



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: John Stufflebean
Jennifer Maguire

SUBJECT: SEE BELOW

DATE: 12-15-08

Approved

Date

12/12/08

COUNCIL DISTRICT: 4

SUBJECT: APPROVAL OF SETTLEMENT AGREEMENTS WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) AND RELATED APPROPRIATION ORDINANCE AMENDMENTS.

RECOMMENDATION

1. Adopt a resolution authorizing the City Attorney to negotiate and execute two Settlement Agreements with Bay Area Air Quality Management District (BAAQMD) that provide for the payment to BAAQMD of an amount not to exceed \$7,000 per Agreement for settlement of air quality violations at the Trimble and Nortech Municipal Water System pump stations.
2. Adopt the following Appropriation Ordinance amendments in the Water Utility Capital Fund 500:
 - a. Establish an Appropriation: Nortech & Trimble Pump Station Retrofit Project, in the amount of \$275,000.
 - b. Decrease the Reserve for System Rehabilitation/Replacement by \$275,000.
3. Adopt the following Appropriation Ordinance amendments in the Major Facilities Fund 502:
 - a. Establish an Appropriation: Nortech & Trimble Pump Station Retrofit Project, in the amount of \$275,000.
 - b. Decrease the Ending Fund Balance by \$275,000.

OUTCOME

The approval of the appropriation adjustment and settlement agreement will allow the immediate replacement of two emergency diesel engines with electric motors in order to meet State Public Health water quality regulations and BAAQMD air quality emission standards.

BACKGROUND

The Municipal Water System (MWS) has two emergency diesel engine driven pump stations in the North San Jose Water service area. Trimble Pump Station and Reservoir was constructed in 1979 and the Nortech Pump Station and Reservoir was constructed in 1997. Historically, these diesel engine fire pumps were designed to provide water supply in the event of a fire emergency, and to operate less than 20 hours per year for reliability testing.

In 2006, the San Francisco Public Utility Commission (SFPUC), the local potable water wholesaler, modified their water disinfection process, resulting in increased levels of nitrates in the water stored at both pump station sites. To control the level of nitrates and remain in compliance with the State Department of Public Health water quality regulations, MWS began rotating water out of the storage tanks by pumping the water into the distribution system using the diesel engine fire pumps. In 2007, an internal mixing system was installed in the Trimble reservoir to increase water quality and reduce pumping. Marginal improvement in water quality was observed, however the water quality did not improve sufficiently to avoid the need to run the diesel pumps on a regular basis.

Municipal Water applied for BAAQMD permits on January 28, 2008 to operate the fire pumps 206 hours each per year. Due to the age of the engines and new air emissions standards, BAAQMD issued permits to operate the engines only 20 hours per year. To maintain water quality and necessary fire protection, the reservoirs have remained in service with continued use of the diesel engines beyond the permitted hours.

BAAQMD staff has notified the City that continued operation of the pumps in excess of the permit limits violates air emission standards and subjects the City to potential enforcement action. Unless the City negotiates and executes a stipulated order with BAAQMD to abate violations, the City may be subject to daily penalties for operating in violation of its permit and Air District regulations. Penalties range from \$1,000 per day (administrative penalty) up to \$25,000 per day for negligently emissions in violation of regulations and up to \$40,000 per day for knowing violations of the regulations.

BAAQMD has offered to enter into negotiated Settlement Agreement for abatement of the violations, provided that the City agrees to come into compliance with the permits and air emissions standards. BAAQMD has offered the following penalty payment schedule for the violations at each of the facilities, based on how soon compliance is achieved after execution of

each Settlement Agreement: 0-3 months/ \$2,000; 3-6 months/\$3,500; 6-9 months/\$5,000; 9-12 months/\$7,000.

ANALYSIS

To comply with water quality regulations and air emission standards, and maintain adequate storage for fire protection, MWS is recommending that a diesel engine at each location be replaced with an electric engine. Because electric engines result in no emissions, they do not require a permit from BAAQMD, and can be run as long as is necessary to comply with water quality regulations. The remaining diesel engines would remain in service for emergency use consistent with BAAQMD regulations. Installation of electric motors will increase system reliability and reduce maintenance costs while maintaining water quality and air emission standards.

It is further recommended that the City Manager be authorized to negotiate and execute Settlement Agreements with BAAQMD that provide for the payment to BAAQMD of an amount not to exceed \$7,000 per Agreement for settlement of air quality violations at the Trimble and Northech Municipal Water System pump stations.

EVALUATION AND FOLLOW-UP

A recommendation to award construction bids will be presented to the Council, with a projected final completion date of October 2009.

POLICY ALTERNATIVES

Alternative 1: Replace existing diesel engine with a new diesel engine

Pros: Capital cost savings

Cons: Diesel engines that can satisfy current air emission requirements are not yet in production.

Reason for not recommending: A new diesel engine would require additional air abatement devices and monitoring to meet current air emission standards. This alternative would also result in increased fuel and maintenance costs. More restrictive future air emission requirements may result in eventual removal of all diesel engines to remain in compliance.

Alternative 2: Drain reservoirs and decommission pump station

Pros: Capital and operating cost savings

Cons: Reduced fire protection and system reliability

Reason for not recommending: During an emergency situation, this alternative would severely limit the system ability to provide water for fire protection and potable use.

Alternative 3: Continue to use diesel engines

Pros: Capital cost savings

Cons: Potential for abatement action and substantial fines by BAAQMD

Reason for not recommending: Abatement action by BAAQMD would require draining the reservoirs and decommission the pump stations, which would have the adverse effect of the system noted for Alternative 2, and would expose the City to risk of imposition of substantial fines by BAAQMD.

PUBLIC OUTREACH/INTEREST

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This memorandum is posted on the City's website for the January 13, 2009 City Council agenda.

COORDINATION

This project has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT:	\$550,000
Construction	\$ 400,000
Contingency	\$ 100,000
Project Delivery	\$ 50,000
Total Project Costs	\$ 550,000

2. COST ELEMENTS OF PROJECT & AGREEMENT:

Electrical Equipment	\$ 300,000
Motor Installation	\$ 100,000
Underground Electrical Utilities	\$ 100,000
Mobilization	\$ 50,000
BAAQMD Payments	\$14,000
Total	\$ 564,000

3. SOURCE OF FUNDING: 500 – Water Utility Capital Fund
 502 – Major Water Facilities Fee Fund

4. FISCAL IMPACT: There are no cost implications to the General Fund as a result of this action. From the Reserve for System Rehabilitation/Replacement Projects, \$275,000 of the Reserve required in FY 2008-2009 has been programmed to fund the Nortech & Trimble Pump Station Retrofit project. Anticipated Funding for this project is scheduled to be reallocated to the Reserve in FY 2009-2010, restoring it to the level required by Ordinance No. 26903, pending Council approval of rate increases necessary to replenish Reserve. Reallocation of funding Consistent with Ordinance No. 26903, this reserve will total \$2.6 million in the 2012-2013 CIP. Funding is available in the Infrastructure Improvements appropriation in Fund 500 for fines associated with the BAAQMD Settlement Agreement. This recommendation meets the general principles of the City's FY 2008-09 Budget Message of providing essential public services while valuing financial sustainability and cost recovery.

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency costs.

Funding is available in the Infrastructure Improvements appropriation in Fund 500 for fines associated with the BAAQMD Settlement Agreement.

HONORABLE MAYOR AND CITY COUNCIL

12-15-08

Subject: FY 2008-2009 CIP Budget Appropriation Adjustment and Approval of Settlement Agreement

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Fund #	Appn. #	Appn. Name	RC #	Total Appn.	Amt. For Construction	2008-2009 Adopted Capital Budget (Page)	Last Budget Action (Date, Ord. No.)
Total Project Costs				\$564,000			
Current Funding Available							
500		Nortech & Trimble Pump Station Retrofit			\$200,000		
502		Nortech & Trimble Pump Station Retrofit			\$200,000		
Total Current Funding Available				\$0			
Additional Funding Recommended							
500		Nortech & Trimble Pump Station Retrofit		\$282,000			
502		Nortech & Trimble Pump Station Retrofit		\$282,000			
Total Funding for Remaining Project Costs				\$564,000	\$400,000		

CEQA

Exempt, File PP08-276 / PP08-277



JENNIFER A. MAGUIRE
Budget Director



JOHN STUFFLEBEAN
Director, Environmental Services

For questions please contact Jeff Provenzano, Acting Senior Engineer, at (408) 277-3671.