

**Municipal Sanitary Authority of
The City of New Kensington
Westmoreland County, Pennsylvania**

**2016 Sewage System
Annual Report and
2017 Operating Budget**

December 2016

Submitting Office:

**Mott MacDonald
Gateway View Plaza
1600 West Carson Street
Pittsburgh, PA 15219
T 412.497.2900 F 412.497.2901**

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ACKNOWLEDGEMENT

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Figure 1 – Wastewater Flow Schematic

Figure 2 – Service Area Map

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Appendix A – 12-Month Performance Summary

1.0 INTRODUCTION

1.1 Introduction

This Sewage System Annual Report has been prepared in accordance with the authorization given to Mott MacDonald by the Municipal Sanitary Authority of the City of New Kensington (MSANK) in accordance with Section 5.12 of the Trust Indenture between MSANK and The Bank of New York Mellon Trust Company, as Trustee, which requires that the Consulting Engineer shall file with the Trustee, and MSANK, a report setting forth the following:

- A. Their estimate as to the aggregate amount of the rents, rates and charges, connection charges, assessment proceeds, service fees and other amounts, governmental general contributions, and other receipts and revenues which MSANK will receive during the ensuing fiscal year from the operation of the Sewer System.
- B. Their estimate as to the operating expenses of the Sewer System for the ensuing fiscal year.
- C. The MSANK administration expense for the ensuing fiscal year.
- D. The amount of the debt service and cover for the ensuing fiscal year.
- E. The sum of the amounts set forth in the report pursuant to subparagraphs (B) and (D) above.
- F. The excess, if any, of the amount set forth in the report pursuant to subparagraph (E) above over the amount set forth in the report pursuant to subparagraph (A) above, with a statement as to whether there will be compliance by MSANK based upon their estimates of the appropriate provisions of the Indenture.
- G. Their report as to compliance by MSANK with its obligations concerning insurance and his advice and recommendations as to the MSANK's future obligations hereunder.

- H. Their findings as to whether the Sewer System has been maintained in good repair and sound operation condition and a statement of the repairs and maintenance, if any, which are necessary or advisable during the ensuing fiscal year to preserve, develop, or improve the Sewer System or to maintain adequate service to the public.
- I. Their estimate as to reasonable provision for present and future capital expenditures by MSANK.

1.2 Municipal Sanitary Authority of the City of New Kensington Sewage System Description

The Municipal Sanitary Authority of the City of New Kensington Sewage System is comprised of one (1) sewage treatment plant, three (3) sewage pumping stations, collector sewers, conveyance sewers, six (6) combined sewer overflows and associated sewer appurtenances. This sewage system serves the Cities of New Kensington, Arnold, and Lower Burrell and a small area of Plum Borough. Pertinent information about MSANK and its sewage system is provided on the following pages.

A. Water Pollution Control Plant

This facility is operated under National Pollutant Discharge Elimination System (NPDES) Permit No. PA0027111, which became effective July 1, 2010 and will expire on June 30, 2015. An application for a renewal permit was submitted to the PA Department of Environmental Protection on December 18, 2014. The plant is located on Logans Ferry Road in the City of New Kensington. The treatment plant is an aerobic biological treatment facility with grit removal, primary clarification, activated sludge, secondary clarification, chlorine disinfection, sludge thickening, anaerobic biological sludge stabilization, and sludge dewatering. A flow schematic of the system is included at the end of this section and noted as Figure 1.

B. Sewage Pumping Stations

There are three (3) sewage pumping stations that MSANK operates and maintains: 1) Valley Camp, which has capacity of 432,000 gallons per day; 2) Linden Avenue, which has capacity

of 1,152,000 gallons per day; and 3) Days Inn which has a capacity of 403,200 gallons per day.

C. Sewer System

The MSANK sanitary sewer conveyance and collection system consists of approximately 63.20 miles of combination and separate sanitary sewer lines ranging in size from 8-inches to 48-inches in diameter, six (6) combined sewer overflows, and three (3) sewage pump stations in the City of New Kensington. The service area also includes the City of Arnold which has 15 miles of combined sanitary sewer lines ranging in size from 8-inches to 18-inches in diameter with two (2) combined sewer overflows and one pump station; the City of Lower Burrell which has 70.3 miles of separate collector and trunk sewers from 8-inches to 24-inches in diameter and twelve sewage pump stations; and, a small area of Plum Borough with five miles of separate collector sewers from 8-inches to 10-inches in diameter. The MSANK service area is shown on Figure 2 at the end of this section.

D. Board Members and Management Staff

The New Kensington Municipal Sanitary Authority is comprised of the following Board Members:

<u>Board Member</u>	<u>Title</u>	<u>Service Began</u>	<u>Term Expires</u>
Delbert J. Brown	Chairman	1997	2016
Daniel D. Felack	Vice Chairman	2006	2020
Gary Astor	Secretary	2010	2019
George Adda	Treasurer	2013	2017
Phillip Toney	Asst. Secretary/Treasurer	2014	2018

The management and advisory staff is comprised of the following:

<u>Title</u>	<u>Advisory Staff</u>	<u>Service Began</u>
Manager:	Daniel H. Rowe, Jr.	1994
Pretreatment Coordinator:	Joseph F. Ditty	1984
Solicitor:	Larry D. Loperfito, Esq.	2014
Consulting Engineer:	Mott MacDonald	1996
Auditor:	Mark Turnley CPA	2009
Bond Counsel:	Lynch and Lynch, Esquires	1999
Trustee:	Bank of New York Mellon Trust Co., N.A.	2002

1.3 Review of Major MSANK Activities in 2016

Management reports that during 2016 MSANK undertook several noteworthy activities which are itemized below:

A. Wastewater Treatment Plant

- MSANK employees rotated conveyor belt supports and installed new wear plates on the #2 grit snail.
- MSANK employees installed a new gear box, drive motor and chain on the #2 clarifier.
- MSANK employees installed a new digester gas compressor #2. New ceramic filters were installed and all piping associated with this compressor and filter was removed and thoroughly cleaned and reinstalled.
- MSANK employees drained and cleaned both head cells in the grit removal facility.
- MSANK employees cleaned and coated the #3 digester roof with Shur-Tar.
- MSANK employees installed and rebuilt the #1 digester recirculation pump.

- MSANK employees removed gravel and other debris from the main influent channel in the new head works pump house several times.
- MSANK employees cleaned the decant tank and all associated piping in the primary system.
- MSANK employees drained and cleaned both chlorine contact tanks and repaired the pump screens.
- MSANK employees repaired the non-potable water line in the digester basement and installed new support braces.
- MSANK employees repaired the #1 bar screen by replacing the broken chain and flights and converting the torque.
- MSANK employees sealed concrete around the new construction.
- MSANK employees installed beam stops on the hoist in the new pump house.
- MSANK employees drained, cleaned, and repaired chains, flights and wear shoes in all four primary settling tanks.
- MSANK employees excavated a trench for a new electric line from the new office building to entrance gate.
- MSANK employees performed exploratory excavation to locate existing conduit for light standards around the new office.
- MSANK employees replaced the drive motor and coupler on the #2 primary tank.

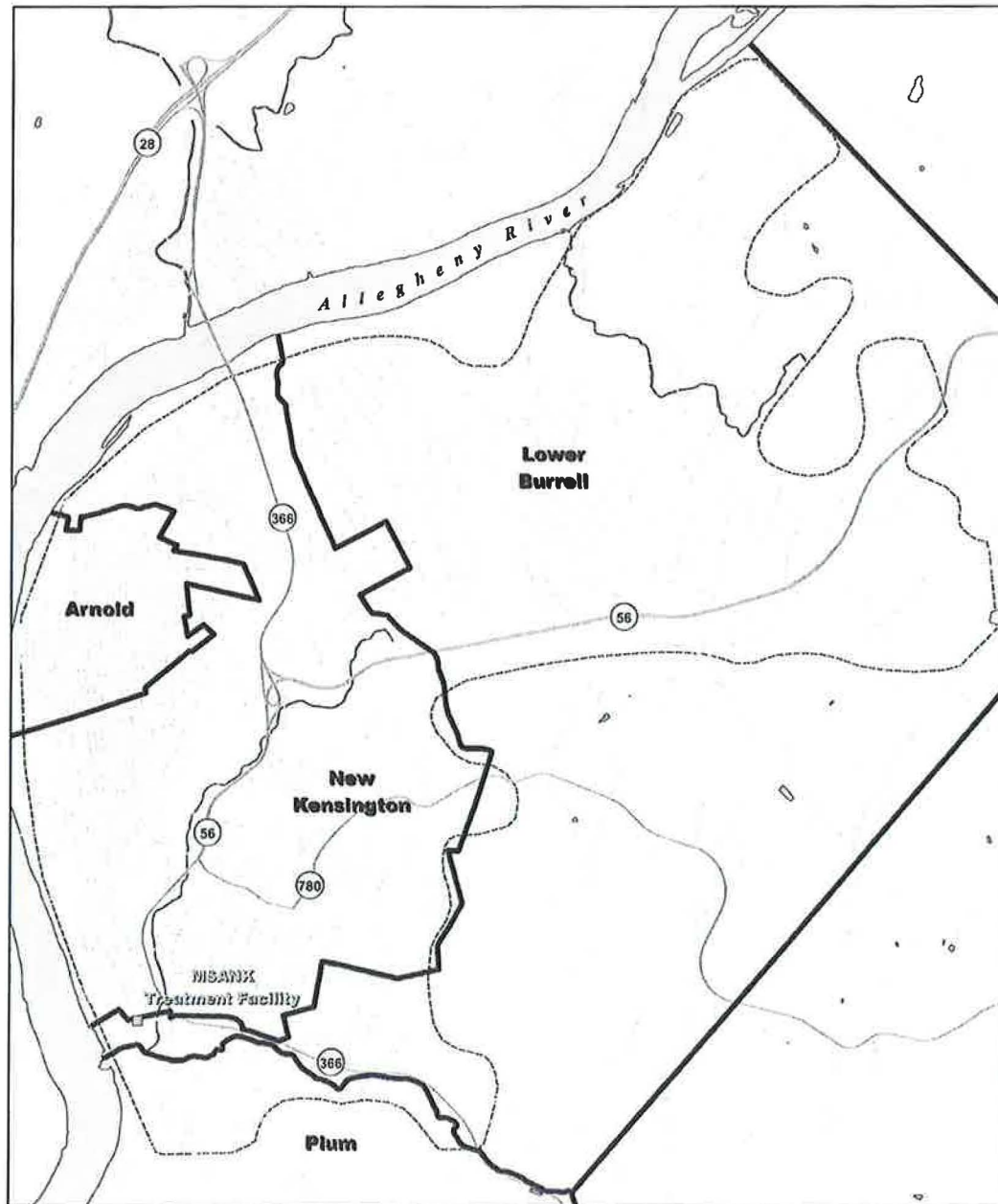
- MSANK employees installed new 6 inch stainless steel pipe to facilitate main channel cleaning in the new pump house.
- MSANK employees installed two new samplers – one for primary effluent and one for final effluent.
- MSANK employees repaired the drive chain and flights in the secondary thickener.
- MSANK employees replaced the air compressor and air lines in the secondary thickener.
- MSANK employees loaded excess excavated material and debris for the new construction project site.

B. Wastewater Collection System

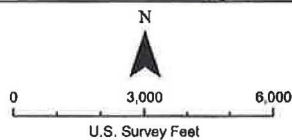
- Conducted internal inspection of approximately 3,369 lineal feet of sanitary sewer line ranging in size from 8-inch to 48-inch.
- Conducted dye testing of approximately 241 units for I/I violations.
- Continued infiltration/inflow (I/I) studies in certain areas of the collection system.
- Cleaned approximately 11,575 lineal feet of sewer line.
- Performed work on 24 manholes. The work comprised of lid and casting replacement to at times installing a new precast manhole.
- Repaired approximately 55 feet of sanitary sewer line ranging in size from 6 inch to 18 inch.

- Conducted continuing flow monitoring in select manholes as a part of the CSO requirements of the NPDES Permit.
- Performed inspections of CSO chambers at various intervals and during rain events.
- Responded to all Pa-One Call notices (400).
- Responded to all service calls (77) and made repairs as required.
- Monitored all MSANK pump stations daily.
- Continued to collect and update data regarding our collection system for the GPS information of our Information Management System (City Works).
- Continued to utilize and upgrade the Service Work Order of the Information Management System (to be City Works Program).
- Continued to up-grade our Sewer Camera CCTV system for NASSCO certification.
- Assisted MSANK contractors performing CCTV and cleaning and repairing of sanitary sewer lines in conjunction with the regions Administrative Order for Compliance on Consent.

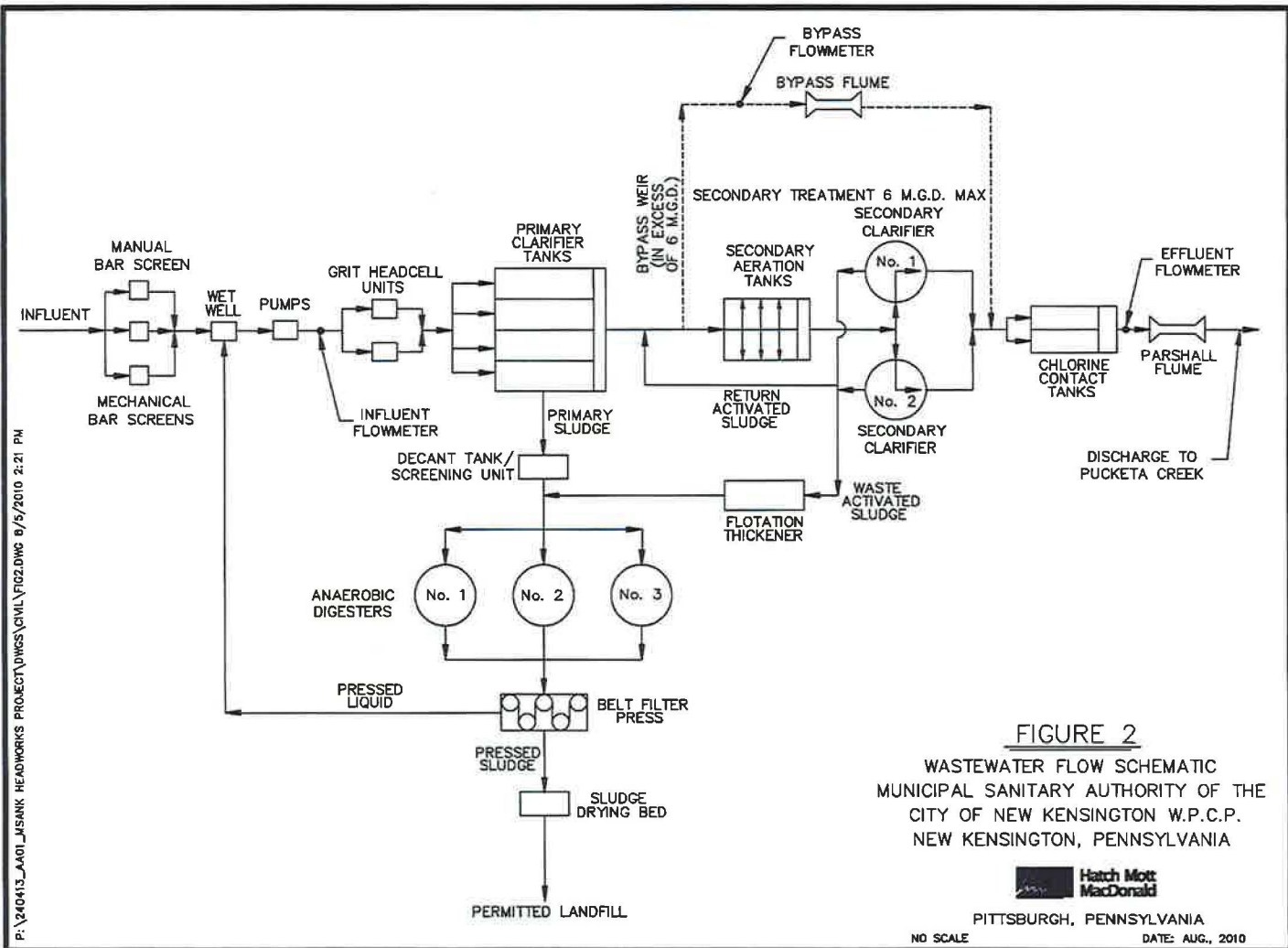
The Authority's maintenance staff continued their efforts relative to the completion of preventive maintenance activities on equipment in an effort to maintain satisfactory operation and performance of all MSANK plant and collection system equipment throughout 2016.



**Service Area Map
Municipal Sanitary Authority
New Kensington, PA**



Hatch Mott
MacDonald



2.0 OPERATIONAL AND MAINTENANCE STATUS OF MSANK SEWAGE FACILITIES

2.1 Sewage System Operational and Maintenance Status

The general performance of all MSANK sewage collection, conveyance, pumping, and treatment facilities during Fiscal Year 2016 has been satisfactory. See Appendix A for a summary of performance for the recent 12 month period.

A. Water Pollution Control Plant

The plant effluent was in full compliance with the NPDES permit conditions during 2016 with the exception of a daily maximum total residual chlorine violation in September.

All mechanical and electrical work was of the preventive and corrective maintenance type normally associated with the extended use of mechanical/electrical equipment. However, it is noted that some of the older equipment will require replacement in the ensuing years as said equipment approaches its normal life expectancy and warrants replacement due to the age and extended use.

B. Sewer System

MSANK personnel conduct a preventive maintenance program on the sewage collection and conveyance systems each year. During 2016, staff personnel routinely inspected various manholes and sewer lines to determine the structural integrity of the system and to locate any blockages or flow restrictions. The MSANK personnel use their Vactor and Sewer Jet equipment on an as-needed basis to clear blockages and clean the lines.

MSANK uses their own forces and equipment in a continuing program of sanitary sewer cleaning and internal inspection work throughout the City of New Kensington.

Operational and Maintenance Status of MSANK Sewage Facilities

C. Administrative Order for Compliance on Consent

- MSANK, City of New Kensington, City of Arnold, City of Lower Burrell, Lower Burrell Municipal Authority, and the Plum Borough Municipal Authority entered into an Administrative Order for Compliance on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA). The AOC became effective on December 11, 2009. Over the next several years, the communities will be carrying out a comprehensive wet weather management plan in accordance with a Long Term Control Plan (LTCP).

In accordance with the AOC requirements, some of the activities that were initiated or completed since the AOC became effective include the following:

- Prepared and submitted a Public Participation Plan.
- Provided information to the public.
- Replaced the signage at the combined sewer overflow (CSO) structures.
- Performed a complete sewer system investigation.
- Identified sewer system deficiencies and initiated corrections.
- Developed and prepared sewer system mapping.
- Conducted flow/rainfall monitoring along with CSO pollutant monitoring.
- Developed a hydraulic and hydrologic model of the complete sanitary sewage system utilizing the collected flow and rainfall data.
- Submitted a Regional Long Term Control Plan to the U.S. Environmental Protection Agency and the PA Department of Environmental Protection on October 30, 2014. This

Operational and Maintenance Status of MSANK Sewage Facilities

information, along with other information management tools MSANK is implementing (GPS mapping, computerized service work orders, etc.) will be an important asset to MSANK for a regional approach to sewage facility planning.

D. Pumping Stations

All sewage pumping stations owned and operated by the Municipal Sanitary Authority performed well during 2016. The same preventive maintenance program employed at the treatment plant is also practiced at the pumping stations. No major maintenance was required at the other pump stations during 2016.

E. Management

During 2016, the MSANK management undertook several important initiatives itemized below:

- Worked with the Engineer to implement various Capital Improvements both at the treatment plant and in the collection system.
- Prepared the 2017 Operating Budget.
- Continued to participate in the long-term sewage facilities planning for the existing service area.
- Integrally involved in discussions with the PADEP regarding our position on outside service communities' flows to our collection system and how these flows affect the system, particularly in potential sanitary sewer overflow (SSO) areas and combined sewer overflow areas.
- Directly involved in meeting and discussions with EPA, PADEP and the existing service communities to address requirements in the Administrative Order for Compliance on Consent to develop a Long Term Control Plan. These meetings involved discussions of

Operational and Maintenance Status of MSANK Sewage Facilities

the MSANK future plans for the treatment plant, existing and future collection systems and potential expansion of the service area.

- Directly involved in the proper allocation of revenues to the various MSANK and Trustee held funds facilitating prompt bill payment, payroll accommodation, bond payments and loan payments. This fund management also allowed MSANK to earn the maximum allowable interest on MSANK funds throughout the year. This is reflected in the Audit.
- MSANK has a continuing education and training program for all employees. Activity in this program this year has included Pretreatment Training Seminars and Operators Training Courses for both union and non-union employees. MSANK will continue to promote this active training program.
- Directly and continually involved in public relations regarding the wastewater treatment facility and sanitary sewage collection and conveyance system. This also involved attending many public meetings addressing sanitary sewage issues in the service communities. These meetings focused on explaining why the Headworks Project was needed, and the costs associate with the Administrative Order for Compliance on Consent, how MSANK intends to fund these projects, and what impact these projects would have on the sewage rates of all the service communities.
- Worked with the engineers in the continued development and implementation of our Information Management System and the upgrade of the SCADA system.

F. Pretreatment Program

MSANK is required by EPA to implement an Industrial Waste Pretreatment Program. MSANK aggressively administers this program and currently has one hundred and sixty-two (162) facilities under permit (as of 12/31/16). The Industrial Waste Pretreatment Program is essentially self-supporting through permit fees and penalties.

Operational and Maintenance Status of MSANK Sewage Facilities

G. Permits

MSANK has an annual contract for sludge hauling and is presently utilizing Waste Management of PA, Inc. and they are disposing of the stabilized sludge at their Valley landfill in Irwin, PA. Below is a summary of the status of all pertinent MSANK permits.

<u>Plant</u>	<u>NPDES Permit No.</u>	<u>Expiration Date</u>
Municipal Sanitary Authority of the City of New Kensington Treatment Plant	PA 0027111	June 30, 2015* *A renewal permit application was submitted to the PADEP on December 18, 2014.
<u>Sludge Site</u>	<u>Solid Waste Permit No.</u>	
Valley Landfill (Irwin, PA)	100280	

2.2 Recommendations for Operation and Maintenance During Fiscal Year 2017

After reviewing the operational and maintenance status of all MSANK facilities with the MSANK management staff, we recommend that the following items be addressed during Fiscal Year 2017. These items, if successfully completed, should result in the continued efficient and effective performance of MSANK facilities and functions:

- Continue the Infiltration/Inflow (I/I) remedial program conducted in recent years in an effort to locate and eliminate obvious sources of I/I which presently enter the sewage system of MSANK.
- Continue to implement the plan to clean and internally inspect the sanitary sewer collection system of the City of New Kensington.
- Continue the development and implementation of the Information Management Systems Tasks as budgeted to the treatment plant and collection system.

Operational and Maintenance Status of MSANK Sewage Facilities

- Continue the implementation of the Administrative Order for Compliance on Consent between MSANK, the City of Arnold, the City of Lower Burrell, the Lower Burrell Municipal Authority, the City of New Kensington, and the Borough of Plum, severally.

2017 Projected Revenues And Expenses

3.0 2017 PROJECTED REVENUES AND EXPENDITURES

3.1 2017 Total Estimated Revenues

The anticipated revenues for Fiscal Year 2017 are projected to be \$7,038,755. In the preparation of the operating budget for Fiscal Year 2017 it is worthy of note that, there are sufficient sewer service fee revenues being projected so that when combined with the other sources of revenue, they would cover the anticipated operation and maintenance and debt service expenses.

3.2 2017 Total Projected Expenditures

Operating, administrative and debt service expenses for Fiscal Year 2017 are estimated to be \$7,038,755 and are shown in detail in this section. This estimate has been prepared from a careful analysis of operating expenses incurred during Fiscal Year 2016, and anticipated increases/decreases in these expenses for Fiscal Year 2017 for the wastewater treatment facility and the wastewater collection system.

3.3 Fiscal Year 2017 Operating Budget

The adopted Operating Budget of MSANK for 2017 is contained on the following pages.

**THE MUNICIPAL SANITARY AUTHORITY OF THE
CITY OF NEW KENSINGTON
FISCAL YEAR 2017 BUDGET**

**WASTEWATER TREATMENT FACILITY
OPERATING BUDGET**

OPERATING EXPENSES

Payroll	\$	782,000.00
Taxes	\$	63,700.00
Retirement Plan	\$	89,650.00
Hospitalization	\$	249,700.00
Office Expenses	\$	-
Management Expenses	\$	-
Engineering	\$	3,000.00
Legal Expenses	\$	5,000.00
Contracted Services	\$	185,600.00
Utilities	\$	440,000.00
Equipment Maintenance	\$	80,000.00
Line Maintenance	\$	8,000.00
Building Maintenance	\$	7,000.00
Grounds Maintenance	\$	7,000.00
Vehicle Expenses	\$	10,000.00
Process Expenses	\$	60,000.00
Laboratory Supplies	\$	9,000.00
Personnel Training	\$	2,000.00
Employee Safety	\$	14,000.00
Other	\$	12,000.00
Workmen's Compensation	\$	39,550.00

TOTAL TREATMENT FACILITY OPERATING EXPENSE

\$ 2,067,200.00

TREATMENT FACILITY REPAIRS AND UPGRADES

All other major plant capital expenses
paid by Capital Expenditures Fund

TOTAL TREATMENT FACILITY EXPENSES

\$ 2,067,200.00

**THE MUNICIPAL SANITARY AUTHORITY OF THE
CITY OF NEW KENSINGTON
FISCAL YEAR 2017 BUDGET**

WASTEWATER COLLECTION SYSTEM

OPERATING BUDGET

OPERATING EXPENSES

Payroll	\$ 368,000.00
Taxes	\$ 30,560.00
Retirement Plan	\$ 37,250.00
Hospitalization	\$ 89,500.00
Office Expenses	\$ -
Management Expenses	\$ -
Engineering	\$ 6,000.00
Legal Expenses	\$ 4,000.00
Contracted Services	\$ 25,000.00
Utilities	\$ 20,200.00
Equipment Maintenance	\$ 16,000.00
Line Maintenance	\$ 22,000.00
Building Maintenance	\$ 1,500.00
Grounds Maintenance	\$ 1,000.00
Vehicle Expenses	\$ 30,000.00
Maintenance Chemicals	\$ 2,000.00
Personnel Training	\$ 2,000.00
Employee Safety	\$ 7,000.00
Other	\$ 8,000.00
Workmen's Compensation	\$ 17,870.00

TOTAL COLLECTION SYSTEM OPERATING EXPENSES

\$ 687,880.00

COLLECTION SYSTEM CAPITAL PROJECTS EXPENSES

Loans	\$ 45,800.00
6th Street Sewer Rehab/Seperation	\$ 100,000.00
Upper Kinlock line Rehabilitation	\$ 60,000.00
Cityworks Annual Lic/Support	\$ 7,500.00
Rain Garden Downtown New Kensington	\$ 150,000.00
Improvements to CSO Structures	\$ 150,000.00

TOTAL COLLECTION SYSTEM CAPITAL PROJECT

\$ 513,300.00

TOTAL COLLECTION SYSTEM EXPENSES

\$1,201,180.00

**THE MUNICIPAL SANITARY AUTHORITY OF THE
CITY OF NEW KENSINGTON
FISCAL YEAR 2016 BUDGET**

**PRETREATMENT PROGRAM OPERATING BUDGET
OPERATING EXPENSES**

Payroll	\$ 56,000.00
Taxes	\$ 4,600.00
Retirement Plan	\$ 6,550.00
Hospitalization	\$ 22,600.00
Engineering	\$ 3,000.00
Legal Expenses	\$ 2,000.00
Contracted Services	\$ 5,000.00
Utilities	\$ 900.00
Vehicle Maintenance	\$ 1,500.00
Equipment Maintenance	\$ 500.00
Laboratory Supplies	\$ 500.00
Personnel Training	\$ 750.00
Employee Safety	\$ 200.00
Workmen's Compensation	\$ 220.00
Office Expense	\$ 500.00
Other	\$ -
TOTAL PRETREATMENT PROGRAM O & M EXPENSES	\$ 104,820.00

TOTAL PRETREATMENT EXPENSE **\$ 104,820.00**

PRETREATMENT REVENUE

Permits	\$ 92,000.00
Other Routine Pretreatment Fees	\$ 12,820.00
TOTAL PRETREATMENT REVENUE	\$ 104,820.00

**THE MUNICIPAL SANITARY AUTHORITY OF THE
CITY OF NEW KENSINGTON
FISCAL YEAR 2016 BUDGET**

AUTHORITY ADMINISTRATION OPERATING BUDGET

Payroll	\$ 7,000.00
Taxes	\$ 700.00
Consulting Engineer	\$ 16,000.00
Solicitor	\$ 6,000.00
Trustee	\$ 18,000.00
Auditor	\$ 8,900.00
TOTAL ADMINISTRATION EXPENSES	\$ 56,600.00

MANAGEMENT OPERATING BUDGET

Billing and Collecting	\$ 144,000.00
Insurance	\$ 90,000.00
Management Expenses	\$ 100,000.00
Office Expenses	\$ 12,000.00
TOTAL MANAGEMENT EXPENSE	\$ 346,000.00

FACILITY DEBT SERVICE

2001 PENNVEST (Plant Loan #22624 only!)	\$ 33,125.00
2012 Bonds w/10%cover	\$ 2,281,090.62
2012 Series A Bonds(Re-fi 2009)	\$ 753,121.88
2015 Bonds	\$ 300,437.50

TOTAL DEBT SERVICE **\$ 3,367,775.00**

TOTAL EXPENSES

TOTAL TREATMENT FACILITY OPERATING EXPENSE	\$ 2,067,200.00
TOTAL TREATMENT FACILITY CAPITAL PROJECT	Construction and Capital Exp.Fund
TOTAL COLLECTION SYSTEM OPERATING EXPENSE	\$ 687,880.00
TOTAL COLLECTION SYSTEM CAPITAL PROJECT	\$ 513,300.00
TOTAL ADMINISTRATIVE EXPENSE	\$ 56,600.00
TOTAL MANAGEMENT EXPENSE	\$ 346,000.00
TOTAL DEBT SERVICE	\$ 3,367,775.00
TOTAL EXPENSES	\$ 7,038,755.00

**THE MUNICIPAL SANITARY AUTHORITY OF THE
CITY OF NEW KENSINGTON
FISCAL YEAR 2016 BUDGET**

AUTHORITY OPERATING REVENUES

RATES, CHARGES AND SERVICE FEES

City of New Kensington	\$ 4,280,870.70
City of Arnold	\$ 935,026.50
City of Lower Burrell	\$ 1,711,778.74
Borough of Plum	\$ 76,079.06

TOTAL RATES, CHARGES AND SERVICE FEES **\$ 7,003,755.00**

CONNECTIONS

Tap I Fees and Inspections	\$ -
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TOTAL CONNECTIONS **\$ -**

PENALTIES

Consumer- from New Kensington only.	\$ 25,000.00
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TOTAL PENALTIES **\$ 25,000.00**

INTEREST ON INVESTMENTS

Interest Income	\$ 7,000.00
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TOTAL INTEREST ON INVESTMENTS **\$ 7,000.00**

SURCHARGE (Net)

Pretreatment to Plant	\$ 3,000.00
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TOTAL SURCHARGES **\$ 3,000.00**

TOTAL REVENUES **\$ 7,038,755.00**

TOTAL EXPENSES **\$ 7,038,755.00**

2017 Projected Revenues And Expenses

3.4 Conclusions and Recommendations About Sewer Rental Rates

For purposes of future rate calculations, it is recommended that the MSANK obtain consumption figures for all customers for each billing period. This will provide an up-to-date database for tracking consumption trends and for computing the impact of future rate changes.

The year 2017 budget contains a rate increase for the City of New Kensington rate payers of 7.02%. The 2017 budget was approved by MSANK at its regular meeting on October 17, 2016, and MSANK passed Resolution 06-16 adopting the rate structure at this meeting. The 2017 uniform sewage rate for the City of New Kensington is \$8.54 per ccf.(per 100 cubic feet). A copy of the resolution and 2017 rate schedule are on the following pages.

RESOLUTION NO. 06 -16

RESOLUTION ADOPTING CHANGES TO THE
RATE STRUCTURE OF THE MUNICIPAL SANITARY
AUTHORITY OF THE CITY OF NEW KENSINGTON

IT IS HEREBY RESOLVED by the Municipal Sanitary Authority of the City of New Kensington, hereinafter called the Authority, that the minimum sewage rates heretofore charged by the Authority shall be amended and revised to be those such rates as are reflected in the Authority's Rate Chart entitled "Minimum Sewage Rates Based on \$8.54/100 Cubic Feet", attached hereto and made a part hereof.

In addition to the rates reflected in the Rate Chart, it is further resolved that all consumption over Minimum usage shall be at the rate of \$8.54 per 100 cubic feet and the flat rate charged to customers without city water shall be charged at the rate of \$130.00 per quarter.

It is also resolved that the Security Deposit for Sewage Service is \$130.00.

These changes in the rates shall take effect on bills rendered after January 1, 2017. Resolved by the Authority at its regular monthly meeting held this 17 th day of October 2016.

MUNICIPAL SANITARY AUTHORITY
OF THE CITY OF NEW KENSINGTON

Chairman

ATTEST:

Secretary

LEGAL NOTICE

MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON

Effective **January 1, 2017**, customers in New Kensington will notice an increase in billing for their sewage services. This rate increase is required to facilitate sewer line repairs and equipment improvements within the City of New Kensington, along with repairs to the sewage treatment plant. The Pennsylvania Department of Environmental Protection has mandated some of these projects.

The following schedule of rates has been authorized by the Municipal Sanitary Authority of the City of New Kensington for the various classes of service:

The Municipal Sanitary Authority Of the City of New Kensington

Minimum Sewage Rates Based on \$8.54/100 Cubic Feet
Sewage Rates for Consumption over Minimum Usage Based on \$8.54/100 Cubic Feet

Meter Size	Cubic Feet Minimum (Quarterly)	Minimum Rate (Quarterly)	Cubic Feet Minimum (Monthly)	Minimum Rate (Monthly)
5/8 inch	1500	\$128.10	500	\$42.70
3/4 inch	2900	\$247.66	967	\$82.58
1 inch	4000	\$341.60	1333	\$113.84
1 1/4 inch	5900	\$503.86	1967	\$167.98
1 1/2 inch	7900	\$674.66	2633	\$224.86
2 inch	16500	\$1,409.10	5500	\$469.70
3 inch	36000	\$3,074.40	12000	\$1,024.80
4 inch	80800	\$6,900.32	26933	\$2,300.08
6 inch	148500	\$12,681.90	49500	\$4,227.30

Flat Rate for Customers without City Water - \$130.00 / Quarter

The Security Deposit - \$130.00

*All Rates Effective on Bills Rendered After January 1, 2017

4.0 INSURANCE

4.1 Insurance

The insurance program of MSANK for the sewage system has been reviewed in detail by the Authority with its insurance agent. An outline of the insurance coverage carried by MSANK is presented in this section of the report. The complete insurance policy is on file at the MSANK office. The current coverage is based on an appraisal by an independent professional appraiser. This appraisal is updated annually. It is recommended that this practice be continued.

4.2 Insurance Outline

A copy of the Insurance Outline, which was obtained from The HDH Group, Inc., through MSANK, is as follows:

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION: INLAND MARINE

INSURER: MRM Property and Liability Trust

POLICY NUMBER: PHPK11448196

POLICY PERIOD: 2/18/16 - 2/17/17

POLICY LIMITS: Contractor's Equipment Total Values \$407,219

Miscellaneous Property Protection

Total Values \$134,979

Sewer Camera/Video Equipment/flow meters

Miscellaneous Tools and Equipment

Total Values \$50,000

Deductible - \$250 per occurrence

Coverage:

1. Valuation

- Actual Cash Value for Miscellaneous Tools and Equipment
- Replacement Cost for Contractor's Equipment, Camera/Video Equipment and Flow Meters

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION:	PUBLIC OFFICIALS
INSURER:	United States Liability Insurance Co.
POLICY NUMBER:	PO1000540H
POLICY PERIOD:	2/18/16 - 2/17/17
POLICY LIMITS:	
\$4,000,000	Each Wrongful Act
\$4,000,000	Total Limit
DEDUCTIBLES:	
\$1,000	

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION: CRIME

INSURER: MRM Property and Liability Trust

POLICY NUMBER: PHPK1448196

POLICY PERIOD: 2/18/16 – 2/1717

POLICY LIMITS:

\$100,000	Employee Theft
\$100,000	Forgery/Alteration
\$100,000	Inside Premises -Robbery
\$100,000	Outside the Premises
\$100,000	Computer Fraud

DEDUCTIBLES: \$250

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION: AUTOMOBILE

INSURER: MRM Property and Liability Trust

POLICY NUMBER: PHPK1448196

POLICY PERIOD: 2/18/16 – 2/17/17

POLICY LIMITS:

\$1,000,000	Each Accident Liability
\$35,000	Un-insured / Under-insured Motorists

DEDUCTIBLES:

\$500	Comprehensive
\$500	Collision
	Except Vactors
\$1,000	Comprehensive
\$1,000	Collision

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION: GENERAL LIABILITY

INSURER: MRM Property and Liability Trust

POLICY NUMBER: PHPK1448196

POLICY PERIOD: 2/18/16 – 2/17/17

POLICY LIMITS:

\$2,000,000	General Aggregate
\$2,000,000	Products/Completed Operations Aggregate
\$1,000,000	Each Occurrence
\$1,000,000	Personal and Advertising Injury
\$ 100,000	Damage to Premises Rented to You

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION:	PROPERTY
INSURER:	MRM Property and Liability Trust
POLICY NUMBER:	PHPK1448196
POLICY PERIOD:	2/18/16 – 2/17/17
POLICY LIMITS:	See Policy

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION:	EXCESS LIABILITY
INSURER:	MRM Property and Liability Trust
POLICY NUMBER:	PHUB528897
POLICY PERIOD:	2/18/16 – 2/17/17
POLICY LIMITS:	See Policy

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION:	EQUIPMENT BREAKDOWN
INSURER:	MRM Property and Liability Trust
POLICY NUMBER:	PHPK1448196
POLICY PERIOD:	2/18/16 – 2/17/17
POLICY LIMITS:	Same as Property
DEDUCTIBLES:	Same as Property

**MUNICIPAL SANITARY AUTHORITY OF
THE CITY OF NEW KENSINGTON**

POLICY DESCRIPTION:	WORKERS COMPENSATION
INSURER:	Municipal Risk Management Workers' Compensation Pooled Trust
POLICY NUMBER:	Trust Membership No. MRM-225-1617 Excess Insurance Coverage By Safety National Casualty Corp. under Policy No. SP-4053630
POLICY PERIOD:	10/1/16 to 9/30/17
POLICY LIMITS:	
Workers Compensation	Statutory
Employers Liability:	\$2,000,000
Retention:	\$750,000
State of Operations:	Pennsylvania
DEDUCTIBLES:	None

Proposed Treatment Facility and Collection System Repairs and Upgrades

5.0 PROPOSED TREATMENT FACILITY AND COLLECTION SYSTEM REPAIRS AND UPGRADES

MSANK will continue to make or plan for several repairs and upgrades to their sewage system during Fiscal Year 2017. Many of these have been identified in the Fiscal Year 2017 Operating Budget set out in a previous section of this report.

Repairs and upgrades that have been identified for implementation in 2017 are tabulated below:

5.1 Wastewater Treatment Facility

- Continue Primary Tank Internals Replacement
Estimated Cost: \$10,000
- Implement new Work Management Program to include all new equipment and related information for the O&M system.
Estimated Cost: \$20,000
- Replace piping in the #2 Secondary Clarifier
Estimated Cost: \$10,000

It should be noted that the Trustee held Capital Expenditures Fund will be used to fund the Wastewater Treatment Plant projects.

5.2 Wastewater Collection System

- Information Management System Tasks include updating GPS/GIS and payment of required license fees.
Estimated Cost: \$7,500

Proposed Treatment Facility and Collection System Repairs and Upgrades

- Sixth Street Sewer Rehabilitation/Separation
Estimated Cost: \$100,000
- Upper Kinloch Sewer Line Rehabilitation
Estimated Cost: \$200,000
- CIPP lining of various sanitary sewer lines in New Kensington.
Estimated Cost: To be bid
- Continue to implement the sewer monitoring aspects of the Administrative Order for Compliance on Consent.

6.0 CAPITAL ADDITION AND PLANNING PROJECTS

6.1 Capital Addition and Planning Projects

In the past few years, MSANK has been obligated to make certain modifications and improvements at the sewage treatment plant to maintain the efficient operation of the plant and to maintain compliance with NPDES Permit effluent limits. This resulted in effecting “piece-meal” solutions to an immediate problem without consideration of the long-term impact of such actions. After due consideration by MSANK and its consultants, the need for an overall “Comprehensive Master Plan” was recognized. Implementation of the plan will enable MSANK to make necessary improvements to deal with urgent problems that will be compatible with future planning.

The Master Plan study was completed in November 1998. Five Scenarios were presented in this report for consideration. After in depth review, the MSANK Board adopted Scenario No.3 as their long range Master Plan. This scenario addresses corrective actions and represents the facilities needed to meet the needs of the existing service area and the Pucketa Creek service area, including 20-year growth for each. Although considering the Pucketa Creek service area is in its preliminary phases of study, ultimate implementation of the project is assumed to occur under Scenario Three. The master plan needs to consider these additional flows and loadings. Adoption of one scenario has enabled MSANK to set priorities within the selected scenario and construct the project in phases. This phased process has begun.

Commencing in the year 2001, and continuing through 2004, work proceeded on the repair of the existing digesters and associated equipment through the Anaerobic Digestion and Ancillary Facilities Project. This estimated \$7 million project has been completed. These repairs and associated debt service requirements resulted in rate increases to the rate payers of all tributary communities. The “phasing” of the project will result in reducing the impact of these rate increases. The engineering and design for the next phase of construction at the plant began in 2005 and was completed in 2006. The Headworks and Blower Building project included reconstruction of the plant’s headworks along with construction of a separate building to house the secondary aeration blowers. The project began in October of 2007 and was completed in 2011.

MSANK is now involved in the preliminary design phase of the Wastewater Treatment Plant Phase 2 Secondary Treatment Upgrade Project. The project proposes new primary clarifiers, new secondary aeration equipment, a new clarifier, a new clarifier distribution box, a new chlorine contact tank and distribution box, a new flow distribution box from the grit facility, a new effluent channel and a new blending channel.

The new office and locker room buildings and a new garage are currently under construction. The project also proposes modifications to Clarifier No. 1 and No. 2, the secondary aeration equipment and the primary clarifiers. The new office and garage and locker room buildings are currently under construction. The construction will be completed in 2016 and should enable a seamless transition to the design and construction of the Phase 2 Secondary Treatment Upgrade Project.

With a phased approach to ongoing maintenance and rehabilitation of the treatment plant and collection system, and continued support to revitalization of the region, MSANK will continue to move forward in a pro-active direction.

ACKNOWLEDGEMENT

Mott McDonald would like to take this opportunity to express its sincere thanks to the MSANK Budget Committee, Mr. Brown and Mr. Astor, along with Mr. Rowe and the management staff, along with Mr. Curt Carion and Mr. James Gardlock for their teams' work and valuable contributions to this report.

Respectfully submitted,

Mott MacDonald



Stephen B. Polen, P.E.

Senior Vice President

P 412.497.2950 F 412.497.2951

stephen.polen@mottmac.com

SBP/lf

Appendix A

12 Month Performance Summary

MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON
WASTEWATER TREATMENT PLANT
2015-2016
MONTHLY PERFORMANCE SUMMARY

	INFLUENT						30 DAY AVERAGE - EFFLUENT					MAX. WEEKLY AVERAGE			MAXIMUM DAY				FINAL EFFLUENT	
	BLEND	TREAT	TOTAL	FLOW	BOD5	BOD5	CBOD5	TSS	EFFLUENT LOAD		FECAL	CBOD5	TSS	FECAL	CBOD5	TSS	CL2	FECAL	CL2	pH
	FLOW	FLOW	FLOW	MAX	INF.	INF.	EFF.	EFF	CBOD5	TSS	COL.	mg/l	mg/l	COL.	mg/l	mg/l	mg/l	COL.	mg/l	S.U.
	MGD	MGD	MGD	MGD	mg/l	LB/D	mg/l	mg/l	LB/D	LB/D	#/100 ml	LB/D	LB/D	#/100 ml	LB/D	LB/D		#/100 ml	mg/l	
PLANT DESIGN PERMIT PA0027111	****	****	6.0	****	204	8500	25	30	1251	1501	200 *	37.5	45	****			3.3	10000	1.0**	6.0 - 9.0
											2000	1877	2252							
JANUARY 2016	0.220	5.770	5.990	12.39	137	6654	7	6	364	328	40	7.0	6	82	20	16	1.8	310	0.50	6.8
FEBRUARY 2016	0.840	6.500	7.340	14.00	132	7369	8	10	533	605	21	8.0	19	96	17	69	1.5	540	0.6	6.9
MARCH 2016	0.173	5.544	5.717	8.57	165	7870	7	7	318	326	41	9.0	9	52	13	27	1.0	440	0.49	6.7
APRIL 2016	0.173	5.217	5.390	10.66	126	5513	7	5	306	243	61	8.0	5	102	10	7	0.9	620	0.36	6.3
MAY 2016	0.186	4.999	5.185	11.50	163	7095	7	6	290	275	50	7.0	9	105	9	25	0.9	285	0.33	6.7
JUNE 2016	0.285	5.073	5.358	11.97	244	11394	6	6	264	265	23	7.0	7	40	9	10	1.15	612	0.51	6.6
JULY 2016	0.084	3.933	4.017	6.46	150	5182	7	11	245	355	37	7.0	14.0	78	13.0	10.0	2.01	3300	0.56	6.5
AUGUST 2016	0.186	4.374	4.560	10.19	106	3717	6	12	223	381	69	10.0	27	223	14	70	0.8	3500	0.32	6.5
SEPTEMBER 2016	0.169	3.520	3.689	7.99	115	3629	7	4	220	151	47	10.0	5	62	44	22	3.77	7200	0.58	6.6
OCTOBER 2016	0.345	4.552	4.897	13.75	111	4542	5	4	195	211	36	5.0	5.0	44	8	5	2.1	320	0.45	6.7
NOVEMBER 2015	0.136	4.952	5.088	10.60	132	5433	6	7	263	326	45	6.0	8.0	75	7	9	1.1	1090	0.42	6.5
DECEMBER 2015	0.662	5.836	6.498	11.56	104	5438	7	5	378	298	38	6.0	4	68	15	13	2.4	216	0.55	6.7
ANNUAL AVERAGE	0.288	5.023	5.311	MAX. 14	140	6153	7	7	300	314	42	7.5	10	86	15	24	1.6	1536	0.47	6.6

CBOD5 - FIVE DAY CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND

TSS - TOTAL SUSPENDED SOLIDS

*PERMIT LIMIT FOR PERIOD 5/1 - 9/30

NH3-N - AMMONIA NITROGEN

DO - DISSOLVED OXYGEN

FECAL COL. - FECAL COLIFORM

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OCTOBER 2015	0.371	5.272	5.643	13.11	116	4781	8	11	366	487	35	9.0	15.0	49	9	14	1.2	204	0.55	6.8
												466	716		1093	1421				7.5