



COUNCIL AGENDA: 05/17/05

ITEM: 2.10

Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Scott P. Johnson

SUBJECT: SEE BELOW

DATE: April 26, 2005

Approved

Date

5/5/05

Council District: CITY-WIDE

**SUBJECT: SOLE SOURCE PURCHASE OF ROTATING ASSEMBLY FOR THE
MAIN RAW SEWAGE PUMP (MRSP) #6 AT WATER POLLUTION
CONTROL PLANT**

RECOMMENDATION

Approve the purchase of an Allis Chalmers Rotating Assembly from ITT A-C Pump (formerly Allis-Chalmers Pump Company), a division of ITT Industries Inc. (Pewaukee, WI) as a sole source purchase for a total not to exceed \$211,575 including tax and delivery; and authorize the Director of Finance to execute the purchase order.

BACKGROUND

The Water Pollution Control Plant (Plant) has two large Main Raw Sewage Pumps (MRSP) pumps (# 5 and # 6). Raw sewage first enters the Plant for pre-treatment through one of these two pumps. After pre-treatment, the raw sewage continues downstream through four smaller pumps for further treatment and filtration before it is pumped into the bay. The primary pump #5 operates 24/7 and uninterrupted operation is critical to ensure the raw sewage is continually processed. The second pump #6 is a backup for redundancy protection in the event a fatal failure occurs or routine maintenance is performed on the primary pump. Switching to the backup pump insures uninterrupted operations.

Each MRSP has a huge rotating assembly (a 10-Ton component) that includes a shaft and impeller inside a stationary cavity called the volute. The rotating assembly in MRSP pump #6 is ten years old and has exceeded its expected life. A new rotating assembly is required to ensure continuous pump operation and prevent the risk of raw sewage flooding at the Plant.

ANALYSIS

These large MRSP pumps are specialized and available exclusively through ITT A-C Pump, (formerly Allis Chalmers), the original equipment manufacturer (OEM). While there are other brands of rotating assemblies, only the Allis Chalmers rotating assembly's configuration is compatible with the existing Allis Chalmers MRSP pump. The rotating assembly must fit into the existing volute. All new parts must have material thicknesses and tolerances in accordance with OEM specifications. In addition, only ITT A-C Pump has the castings needed to forge the required parts for the rotating assembly e.g., the impeller, the main assembly frame and the stuffing box head.

The MRSP pumps are located underground and are designed to have parts replaced to extend the pump's life. Replacing the existing rotating assembly for \$211K is the most cost effective solution to extend the life of the pump, when compared to the purchase of an entirely new pump estimated at \$1.5 Million (\$800K for labor to de-install existing pump and install new pump + \$700K for purchase of new pump).

OUTCOME

Provide a reliable backup MRSP pump to insure uninterrupted 24/7 operations and prevent flooding.

PUBLIC OUTREACH

Not applicable.

COORDINATION

This memorandum has been coordinated with the Environmental Services Department, the City Manager's Budget Office, and the Office of the City Attorney.

This recommendation is scheduled for presentation to the Treatment Plant Advisory Committee (TPAC) on May 12, 2005.

COST IMPLICATIONS

This Council item is consistent with Council approved Budget Strategy Memo, General Principal #2, "We must focus on protecting our vital core city services"

HONORABLE MAYOR AND CITY COUNCIL

Subject: Rotating Assembly for Main Raw Sewage Pump (MSRP) # 6 at Water Pollution Control Plant

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BUDGET REFERENCE

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Amt. for Contract	2004-2005 Adopted, Operating Budget Page	Last Budget Action (Date, Ord. No.)
513	0762	Non-Personal/Equipment	927200	\$27,588,421	\$211,575	VIII-50	10/12/04 27267

CEQA

Not a project.


SCOTT P. JOHNSON
Director, Finance Department

