

CURRENTS

CRACKING THE CORROSION CODE:

Key Progress Made On Water Treatment Upgrades



PWSA's Pipe Loop Study

This month, PWSA secured several key regulatory approvals that will allow us to improve our drinking water treatment to reduce lead levels throughout our system.

Due to elevated levels of lead found in some homes with lead service lines or plumbing, PWSA conducted a comprehensive and industry-leading study to determine if our existing corrosion control treatment methods could be improved. The study, which used lead and copper “pipe loops” to test the effectiveness of several different additives, proved adding orthophosphate to our treated drinking water is the best approach to reducing corrosion from lead and copper pipes. Orthophosphate

is used to reduce and control lead levels by water utilities across the country that are similar to PWSA.

In March of this year, PWSA submitted a final version of our study to the drinking water regulators at the Pennsylvania Department of

Environmental Protection (DEP). In early May, DEP approved the study's recommendation to change our corrosion control treatment to include orthophosphate.

Adding orthophosphate to our treated drinking water requires installing additional equipment that must also be approved by DEP. On May 10th, PWSA completed the design for this equipment and submitted an additional application to DEP for approval to proceed with construction. The application lays out PWSA's plan to construct four facilities that will add orthophosphate: one at the Bruecken Pump Station, one at the Aspinwall Pump Station and two facilities near the Highland 1 reservoir. We anticipate a response to our construction application from

DEP in the coming weeks.

Changing our drinking water treatment is a serious decision that must be addressed methodically to ensure a safe and smooth transition. We will first conduct a large-scale flushing program to prepare the drinking water distribution system for the new treatment chemical. Additionally, our application to DEP includes plans to continually analyze water quality in different neighborhoods across our service area, and to verify the corrosion chemical's performance. These monitoring activities from our staff will ensure water quality and help us verify the dose of orthophosphate that will be most effective at protecting our customers.

We're pleased to share the progress to date on this essential program, but there is much more work ahead to achieve our goal of applying orthophosphate by September 2018. This project is our number one priority, and our staff and the international water quality experts we employ will be working diligently to apply this treatment upgrade as quickly as possible.

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COMING UP:

2018 Board Meeting Dates

June 22, July 27
(no August meeting)

Perry Hilltop/Fineview

May 22
The Pittsburgh Project

Woods Run Mairdale Avenue Stormwater Project Meeting

June 4
Perry High School

Morningside Area Community Council

June 6
Morningside VFW

Shadyside Action Coalition

June 14
Winchester-Thurston Lower School

Lawrenceville 9th Ward

June 19
Our Lady of the Angels Parish

Oakland Community Town Hall

June 20
Oakland Career Center

RAW TALK

By Executive Director **Robert A. Weimar**



The Road Ahead on Lead

Every week we're engaging with customers at neighborhood meetings and community events. We appreciate hearing directly from our customers about what matters most to them. At nearly every meeting we're asked about lead in water. And it's for good reason. Lead was a commonly used metal that can cause serious health problems, especially in young children and pregnant women. So, in this month's column I'll break down the issue and explain our plan to tackle this complicated problem in our water system.

Like many cities, PWSA has water service lines made of lead

Our history is what makes Pittsburgh one of the best cities in the world. Unfortunately, that history means we have old infrastructure. Up until the 1930s, it was common for the pipe that runs from the water main into individual homes to be made of lead. Long ago, lead pipe was believed to be high quality, and its flexibility made it a preferred choice for plumbers. As the nation became aware of the dangers of corrosion from lead pipes, PWSA stopped using it. Many lead lines have been removed over time, but we estimate that about 20 percent of homes we serve still have them in place. We now have a searchable map showing where many lead lines were originally installed. We're continually updating the map and we'll have a complete up-to-date inventory of homes with lead service lines in the next 18 months. The inventory will be used to find where we'll replace lead service lines in the future.

Water treatment reduces risk

Older cities with lead service lines use additives to reduce the risk of lead entering drinking water. Since

the 1990s, PWSA added soda ash and lime for this purpose. Our recent water testing shows these additives no longer provide the protection from lead corrosion we need. Over the past year, we conducted a state of the art study that proved a potable chemical called orthophosphate is most effective at reducing corrosion in our water. Orthophosphate is an additive that is mixed with many water supplies like ours to control corrosion. With the approval of the Pennsylvania Department of Environmental Protection, PWSA is now installing new equipment to apply orthophosphate later this summer. We expect to see lead levels at homes with lead service lines decrease within three to six months of adding orthophosphate.

Getting the lead out

Service lines are the only sources of lead in PWSA's drinking water system. So, the most permanent way to reduce the risks of lead in water is to replace them. It may sound simple, but it's a long-term and costly endeavor. Service lines are made up of two parts – a public side that runs from the water main to the curb, and a private side running from the curb into the home. We've learned that replacing only the public side of a lead line can temporarily raise lead levels in homes. That's why homes identified under our 2018 replacement program can have both portions replaced at no cost to the customer. We're devoting \$44 million in ratepayer dollars in 2018 to replace 2,100 lead service lines across the city and Millvale. The rate we replace lead lines in the future will depend on our ability to treat the water with orthophosphate. Regardless, lead service line replacements will be a central

component of PWSA's construction program for the foreseeable future, and PWSA intends to remove all lead service lines from our system.

Make informed decisions

There are several steps anybody can take to reduce the risk of lead in tap water:

- **Test your tap water for free.** Kits can be requested at pgh2o.com/leadform or by calling our Lead Help Desk at 412.255.8987.
- **Search the records we have for your home at pgh2o.com/leadmap.** Many of the records are from the time of original construction, but it's useful to see if you may have a lead service line. A registered plumber can also inspect the private line entering your home.
- **If you think you have a lead service line, run your tap for at least one minute before using water for cooking or drinking.** You can also use water filters certified to remove lead. Coupons for filters can be found on our [website](http://pgh2o.com/lead).
- **Visit pgh2o.com/lead-facts or call our Lead Help Desk** at 412.255.8987 to learn more about our lead line replacement programs.
- **Learn about the Allegheny County Health Department's programs** to reduce lead exposure from sources other than water at achd.net/lead

As your Executive Director of PWSA, my number one priority is to provide clean, safe, and reliable drinking water. Our team is focused on upgrading treatment to reduce lead corrosion using orthophosphate, finding the lead lines and sharing their location with customers, and replacing full lead lines at an accelerated pace. These initiatives have taken longer than any of us would like, but we're making significant progress—every day—toward becoming the water, sewer, and stormwater utility you expect and deserve.

Green Stormwater Infrastructure Projects

Projects coming to Pittsburgh neighborhoods

Maryland Avenue

On Tuesday, April 24th PWSA met with Shadyside residents about the first phase of the Maryland Avenue Green Stormwater Infrastructure (GSI) project. Residents in this neighborhood have experienced basement and neighborhood flooding for many years. This project will address those issues and will incorporate green solutions to enhance the neighborhood.

Attendees were able to provide final input into the design elements of the project's green intersections, pedestrian greenways, and green alleys. Residents expressed interest in incorporating trees and potentially an art installation into the project. Residents within the project area will have the option to disconnect their downspouts from the sewer system using green solutions. PWSA will provide more information about this opportunity. Construction will begin on the first phase of Maryland Avenue later this summer.

Wightman Park

The Wightman Park Master Plan, led by the District 8 Council Office, was adopted in 2015. PWSA is a partner in the project. The meeting held on Monday, April 23rd, focused on GSI solutions to incorporate into the design to address drainage and improve stormwater management within the park and adjacent streets.

Attendees had an opportunity to explore project boards that provided examples of green solutions including underground storage, rain gardens, wetlands, additional landscaping, and curb cuts along the street. The feedback will be incorporated into a preliminary design for the project and presented to residents for further input in June.



Wightman Park Community Meeting

Hillcrest Street Stormwater Park

PWSA met with Garfield residents on Tuesday, May 8th, to answer questions related to the remaining construction timeline and to address concerns about trash, maintenance, and safety. The project will reduce neighborhood flooding and capture stormwater draining from above Hillcrest Street. Contractors are installing landscaping and are completing the last remaining items to fully construct the project. PWSA is resolving the issues raised by the community, and the project will be finished by the end of June.

Melwood and Finland

Contractors broke ground on this GSI project in Polish Hill on April 30th. Work is well underway and includes a variety of green solutions that will intercept stormwater throughout the neighborhood. PWSA is constructing improved curbs, stormwater inlets, and underground storage to capture stormwater runoff. Work is taking place along Melwood Avenue and Bethoven and Finland streets.

Centre and Herron

The Centre and Herron GSI project in the Hill District will be finished this spring. The Pittsburgh Parks Conservancy led several volunteer planting events to install the landscaping. They will maintain the site once it is fully constructed. In June, PWSA will hold a ribbon cutting event to recognize the completion of the project.



PWSA IN THE COMMUNITY

PWSA has been busy out in the community at the following meetings:

Wightman Park GSI Project Community Meeting
April 23
Carriage House

Maryland Avenue GSI Project Community Meeting
April 24
Winchester-Thurston Upper School

Swisshelm Park Group
April 25
Sarah Jackson Black Community Center

Banksville Civic Association
April 26
Banksville Park Shelter

South Side Planning Forum
May 8
Brashear Center

Manchester Citizens Corporation
May 10
1319 Allegheny Avenue

Lincoln-Lemington Consensus Group
May 12
Paulson Community Center

Allegheny City Central Association
May 14
City of Asylum

Mt. Washington Community Development Corporation
May 17
Mt. Washington Senior Center

PWSA Customer Feedback

Going above and beyond to help customers.



PWSA Compliance Team (left to right): Sarah Viszneki, Brittany Schacht, and Reginald Brown

A Pennsylvania Public Utility Commission (PUC) investigator gave high praise to our Compliance Team:

“This is the first case I have had a chance to review, and I just wanted to let you know that your report is great. You provided all the pertinent information and explained the customer’s situation in detail. I wish other companies—who have been writing these reports for decades—could do it this well.”

- A customer recognized Shannon Deasy, Dispatcher, for excellent service. The customer shared that Shannon was very knowledgeable and helpful and promptly called her back to let her know the schedule for work at her home. Thanks for a job well done!
- Michelle Short, Customer Service representative, received a nice note from a happy customer. *“You are the best—thanks for knowing what to do and being so pleasant.”* Great customer service, Michelle, keep up the good work!
- Our Field Operations crew replaced a leaking a water service line for some appreciative customers: *“The replacement was done by Anthony and his crew and they were great, extremely courteous, professional, and helpful. At every important step in the replacement process they made a point of finding my wife and me and explaining to us exactly what their next steps were. They completed the replacement in a little over a day with minimal disruption and cleaned up in exemplary fashion.”*
- Our Lead Project Construction Team received the the following from a satisfied customer: *“Thank you very much! All the guys were helpful and professional. They came back and filled in the holes. They were efficient, kind, and courteous.”*
- A resident who experienced a particularly messy water main break in front of his property had very kind words for the team that cleaned up the site: *“I think some of the people at PWSA should know how very well all of this adventure worked out.... from the main’s break, my being alerted at 4AM by the City’s police, and the immediate repair and clean-up to the wall’s reconstruction with metal ties to the sidewalk and curb replacement, to yesterday’s final backfilling and planting..... all of this done as promptly as conditions allowed and by workers/craftspeople who were -- to a person -- polite and focused on their tasks.... As I’ve said to several of the people at the site since December, I wish the media would feature this sort of performance by an often-criticized public authority..”*

PWSA's Lead Map Draws a Big Crowd

In early May, we released new service line information for over 20,000 location throughout our water service area.

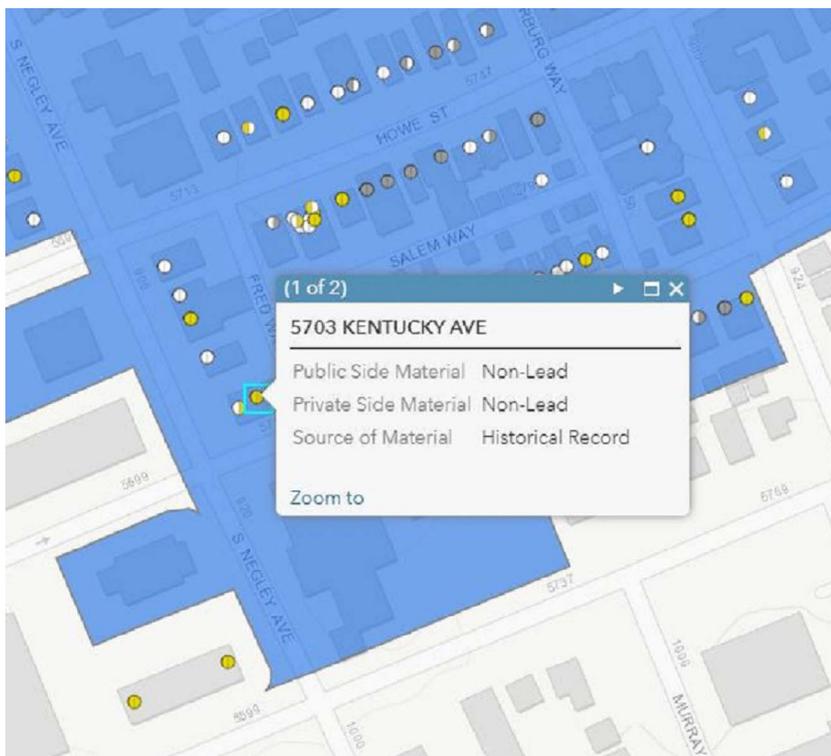
After reviewing and digitally logging over 120,000 paper records of properties from the time they were built, PWSA transferred this data to pgh2o.com/leadmap for customers to learn if they might have a lead service line.

Customers can search for their address and find the results of curb box inspections performed to determine the material type of their service line as well as historical records recently digitized by PWSA. This information is a good first step to understanding the potential risks of lead service lines at their property.

The response so far has been great. On May 2nd, the map had over 30,000 visitors! This goes to show what transparency and access to resources means to our customers and we are committed to building on this great interactive tool.

Read more about the map in our [press release](#).

Customers can receive a free lead water test kit at pgh2o.com/leadform.



Media and Press Releases

MEDIA COVERAGE

PWSA Updates Interactive Map Showing Lead Service Lines, KDKA

Could your home have a lead water line? PWSA has a map for that, Post-Gazette

PWSA using quick, less costly method to pull lead water lines from ground, Tribune-Review

PWSA Using “Pulling” Technique, A Less Invasive Way To Replace Lead Lines, WESA

PWSA touts cheaper lead line replacement – with less lawn damage, Post-Gazette

PRESS RELEASES

The Pittsburgh Water and Sewer Authority Joins 6th Annual National Infrastructure Week

PWSA Posts Historical Record Information to Interactive Lead Line Map

Pittsburgh Water and Sewer Authority Taps the Sun to Manage Stormwater

Why Dig When You Can Pull?

City officials and media witness demonstration of innovative lead line replacement

We are hard at work replacing lead lines throughout the City of Pittsburgh and Millvale this year. While it may seem simple to replace the old lead pipes running from the water main into homes, each property has unique challenges and requires our contractors to use different techniques to minimize property damage. The requirement by the state to replace 2,100 lead service lines by the end of 2018 also means that we must replace lines as quickly as possible.

On May 4, 2018, PWSA and its contractor, Independent Enterprises Inc., demonstrated to city officials, members of our board of directors, and local media outlets how we can replace a lead service line by pulling it underground using a cable. Pulling a lead line means that a new copper line is attached to the lead line, so it is threaded in place at the same time as the old line is removed. This method not only saves time, but it also avoids digging a trench through the street into a home. A video of the lead line pull can be found on our [@pgh2o Twitter page](#).

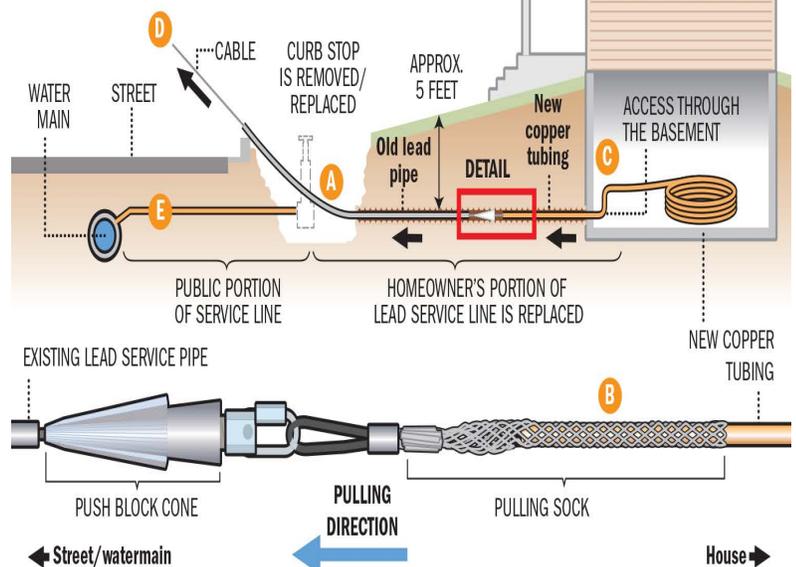
“The lead line replacement program is focused on serving our customers by avoiding potentially harmful partial lead line replacements and using innovation to reduce private property disruption,” said PWSA Executive Director Robert Weimar. “Pulling old lead lines is a win-win for PWSA and the public because it can save time and reduce the need to dig up front yards or remove trees.”

The highlight of the demonstration was when a resident who had her lead line pulled the day prior chatted with attendees about her experience with the program. Not only was she delighted that her public and private lead line was replaced, but she thanked PWSA for thoughtfully preserving the tulips in her front yard.

PWSA's Engineering and Field Operations staff learned about the line pulling method through best-practice research, as well as outreach to master plumbers and other drinking water utilities. As the lead line replacement program moves into the summer, we expect contractors to perfect the technique and use it whenever possible. More information about the lead line replacement program, including a map of our work areas, can be found at pgh2o.com/lead-facts.

Replacing old lead service lines without digging trenches

- Excavation exposes the curb stop where the homeowner's portion of the service line meets the public portion. Cable/wire rope is inserted into the existing lead service pipe at the curb stop.
- Cable is attached to new copper tubing using a push block cone and a pulling sock.
- Foundation wall is chipped away from existing line to allow new line to pull smoothly into position.
- Existing line is pulled out using an excavator as the new line is pulled into position.
- Existing line between watermain and curb stop is also replaced.



THIS TECHNIQUE CANNOT BE USED IF ...

- The service pipe is looped.
- The pipe is so badly clogged that the cable cannot pass through.
- The pipe is encased in concrete (excluding basement wall).
- The ground is extremely hard and dry.
- The existing utilities interfere with a straight line pull.

Source: Pittsburgh Water and Sewer Authority

James Hilston/Post-Gazette

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PWSA Joins 6th Annual National Infrastructure Week



Infrastructure Week – May 14-21, 2018 – is a week-long series of events raising awareness about why it is #TimeToBuild better infrastructure.

PWSA is a participant in the national advocacy and educational event, Infrastructure Week, which takes place annually in May. Across the country, hundreds of businesses, labor organizations, elected officials, and more come together to spread the message. During this 6th annual Infrastructure Week, the message is: The future won't wait. Neither can we. It's #TimeToBuild.

“We are thrilled that the Pittsburgh Water and Sewer Authority is joining Infrastructure Week. The dire state of America’s infrastructure is one of the most pressing issues facing us as a nation, and the benefits of a stronger, better infrastructure system will be far-reaching and long-lasting,” said Zach Schafer, director of Infrastructure Week. “During Infrastructure Week, we bring together the public and private sector to encourage

lawmakers to highlight innovation and leadership, think long-term, and invest in infrastructure at the federal, state and local level.”

In 2018, PWSA will implement an \$88.4 million capital program focusing on investment in infrastructure. This investment includes a \$44 million lead line replacement program, constructing new green infrastructure projects to manage stormwater, and upgrading critical components of our water distribution system. We have approved a five-year capital improvement program of \$1.1 billion that reflects the level of investment needed to improve and maintain our infrastructure.

“Pittsburgh is a growing city with first-class universities, healthcare, financial institutions, and a growing

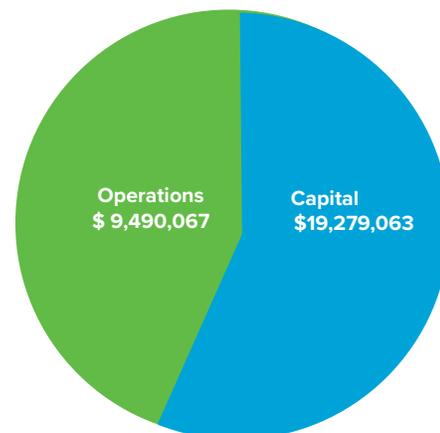
technology sector. As the city’s population grows, it’s necessary to provide residents and businesses with safe and reliable water, sewer, and stormwater services,” stated PWSA Executive Director, Robert Weimar. “Investing and maintaining in our infrastructure is essential to providing the City of Pittsburgh with the water authority it expects and deserves.”

More information about Infrastructure Week can be found at infrastructureweek.org and pgh2o.com/infrastructureweek

2018 YTD Expenditure

Report includes all paid Vendor Invoices and Contractor Pay Applications from January 1, 2018, to May 15, 2018, as well as invoices received but not yet finalized/approved.

Capital	\$ 19,279,063
Operations	\$ 9,490,067
TOTAL	\$ 28,769,130



Bob Weimar Accepts Role as PWSA's Executive Director



Robert A. Weimar
Executive Director

At last month's board meeting, Bob Weimar

officially accepted a permanent position as Executive Director of PWSA. Bob served PWSA as an engineering consultant since 2014, and as Interim Executive Director since June 2017. Bob will lead the Authority for the foreseeable future, continuing to get stuff done (GSD) alongside the entire PWSA team, for our customers and stakeholders.

Everyone at PWSA is appreciative to Bob for bringing much needed stability to our organization!

New Hires

Robin Shaw
Environmental Compliance Coordinator

Nicholas Denham
Help Desk Intern

Kameron Davis
Help Desk Intern

Halie Stewart
Clerical Specialist II

Maria Michalek
Customer Service Representative (Part-Time)

WELCOME ABOARD!

Job Postings

Interested in working with us? PWSA is looking for dedicated people to join our team.

Director of Engineering & Construction

Director of Water Production

Budget Director

Treasurer

Controller

Scada Technician

Product System Specialist

Inventory Control Specialist

Accounting Specialist

Environmental Compliance Intern

Customer Service Representative - Full Time

Customer Service Representative - Part Time

Visit www.pgh2o.com/employment to learn more.

PWSA Employee Spotlight

Sharon Gottschalk: Customer Service Manager



Sharon Gottschalk's promotion to Customer Service Manager comes after 14 years with

PWSA. She came up through the ranks of customer service, first as a Customer Service Representative I, and until February 2018, as the Collections Coordinator.

"I never thought I'd be a manager," Sharon said. "I always did my job with a willingness to learn and go above and beyond what was expected. That's who I am. My direct supervisor, Julie Quigley, fully supports me, and I appreciate the mentoring she is providing as I adjust to this new role."

Her work ethic, diligence, and commitment to PWSA are the traits that got her to this level, and they are the very traits that are needed to build her department as we enter a new era under Pennsylvania Public Utility Commission (PUC) oversight.

Gottschalk oversees the Advanced Metering Infrastructure (AMI), Billing, Collections, the Contact Center, Dispatch, and a new division focusing on PUC compliance. One of the first changes she made was to get all divisions within customer service talking with one another. She has established weekly staff meetings that provide an opportunity for customer service representatives to talk through the questions they are getting from customers and to discuss how they are addressing those concerns.

These meetings are going a long way to build morale, create connections within the department, and help our front line staff learn from one another to better address customers' questions.

"Since February, we have hired eight new customer service representatives, and we're all learning how to work with customers under the PUC," Gottschalk stated. "These conversations are important for everyone, and it helps us realize that we are all in this together."

Making sure the Customer Service department is fully staffed is another function she manages. Not too long-ago, the Contact Center had a skeleton crew of four representatives. Staff from other areas within Customer Service were pulled into the phone queue, making it difficult to cover calls and focus on the main duties of their back-office jobs.

There are now 13 customer service representatives working in the Contact Center. Calls are being answered with less wait time, and with PUC oversight, there is more accountability to make sure the customer is satisfied.

Under PUC, we are required to ask a customer if they are satisfied with the resolution provided. If a customer says 'no,' the call escalates to our Compliance Division and we have three days to satisfactorily address their concern. If a customer still isn't satisfied, then it becomes a dispute that is escalated to our Compliance Group to satisfy the customer within 30 days via a utility report. If Compliance is unable to satisfy the customer, the customer has the option of filing an informal complaint with the PUC.

Although moving to PUC oversight has created more work for PWSA's Customer Service department, it is a positive step. There is more accountability to ensure the customer's satisfaction, and there are also more flexible payment plans to offer customers who have difficulty paying their bill. Customers are feeling heard, and our Representatives are feeling more effective doing their job.

"I've only been in this position for a couple of months, and I am already seeing differences," Sharon said. "Morale is improving; people are happier. The actions to hire more people, establish consistent communication throughout the department, and follow PUC procedures are creating a group that is working well together. I'm proud of what we've accomplished in this short time."

Sharon has two kids, Cailey (14) and Tommy (10). After work, she's often attending basketball, baseball, and softball games. Her kids are her life and keep her very busy.

"I've only been in this position for a couple of months, and I am already seeing differences."

Visit www.pgh2o.com/employment to learn more.

WATER WISE

Stormwater Tips

Medicine Disposal Myths and Facts



Unwanted medicines should be disposed of properly like other household hazardous wastes. Medicine take-back programs are the best way to dispose of unwanted medicine.

Myth: It's fine to flush prescription drugs down the toilet or pour them down the drain.

Fact: Many pharmaceuticals are getting past our wastewater treatment plants and getting into our drinking water. Sewage systems are not equipped for prescription drug removal. **It is important to note, however, that a small number of medicines have specific directions to immediately flush them down the toilet when they are no longer needed and a take-back option is not readily available. A list is available on the [FDA website](#).*

Myth: Medicines thrown in the garbage cannot get into the environment.

Fact: Unwanted drugs are still chemically active when they are thrown in the trash. Medicines in a landfill can be released into the environment through the landfill drainage.



Water Wise Tip

The BEST option to dispose of old medication is a drug or medicine take back event. If you are unable to attend one, here are steps for household disposal:

1. Take your prescription drugs out of their original containers.
2. Mix drugs with an undesirable substance, such as cat litter or used coffee grounds.
3. Put the mixture into a disposable container with a lid, such as an empty margarine tub, or into a sealable bag.
4. Conceal or remove any personal information, including Rx number, on the empty containers by covering it with permanent marker or duct tape, or by scratching it off.
5. The sealed container, with the drug mixture and the empty drug containers, can now be placed in the trash.

* Drug Disposal Guidelines, Office of National Drug Control Policy, October 2009



Stay in Touch with PWSA!

Subscribe to our mailing list to receive press releases and community announcements.



Please take a minute to join our mailing list at pgh2o.com/subscribe to receive press releases, our monthly newsletter, and other announcements you won't want to miss. Our goal is to establish an ongoing dialogue with customers and the Pittsburgh community.



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Will Pickering
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Julie Quigley
Director of Administration

PWSA wants to have an ongoing dialogue with our customers and the Pittsburgh community. One of the easiest ways to share information is on social media and through our email subscription. Join us in any or all of the following ways to receive the latest about water and sewer services, projects and initiatives, our newsletter, and announcements.

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