

## DEPARTMENT OF PUBLIC WORKS

### WATER LINE MAINTENANCE DIVISION

*We bring it safely to your tap...*

*DPW is committed to providing the best possible water service to our customers. Our water consistently meets all federal and state standards and our Water Operations employees of the Bureau of Utility Operations have won numerous national and local awards. Water Operations is proactive in performing continual evaluation and rehabilitation of the water system. A comprehensive program of on-going investigation and preventative maintenance maximizes system performance and is more economical than expensive and inconvenient emergency repairs. The Water Line Maintenance Division is responsible for both scheduled preventative maintenance and emergency repairs to the county's water distribution system...*

Have you ever been driving to work on a cold winter morning and heard on the radio "traffic backup due to water main break"? You can be assured that if it is in Anne Arundel County, by the time you hear this message, one of our highly trained crews is already on the site, repairing the pipe and returning water service to the area of the break back to normal. This can be a wet, cold and messy job, but one that the personnel in the Water Line Maintenance Division are ready to perform 24 hours a day, seven days a week. Our crews are highly trained in specialized emergency repairs, but that's not the only job they accomplish. The workers in Water Line Maintenance ensure that every consumer in Anne Arundel County receives safe, reliable water every time they open a faucet.



Water line exposed in preparation for maintenance.



Workers repair a fire hydrant struck by a vehicle.

Consisting of only 30 employees, the Water Line Maintenance Division's responsibilities include maintaining:

- Over 1,100 miles of water mains
- 8,000 fire hydrants
- 18,000 valves
- Over 100,000 customer water service lines

#### ***Emergency Repairs***

One of the responsibilities of the Water Line Maintenance Division is to perform emergency repairs to water transmission mains, individual water services, broken fire hydrants, leaking valves, broken meter vaults and any other part of the distribution system that fails.

Despite our best efforts to maintain the system, pipes deteriorate on the inside from water corrosion and on the outside from moisture, shifting earth and tree roots. The need for repair may surface by way of loss of water pressure, a water leak, or by poor

water quality. Fire hydrants may fail due to frequent use, being struck in traffic accidents and vandalism.

***Scheduled Maintenance***

In an effort to provide the highest quality water to our customers, the Water Line Maintenance Division performs routine, scheduled maintenance on the water distribution

system. This work includes water main flushing, water valve exercising and fire hydrant servicing.

The flushing program consists of flowing water out of selected fire hydrants in order to remove accumulated sediment, improve water delivery and increase chlorine residuals in the water.

The flushing is performed by drawing enough water through the mains at sufficient force and duration to flush out accumulated deposits of sediments. By use of valve closures, workers are able to isolate the main being flushed and direct the flow of water one way towards a fire hydrant. The main is then flushed by opening a hydrant at sufficient velocity to loosen and remove sediment, resulting in clean, clear water.

The flushing program helps maintain flow capacity and water quality in the distribution system; removes impurities associated with new and repaired mains; and helps eliminate taste, odors and discoloration from the water.

Residents are notified by signs posted on major arteries leading into neighborhoods 48 hours prior to flushing. Flushing may result in some temporary discoloration in the water which is common during any interruption or disturbance in the distribution system.

Another preventative maintenance function performed by the Water Line Maintenance Division is the exercising of valves. Valves are strategically placed throughout the distribution system so that water can be turned on, turned off, or diverted in another direction. Valves are also used to isolate a section of the system under certain circumstances, such as a water main line break, a service line break or a damaged fire hydrant.

Valve exercising is required to keep the valves operating properly and to identify valves that need maintenance.

The third important type of preventative maintenance is the upkeep of fire hydrants. Since the main function of fire hydrants is to maintain adequate fire protection, it is extremely important that they function properly. The Water Line Maintenance Division has an established maintenance program to service fire hydrants, which also includes painting over 1,000 hydrants per year.

### ***Dedicated, experienced personnel***

Water distribution system maintenance requires experienced workers that understand how the system functions in order to make repairs and perform maintenance as quickly and safely as possible. With an average tenure of 18 years in county service, the personnel of the Division have a great deal of experience in operating and maintaining a water distribution system. Approximately half of the employees hold state distribution operator certification, and an ongoing training program strives to increase this number. With this depth of knowledge and experience, the Division is prepared to handle whatever arises in the distribution system.

As the distribution system ages, Water Line Maintenance will be there to ensure that the effects of aging are controlled and problems are repaired before they result in loss of water service to the customers. When failures do occur, the Division will minimize the impact and get the water flowing to the customers as quickly as possible. The Water Line Maintenance Division takes great pride in being the ones who bring the water safely to your

## **Helpful Telephone Numbers for The Department of Public Works**

24-hour EMERGENCY service for water and wastewater; solid waste (after 3:30 p.m.) ... 410-222-8400  
South County... 410-451-4118

After 3:30 p.m., weekends and holiday EMERGENCY Service for stormdrains, roads, traffic lights/signs... 410-222-6120

For weekday EMERGENCIES (between 7:00 a.m. and 3:30 p.m.) involving stormdrains, roads, or traffic lights/signs, please call the appropriate district office. If you do not know what district to call, please call any of these Customer Relations numbers...

Customer Relations... 410-222-7582  
General Information... 410-222-7500  
Billing Information ... 410-222-1144  
Bulk Item Trash Service, Recycling Information and Trash Collection... 410-222-6100  
Northern Roads District... 410-222-6120  
Southern Roads District... 410-222-1933  
Central Roads District...  
Crownsville Yard... 410-222-7940  
Central Roads District...  
Odenton Yard... 410-222-6126

During snow emergencies (4" or more) customers in all roads districts please call... 410-222-4040

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