

## Flushing for Orthophosphate – Frequently Asked Questions

### What is Orthophosphate?

Orthophosphate is a food-grade additive that we will begin adding out our treatment plants to help reduce lead levels in water. When water with orthophosphate runs through the system, it will create a coating on the inside of lead service lines, creating a barrier between the lead pipes and the water. This is called “corrosion control”. PWSA currently uses soda ash and lime for corrosion control but has found that orthophosphate will work even better.

### Is it safe in my drinking water?

The Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PA DEP) recognizes orthophosphate as an effective additive in water in reducing lead levels. It is also recognized as safe by the U.S. Food and Drug Administration.

PWSA conducted a year-long study of several different additives that are used to reduce lead levels in water. After finding that orthophosphate would be most effective for PWSA’s system, the research was reviewed extensively by the PA DEP before being approved as part of the treatment process. Orthophosphate is used for corrosion control in Boston, Washington, DC, Cleveland, and Philadelphia. It is also used by Pennsylvania American Water Company who serve some customers in the City of Pittsburgh.

### Why is it important for the water system?

PWSA exceeded the action level for drinking water in June 2016. Since then, we have been working to aggressively replace lead service lines. However, replacing every lead service line will take years. In the immediate term, an effective solution to address high lead levels is to use the most effective corrosion control, which benefits our entire drinking water system.

### Why does PWSA need to “flush” the water system before adding orthophosphate?

Before PWSA can begin to add orthophosphate-treated water into the system, it must flush the water distribution system. To do this, PWSA crews will be strategically traveling through the drinking water system opening hydrants to let the water flush out of the mains in the street. This will help the water with orthophosphate create the protective barrier necessary for corrosion control.

Crews will start with our largest water mains in the system and will work at night so not to disrupt customers. As they complete flushing on the largest water mains, they will move to the smaller water mains and hydrants that are located on most city streets. This work will take place during the daytime.

### How will I know you are flushing the water system in my area?

PWSA will be notifying customers via robocall who are near our crews flushing hydrants. If you live near a large water main, you may not notice our crews working during the nighttime. During daytime work, you will see fire hydrants running and crews taking samples.

There is a chance you will see brown water after flushing is completed in your area. This water is not unsafe but is unpleasant to see. To flush brown water from your internal plumbing, run the cold taps in your building at the lowest possible point until the water appears clear. There may be some no-parking signs posted while crews perform flushing to allow for enough room for equipment around hydrants.