where the original, warranted work is performed at any location other than 120 E North 25 Street, Suite 300, Lebanon, PA 17042:
   a) This warranty does not include travel time and labor for the removal of the product from its application, and reinstallation
   b) DynaTech Industries will pay travel time and mileage upto a maximum of 4 hours and 150 miles

This Warranty and DynaTech Industries' obligation hereunder is in lieu of all warranties, expressed or implied, including without limitation, the implied warranties of merchantability and fitness for a particular purpose, and all other obligations of liabilities, including liability for incidental and consequential damage.

ROOF WARRANTY

PLANT BUILDINGS

SOUTHEAST PUMP STATION

CEDAR CLIFF PUMP STATION

WICKERSHAM CONSTRUCTION AND ENGINEERING, INC.

Build Blue

Date: August 14, 2014

Project: Borough of New Cumberland
Wastewater Treatment Facility Upgrade
Contract – 1
Engineer's Project: 0588

TO: **John Shambaugh**
FPE Consulting Engineers
100 S. Baltimore St.
Dillsburg, PA 17019

NO	DESCRIPTION	TITLE		FOR APPROVAL	APPROVED AS NOTED	APPROVED	DISAPPROVED	REVISE & RESUBMIT	FOR YOUR USE
1	Copy Each	**Roof Warranty**							X

REMARKS: FOR YOUR USE

BY: Joseph Dougherty

c: file

TITLE: Vice President

www.WickershamConstruction.com
777 East Ross Street, Lancaster, PA 17602 | Phone: 717-397-8282 | Fax: 717-397-5826

RED SHIELD WARRANTY

RED SHIELD ROOFING SYSTEM LIMITED WARRANTY

Warranty No: RO062619 **FBPCO #:** AE6608 **Square Footage:** 14220 s.f.
Building Owner: NEW CUMBERLAND WWTP (HEADWORKS, INFLUENT
Building Identification: NEW CUMBERLAND WWTP (HEADWORKS, INFLUENTPUMP, BLOWER, GARAGE, OPERATIONS, MOT
Building Address: 12 & MARKET STREETS, NEW CUMBERLAND, PA, 17070-0900
Warranty Period Of: TWENTY (20) Years, Beginning On: 06/03/13
Roofing Contractor: J. M. GANGLOFF ROOFING, INC. (06556)

For the warranty period indicated above, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, warrants to the Building Owner ("Owner") named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, repair any leak in the Firestone Roofing System ("System").

TERMS, CONDITIONS AND LIMITATIONS

1. **Products Covered.** The System shall mean only the Firestone brand roofing membranes, Firestone brand roofing insulations, Firestone brand roofing metal, and other Firestone brand roofing accessories when installed in accordance with Firestone technical specifications by a Firestone licensed applicator.
2. **Notice.** In the event any leak should occur in the System, the Owner must give notice in writing or by telephone to Firestone within thirty (30) days of any occurrence of a leak. Written notice may be sent to Firestone at the street address or fax number shown on the reverse side of this Limited Warranty. Evidence of this notice shall be the receipt by Owner of a Firestone Leak Notification Acknowledgement. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the cause of the leak.
3. **Investigation.** If upon investigation, Firestone determines that the leak is not excluded under the Terms, Conditions and Limitations set forth in this Red Shield Roofing System Limited Warranty (the "Limited Warranty"), the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the repair of the leak. Should the investigation reveal that the leak is excluded under the Terms, Conditions and Limitations, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay for these costs shall render this Limited Warranty null and void. Firestone will advise the Owner of the type and/or extent of repairs required to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the unexpired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone licensed applicator and within 60 days shall render this Limited Warranty null and void.
4. **No Dollar Limit (NDL).** There is no dollar limit placed on warranted leak repairs to the extent such repairs are covered by this Limited Warranty.
5. **Disputes.** Any dispute, controversy or claim between the Owner and Firestone concerning this Limited Warranty shall be settled by mediation. In the event that the Owner and Firestone do not resolve the dispute, controversy or claim in mediation, the Owner and Firestone agree that neither party will commence or prosecute any suit, proceeding, or claim other than in the courts of Hamilton County in the state of Indiana or the United States District Court, Southern District of Indiana, Indianapolis Division. Each party irrevocably consents to the jurisdiction and venue of the above identified courts.
6. **Payment Required.** Firestone shall have no obligation under this Limited Warranty unless and until Firestone and the licensed applicator have been paid in full for all materials, supplies, services, approved written change orders, warranty costs and other costs which are included in, or incidental to, the System. In the event that repairs not covered by this Limited Warranty are necessary in the future, Firestone reserves the right to suspend this Limited Warranty until such repairs have been completed and the licensed applicator and/or Firestone has been paid in full for such repairs.
7. **Exclusions.** Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a leak or damage is caused by: (a) Natural forces, disasters, or acts of God including, but not limited to, fires, hurricanes, tornadoes, hail, wind-blown debris, lightning, earthquakes, volcanic activity, atomic radiation, insects or animals; (b) Winds of peak gust speed at or in excess of 55MPH calculated at ten(10) meters above ground using available meteorological data; (c) Act(s), conduct or omission(s) by any person, or act(s) of war, terrorism or vandalism, which damage the System or which impair the System's ability to resist leaks; (d) Failure by the Owner to use reasonable care in maintaining the System, said maintenance to include, but not be limited to, those items listed on the reverse side of this Limited Warranty entitled "Building Envelope Care and Maintenance Guide"; (e) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, skylights etc.; (f) Construction generated moisture, condensation or infiltration of moisture in, from, through, or around the walls, copings, rooftop hardware or equipment, skylights, building structure or underlying or surrounding materials; (g) Acid, oil, harmful chemicals, or the reaction between them; (h) Alterations or repairs to the System that are not completed in accordance with Firestone's published specifications, not completed by an approved contractor, and/or not completed with proper notice to Firestone; (i) The design of the roofing system. Firestone does not undertake any analysis of the architecture or engineering required to evaluate what type of System is appropriate for a building and makes no warranty express or implied as to the suitability of its Products for any particular structure; such a determination is the responsibility of the architect, engineer or design professional; (j) Improper selection of materials for the roof assembly or the failure to accurately calculate wind uplift and/or roof loads; (k) Deterioration to metal roofing materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; or, (l) Change in building use or purpose.
8. **Transfer.** This Limited Warranty shall be transferable subject to Owner's payment of the current transfer fee set by Firestone.
9. **Term.** The term of this Limited Warranty shall be for the period set forth above and such term shall not be extended under any circumstances.
10. **Roof Access:** During the term of this Limited Warranty, Firestone's designated representative or employees shall have free access to the roof during regular business hours. In the event that roof access is limited due to security or other restrictions, Owner shall reimburse Firestone for all reasonable cost incurred during inspection and/or repair of the System that are due to delays associated with said restrictions. Owner shall be responsible for the damage caused by, removal and replacement of any overburdens, superstrata or overlays, either permanent or temporary, excluding accepted stone ballast or pavers, as necessary to expose the system for inspection and/or repair.
11. **Waiver.** Firestone's failure to enforce any of the terms or conditions stated herein shall not be construed as a waiver of such provision or of any other terms and conditions of this Limited Warranty.
12. **Governing Law.** This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Indiana without regard to that State's rules on conflict of laws.
13. **Severability.** If any portion of this Limited Warranty is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force.

FIRESTONE DOES NOT WARRANT PRODUCTS INCORPORATED OR UTILIZED IN THIS INSTALLATION THAT WERE NOT FURNISHED BY FIRESTONE. FIRESTONE SPECIFICALLY DISCLAIMS LIABILITY UNDER ANY THEORY OF LAW ARISING OUT OF THE INSTALLATION OF, PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY FIRESTONE.

THIS LIMITED WARRANTY SUPERSEDES AND IS IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND FIRESTONE HEREBY DISCLAIMS ALL SUCH WARRANTIES. THIS LIMITED WARRANTY SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST FIRESTONE, AND FIRESTONE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGES TO THE BUILDING OR ITS CONTENTS OR THE ROOF DECK. THIS LIMITED WARRANTY CANNOT BE AMENDED, ALTERED OR MODIFIED IN ANY WAY, EXCEPT IN WRITING SIGNED BY AN AUTHORIZED OFFICER OF FIRESTONE. NO OTHER PERSON HAS ANY AUTHORITY TO BIND FIRESTONE WITH ANY REPRESENTATION OR WARRANTY, WHETHER ORAL OR WRITTEN.

FIRESTONE BUILDING PRODUCTS COMPANY, LLC
By: Phil LaDuke

Authorized Signature:

Title: Director, Quality Assurance

Firestone

BUILDING ENVELOPE CARE AND MAINTENANCE GUIDE
(For Red Shield Warranted Roofing Systems)

Congratulations on your purchase of a Firestone Roofing System! Your roof is a valuable asset that should be properly maintained. **All roofs and roofing systems require periodic inspection and maintenance to perform as designed and to keep your Limited Warranty in full force and effect.**

1. The roof should be inspected at least twice yearly and after any severe storms. A record of all inspection and maintenance activities should be maintained, including a listing of the date and time of each activity as well as the identification of the parties performing the activity.
2. Proper maintenance and good roofing practice require that ponded water (defined as water standing on the roof forty-eight hours after it stops raining) not be allowed on the roof. Roofs should have slope to drain, and all drain areas must remain clean. Bag and remove all debris from the roof since such debris can be quickly swept into drains by rain. This will allow for proper water run-off and avoid overloading the roof.
3. The Firestone Roofing System should not be exposed to acids, solvents, greases, oil, fats, chemicals and the like. If the Firestone Roofing System is in contact with any such materials, these contaminants should be removed immediately and any damaged areas should be inspected by a Firestone Licensed Applicator and repaired if necessary.
4. The Firestone Roofing System is designed to be a waterproofing membrane and not a traffic surface. Roof traffic other than periodic traffic to maintain rooftop equipment and conduct periodic inspections should be prohibited. In any areas where periodic roof traffic may be required to service rooftop equipment or to facilitate inspection of the roof, protective walkways should be installed by a Firestone Licensed Applicator as needed to protect the roof surface from damage.
5. Some Firestone roofing membranes require maintenance of the surface of the membrane:
   a. **Smooth-surfaced Firestone APP membranes** should be coated with an approved liquid coating, such as Firestone Aluminum Roof Coating or Firestone AcryliTop applied in accordance with Firestone specifications, in order to maximize the service life of the membrane. If this coating is not applied as part of the initial roofing installation, it should be applied within the first five years after the roof is installed to help protect the membrane from surface crazing and cracking. In addition, this coating should be maintained as needed to re-coat any areas that have blistered, peeled or worn through.
   b. **Granule-surfaced Firestone APP and SBS membranes** do not normally require surface maintenance other than periodic inspection for contaminants, cuts or punctures. If areas of granular loss are discovered during inspection, these areas should be coated with Firestone AcryliTop or other Firestone-approved coating applied in accordance with Firestone specifications.
   c. **Gravel-surfaced Firestone BUR membranes** do not normally require surface maintenance other than periodic inspection for contaminants or damage. If areas of gravel loss are discovered during inspection, gravel must be reinstalled into hot asphalt to protect the surface of the membrane. Coatings on smooth surface BUR membranes must be maintained as needed to re-coat any areas that have blistered, peeled or worn through.
   d. **Firestone EPDM and TPO roofing membranes** do not normally require surface maintenance other than periodic inspection for contaminants, cuts or punctures. Occasionally, approved liquid roof coatings, such as Firestone AcryliTop, are applied to the surface of EPDM membranes in order to provide a lighter surface color. Such coatings do not need to be maintained to assure the performance of the underlying EPDM roof membrane, but some maintenance and re-coating may be necessary in order to maintain a uniform surface appearance.
   e. **Firestone Una-Clad metal roofing panels and trim** do not normally require surface maintenance other than periodic inspection for contaminants or damage. In addition, periodic cleaning of the surface may be required to remove dirt and maintain the aesthetic appearance of the coated metal. Simple washing with plain water using hoses or pressure spray equipment is usually adequate. If cleaning with agents other than water is contemplated, several precautions should be observed: (1) do not use wire brushes, abrasives, or similar cleaning tools which will mechanically abrade the coating surface, and (2) cleaning agents should be tested in an inconspicuous area before use on a large scale.
6. All metal work, including counter-flashings, drains, skylights, equipment curbs and supports, and other Firestone brand rooftop accessories must be properly maintained at all times. Particular attention should be paid to sealants at joints in metal work and flashings. If cracking or shrinkage is observed, the joint sealant should be removed and replaced with new sealant.
7. Any alterations to the roof, including but not limited to roof curbs, pipe penetrations, roof-mounted accessories, and tie-ins to building additions must be performed by a licensed Firestone Licensed Applicator and reported to Firestone. Additional information and reporting forms for roof alterations are available at www.firestonebpco.com.
8. Should you experience a leak:
   (a) Check for the obvious: clogged roof drains, loose counterflashings, broken skylights, open grills or vents, broken water pipes.
   (b) Note conditions resulting in leakage. Heavy or light rain, wind direction, temperature and time of day that the leak occurs are all-important clues to tracing roof leaks. Note whether the leak stops shortly after each rain or continues to drip until the roof is dry. If you are prepared with the facts, the diagnosis and repair of the leak can proceed more rapidly.
   (c) Contact Firestone Warranty Claims at 1-800-830-5612 as soon as possible...but please don't call until you are reasonably sure that the Firestone Roofing System is the cause of the leak.

Firestone feels that the preceding requirements will assist you, the building owner, in maintaining a watertight roof for many years. Your roof is an investment, and maintenance is essential to maximize your return on this important investment.

Firestone
BUILDING PRODUCTS
NOBODY COVERS YOU BETTER™
250 West 96th Street – Indianapolis, IN 46260
1-800-428-4442 * 1-317-575-7000 * FAX 1-317-575-7100
www.firestonebp.com

RECEIVED FEB 2 4 2016

ALLIED

LETTER OF TRANSMITTAL

ROOFING AND SHEETMETAL, INC.
340 PLEASANT VIEW ROAD NEW CUMBERLAND PA 17070-2738
(717) 774-6476 ♦ FAX (717) 774-6477

DATE: 2/22/16	JOB: 51517
ATTENTION:	
RE: SOUTHEAST PUMP STATION	

NEW CUMBERLAND BORO
1120 MARKET STREET
NEW CUMBERLAND PA 17070

GENTLEMEN:

WE ARE SENDING YOU: X ATTACHED ☐ Under separate cover via_____ the following items:
☐ Shop Drawings ☐ Prints ☐ Samples ☐ Specifications
☐ Copy of Letter ☐ Change Order ☐ _____

COPIES	SPECIFICATION	DESCRIPTION
1		FIRESTONE 15-YEAR WARRANTY

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
X For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for correction ☐ Return _____corrected prints
☐ For review and comment ☐ _____

REMARKS:

COPY TO _____ SIGNED: Joanne R Schumacher

If enclosures are not as noted, please notify us at once

WEB SITE ADDRESS: www.alliedroofingpa.com **E-MAIL: sales@alliedroofingpa.com**

RED SHIELD WARRANTY

RED SHIELD ROOFING SYSTEM LIMITED WARRANTY

Warranty No: RD130843 **FBPCO #** AF4639 **Square Footage:** 418 **s.f.**
Building Owner: BOROUGH OF NEW CUMBERLAND
Building Identification: BOROUGH OF NEW CUMBERLAND - SOUTHEAST PUMP STATION
Building Address: 87 WALNUT ALLEY, NEW CUMBERLAND, PA, 17070-0000
Warranty Period Of: FIFTEEN (15) Years, Beginning On: 09/23/15
Roofing Contractor: ALLIED ROOFING & SM CO INC (07088)

For the warranty period indicated above, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, warrants to the Building Owner ("Owner") named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, repair any leak in the Firestone Roofing System ("System").

TERMS, CONDITIONS AND LIMITATIONS

1. **Products Covered.** The System shall mean only the Firestone brand roofing membranes, Firestone brand roofing insulations, Firestone brand roofing metal, and other Firestone brand roofing accessories when installed in accordance with Firestone technical specifications by a Firestone-licensed applicator.
2. **Notice.** In the event any leak should occur in the System, the Owner must give notice in writing or by telephone to Firestone within thirty (30) days of any occurrence of a leak. Written notice may be sent to Firestone at the street address or fax number shown on the reverse side of this Limited Warranty. Evidence of this notice shall be the receipt by Owner of a Firestone Leak Notification Acknowledgement. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the cause of the leak.
3. **Investigation.** If upon investigation, Firestone determines that the leak is not excluded under the Terms, Conditions and Limitations set forth in this Red Shield Roofing System Limited Warranty (the "Limited Warranty"), the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the repair of the leak. Should the investigation reveal that the leak is excluded under the Terms, Conditions and Limitations, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay for these costs shall render this Limited Warranty null and void. Firestone will advise the Owner of the type and/or extent of repairs required to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the unexpired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone-licensed applicator and within 60 days shall render this Limited Warranty null and void.
4. **No Dollar Limit (NDL).** There is no dollar limit placed on warranted leak repairs to the extent such repairs are covered by this Limited Warranty.
5. **Disputes.** Any dispute, controversy or claim between the Owner and Firestone concerning this Limited Warranty shall be settled by mediation. In the event that the Owner and Firestone do not resolve the dispute, controversy or claim in mediation, the Owner and Firestone agree that neither party will commence or prosecute any suit, proceeding, or claim other than in the courts of Hamilton County in the state of Indiana or the United States District Court, Southern District of Indiana, Indianapolis Division. Each party irrevocably consents to the jurisdiction and venue of the above-identified courts.
6. **Payment Required.** Firestone shall have no obligation under this Limited Warranty unless and until Firestone and the licensed applicator have been paid in full for all materials, supplies, services, approved written change orders, warranty costs and other costs which are included in, or incidental to, the System. In the event that repairs not covered by this Limited Warranty are necessary in the future, Firestone reserves the right to suspend this Limited Warranty until such repairs have been completed and the licensed applicator and/or Firestone has been paid in full for such repairs.
   Exclusions. Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a leak or damage is caused by: (a) Natural forces, disasters, or acts of God including, but not limited to, fires, hurricanes, tornadoes, hail, wind-blown debris, lightning, earthquakes, volcanic activity, atomic radiation, insects or animals; (b) Winds of peak gust speed at or in excess of 55 MPH calculated at ten(10) meters above ground using available meteorological data;(c) Act(s), conduct or omission(s) by any person, or act(s) of war, terrorism or vandalism, which damage the System or which impair the System's ability to resist leaks; (d) Failure by the Owner to use reasonable care in maintaining the System, said maintenance to include, but not be limited to, those items listed on the reverse side of this Limited Warranty entitled "Building Envelope Care and Maintenance Guide"; (e) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, skylights etc.; (f) Construction generated moisture, condensation or infiltration of moisture in, from, through, or around the walls, copings, rooftop hardware or equipment, skylights, building structure or underlying or surrounding materials; (g) Acid, oil, harmful chemicals, or the reaction between them; (h) Alterations or repairs to the System that are not completed in accordance with Firestone's published specifications, not completed by an approved contractor, and/or not completed with proper notice to Firestone; (i) The design of the roofing system: Firestone does not undertake any analysis of the architecture or engineering required to evaluate what type of System is appropriate for a building and makes no warranty express or implied as to the suitability of its Products for any particular structure; such a determination is the responsibility of the architect, engineer or design professional; (j) Improper selection of materials for the roof assembly or the failure to accurately calculate wind uplift and/or roof loads;(k) Deterioration to metal roofing materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; or, (l) Change in building use or purpose.
7. **Transfer.** This Limited Warranty shall be transferable subject to Owner's payment of the current transfer fee set by Firestone.
8. **Term.** The term of this Limited Warranty shall be for the period set forth above and such term shall not be extended under any circumstances.
9. **Roof Access.** During the term of this Limited Warranty, Firestone's designated representative or employees shall have free access to the roof during regular business hours. In the event that roof access is limited due to security or other restrictions, Owner shall reimburse Firestone for all reasonable cost incurred during inspection and/or repair of the System that are due to delays associated with said restrictions. Owner shall be responsible for the damage caused by, removal and replacement of any overburdens, superstrata or overlays, either permanent or temporary, excluding accepted stone ballast or pavers, as necessary to expose the system for inspection and/or repair.
10. **Waiver.** Firestone's failure to enforce any of the terms or conditions stated herein shall not be construed as a waiver of such provision or of any other terms and conditions of this Limited Warranty.
11. **Governing Law.** This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Indiana without regard to that State's rules on conflict of laws.
12. **Severability.** If any portion of this Limited Warranty is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force.

FIRESTONE DOES NOT WARRANT PRODUCTS INCORPORATED OR UTILIZED IN THIS INSTALLATION THAT WERE NOT FURNISHED BY FIRESTONE. FIRESTONE SPECIFICALLY DISCLAIMS LIABILITY UNDER ANY THEORY OF LAW ARISING OUT OF THE INSTALLATION OF, PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY FIRESTONE.

THIS LIMITED WARRANTY SUPERSEDES AND IS IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND FIRESTONE HEREBY DISCLAIMS ALL SUCH WARRANTIES. THIS LIMITED WARRANTY SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST FIRESTONE, AND FIRESTONE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGES TO THE BUILDING OR ITS CONTENTS OR THE ROOF DECK. THIS LIMITED WARRANTY CANNOT BE AMENDED, ALTERED OR MODIFIED IN ANY WAY EXCEPT IN WRITING SIGNED BY AN AUTHORIZED OFFICER OF FIRESTONE. NO OTHER PERSON HAS ANY AUTHORITY TO BIND FIRESTONE WITH ANY REPRESENTATION OR WARRANTY WHETHER ORAL OR WRITTEN.

FIRESTONE BUILDING PRODUCTS COMPANY, LLC
By: **Chris Huettig**

Authorized Signature: _____
Title: **Director, Quality Building Services**

Firestone

RECEIVED OCT - 1 2014

ALLIED

LETTER OF TRANSMITTAL

ROOFING AND SHEETMETAL, INC.
340 PLEASANT VIEW ROAD NEW CUMBERLAND PA 17070-2738
(717) 774-6476 ♦ FAX (717) 774-6477

DATE: 9/30/14	JOB:
ATTENTION:	
RE: Pump House	

New Cumberland Borough
1120 Market Street
New Cumberland PA 17070

GENTLEMEN:

WE ARE SENDING YOU:
☐ Shop Drawings
☐ Copy of Letter

X ATTACHED
☐ Prints
☐ Change Order

☐ Under separate cover via_____ the following items:
☐ Samples
☐ Specifications
☐ _____

COPIES	SPECIFICATION	DESCRIPTION
1		Firestone 15-year warranty

THESE ARE TRANSMITTED as checked below:

☐ For approval
X For your use
☐ As requested
☐ For review and comment

☐ Approved as submitted
☐ Approved as noted
☐ Returned for correction
☐ _____

☐ Resubmit _____ copies for approval
☐ Submit _____ copies for distribution
☐ Return _____corrected prints

REMARKS:

COPY TO _____

SIGNED: Joanne M. Schumacher

If enclosures are not as noted, please notify us at once

WEB SITE ADDRESS: www.alliedroofingpa.com

E-MAIL: sales@alliedroofingpa.com

RED SHIELD WARRANTY

RED SHIELD ROOFING SYSTEM LIMITED WARRANTY

Warranty No: RD124210 **FBPCO #** AF0517 **Square Footage:** 135 s.f.
Building Owner: BOROUGH OF NEW CUMBERLAND
Building Identification: BOROUGH OF NEW CUMBERLAND - PUMP HOUSE
Building Address: 1108 CARLISLE ROAD, CAMP HILL, PA, 17011-6202
Warranty Period Of: FIFTEEN (15) Years, Beginning On: 09/22/14
Roofing Contractor: ALLIED ROOFING & SM CO INC (07088)

For the warranty period indicated above, Firestone Building Products Company, LLC ("Firestone"), an Indiana limited liability company, warrants to the Building Owner ("Owner") named above that Firestone will, subject to the Terms, Conditions and Limitations set forth below, repair any leak in the Firestone Roofing System ("System").

TERMS, CONDITIONS AND LIMITATIONS

1. **Products Covered.** The System shall mean only the Firestone brand roofing membranes, Firestone brand roofing insulations, Firestone brand roofing metal, and other Firestone brand roofing accessories when installed in accordance with Firestone technical specifications by a Firestone-licensed applicator.
2. **Notice.** In the event any leak should occur in the System, the Owner must give notice in writing or by telephone to Firestone within thirty (30) days of any occurrence of a leak. Written notice may be sent to Firestone at the street address or fax number shown on the reverse side of this Limited Warranty. Evidence of this notice shall be the receipt by Owner of a Firestone Leak Notification Acknowledgement. By so notifying Firestone, the Owner authorizes Firestone or its designee to investigate the cause of the leak.
3. **Investigation.** If upon investigation, Firestone determines that the leak is not excluded under the Terms, Conditions and Limitations set forth in this Red Shield Roofing System Limited Warranty (the "Limited Warranty"), the Owner's sole and exclusive remedy and Firestone's total liability shall be limited to the repair of the leak. Should the investigation reveal that the leak is excluded under the Terms, Conditions and Limitations, the Owner shall be responsible for payment of the investigation costs. Failure by Owner to pay for these costs shall render this Limited Warranty null and void. Firestone will advise the Owner of the type and/or extent of repairs required to be made at the Owner's expense that will permit this Limited Warranty to remain in effect for the unexpired portion of its term. Failure by the Owner to properly make these repairs in a reasonable manner using a Firestone-licensed applicator and within 60 days shall render this Limited Warranty null and void.
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7. **Exclusions.** Firestone shall have no obligation under this Limited Warranty, or any other liability, now or in the future if a leak or damage is caused by: (a) Natural forces, disasters, or acts of God including, but not limited to, fires, hurricanes, tornadoes, hail, wind-blown debris, lightning, earthquakes, volcanic activity, atomic radiation, insects or animals; (b) Winds of peak gust speed at or in excess of 55MPH calculated at ten(10) meters above ground using available meteorological data; (c) Act(s), conduct or omission(s) by any person, or act(s) of war, terrorism or vandalism, which damage the System or which impair the System's ability to resist leaks; (d) Failure by the Owner to use reasonable care in maintaining the System, said maintenance to include, but not be limited to, those items listed on the reverse side of this Limited Warranty entitled "Building Envelope Care and Maintenance Guide"; (e) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, skylights etc.; (f) Construction generated moisture, condensation or infiltration of moisture in, from, through, or around the walls, copings, rooftop hardware or equipment, skylights, building structure or underlying or surrounding materials; (g) Acid, oil, harmful chemicals, or the reaction between them; (h) Alterations or repairs to the System that are not completed in accordance with Firestone's published specifications, not completed by an approved contractor, and/or not completed with proper notice to Firestone; (i) The design of the roofing system. Firestone does not undertake any analysis of the architecture or engineering required to evaluate what type of System is appropriate for a building and makes no warranty express or implied as to the suitability of its Products for any particular structure; such a determination is the responsibility of the architect, engineer or design professional; (j) Improper selection of materials for the roof assembly or the failure to accurately calculate wind uplift and/or roof loads; (k) Deterioration to metal roofing materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; or, (l) Change in building use or purpose.
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11. **Waiver.** Firestone's failure to enforce any of the terms or conditions stated herein shall not be construed as a waiver of such provision or of any other terms and conditions of this Limited Warranty.
12. **Governing Law.** This Limited Warranty shall be governed by and construed in accordance with the laws of the State of Indiana without regard to that State's rules on conflict of laws.
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FIRESTONE BUILDING PRODUCTS COMPANY, LLC
By: Phil LaDuke

Authorized Signature:
Title: Director, Quality Assurance

Firestone

BUILDING SEWER CONNECTION AGREEMENT ON POPLAR AVE - #90 & #94

(92)

Schedule 4.1(1)(i)

AGREEMENT

THIS AGREEMENT, made as of this 29TH day of MARCH, 1995, by and among LOWER ALLEN TOWNSHIP AUTHORITY, a Pennsylvania municipal authority having its principal office at 120 Limekiln Road, New Cumberland, Pennsylvania (herein "AUTHORITY"), MELVIN K. JOHNSON and HELEN S. JOHNSON, his wife, of Lower Allen Township, Cumberland County, Pennsylvania (herein "JOHNSONS"), GRACE MARGARET SWIFT, of Lower Allen Township, Cumberland County, Pennsylvania (herein "SWIFT") and RICHARD M. SPOHN, JR. and RENEE SPOHN, his wife, of New Cumberland, Cumberland County, Pennsylvania, and BOROUGH OF NEW CUMBERLAND, a Pennsylvania municipal corporation, having its principal office at 1120 Market Street, New Cumberland, Cumberland County, Pennsylvania (herein "BOROUGH").

WITNESSETH:

WHEREAS, RICHARD M. SPOHN, JR. and RENEE SPOHN, his wife, (herein "SPOHNS") are the owners of the house and lot situate at 94 Poplar Avenue, Lower Allen Township, Cumberland County, Pennsylvania, more particularly bounded and described as set forth in Cumberland County Deed Book Y-27-387, tax parcel number 13-25-0008-068 (herein SPOHN PROPERTY"); and

WHEREAS, GRACE MARGARET SWIFT, (herein "SWIFT") is the owner of the house and lot situate at 92 Poplar Avenue, Lower Allen Township, Cumberland County, Pennsylvania, more particularly bounded and described as set forth in Cumberland County Deed Book C-21-76, tax parcel number 13-25-0008-067 (herein "SWIFT

PROPERTY"), and has entered into an Agreement made as of May 5, 1994, with AUTHORITY dealing with the PROJECT; and

WHEREAS, MELVIN K. JOHNSON and HELEN S. JOHNSON, his wife, (herein "JOHNSONS") are the owners of the house and lot situate at 90 Poplar Avenue, Lower Allen Township, Cumberland County, Pennsylvania, more particularly bounded and described as set forth in Cumberland County Deed Book F-22-8, tax parcel number 13-25-0008-066 (herein "JOHNSON PROPERTY"), and have entered into an Agreement made as of May 5, 1994, with AUTHORITY dealing with the PROJECT; and

WHEREAS, SPOHNS, SWIFT and JOHNSONS have made application to AUTHORITY for permission to construct or cause to be constructed, at the sole cost and expense of SPOHNS, SWIFT and JOHNSONS, a force main in the right-of-way of Poplar Avenue (herein "PROJECT") and then to connect same to the existing sanitary sewer collection, transportation and treatment system of BOROUGH, such application having been made after SPOHNS, SWIFT and JOHNSONS have received information from officials of AUTHORITY as to the optional methods by which such construction and connection may be accomplished and the relative costs and expenses thereof under the uniform rules and regulations of the AUTHORITY and Ordinances of Lower Allen Township and of BOROUGH; and

WHEREAS, AUTHORITY and BOROUGH acknowledge that SPOHNS, SWIFT and JOHNSONS desire sanitary sewer service from BOROUGH due to the location of the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY

which are within approximately 300 feet of the sanitary sewer system of BOROUGH and are approximately 2,800 feet from the sanitary sewer system of AUTHORITY; and

WHEREAS, AUTHORITY and BOROUGH acknowledge that SPOHNS, SWIFT and JOHNSONS propose to construct or cause to be constructed the PROJECT; and

WHEREAS, BOROUGH is willing to permit the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY to connect to the sanitary sewer collection system of BOROUGH if AUTHORITY agrees to own and repair, operate and maintain and replace the force main and all parts and appurtenances thereof; and

WHEREAS, AUTHORITY and BOROUGH agree that SPOHNS, SWIFT and JOHNSONS will construct or cause to be constructed and be responsible for repair, operation and maintenance or replacement of the force main up to the point of connection with the sanitary sewer collection system of BOROUGH as set forth in the plans and specifications attached hereto.

NOW, THEREFORE, AUTHORITY, BOROUGH, SPOHNS, SWIFT and JOHNSONS, intending to be legally bound according to law, mutually agree as follows:

1. AUTHORITY shall require SPOHNS, SWIFT and JOHNSONS, at their sole cost and expense, to prepare, by qualified professional engineering personnel, detailed plans and specifications for the proposed connection in accordance with all applicable rules and

regulations of AUTHORITY and Ordinances of Lower Allen Township and BOROUGH, as follows:

(a) Said plans and specifications shall be drawn or imprinted upon sheets of the same size and dimensions, shall be drawn to the same scale and shall incorporate the same data as the plans and specifications, as amended and supplemented, of the existing sewer system of BOROUGH.

(b) The plans and specifications of SPOHNS, SWIFT and JOHNSONS, shall be furnished to the Manager of AUTHORITY and Manager of BOROUGH in at least three (3) copies.

(c) Upon receipt of such plans and specifications, AUTHORITY shall cause same to be submitted to the Consulting Engineer of AUTHORITY and to Consulting Engineer of BOROUGH. Said plans and specifications shall be revised or amended, if necessary, until they are [unequivocally approved by the Consulting Engineer of AUTHORITY and Consulting Engineer of BOROUGH as providing for a connection of a type and nature and so planned and to be constructed as to readily become an integral part of the sanitary sewer system of BOROUGH.]

(d) Promptly upon receipt of the approval of the Consulting Engineer of AUTHORITY and Consulting Engineer of BOROUGH, the approved plans and specifications shall be submitted by the AUTHORITY to DER together with a permit application with respect thereto. Upon receipt of such permit and upon compliance by SPOHNS, SWIFT and JOHNSONS with all

rules and regulations of AUTHORITY and ordinances of Lower Allen Township and the BOROUGH, AUTHORITY will notify SPOHNS, SWIFT and JOHNSONS that work may be started on the PROJECT.

2. SPOHNS, SWIFT and JOHNSONS shall construct or cause to be constructed the force main and grinder pump according to the approved plans and specifications, and AUTHORITY and BOROUGH shall have no responsibility or liability for payment for any part of the cost or expenses arising out of or relating to construction or labor, materials and equipment used therein or thereon, or for injury or damage to any person or property occurring upon or associated with the construction of the PROJECT.

3. To the extent permitted by law, AUTHORITY will apply for a Highway Occupancy Permit from the Pennsylvania Department of Transportation (herein "PennDOT") in the name of AUTHORITY and post such bond as may be required. SPOHNS, SWIFT and JOHNSONS shall pay all charges and fees, including but not limited to any premium by a bonding company with respect to the issuance of any necessary bond and inspection fees of PennDOT, AUTHORITY, and BOROUGH. In addition, SPOHNS, SWIFT and JOHNSONS shall comply with the following conditions and terms:

(a) SPOHNS, SWIFT and JOHNSONS, regardless of whether the work is performed by SPOHNS, SWIFT or JOHNSONS or by a contractor for SPOHNS, SWIFT or JOHNSONS, shall fully indemnify and save harmless and defend PennDOT, the AUTHORITY and BOROUGH, its agents, employees, members, solicitors,

consulting engineer, of and from any liability for damage or injury occurring to any person or property through or in consequence of any act or omission of SPOHNS, SWIFT or JOHNSONS, any contractor, agent, servant, employee, or person engaged or engaged in, about, or upon, the work by, at the instance, with the approval of, or consent of SPOHNS, SWIFT or JOHNSONS, or their contractor or subcontractor, for any failure to comply with the permit or terms and provisions of 67 Pa. Code Ch. 459. SPOHNS, SWIFT and JOHNSONS shall have PennDOT, AUTHORITY, and BOROUGH added as additional insureds to their or their contractor's insurance policy to secure the SPOHNS, SWIFT and JOHNSONS' indemnification of PennDOT, AUTHORITY and BOROUGH for property damage or personal injury under this paragraph. The coverage of PennDOT, AUTHORITY and BOROUGH as an additional insured shall be limited to the acts or omissions of SPOHNS, SWIFT and JOHNSONS or their contractor, as hereinbefore described. The amount of insurance shall be at least Two Hundred Fifty Thousand ($250,000.00) Dollars per person and at least One Million $1,000,000.00) Dollars per occurrence, or other statutory limitation on damages as the General Assembly may establish. The policy shall be of a duration satisfactory to PennDOT, AUTHORITY, and BOROUGH. Upon request, SPOHNS, SWIFT and JOHNSON shall deliver to the District Office of PennDOT,

AUTHORITY, and BOROUGH certificates of insurance evidencing that the coverage required hereunder has been obtained.

(b) Work authorized by the permit is subject to:

(1) Applicable laws, rules and regulations, including but not limited to:

(A) The act of October 26, 1972 (P.L. 1017, No. 247) (53 P.S. §1611), concerning environmental control measures related to pollution and the preservation of public natural resources.

(B) The act of December 10, 1974 (P.L. 852, No. 287) (73 P.S. §§176-182), concerning protection of the public health and safety by preventing excavation or demolition work from damaging underground utility facilities.

(C) The Clean Streams Law (35 P.S. §§691.1-691.1001).

(D) O.S.H.A. construction safety and health regulations at 29 CFR 1926.1-1926.1051.

(E) Title VI, Civil Rights Act of 1964 (23 U.S.C. §§140 and 315) and implementing regulations.

(F) The Federal Highway Program Manual--Volume 6, Chapter 6, section 3.

(G) Title 66 if the *Pennsylvania Consolidated Statutes* §§ 2701-2706 (relating to railroads), in instances where the Pennsylvania Public Utility

Commission has taken jurisdiction of a public rail-highway crossing.

(2) The rights of any person.

(3) The conditions, restrictions and provisions of the permit.

(c) Work shall conform to PennDOT standards, including the following:

(1) The work shall be done at a time and in a manner consistent with the safety of the public and conform to requirements and standards of PennDOT, including, but not limited to, Publication 408.

(2) Highway materials shall be obtained from PennDOT approved sources which are identified in current PennDOT Publication Numbers 34, 35, 41 and 42. Upon request, SPOHNS, SWIFT and JOHNSONS shall make available for review certifications for backfill and restoration materials placed within the approved area.

(3) If it is found by PennDOT that the work is not being done or has not been properly performed, SPOHNS, SWIFT and JOHNSONS shall promptly take the necessary steps, at their own expense, to place the work in condition to conform to the requirements or standards.

(4) If a dispute arises between SPOHNS, SWIFT or JOHNSONS and PennDOT's inspector, PennDOT's inspector has

the authority to suspend work until the question at issue may be referred to and decided by the district office.

(c) SPOHNS, SWIFT and JOHNSONS' responsibilities include the following:

(1) SPOHNS, SWIFT and JOHNSONS shall pay the costs and expenses incident to or arising from the PROJECT, including the prescribed fees for the PROJECT, the cost of making and maintaining temporary restoration of the disturbed areas and making permanent restoration. SPOHNS, SWIFT and JOHNSONS shall reimburse PennDOT for inspection costs which PennDOT deems necessary to incur within 30 days after receipt of PennDOT's invoice.

(2) At the end of a workday, an opening in the right-of-way shall be covered, backfilled or protected under 67 Pa. Code §459.8(d)(2) (relating to special conditions--subsurface operations). If work is stopped on the PROJECT, other than at the end of a normal workday, SPOHNS, SWIFT and JOHNSONS shall promptly backfill the opening and restore the surface, and work may not be resumed until SPOHNS, SWIFT or JOHNSONS are prepared to proceed with the work to its completion. If SPOHNS, SWIFT and JOHNSONS fail to backfill the opening or proceed until completion of the work, PennDOT reserves the right to do the work upon notice to SPOHNS, SWIFT and JOHNSONS, where practicable, and shall be reimbursed for

the costs by SPOHNS, SWIFT and JOHNSONS within 30 days after receipt of PennDOT's invoice.

(3) If SPOHNS, SWIFT and JOHNSONS, after making an opening in the surface to replace or repair a facility or for another purpose, fail to restore a portion of the right-of-way to conform with §459.7 and §459.8 and §459.9 (relating to special conditions, above-ground facilities), PennDOT reserves the right to do the work upon notice to SPOHNS, SWIFT and JOHNSONS, if practicable, and SPOHNS, SWIFT and JOHNSONS shall reimburse PennDOT for the costs within 30 days after receipt of PennDOT's invoice.

(4) If backfill or restoration work will be performed for SPOHNS, SWIFT and JOHNSONS by a contractor, SPOHNS, SWIFT and JOHNSONS shall identify to PennDOT both its contractor and its inspector-in-charge who shall be assigned to monitor backfill and restoration work performed within the improved area. SPOHNS, SWIFT and JOHNSONS' inspector-in-charge, as well as SPOHNS, SWIFT and JOHNSONS, are responsible for ensuring work is performed in compliance with the permit, 67 Pa. Code Ch. 459, and Publication 408 and Design Manual, Parts 2 and 5.

(5) SPOHNS, SWIFT and JOHNSONS shall verify that no person debarred under 67 Pa. Code §459.3(1) (relating to

permit application procedure) is allowed to perform permitted work or direct permitted work within State highway right-of-way.

(6) SPOHNS, SWIFT and JOHNSONS shall notify the district office at least 3 full workdays prior to the start of work when the permit identifies that the permitted work will be inspected on a more than spot inspection basis.

(d) Altering drainage shall be prohibited by the following conditions:

(1) Unless specifically authorized by the permit, SPOHNS, SWIFT and JOHNSONS may not:

(A) Alter the existing drainage pattern or the existing flow of drainage water.

(B) Direct additional drainage of surface water toward, onto, or into or in any way affect the highway right-of-way or highway facilities.

(2) The permit does not authorize SPOHNS, SWIFT and JOHNSONS to direct, divert or otherwise drain surface waters over the property of another property owner.

(A) The permit does not relieve SPOHNS, SWIFT and JOHNSONS from acquiring the consent, permission or other authorization from a property owner who may be adversely affected by drainage alterations.

(B) SPOHNS, SWIFT and JOHNSONS are responsible for damage caused to property owners as a result of work done under the permit.

(e) Poplar Avenue shall be protected in accordance with the following:

(1) To protect the pavement and shoulders, equipment shall have rubber wheels or runners and have rubber, wood or similar protective pads between the outriggers and the surface unless otherwise authorized by the permit.

(2) If other than rubber equipped machinery or equipment is used, the pavement and shoulders shall be protected from equipment damage by the use of matting or other suitable protective material, unless SPOHNS, SWIFT and JOHNSONS request, in writing, a waiver from the use of protective material, thereby acknowledging their obligation and commitment to repair or reconstruct the pavement and shoulder, if damaged, to its former condition.

(3) If the equipment damages the pavement or shoulders, SPOHNS, SWIFT and JOHNSONS shall restore the damaged pavement or shoulder, or both, to its former condition, in a manner authorized by the district office.

(4) The district office may authorize SPOHNS, SWIFT and JOHNSONS to restore the pavement or shoulder from

superficial surface damage with a seal coat or surface treatment.

(f) Maintenance and protection of traffic shall be carried out by SPOHNS, SWIFT and JOHNSONS under 75 Pa.C.S. §6123 (relating to erection of traffic-control devices while working), the approved traffic control plan and the applicable provisions of Chapter 203 (relating to work zone traffic control).

(g) No permit application will be approved for occupancy of a section of right-of-way within which a highway construction or reconstruction project is underway, or if a contract for such a project has been let, until the PROJECT is completed and accepted by PennDOT, unless the application is accompanied by an attested certificate signed by the contractor or other authority constructing the PROJECT, consenting to the proposed work of the applicant within the right-of-way, together with a waiver, release and quitclaim to PennDOT of damages and defenses for delays by reason of that work and occupation of the right-of-way by SPOHNS, SWIFT and JOHNSONS, or from a cause resulting by reason of that work and occupation. This paragraph does not apply:

(1) To an emergency. In an emergency, SPOHNS, SWIFT and JOHNSONS shall procure the consent of PennDOT to do the work as deemed necessary to correct the

existing emergency condition under §459.6 (relating to emergency work).

(2) If SPOHNS, SWIFT and JOHNSONS have been authorized by PennDOT to relocate or adjust their facilities simultaneously with highway construction, under applicable provisions of Design Manual, Part 5.

(h) SPOHNS, SWIFT and JOHNSONS shall obtain, prior to the start of work, a policy of insurance, issued by an insurer having a certificate of authority and a licensed agent authorized to transact the business of insurance in this Commonwealth, in accordance with the following conditions:

(1) SPOHNS, SWIFT and JOHNSONS or their contractor shall obtain insurance for public liability and property damage, in form, amount and duration satisfactory to PennDOT to cover a loss that may be incurred for construction, reconstruction, repair, relocation or installation of the permitted structure or facilities.

(2) If blasting is authorized by the permit under paragraph (i), the insurance coverage shall include property damage and personal injury occasioned by blasting. In addition, the insurance policy shall provide coverage for damage to the highways, highway structures and appurtenances or other PennDOT property and shall be in an amount satisfactory to PennDOT, AUTHORITY and BOROUGH.

(3) Upon request, SPOHNS, SWIFT and JOHNSONS shall deliver to the district office certificates of insurance evidencing that the insurance coverage required under subparagraphs (1) and (2) has been obtained. PennDOT, AUTHORITY and BOROUGH may accept a formalized plan of self-insurance as a substitute for the insurance described in this subparagraph.

(4) SPOHNS, SWIFT and JOHNSONS' obligations to indemnify PennDOT, AUTHORITY and BOROUGH and obtain insurance to secure indemnification under paragraph (g) and its obligations to restore the highway and obtain a bond relating to restoration under paragraph (l) are separate obligations from obtaining insurance for the purposes required under this paragraph. Obtaining insurance under this paragraph does not relieve SPOHNS, SWIFT and JOHNSONS of their obligations under paragraphs (g) and (l).

(i) Blasting requirements include the following:

(1) No predrilling or blasting may be performed within the right-of-way unless authorized by the permit and until SPOHNS, SWIFT and JOHNSONS provide insurance for property damage and public liability under paragraph (h).

(2) The blaster's license number shall be furnished upon request.

(3) No blasting will be permitted within 50 feet of the nearest part of a bridge, box or culvert.

(4) SPOHNS, SWIFT and JOHNSONS' obligation for restoration of the highway under paragraph (l) shall include failure of the highway occasioned by blasting.

(j) As long as SPOHNS, SWIFT and JOHNSONS operate and leave in place structures or facilities, in, upon or along the right-of-way, SPOHNS, SWIFT and JOHNSONS shall maintain and keep them in good order and repair.

(k) If a structure or facility becomes damaged, SPOHNS, SWIFT and JOHNSONS shall promptly have it removed, repaired or otherwise made safe. SPOHNS, SWIFT and JOHNSONS are responsible for repair or restoration of the portion of the highway damaged by a structure or facility. SPOHNS, SWIFT and JOHNSONS' obligation to repair or restore the highway necessitated by a damaged structure or facility under this paragraph is separate from the obligations to restore the highway and obtain a bond relating to restoration and maintenance of the highway under §459.5(b) (relating to issuance of permits). Compliance with paragraph (l) does not relieve the SPOHNS, SWIFT and JOHNSONS of its obligations under this paragraph.

(l) Responsibility of SPOHNS, SWIFT and JOHNSONS for restoration of the highway includes the following:

(1) If there is a failure of the highway, including a slope or other appurtenance thereto, in the area of the permitted work within 2 years after the acknowledged completion of the permitted work and there is no similar failure of the highway beyond the area of the permitted work, SPOHNS, SWIFT and JOHNSONS have absolute responsibility to make temporary and permanent restoration of this area unless SPOHNS, SWIFT and JOHNSONS deliver clear and convincing evidence to the district office demonstrating that the highway failure was caused by another person.

(2) In situations where SPOHNS, SWIFT and JOHNSONS have the responsibility to restore the highway, including slope or another appurtenance thereto, under subparagraph (1), SPOHNS, SWIFT and JOHNSONS have the duty to restore the improved area in accordance with the permit. If SPOHNS, SWIFT and JOHNSONS fail to restore the improved area properly, PennDOT, AUTHORITY or BOROUGH will have the authority to do the work at the expense of SPOHNS, SWIFT and JOHNSONS. SPOHNS, SWIFT and JOHNSONS shall reimburse PennDOT, AUTHORITY or BOROUGH for the costs within 30 days after receipt of PennDOT, AUTHORITY or BOROUGH's invoice.

(3) The obtaining of a bond, other security or an agreement described in §459.5(b) to secure restoration

costs does not relieve SPOHNS, SWIFT and JOHNSONS of the restoration obligations imposed by subparagraph (1) and (2), nor does it relieve SPOHNS, SWIFT and JOHNSONS of their obligations under paragraphs (g) and (h). The obtaining of a bond, other security or an agreement will not act as a release of SPOHNS, SWIFT and JOHNSONS from liability under principles of tort law with respect to a failure of the highway in the permitted area occurring after the expiration of the bond, other security or agreement.

(m) If in the future the highway is altered for public convenience or necessity, SPOHNS, SWIFT and JOHNSONS shall at their own cost and expense, change or relocate all or a part of the structures or facilities authorized by the permit which interfere with the highway alterations or which is inconsistent with the purpose of the highway alterations.

(n) Acknowledgement, by the inspector of PennDOT, AUTHORITY or BOROUGH that all or part of the permitted work has been completed, does not constitute approval or acceptance of the work or agreement that the work was performed in accordance with the permit. Acknowledgement of completion by the inspector will not act as a release of SPOHNS, SWIFT and JOHNSONS or waiver by PennDOT of its right to seek performance or restitution from SPOHNS, SWIFT and JOHNSONS.

4. During the course of construction, all materials and workmanship shall comply with the approved plans and specifications and shall be subject to the inspection and approval of the designated representative of AUTHORITY or BOROUGH, including the Consulting Engineer of AUTHORITY or BOROUGH. Final inspection shall include air testing, flushing and internal television, if deemed necessary by AUTHORITY or BOROUGH. Upon completion of the construction and prior to connection of the PROJECT to the sanitary sewer collection system of BOROUGH, the professional engineer for SPOHNS, SWIFT and JOHNSONS shall certify, in writing, the satisfactory completion of the PROJECT to AUTHORITY and BOROUGH.

5. To the extent applicable, SPOHNS, SWIFT and JOHNSONS shall comply with or cause their contractor to comply with the provisions of 67 Pa. Code Section 459.8 (dealing with special conditions - subsurface operations).

6. SPOHNS, SWIFT and JOHNSONS agree that the aforesaid construction and installation will be completed within one (1) year from the date hereof.

7. SPOHNS, SWIFT and JOHNSONS shall deposit with the Authority financial security in an amount sufficient to cover the cost of all required improvements. The financial security shall guarantee performance of this Agreement in completion of the improvements by SWIFT and JOHNSONS in strict accordance with the approved Plan, specifications, schedules, plat, rules and regulations of the Authority and DER permit. The financial

security shall be (corporate surety bond) (irrevocable letter of credit) (escrow agreement) in the amount equal to one hundred ten (110%) percent of the costs of the required improvements and estimated cost of eminent domain proceedings for which the financial security is to be posted, if eminent domain proceedings are necessary.

8. The cost of improvements shall be established in the following manner:

(a) By submission to the Authority of a bona fide bid or bids from the contractor or contractors chosen by SPOHNS, SWIFT and JOHNSONS to complete the improvements, or

(b) In the absence of such bona fide bid or bids, the costs shall be established by estimates prepared by the Consulting Engineer.

9. If SPOHNS, SWIFT and JOHNSONS require more than one (1) year from the date of posting of such financial security to complete the required improvements, the amount of such financial security shall be increased by an additional (10%) percent for each one (1) year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one hundred ten (110%) percent of the cost of completing the required improvements as re-established on or about the expiration of the preceding one (1) year period by using the above bidding procedure or, in the absence of such bidding procedure, as established by estimates prepared by the Consulting Engineer. Any such increase in

financial security shall be delivered to the Authority, not later than the applicable anniversary date, subject to the provisions of this Agreement.

10. If the aforesaid improvements are not completed within said period of time and SPOHNS, SWIFT and JOHNSONS fail to increase the security as provided in paragraph 8 hereof or if the said improvements are not constructed and installed in strict compliance with the provisions of this Agreement or instructions of the Consulting Engineer or applicable laws and regulations of the Commonwealth of Pennsylvania, the corporate surety or financial institution shall immediately turn over to the Authority so much of the financial security as is requested by the Authority in writing so that the Authority may make or complete the aforesaid improvements.

11. The Authority shall be the sole judge as to whether the improvements are constructed and installed in strict accordance with the provisions of this Agreement or instructions of the Authority Engineer.

12. Subject to retention of ten (10%) percent of the estimated cost of the aforesaid improvements, as the work of installing the required improvements proceeds, SPOHNS, SWIFT and JOHNSONS may request the Authority to release or authorize the release, from time to time, of such portions of the financial security necessary for payment to the contractor or contractors performing the work. Any such request shall be in writing

addressed to the Authority. The Authority shall have forty-five (45) days from receipt of such request within which to allow the Consulting Engineer to certify, in writing, to the Authority that such portion of the work upon the improvements has been completed in accordance with the standards and specifications of the Ordinance or the instructions of the Consulting Engineer. Upon such certification, the Authority shall authorize the release by Escrow Agent of an amount estimated by the Consulting Engineer fairly representing the value of the improvements completed, subject to the aforesaid retention of ten (10%) percent of the estimated cost of the aforesaid improvements. If the Authority fails to act within said forty-five (45) day period, the Authority shall be deemed to have approved the release of funds as requested, subject to retention of ten (10%) percent of the estimated cost of the aforesaid improvements.

13. When SPOHNS, SWIFT and JOHNSONS have completed all of the required improvements, SPOHNS, SWIFT and JOHNSONS shall notify the Authority in writing, by certified or registered mail, of the completion of the aforesaid improvements and shall send a copy thereof to the Consulting Engineer.

(a) The Consulting Engineer shall, within ten days after receipt of such notice, perform a final inspection of the required improvements.

(b) The Consulting Engineer shall thereupon file a report, in writing, with the Board and shall promptly mail a copy of the same to SPOHNS, SWIFT and JOHNSONS by certified or

registered mail. The report shall be made and mailed within thirty days after receipt of such notice by the Consulting Engineer.

(c) The report shall be detailed and shall indicate approval or rejection of such improvements, or any portion thereof, are not approved or are rejected by the Consulting Engineer, the report shall contain a statement of the reasons for non-approval or rejection.

(d) The Authority shall notify SPOHNS, SWIFT and JOHNSONS in writing by certified or registered mail, of the action of the governing body with relation thereto within fifteen (15) days after receipt of the Consulting Engineer's report.

(e) If the Authority or the Consulting Engineer fails to comply with the time limitation provisions contained herein, all improvements will be deemed to have been approved and SPOHNS, SWIFT and JOHNSONS shall be released of all liability, except as set forth in paragraphs 12 and 14 hereof.

(f) If any portion of the improvements are not approved or are rejected by the Authority, SPOHNS, SWIFT and JOHNSONS shall proceed to complete the same, and upon completion the same procedure of notification as listed above shall be followed.

14. Prior to the acceptance by the Authority of all or some of the required improvements, SPOHNS, SWIFT and JOHNSONS shall post financial security to secure structural integrity of said improvements as well as the functioning of said improvements in

accordance with the design, specifications, and schedules for a term of eighteen (18) months from the date of acceptance thereof by the Authority.

(a) Said financial security shall be of the same type as required by subsection 4b of the Subdivision and Land Development Resolution of the Authority.

(b) The amount of such financial security shall be fifteen (15%) percent of the actual costs of installation of said improvements.

15. Upon completion of such improvements and as a condition of acceptance by Authority, SPOHNS, SWIFT and JOHNSONS shall submit to Authority an affidavit, waiver of mechanics liens and such other satisfactory evidence as Authority may require, that all labor, material, rental, contractors and subcontractors used, supplied, furnished or employed in the construction of such improvements have been paid.

16. SPOHNS, SWIFT and JOHNSONS shall comply with the following conditions upon completion of the PROJECT:

(a) Cause to be prepared and furnished to AUTHORITY and BOROUGH, at the expense of SPOHNS, SWIFT and JOHNSONS, "as-built" drawings of the completed facilities.

(b) Cause to be prepared, executed, acknowledged and delivered to AUTHORITY, at the sole expense of SPOHNS, SWIFT and JOHNSONS, an appropriate instrument or instruments for the conveyance of the force main and all parts and appurtenances

thereof, as well as all rights, liberties and privileges, including easements and rights-of-way, if any, necessary, to the existence, operation and maintenance thereof, said conveyance to be free and clear of all liens and encumbrances.

17. This Agreement is not intended to and shall not obligate the AUTHORITY or BOROUGH to take by eminent domain proceedings any necessary easement or right-of-way.

18. Upon receipt of said instrument or instruments of transfer, AUTHORITY agrees that the force main and all parts and appurtenances thereof shall be, become and remain the sole, absolute property of AUTHORITY, its successors and assigns, free and clear of all liens, obligations or liabilities in favor of SPOHNS, SWIFT and JOHNSONS, their heirs and assigns, or contractors and their laborers and materialmen, and any of their creditors or in favor of any person or corporation, to the same end and effect as if AUTHORITY constructed the same with its own labor and at its own expense.

19. SPOHNS, SWIFT and JOHNSONS shall perform at any time any required maintenance, repair, or replacement of the force main and all parts and appurtenances thereof, and SPOHNS, SWIFT and JOHNSONS shall be liable and responsible for all damage to any person or property occurring upon, caused by or associated therewith. SPOHNS, SWIFT and JOHNSONS shall pay and be responsible for the cost of maintenance, repair, and operation of said force main and

all parts and appurtenances thereof. In the event that SPOHNS, SWIFT and JOHNSONS fail to comply with the terms and provisions of this paragraph 19, and AUTHORITY pays for the unpaid cost of maintenance, repair, and operation of said force main and all parts and appurtenances thereof, AUTHORITY may institute appropriate legal proceedings against SPOHNS, SWIFT and/or JOHNSONS seeking reimbursement therefor.

20. In the event that gravity sanitary sewer service from AUTHORITY becomes available to the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY, SPOHNS, SWIFT and JOHNSONS shall connect to such service upon written notice thereof from AUTHORITY. In the event the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY connect to any sanitary sewer service other than the sanitary sewer service operated by BOROUGH, this agreement shall become immediately null and void. AUTHORITY, SPOHNS, SWIFT and JOHNSONS agree to assume all responsibility and costs associated with termination and cessation of all sewage flow from the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY to the BOROUGH sanitary sewer collection system at no expense to BOROUGH.

21. AUTHORITY shall require that SPOHNS, SWIFT and JOHNSONS pay BOROUGH for sanitary sewer services as rendered and established in accordance with the rules, regulations, resolutions and Ordinances of BOROUGH which impose charges or fees for sanitary sewer services which will be provided to the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY. In the event either SPOHNS, SWIFT

or JOHNSONS fail to pay BOROUGH for said charges or fees for sanitary sewer services, BOROUGH shall be without prejudice to pursue any action at law or equity against AUTHORITY for recovery of the said charges or fees for sanitary sewer services provided to the SPOHN PROPERTY, SWIFT PROPERTY and JOHNSON PROPERTY. AUTHORITY shall assume full responsibility for failure of SPOHNS, SWIFT and JOHNSONS, their heirs, personal representatives, successors and assigns to pay charges or fees for sanitary sewer service to BOROUGH.

22. AUTHORITY and BOROUGH agree that no other person, corporation, business entity or property within Lower Allen Township shall connect to the PROJECT without specific approval and written agreement executed by SPOHNS, SWIFT, JOHNSONS, AUTHORITY and BOROUGH. In the event AUTHORITY, SPOHNS, SWIFT or JOHNSONS authorize or permit any additional connections to the PROJECT without the specific approval of BOROUGH, any attorney's fees, costs and expenses incurred by BOROUGH through any resulting action in law or equity, including the initiation of injunctive relief by BOROUGH, shall be the responsibility of AUTHORITY, SPOHNS, SWIFT and JOHNSONS.

23. AUTHORITY, SPOHNS, SWIFT and JOHNSONS shall indemnify, save harmless and defend and BOROUGH, their agents, employees, members, solicitors and Consulting Engineers, of and from any and all liability for damage or injury occurring to any person or persons or property through or in consequence of the AUTHORITY'S

ownership of said force main and all parts and appurtenances thereof for any defect or for failure, neglect or refusal of AUTHORITY, SPOHNS, SWIFT and JOHNSONS to maintain, repair, operate, or, if necessary, replace said force main and all parts and appurtenances thereof, including reasonable attorney's fees and costs incurred by BOROUGH with respect thereto. In the event that SPOHNS, SWIFT and JOHNSONS fail to comply with the terms and provisions of this Paragraph 23, and AUTHORITY pays for the items herein set forth, AUTHORITY may institute appropriate legal proceedings against SPOHNS, SWIFT and/or JOHNSONS seeking reimbursement therefor.

24. AUTHORITY shall be responsible for obtaining all PennDOT, DER or other approvals and permits. BOROUGH shall cooperate to the extent necessary to obtain such approvals and permits.

25. In the event of failure of SPOHNS, SWIFT or JOHNSON to complete the PROJECT, AUTHORITY shall not be obligated to complete the PROJECT. If AUTHORITY elects not to complete the PROJECT, restoration of Poplar Avenue shall comply with the terms and provisions of 67 Pa. Code Ch. 459.

26. SPOHNS, SWIFT and JOHNSONS shall pay reasonable charges of the Consulting Engineer of the AUTHORITY and the Consulting Engineer of the BOROUGH for examination and approval of the plans and specifications as referred to in Paragraph 1 hereof, the fees and charges of DER for the Permit referred to in Paragraph 1 hereof, fees and charges of the Pennsylvania Department of

Transportation for permits, licenses, or posting of bond, and premiums for bonding, or additional insurance coverage, the expenses and charges for inspection, testing and flushing as referred to in Paragraph 4 hereof, and the legal expenses of BOROUGH with respect to the preparation and/or review of this Agreement, the aforesaid instrument or instruments of transfer, and any required easements, title searches, or other costs relating to the matters covered herein.

27. AUTHORITY and BOROUGH shall enforce this agreement and that it shall be binding upon and inure to the benefit of the parties hereto, their respective heirs,personal representatives, successors and assigns, as the case may be.

28. The Agreement made as of May 5, 1994, by and between Grace Margaret Swift and Lower Allen Township Authority be and is hereby terminated and declared null and void.

29. The Agreement made as of May 5, 1994, by and between Melvin K. Johnson and Helen S. Johnson, his wife, and Lower Allen Township Authority be and is hereby terminated and declared null and void.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year set forth above.

ATTEST:
(Corporate Seal)

William S. Brown
(Assistant) Secretary

LOWER ALLEN TOWNSHIP AUTHORITY

By: Robert J. Wong
~~(Vice)~~ Chairman

ATTEST:

Stephen C. Sultzaberger
Stephen C. Sultzaberger,
Secretary

COUNCIL OF THE BOROUGH OF NEW CUMBERLAND

By: John R. Murray
John R. Murray, President

WITNESSES:

William S. Brown

Grace Margaret Swift (SEAL)
Grace Margaret Swift

William S. Brown

Melvin K Johnson (SEAL)
Melvin K. Johnson

William S. Brown

Helen S Johnson (SEAL)
Helen S. Johnson

William S. Brown

Richard M Spohn (SEAL)
Richard M. Spohn, Jr.

William S. Brown

Renee Spohn (SEAL)
Renee Spohn

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-23. Schedule 4.1(l)(ii) in the Application's APA lists two known easements and rights-of-way agreements that PAWC-WD will assume. Please provide a copy of the subject easements and rights-of-way agreements.

RESPONSE: See Attachments TUS Set 1, A-23, Parts A and B as follows:

Part A: North Central Railway Company and The Pennsylvania Railroad Company Agreement

Part B: Security Systems Savings, Inc. Easement Agreement

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

AGREEMENT, made this First day of February, A. D. 1951., by and between THE NORTHERN CENTRAL RAILWAY COMPANY and THE PENNSYLVANIA RAILROAD COMPANY, Lessee of the railroad and property of The Northern Central Railway Company, hereinafter called the "Railroads", parties of the first part, and BOROUGH OF NEW CUMBERLAND and NEW CUMBERLAND BOROUGH AUTHORITY, both municipal corporations of the Commonwealth of Pennsylvania, in the County of Cumberland and said Commonwealth of Pennsylvania, hereinafter called the "Municipalities", parties of the second part; WITNESSETH, That -

1. Pursuant to request of said Municipalities, said Railroads, in so far as their present title permits, hereby grant to the Municipalities, subject to the provisions hereof to which the Municipalities agree, permission and privilege to construct or install, use, maintain, repair and renew or replace, as well as ultimately remove, as part of an outfall sewer, 130 lineal feet of 42-inch reinforced concrete pipe and 55 lineal feet of 18-inch vitrified clay pipe, together with the placement of two (2) manholes, under and across the right-of-way or property and York Haven Line tracks of the Railroads, at a point at Mile Post 81, plus 3,848 feet, in the Borough of New Cumberland, County of Cumberland and Commonwealth of Pennsylvania: as shown in yellow on the plan attached hereto, made a part hereof and marked "Exhibits 'A' & 'B'".

2. Municipalities shall not revise, add to or alter said facilities without first securing, in writing, the consent of Railroads; and further, this right is given subject to the condition that if and when from time to time requested, in writing, by Railroads so to do, Municipalities shall, at the latters' expense, promptly and within the time specified in such notice, change, revise, strengthen, improve, repair, renew or relocate the facilities or any part thereof to permit and accommodate future development of the property and land upon which the facilities are located, or to permit and accommodate changes of grade or alignment of, and improvements in or renewals, repair, or additions to, or to correct any interference with, the instrumentalities or property, as they or it may now or hereafter exist, of Railroads; and the facilities as so changed, revised, strengthened, improved, or relocated from time to time shall come under this Agreement or right as if originally mentioned herein.

3. Municipalities, at their sole cost and expense, shall construct or install, keep, maintain, repair, alter, adjust, operate, use and renew, as well as ultimately remove, the facilities in a safe, proper and adequate manner, good order and condition at all times so as not to interfere with, impair, endanger or prevent the proper, safe, continuous use and operation of the railroad and property of Railroads; and except in case of emergency where notice is not possible, Municipalities shall give Railroads reasonable notice before commencing any work on property of Railroads, and such work shall be performed at such time and in such manner, including but not restricted to plans, specifications and materials, as shall meet with the approval of the Chief Engineer of Railroads or his representative. In the course of any work, Municipalities shall furnish any necessary inspectors, watchmen or flagmen; PROVIDED, however, Railroads reserve the right and shall have the right to furnish inspectors, watchmen or flagmen at the cost of Municipalities. After performing any work, Municipalities shall do all things necessary to restore the property of Railroads to a neat, clean and safe condition.

4. If any work is required from time to time under and adjacent to the track of Railroads, before any work is done by Municipalities the parties shall confer to determine if any part thereof should be performed by employes of Railroad, and Railroad reserves and shall have the right to perform at the cost and expense of Municipalities, any part of the work which in Railroads' judgment they deem necessary for the better safety and protection of persons,

property and operations of or upon the railroad.

5. While there shall be no duty resting upon Railroads to inspect the facilities or to inform Municipalities of Municipalities' failure to comply with any term hereof, nevertheless if Municipalities should fail faithfully to do or perform any act or duty required by Municipalities to be done or performed hereunder and having received notice thereof from Railroads to correct such situation, Railroads, at their option and without limitation of other rights hereunder or at law or equity, may, after expiration of the time specified in any notice given under this Agreement, furnish or cause to be furnished materials for and do and perform, or cause to be done and performed, such work, obligation, or duty for or on account of Municipalities, and the latter agree to pay or reimburse Railroads therefor; PROVIDED, however, in the event of an emergency requiring prompt action in respect to the safety of Railroads' railroad and operations, Railroads may forthwith furnish or cause to be furnished materials for and do or perform, or cause to be done or performed, such emergency work as they deem necessary, but shall immediately give to Municipalities, in writing, notice of such emergency, the necessary work involved, and that under the circumstances Railroads are proceeding therewith, and Municipalities agree to pay or reimburse Railroads therefor. Failure of Railroads to insist upon strict performance of any provision of this Agreement, or to exercise any option in this Agreement conferred, in any one or more instances, shall not be construed as a waiver or relinquishment for the future of any such provision or option, but the same shall remain in full force and effect.

6. Bills of Railroads under this Agreement shall be paid within thirty (30) days after presentation. Municipalities understand that in respect to bills of Railroads for cost of any work or services there shall be added to the cost of materials fifteen (15) per centum and to the cost of labor ten (10) per centum, for overhead, and, in addition, there shall be added to such labor applicable vacation percentages and taxes paid or accrued by employers on wages paid for such labor for railroad retirement, railroad unemployment insurance and other social security taxes, plus cost of insurance.

7. (a) Municipalities shall reimburse Railroads for loss, damage or expense sustained by Railroads or for which they may be held liable resulting from breakage of or leakage from the facilities.

(b) Municipalities shall provide, or cause to be provided, without expense to Railroads, insurance protecting Municipalities and Railroads, or either of them, as the case may be, from all liability for loss, damage or expense which they or either of them may suffer, or for which they, or either of them, may be held liable, by reason of injury (including death) to officers, representatives or employes of Municipalities, to any contractor, sub-contractor, or materialman, its, his or their officers, representatives and employes, arising out of or in any manner connected with the work to be performed hereunder on the part of Municipalities on the premises of Railroads, whether due to any act or omission of Municipalities or of Railroads, or otherwise, such insurance to be in amount of not less than One hundred thousand Dollars ($100,000.) for injury (including death) to any one such persons in any one accident, and, subject to that limit for any one such persons in amount of not less than Three hundred thousand Dollars ($300,000.00) for more than one such persons in any one accident. Evidence that said insurance has been provided shall be submitted to Railroads before the commencement of the work. The foregoing insurance shall be in addition to any workmen's compensation insurance required by law to be carried.

(c) Municipalities agree to protect, indemnify and save harmless, or to cause their contractor to agree to protect, indemnify and save harmless Railroads from all loss, damage or expense suffered by Railroads or for which they may be held liable by reason of injury to persons, whomsoever, and property, whatsoever (except persons or property hereinbefore mentioned to the extent of the aforesaid insurance paid), growing out of or in any way connected with the construction, presence, or use of or work in respect to the facilities, unless the same occurs solely through the negligence of Railroads, and, in the event of joint or concurring negligence, the loss, damage or expense shall be borne equally by the parties at fault; it being agreed, however, that Railroads shall not be deemed negligent hereunder in respect to any unsafe condition of the facilities of Municipalities. If Municipalities have a contractor perform any work, Municipalities shall require the contractor to provide necessary protective insurance, covering the contractor and any sub-contractor and the contingent liability of Municipalities and Railroads. If a claim or action is made against either party and for which the other party may be responsible hereunder, such other party shall be notified and permitted to participate in the handling of the matter.

8. If Municipalities abandon or discontinue the use of the facilities, or fail to comply with any of the terms or provisions hereof, this right shall cease and determine, and Municipalities shall remove the facilities if and when requested by Railroads, and should Municipalities fail so to do, Railroads may remove the facilities and restore the premises, at the cost and expense of Municipalities.

9. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

10. This Agreement shall take effect at the expiration of thirty (30) days from the date when a copy thereof shall be filed in the office of the Secretary of the Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania, provided that, if the said Commission shall, prior to the expiration of such period, institute a proceeding affecting its validity under the provisions of Section 911, Article 9, of the Pennsylvania Public Utility Law, this contract shall become effective only upon approval thereof by the said Commission, but this Agreement when effective in compliance with said Section 911 shall be retroactive to the date the Municipalities are permitted to enter upon the involved premises of the Railroads for the purposes intended.

IN WITNESS WHEREOF, the said parties hereto have caused this Agreement

to be duly executed and delivered the day and year first hereinbefore mentioned.

) THE NORTHERN CENTRAL RAILWAY COMPANY

By

Vice President

ATTEST:

Asst. Secretary

APPROVED AS TO FORM

ASSISTANT GENERAL COUNSEL

THE PENNSYLVANIA RAILROAD COMPANY,
Lessee of the railroad and property
of The Northern Central Railway Company

By

Vice President

EVW S

ATTEST:

Asst. Secretary

BOROUGH OF NEW CUMBERLAND

By

ATTEST:

NEW CUMBERLAND BOROUGH AUTHORITY

By

Chairman

ATTEST:

Sec.

SECURITY SYSTEMS SAVINGS

RIGHT OF WAY AND MAINTENANCE AGREEMENT

Schedule 4.1(1)(ii)

PUBLIC SEWER EASEMENTS, RIGHT OF WAY AND MAINTENANCE AGREEMENT

1. PARTIES:

Security Systems Savings, Inc. of 901 Market Street, New Cumberland, Pennsylvania, hereinafter referred to as "**Grantor**", and the Borough of New Cumberland, of 1120 Market Street, New Cumberland, Pennsylvania, hereinafter referred to as "**Grantee**".

2. PROPERTY SUBJECT TO EASEMENT:

Grantor hereby represents and warrants that it is currently the owner of the following unencumbered real property, hereinafter referred to as "**Property**", located in the Borough of New Cumberland, as set forth in Deed Book 25, Volume Y, Page 643, as more specifically shown on the attached description of property as set forth on a final subdivision and land development map attached hereto as EXHIBIT "A", incorporated herein.

3. CONSIDERATION:

This Public Sewer Easements, Right of Way and Maintenance Agreement is entered and agreed upon between **Grantor** and **Grantee** in consideration of the sum of one and No Dollars ($1.00), the receipt of which is acknowledged by **Grantor**, together with the other mutual covenants, agreements and terms contained herein.

4. GRANT OF EASEMENTS AND STATEMENT OF PURPOSES:

A. **Subsurface Easement and Right of Way for existing public sewer. Grantor** does hereby give, grant and convey unto the **Grantee**, its successors and assigns, and **Grantee** hereby accepts, a subsurface public Sewer Easement and a free uninterrupted and unobstructed subsurface right-of-way in, under and through a portion of **Grantor's** property as shown in the map attached as EXHIBIT "B" which is incorporated herein. This Public Sewer Easement and Right-of-Way is granted for the exclusive benefit of granting **Grantee** uninterrupted and obstructed ingress, egress and access to **Grantor's** lands upon which exist a public sewer line upon which **Grantor** has constructed a commercial office building. This subsurface Easement and Right of Way is granted for the purpose of installing, laying, operating, maintaining, inspecting, removing, repairing, replacing, testing, inspecting, relaying, refitting, slip lining, lining, and adding to from time to time the existing public sewer pipe, pipes, which necessary fittings, appurtenances, devices, facilities, including laterals and connections for the transmission, pumping and distribution of public sewage and water. However, **Grantor** and **Grantee** agree that **Grantee** shall have no right to access the surface of the right-of way and

easement area described in this paragraph and that **Grantee** shall have no right or authority to access the surface area above upon which **Grantor's** existing building, its floor or any part thereof is constructed, without written agreement executed by **Grantor**. The subsurface easement shall perpetually encumber the **Property** or until abandonment as evidenced by written agreement by **Grantee,** its successors and/or assigns, in recordable form.

B. **Surface and subsurface Easement and Right of Way around northern and eastern perimeter of new lot created by Final Land Development and Subdivision Plan of Security Savings Systems, Inc.**

Grantor does hereby give, grant and convey unto the **Grantee**, its successors and assigns, and **Grantee** hereby accepts, a twenty foot (20') public Sewer Easement and a free uninterrupted and unobstructed right-of-way in, under, through, across and over a portion of **Grantor's** property as shown in the map attached as EXHIBIT "C" which is incorporated herein. This Public Sewer Easement and Right-of-Way is granted for the exclusive benefit of granting **Grantee** free, uninterrupted and obstructed access to the area described in EXHIBIT "C" for the purpose of installing, laying, operating, maintaining, inspecting, removing, repairing, replacing, testing, inspecting, relaying and adding to from time to time pipe or pipes, with necessary fittings, appurtenances and attached facilities, including laterals and connections for the transmission, pumping and distribution of public sewage and water. **Grantor** and **Grantee** acknowledge that the purpose of this surface and subsurface Easement and Right of Way is to permit **Grantee**, at its sole costs and expense, to construct a new public sewer main line within the Easement and Right of Way area as depicted in Exhibit "C" in the event of a failure of the existing main public sewer line as depicted in Exhibit "B" beneath the building and improvements owned by **Grantor**. The easement shall perpetually encumber the **Property**, or until abandonment as evidenced by written agreement by **Grantee**, its successors and/or assigns, in recordable form.

5. MAINTENANCE AGREEMENT:

Within a period of three (3) months from the issuance of a building permit for improvements depicted on the Final Subdivision / Lot Consolidation Plat and Land Development Plan for Security Saving Systems, Inc. dated August 26, 2008, **Grantor** shall, at **Grantor's** sole cost and expenses, repair the existing public sewer line located within the easement and right-of-way area depicted on Exhibit "B" through the placement of a slip-lining system within the existing public sewer line located within the Easement and Right of Way area depicted in Exhibit "B". In addition, **Grantor** shall also, at **Grantor's** sole cost and expense, install a manhole provided by **Grantee** as depicted on a Final Subdivision / Lot Consolidation Plat and Land Development Plan for Security Saving Systems, Inc. dated August 26, 2008 to be recorded simultaneously with this Public Sewer Easement, Right of Way and Maintenance Agreement. Upon completing the installation of a slip line within the existing public sewer easement and the installation of a manhole provided by the Grantee, Grantor shall be responsible for backfilling, landscaping and re-sodding **Grantor's** lands within the area depicted as Exhibit "B".

Grantee shall not be obligated to restore landscaping, grass resodding, paving, construction in association with the requirements of this paragraph 5. Further, at no time shall **Grantor** interfere with **Grantee's** maintenance, inspection, repair, removal, replacement, relaying, adding or operation of the existing public sanitary sewer systems within the area depicted by Exhibit "B", provided that at no time shall **Grantee** alter, disturb the surface of the right-of-way and easement area depicted by Exhibit "B" without the written consent of **Grantor**.

6. INDEMNIFICATION AND RESPONSIBILITIES:

Grantor, its successors and assigns, does hereby agree to defend, hold harmless, and indemnify **Grantee**, its successors and assigns, from any claim of liability or any other claim arising out of the necessity of **Grantee**, its successors and assigns, to access the public sewer line as it presently exists within the subsurface area and beneath an existing structure owned by **Grantor** as depicted within Exhibit "B". **Grantor** acknowledges that **Grantee** may be required to access the subsurface area of the existing public sewer line for purposes of maintenance, inspection, repair, removal, replacement, relaying, adding or operation of the existing public sanitary sewer systems, and **Grantor**, on behalf of itself, successors and assigns hereby unconditionally releases **Grantee**, its successors and assigns, for any damage, claim, cause of action or claim for relief, monetary damages, in law or equity, as a result of **Grantee's** maintenance, inspection, repair, removal, replacement, relaying, adding or operation of the existing subsurface area supporting the public sanitary sewer system, its sewer line and its utilities. However, **Grantor's** releases and indemnifications herein are limited to sub-surface access rights. **Grantor** and **Grantee** agree that in the event of a subsequent defect, deficiency or failure in the existing public sewer line requiring surface access to **Grantor's** improved building to repair, fix, maintain or correct the defect, deficiency or failure, **Grantee**, at **Grantee's** cost and expense, shall abandon the existing public sewer line right of way and easement as described in Exhibit "B", cap the existing public sewer line and install a new public sewer line within the area described as Exhibit "C" as described herein.

7. REMEDIES:

In addition to all other remedies allowed by law, the parties, their successors and assigns, shall have the right to seek injunctive relief for the enforcement of the terms and conditions of this agreement.

8. BINDING EFFECT ON SUCCESSOR INTERESTS:

The terms, conditions and provisions of this agreement shall extend to, be binding upon and inure to the benefit of the heirs, personal representatives and assigns of the parties.

9. ATTORNEY FEE:

In case suit or action is instituted in connection with this agreement, the prevailing party shall be entitled to recover from the losing party such sums as the court may adjudge reasonable as attorney fees and costs in such suit or action, or upon appeal. For interpretational purposes, this Public Sanitary Sewer Easement, Right-of-Way and Maintenance agreement was prepared and reviewed by legal counsel for both **Grantor** and **Grantee**.

DATED, this 29th day of October, 2008 .

IN WITNESS WHEREOF, the Grantor has duly executed this document, all as of the day and year set forth above.

GRANTOR:

ATTEST:

Security Savings Systems, Inc.

Secretary

By:
Frank Mosher, CEO

IN WITNESS WHEREOF, the Grantee has duly executed this document, all as of the day and year set forth above.

GRANTEE:

ATTEST:

Borough of New Cumberland
By: John R. Murray, President

Stephen C. Sultzaberger, Secretary

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF CUMBERLAND)

On this, the 29th day of October, 2008, before me, a Notary Public, personally appeared Frank Mosher, known to me as CEO of the Security Savings Systems, Inc., a Pennsylvania Corporation, known to me or satisfactory proven to be the President of said company and person whose name is subscribed to the within instrument,

and as such officer, being authorized to do so, executed the foregoing instrument for the purposes contained therein.

In Witness Whereof, I have set my hand and official seal.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Cassandra T. Rosenbaum, Notary Public
Lemoyne Boro., Cumberland County
My Commission Expires Dec. 4, 2008
Member, Pennsylvania Association of Notaries

By: Cassandra T. Rosenbaum
Notary Public
My Commission expires: 12/4/08

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF CUMBERLAND)

On this, the 31st day of October, 2008, before me, a Notary Public, personally appeared John R. Murray, known to me as President of the Borough of New Cumberland Borough Council, a municipal corporation, known to me or satisfactory proven to be the person whose name is subscribed to the within instrument, and as such officer, being authorized to do so, executed the foregoing instrument for the purposes contained therein.

In Witness Whereof, I have set my hand and official seal.

By: Becky M. Knisely
Notary Public
My Commission expires:

NOTARIAL SEAL
BECKY M. KNISELY, Notary Public
Mechanicsburg Boro, Cumberland Co.
My Commission Expires Nov. 19, 2010

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-24. Section 6.8 of the Application's APA states PAWC-WD will spend $2 Million in capital improvements to the both the water and wastewater infrastructure located within the Borough over the first five years of PAWC-WD ownership of the Borough's wastewater system. Please provide a detailed description, an implementation schedule, and an itemized breakdown of the costs for each of the proposed improvements to the water and wastewater systems.

RESPONSE: Below is a preliminary list and schedule of capital improvements following the first five years of PAWC ownership. Final capital improvement projects will be determine after closing and based upon identified system needs.

The anticipated wastewater system improvements are as follows:

Year	2017	2018	2019	2020	2021
I&I study	$79,200				
Routine WW DSIC		$264,000	$264,000	$264,000	$264,000
SCADA and Security at Plant	$79,200				
SCADA and Security at lift stations	$118,800				
Carlisle Road Project	$860,000				
Total	$1,137,200	$264,000	$264,000	$264,000	$264,000
Grand Total					$2,193,000

Response Witness: Michael Guntrum PE, PMP
Title: Senior Project Engineer

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-25. Section 6.11 of the Application's APA references the "Carlisle Road Facilities Improvement Project." Please an itemized cost estimated for the construction of this project.

RESPONSE: The following is the preliminary cost estimate for the "Carlisle Road Facilities Improvement Project":

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
FOR
NORTHWEST PUMP STATION AND FORCE MAIN IMPROVEMENTS
NEW CUMBERLAND BOROUGH
APRIL 2016

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT	UNIT COST	EXTENSION
	GENERAL				
1	MOBILIZATION & PROJECT MANAGEMENT @10%	1	L.S.	$ 69,000.00	$ 69,000.00
2	TRAFFIC MAINTENANCE & PROTECTION	27	DAY	$ 650.00	$ 17,550.00
3	BYPASS PUMPING	2	WK.	$ 3,800.00	$ 7,600.00
	DEMOLITION				
4	DEMO EXISTING FORCE MAIN PIPING	1	L.S.	$ 2,500.00	$ 2,500.00
	FORCE MAIN				
5	6-INCH DUCTILE IRON PIPE	3,690	L.F.	$ 40.00	$ 147,600.00
6	6-INCH DUCTILE IRON FITTINGS AND ACCESSORIES	1	L.S.	$ 5,000.00	$ 5,000.00
7	TRENCHING (8-10' DEPTH)	1,845	L.F.	$ 130.00	$ 239,850.00
8	NEW MANHOLE	9	V.F.	$ 600.00	$ 5,400.00
9	NEW MANHOLE FRAME AND COVER	1	EA.	$ 600.00	$ 600.00
10	ABANDON EXISTING MANHOLE	1	L.S.	$ 1,500.00	$ 1,500.00
11	CURB AND SIDEWALK RESTORATION	1	L.S.	$ 1,450.00	$ 1,450.00
12	TEMPORARY PAVING	1,845	L.F.	$ 16.00	$ 29,520.00
13	PAVEMENT RESTORATION	1,845	L.F.	$ 100.00	$ 184,500.00
14	VEGETATIVE RESTORATION	1	L.S.	$ 1,000.00	$ 1,000.00
15	ADDITIONAL UNCLASSIFIED EXCAVATION	5	C.Y.	$ 35.00	$ 175.00
16	UNSUITABLE BEARING MATERIAL REPLACEMENT	5	C.Y.	$ 60.00	$ 300.00
17	ADDITIONAL AGGREGATE BACKFILL	5	TON	$ 20.00	$ 100.00
18	MISCELLANEOUS CONCRETE INSTALLATION	5	C.Y.	$ 150.00	$ 750.00
	PUMP STATION				
19	NEW FLOW METER	1	EA.	$ 5,000.00	$ 5,000.00
20	NEW WET WELL PLATFORM	1	L.S.	$ 6,000.00	$ 6,000.00
21	NEW INFLUENT SLIDE GATE	1	EA.	$ 1,500.00	$ 1,500.00
22	WET WELL LINING	901	S.F.	$ 35.00	$ 31,535.00
23	SAFETY LADDER UP	1	L.S.	$ 750.00	$ 750.00
24	PAINTING	1	L.S.	$ 4,000.00	$ 4,000.00
25	WALL PENETRATIONS	2	EA.	$ 750.00	$ 1,500.00
26	GAS LINE RELOCATION	1	L.S.	$ 2,000.00	$ 2,000.00
27	HEAT TRACE AND INSULATION	1	L.S.	$ 2,500.00	$ 2,500.00
28	MISCELLANEOUS MODIFICATIONS AT PUMP STATION BUILDING	1	L.S.	$ 1,500.00	$ 1,500.00
29	MASONRY BLOCK WALL	50	S.F.	$ 17.00	$ 900.00
	ELECTRICAL				
30	ELECTRICAL WORK AT PUMP STATION BUILDING	1	L.S.	$ 10,000.00	$ 10,000.00
				SUBTOTAL	$ 781,580.00
				CONTINGENCY @ 10%	$ 78,158.00
				TOTAL CONSTRUCTION COST	$ 859,738.00
				SAY	$ 860,000.00

Response Witness: Michael Salvo
Title: Senior Manager, Business Development

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-26. PAWC-WD has filed amended versions of the Application's Exhibits I and J with the Commission. Please explain why these exhibits, dealing with customer rates under PAWC-WD, were amended.

RESPONSE: Exhibits I and J of the Application were amended to "round" the amount of usage associated with each rate blocks to 100 gallon increments. PA American billing system does not allow for block rates less than 100 gallons. This clarification will not have an adverse impact upon the New Cumberland wastewater customers.

Response Witness: John R Cox
Title: Manager of Rates and Regulations

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-27. Please provide a calculation of a typical customer's current and future wastewater bill for each customer class.

RESPONSE: Please refer to Attachment TUS Set 1, No. A-27 for a calculation of a typical customer's current and future wastewater bill for each customer class, based on usage for January through March of 2016.

Response Witness: John R. Cox
Title: Manager of Rates and Regulations

Attachment TUS Set 1, No. A-27

Pennsylvania American Water Company
Acquisition of New Cumberland Borough's Wastewater System
R-2016-2544151

Attachment TUS Set 1, A-27

Residential (9,600 gallons per quarter or 3,200 gallons per month)

Current under BNC (Quarterly)				Future under PAWC (Monthly)			
		Rate (per 100 gallons)	Quarterly Charge			Rate (per 100 gallons)	Monthly Charge
Minimum Charge			$ 76.64	Minimum Charge			$ 25.54
Usage	9,600			Usage	3,200		
First 6,200	6,200	Allowance	-	First 2,100	2,100	Allowance	-
Next 2,800	2,800	$1.201	33.63	Next 900	900	$1.201	10.81
Next 9,000	600	$1.022	6.13	Next 3,000	200	$1.022	2.04
Total			$ 116.40	Total			$ 38.39

Commercial (22,500 gallons per quarter or 7,500 gallons per month)

Current under BNC (Quarterly)				Future under PAWC (Monthly)			
		Rate (per 100 gallons)	Quarterly Charge			Rate (per 100 gallons)	Monthly Charge
Minimum Charge			$ 76.64	Minimum Charge			$ 25.54
Usage	22,500			Usage	7,500		
First 6,200	6,200	Allowance	-	First 2,100	2,100	Allowance	-
Next 2,800	2,800	$1.201	33.63	Next 900	900	$1.201	10.81
Next 9,000	9,000	$1.022	91.98	Next 3,000	3,000	$1.022	30.66
Next 49,000	4,500	$0.818	36.81	Next 16,300	1,500	$0.818	12.27
Total			$ 239.06	Total			$ 79.28

Municipal - (145,800 gallons per quarter or 48,600 gallons per month)

Current under BNC (Quarterly)				Future under PAWC (Monthly)			
		Rate (per 100 gallons)	Quarterly Charge			Rate (per 100 gallons)	Monthly Charge
Minimum Charge			$ 76.64	Minimum Charge			$ 25.54
Usage	139,005			Usage	46,335		
First 6,200	6,200	Allowance	-	First 2,100	2,100	Allowance	-
Next 2,800	2,800	$1.201	33.63	Next 900	900	$1.201	10.81
Next 9,000	9,000	$1.022	91.98	Next 3,000	3,000	$1.022	30.66
Next 49,000	49,000	$0.818	400.82	Next 16,300	16,300	$0.818	133.33
Next 157,000	72,005	$0.615	442.83	Next 52,300	24,035	$0.615	147.82
Total			$ 1,045.90	Total			$ 348.16

Pennsylvania-American Water Company's
Responses to the Bureau of Technical Utility Services
Water/Wastewater Division

Data Request 1

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
at Docket No. A-2016-2544151

A-28. Please provide calculations that show how the values were determined for the estimated annual revenues and expenses as shown in the Application's Exhibit O.

RESPONSE:

	2017
OPERATING REVENUES	
Sewer Revenues	1,655,000
Operating Revenues	**1,655,000**
OPERATIONS & MAINTENANCE EXPENSE	
PRODUCTION EXPENSES	
Fuel & Power	136,615
Chemicals	51,359
Waste Disposal	49,776
Total Production Costs	**237,750**
O&M LABOR & OVERHEAD	
Labor	254,695
Group Insurance	44,445
Other Benefits	20,334
Total Employee Related	**319,474**
Other O&M Expenses	46,675
Total O&M Expense	**603,899**
Depreciation and Amortization	**577,931**
General Taxes	50,170
Total operating expenses, net	**1,232,000**

Response Witness: James Merante
Title: Director - Financial Strategy, Planning and Decision Support

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
Docket No. A-2016-2544151

VERIFICATION

I, John Cox, Manager of Rates and Regulation, of Pennsylvania-American Water Company, hereby state that the facts set forth in the response(s) to the Bureau of Technical Utility Services, Set I, which I have sponsored, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: JUN 0 3 2016

John Cox

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
Docket No. A-2016-2544151

VERIFICATION

I, Scott Fogelsanger, Senior Business Development Manager, of Pennsylvania-American Water Company, hereby state that the facts set forth in the response(s) to the Bureau of Technical Utility Services, Set I, which I have sponsored, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: JUN 0 3 2016

Scott D. Fogelsanger

PAWC Application to Acquire the New Cumberland Borough's Wastewater System
Docket No. A-2016-2544151

VERIFICATION

I, Bernard Grundusky, Director Business Development, of Pennsylvania-American Water Company, hereby state that the facts set forth in the response(s) to the Bureau of Technical Utility Services, Set I, which I have sponsored, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: JUN 0 3 2016



PAWC Application to Acquire the New Cumberland Borough's Wastewater System
Docket No. A-2016-2544151

VERIFICATION

I, Michael Guntrum, PE, PMP, Senior Project Engineer, of Pennsylvania-American Water Company, hereby state that the facts set forth in the response(s) to the Bureau of Technical Utility Services, Set I, which I have sponsored, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: JUN 0 3 2016

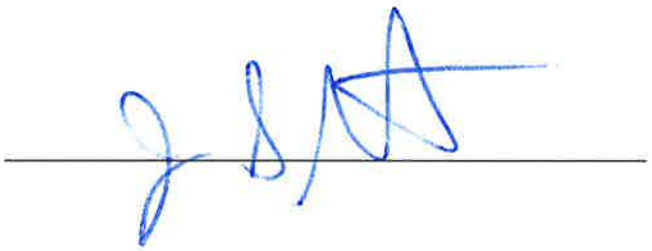


PAWC Application to Acquire the New Cumberland Borough's Wastewater System
Docket No. A-2016-2544151

VERIFICATION

I, James Merante, Director-Financial Strategy Planning and Decision Support, of Pennsylvania-American Water Company, hereby state that the facts set forth in the response(s) to the Bureau of Technical Utility Services, Set I, which I have sponsored, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 6/3/16



PAWC Application to Acquire the New Cumberland Borough's Wastewater System
Docket No. A-2016-2544151

VERIFICATION

I, Michael Salvo, Senior Manager, Business Development, of Pennsylvania-American Water Company, hereby state that the facts set forth in the response(s) to the Bureau of Technical Utility Services, Set I, which I have sponsored, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: JUN 0 3 2016

