Engineering & Operations Committee

Subject: Pilot Program to Refurbish Filter Valves at the Diemer & Jensen Plants

Purpose: This presentation will brief the Board on activities conducted by Metropolitan staff to identify vendors capable of refurbishing filter valves, and the findings of this program

Engineering & Operations Committee Summary

A pilot program conducted by Metropolitan staff shows that valve refurbishment does not appear viable as an option to refurbish the filter valves at the Jensen and Diemer plants.

Staff has terminated the pilot program, and will prepare contract specifications to procure and install new filter valves.



Pilot Program to Refurbish Filter Valves at the Diemer & Jensen Plants

Engineering & Operations Committee Item 7b
July 9, 2012

Metropolitan Treatment Plants



Background

- Filter valves at Jensen Module 1 & Diemer plant have exceeded their service life
 - Accelerated corrosion
 - Excessive leaking
 - Increased maintenance
- Pilot refurbishment program authorized in March 2011:
 - Identify qualified vendors to refurbish valves
 - Develop procurement specification for new valves

Existing Filter Valves

Leaking valve with disk closed



Corroded valve disk with failed coating



Corroded valve disk with failed coating & metal wastage

Filter Valve Gallery @ Jensen Plant



Pilot Program Objectives

- Determine the most feasible & cost-effective approach to refurbish the valves
- Find qualified vendors to refurbish valves
 - Technically capable
 - Capacity to meet a 4-year project schedule
- Trial refurbishment of 3 valves
- Confirm potential cost savings of refurbishment

Pilot Program Results

- 13 vendors contacted throughout US
- General findings:
 - Some have experience in refurbishing valves
 - Limited experience in rubber lining valves
 - Limited shop capacity
 - Little vendor interest, including original valve mfrs
 - Reluctance to provide a warranty

Conclusions

- Large-scale refurbishment is not viable or costeffective
 - Low level of industry capability
 - Risk without warranty
 - Half of Diemer valves (122 valves) cannot be refurbished
 - Future service life of remaining valves is uncertain
- Revert to original plan of phased replacement

Next Steps

- Proceed with phased replacement
 - Jensen valves bid date: 7/26/2012
 - Diemer valves bid date: 9/2012
- Move forward with design of valve installation contracts
- Recommend Board award of both procurement contracts:
 - Jensen valves: October 2012
 - Diemer valves: December 2012

