



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

November 10, 2009 Board Meeting

7-3

Subject

Authorize increases in change order authority for hazardous material remediation at the Jensen plant

Description

This action authorizes increases in the General Manager's change order authority for two construction contracts at the Joseph Jensen Water Treatment Plant. The increase in change order authority will address the removal and remediation of polychlorinated biphenyl (PCB)-containing materials for the Solids Thickeners Nos. 5 and 6 contract and the Administration Building Seismic Upgrades contract. The former contract includes remediation of PCB-containing sealants in Jensen Sedimentation Basin No. 3. PCB remediation was required by U.S. Environmental Protection Agency (EPA) regulations, and was conducted in a planned manner under these two contracts.

No funds are requested in this action, as sufficient funds are available within the Jensen Improvements Program appropriation. Both projects are categorized as Infrastructure Upgrade projects and are budgeted within Metropolitan's Capital Investment Plan for fiscal year 2009/10.

Strategy for Remediation of Hazardous Waste on Construction Projects

Due to the increasing number of aging Metropolitan facilities that require rehabilitation or upgrades, staff has proposed a strategy to EPA to address PCB-containing materials found at Metropolitan facilities. PCBs are a group of synthetic chlorinated organic compounds that were widely used prior to 1977 in manufactured building materials, but were later found to be of public health concern because of their persistence in the environment and their potential health effects. PCBs were sometimes added as plasticizers to sealants and caulking used in structures and buildings constructed prior to 1980. The United States stopped producing PCBs in 1977.

Under Metropolitan's PCB remediation strategy, when PCB-containing materials are discovered, staff develops an action plan to safely remove or remediate those materials. The work would typically be accomplished via a construction contract. In general, the EPA mandates that PCB-containing materials be addressed shortly after discovery. Metropolitan staff has negotiated with the EPA to allow some flexibility to accommodate logistical limitations. Sampling and testing to determine the presence or absence of PCBs are often not physically possible, and are typically conducted after construction contract award. In those projects that involve demolition of materials and equipment, and which are suspected to contain PCBs based on historical records or experience, the quantities of materials to be remediated are estimated based on best-available information, and provisions are included in the specifications for the safe remediation and disposal of PCB-containing materials, and for terms of payment. PCB remediation requires: (1) the installation of barriers to prevent the escape and migration of PCB-containing materials and waste outside of the abatement area; (2) worker decontamination enclosure systems; (3) waste container pass-out enclosure systems; and (4) transport and disposal in approved disposal facilities.

Timing and Urgency

Each of the Jensen plant contracts had identified that PCB-containing materials were present and would need to be removed or remediated. Due to the limited access for testing some materials prior to demolition, the exact quantities of materials of PCB-containing materials to be removed or remediated could not be determined until the work was underway. Staff directed the contractor on both contracts to complete the project under the extra

work provisions of the contract. In both cases, this work used much of the change order authority granted to the General Manager under Metropolitan's Administrative Code, with little change order authority remaining.

Since the two construction contracts still have a large proportion of construction remaining to be performed, staff recommends that additional change order authority be provided to address the completed remediation of PCB-containing materials.

Background of Jensen Projects

The Jensen plant was placed into service in 1972 with an initial capacity of 350 million gallons per day (mgd). The plant was expanded in the early 1990s to its current capacity of 750 mgd. The Jensen plant exclusively treats water from the West Branch of the State Water Project and delivers it to Metropolitan's Central Pool portion of the distribution system, and to exclusive service areas on the west side of the distribution system.

Jensen Sedimentation Basin No. 3 was constructed in 1970 as part of Module No. 1. The basin was in continuous operation until the late 1990s, when it was removed from service due to significant water leakage at the concrete construction and expansion joints. In April 2005, PCBs were discovered in the Basin No. 3 concrete joint sealants while the basin was being repaired; the repair work was subsequently halted. Metropolitan staff informed the EPA, placed Basin No. 3 on long-term outage, and worked with the EPA to develop a methodology for safe removal and disposal of the PCB-containing materials and a timetable for completion. The methodology and timetable were incorporated into the current contract to construct new Jensen Thickeners Nos. 5 and 6.

In September 2008, Metropolitan's Board awarded a \$5,499,000 construction contract to Brutoco Engineering & Construction, Inc. to add two new solids thickeners (Thickeners Nos. 5 & 6); remove the PCB-containing joint sealant material in Basin No. 3 in accordance with the EPA-approved methodology and timetable; and repair the joints in Basin No. 3. During the PCB material removal stage, additional PCB-containing material was encountered. In addition, it was discovered that segments of the reinforced concrete of the traveling bridge guide and traveling bridge utility trays were directly on top of the joint sealants, which needed to be abated. Removal of this additional material and the structures on top of the joint sealant was performed under the extra work provisions of the contract. Staff directed the contractor to complete the abatement of all additional PCB-containing materials in Sedimentation Basin No. 3 for a negotiated change order cost of \$219,000. This work was completed in October 2009. The remainder of the construction including final confirmation testing is expected to be completed in June 2010.

In April 2009, Metropolitan's Board awarded a \$1,535,000 construction contract to Brutoco Engineering & Construction, Inc. to seismically strengthen the Jensen Administration Building, which was built in 1970. The construction contract included removal and disposal of PCB-laden sealant at the upper roof edge of the clerestory. In May 2009, testing revealed that concrete joint sealants inside the Administration Building lobby also contained PCBs. Disposal of this additional material was executed under the extra work provisions of the contract. Staff directed the contractor to complete the removal of all additional PCB-containing sealant in the Administration Building lobby, which involved removing and replacing 28 concrete pre-cast panels, at a negotiated change order cost of \$181,000. This work was completed in October 2009. The remainder of the construction is expected to be completed in May 2010.

Increase in Change Order Authority for Jensen Solids Thickeners Nos. 5 and 6 Construction Contract (No Funds Required)

Per Metropolitan's Administrative Code, the General Manager has the authority to execute change orders for the Solids Thickeners Nos. 5 and 6 contract up to \$274,950 (5 percent of the original contract amount). In addition to the \$219,000 change order issued for PCB abatement, staff has executed \$26,000 of additional change orders on the contract, which provides a remaining change order authority of \$29,950. Construction is currently approximately 70 percent complete, with some of the most complex items within the contract still to be performed: a majority of the electrical scope; final installation of mechanical and Supervisory Control and Data Acquisition (SCADA) systems; trouble-shooting; and start-up. As a result, staff recommends an increase in change order authority of \$219,000, equal to the amount required for PCB remediation.

This action authorizes an increase in the General Manager's authority to execute change orders for the Jensen Thickeners Nos. 5 and 6 construction contract up to an aggregate amount not to exceed \$494,000. No additional funds are requested, as sufficient funds were previously appropriated and are available within the Jensen Improvements Program budget.

Increase in Change Order Authority for Jensen Administration Building Seismic Upgrades Construction Contract (No Funds Required)

Per Metropolitan's Administrative Code, the General Manager has the authority to execute change orders for the Administration Building Upgrades contract up to \$250,000. In addition to the \$181,000 change order issued for PCB abatement, staff has executed \$16,000 of additional change orders on the contract, which provides a remaining change order authority of \$53,000. Construction is currently approximately 55 percent complete. Staff recommends an increase in change order authority of \$181,000, equal to the amount required for PCB remediation disposal.

This action authorizes an increase in the General Manager's authority to execute change orders for the Jensen Administration Building Seismic Upgrades construction contract up to an aggregate amount not to exceed \$431,000. No additional funds are requested, as sufficient funds were previously appropriated and are available within the Jensen Improvements Program budget.

See [Attachment 1](#) for the Location Map.

These projects are consistent with Metropolitan's goals for sustainability by protecting water quality and enhancing the reliability of the existing treatment system, in order to maintain reliable water deliveries in the future.

Project Milestones

May 2010 – Completion of Jensen Administration Building Seismic Upgrades

June 2010 – Completion of Jensen Solids Thickeners Nos. 5 and 6

Policy

Metropolitan Water District Administrative Code Section 8121(a): Contracts over \$250,000

Metropolitan Water District Administrative Code Section 8123: Authority of the General Manager to Amend Contracts

California Environmental Quality Act (CEQA)

Increase in Change Order Authority for Jensen Solids Thickeners Nos. 5 and 6 Construction Contract

CEQA determination for Option #1:

The environmental effects from the funding, design, construction and maintenance of the proposed Jensen Solids Thickeners Nos. 5 and 6 and a vault were originally evaluated in the Mitigated Negative Declaration (MND) for the Joseph P. Jensen Filtration Plant Expansion. Board adoption of the MND, along with approval of the Jensen Expansion, occurred in March 1989. The Board approved an Addendum to the MND for the Joseph P. Jensen Filtration Plant Expansion in April 1990. With the present board action, there are no substantial changes proposed to the project since the original MND and Addendum was filed. In addition, the fiscal aspects of change orders themselves and the amending of the existing agreement with Brutoco are not subject to CEQA because they involve other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). Hence, the previously adopted environmental documentation in conjunction with the current action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental documentation is necessary for the Board to act on with respect to the proposed action.

The environmental effects from the funding, design, construction and maintenance resulting from modifying the existing residual solids pumping system and the existing four thickeners; repairing joint sealants in a

sedimentation basin; and related yard piping and site work were found to be categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The Board found this project to be exempt under two Categorical Exemptions (Class 1, Section 15301 and Class 30, Section 15330) of the State CEQA Guidelines on September 9, 2008. A Notice of Exemption (NOE) was filed at that time and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the projects since the original NOE was filed. In addition, the fiscal aspects of change orders themselves and the amending of the existing agreement with Brutoco are not subject to CEQA because they involve other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). Hence, the previous environmental documentation in conjunction with the projects fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regards to the proposed actions.

The CEQA determination is: Determine that the Jensen Solids Thickeners Nos. 5 and 6 and a vault have been previously addressed in the adopted 1989 MND and 1990 Addendum, and that modifying the existing residual solids pumping system and the existing four thickeners; repairing joint sealants in a sedimentation basin; and related yard piping and site work have been previously addressed under two Categorical Exemptions (Class 1, Section 15301 and Class 30, Section 15330 of the State CEQA Guidelines). In addition, the fiscal aspect of amending an existing agreement is not subject to CEQA (Section 15378(b)(4) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Increase in Change Order Authority for Jensen Administration Building Seismic Upgrades Construction Contract

CEQA determination for Option #1:

This project was previously determined to be categorically exempt under the provisions of CEQA and State CEQA Guidelines. The Board found this project to be exempt under Class 1, Section 15301 of the State CEQA Guidelines on December 12, 2006. A Notice of Exemption (NOE) was filed at that time and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the projects since the original NOE was filed. In addition, the fiscal aspects of change orders themselves and the amending of the existing agreement with Brutoco are not subject to CEQA because they involve other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). Hence, the previous environmental documentation in conjunction with the projects fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regards to the proposed actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the 2006 NOE (Class 1, Section 15301 of the State CEQA Guidelines). In addition, the fiscal aspect of amending an existing agreement is not subject to CEQA (Section 15378(b)(4) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determinations and

- a. Authorize change orders for the Jensen Solids Thickeners Nos. 5 and 6 contract up to an aggregate amount not to exceed \$494,000; and
- b. Authorize change orders for the Jensen Administration Building Seismic Upgrades contract up to an aggregate amount not to exceed \$431,000.

Fiscal Impact: None, as sufficient funds were previously appropriated and are available within the Jensen Improvements Program

Business Analysis: Increasing the General Manager's change order authority for the Jensen Solids Thickeners Nos. 5 and 6 and Jensen Administration Building Seismic Upgrades construction contracts will provide sufficient change order authority to address the completed remediation of PCB-containing materials.

Option #2

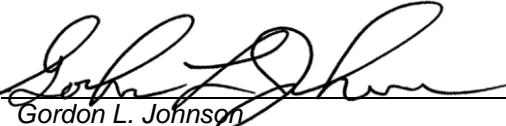
Do not authorize the increases in change order authority.

Fiscal Impact: Unknown, but likely to increase construction costs due to construction delays for staff to return to the Board for increases in change order authority after problems occur.

Business Analysis: By not authorizing the increases in change order authority, staff will return to the Board in the future to authorize individual contract change orders after they are identified. Completion of the Jensen Solids Thickeners Nos. 5 and 6 contract and the Jensen Administration Building Seismic Upgrades contract in a timely manner will be impacted, and the risk of delay claims will increase.

Staff Recommendation

Option #1



Gordon L. Johnson
for Roy L. Wolfe
Manager, Corporate Resources

10/26/2009
Date



Jeffrey Nightlinger
General Manager

10/27/2009
Date

Attachment 1 – Location Map

BLA #6860

