TO: Appleton Water Customers

FROM: Chris Shaw, Utilities Director

DATE: August 24, 2011

RE: Intent to Decrease Fluoride Concentration in Drinking Water

Background:

The Appleton Water Treatment Facility (AWTF) fluoridates the community’s water to improve oral health and reduce tooth decay. The current process set point is to dose fluoride at 1.0 mg/L. This concentration and practice is similar to other water systems that fluoridate water in the United States (approximately 200 million people). The current maximum contaminant limit for fluoride is 4.0 mg/l.

Recently, the U.S. Department of Health and Human Services proposed that the recommended level of fluoride in drinking water be set at the lower end of the current recommended range (0.7-1.2 mg/l) to prevent tooth decay. The reason for the change is that Americans have other sources of fluoride when compared to when fluoride was first introduced. Too much fluoride can lead to dental fluorosis which can leave white markings on the tooth enamel.

Wisconsin Safe Drinking Water regulations and Appleton municipal code currently require fluoride to be maintained within a range of 1.0-1.5 mg/l. AWTF staff have received notification from WDNR that reducing the concentration in drinking water can happen conditionally. The WDNR requires that notification to the water customers occurs prior to the reduction. AWTF will meet the notice requirement through notification through water bills. Other regulatory conditions for chemical storage, feed equipment, metering, and fluoride analysis are currently being met.

In addition to the state regulatory requirements, the city’s municipal code was revised to reflect the lower concentration. The AWTF is tentatively scheduling January 1, 2012 as the date to lower the fluoride concentration into the city’s water system to approximately 0.7 mg/L. In doing so, the reduced fluoride concentration will ensure proper prevention of dental caries while minimizing the potential for fluorosis. Please feel free to contact Chris Shaw if you have any questions or would like any additional information at ph: 832-5945.