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TO: Chairperson Joe Martin and Members of the Utilities Committee

CC: Enterprise Accounting Fund Manager Kelli Rindt
City Attorney Jim Walsh
Mayor Timothy Hanna

FROM: Utilities Director Chris Shaw

DATE: May 15, 2014

RE: *Koch Membrane Systems Warranty Agreement Expires June 15, 2015*

BACKGROUND:

The City of Appleton has been in a warranty agreement with Koch Membrane Systems (KMS) since 2007. The KMS Warranty Agreement provides the AWTF with ultrafiltration membranes to protect Appleton residents and the City's wholesale water customers from the waterborne microorganisms Cryptosporidium and Giardia. The agreement also established standards for initial and lifetime flux capacities and provided a general warranty for membrane maintenance (i.e., fiber breakage repair). The warranty agreement costs are conditioned on an escalating scale of payments over time and adjusted for inflation using the Consumer Price Index (CPI). The KMS Warranty Agreement will expire June 15, 2015.

RUPIP DEMONSTRATION TESTING:

An element of the current Regulatory Upgrade and Process Improvement Project (RUPIP) is full scale demonstration testing of newly installed process equipment and chemical treatment. The intent of the testing is to ultimately transition disinfection technologies from the KMS system of ultrafiltration to new chemical treatment and the ultraviolet light process. This full scale testing cannot be completed until the construction phase advances the new equipment and plant modifications. Tentatively, the RUPIP construction schedule would allow for full scale demonstration testing in the first quarter of 2015.

Both the KMS warranty agreement expiration and completion of the RUIIP construction phase will be occurring close to the same time. Once started, RUIIP full scale plant testing should continue to occur over the following year to work through seasonal variations in source water quality. With positive full scale demonstration test results the AWTF will be in a position to transition to ultraviolet light as the disinfection process to treat both Cryptosporidium and Giardia.

MEMBRANE REPLACEMENT PLAN - POST WARRANTY:

AWTF staff has reviewed the existing KMS Warranty Agreement and finds that there exists too many unknown variables to ensure the city would be well served with another term or a new agreement with KMS. First, the ultraviolet light process may have a limited process life and there would be little value in warranting a process that is not in use for the long term. Second, the current KMS warranty agreement offers a post agreement warranty using a prorata warranty. Therefore, the cartridges on site will transition into the manufacturer's standard warranty. Third, purchasing new cartridges directly allows for the City to have simplified unit costs. Finally, KMS has introduced a new membrane (Targa II PES line) which the City has limited product data to support life expectancy and cost decisions.

To supplement the post KMS Warranty Agreement there will be funds allocated to Operations and Maintenance Treatment Program Budget, Business Unit 5323. If you have any questions regarding this planning or the KMS agreement please feel free to contact Chris Shaw or City Attorney Jim Walsh.