

## AGENDA

### **BOARD OF DIRECTORS ORANGE COUNTY SANITATION DISTRICT**

**DISTRICT'S ADMINISTRATIVE OFFICES  
10844 ELLIS AVENUE  
FOUNTAIN VALLEY, CA 92708  
www.ocsd.com**

### REGULAR MEETING

**April 24, 2002 – 7:00 p.m.**

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted in the main lobby of the District's Administrative Offices not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the Board Secretary.

In the event any matter not listed on this agenda is proposed to be submitted to the Board for discussion and/or action, it will be done in compliance with Section 54954.2(b) as an emergency item, or that there is a need to take immediate action which need came to the attention of the District subsequent to the posting of the agenda, or as set forth on a supplemental agenda posted not less than 72 hours prior to the meeting date.

All current agendas and meeting minutes are also available via Orange County Sanitation District's Internet site located at [www.ocsd.com](http://www.ocsd.com). Upon entering the District's web site, please navigate to the Board of Directors section.

1. Invocation and Pledge of Allegiance
2. Roll Call
3. Consideration of motion to receive and file minute excerpts of member agencies relating to appointment of Directors, if any. (See listing in Board Meeting folders)
4. Appointment of Chair pro tem, if necessary
5. Public Comments: All persons wishing to address the Board on specific agenda items or matters of general interest should do so at this time. As determined by the Chair, speakers may be deferred until the specific item is taken for discussion and remarks may be limited to three minutes.

Matters of interest addressed by a member of the public and not listed on this agenda cannot have action taken by the Board of Directors except as authorized by Section 54954.2(b).

6. The Chair, General Manager and General Counsel present verbal reports on miscellaneous matters of general interest to the Directors. These reports are for information only and require no action by the Directors.
  - a. Report of Chair; consideration of resolutions or commendations,

- b. presentations and awards
  - b. Report of General Manager
  - c. Report of General Counsel
7. If no corrections or amendments are made, the minutes for the regular meeting held on March 27, 2002 will be deemed approved as mailed and be so ordered by the Chair.
8. Ratifying [payment of claims](#) of the District, by roll call vote, as follows:

<u>ALL DISTRICTS</u>	<u>03/15/02</u>	<u>03/31/02</u>
Totals	\$8,467,954.20	\$7,119,974.40

**CONSENT CALENDAR**

All matters placed on the Consent Calendar are considered as not requiring discussion or further explanation and unless any particular item is requested to be removed from the Consent Calendar by a Director or staff member, there will be no separate discussion of these items. All items on the Consent Calendar will be enacted by one action approving all motions, and casting a unanimous ballot for resolutions included on the consent calendar. All items removed from the Consent Calendar shall be considered in the regular order of business.

The Chair will determine if any items are to be deleted from the Consent Calendar.

9. Consideration of motion to approve all agenda items appearing on the Consent Calendar not specifically removed from same, as follows:
- a. (1) [Receive and file](#) petition from John Hormuth requesting annexation of 2.226 acres to the District in the vicinity of Meads Drive and Hillside Drive in an unincorporated area of Orange County; and (2) Adopt Resolution No. OCSD 02-07, authorizing initiation of proceedings to annex said territory to the District (Proposed Annexation No. OCSD-7 - Hormuth Annexation).
  - b. (1) [Approve a Grant](#) of Easement, Right of Entry, Maintenance and Indemnity Agreement with the City of Costa Mesa in a form approved by General Counsel at no cost to the District; and (2) Approve a Grant of Easement Agreement with the Newport-Mesa Unified School District, with the District paying the fees over a 5-year period of \$5,252.57 per year for a total cost of \$26,262.85, in a form approved by General Counsel.

**END OF CONSENT CALENDAR**

10. Consideration of items deleted from Consent Calendar, if any.

**NON-CONSENT CALENDAR**

11. a. Verbal report by Chair of Steering Committee re April 24, 2002 meeting.

- b. DRAFT STEERING COMMITTEE MINUTES – NO ACTION REQUIRED (Information only): The Chair will order the draft Steering Committee Minutes for the meeting held on March 27, 2002 to be filed.
  - c. Review and consideration of agenda items considered by the Steering Committee re the April 24, 2002 meeting.
- 12.
- a. Verbal report by Chair of Operations, Maintenance and Technical Services Committee re the April 3, 2002 meeting.
  - b. DRAFT OPERATIONS, MAINTENANCE AND TECHNICAL SERVICES COMMITTEE MINUTES – NO ACTION REQUIRED (Information only): The Chair will order the draft Operations, Maintenance and Technical Services Committee Minutes for the meeting held on April 3, 2002 to be filed.
  - c. [Approve Professional Services Agreement](#) with m2t technologies to provide professional services for the evaluation of alternatives for Plant No. 2 Oxygen Plant Replacement/ Rehabilitation Assessment, Job No. SP-72, for an amount not to exceed \$97,000.
  - d. [Authorize the General Manager](#) to issue Purchase Agreements with Pro Pipe Professional Pipe Services, Innerline Engineering, and National Plant Services for Sewer Line Video Inspection Services, Specification No. S-2002-81, for a combined annual total amount not to exceed \$400,000, with four one-year renewable options.
  - e. (1) [Award a consulting services](#) contract to Parsons Infrastructure and Technology Group, Inc. for professional consulting services for development of Asset Management Program, Job No. SP-68, for a total amount not to exceed \$455,957; and, (2) approve out-of-country travel for two employees to Australia/New Zealand for the purpose of site visits to five public agencies that have successfully implemented advanced asset management programs.
  - f. (1) [Establish Cisco Equipment](#) as the District's standard networking equipment; and (2) award a purchase contract to IKON Office Solutions for Purchase of CISCO Equipment, Specification No. E-2002-86, to provide infrastructure networking equipment and maintenance contract, in an amount not to exceed \$799,247.
  - g. (1) [Authorize development](#) of a Fats, Oil and Grease (FOG) Program in accordance with the provisions of California Regional Water Quality Control Board Santa Ana Region Order No. 01-99, General Discharge Requirements for Sewage Collection Agencies; (2) Establish a new budget of \$150,000 for development of the FOG Program; (3) Authorize staff to develop a funding program with the County of Orange and cities within the District's jurisdiction for development of the FOG Program; and (4) Approve a sole source consultant agreement with Environmental Engineering and Construction, Inc. to conduct a study for Phase I of the FOG Program for an amount not to exceed \$268,000

- h. (1) [Authorize the General Manager](#) to exercise informal bidding procedures and sole-source procedures, as applicable, for the award of contracts for the Ocean Outfall Bacteria Reduction Program, Job No. J-87; (2) Authorize the General Manager to purchase and award sole-source contracts, as applicable, for materials and equipment, and/or services, including tanks, pumps, flow meters, and certain electrical and instrumentation devices for testing, feasibility and planning study purposes, as identified by the District's consultants, for use in the Ocean Outfall Bacteria Reduction Program, Job No. J-87, in an amount not to exceed \$600,000; and, (3) Increase the sole-source authorization limits for the General Manager to \$200,000 for said purchases.
- 13.
- a. Verbal report by Chair of Planning, Design and Construction Committee re the April 4, 2002 meeting.
  - b. DRAFT PLANNING, DESIGN AND CONSTRUCTION COMMITTEE MINUTES – NO ACTION REQUIRED (Information only): The Chair will order the draft Planning, Design and Construction Committee Minutes for the meeting held on April 4, 2002 to be filed.
  - c. (1) [Approve a budget](#) amendment of \$200,605 for Distribution and Junction Box Odor Control Modifications, Job No. J-71-1 and J-71-2, for a total budget of \$1,290,605; (2) Ratify Change Order No. 2 to Distribution and Junction Box Odor Control Modifications, Job No. J-71-1 and J-71-2, with Margate Construction, Inc. authorizing an addition of \$150,582, and a time extension of 168 calendar days, increasing the total contract amount to \$883,249; and (3) Accept Distribution and Junction Box Odor Control Modifications, Job No. J-71-1 and J-71-2, as complete, authorizing execution of the Notice of Completion and approving the Final Closeout Agreement.
  - d. (1) [Reject bid](#) received March 27, 2001 from Margate Construction, Inc. for Natural Gas Line Replacement at Plant No. 1, Job No. SP2000-22, due to the single bid exceeding the Engineer's Estimate; and (2) Award a construction contract to Atlas-Allied, Inc. for Natural Gas Line Replacement at Plant No. 1, Job No. SP2000-22 (Rebid), in an amount not to exceed \$184,887.
  - e. [Approve a sole source](#) purchase order to AT&T Wireless for phone service related to Long Term Flow Monitoring Program, Job No. J-73-2, in an amount not to exceed \$165,000.
  - f. [Approve a budget](#) amendment of \$168,000 for Facilities Modifications for Odor Control, Job No. J-71-3, for a total project budget of \$2,900,000.
  - g. [Authorize the General Manager](#) to negotiate a purchase order for procurement of services with Power & Compression Systems for Central Generation Automation, Job No. J-79, for an amount not to exceed \$1,500,000.
  - h. [Establish a budget](#) of \$1,982,000 for the Engineering Trailer Complex at Plant No. 1, Job No. J-90.
- 14.
- a. Verbal report by Chair of Finance, Administration and Human Resources Committee re the April 10, 2002 meeting.

- b. DRAFT FINANCE, ADMINISTRATION AND HUMAN RESOURCES COMMITTEE MINUTES – NO ACTION REQUIRED (Information only): The Chair will order the draft Finance, Administration and Human Resources Committee Minutes for the meeting held on April 10, 2002 to be filed.
  - c. [Receive and file](#) Treasurer's Report for the month of March 2002.
  - d. [Approve SAFETY](#)-POL-103, 105, 111, 112 and 403, as provided for in Resolution No. OCSD 02-5, regarding the District's Injury and Illness Prevention Program Policy.
- 15.
- a. Verbal report by Vice Chair of Joint Groundwater Replenishment System Cooperative Committee re April 22, 2002 meeting.
  - b. DRAFT JOINT GROUNDWATER REPLENISHMENT SYSTEM COOPERATIVE COMMITTEE MINUTES – NO ACTION REQUIRED (Information only): The Chair will order the draft Joint Groundwater Replenishment System Cooperative Committee Minutes for the meeting held on March 11, 2002 to be filed.
  - c. (1) [Approve Trojan Technologies](#) as the ultraviolet light (UV) equipment manufacturer for the Groundwater Replenishment System based on lowest calculated present worth life cycle cost of \$20,253,000, and a total capital cost of \$9,749,405, plus tax; (2) Approve a Pre-Selection Agreement between Orange County Water District (OCWD) and Trojan Technologies to provide engineering details for the equipment design in the total amount of \$250,000 to be equally shared between OCWD and Orange County Sanitation District; (3) Grant authority to the Board of Directors of OCWD to assign the value of the ultraviolet light equipment to the contract to install the permanent UV system at a total estimated capital cost of \$8,649,563, plus tax.

16.

CLOSED SESSION: During the course of conducting the business set forth on this agenda as a regular meeting of the Board, the Chair may convene the Board in closed session to consider matters of pending real estate negotiations, pending or potential litigation, or personnel matters, pursuant to Government Code Sections 54956.8, 54956.9, 54957 or 54957.6, as noted.

Reports relating to (a) purchase and sale of real property; (b) matters of pending or potential litigation; (c) employment actions or negotiations with employee representatives; or which are exempt from public disclosure under the California Public Records Act, may be reviewed by the Board during a permitted closed session and are not available for public inspection. At such time as the Board takes final action on any of these subjects, the minutes will reflect all required disclosures of information.

- a. Convene in closed session, if necessary  
  
Confer with General Counsel re anticipated litigation, one potential case. (Government Code Section 54956.9(c)).
- b. Reconvene in regular session
- c. Consideration of action, if any, on matters considered in closed session

17. Matters which a Director may wish to place on a future agenda for action and staff report
18. Other business and communications or supplemental agenda items, if any
19. Future Meeting Date: The next Board of Directors special meeting is scheduled for May 15, 2002, at 6:00 p.m.
20. Adjournment

NOTICE TO DIRECTORS: To place items on the agenda for the Regular Meeting of the Board of Directors shall submit items to the Board Secretary no later than the close of business 14 days preceding the Board meeting. The Board Secretary shall include on the agenda all items submitted by Directors, the General Manager and General Counsel and all formal communications.

Board Secretary: Penny Kyle (714) 593-7130 or  
(714) 962-2411, ext. 7130

## **BOARD OF DIRECTORS**

### **AGENDA REPORT**

Meeting Date	To Bd. of Dir. 04/24/02
Item Number	Item Number 8

Orange County Sanitation District

**FROM:** Gary Streed, Director of Finance  
Originator: Lenora Crane, Executive Assistant

**SUBJECT:** PAYMENT OF CLAIMS OF THE ORANGE COUNTY SANITATION DISTRICT

#### **GENERAL MANAGER'S RECOMMENDATION**

Ratify Payment of Claims of the District by Roll Call Vote.

#### **SUMMARY**

See attached listing.

#### **PROJECT/CONTRACT COST SUMMARY**

N/A

#### **BUDGET IMPACT**

- This item has been budgeted. (Line item:            )
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

#### **ADDITIONAL INFORMATION**

N/A

#### **ALTERNATIVES**

N/A

#### **CEQA FINDINGS**

N/A

#### **ATTACHMENTS**

Copies of Claims Paid reports from 03/01/02 – 03/15/02 and 03/16/02 – 03/31/02

**BOARD OF DIRECTORS**

**AGENDA REPORT**

Meeting Date	To Bd. of Dir. 4/24/02
Item Number	Item Number 9(a)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Bob Chenowith, Principal Engineering Associate

**SUBJECT:** PROPOSED ANNEXATION NO. OCSD-7 - HORMUTH ANNEXATION

**GENERAL MANAGER'S RECOMMENDATION**

(1) Receive and file petition from John Hormuth requesting annexation of 2.226 acres to the District in the vicinity of Meads Drive and Hillside Drive in an unincorporated area of Orange County; and (2) Adopt Resolution No. OCSD 02-07, authorizing initiation of proceedings to annex said territory to the District (Proposed Annexation No. OCSD-7 - Hormuth Annexation).

**SUMMARY**

- OCSD received a request from John Hormuth to annex 2.226 acres to OCSD. This property will be annexed into Revenue Area 7.
- Mr. Hormuth's property is located within the boundaries of the City of Orange, but outside the boundaries of OCSD and needs to be annexed.
- The City of Orange issued Mr. Hormuth a sewer connection permit without verifying OCSD annexation status. Mr. Hormuth completed connection of his private residence to the local sewer and abandonment of his septic tank without OCSD annexation.
- OCSD sent a letter to Mr. Hormuth on June 7, 2001 informing him of the requirement for OCSD annexation and payment of all fees. Mr. Hormuth has recently paid all applicable connection and annexation fees to OCSD.

**PROJECT/CONTRACT COST SUMMARY**

This annexation is in accordance with the terms of the negotiated agreement with the County of Orange regarding A.B.8 Tax Exchange for annexing properties, Board approved and effective March 14, 1989. Under this Tax Exchange, OCSD does not receive a percentage of the basic levy, and instead, collects a higher annexation fee. The fee of \$9,587 includes the following:

LAFCO Processing Fee (\$1,100 fee paid directly to LAFCO by homeowner)	\$ 0
Additional LAFCO Processing Fee (current difference for 2001 fees)	50
OCSD Processing Fee	500
State Board of Equalization Processing Fee	350
CA Environmental Quality Act Filing Fee	43
Annexation Acreage Fee	<u>8,644</u>
<b>TOTAL ANNEXATION AND SEWER CONNECTION FEE</b>	<b>\$ 9,587</b>



**BUDGET IMPACT**

- This item has been budgeted. (Line item:            )
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

**ADDITIONAL INFORMATION**

Orange County Sanitation District (OCSD) staff has instituted a procedure with the City of Orange to preclude them from issuing connection permits without checking for OCSD annexation status and payment of OCSD fees.

**ALTERNATIVES**

N/A

**CEQA FINDINGS**

Notice of Exemption will be filed.

**ATTACHMENTS**

1. Exhibit A Legal Description
2. Exhibit B Map

## **BOARD OF DIRECTORS**

### **AGENDA REPORT**

Meeting Date	To Bd. of Dir. 4/24/02
Item Number	Item Number 9(b)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Larry Rein, Contract Project Manager

**SUBJECT:** ABANDONMENT OF AIRBASE TRUNK SEWER, WATSON AND CALIFORNIA SEWERS, CONTRACT NO. 6-13

#### **GENERAL MANAGER'S RECOMMENDATION**

(1) Approve a Grant of Easement, Right of Entry, Maintenance and Indemnity Agreement with the City of Costa Mesa in a form approved by General Counsel at no cost to District; and  
(2) Approve a Grant of Easement Agreement with the Newport-Mesa Unified School District, with the District paying the fees over a 5-year period of \$5,252.57 per year for a total cost of \$26,262.85, in a form approved by General Counsel.

#### **SUMMARY**

- This project will abandon two of the oldest Orange County Sanitation District (District) sewers in Costa Mesa. The sewers were constructed in the 1940s and are deteriorated to a condition where they cannot be maintained.
- The Airbase Trunk Sewers are no longer needed as trunk sewers since the construction of the Fairview Trunk Sewer and the Gisler-Baker Trunk Sewers.
- In order to abandon the sewers, a smaller sewer needs to be constructed to replace the local service provided by the Airbase Trunk Sewers. This agreement will provide the easements needed for the local sewer.
- The agreement with City of Costa Mesa also quitclaims a portion of the Airbase Trunk Sewer that is no longer needed. See attached map for clarification.
- At completion of the project, the local sewers and easements will be assigned to Costa Mesa Sanitary District.
- When the sewers are transferred to Costa Mesa Sanitary District, Newport-Mesa Unified School District will incur Costa Mesa Sanitary District sewer fees that are not currently assessed. Therefore, in compensation for these costs and the easement rights, District will pay the fees for five years at \$5,252.57 per year, for a total of \$26,262.85.

#### **PROJECT/CONTRACT COST SUMMARY**

The agreement with Newport-Mesa Unified School District will cost the District \$26,262.85. The agreement with the City of Costa Mesa is a no cost agreement. See the attached Budget Information Table for project summary.

#### **BUDGET IMPACT**

This agreement has no impact on the Budget.

- This item has been budgeted. (Line item FY 2001-02, Section 8, Page 32: Capital Improvement Program, Collections Facilities, Abandonment of AB Trunk, Watson and Cal. Sewers, Contract No. 06-13)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable

### **ADDITIONAL INFORMATION**

Contract No. 6-13 is to be split into three Capital Improvement Projects (CIP). There are three separate segments of the Airbase Trunk Sewers that are being abandoned along with three separate means of constructing replacement sewers to provide local service once the sewers are abandoned. Since each of these segments has separate timing considerations, the project is being divided into three capital budgets (Contract Nos. 6-13-1, 6-13-2, and 6-13-3) for construction purposes, the design work has been done under Contract No. 6-13. A budget for Contract No. 6-13-2 will be established in May 2002, so this project can proceed first. The other two project budgets will be established in FY2002/03. This easement agreement is needed for Contract No. 6-13-2

### **ALTERNATIVES**

No alternatives were considered. If the Airbase Trunk Sewers are not abandoned, major rehabilitation work and periodic maintenance will be required. The sewers are unneeded for Orange County Sanitation District purposes.

### **CEQA FINDINGS**

This project is covered in the previously approved 1989 Master Plan/EIR. The final EIR was approved July 19, 1989 and the Notice of Determination was filed July 20, 1989.

### **ATTACHMENTS**

1. Budget Information Table
2. Area Maps

## **OMTS COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/03/02	To Bd. of Dir. 04/24/02
Item Number OMTS02-22	Item Number 12(c)

Orange County Sanitation District

**FROM:** Robert Ooten, Director of Operations and Maintenance  
Originator: Shabbir Basrai, Engineer

**SUBJECT:** PROFESSIONAL SERVICES AGREEMENT FOR PLANT NO. 2 OXYGEN  
PLANT REPLACEMENT/REHABILITATION ASSESSMENT, CAPITAL  
PROJECT NO. SP-72.

#### **GENERAL MANAGER'S RECOMMENDATION**

Approve Professional Services Agreement with m2t technologies to provide professional services for the evaluation of alternatives for Plant No. 2 Oxygen Plant Replacement/ Rehabilitation Assessment, Job No. SP-72, for an amount not to exceed \$97,000.

#### **SUMMARY**

- The existing cryogenic oxygen generation facility, which provides oxygen to Plant No. 2 aeration basins, was installed in the early eighties and is showing age-related problems.
- The intent of this project is to evaluate the option of rehabilitating the existing oxygen generation system and compare against other pure oxygen generation technologies such as vacuum or pressure-swing adsorption and to identify the most appropriate option for the District.
- Currently, the cryogenic plant is being operated and maintained under a 15-year contract by Air Products and Chemicals, Inc (APCI). This contract expires in February 2005.
- The proposed work includes establishing a project approach, preliminary design, budget and a project schedule to implement the recommended option before the expiration of the current contract with APCI.
- This capital project study SP-72, was budgeted and approved by the Board.
- Requests for proposals were sent to five consulting firms. Two firms submitted proposals: Black and Veatch, and m2t technologies.
- Staff recommends approval of the PSA with m2t technologies for a total amount not to exceed \$97,000.

#### **PROJECT/CONTRACT COST SUMMARY**

The engineering services will not exceed \$97,000. The total project budget is \$110,000 for Capital Project SP-72. There is sufficient funding for the PSA agreement.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item: 2001-02 Budget Section 8, page 70 Project No. SP-72)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ADDITIONAL INFORMATION**

Pure oxygen is required for the Plant No. 2 activated sludge secondary treatment process. The oxygen activated sludge secondary treatment system consists of eight, covered oxygen dissolution basins where pure oxygen is introduced instead of air for biological treatment of the wastewater entering the process.

The existing oxygen generation system consists of two 72.5 tons per day APCI designed cryogenic-type plants. These plants are designed to produce a gaseous oxygen product at a purity of 95% oxygen or higher. These generators were installed in the early eighties and are showing age related problems. Only one of the two cryogenic plants is currently working and is being operated at a turned-down capacity of 40-45 tons per day to meet the oxygen requirements of the secondary treatment process. The second plant is mothballed. The plants lack adequate automation, making the task to control its output to meet the diurnal changes of the oxygen demands of the system, impossible. Additionally, the production efficiency of the plant has suffered over the past few years due to several factors including cooling water fouling, limitation in the ability to turndown the main air compressor and a potentially undersized main condenser hydrocarbon gel trap.

Currently, the cryogenic plant is being operated and maintained under a 15-year contract by Air Products and Chemicals, Inc. (APCI), the original equipment manufacturer. This contract expires in February 2005. The intent of this project is to evaluate the option of rehabilitating the existing system and compare that against other pure oxygen generation technologies such as vacuum or pressure swing adsorption and identify the most appropriate option for the District. Additionally, this project shall establish a project approach, preliminary design, budget and a project schedule in order to implement the recommended option before the expiration of the operating contract with APCI.

Staff received proposals from two firms on March 12, 2002: Black and Veatch and m2t technologies. Brown and Caldwell, Montgomery Watson Harza, and CH2M Hill declined to submit. A panel of four District Staff members reviewed and ranked the proposals on March 18, 2002. M2t technologies was ranked higher by the panel based upon its extensive experience and capabilities in designing, constructing, operating, and evaluating oxygen supply systems. Each of the m2t technologies' project team member offers 30 plus years experience in the high purity oxygen marketplace. A summary of the selection panel proposal evaluation score is attached. The fee proposals ranged from \$97,000 to \$149,000. Staff recommends approval of the Professional Services Agreement with m2t technologies for an amount not to exceed \$97,000.

The final report from the consultant is expected to be completed by July 2002.

**ALTERNATIVES**

Do not rehabilitate/replace the existing cryogenic oxygen generation system. This would compromise the continuous availability of oxygen for the secondary process.

**CEQA FINDINGS**

This project is exempt from CEQA per Sections 15301 (k) and 15306.

**ATTACHMENTS**

Staff Evaluation of Proposals.

## **OMTS COMMITTEE**

### **AGENDA REPORT**

Meeting Date 4/3/02	To Bd. of Dir. 04/24/02
Item Number OMTS02-21	Item Number 12(d)

Orange County Sanitation District

**FROM:** Robert J. Ooten, Director of Operations and Maintenance  
Originator: Nick Arhontes, Manager Collection Facilities O & M

**SUBJECT:** AWARD OF CLOSED CIRCUIT TELEVISION INSPECTION SERVICES  
SPECIFICATION NO. S-2002-81-BD

#### **GENERAL MANAGER'S RECOMMENDATION**

Authorize the General Manager to issue Purchase Agreements with Pro Pipe Professional Pipe Services, Innerline Engineering, and National Plant Services for Sewer Line Video Inspection Services, Specification No. S-2002-81, for a combined annual total amount not to exceed \$400,000, with four one-year renewable options.

#### **SUMMARY**

- Staff recommends the District have all sewer lines inspected with video equipment for condition assessment purposes over the next six years to better plan and schedule repair and rehabilitation needs.
- The maintenance budget, approved in the FY 2001/02 Budget, allows for this activity, and has an amount of \$86,000 remaining for this Fiscal Year. For FY 02/03, the budget is \$393,200.
- The Purchase Agreement deliverables include preparation of sewer videotapes, CD-ROMs, inspection reports, and electronic data files for the District to be added to the District Computerized Maintenance Management System.
- Requests for proposals were sent to seven firms. Four teams submitted proposals: Pro Pipe Professional Pipe Services, Innerline Engineering (teamed with Affordable Pipeline Inspection Company), California Pipeline Inspection, Inc., and National Plant Services. Downstream Services and Kenny Manta declined to propose.
- A team of District staff, including engineers, collections, construction management, and programming and database staff reviewed, evaluated, and ranked the proposals.
- Staff recommends multiple service providers to provide inspection for local sewers, laterals, trunk lines and interceptor sewers. The firms recommended are Pro Pipe Professional Pipe Services, Innerline Engineering, and National Plant Services, for a total amount not to exceed \$400,000. The Agreements will each be for a one-year period with a one-year renewable option. Staff received, in the proposals, data from each contractor for the cost per foot for each size of pipe to be inspected. Award of each segment of work authorized by staff will be determined based on the cost data supplied by the service providers.

#### **PROJECT/CONTRACT COST SUMMARY**

The CCTV Inspection Services agreement will not exceed \$400,000 annually. This level of funding is based on the proposed Budget.

### **BUDGET IMPACT**

- This item has been budgeted at \$86,000 (2001-02 Budget Section 6, page 68 Professional and Contractual Services).
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ADDITIONAL INFORMATION**

The District operates over 650 miles of various size gravity pipelines, which collect and convey the sewage flows to the treatment plants. The District desires to have the complete system inspected and recorded, and electronic data files available within a six-year period and reoccur thereafter on an as yet to be determined frequency. The need for inspection of the system comes from the findings that many sewers have never been inspected, concern over the condition of the pipes, development of the pending Environmental Protection Agency's (EPA) Capacity, Management, Operations, and Maintenance (CMOM) regulations requiring evaluation of existing facilities, and the Regional Board's upcoming Waste Discharge Requirements (WDR).

In the past, CCTV work has been done as needed, mainly for follow-up activities. Videotapes and reports have been stored in the engineering library, when possible. Because a record keeping system for the tapes and reports has not been well defined, the tapes are difficult to locate and, if found, the viewer must search hours of video tape for possibly only several observations and/or defects. With the existing system, it is often easier and less expensive to re-inspect a pipe than it is to locate and review any existing tape.

District staff has been developing a Scope of Work for over a year that includes procedure and equipment requirements, defect/observation identification and coding based on emerging National Standards, and data management. This system will provide current pipe inspection data in an easy to track and manageable format.

The District also desires to have several firms available that can meet the new data acquisition and management, at fixed pricing, in order to expedite CCTV work. Work is currently performed less efficiently.

Requests for proposals were sent to seven firms. Staff received proposals from four firms on February 28, 2002: Pro Pipe Professional Pipe Services, Innerline Engineering (teamed with Affordable Pipeline Inspection Company), California Pipeline Inspection, Inc., and National Plant Services. Downstream Services and Kenny Manta declined to propose.

A team of District staff, including engineers, collections, construction management, and programming and database staff reviewed, evaluated, and ranked the proposals. Staff reviewed and ranked the proposals on March 11, 2002.

Staff recommends approval of the Purchase Agreements with three of the firms: Pro Pipe Professional Pipe Services, Innerline Engineering, and National Plant Services for a total amount not to exceed \$400,000 per year. This allows the District more flexibility since there is currently no staff or equipment to perform this work.



Innerline Engineering and National Plant Services were ranked the highest technically by the proposal review team (within 1 point out of a possible average 200 points). Both teams have a good understanding of the work and included detailed approaches for performing the work. They included acceptable samples of video recordings in their proposals. Both firms are recommended as Service Providers. However, National Plant Services listed some Exceptions to the Contractual Requirements that will need to be negotiated prior to entering an Agreement.

Additionally, Pro-Pipe appears capable of performing the work as requested, although their sample materials were substandard, they are included in the recommendation as an alternate service provider.

District staff has favorable experience with the three recommended firms.

### **ALTERNATIVES**

Do not issue the Agreements to these firms, and continue to perform the work on an as needed basis. This would add time to the overall schedule of completion of having all the sewers CCTV inspected, due to time required for preparing and revising contracts. This is also less efficient for District staff.

### **CEQA FINDINGS**

This inspection work is exempt from CEQA.

### **ATTACHMENTS**

Staff Evaluation of Proposals.

## OMTS COMMITTEE

### AGENDA REPORT

Meeting Date 4/3/02	To Bd. of Dir. 4/24/02
Item Number OMTS02-23	Item Number 12(e)

Orange County Sanitation District

**FROM:** Blake Anderson, General Manager  
Greg Mathews, Assistant to the General Manager  
Originator: Doug Stewart, Project Manager

**SUBJECT:** ASSET MANAGEMENT, JOB NO. SP-68

#### GENERAL MANAGER'S RECOMMENDATION

- 1) Award a consulting services agreement to Parsons Infrastructure and Technology Group, Inc. for professional consulting services for development of an Asset Management Program, Job No. SP-68, for a total amount not to exceed \$455,957; and
- 2) Approve out-of-country travel, in support of developing the Strategic Plan, for two employees to Australia/New Zealand for the purpose of site visits to five public agencies that have successfully implemented advanced asset management programs.

#### SUMMARY

- Asset management is managing infrastructure assets to minimize the total cost of owning and operating them while continuously delivering the service levels customers desire.
- Asset management has been the legislated standard of practice in Australia and New Zealand for almost a decade. Several years ago, District staff recognized the need for implementing a more rigorous process to attain better stewardship of the District's assets throughout their life cycle. Many other public agencies in the U.S. are now becoming increasingly aware of the importance of developing a life-cycle approach to maintaining and protecting infrastructure assets, however none have progressed to the point of having implemented an agency-wide program.
- A request for proposals, developed by an inter-departmental team, was issued in November 2001 for consulting services to assist OCSD staff in preparing a strategic plan for an asset management program. Seven proposals were received, the proposals were reviewed, evaluated and ranked by a five-member team and the top three firms were interviewed. Parsons Infrastructure and Technology Group were selected as the top ranked firm. A final scope of work and fee estimate was negotiated with Parsons.
- Staff recommends that the Board approve out-of-country travel, in support of developing the Strategic Plan, by two District employees to Australia/New Zealand for the purpose of site visits to five (5) public agencies that have implemented advanced asset management programs. Contacts will also be made to establish

future relationships with these agencies for the purpose of collaboration and benchmarking. Funds for this trip are included in the project budget.

- Staff recommends that Parsons Infrastructure and Technology Group, Inc. be awarded a Professional Services Agreement for the Development of a Strategic Plan for Asset Management, Job No. SP-68, for a total fee not to exceed \$455,957. Scheduled completion date is January 2003.

### **PROJECT/CONTRACT COST SUMMARY**

The total current fiscal year budget for SP-68 is \$870,000. The SP-68 budget is being divided into two projects: SP-68 will remain with \$691,800 for asset management and SP-68-1 will have a budget of \$178,200 for a managed maintenance program. A revised budget for SP-68 has been submitted through the standard budget process to increase the SP-68 budget to \$1,027,000 in FY 02/03. There are sufficient funds in the current year budget to award this contract to Parsons for \$455,957. Please refer to attached Budget Information Table.

Travel expenses for two District employees are estimated to be approximately \$3800 each, including travel, lodging, meals, and local transportation. The funds for this travel are budgeted in the staff costs for this project. An itinerary is planned to include site visits with five agencies in Sydney and Melbourne, Australia and Auckland, New Zealand.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item:            )
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

A revised project budget has been submitted in the annual budget process for SP-68. Please refer to attached budget information table.

### **ADDITIONAL INFORMATION**

A number of forces are driving OCS and other government agencies to adopt more stringent business practices, many of which are used in the private sector. These forces include:

- Regulatory demands such as pending EPA sanitary sewer Capacity, Maintenance, Operations, and Management (CMOM) regulations, focusing on reducing sewer overflows by implementing improved programs.
- A growing recognition in the wastewater industry of the impact of deferred maintenance on the long term viability of the public infrastructure.
- On a national level, ratepayer and governing Board pressure to improve level of service while reducing operating costs.

- An increased recognition at the State and Federal government level of the need to establish sustainable infrastructure policies tied to approval for future funding requests. The Water Investment Act of 2002 (SB 1961 – Jeffers (I) VT), as introduced, requires that an asset management program be in place to be eligible for federally financed State Revolving Fund Loans.
- Governmental accounting standards changes (GASB 34) requiring increased transparency by government agencies on the true asset conditions, cost of delivering services, including preservation of capital assets.

To improve business practices, the entire organization must increase attention to its ongoing:

- Strategic thinking and planning as it relates to facility financing, planning, design, construction, and O&M.
- Informed decision making.
- More efficient joint use of capital and operating funds.
- The relationship between initial asset cost and long term asset costs and performance.
- Management of exposure to risk.

The use of information produced from a properly designed and implemented Asset Management Program is the key to bringing utilities' actions in line with sound business practices. An effective Asset Management Program results in more efficient capital program outlays; reduced asset life-cycle cost; increased asset performance and reliability; and refined financial planning. In order to be effective, the information produced by the Asset Management Program must be communicated and used throughout the organization to make informed decisions regarding asset preservation and replacement.

AMSA, in its 2002 report entitled "Managing Public Infrastructure Assets to Minimize Cost and Maximize Performance" promulgates this definition of asset management. "Asset management is managing infrastructure assets to minimize the total cost of owning and operating them while continuously delivering the service levels customers' desire." AMSA also states that, "The majority of water and wastewater utility managers throughout North America understand the concept of asset management; however, it is rarely implemented with the rigor necessary to succeed.....American best practice (in the public sector) has not yet embraced the total life-cycle cost approach to asset management." The asset management approach proposed in our effort is to emulate the Australia/New Zealand approach to asset management, the proven world leaders in asset management, and adapt this proven approach to fit our specific agency.

Asset Management programs are a legislated requirement in New Zealand and were widely implemented in Australia as a competitive strategy when the water and wastewater industries were privatized. In Australia, water and wastewater utilities are wholly owned by the state government but are otherwise operated as private enterprises, earning returns on assets and paying taxes. Asset Management

(minimizing the total life-cycle cost of owning and operating assets) is the core of the Australian/New Zealand approach to operating their wastewater utilities.

Several initial steps have been taken by OCSD in the past several years to move us toward implementing an effective asset management program:

- DART (O&M Reinvention) - This project has focused on changing the business and work practices to make the divisions more effective and efficient. A structure has been developed to document and capture all asset information including asset description, financial data, work history, parts lists, and task analysis. Methods have been established to perform cost benefit analysis for the repair or replacement of inoperative equipment. Warehousing, purchasing and accounting practices have been modified to effectively support a planned maintenance environment. The project has resulted in better decision making and cost effective maintenance and operations. The next step is to develop an organizational Asset Management program to incorporate the full life cycle of the equipment and not just the maintenance and operations of the facilities.
- J-42 - This project has identified, tagged, and produced Process and Instrumentation Diagrams and Loop drawings for all the major equipment within the two plants. The drawings are all available on-line for easy access by all OCSD staff.
- Trunk sewer mapping project – OCSD is in the process of developing computerized maps of all of OCSD's collections' facilities.
- CMMS.
- Engineering Department's Reorganization, including developing a Planning Division.
- Development of GIS architecture, standards, and strategy.
- Preliminary RWQCB WDR and EPA CMOM compliance strategies.

In the first half of 2001, OCSD staff participated in an inter-agency benchmarking study, sanctioned by all of the agencies' General Managers, to determine best practices for an asset management program. Participating agencies were King County Department of Natural Resources (Seattle), City of Portland Bureau of Environmental Services, Sacramento Regional County Sanitation District, Central Contra Costa Sanitation District, and the City of Los Angeles Bureau of Sanitation. A questionnaire was developed to determine each agencies current status with respect to employing asset management techniques, responses were tabulated, a two-day workshop was held in June to discuss the survey results and develop group recommendations, and a technical memorandum was produced. The report concludes, "An Asset Management Program must become the cornerstone of how participating agencies conduct business. The program must be comprehensive and management driven, and resonate throughout the organization. Developing asset management programs must be viewed as a long-term effort whose end result is a model for making optimal business decisions."

In the second half of 2001, an inter-departmental Asset Management team developed the scope of work for this proposed effort. This scope of work provides for the following:

- A strategic level review of current OCSD asset management (AM) practices
  - A defined scope and set of assumptions for a basic and advanced AM program
  - An assessment and gap analysis relative to the desired AM programs
  - A strategic plan for the effective deployment of the AM programs
  - A scope of work for the development of a subsequent implementation plan
  - Specific training for staff in state-of-the-art asset management techniques
1. The major goals of the Strategic Plan are to:
    - Document a shared vision for the desired agency-wide AM program
    - Identify desired outcomes - quantitative and qualitative
    - Provide the business (financial) case to gain support and approval for further development of the AM program
    - Develop a gap analysis and needs assessment between the existing state of AM and the desired program
    - Develop strategies and recommendations for the effective deployment of the desired AM program
    - Identify the structure, accountability, and staff responsibilities for implementation
  2. The Asset Management Team decided to develop a strategic plan first, rather than proceed directly to implementation steps, so that sufficient education and buy-in from all of the affected departments could be obtained and that the Board could be informed of the intended program. Implementation will be expedited with a sufficiently detailed vision (strategic plan) and education (buy in) of all of the affected organizational units.
  3. A request for proposals was sent to seven consulting firms, who had all expressed an interest in this work, in November 2001. Proposals were received in January 2002 and consultant selection was complete in February 2002. A staff evaluation of the proposals is attached as Attachment 2 to this agenda report.
  4. Staff recommends that Parsons Infrastructure and Technology Group, Inc. be awarded a Professional Services Agreement for the Development of a Strategic Plan for Asset Management, Job No. SP-68, for a total fee not to exceed \$455,957.
  5. Staff also recommends that the Board approve out-of-country travel by two District employees to Australia/New Zealand for the purpose of site visits to five (5) public agencies that have implemented advanced asset management programs. Contacts will also be made to establish future relationships with these agencies for the purpose of collaboration and benchmarking. Funds for this trip are included in the project budget.

**ALTERNATIVES**

Do not proceed with implementing a structured and shared best-practice Asset Management Program at OCSD.

**CEQA FINDINGS**

Not applicable

**ATTACHMENTS**

1. Staff Evaluation of Proposals
2. Budget Information Table

## **OMTS COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/03/02	To Bd. of Dir. 04/24/02
Item Number OMTS02-24	Item Number 12(f)

Orange County Sanitation District

**FROM:** Patrick Miles, Director of Information Technology  
Originator: Richard Castillon, Division Manager

**SUBJECT:** PURCHASE OF CISCO SYSTEMS NETWORKING EQUIPMENT

#### **GENERAL MANAGER'S RECOMMENDATION**

(1) Establish Cisco Equipment as the District's standard networking equipment; and (2) award a purchase contract to IKON Office Solutions for Purchase of CISCO Equipment, Specification No. E-2002-86 to provide infrastructure networking equipment and maintenance contract, in an amount not to exceed \$799,247.

#### **SUMMARY**

- The network infrastructure is the system that allows all of the computing devices (PCs, printers, database/e-mail servers and plant process control systems) to communicate with each other.
- The current network infrastructure is built on outdated equipment, lacks support from the hardware and software vendor, and is not capable of expanding to meet the current requirements of OCSD. This equipment has been in service for nearly five years and has reached its operating life expectancy.
- Since the current networking equipment is no longer supported by the manufacturer, OCSD can not procure any maintenance contracts or new parts to replace failed parts. We must search for parts on the "used market" and these parts are not necessarily reliable.
- OCSD has recently experienced several network component failures. These failures have resulted in complete or partial network outages. Based on the similarities of the particular hardware failures, we predict that these failures and resulting outages will occur at a more frequent rate.
- A complete internal needs assessment was accomplished to determine the requirements of all OCSD divisions. This resulted in a system design that includes redundancy and failover protection at a network's central (core) level.
- The existing equipment is to be replaced by equipment manufactured by Cisco systems. OCSD staff will perform all maintenance work in concert with a selected contractor who will advise staff on installation strategies and problems/issues as they arise.



- OCSD has selected to sole-source Cisco Systems equipment for the following reasons:
  - Cisco is the leading networking equipment tier one vendor in the world. This gives OCSD a high comfort level that this manufacturer will provide support to this equipment for the period we own and operate this equipment.
  - Cisco offers single vendor solutions that span the networking needs of our entire enterprise including the office network, the process network, and the pump station network
  - Cisco is the industry leader on the standardization of protocols and security
  - Cisco solutions are open in nature allowing for greater interoperability with other products and a greater pool of outside resources
- The Executive Management Team has evaluated the results of the needs assessment and recommends this specific solution.

### **BUDGET IMPACT**

- This item has been budgeted.
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ALTERNATIVES**

Design and build a completely redundant/failover system at a substantially increased price.

### **CEQA FINDINGS**

Not applicable.

### **ATTACHMENTS**

Executive Summary

## **ASSET MANAGEMENT JOB NO.SP-68**

### **Staff Evaluation of Proposals**

The following consulting firms received a Request for Proposals:

- Black & Veatch
- Brown and Caldwell
- CH2M-HILL
- Strategic Asset Management, Inc.
- Parsons
- Westin
- Carollo Engineers

The request for proposals was mailed to all seven firms on November 26, 2001. Seven responsive proposals were received on January 18, 2002. On February 5, 2002 a sub-committee of the OCSD's Asset Management Team met to review the written proposals. All seven firms' proposals were individually ranked and the top three firms were invited to the interview process, which was held on February 13, 2002. The review panel consisted of five members, comprised of staff from the Administration, Operations and Maintenance, Finance, Engineering, and Information Technology departments. Each proposal was graded from 1 to 10 (10 being best) in each of the five categories listed below:

1. Qualifications of the firm
2. Staffing and Project Organization
3. Workplan
4. Completeness of response
5. Interview

After conducting the interviews, the top three firms were again individually ranked by each OCSD project team member. The following summarizes the ranking results for the three firms:

- |    |                    |      |        |
|----|--------------------|------|--------|
| 1. | Parsons            | 1337 | Points |
| 2. | Brown and Caldwell | 1283 | Points |
| 3. | CH2M-Hill          | 1070 | Points |

The following is a summary of how the evaluation team collectively viewed the top ranked consultant:

#### **Parsons**

Parsons presented a very strong team of professionals, each with specific expertise in asset management. Roger Byrne, with GHD, has been involved with over 100 asset management implementations in New Zealand and Australia. GHD is committed to an asset life cycle approach to asset management. Roger Byrne is a specialist in employing advanced asset management techniques in wastewater agencies like OCSD.

Bill Kennedy, project manager for this work, brings a lot of relevant agency experience from his planning work at San Diego. Lynn Norton is very strong on experience with strategic planning and strategic plan development in the wastewater industry. Peter Lewis is proposed as the workshop facilitator. He has OCSD workshop experience from the J-42 project. Duncan Rose, Parsons' National Asset Management Technical Director, has a significant role in the project, as well.

Parsons team has specific JDE (One World) experience and integrating JDE into Asset Management Programs. Parson's team has the necessary experience and tools to do this project and is approaching the project as a collaborative effort with OCSD staff. Parsons is committed to provide the necessary training to OCSD at the project outset to ensure a well informed and knowledgeable staff input to the process. Parsons presented an outstanding presentation of their project approach and team qualifications in the interview process, which caused the majority of the review panel to rate them as the best firm for this work.

### **Fee Proposals**

After completing the interview process and finalizing the consultant rankings, the sealed fee proposals submitted by the three interviewed firms, were opened.

The top ranked consultant, Parsons, submitted the highest fee proposal for the requested Scope of Work. Over the next week, staff negotiated with Parsons to reduce the man-hour estimate and fee schedule, while keeping the same scope of work for the project. All of the required elements of the scope of work will be produced, but with a lower than proposed level of effort from Parsons' team. One software application proposed by Parsons in the proposal will be deferred to the next phase of the project, developing implementation plans based on the approved strategic plan. A reduced man-hour estimate of 2979 hours and a fee of \$455,957 were negotiated.

Staff recommends Parsons be awarded the Professional Services Agreement for the Development of a Strategic Plan for Asset Management, Job No. SP-68, for a total fee not to exceed \$455,957.

## **OMTS COMMITTEE**

### **AGENDA REPORT**

Meeting Date 4/3/02	To Bd. of Dir. 04/24/02
Item Number OMTS02-25	Item Number 12(g)

Orange County Sanitation District

**FROM:** Robert P. Ghirelli, D.Env., Director of Technical Services  
Originator: Adriana Renescu, Engineering Supervisor

**SUBJECT:** FATS, OIL AND GREASE (FOG) CONTROL PROGRAM

#### **GENERAL MANAGER'S RECOMMENDATION**

(1) Authorize development of a Fats, Oil and Grease (FOG) Program in accordance with the provisions of California Regional Water Quality Control Board Santa Ana Region Order No. 01-99, General Discharge Requirements for Sewage Collection Agencies; (2) Establish a new budget of \$150,000 for development of the FOG Program; (3) Authorize staff to develop a funding program with the County of Orange and cities within the District's jurisdiction for development of the FOG Program; and (4) Approve a sole source consultant agreement with Environmental Engineering and Construction, Inc. to conduct a study for Phase I of the FOG Program for an amount not to exceed \$268,000.

#### **SUMMARY**

- To address countywide sewer system overflow (SSO) incidents, the California Regional Water Control Board, Santa Ana Region (RWQCB) is in the process of issuing Order No. 01-99, General Waste Discharge Requirements, requiring Orange County cities and wastewater treatment agencies to monitor and control SSOs. The Order names the District as a co-permittee and as the lead to "facilitate regional compliance" with the Order. As part of the Order, cities and wastewater agencies are required to develop a FOG control plan by September 30, 2004. To enable the development of a FOG control program that is practical, equitable and implementable, staff proposes to conduct a study to evaluate FOG control technologies, practices and programs and establish the technical, administrative and ordinance building blocks of a control program. The District estimates that the total cost for FY02/03 to develop and conduct the study for its area of responsibility is \$150,000.
- The co-permittees have determined that the interests of the county would be best met by conducting a countywide, comprehensive FOG control study that provides a consistent, practical and equitable approach throughout Orange County. In addition, the countywide study managed centrally by the District will result in significant cost savings to the county. The expected cost of this consolidated approach is \$300,000 for FY02/03, which represents a significant cost saving to the county versus the cumulative cost of \$3-4 million if co-permittees conducted program development individually.

- To meet the September 2004 deadline, schedule and resource requirements and constraints, the District's Source Control Division proposes to obtain on a sole source basis the services of Environmental Engineering and Contracting, Inc. (EEC) to conduct a two-phase study. Based on the EEC proposal, the cost for Phase I of the study is \$268,000. Phase I will be started May/June 2002 and will be completed during FY 02/03.
- Therefore, the District proposes to (1) facilitate and manage the countywide study; (2) budget \$150,000 for FY02/03; (3) contract EEC on a sole source basis to perform the Phase I of the study for a cost not to exceed \$268,000; and (4) jointly fund the total cost of the study with cities and wastewater agencies through a memorandum of understanding or other form of understanding. The County of Orange has to date pledged \$50,000 towards funding the study, and the Costa Mesa Sanitary District has budgeted \$17,000 to be paid to the District upon invoicing.

### **PROJECT/CONTRACT COST SUMMARY**

The consultant (EEC) provided a solicited proposal for Phase I as follows:

- \$118,000 for Task 1
- \$120,000–150,000 for Task 2, depending on the findings of Task 1

The total consultant fee will not exceed \$268,000 for Phase I of the study. Staff estimates that the total cost of the work will not exceed \$300,000 for FY02/03. The District proposes to budget \$150,000, which represents its initial cost to the District to meet the requirements of the Order.

The grease control program has not been budgeted for the current FY02/03.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item:            )
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ADDITIONAL INFORMATION**

#### **Background**

From January 2000 through August 2001, there were approximately 250 sewer system overflows (SSOs), of which almost 75% were from sewer collection systems owned by cities and local wastewater agencies. During this same period, there were 31 beach closures due to SSOs, of which 17 were from systems owned by cities and wastewater agencies. The most prevalent cause of the SSOs is grease accumulation in the small to

medium sewer lines. These sewer lines are owned and operated by cities and local wastewater agencies, with the exception of unincorporated areas and cities that have agreements with the District such as Tustin and the Irvine business center, which are currently under the District's jurisdiction.

The 2000/01 Orange County Grand Jury (Grand Jury) investigated SSOs and published its findings in April 2001 in a report entitled, *Sewage Spills, Beach Closures-Trouble in Paradise*. The Grand Jury identified as the main cause of SSOs sewer pipes clogged with grease from restaurants and high-density residential areas (e.g., apartment complexes). The Grand Jury also suggested that a regional coalition be formed to resolve the SSOs and develop a regional, consolidated approach to controlling grease. More recently, to address regional SSOs, the California Regional Water Control Board, Santa Ana Region (RWQCB) is finalizing *Tentative Order No. 01-99, General Waste Discharge Requirements*, requiring Orange County cities and agencies to develop and implement a plan to monitor and control SSOs. In part, the Order requires the permittees to develop and submit to the RWQCB plans to implement a "Fats, Oils, and Grease (FOG) Control Program," by **September 30, 2004**. The Order names the District a co-permittee and the lead to "facilitate regional compliance" with the Order.

To meet the Order requirements as a co-permittee, the District needs to conduct a study to develop a FOG control program for its area of jurisdiction. The District estimates that the total cost for FY02/03 to conduct the study is \$150,000. The co-permittees—cities, local wastewater agencies, the District and County of Orange—have formed a steering committee and have determined that the interests of the region would be best met by a consolidated approach that includes conducting a comprehensive FOG control study to develop program and ordinance building blocks to enable co-permittees to institute site specific programs that are practical, equitable and address local conditions.

The following summarizes the advantages of a countywide approach vs. individual development of a study and program:

Issue	District Responds Alone	Regional Approach
Impact	District's jurisdiction only	Countywide
Coordination required	District's staff	County, cities, agencies
Costs	\$150,000 (FY 02/03)	\$300,000 (FY 02/03)
Funding source	District's budget	All parties
Approaches	Address only District's concerns	Develop building blocks that can be selected by participants
Length of time required	~1 year	~1 year
Resources required	Significant	Shared
Long-term or secondary impacts to the District's facilities	Potentially extensive and uncontrolled	Minimal, will be studied and addressed during the program
Final District cost	\$150,000	Maximum \$100,000, as low as \$50,000

## **Countywide FOG Control Study**

The FOG Control Program study will take place in two phases. Phase I will develop grease control building blocks based on a thorough evaluation of technologies and current state and national programs. Phase II will include field testing of a select group of non-validated technologies/practices identified for further study based on the testing protocol and plan developed in Phase I. Phase I will have two tasks. The deliverables of Task 1 will include:

- Evaluation of local conditions
- Evaluation of components of existing regional and national FOG control programs
- Assessment of effective source control measures and list of technology and procedures applicable to Orange County
- Identification of technologies for further study in Phase II
- FOG control program building blocks

Task 2 deliverables will include:

- Grease control technologies matrix with applicability, benefits, costs, etc.
- FOG ordinance building blocks
- Study protocol for testing the short list of non-validated technology/practices and a field-testing plan
- Recommendation of an information management system
- Proposal and recommendation for Phase II of the study with a cost estimate

To meet the September 2004 deadline, schedule and resource requirements and constraints, the District's Source Control Division proposes to contract the services of EEC to conduct the study. The total cost for Phase I, as proposed by EEC is \$268,000. Task 1 of Phase 1 proposed cost is \$118,000, and Task 2 cost is expected to be \$120,000–150,000, the actual amount of Task 2 dependent on the results of Task 1.

The District proposes to award Phase I of the FOG control study to EEC on a sole source basis because EEC is knowledgeable in both the pretreatment and source control programs, is well-acquainted with the District's needs and requirements, and is experienced in conducting the required scientific evaluations and policy development. Furthermore, the consultant is knowledgeable about the issue and formulated the approach proposed to provide a cohesive and comprehensive countywide solution to FOG control. Retaining EEC's services also addresses the resource and schedule constraints and would use already developed expertise and information. Because of work already started, EEC is willing to begin work FY to meet schedule, and receive payment from the FY 02/03 budget.

## **Budget and Funding**

The District considered a number of options to achieve the most effective and practical mechanism to meet the Order requirements and address schedule and resource. Based on these considerations, the District determined that the interests of the county and resources would be used at their most effective if (1) the District budgets \$150,000

for FY02/03, which is the cost to the District as a co-permittee; (2) obtains the services of EEC on a sole source basis to perform the Phase I study with an immediate start date, and (3) develops fund sharing memorandum of understandings with co-permittees to jointly cover at a minimum the portion of the budget that is above District's cost as a co-permittee (estimated at \$150,000). Co-funding will be based on an equitable formula, accounting for area and population, to be developed by the County of Orange. This funding approach would mean that the final cost to the District for Phase I of the study would be no higher than \$150,000 and as low as \$50,000 for FY02/03. The County of Orange has to date pledged \$50,000 towards funding the study, and the Costa Mesa Sanitation District has budgeted \$17,000 to be paid to the District upon invoicing.

### **ALTERNATIVES**

1. Staff has evaluated, as an alternate to conducting a countywide study, developing a grease control plan for the areas of its jurisdiction alone (Tustin, Irvine business center and unincorporated areas), and not take the lead of the regional study. Under this alternate, the District would develop and conduct a modified FOG Control Program and study that would consist of a modified Phase I of the study. It is estimated that the cost to the District for FY02/03 would be \$150,000. For this alternate, the District proposes to contract the services of EEC on a sole source basis. This alternate approach however, would not meet the Order's requirement of a lead facilitating regional compliance with the Order. The cost to the region under this alternate would be \$3–5 million.
2. The District estimates that, if it did not use the services of a consultant to conduct the countywide study, it would require the equivalent of three FTEs to perform the study on a timely schedule and meet the deadlines. The cost to the District including the three FTEs is estimated at about \$368,000. In addition, these resources do not exist at the present time. Obtaining these resources would require at a minimum three months and several months of training following hire. Therefore, schedule could not be met.

### **CEQA FINDINGS**

N/A

### **ATTACHMENTS**

Summary Staff Report



## **OMTS COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/03/02	To Bd. of Dir. 04/24/02
Item Number OMTS02-28	Item Number 12(h)

Orange County Sanitation District

**FROM:** Robert J. Ooten, Director of Operations and Maintenance  
Originator: Mark Esquer, Division 820 Manager

**SUBJECT:** PURCHASE EQUIPMENT AND MATERIALS FOR OCEAN OUTFALL BACTERIA REDUCTION, TESTING, FEASIBILITY STUDIES AND PLANNING, JOB NO. J-87

#### **GENERAL MANAGER'S RECOMMENDATION**

(1) Authorize the General Manager to exercise informal bidding procedures and sole-source procedures, as applicable, for the award of contracts for the Ocean Outfall Bacteria Reduction Program, Job No. J-87; (2) Authorize the General Manager to purchase and award sole-source contracts, as applicable, for materials and equipment, and/or services, including tanks, pumps, flow meters, and certain electrical and instrumentation devices for testing, feasibility and planning study purposes, as identified by the District's consultants, for use in the Ocean Outfall Bacteria Reduction Program, Job No. J-87, in an amount not to exceed \$600,000; and (3) Increase the sole-source authorization limits for the General Manager to \$200,000 for said purchases.

#### **SUMMARY**

- Staff is requesting authorization to procure the equipment and materials as recommended by the District's consultant for the purposes of testing and advanced planning.
- The proposed short-term ocean outfall bacteria reduction work comprises peracetic acid or chemical bleach (a chlorine-type solution) and sodium bisulfite (de-chlorination) chemical addition facilities. The new facilities would be used for a 3 to 5-year period or until a long-term alternative is implemented.
- Staff is proposing to informally bid or sole-source said purchases in order to meet the tight deadlines.

#### **PROJECT/CONTRACT COST SUMMARY**

The short-term ocean outfall bacteria reduction concept was not budgeted. A proposed budget is being developed as part of the upcoming fiscal year budget. Due to delays in some capital improvement projects and the associated capital outlay, there is sufficient funding to cover the cost of the services, materials, and goods during the current year.

Therefore, a capital budget amendment would not be required to complete this work or cover costs this fiscal year.

A detailed breakdown of the budget estimate for the bleach with de-chlorination alternative is as follows:

Phase Description	Amount (\$)
1. Development	15,000
2. Studies	80,000
3. Detailed Concepts and Drawings	450,000
4. Construction Contract	2,400,000
5. Construction Admin.	75,000
6. Construction Inspection	25,000
7. Ocean Monitoring	500,000
8. Record Drawings	25,000
9. Contingency	430,000
Total	4,000,000

**BUDGET IMPACT**

- This item has been budgeted. (Line item:            )
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

**ADDITIONAL INFORMATION**

None

**ALTERNATIVES**

Do not pre-purchase equipment and materials.

**CEQA FINDINGS**

Recommended action consists of testing studies and planning efforts, which are exempt from CEQA.

**ATTACHMENTS**

None

## **PDC COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/04/02	To Bd. of Dir. 04/24/02
Item Number PDC02-22	Item Number 13(c)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Sid Kirk, Project Specialist

**SUBJECT:** DISTRIBUTION AND JUNCTION BOX ODOR CONTROL  
MODIFICATIONS, JOB NO. J-71-1 and J-71-2

### **GENERAL MANAGER'S RECOMMENDATION**

(1) Approve a budget amendment of \$200,605 for Distribution and Junction Box Odor Control Modifications, Job No. J-71-1 and J-71-2, for a total budget of \$1,290,605; (2) Ratify Change Order No. 2 to Distribution and Junction Box Odor Control Modifications, Job No. J-71-1 and J-71-2, with Margate Construction, Inc. authorizing an addition of \$150,582, and a time extension of 168 calendar days, increasing the total contract amount to \$883,249; and (3) Accept Distribution and Junction Box Odor Control Modifications, Job No. J-71-1 and J-71-2, as complete, authorizing execution of the Notice of Completion and approving the Final Closeout Agreement.

### **SUMMARY**

#### ***Background***

- Job No. J-71-1, Distribution and Junction Box Odor Control Modifications, includes additions to the foul air (FA) ducts at the Metering and Diversion Structure at the Headworks and the Eastside Primary Basin and new fiberglass reinforced plastic ( FRP) gratings to replace the old gratings at the Eastside Primary Basin at Plant No. 1.
- Job No. J-71-2, Distribution and Junction Box Odor Control Modifications, includes installation of new fiberglass reinforced plastic (FRP) gratings and new foul air duct systems at Distribution Boxes B and C, Junction Structure 1, Junction Structure 2, (east and west) and Junction Structure 3, at Plant No. 2.
- The new FRP gratings were needed to contain gasses and odors that previously vented into the atmosphere through inefficient wooden covers. These gasses and odors are being drawn off through the new foul air duct systems and into the scrubbers for cleansing.
- CGvL Engineers prepared the plans and specifications and the contract was awarded to Margate Construction, Inc. on December 20, 2000.

- Change Order No. 2 includes three items of added work to the contract. Items 1 and 2 are changed conditions due to undisclosed utilities and Item 3 is due to deterioration of the concrete surfaces exposed to gas in the interior of Distribution Box B that was more extensive than originally observed. There is a 168 calendar day time extension associated with this change order.

**Contract Schedule**

Contract Start Date	February 12, 2001
Original Contract Completion Date	August 15, 2001
Total Number of Change Orders to Date	2
Current Contract Completion Date	February 21, 2002
Actual Completion Date	February 21, 2002
Days Subject to Liquidated Damages	0

Change Order No. 2 Content

Item No.	Description	Amount	Days	Type
1	Relocate and/or move undisclosed utilities	\$ 8,346	12	Changed Conditions
2	Perform detailed attachment to existing 54-inch concrete encasement	3,291	6	Changed Conditions
3	Repair deteriorated concrete surfaces to the interior of Distribution Box B	138,945	150	Changed Conditions
<b>Total Change Order No. 2</b>		<b>\$ 150,582</b>	<b>168</b>	

Job Completion

This project is complete and ready for closeout.

**PROJECT/CONTRACT COST SUMMARY**

Original Contract Price	\$ 693,000.00
Previously Authorized Changes	\$ 39,667.00
This Change Order (CO No. 2, Add)	\$ 150,582.00
Change Orders to Date	\$ 190,249.00
Percent Increase to Date	27.45%
Final Contract Price	\$ 883,249.00

**BUDGET IMPACT**

- This item has been budgeted.
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

Additional budget is required to provide funds for this construction contract change order and additional staff costs. Item 3 required significant additional Engineering staff costs to implement the change and Operations staff cost was required to divert and bypass flows during the work at Plant No. 2. Additional Engineering costs were also incurred at Plant No. 1.

**ADDITIONAL INFORMATION**

None

**ALTERNATIVES**

None

**CEQA FINDINGS**

None

**ATTACHMENTS**

1. Budget Information Table
2. Change Order Status Report
3. Change Order No. 2

## **PDC COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/04/02	To Bd. of Dir. 04/24/02
Item Number PDC02-23	Item Number 13(d)

Orange County Sanitation District

**FROM:** David A. Ludwin, Director of Engineering  
Originator: Jim Harris, Principal Engineering Associate

**SUBJECT:** NATURAL GAS LINE REPLACEMENT AT PLANT NO. 1,  
JOB NO. SP2000-22 (REBID)

### **GENERAL MANAGER'S RECOMMENDATION**

(1) Reject bid received March 27, 2001 from Margate Construction, Inc. for Natural Gas Line Replacement at Plant No. 1, Job No. SP2000-22, due to the single bid exceeding the Engineer's Estimate; and (2) Award a construction contract to Atlas-Allied, Inc. for Natural Gas Line Replacement at Plant No. 1, Job No. SP2000-22 (REBID), in an amount not to exceed \$184, 887.

### **SUMMARY**

- The original Engineering Estimate for the project was \$111,000. Margate Construction, Inc. submitted the only bid on March 27, 2001 for an amount of \$239,000. Proposed cost of construction was considerably over the estimate.
- The Design Engineer, RW Beck, was asked to review their Engineer's Estimate considering the bids received. RW Beck re-affirmed their Engineer's Estimate of \$111,000.
- Staff proceeded with re-bidding the project due to the single bid received, which exceeded the Engineer's Estimate.
- Staff again bid the project on June 26, 2001 and received only one bid from Atlas-Allied, Inc. for an amount of \$184,887, again over the estimate.
- Staff questioned and reviewed the Engineer's Estimate. Based upon estimated quantities, Staff determined the cost to construct should be increased to \$200,000. The original Engineer's Estimate did not include all quantities of valves and valve vaults, and under-estimated the cost per linear foot of pipe installed.
- Considerable delay occurred in resolving this project due to possible new construction occurring in the same areas that the proposed gas line is routed. Staff delayed finishing this work until more definitive information was developed on the conflicting projects. The conflicts are now resolved and this work can now continue.

- In discussions with Atlas-Allied, Inc., the company agrees to honor their original bid, even though they are not obligated to do so since more than 90 days has passed since their bid date.

### **PROJECT/CONTRACT COST SUMMARY**

The Budget shall be modified to include the new estimate to construct of \$200,000.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item: Facilities Engineering, Plant 1)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

No authorization of funds is being requested at this time.

### **ADDITIONAL INFORMATION**

The Natural Gas Line Replacement at Plant No. 1, Job No. SP2000-22, will replace the gas piping currently installed serving both personnel and process uses. The natural gas is used for water heating, air conditioning, and as pilot gas for the digester gas flares. Existing piping is located both underground and in tunnels. Piping located underground was installed in the 1960s. The piping in tunnels was installed in the early 1990s. Recently, underground piping failures required the replacement of sections around the Administration Building and outside the Laboratory. It is reasonable to expect additional failures will be found in the very near future. The piping located in tunnels does not comply with current National Fire Protection Association (NFPA) 820 standards due to the use of screwed fittings. The NFPA standards require welded fittings only. The Orange County Sanitation District adopted NFPA 820 as a standard subsequent to the installation of the gas lines in the tunnels.

RW Beck designed the project. The work replaces the underground piping with polyethylene pipe, adds additional isolation valves, and automatic earthquake shut-off devices at each building. The piping located in tunnels will be replaced with welded black steel pipe. Both meet NFPA guidelines and building codes.

The Delegation of Authority assigns the approval of an original construction contract agreement, not exceeding \$200,000 to the Planning, Design, and Construction Committee. Staff recommends the award of a construction contract to Atlas-Allied, Inc. for an amount not to exceed \$184,887.

### **ALTERNATIVES**

Reject all bids and re-advertise the project. This rebid would be the third time.

## **CEQA FINDINGS**

The project is a direct replacement, and is therefore categorically exempt from CEQA. A Notice of Exemption for the Facilities Engineering Projects was filed on November 20, 2000.

## **ATTACHMENTS**

1. Budget Information Table
2. Bid Summary
3. Bid Tabulation



## **PDC COMMITTEE**

### **AGENDA REPORT**

Meeting Date 4/4/02	To Bd. of Dir. 4/24/02
Item Number PDC02-24	Item Number 13(e)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Jim Herberg, Engineering Manager

**SUBJECT:** LONG TERM FLOW MONITORING PROGRAM, JOB NO. J-73-2

#### **GENERAL MANAGER'S RECOMMENDATION**

Approve a Sole Source Purchase Order to AT&T Wireless for phone service related to Long Term Flow Monitoring Program, Job No. J-73-2, in an amount not to exceed \$165,000.

#### **SUMMARY**

- The Orange County Sanitation District (District) is beginning a comprehensive program to reduce wet weather flows caused by rain dependent infiltration and inflow (I/I) as part of the implementation of District's Strategic Plan. One of the key elements of this effort is a Long Term Flow Monitoring Program, Job No. J-73-2.
- The Long Term Flow Monitoring Program consists of locating flow meters throughout the District to monitor flows on a continuous basis for a period of five years. A total of 150 locations will be monitored during the first two years and 75 locations during years three through five.
- A Professional Services Agreement (PSA) was awarded to ADS Environmental Services by the Board on October 10, 2000, to perform the flow monitoring activities.
- Wastewater flow data will be transmitted from the flow meters to an ADS Environmental Services central computer system at a remote location via wireless telecommunications. This is less expensive than traditional phone service and will be less disruptive to the community during installation.
- At this time, AT&T Wireless is the only telecommunications company that can provide the required service at all of the meter locations within Orange County.

#### **PROJECT/CONTRACT COST SUMMARY**

See the attached Budget Information Table. Approval is being requested for a Sole Source Purchase Order in an amount not to exceed \$165,000.

## **BUDGET IMPACT**

- This item has been budgeted. (Line item: Section 8 – Page 155)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

A transfer of \$165,000 from the Contingency line to the Construction Contract line is being requested. The overall budget total remains unchanged.

## **ADDITIONAL INFORMATION**

There are four major elements of the Orange County Sanitation District's (District) campaign to reduce rainfall dependent infiltration and inflow (I/I): Cooperative Projects Program; Long Term Flow Monitoring Program; District's on-going sewer and pump station flow monitoring program; and the District's collection system CIP. These programs benefit each other in terms of shared data and are, therefore, integrally linked to meet the District's needs.

The purpose of the Long Term Flow Monitoring Program is to address rain dependent I/I from a District-wide perspective over a five year period. The proposed program is designed to identify major sources of I/I in the District's trunk sewer and the local agencies tributary sewers. The data collected from this program will be compared with more detailed local agency flow monitoring data that is collected as part of their Master Plans. These Master Plans are funded through the Cooperative Projects Program. Based on this information, the District, in conjunction with local agencies, will develop and implement a strategy for reducing I/I.

Since the inception of the Long Term Flow Monitoring Program, ADS Environmental Services has developed a wireless telecommunications system for use with their flow monitoring equipment. This new system will allow them to transmit flow monitoring data via the Internet to both the District and local agencies on a nearly real-time basis. This technology has an added benefit of minimizing community disruptions during installation of the flow monitoring equipment.

At this time, AT&T Wireless is the only telecommunications company that provides the required wireless service in Orange County. The District will be able to set up an arrangement with AT&T Wireless to obtain government rates and volume discounts for use of their service. In addition, AT&T Wireless will waive the activation fees for service at each location.

## **ALTERNATIVES**

Do not approve this Purchase Order. Not approving the Purchase Order will mean that the District will have to make arrangements with a local phone company to provide traditional phone service to the flow meters. This will delay the project for several

months and will be more costly in the long run in terms of capital cost (i.e., installation of conduit in streets) and monthly fees. In addition, the disruption to the local agencies will be significant.

### **CEQA FINDINGS**

This project is categorically exempt.

### **ATTACHMENTS**

Budget Information Table

## **PDC COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/04/02	To Bd. of Dir. 04/24/02
Item Number PDC02-25	Item Number 13(f)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Dennis May, Project Manager

**SUBJECT:** FACILITIES MODIFICATIONS FOR ODOR CONTROL,  
JOB NO. J-71-3

### **GENERAL MANAGER'S RECOMMENDATION**

Approve a budget amendment of \$168,000 for Facilities Modifications for Odor Control, Job No. J-71-3, for a total project budget of \$2,900,000.

### **SUMMARY**

- In July 2000, the Orange County Sanitation District (District) issued a Professional Services Agreement (PSA) to Black & Veatch Corporation to provide engineering services for Facilities Modifications for Odor Control, Job No. J-71-3.
- This project makes improvements to eliminate odor sources at both plants to minimize odor complaints from our neighbors. These improvements include better foul air treatment for the Waste Hauler Dump Station, solids dewatering buildings at Plant No. 1, and junction structures at Plant No. 2.
- In June 2001, the Board approved Addendum No. 2, which added instrument and control elements such as: process and instrumentation diagrams, control logic diagrams, development of an equipment instrument database, and conduit and cable schedules to meet the current design standards. This additional work was required to support the automation of the treatment plants for unattended operation and to support ongoing preventative maintenance.
- This project design is complete and is scheduled for public bidding in May 2002. A budget amendment is being requested at this time because the latest Engineer's Estimate is greater than the previous construction budget, requiring Board approval prior to advertising for public bids.
- This budget amendment of \$168,000 is needed to cover additional construction costs for landscaping, electrical and control system upgrades, and structural coatings. These items are discussed in detail in the Additional Information section of this report.

## **PROJECT/CONTRACT COST SUMMARY**

Refer to the attached Budget Information Table. Authorization of \$94,000 of Contingency budget is being requested.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item: section 8 page 8)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

The Construction Contract budget is being increased by \$262,000. Authorization of \$94,000 of Contingency budget is being requested, for an overall budget increase of \$168,000.

### **ADDITIONAL INFORMATION**

The additional construction improvements are broken down as follows:

#### ***Wastehauler Station***

During design of the Waste Hauler Dump Station biofilter, it was determined that landscaping would be required to hide it from view from the Plant No. 1 main entrance. Additional instrumentation was added to monitor flushing of the Waste Hauler Station at the Guard Shack at Plant No. 1.

#### **Plant No. 1 Dewatering**

The order control improvements at Plant No. 1 dewatering will require additional airflow control dampeners, supports, and control system improvements to allow the foul air collection system to function properly.

#### ***Primary Distribution Structure "A"***

This structure is over 40 years old and is used to direct wastewater flows to primary treatment at Plant No. 1. During the design, the structure was inspected to determine the extent of repairs needed to the structure prior to fitting it with foul air capture equipment. Upon inspection, it was found that a structural coating system would need to be applied and that modifications to the foul air cover and ductwork would also be needed.

### **ALTERNATIVES**

Reduce the scope of improvements. This option would make the new biofilter at the Waste Hauler Dump Station clearly visible from the Plant No. 1 main entrance, resulting in instrumentation and control system integration problems, and would not provide an adequate structural repair at Primary Distribution.

**CEQA FINDINGS**

This Project is included in the District's 1999 Strategic Plan EIR certified by the Board of Directors on October 27, 1999. A Notice of Determination was filed on October 29, 1999.

**ATTACHMENTS**

Budget Information Table

## **PDC COMMITTEE**

### **AGENDA REPORT**

Meeting Date 4/4/02	To Bd. of Dir. 4/24/02
Item Number PDC02-26	Item Number 13(g)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Jim Harris, Project Manager

**SUBJECT:** CENTRAL GENERATION AUTOMATION, JOB NO. J-79

#### **GENERAL MANAGER'S RECOMMENDATION**

Authorize the General Manager to negotiate a purchase order for procurement of services with Power & Compression Systems for Central Generation Automation, Job No. J-79, for an amount not to exceed \$1,500,000.

#### **SUMMARY**

- The Central Generation Automation, Job No. J-79, replaces the original engine/generator and auxiliary systems computer monitoring and control systems originally installed in 1990, under the Central Generation Facilities at Plant Nos. 1 and 2, Job Nos. J-19-1 and J-19-2.
- The monitoring systems control engine operating parameters; monitor engine functions; control auxiliary systems; and reports to the plant wide monitoring computer system.
- The systems that were originally installed do not meet the Orange County Sanitation District (District) minimum requirements for computer hardware and software developed subsequent to the original installation. The original supplier no longer supports the equipment. District staff cannot obtain spare parts or programming assistance, causing decreased reliability and availability of this critical equipment.
- The proposal work is a direct upgrade of existing equipment. A conventional engineering design consultant is not needed. Typically, an engineering consultant will document the facility instrumentation systems and specify a number of systems that could be put into place. This historical process can be modified due to the District having in place:
  1. As-Built Documentation: Staff intends to use the as-built documentation provided by the Reinvention Project, Job No. J-42. The documentation includes Process Instrumentation and Diagrams, Loop Diagrams, and other related information required for upgrading the systems.

2. Standardization of Computer Hardware & Software: The District Process Integration and Controls Staff developed standards for the type of hardware required, software types, and programming templates. Using these standards eliminates the needs for “Classical Detailed Design” by a consultant.
  3. Cost Savings: Staff estimates a total project cost savings of approximately \$200,000 and a reduced project schedule by one year.
- The proposed contractor has successfully completed similar upgrades to engine generator systems by the same supplier. The project manager for Power & Compression Systems has over 30 years experience, and worked on the Central Generation Engine-Generators for Cooper-Bessemer Industries, the original equipment supplier.

### **PROJECT/CONTRACT COST SUMMARY**

At this time, authorization to negotiate a contractor cost is being requested. No authorization to spend funds is requested at this time. If an acceptable scope, budget, and schedule is negotiated, the request for awarding a construction contract shall be brought back to the Planning, Design, and Construction Committee.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item: Section 8, Page 95)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ADDITIONAL INFORMATION**

The Strategic Plan and operations requirements recommend replacing the Central Generation Facilities Engine Generators and auxiliary systems computer monitoring and control systems. This 12-year-old technology can no longer be supported and has reached the end of its useful mechanical life. The computer monitoring systems are expensive to keep on line and require extensive servicing by both software and hardware technicians. Staff has integrated five separate and distinct systems using “black boxes” and special programming to allow remote monitoring of system performance. “Black boxes” translate one programming language into another. This project eliminates the use of specialized computer systems and integrates the facilities using existing Orange County Sanitation District standards for hardware, software, and installation methods.

This project is providing an opportunity to more effectively operate and maintain the facilities by redirecting Staff to perform more maintenance related tasks and relieves them from continuously monitoring the facilities operation. The recommended



improvements upgrade the computer hardware and software to District standards, and eliminates specialized equipment and programming supplied with the original facilities installation.

The Central Generation (CenGen) Facilities provides electrical power, hot water, and chilled water for Orange County Sanitation District (District) use. The engine/generators utilize the biogas produced in the wastewater process as the primary fuel source. Natural gas is used as a supplemental fuel source. The maximum permitted power output for the two plants are 17.5 megawatts. Hot water is reclaimed from the engine cooling water systems and from the engine exhaust. Chilled water is produced from the recovered heat through adsorption chillers. Adsorption chillers take the heat from the engine exhaust, and through chemical reaction produces chilled water. Nearly 100 % of the waste heat produced by the engines is recovered for process heating and cooling.

The CenGen Facilities construction occurred from 1989 through 1991. The engine/generators were purchased from Cooper-Bessemer Industries (Cooper) under Contract No. J-19A. The associated scope of supply included the engines, generators, heat recovery equipment, and auxiliary equipment including a propriety computer monitoring system. The specialty computer monitoring system utilizes a unique and one of a kind programming language developed by Cooper.

Rolls Royce recently bought the Cooper division that supplied the original engine-generator and controls. District staff received notice that the equipment would no longer be serviced or have spare parts available due to the company acquisition.

This project eliminates several "islands of automation" that cannot be supported or is expensive to operate and maintain. The general work for the Central Generation Automation, Job No. J-79 includes:

- Replaces the on engine computer monitoring and control system and panels (9 total)
- Replaces the supervisory monitoring computer (2 total).
- Replaces the auxiliary equipment monitoring and control computer (4 total).

Specific requirements include:

- Meet with District staff and review or develop new engine, steam and auxiliary control philosophies.
- Construction and installation of all new equipment to District standards.
- Integrate the existing engine and auxiliary instrumentation into the new computers.
- Develop engine and auxiliary software programming and visual graphics to district standards
- Provide all necessary engineering drawings and testing.
- Provide all miscellaneous equipment and installation materials (excluding owner supplied programmable logic controllers and related Modicon

equipment)

Staff recommends not using the traditional method of selecting a design consultant to prepare plans and specifications for this particular project. There is not any civil or mechanical work associated with this project. The work upgrades the existing computer monitoring systems, without adding any additional facilities. Staff proposes using the information already developed by the J-42 Reinvention Project as the basis of design. The as-built information reliably detailed the existing installation wiring, instrumentation, and processes. Also, standards for computer equipment and construction requirements shall be used and enforced during the life of the project.

The proposed contractor, Power & Compression Systems (P&CS) is actually a partnership between three specialty companies. P&CS provide the professional engineering and construction management services. The second company is PC-IC that is providing the computer programming and graphics services, and Cavagnaro's Electric, provide the electrical contractor or installation services. These groups of companies provide unique and specialized services in that the replacement of engine control systems is complex and can directly effect engine performance, emissions, and reliability.

A brief resume of each firm includes:

Power & Compression Systems is owned by Mr. Tony Giampaolo. He has over 30 years experience in the selection, installation, commissioning, operation, and maintenance of engines and control systems. Earlier, Mr. Giampaolo worked for Cooper-Bessemer Industries as an engineer, and worked on the district's engines at the factory. Today, he specializes in custom control designs for unique applications such as cogeneration and combined cycle plants, parallel operation of reciprocating engines. He has numerous articles published for Oil and Gas Journal, Diesel & Gas Turbine Worldwide, and Western Energy Magazines. He has written the engineering textbook "The Gas Turbine Handbook: Principles and Practices". He is also a part-time instructor for the California State University system.

PC-IC is owned by Mr. Paul Crossman. He has over 20 years experience with process control, automation, and telemetry. He has managed SCADA systems, including supervisor of maintenance database, repair, replacement, and upgrade. His company has provided the design and programming for Co-Generation Facilities, bulk truck loading systems, and various other complex computer programming and control systems. He provides technical training classes and automation computer programming.

Cavagnaro's Electric is owned by Mr. David Cavagnaro. He has 20 years experience as an electric contractor providing extensive installations for Pismo Beach Water Systems, and various energy related companies in the Central Valley of California. This firm is one of the few Underwriters Laboratory (UL) certified control panel builders in California.

Staff held several informal meetings with these companies which, introduced documentation related to Orange County Sanitation District (District) established standards. Discussions included District requirements concerning programming, installation, hardware, and services related with this work. Staff confirmed that the work provided by these companies at other installations met the needs of the owner, and upgrades were completed on time and within budget. No other company known to Staff has this level of experience and proven track record.

There are several points in the planned project development that requires Board approval. These future agenda requests include:

- Board approval of a contract with CG&S.
- Board approval for the purchase of district supplied Modicon equipment with an estimated value of \$300,000.
- Any changes to the project in the form of Change Order requests similar to any construction project.

Staff recommends pursuing an agreement with Power & Compression Systems, to negotiate the contract for installation and programming associated with the Central Generation Automation, Job No. J-79. If an agreement can be reached, the proposed contract award shall be brought to the Planning, Design, and Construction Committee for award.

### **ALTERNATIVES**

The alternative will be to develop the project following the established guidelines. This option increases job cost by \$200,000 and adds an additional 12 months to the schedule.

### **CEQA FINDINGS**

The Automation of Central Generation was included in the 1999 Strategic Plan Environmental Impact Report (EIR).

### **ATTACHMENTS**

N/A

## **PDC COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/04/02	To Bd. of Dir. 04/24/02
Item Number PDC02-27	Item Number 13(h)

Orange County Sanitation District

**FROM:** David A. Ludwin, Director of Engineering  
Originator: Sejal Patel, Project Manager

**SUBJECT:** ENGINEERING TRAILER COMPLEX AT PLANT NO. 1,  
JOB NO. J-90

### **GENERAL MANAGER'S RECOMMENDATION**

Establish a budget of \$1,982,000 for the Engineering Trailer Complex at Plant No. 1, Job No. J-90.

### **SUMMARY**

- The existing Plant No. 1 Construction Management Trailer Complex must be moved to make room for the construction of Job No. P1-76, Trickle Filter Rehabilitation and New Clarifiers. This trailer complex is rundown and not suitable to relocate in another area.
- Space will also be provided for the proposed program management consultants who will soon be retained as the Orange County Sanitation District's (District) Capital Improvement Program (CIP) ramps up.
- The complex will allow the co-location of engineers, project managers, construction managers, and their support staff. This will pull staff together for the proposed Engineering and Construction Division and Project Management Office. Bringing all the staff together is necessary to facilitate team building, collaboration, efficiency, communication, reporting, and supervision.
- This project provides an Engineering Trailer Complex located on the corner of Ward and Garfield, formally known as the "space leasing area".
- The complex will provide 12 doublewide modular trailers with 48 offices, 20 cubicles, two printer/Xerox rooms, three conference rooms, and a storage/filing area for 70 employees.
- The budget estimate is based on the recently received bids for the Groundwater Replenishment System trailers complex (\$730,000, for modular offices for 38 people).
- Three other trailer alternatives have been considered. All of the alternatives' locations were near the existing Administration Building. Staff's first choice would be to locate the trailer complex near the Administration Building; however, there is not enough space for the required number of trailers. In addition to not providing sufficient office space, they require the destruction of many trees, severely worsen parking problems, and create interference with traffic flow and operations of other

divisions.

- An off-site office-leasing alternative was also considered and found to be non-desirable based on the cost (higher than the recommended alternative) and concerns regarding safety, security, network capabilities, proximity, and efficiency.
- Conceptual design is underway to remodel the existing Administration Building and to add additional office space to accommodate the Information Technology Department currently located in temporary trailers and Engineering staff currently located in field trailers. Once completed, in three to four years, the Engineering staff can be relocated to the new Administration Building complex and the temporary trailers can be disposed of.

### **PROJECT/CONTRACT COST SUMMARY**

Staff is requesting that a project budget for this job totaling \$1,982,000 be established. This cost represents less than 0.2% of the current Capital Improvement Program of \$1.5 billion. The attached Budget Information Table indicates authorization of \$62,000 for staff time to complete an in-house design.

### **BUDGET IMPACT**

- This item has been budgeted.
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

This is a new project, and therefore, a budget does not currently exist. Staff is requesting a total of \$1,982,000 from the Orange County Sanitation District's (District) Capital Improvement Reserve Funds. This budget request authorizes \$62,000 for design staff time.

### **ADDITIONAL INFORMATION**

The District's Capital Improvement Program shows a substantial increase in the number of projects that the Engineering Department will deliver over the next five to ten years. To facilitate that effort, the Engineering Department has been restructured and reorganized and plans to increase its staffing levels through a Program Management Consulting (PMC) firm. The PMC will provide approximately 20 new staff, including Project Managers and Construction Inspectors, will be retained during the next twelve months. There is not enough space to accommodate these new employees within the department. This project will also pull staff together for the proposed Engineering and Construction Division and Project Management Office.

The existing Construction Management trailers must be demolished before March 2003. Construction of Job No. P1-76, Trickling Filter Rehabilitation and New Clarifiers necessitates removal of these trailers to install underground utilities. Therefore, Construction Management staff needs a new office facility.

## **ALTERNATIVES**

One alternative is not to proceed with this project. This alternative is not recommended because it will have several impacts:

- Construction Management staff will not have offices starting March 2003.
- The newly structured Engineering Divisions will remain in separate locations.

## **CEQA FINDINGS**

The CEQA requirements for this project are being determined. It is likely that a Notice of Exemption will be filed.

## **ATTACHMENTS**

Budget Information Table

## **FAHR COMMITTEE**

### **AGENDA REPORT**

Meeting Date 4/10/02	To Bd. of Dir. 4/24/02
Item Number FAHR02-29	Item Number 14(c)

Orange County Sanitation District

**FROM:** Gary Streed, Director of Finance  
Originator: Michael White, Controller

**SUBJECT:** TREASURER'S REPORT FOR THE MONTH OF MARCH 2002

#### **GENERAL MANAGER'S RECOMMENDATION**

Receive and file Treasurer's Report for the month of March 2002.

#### **SUMMARY**

Pacific Investment Management Co. (PIMCO), serves as the District's professional external money manager, and Mellon Trust serves as the District's third-party custodian bank for the investment program. Some funds are also deposited in the State of California Local Agency Investment Fund for liquidity.

The District's Investment Policy, adopted by the Board, includes reporting requirements as listed down the left most column of the attached PIMCO Monthly Report for the "Liquid Operating Monies" and for the "Long-Term Operating Monies" portfolios. The District's external money manager is operating in compliance with the requirements of the District's Investment Policy. The District's portfolio contains no reverse repurchase agreements.

As shown on page 2 of the attached PIMCO's Performance Monitoring and Reporting Report, the District is holding a United Airlines (UAL) Asset Backed Security that carried an acceptable credit rating at the time of purchase. Since that time, the rating from Moody's has fallen twice, first from A3 to BA1, and then to BA3. Also, the security rating from Standard & Poors fell once from A- to BBB. Although these ratings are less than what is required at the time of purchase, PIMCO believes, based on the financial strength of UAL and the underlying collateral of the security, that the District would suffer an unwarranted loss if this security was sold. The District's investment policy does not require any action because of "credit watch" notices or the decline in credit standing. PIMCO will continue to monitor the credit very closely.

Historical cost and current market values are shown as estimated by both PIMCO and Mellon Trust. The District's portfolios are priced to market ("mark-to-market") as of the last day of each reporting period. The slight differences in value are related to minor variations in pricing assumptions by the valuation sources at the estimate date.

**PROJECT/CONTRACT COST SUMMARY**

None.

**BUDGET IMPACT**

- This item has been budgeted. (Line item: )
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

**ADDITIONAL INFORMATION**

Schedules are attached summarizing the detail for both the short-term and long-term investment portfolios for the reporting period. In addition, a consolidated report of posted investment portfolio transactions for the month is attached. The attached yield analysis report is presented as a monitoring and reporting enhancement. In this report, yield calculations based on book values and market values are shown for individual holdings, as well as for each portfolio. Mellon Trust, the District's custodian bank, is the source for these reports. Transactions that were pending settlement at month end may not be reflected.

Also provided is a summary of investment balances and transactions within the State of California Local Agency Investment Fund for the month of March 2002.

These reports accurately reflect all District investments and are in compliance with California Government Code Section 53646 and the District's Investment Policy. Sufficient liquidity and anticipated revenues are available to meet budgeted expenditures for the next six months.

The table below details the book balances of the District's funds at month-end. A graphical representation of month-end balances is shown by the attached bar chart.

Funds/Accounts	Book Balances March 31, 2002	Estimated Yield (%)
State of Calif. LAIF	\$ 18,799,348	(1)
Union Bank Checking Account	450,689	N/A
Union Bank Overnight Repurchase Agreement	2,985,000	1.1
PIMCO – Short-term Portfolio	43,141,425	4.4
PIMCO - Long-term Portfolio	351,728,203	4.6
Debt Service Reserves w/Trustees	35,163,004	4.2
Petty Cash	5,000	N/A
TOTAL	<u>\$452,272,669</u>	

(1) Unavailable as of the date of this report.



**ATTACHMENTS**

1. Monthly Investment Reports
2. Monthly Transaction Report

## **FAHR COMMITTEE**

### **AGENDA REPORT**

Meeting Date 04/10/02	To Bd. of Dir. 04/24/02
Item Number FAHR02-33	Item Number 14(d)

Orange County Sanitation District

**FROM:** Lisa Tomko, Director of Human Resources  
Originator: Jeff Reed, Human Resources Manager

**SUBJECT:** Additions to Safety Policies as Authorized by Resolution No. OCSD 02-5

#### **GENERAL MANAGER'S RECOMMENDATION**

Approve SAFETY-POL-103, 105, 111, 112 and 403, as provided for in Resolution No. OCSD 02-5, regarding the District's Injury and Illness Prevention Program Policy.

#### **SUMMARY**

Title 8 of the California Code of Regulations, Section 3203, and California Labor Code, Section 6401.7, require employers to establish, implement and maintain an effective injury prevention program. The District's written Injury and Illness Prevention (IIP) Program was approved in February 2002. The IIP Program provides that written safety and health policies, procedures and programs will be developed and maintained to ensure compliance with applicable Federal OSHA and Cal-OSHA requirements and to carryout effective accident prevention in the workplace, thereby reducing injury incidence rates.

To ensure that the IIP Program is effectively implemented, various Safety Policies are being developed to address targeted compliance areas. The initial compliance areas identified for program development and policy implementation are indicated in the following policies:

- SAFETY-POL-103 Safety Awareness For Everyone (SAFE) Bulletins
- SAFETY-POL-105 Hazardous Energy Control
- SAFETY-POL-111 Chemical Hygiene Plan
- SAFETY-POL-112 Integrated Emergency Response Program
- SAFETY-POL-403 Employee Access to Medical Records

#### **PROJECT/CONTRACT COST SUMMARY**

Not Applicable

#### **BUDGET IMPACT**

This item has been budgeted. (Line item: )

- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ADDITIONAL INFORMATION**

Written safety compliance programs are detailed in specific Safety Policies, Procedures or Programs. The initial five policies being submitted for approval are the following:

#### **SAFETY-POL-103 Safety Awareness For Everyone (SAFE) Bulletins**

SAFE bulletins are bulletins issued on specific safety related items explaining how something should be done or how specific components of a safety program are to be implemented. SAFE Bulletins shall be considered policy for items not covered by specific policies.

#### **SAFETY-POL-105 Hazardous Energy Control**

This policy formalizes a safety program that has been in place since 1994. This program is mandated by Cal-OSHA. It includes the requirements for working on or around equipment that is energized or equipment that has the potential to contain residual energy.

#### **SAFETY-POL-111 Chemical Hygiene Plan**

This policy formalizes the Chemical Hygiene Plan used by the Environmental Sciences Laboratory since 1996. It is mandated by Cal-OSHA. This program includes the duties of the safety specialist, supervisor, and laboratory employees.

#### **SAFETY-POL-112 Integrated Emergency Response Program**

This policy formalizes the Integrated Emergency Response Program, which has been in place for the last six years. This program is mandated by Cal-OSHA, in addition to other regulatory agencies. The plan is divided into three (3) volumes. Volume I, Emergency Preparedness, contains plans for preparing for an emergency. Volume II, Emergency Procedures, contains plans and procedures to be implemented in response to an emergency. Volume III, which is under development, includes organizational recovery plans.

#### **SAFETY-POL-403 Employee Access to Medical Records**

This program is mandated by Cal-OSHA. It formalizes procedures for granting employees access to their occupational medical and exposure. This program includes procedures on how employees may request their records and what they are allowed access to. Also included are the timeframes for compliance with requests.

### **ALTERNATIVES**

Not Applicable

**CEQA FINDINGS**

Not Applicable

**ATTACHMENTS**

Attachment 1 - SAFETY-POL-103 Safety Awareness For Everyone (SAFE) Bulletins

Attachment 2 - SAFETY-POL-105 Hazardous Energy Control

Attachment 3 - SAFETY-POL-111 Chemical Hygiene Plan

Attachment 4 - SAFETY-POL-112 Integrated Emergency Response Program

Attachment 5 - SAFETY-POL-403 Employee Access to Medical Records

## **BOARD OF DIRECTORS**

### **AGENDA REPORT**

Meeting Date	To Bd. of Dir. 04/24/02
Item Number	Item Number 15(c)

Orange County Sanitation District

**FROM:** David Ludwin, Director of Engineering  
Originator: Wendy Sevenandt, Project Manager

**SUBJECT:** GROUNDWATER REPLENISHMENT SYSTEM, JOB NO. J-36,  
ULTRAVIOLET LIGHT EQUIPMENT PRE-SELECTION

### **GENERAL MANAGER'S RECOMMENDATION**

(1) Approve Trojan Technologies as the ultraviolet light (UV) equipment manufacturer for the Groundwater Replenishment System based on lowest calculated present worth life cycle cost of \$20,253,000, and a total capital cost of \$9,749,405, plus tax; (2) Approve a Pre-Selection Agreement between Orange County Water District (OCWD) and Trojan Technologies to provide engineering details for the equipment design in the total amount of \$250,000 to be equally shared between OCWD and Orange County Sanitation District; (3) Grant authority to the Board of Directors of OCWD to assign the value of the ultraviolet light equipment to the contract to install the demonstration UV system at a total cost of \$849,842, plus tax; and (4) Grant authority to the Board of Directors of OCWD to assign the value of the ultraviolet light equipment to the contract to install the permanent UV system at a total estimated capital cost of \$8,649,563, plus tax.

### **SUMMARY**

- In March 2002, the General Manager recommended the actions as written above regarding the award of ultraviolet light (UV) disinfection equipment for the GWR System.
- The Board of Directors deferred action back to staff to address a letter issued by Calgon Carbon Corporation dated March 1, 2002.
- Staff has addressed the issues in a response letter dated April 8, 2002 to Calgon Carbon Corporation.
- Staff recommends selecting Trojan Technologies as the UV equipment manufacturer for the GWR System.
- Approval is requested to award a \$250,000 contract to Trojan Technologies for engineering design documents at this time.

### **PROJECT/CONTRACT COST SUMMARY**

See the attached Budget Information Table. The value of the agreement awarded with this action is \$250,000 to be equally shared with OCWD in the amount of \$125,000.

The authorization of funds was made in October 2001 for the engineering documents only in the amount of \$125,000. There is no increase in the cost for engineering documents.

Authorization of expenditures for the equipment will be requested with the award of the construction contracts in the future. Although the proposal by Trojan Technologies was over the engineer's estimate, a budget increase is not requested at this time. Funds are existing in contingency for the increase over the engineer's estimate, but adjustments will not be requested until the construction contracts are awarded.

### **BUDGET IMPACT**

- This item has been budgeted. (Line item: 2001-02 CIP Budget Sec. 8, page 152)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

### **ADDITIONAL INFORMATION**

In October 2001, the Orange County Sanitation District (OCSD) Board of Directors authorized issuance of a Request for Proposals for the pre-selection of ultraviolet light equipment estimated at \$10,250,000, and granted authority to the Orange County Water District (OCWD) Board of Directors to award a contract for equipment design in the amount of \$250,000, also granted authority to the OCWD Board of Directors to assign the value of equipment to construction contracts for installation.

The request for proposals was sent to four firms specializing in ultraviolet (UV) disinfection equipment and two proposals were received. Proposals were received from Calgon Carbon Corporation and Trojan Technologies on February 27, 2002. Both were over the engineer's estimate of \$10,250,000 when tax is included in the total cost.

This item was brought before the OCSD Board of Directors in March because the lowest proposed cost exceeded the engineer's estimate.

Trojan Technologies proposes the lowest capital cost of \$10,439,990.61 with tax included at 7.75% and the lowest calculated present worth life cycle cost of \$20,253,000.

With this approval, a contract in the amount of \$250,000 will be awarded to Trojan Technologies for engineering design documents. The value of the UV disinfection equipment as proposed by Trojan Technologies will be assigned to the demonstration unit construction contractor and the permanent facilities construction contractor. These contracts are scheduled for bid and award in the Summer of 2002 and Spring of 2003. These installation contracts will be brought before the Joint Cooperative Committee and the OCSD and OCWD Board of Directors in accordance with the adopted procedures

that will be in effect at that time.

The Joint Cooperative Committee (JCC) approved the recommended action on March 11, 2002. Please refer to the attached March 11, 2002 JCC Agenda Item Submittal. Staff reported on the Calgon Carbon Corporation letter and response at the April 22, 2002 JCC meeting.

### **ALTERNATIVES**

Alternatives to issuing a proposal for pre-selection of the equipment included pre-purchase of the equipment or preparing final designs for all equipment options. Pre-purchase of the equipment was not selected to reduce liability to the agencies and place liability for the equipment on the Contractor. With substantial differences in each equipment design, preparing final designs for each manufacturer was determined to be cost prohibitive.

### **CEQA FINDINGS**

The OCSD and OCWD Boards of Directors certified the Environmental Impact Report for the Groundwater Replenishment System on March 24, 1999. Addendum No. 1 was approved on March 28, 2001, Addendum No. 2 was approved by OCSD on January 23, 2002, and by OCWD on January 16, 2002.

### **ATTACHMENTS**

1. Budget Information Table
2. March 11, 2002 Joint Cooperative Committee Agenda Item Submittal re: Ultraviolet Light Equipment Pre-selection.
3. Letter dated March 1, 2002 from Calgon Carbon Corporation.
4. Letter dated April 9, 2002 from OCWD to Calgon Carbon Corporation.