

- **Board of Directors**
Engineering and Operations Committee

September 10, 2002 Board Meeting

8-3

Subject

Authorize \$196,000 to replace the heating, ventilating and air conditioning system serving the Henry J. Mills Filtration Plant Administration Building (Approp. 15381)

Description

The original Administration Building at the Mills filtration plant was constructed in 1978 and underwent an expansion in 1995. The heating, ventilating and air conditioning (HVAC) system to be replaced was part of the original construction. The existing HVAC system is 25 years old and has reached the end of its useful life. The air handler unit is undersized, fails frequently, and is energy inefficient.

The Administration Building houses many essential functions: plant operations, water quality laboratory, supervisory control and data acquisition (SCADA) servers, engineering support, purchasing and administration support.

This project was evaluated and recommended by the Capital Investment Plan (CIP) Evaluation Team as part of the Mills Filtration Plant Improvements Program, as described and included in the fiscal year 2002/2003 CIP budget. See [Attachment 1](#) for the detailed report and [Attachment 2](#) for the financial statement.

Policy

Metropolitan Water District Administrative Code § 5108: Capital Project Appropriation

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA. The overall project activities involve the funding and installation of equipment in existing public facilities with no expansion of use and no possibility of significantly impacting the physical environment. As such, the proposed action qualifies under a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies as a Categorical Exemption (Class 1, Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination for the project described herein:

- a. Appropriate \$196,000 in budgeted CIP funds, and
- b. Authorize the Chief Executive Officer to have all work performed to replace the Mills plant Administration Building HVAC system.

Fiscal Impact: \$196,000 of budgeted CIP funds under Appropriation 15381.

Option #2


Defer project and do not replace the Administration Building HVAC system. Continue to perform repairs to existing air handling unit and pay high energy costs.

Fiscal Impact: Project deferral will result in increased costs.

Staff Recommendation

Option #1

	8/12/2002
_____ Roy L. Wolfe Manager, Corporate Resources	Date

	8/17/2002
_____ Ronald R. Gastelum Chief Executive Officer	Date

Attachment 1 – Detailed Report

Attachment 2 – Financial Statement for Mills Filtration Plant Improvements Program

Detailed Report

The Henry J. Mills Filtration Plant was placed into service in 1978 with an initial capacity of 75 mgd. The plant was expanded twice to its current rated capacity of 326 mgd. The Mills Improvement Program was established to permit and implement multiple projects at the plant to ensure the reliability of equipment and facilities and ensure regulatory compliance.

Purpose/Background

The original Administration Building was constructed in 1978, with an annex added in 1995. The original heating, ventilating and air conditioning (HVAC) system installed in 1978 still serves the original building space, currently housing the supervisory control and data acquisition computers, telecommunications equipment, and operations and engineering staff offices. The 25-year-old system struggles to maintain environmental control of the building, with many portions of the building too hot in the summer and too cold in the winter. The air-handling unit requires frequent servicing (averaging four times per year at \$10,000 annual maintenance cost) and is energy inefficient. Replacement with an energy efficient system is expected to save \$2,000 per year in energy cost and \$10,000 per year in maintenance costs.

Project Description

The proposed project consists of replacing the original air-handling unit located atop the Administration Building, upsizing ductwork, and installing appropriate devices and control systems necessary to regulate the air temperature in each room. The project includes the structural and electrical modifications required to accommodate the larger unit.

For this project, Metropolitan will use existing on-call professional consulting services to design the new HVAC system. After construction documents are generated and approved, a competitively bid contract within the Chief Executive Officer's Administrative Code authority will be awarded for HVAC system demolition, replacement, and air balancing.

Project Milestones

- September 2002 – Receive project authorization and funding
- March 2003 – Award construction contract, start construction
- June 2003 – Complete project

Financial Statement for Mills Filtration Plant Improvements Program

A breakdown of Board Action No. 3 for Approp. No. 15381 to authorize funds to replace the Mills Filtration Plant Administration Building HVAC system is as follows:

	Previous Board Action No. 2 <u>(Feb. 2002)</u>	Current Board Action No. 3 <u>(Sept. 2002)</u>	New Total Appropriated Amount
Labor			
Studies and Field Investigations	\$ 100,000	\$ 9,000	\$ 109,000
Design and Specifications	475,000	0	475,000
Owner Costs (Program Management, Environmental Docs. Control System Integration, Bidding Process)	120,000	20,000	140,000
Construction Management, Support and Inspection	0	10,000	10,000
Water System Operations (Metropolitan Force Installation and Construction, Water Quality)	85,000	0	85,000
Materials and Supplies	75,000	0	75,000
Incidental Expenses	7,000	0	7,000
Professional/Technical Services	0	21,000	21,000
Equipment Use	8,000	0	8,000
Contracts	0	115,000	115,000
Remaining Budget	<u>130,000</u>	<u>21,000</u>	<u>151,000</u>
Total	<u>\$ 1,000,000</u>	<u>\$ 196,000</u>	<u>\$ 1,196,000</u>

Funding Request

Program Name:	Mills Filtration Plant – Improvements Program		
Source of Funds:	Construction Funds (General Obligation, Revenue Bonds, Pay-As-You-Go Fund)		
Appropriation No.:	15381	Board Action No.:	3
Requested Amount:	\$ 196,000	Capital Program No.:	15381-I
Total Appropriated Amount:	\$ 1,196,000	Capital Program Page No.:	E-53
Total Program Estimate:	\$ 3,690,000	Program Goal:	I – Infrastructure Reliability