

Upper Southampton Municipal Authority is in the process of replacing the water main along Maple Avenue from Second Street Pike to Street Road. The existing main is cast iron, which was installed in the 1950's and 1960's. In recent years, the Authority has responded to several main breaks along that 1-mile stretch, and we recently replaced many valves in the area in anticipation of replacing the water main. Residents in the area have long complained about changes in pressure and cloudy or brownish water during maintenance events, including hydrant flushing, which largely resulted from the advanced age and overall poor condition of the main. To resolve these longstanding issues, the Authority recently obtained nearly \$3 million dollars in funding , financed through PennVest (Pennsylvania Infrastructure Investment Authority, an agency of the Commonwealth of PA) to completely replace this 1-mile stretch of water main, which began approximately one month ago.

As the work was being completed, complications arose that resulted in temporary problems with water pressure and coloration in the area. While the Authority's experience with large scale infrastructure projects has shown that issues and complications are not unusual, we understand that our residents do not have that same understanding. In this case, our contractor was performing work on the main and opened valves that are designed to be normally closed and also closed a valve that should have been reopened. That error resulted in residents experiencing a drop in water pressure, and we immediately sent our crew out to investigate and address the problem. It took our crew some time to identify the exact source of the issue. The reduction in pressure first needed to be controlled, so a back-up booster station was put in service. Utilizing that normally dormant line scoured mineral deposits off the inside of the cast iron pipe and stirred up existing sediment that was then introduced into the common lines, resulting in brownish-orange water. Disturbances to cast iron pipes which have corroded over time result in both rust and pipe materials that may flake into the water supply. Upper Southampton Township also has a high level of manganese, which combined with iron, will also cause a brownish-orange tint to the water supply.

Water Authority staff executed changes to the levels in our elevated tanks to increase the water pressure in the lines that feed the affected area, restoring levels in our main feed tank, the Rosebud booster station, and ultimately stabilizing pressure throughout the neighborhood. We have since been operating under that scenario, without the need to enlist our back up booster station again.

Fortunately, the Authority addressed both the pressure and water clarity concerns and have not received notice from our residents of any further issues, allowing the Authority to continue work on this important main replacement project that will provide long-term relief to issues that our residents have been experiencing for years. The purpose of the water main replacement is to replace the decades old cast iron main with modern, C900 plastic pipe to provide a more reliable and efficient water supply, one that will not be

subject to the electrochemical breakdown that occurs in cast iron pipe. This issue is most particularly found in aging infrastructure and is one of the chief culprits behind the most recent issues our residents observed with their water service.

It should be noted that during any water main disturbance, pressure can drop which will release air bubbles and make water appear murky or cloudy. Should residents experience any cloudy water, cold water should be run from a tub or large faucet without an aerator for 10-20 minutes until the water runs clear and air escapes. Importantly, this can be observed during periods when the Authority is conducting work on the water main.

Please avoid doing laundry until your water is clear since sediment can stain clothing and fabrics. While the water may appear unpleasant, temporary discoloration from infrastructure work is generally safe. USMA water is tested 5 times per month and is required to meet PA Department of Environmental Protection (DEP) standards. Samples received from private residences will also be tested this week and results will be posted on the USMA site.

USMA is separately aware of the picture of dead fish that was posted on social media. While the Authority has no knowledge of any issues with wildlife in the area, we did discuss the report with our representative from the PA DEP. From what we understand, the PA DEP conducted an investigation into the report on Friday, but we have not yet been made aware of their findings. Ultimately, the Authority understands that there have been long-term issues in the area as a direct result of our aging infrastructure. As a result, we are presently conducting a large-scale project to replace 1-mile of water main with more modern materials that will provide a long-term benefit to our residents. While complications arose this past week, the underlying problems have been addressed, and work is continuing to provide a more permanent fix that will be beneficial to everyone. The Authority remains committed to improving our system while not sacrificing our continued compliance with all Commonwealth safety standards.