

**Department of Public Works and Utilities**

*City of* *Petersburg*  
VIRGINIA

**Presented by:**

**Public Utilities – Janell Sinclair, Operations Manager**

**February 18, 2020**



# Meter Reading Unit - Responsibilities

The Metering Reading Unit is a division of Public Utilities and we are responsible for reading, maintaining, and monitoring of all City-owned meters. Additional duties includes:

- Account connections/New Services
- Reconnections
- Executing account suspensions
- Meter downsizing
- Meter replacement
- Identifying/correcting/reporting meter leaks and homeowner leaks.

# Meter Reading Unit - Statistics



- There are 11,532 active water accounts:
  - Residential - 10,316
  - Commercial/Industrial - 1,216
- There are 12,850 active service addresses



# Meter Reading Unit - Statistics

- Meters by sizes (approximately):

<b>Meter Size</b>	<b>Amount of Meters</b>
5/8"	9,005
3/4"	218
1"	2,526
1 1/2"	253
2"	271
3"	11
4"	17
6"	8
8"	1
10"	1

- 539 Storm Water accounts

# Meter Reading Unit – Stormwater Accounts



- All residential dwelling units in the City will be charged the base residential rate of \$3.75 per month.
- If a parcel has any impervious area (not necessarily, a dwelling) it will be charged the base residential rate of \$3.75 per month.
  - *If there is only a grassy area on a parcel, the property is exempt from Stormwater charges*
- All non-residential properties will be billed at a rate based on their impervious area or areas of property that will not allow water to pass through such as pavement or asphalt.



# Meter Reading Unit – Meter Replacement

The Meter Reading Unit is currently replacing the remaining cubic ft. meters with gallon meters and Encoder Receiver Transmitters (ERT's). Below reflects the number of meter change out's that have been executed:

- FY17 – 11
- FY18 – 9
- FY19 – 315
- FY20 – 142

**477**

There are 223 remaining cubic ft. meters that will be changed by the end of FY20. This includes commercial/industrial meters.



# Meter Reading Unit – New Services

The Meter Reading Unit is also responsible for executing work orders generated by the Office of Billing and Collections. When a New Account is opened, this team ensures the customers' meter is installed and/or turned on meters at the service addresses. The data of Account Connections/New Services is listed below:

- FY17 – 1,588
- FY18 – 1,845
- FY19 – 1,675
- FY20 – 1,138

**6,246**



# Meter Reading Unit - Disconnections

The Meter Reading Unit carries out the instructions reflected on the work orders. When a Delinquent Cut Off work order is created, we disconnect the service. The data of Delinquent Cut Off's below:

- FY17 – 385
- FY18 – 679
- FY19 – 579
- FY20 - 718

**2,361**



# Meter Reading Unit - Reconnections

When a customer submits payment to Billing & Collections to address a delinquent balance, a Delinquent Turn On work order is generated, which we restore the services for that account. The following is a listing of re-connections executed:

- FY17 – 115
- FY18 – 571
- FY19 – 189
- FY20 – 321

**1,196**

- Reconnection fee = \$50.00
- \$50 x 1,196 = \$59,800

# Meter Reading Unit - Disparities



There is a large disparity between the number of Delinquent Cut-Offs and Delinquent Turn-Ons. Below are various scenarios in which could contribute to the vast difference:

- Last account holder did not close the account
  - No one in the home to open a new account
- Last account holder did not close the account
  - A new person is in the home and opens a new account under a different name and account number
- The service was interrupted due to non-payment
  - Parties at the service address access water without authorization



# Meter Reading Unit – Meter Downsizing

- During FY17, the City Council voted and passed a motion that all residential meters would be charged according to meter size ( $5/8$ "",  $3/4$ "",  $1$ "",  $1\ 1/2$ "",  $2$ "") versus the same rate.
- At that time, the City offered citizens the opportunity to downsize their meter, as a cost. In FY18, the cost started at \$736.87 and City Council voted to lower the cost, in FY19, to \$337.64.
- Below are number of citizens that have taken advantage of this initiative:
  - FY18 – 7
  - FY19 – 20
  - FY20 - 7

# Meter Reading Unit – Quality Control



The City of Petersburg utilizes an Automated Meter Reading (AMR) system which consists of a small, low-power radio transmitters that connects to individual water meters. This system records daily consumption and/or readings which is compatible with a computerized billing system. Reads are collected once a month.

The current system allows this unit to identify leaks via error reports and the Billing & Collections team identifies high consumption during their Quality Control process. Below are the number of leak letters mailed to customers/residents:

- FY19 – 172
- FY20 - 162



# Meter Reading Unit – Leak Letter

The City has four (4) types of Leak Letters:

- Business
- *Fixed Leak \*demonstrated below\**
- Intermittent (Sporadic Usage)
- Confirmed Leak

Re: High Usage - #

Dear [Click here to enter text.](#):

The Staff in the Department of Public Works and Utilities works diligently to ensure all concerns and situations are addressed. The Field Services Team is dedicated to our customers, and will work with the customer until the issue is resolved.

During the meter reading cycle, our team works to provide pertinent information concerning a leak on the customer's property or addressing the city's equipment. After a thorough review of the high usage identified and an investigation at your service address, it has been concluded there was a leak on your property. Also, it has been determined; the issue has been corrected as the usage levels has returned to normal.

Please do the following: the homeowner/renter has resolved the issue, we ask that documentation is submitted to the Billing and Collections department at 144 N Sycamore St, Petersburg, VA 23803. You must submit an invoice from a licensed plumber. If the work was not executed by a plumber, you may submit a copy of the parts purchased and notarized statement of the work completed. Additionally, the usage may reflect the actual consumption due to pool fills, gardening, etc... If this is the situation, garden meter reads or the dimensions of the pool must be submitted to receive an adjustment. ***Please note: during the winter months, garden meter reads and pool fills are not credited for significant usage amounts.***

# Meter Reading Unit – Leak Letter



## Confirmed Leak Letter - Example



Office of the Director  
Department of Public Works and Utilities  
103 W. Tabb Street  
Petersburg, Virginia 23803

Phone: (804) 733-2353  
Fax: (804) 732-2030

**TANGELA INNIS**  
DIRECTOR

[Click here to enter a date.](#)

[Click here to enter text.](#)

[Click here to enter text.](#)

Petersburg, VA Choose an item.

Re: High Usage - #

Dear [Click here to enter text.](#):

The Staff in the Department of Public Works and Utilities works diligently to ensure all concerns and situations are addressed. The Field Services Team is dedicated to our customers, and will work with the customer until the issue is resolved.

During the meter reading cycle, our team works to provide pertinent information concerning a leak on the customer's property or addressing the city's equipment. After a thorough review of the high usage identified and an investigation at your service address, it has been concluded there is a leak on your property. Also, it has been determined; the leak is not the result of faulty equipment or improper readings. Therefore, it would be the responsibility of the customer to correct the issue.

Options: once the homeowner/renter determines the source of the problem, please address this issue. After the issue has been resolved, we ask that documentation is submitted to the Billing and Collections department at 144 N Sycamore St, Petersburg, VA 23803. You must submit an invoice from a licensed plumber. If the work was not executed by a plumber, you may submit a copy of the parts purchased and notarized statement of the work completed. Additionally, the usage may reflect the actual consumption due to pool fills, gardening, etc... If this is the situation, garden meter reads or the dimensions of the pool must be submitted to receive an adjustment. *Please note: during the winter months, garden meter reads and pool fills are not credited for significant usage amounts.*

We hope we have exceeded your expectations and provided you with stellar customer service. If you need further assistance; feel free to contact the Operations Manager, Janell Sinclair, at (804) 733-2300 X2533.

Best regards,

Tangela Innis|  
Director of Public Works and Utilities

cc: Billing and Collections Department

# Meter Reading Unit – Customer Investigations



- Customer complaint – High bill
  - A “Check for Leak” work order was generated, as well as, a 40-day usage chart. The chart indicated the customer had a leak.
  - Account holder was informed that there is a leak on the property.
  - Account holder was the tenant and they informed their landlord.
  - Landlord told the tenant that there wasn’t a leak at the service address and the City’s equipment was wrong.
  - Account holder/tenant continued to get high water bills **AND** there were puddles of water in the front yard. Per the account holder, the landlord was using rocks to fill-in the puddles. (*Service address had a leak between the street and dwelling where the customer would not notice and be aware.*)
  - Customer informed the City that there was a leak at the service address.
  - Leak was finally repaired.

# Meter Reading Unit – Customer Investigations cont.



- Customer complaint – Meter is not working
  - Customer opened an account.
  - Water Service Technician went to the service address and initiated the water service (*the same day – although services can be started up to 24 hours*); however, the dial began to spin.
    - *When a dial spins this indicates that water is being consumed somewhere in the household. To ensure there isn't any property damage; the meter is turned off and a door hanger is left informing the customer of what occurred.*
  - Customer called at the end of the day stating they did not have services. They were informed that a technician would be out the next day and please have someone at the location to make sure all water fixtures are in the off position.
  - The next business day, a technician went out to the service address and the meter was repositioned backwards and turned in the On position. There was an unsuccessful attempt to turn on the meter.
  - This could have resulted in damaged equipment.



- Theft of Meters

- A customer opened a new account and the work order generated reflected that meter #1234 is located at this service address.
- When the technician is dispatched to turn on the water, a different meter (meter #5678 – cubic ft. meter) was at the new service address.
- Research in the system revealed that meter #5678 was taken from another service address and now meter #1234 is missing.



- Unauthorized Use of Water
  - A Delinquent Turn-Off workorder was generated by the Billing & Collections team and a technician was dispatched to the service address.
  - The technician could not turn off the services because concrete was poured in the meter box over the meter which would not allow the meter to be turned on or off.
  - The Utilities Construction team had to get involved and excavate the meter box. The yoke and the meter box had to be replaced as result of the concrete.



- **11,532** active water accounts
- **12,850** active service addresses
- **539** Stormwater accounts
- **\$3.75** base rate for residential dwelling units for stormwater each month.
- Non-residential properties will be billed based on their impervious area.
- **477** cubic ft. meters was replaced with gallon meters since 2017

# In Summary



- **223** remaining cubic ft. meters will be replaced by the end of FY20
- **6,246** workorders has been completed since 2017
- **2,361** delinquent cutoff workorders has been executed since 2017
- **1,196** delinquent turn-on workorders has been executed since 2017
- **\$50** reconnection fee assessed to each delinquent account
- Meter downsize in FY18 was \$736.87 and reduced in FY19 to \$337.64.



- **172** Leak letters sent in FY19 & **162** Leak Letters sent FY20.
- Theft has continued to be a challenge. However, when these incidents have been identified; they are addressed quickly.
- The Quality Control process began in July 2018. As of that time, different reports have been added to make sure all reads are captured.
- Since the implementation of the Quality Control process, the Error Rate decreased from **3% to 1%**.
- We are heading in the right direction!

# Meter Reading Unit

