## WATER UTILITY UPDATES FOR CITY OF LONGVIEW CUSTOMERS

The combination of contractor diligence, City coordination, and dry weather is adding up to good things in the Baltimore Area. Phase two of the emergency main replacement project is complete and the new main on Beech Street is in service. Starting tomorrow, crews will be working from both ends of the alley between 16th and 17th Avenues to install a new 8-inch main and move customer services to the new main as soon as possible. Each block of new main will be placed into service as it is completed and new services installed.

Jar testing of phosphate treatment is complete and it demonstrates phosphates are somewhat effective at reducing iron and manganese precipitation and discoloration, but have little effect on spotting. Numerical water quality analysis was performed to evaluate reduced precipitation, and ceramic tiles were used to visually compare white spotting. Using three phosphate products, drops of dosed and un-dosed drinking water were applied to black ceramic tiles and allowed to evaporate. The tile tests showed water dosed with phosphates had no reduction in spotting compared to the undosed water.



Ceramic tile test (Tiles 5 & 9 at top are undosed)

To reduce iron and manganese precipitation, the product which performed best is a 90% polyphosphate blend typically used as a food preservative and is generally recognized as safe by the Food and Drug Administration. Higher concentrations of phosphates



have been used in detergents, but they are being phased out because of their wastewater impacts. Phosphorous is a nutrient which supports plant growth; high concentrations in wastewater discharges can cause eutrophication or algae blooms in rivers, lakes, streams and ponds.

Before any decision is made to implement phosphates, additional pilot testing is needed. Jar testing was a necessary first step, but lab results are not always duplicated in the real world. Preparations have been made to begin pilot testing using pipe loops built of cast iron water main removed from Ocean Beach Hwy and from an alley in the Baltimore area. The pipe loops are plumbed to maintain water flow and they more accurately represent actual dynamic conditions in the distribution system.

## Did You Know?

The intake structure which pumped water to the Fisher's Lane treatment plant is downstream of nine sewage treatment plants with outfalls that discharge to the Cowlitz River. Water testing in 2009 found fecal coliform in the Cowlitz River, and traces of the pharmaceutical drug fluoxetine (Prozac) in the Columbia River.

Additionally, City staff will use our Fluoride treatment in a tracer study to monitor the progression of water throughout the distribution system and determine water age. Water age is important to verify continued effectiveness of phosphate treatment as the water travels through our distribution system.

Weekly distribution system sampling continues to indicate most of the system is stabilizing. Sudden increases in total iron and manganese were observed in the Baltimore Area due to our water main construction activity, and in the Old West Side due to water flow used to put out a residential fire. These increases in iron and manganese are typical effects from sudden hydraulic changes, rather than the effects of changing water chemistry.

To report a water quality complaint 24 hours a day, click on the ASK Longview button at www.mylongview.com or call Utilities Division at 442-5700. We appreciate your patience as we work through these temporary problems.