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

Date: March 10, 2009

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

Subject: **Request to issue RFP for the design and construction of dewatering system improvements at the Minneapolis Water Works.**

Recommendation:

Authorize the distribution of a Request for Proposal for the design and construction of dewatering infrastructure improvements at the City of Minneapolis Water Works. Funds are available within the 2009 Capital Appropriation Project Number CWTR22. (7400/ 9010000/CWTR22)

Previous Directives:

None

Prepared by: Daryoosh Tirandazi P.E. Project Engineer 661.4912

Approved by:

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

Presenters: Robert Verke P.E. Principal Professional Engineer, Water Treatment and Distribution Services

Reviews

Permanent Review Committee (PRC):	Approval ___	Date __3-12-03___
Civil Rights Approval	Approval ___	Date _____NA____
Policy Review Group (PRG):	Approval ___	Date ____NA_____

Financial Impact

No financial impact

Community Impact

Neighborhood Notification:
City Goals:
Comprehensive Plan:
Zoning Code:

Background/Supporting Information

The Minneapolis Water Works existing Dewatering Plant was constructed in 1972 and has been in service for more than 35 years. The current dewatering process utilizes two gravity thickeners, four centrifuges, and seven treatment residuals settling lagoons. By today's standards, using centrifuges is inefficient, costly and not environmentally friendly. The centrifuges have been rebuilt numerous times and have reached the end of their useful life.

The treatment residual solids (cake) separated by the centrifuges are hauled from the Dewatering Plant by tanker trucks and applied to farm lands. The centrifuge wastewater (centrate) is pumped to the lagoons for further solid separation and drying. When sufficiently dried, the solids material is then loaded on trucks and hauled to farm lands. The decant water from the lagoons is treated to EPA standards and discharged to the Mississippi River.

In 2002, the Water Works hired CH2M Hill to conduct a study to analyze and evaluate our solids management processes. The study considered various technologies and equipment, such as belt presses, filter presses, and vacuum filters and centrifuges. The study also considered regulatory requirements from various government agencies such as Minnesota Pollution Control Agency and Minnesota Department of Health. The study recommended filter press as a replacement to the existing system. The new system will improve performance and operation that will increase capture of solids, resulting in less hauling and liquid waste which has to be treated and discharged to the River. The estimated project cost for the Filter Press is $18 million.

The Filter Press project is funded in the Council Approved Capital Improvement Plan for 2009, 2010, and 2011. The department is proceeding with the project as planned but will be taking advantage of drinking water funding opportunities within the Economic Recovery and Reinvestment Act of 2009 (ERRA). A critical eligibility requirement for ERRA funding is projects must be under construction by February 17, 2010.

To meet the aggressive timelines, Public Works is asking for City Council and Permanent Review Committee (PRC) approval on a dual track. The PRC will review the RFP on March 12, 2009.