



## Request for City Council Committee Action From the Department of Public Works

**Date:** January 13, 2009

**To:** Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee

**Referral:** Honorable Paul Ostrow, Chair, Ways & Means/Budget Committee

**Subject:** **Fridley Membrane Filtration Plant - Project Cancellation**

**Recommendation:**

Direct staff to proceed with the cancellation of the Fridley Membrane Filtration Plant project and authorize City officials to negotiate with the parties that hold partially completed agreements for the project to close out those agreements in an appropriate manner.

**Previous Directives:**

- On September 22, 2006, the City Council authorized execution of an agreement for Engineering Services with CH2M Hill, Inc. for the Design and Construction of the Membrane Filtration Plant in Fridley with a fee not to exceed \$4,990,000.
- On September 22, 2006, the City Council authorized acceptance of the bid of Pall Corporation for Ultrafiltration Equipment for the Membrane Filtration Plant in Fridley for an estimated expenditure of \$17,500,000.00.

**Prepared by:**

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**Approved by:**

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Steven A. Kotke, P.E., City Engineer, Director of Public Works

**Presenters:** Shahin Rezaia, PE, Director, Water Treatment & Distribution Services

**Reviews**

Permanent Review Committee (PRC):	Approval	NA	Date
Civil Rights Affirmative Action Plan	Approval	NA	Date
Policy Review Group (PRG):	Approval	NA	Date

**Financial Impact** (Check those that apply)

No Financial Impact

## **Community Impact**

Neighborhood Notification: Not Applicable  
City Goals: Not Applicable  
Comprehensive Plan: Not Applicable  
Zoning Code: Not Applicable

## **Background/Supporting Information**

The City of Minneapolis Capital Improvement Plan included construction of two new water treatment plants:

1. The Columbia Heights Membrane Filtration Plant (CHMFP) – Construction substantially completed in 2005. Investment objective was for the replacement of the existing, obsolete Columbia Heights Filtration Plant (CHFP) with a plant that would surpass current regulations and meet anticipated changes in drinking water regulations from the U.S. Environmental Protection Agency (USEPA).
2. The Fridley Membrane Filtration Plant (FMFP) – Construction currently scheduled to begin in 2009. Original investment objective was for the accelerated replacement of the existing Fridley Filtration Plant (FFP) with a plant that would surpass current regulations and meet anticipated changes in USEPA regulations.

In 2006, the USEPA published its final regulations (referred to as the Long Term 2 Enhanced Surface Water Treatment Rule) with provisions to determine the level of required water treatment based on the level of risk in the source water for each municipality. The level of risk for Minneapolis tap water was determined by a two-year long period of sampling and analysis for cryptosporidium in the Mississippi River at the Minneapolis Water Works intake. The monitoring program found a low occurrence of cryptosporidium. Given those findings, the existing Fridley Filtration Plant met all USEPA regulations and did not need to be replaced on an accelerated basis.

Further analysis by Public Works found that the existing Fridley plant is still very functional, could remain so for another 20 years or longer. Constructed in 1925 and rehabilitated in the 1970s and 1980s, FFP has a superior design over the obsolete Columbia Heights plant (built in 1913). The structural integrity of the FFP was reviewed again in 2007 and determined to be sound.

In addition, rising construction and materials costs, along with other factors, have caused the price tag of the Fridley plant's accelerated replacement to increase dramatically since the first engineering evaluations were made in the mid-1990s. For example, the cost of the new Columbia Heights plant was around \$37,000,000. The estimated cost for a new Fridley plant, initially at around \$45,000,000, is now \$68,000,000 (values only include the construction contractor portion of the projects). Operating experience with the CHMFP since 2005 has shown that even though the construction cost of a membrane filtration plant is competitive with a conventional plant, the operation and maintenance costs are significantly higher.

The review of our financial pro forma reveals that the accelerated replacement of the FFP would create a very significant financial burden on the Water Treatment and Distribution budget and water customers. Also, since FFP is decades from obsolescence and currently produces water that meets or surpasses USEPA regulations, there is no requirement that we proceed with this project. Public Works has reviewed this financial burden and believes that this commitment is not the best use of City resources at this time. Public Works is recommending the cancellation of the accelerated replacement of the Fridley Filtration Plant.

C: Shahin Rezania, P.E., Director of Water Treatment and Distribution Services  
David Ybarra, Assistant Director, Purchasing  
Pam Fernandez, Contract Management Director