Procorp Enterprises LLC

10200 Innovation Drive, Suite 500
Milwaukee, WI 53226
Phone: 414-258-8777
Fax: 414-258-8066
www.procorp.com

Memorandum

Date: **May 20, 2010**

To: Waukesha Common Council
Mayor Scrima
Water Utility Commission
City Administrator Luther
City Attorney Meitz

From: Eric Fessler

Subject: Response to Staff Response to Procorp Presentation

Procorp appreciates the opportunity to present an alternative to Lake Michigan Water for the City Council and the citizens of Waukesha. The purpose of this email is to clarify some of the questions and inaccuracies reported following our presentation. The facts are:

WAUKESHA WATER SUPPLY IS NOT CRITICAL, in fact, the Water Utility states that the aquifer can supply Waukesha's water demand for the next 100 years. Moreover, experts state that the water supply is not critical (please reference "Future Water Report" by CH2M Hill and "Water Resources in Wisconsin Hydrologic Realities and Misconceptions" by UWM).

LAKE MICHIGAN ALTERNATIVES INCLUDE COSTS THAT ARE NOT REQUIRED TODAY. Alternative 1 of the Lake Michigan application, referred to many times Tuesday evening, includes Reverse Osmosis treatment for the majority of the flow to accommodate future regulations. This cost is not required today and not tomorrow. If the regulations don't come for 10 years then there is 10 years of savings; if it's 20 years it's 20 years of savings …THIS IS UP TO $200 OF SAVINGS PER HOUSEHOLD EACH AND EVERY YEAR.

PROCORP TECHNOLOGY IS PROVEN. The fluidized bed reactor (pellet reactor) technology has been utilized for potable water treatment since the 1970's. The first US installation of the pellet reactor was in Hollywood, Florida in 1971. Procorp's first potable water pellet reactor design was in Valencia, California; another will be on-line in July of this year; and four others are in proposal stage. Radium removal is simply an extension of the softening technology. This is not unlike cold lime softening, which is recognized as Best Available Technology for radium removal and has been used for over four decades.

PROCORP TECHNOLOGY WILL SAVE COSTS. If our technology would be employed only for Radium removal (not to provide soft water), the cost is $0.10 per 1,000 gallons (using calcium hydroxide instead of sodium hydroxide). The current HMO process is reported to cost $0.14 per 1,000 gallons. In fairness to the water utility, these costs were not reviewed in depth

as the Water Utility discontinued interest. The cost to provide radium-free, soft water would be $0.24 per household per day. Average cost of home softening is $1 per day for each household on top of the water rates. This is an opportunity for the water utility to provide a higher quality product at lower cost.

PROCORP TECHNOLOGY IS GREEN. Our technology could conserve up to 1-2 million gallons of water each day and eliminate 12 million pounds of chlorides from being discharged to the Fox River.

GROSS ALPHA NUMBERS WERE INCORRECTLY REPORTED. All radium treated effluent samples analyzed according to EPA method 900 were below the gross alpha Maximum Contaminant Level (MCL). The 88 pCi/L result referred to in the Waukesha Water Utility Memorandum was for a raw water sample. We would be happy to provide the City Council the data to avoid confusion between raw water and radium treated effluent sample data.

Procorp is willing to pilot test as long as necessary to demonstrate to the Water Utility and City Council the performance of the technology in meeting the radium and gross alpha standards.

APPROVALS WILL NOT REQUIRE THREE YEARS. Procorp has worked closely with the appropriate State departments. The Departments of Health Services (DHS) and Natural Resources (DNR) are in support of the softening and radium removal technology. Both agencies recognize the positive environmental impact of the technology (eliminating chloride discharge and wasted water). DHS has stated that the licensing process would be completed in less than one year. The DNR permitting process is anticipated to take about the same amount of time.

PROCORP TECHNOLOGY IS ARGUABLY SAFER THAN CURRENT OPERATIONS. The current HMO radium treatment process creates a sludge that is sent to the wastewater treatment plant via the sanitary sewer and then land-spread. The Procorp system produces much less waste volume and is a solid by-product requiring minimal storage and handling. Worst case the by-product would be disposed of in a landfill that is designed to receive waste. State authorities and the landfill have reviewed the by-product and have indicated the disposal will be acceptable and just requires standard permit and approval.

Best case the by-product has potential to be reclaimed and utilized. The by-product meets very stringent European Union standards for by-product utilization. As a stand-alone product it would be acceptable to use as landscaping material or a replacement for fly-ash. Mixed in concrete at appropriate percentages it would meet standards for use in homes or roadways. The Environmental Protection Agency (EPA) does not currently have standards for this type of by-product utilization. Procorp would work with Waukesha and EPA to develop this opportunity. It should be recognized that after seven years the by-product has a similar concentration to common materials used every day like clay brick, natural stone, etc.

We appreciate the opportunity to share details of what we believe is a cost effective, sustainable alternative to needing Lake Michigan Water today. Please contact us to discuss this alternative or if further information is desired.