Water Main Rehabilitation - Trainer Borough

In March 2014, CWA began a water main rehabilitation project in the Borough of Trainer, Delaware County. The project consists of rehabilitating approximately 8,500 feet of 6-, 8-, and 12-inch diameter water main and 2,950 feet of 20-inch water main in Chester along Kerlin Street. The project also includes renewing approximately 95 services and five (5) fire hydrants. This project is on target for completion this October.

You may wonder why the Authority annually rehabilitates water mains. The cleaning and lining process improves water pressure, fire flows, and water quality. Improving our infrastructure will minimize the chances of an interruption of service to customers in these areas. The process consists of cleaning old unlined cast-iron water mains and coating the water main with a thin layer of cement. Older fire hydrants and galvanized iron services will be renewed.

Chester Water Authority does not wait for water mains to break. By performing annual cleaning and lining, we are taking proactive steps to ensure our customers receive high quality water when they need it at a reasonable cost.

Cleaning and Lining Supplementary Projects

The Authority will be performing an additional Water Main Rehabilitation Project this year. One project area is along Township Line Road–Laughead Avenue in Lower Chichester, Trainer Borough, and the City of Chester in Delaware County. A portion of Concord Road located in Aston Township will also be rehabilitated this summer. Approximately 9,600 feet of 12-inch diameter water main will be cleaned and lined and two (2) hydrants and 30 services will be renewed in both locations.

Keeping Our Construction Crews Safe

In addition to drivers not paying attention, the traffic increases in the summer months. Remember, when you see construction crews working along the road, please slow down to protect our workers from harm. They would like to make it home safely.
Fire Hydrants: Safety First

It is illegal to open a fire hydrant. The flow produced would cause lower flow to be available to nearby firemen who are fighting a fire since they need as much water as possible. Illegal usage can also cause damage to the hydrants that can cause the hydrant to be inoperable when needed immediately during an emergency.

Occasionally the Authority issues permits to contractors when they need water for a construction project. CWA personnel and firemen are the only other people who are authorized to normally use fire hydrants.

If you suspect that someone is using a fire hydrant illegally, please call our Customer Service Department at (610) 876-8181 or (800) 793-2323. You can contact us 24 hours a day and you will remain anonymous.

Drinking from a garden hose... is it safe?

Taking a swig from a garden hose on a hot day sounds refreshing, but what is lurking inside could be dangerous. For one thing, bacteria can build up in the hose, especially if it’s been sitting in the sun. For another, unlike household plumbing fixtures, vinyl hoses are not regulated for lead, BPA’s, or other potentially hazardous additives that can leach into the water.

Keep a bottle of cold tap water available whenever you venture outside. Not only is it safe, but it is more refreshing!

Access your account!

www.chesterwater.com

Improving “Front-end” Treatment: Flocculation and Settling

Coagulation, flocculation, and settling are key steps in the front end of the water treatment process. These steps chemically bind and clump suspended and colloidal material into a “floc” particle, which is settled out of the water prior to filtration. Coagulants such as aluminum sulfate or polyaluminum chloride are added to raw water in rapid mixers, enabling floc formation. The coagulated water is distributed among six horizontal paddle-wheel flocculators, where it is slowly mixed as it flows over and under baffles. This builds the floc into a blanket of particles that will settle after it is distributed via flumes to CWA’s settling basins.

In 2013, CWA awarded a contract for improvements to the Treatment Plant’s rapid-mix trains and six flocculation basins, including replacement of associated equipment, motors, and controls that have reached the end of their service lives. The project will also improve flow distribution into and out of the flocculation basins. Construction is scheduled to finish in August 2015.

Water Conservation Facts and Tips

- Less than 2% of the Earth’s water supply is fresh water.
- Of all the earth’s water, 98% is salt water found in oceans and seas.
- The human body is about 75% water.
- Every day in the United States, we drink about 110 million gallons of water.
- The average American uses 140-170 gallons of water per day.
- If every household in America had a faucet that dripped once each second, 928 million gallons of water a day would leak away.
- A leaky faucet can waste 100 gallons a day.
- The average 5-minute shower takes 15-25 gallons of water--around 40 gallons are used in 10 minutes.
- Take short showers instead of baths. A full bathtub requires about 36 gallons of water.

(continued on page back page)
Unwanted Medications: Do Not Flush!

According to research done by the Kaiser Family Foundation in 2006, the average number of prescriptions per person per year increased from 7.9 in 1994 to 12.5 in 2005. Often older or chronically ill Americans have many more. After the death of a parent or loved one, surviving family members are left with large amounts of powerful and potentially dangerous narcotics. Until recently, there has not been an easy way to dispose of unwanted, unneeded, or expired over-the-counter and prescribed medications.

There has been a growing concern regarding trace amounts of pharmaceuticals found in some drinking water sources within the United States. Current federal law prohibits the return of controlled substances to a pharmacy. Similarly, over-the-counter and non-controlled substances are not normally accepted for disposal by pharmacies. The result is an increasing stockpile of unwanted medications in homes all across the country.

The U.S. Geological Survey (USGS) reported that pharmaceuticals such as steroids, prescription and nonprescription medications, antibiotics, and hormones have been detected in the nation’s streams, rivers, and lakes. Studies have shown that pharmaceuticals are present in water bodies around the United States, but more research is needed to determine the extent of ecological harm and the impact that it may have on human health. Although the concentrations are low, their effect could be potentially harmful to aquatic and human life.

In the past, flushing down the drain was considered a proper way to dispose of unwanted medication. Due to increasing awareness, this method is no longer recommended. Medications flushed down the drain can contaminate our water bodies and have adverse effects on our environment. Wastewater treatment facilities are not currently designed to remove these contaminants from their wastewater discharged after treatment.

If you are interested in the proper disposal of medications, visit this web site to find the nearest drug recycling agency is located.


Upgrading Equipment for the Chlorine Storage Building

To protect drinking water from disease-causing organisms, or pathogens, water suppliers often add a disinfectant, such as chlorine, to drinking water. Chlorination is a crucial step in meeting regulatory requirements for disinfection of treated water. It is a method of water purification to make it fit for human consumption as drinking water. In particular, chlorination is used to prevent the spread of waterborne diseases.

In 2013, CWA began design of a project for the timely replacement of the Octoraro Treatment Plant’s chlorination equipment. Associated improvements to the chlorine storage building are part of this work, including an additional door, a new roof, a new bridge crane and hoist for handling chlorine containers, which weigh a ton or more, and associated electrical system improvements.

Construction is scheduled to being in July 2014 and is due to be completed in January 2015.
### Chester Water Authority Contact Information

#### Business Hours and Phone:
- Walk-in: 8:00 AM to 5:00 PM
- Telephone: 8:00 AM to 7:00 PM
- Monday through Friday
- Telephone: (610) 876-8181
  (800) 793-2323

#### Mailing Address:
- P. O. Box 467
- Chester, PA 19016

#### Emergency Hours and Phone:
- 24 HOURS A DAY
- 7 DAYS A WEEK
- Telephone: (610) 876-8181

#### Physical Address:
- Chester Office:
  415 Welsh Street
  Chester, PA 19013

#### Web Site:
- www.chesterwater.com

#### Kennett Square Office:
- 148 West State Street,
  Suite 101
  Kennett Square, PA 19348

### Safety Facts for Customers

Safety for our customers is important. Chester Water Authority wants to help you stay safe.

This includes helping to protect you from impostors and scams relating to your water services.

All CWA meter readers/installers and all of our construction crew wear uniforms and carry identification cards that indicate they are employees of CWA.

### Three facts:

- We **do not** call customers with offers for free water testing.
- CWA **does not** show up unexpectedly asking for entrance into your home. Authority personnel should always have an appointment before they come to your home.
- Chester Water Authority personnel **do not** collect water bill payments while at your home. Payments should be made either in person at our Main Office Building, by mail including your payment in the envelope provided with your water bill, or on-line at:
  - Finding the button “Pay Bill Online”. It is a red button and is located on the left-hand side of the web page.
  - Before letting a stranger into your home, look at the uniform or ask to see their identification. If you have questions about the authenticity of a CWA employee and the nature of his or her visit, please call us at (610) 876-8181 or (800) 793-2323. We will be glad to confirm the identity of our employee.

### Water Conservation Facts and Tips (continued)

- Never put water down the drain when there may be another use for it such as watering a plant or garden, or cleaning.
- Store drinking water in the refrigerator rather than letting the tap run every time you want a cool glass of water.
- Don’t leave the water running when brushing your teeth or shaving. Get in the habit of turning off the water when it’s not being used.
- Chester Water Authority process approximately 29 million gallons of water per day for domestic and public use.
- You can refill an 8-oz glass of water approximately 15,000 times for the same cost as a six-pack of soda pop.
- 300 million gallons of water are needed to produce a single day’s supply of U.S. newsprint.