

OMTS COMMITTEE TOUR & MEETING

October 2, 2002

5 P.M.

Plant No. 2

- **Committee members and attending public will leave promptly at 5:00 p.m. from in front of the Operations Center at Plant No. 2.**
- **Committee members will be touring the microfiltration demonstration process.**
- **After the tour, the Committee will be served dinner (approximately 6 p.m., and the regular OMTS Committee Meeting will begin.**
- **Don't forget your walking shoes!!**
- **Driving directions:**
From the 405 Fwy., take the Brookhurst exit.
Proceed south to 22212 S. Brookhurst Street
(on left between Hamilton & Pacific Coast Highway)

AGENDA

REGULAR MEETING OF THE OPERATIONS, MAINTENANCE AND TECHNICAL SERVICES COMMITTEE

ORANGE COUNTY SANITATION DISTRICT

**Wednesday, October 2, 2002
5:00 P.M.**

OPERATIONS CENTER **PLANT NO. 2**

22212 Brookhurst Street
Huntington Beach, CA

www.ocsd.com

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 Committee 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 Committee subsequent to the posting of the agenda, or as set forth on a supplemental agenda posted in the manner as above, 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. Upon entering the District's web site, please navigate to the Board of Directors section. Estimated times listed on the agenda includes staff presentations, discussion and questions.

- (1) **ROLL CALL**
- (2) **APPOINTMENT OF CHAIR PRO TEM, IF NECESSARY**
- (3) **PUBLIC COMMENTS**

All persons wishing to address the Operations, Maintenance and Technical Services Committee 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 Committee except as authorized by Section 54954.2(b).

- (4) REPORT OF COMMITTEE CHAIR
- (5) REPORT OF GENERAL MANAGER
- (6) CONSENT CALENDAR ITEMS

Consideration of motion to approve all agenda items appearing on the Consent Calendar not specifically removed from same, as follows:

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.

- a. Approve minutes of the September 4, 2002 Operations, Maintenance and Technical Services Committee meeting.
- b. [OMTS02-59](#) Receive and file Technical Services Monthly Report, which focuses on regulatory, biosolids and performance measures for the Technical Services Department.
- c. [OMTS02-60](#) Receive and file Operations & Maintenance Monthly Report, which focuses on compliance, financial data and performance measures for Operations and Maintenance Department.
- d. [OMTS02-61](#) Receive and file Information Technology Quarterly Report, which focuses on current performance trends and key technology business applications.

END OF CONSENT CALENDAR

Consideration of items deleted from Consent Calendar, if any.

(7) ACTION ITEMS

- a. [OMTS02-62](#) Recommend to the Board of Directors to:
 - (1) Approve a budget amendment of \$285,000 for Phase II Biotrickling Filter Demonstration Project, SP-90, for a total budget of \$735,000, as an alternative treatment to control odors; and,
 - (2) Approve Amendment No. 1 to the Study Agreement with the University of California, Riverside to provide continued support for testing biotrickling filters as an air emissions control technology for an

additional amount of \$60,000, which includes a \$15,000 contingency; for a total amount not to exceed \$205,000.

(Ed Torres - 10 minutes)

(8) INFORMATIONAL ITEMS

- a. [OMTS02-63](#) Update on Southern California Coastal Water Research Project Activities

(Dr. Stephen Weisberg – 30 minutes)

- b. [OMTS02-64](#) Groundwater Replenishment System, Job No. J-36, Joint Exercise of Powers Agreement

(Jim Herberg - 10 minutes)

(9) REPORT OF DIRECTOR OF INFORMATION TECHNOLOGY

(10) REPORT OF DIRECTOR OF OPERATIONS AND MAINTENANCE

(11) REPORT OF DIRECTOR OF TECHNICAL SERVICES

(12) REPORT OF COMMUNICATIONS MANAGER

(13) OTHER BUSINESS, COMMUNICATIONS OR SUPPLEMENTAL AGENDA ITEMS, IF ANY

(14) MATTERS WHICH A DIRECTOR MAY WISH TO PLACE ON A FUTURE AGENDA FOR ACTION AND STAFF REPORT

(15) FUTURE MEETING DATES

The next Operations, Maintenance and Technical Services (OMTS) Committee Meeting is scheduled for November 6, 2002, at 5:00 p.m.

(16) CLOSED SESSION

During the course of conducting the business set forth on this agenda as a regular meeting of the Committee, the Chair may convene the Committee 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) employee actions or negotiations with employee representatives; or which are exempt from public disclosure under the California Public Records Act, may be reviewed by the Committee during a permitted closed session and are not available for public inspection. At such time as the Committee

takes final actions on any of these subjects, the minutes will reflect all required disclosures of information.

- A. Convene in closed session.
- B. Reconvene in regular session.
- C. Consideration of action, if any, on matters considered in closed session.

(17) ADJOURNMENT

Notice To Committee Members:

For any questions on the agenda or to place any items on the agenda, Committee members should contact the Committee Chair or Secretary ten days in advance of the Committee meeting.

Committee Chair:	Pat McGuigan	(714) 647-6900	
Committee Secretary:	Penny Kyle	(714) 593-7130	pkyle@ocsd.com
General Manager	Blake Anderson	(714) 593-7110	banderson@ocsd.com
Director of Technical Services	Bob Ghirelli	(714) 593-7400	rghirelli@ocsd.com
Director of Operations & Maintenance	Bob Ooten	(714) 593-7020	rooten@ocsd.com
Director of Information Technology	Patrick Miles	(714) 593-7280	pmiles@ocsd.com

OMTS COMMITTEE

AGENDA REPORT

Meeting Date 10-02-02	To Bd. of Dir.
Item Number OMTS02-59	Item Number

Orange County Sanitation District

FROM: Robert P. Ghirelli, Director of Technical Services
Originator: Rose Marsella, Secretary

SUBJECT: TECHNICAL SERVICES DEPARTMENT MONTHLY REPORT
September 2002

GENERAL MANAGER'S RECOMMENDATION

Information only.

SUMMARY

The Technical Services Department Monthly Report is intended to provide current business information as well as performance trends.

PROJECT/CONTRACT COST SUMMARY

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.
- X Not applicable (information item)

ADDITIONAL INFORMATION

- Environmental Compliance & Monitoring Charts
- Environmental Sciences Laboratory Charts
- Source Control Charts
- Ocean Discharge Permit Compliance:

For the reporting month of August 2002, the toxicity test for mysid (shrimp) exceeded the permit limit. As required by the permit, accelerated testing (one test every two weeks for the next twelve weeks) was initiated. No additional action will be required if all of the accelerated testing results are within permit limits.

ALTERNATIVES

N/A

CEQA FINDINGS

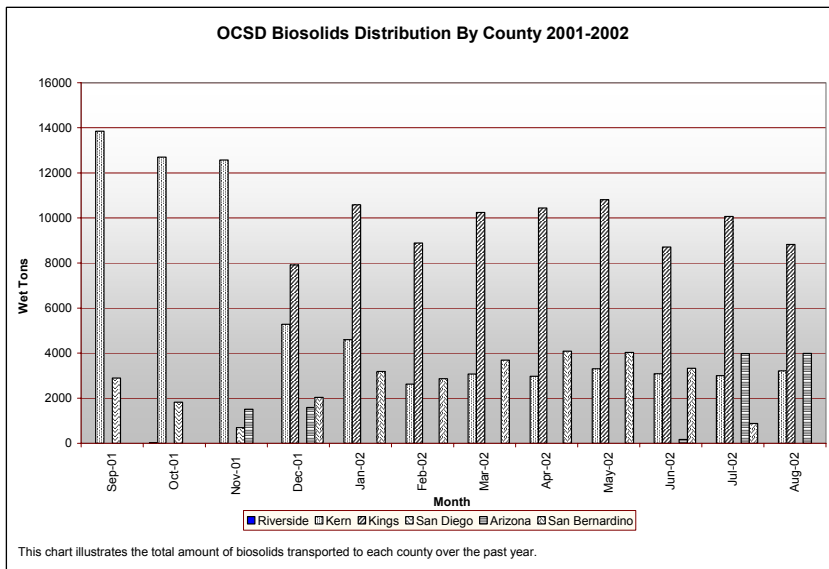
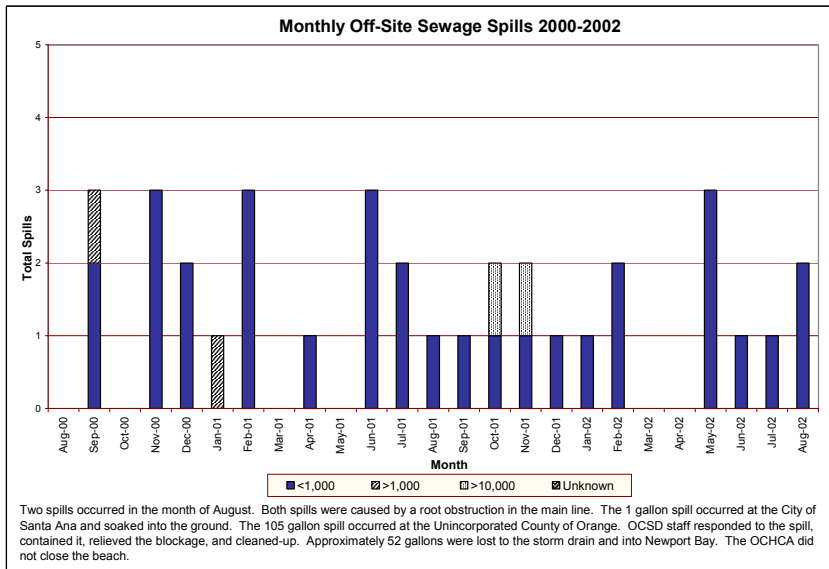
N/A

ATTACHMENTS

[Sewage Spills and Biosolids Distribution Charts](#)

[Laboratory Performance Measures](#)

[Source Control performance trends](#)

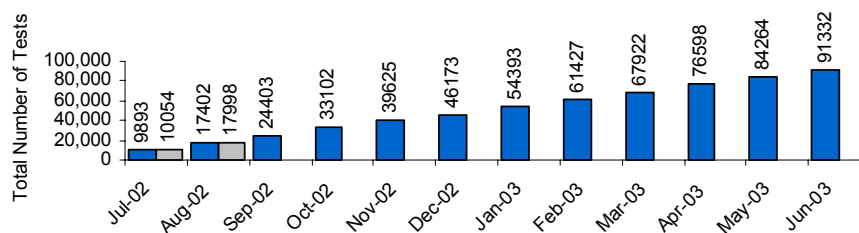


August 2002 Report Environmental Sciences Laboratory

Workload in the laboratory through August of fiscal year 2002/2003 was 17,998 tests compared to the model prediction of 17,402. This is a difference of 596 tests or 3.4%. This slight increase is due primarily acceleration of the Ocean Monitoring Program and to additional testing for the disinfection project. The predictive test model includes regularly scheduled compliance and non-compliance tests necessary to support the ocean discharge permit, the Ocean Monitoring Program, industrial Source Control permits, routine odor and air quality compliance, and operations research.

Cumulative Totals (Test / Month Projected vs. Actual)

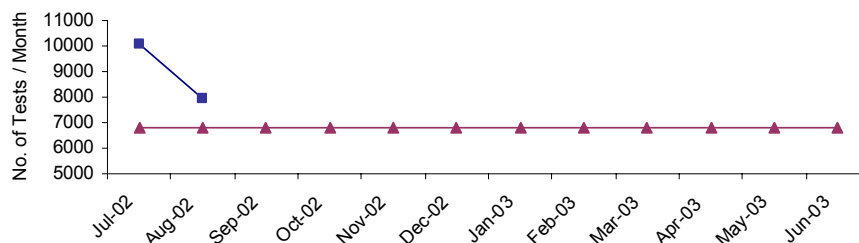
■ Projected Cumulative Total □ Actual Cumulative Total



The benchmark projection for optimal workload, measured as tests per month, is calculated by multiplying the benchmark standard, 229 tests per FTE per month, by the number of FTEs in the laboratory. This is compared to the actual workload. For August 2002, the lab performed 7,944 tests which is 16.5% greater than the standard of 6817 tests.

Test / Month (Actual vs. Benchmark Projection)

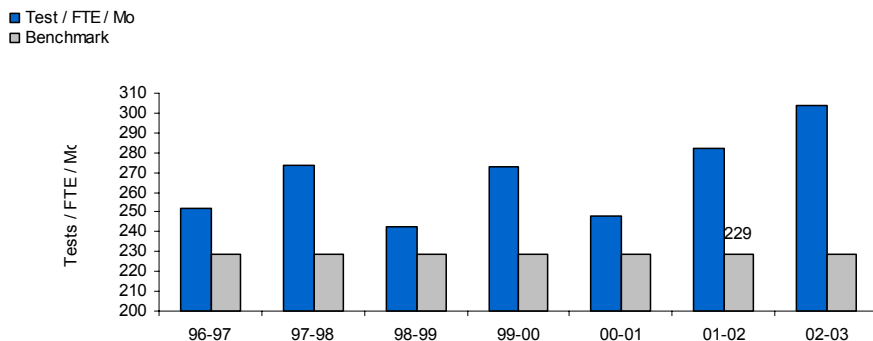
■ Actual-Whole Lab
▲ Benchmark Projection



Lab productivity as measured by tests per FTE per month is compared over the time-frame of FY 1996-97 through 2002-03. For this comparison the results of the first 2 months of 2002/03 are projected to the end of the year. When compared to the benchmark standard of 229 tests per FTE per month, productivity for the lab as a whole (304 tests per FTE per

month) year-to-date is approximately 32.8% greater than the benchmark. For the first two months of FY 2002/03, productivity for each section ranged from 132% to 269% of the benchmark productivity standard. Over the past 5 years, the lab performance has consistently been between 250 and 280 tests per FTE per month (on average 10% - 15%) greater than the benchmark standard, although for the current year the projection will be closer to 300 tests per FTE per month. The productivity increase a tribute to the dedication of the laboratory staff in supporting the chlorination/disinfection project while continuing to perform other compliance and non-compliance related tests.

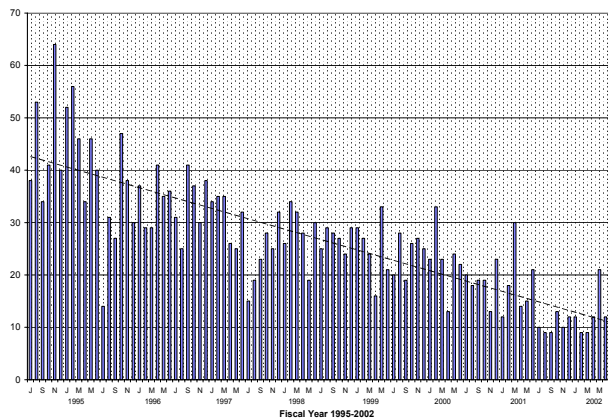
Test / FTE / Month (96-97 through 2001-02)



Industries with Discharge Violations

The total number of industries in violation of their sewer discharge limits during each month is shown. The trend analysis shows a reduction of over 70% in the actual number of industries in violation during the past seven fiscal years. This continued reduction is indicative of the staff's proactive approach in preventing discharge violations of the sewer system, and the application of waste reduction practices by the industrial users. In addition, during the past two years, the District has conducted classes to train industrial operators in better operation and maintenance of the pretreatment system at their facilities, which may have resulted in fewer discharge violations.

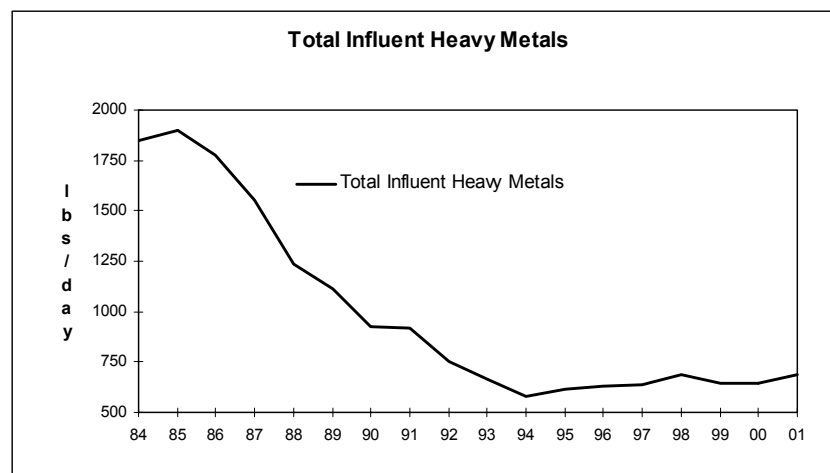
Industries With Both OCSD and Self-Monitoring Violations



Influent Metals Reduction

Since FY 1984/85, the Source Control Program has been successful in reducing the daily heavy metals entering the District's system by over 65%. The reduction in pollutants by our pretreatment program has been so effective that for the last 10 years the influent heavy metals to the District's treatment plants have met ocean discharge permit standards even without benefit of treatment.

The economy boom in 1994 resulted in more business and greater production and, as a result, there had been an increase of about 5% in metal discharges to the sewer by 1998. However, there are indications that during the past year (since July 2000) the influent heavy metals trend is increasing. This increase may be attributed to slow down in economy and cost of business, which may have resulted in cut backs in environmental expenditures. In addition, due to the reduction in the field monitoring staff and added new non-point source control program, there has been limited sewer line surveillance to investigate illegal dumping. The staff is increasing its sewer line investigation activities to ensure compliance with discharge standards and to control the levels of heavy metals in the influent.



Industrial Sampling by FTE

The total number of samples taken per FTE during each month is shown. The trend analysis shows an increase in productivity of about 30% in the number of samples collected during the past seven fiscal years. This increase is indicative of the teamwork and effort of the Source Control Division field staff. Although individual productivity remains the same, there are indications that the overall monitoring activity trend is decreasing. This reduction is due to a reduction of field staff of over 30% since 1995 (from 17.75 FTE to 12 FTE), which has caused a reduction in the monitoring activities such as non-required sampling of potential sources and wastehaulers and trunkline monitoring. Staff is monitoring these activities, and during this fiscal year (2002/03) changes in the staffing levels will occur to meet these challenges.

It should be noted that the data generated during July through October 2001 were not used for trend analysis due to job reassignment of the field staff to the Huntington

OMTS COMMITTEE

AGENDA REPORT

Meeting Date 10/02/02	To Jt. Bds.
Item Number OMTS02-60	Item Number

Orange County Sanitation District

FROM: Robert J. Ooten, Director of Operations and Maintenance
Originator: Pat Magnante, Executive Assistant

SUBJECT: OPERATIONS AND MAINTENANCE (O&M) DEPARTMENT
MONTHLY
REPORT – AUGUST 2002

GENERAL MANAGER'S RECOMMENDATION

Receive and file the Operations and Maintenance Department Monthly Report, which focuses on compliance, financial data and performance measures for the O&M department.

SUMMARY

The Operations and Maintenance Department Monthly Report contains current O&M business information, performance trends and financial information. For reference purposes, chemical contract graphs are provided at the end of this report.

Compressed Natural Gas (CNG Station)

- The current volume at the OCSD station is 88% of the volume dispensed prior to the American Taxi Bankruptcy.
- Some of the new CNG taxis that have been purchased by the three providers at the John Wayne Airport have not yet been put into service.
- Pickens/ENRG predicts that the volume will continue to increase and stabilize at higher levels than before the American Taxi bankruptcy because there will be more CNG taxis in service from the new providers than American operated in its CNG fleet. American is also operating some vehicles and is in business in this area.

Odor Control

There were three odor complaints from neighbors at Plant No. 1 and one odor complaint at Plant No. 2 during the month of August that were determined to be plant-related.

Disinfection Update

- The temporary facilities were installed and operable by August 12, 2002.
- Disinfection is providing significant bacterial reduction.
- Bacteria removal has increased from 90% to over 98% and most often over 99%.
- Compliance testing will occur during the quarterly sampling in October 2002.

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

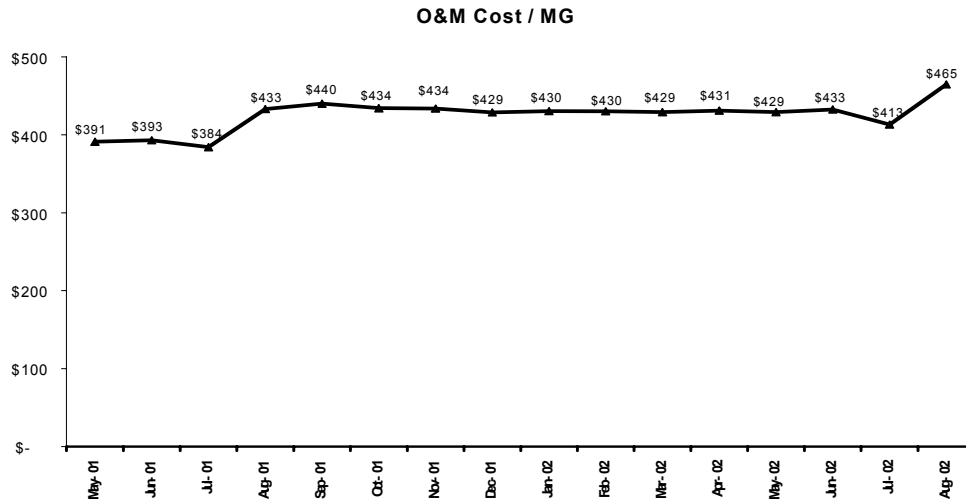
CEQA FINDINGS

N/A

ATTACHMENTS

None

FINANCIAL SUMMARY



Operations and Maintenance Joint Operating Expenses for the Month Ending August 31, 2002 by Division

Division, Number	FY 01/02 Budget Compared to FY 02/03				FY 02/03 Budget Data		
	FY01/02 Exp. 8/31/2001	FY02/03 Exp. 8/31/2002	Inc/Dec \$	Inc/Dec %	FY02/03 Budget	Expended %	Cost \$/mg
	(1)	(2)	(3)	(3)/(1)	(4)	(2)/(4)	
Administration, 810*	\$ 4,735	\$ 51,965	\$ 47,230	997.47%	\$ 430,100	12.08%	\$ 3.48
Process Support, 820	\$ 128,987	\$ 112,968	\$ (16,019)	(12.42%)	\$ 1,224,900	9.22%	\$ 7.56
Ops. Plant 1, 830	\$ 1,260,745	\$ 1,451,554	\$ 190,809	15.13%	\$ 9,688,200	14.98%	\$ 97.19
Ops. Plant 2, 840	\$ 1,748,015	\$ 2,089,451	\$ 341,436	19.53%	\$ 17,228,500	12.13%	\$ 139.90
Mechanical Maint., 850**	\$ 1,515,207	\$ 1,468,904	\$ (46,303)	(3.06%)	\$ 8,989,300	16.34%	\$ 98.35
Elec./Instr. Maint., 860	\$ 783,693	\$ 807,551	\$ 23,858	3.04%	\$ 4,814,500	16.77%	\$ 54.07
Air Quality, 880	\$ 162,597	\$ 183,203	\$ 20,606	12.67%	\$ 1,269,000	14.44%	\$ 12.27
Collections Facilities O&M, 420	\$ 21,869	\$ 177,257	\$ 155,388	710.54%	\$ 51,700	342.86%	\$ 11.87
Plant Facilities Maint., 430	\$ 789,820	\$ 594,725	\$ (195,095)	(24.70%)	\$ 4,336,400	13.71%	\$ 39.82
Total:	\$ 6,415,668	\$ 6,937,578	\$ 521,910	8.13%	\$ 48,032,600	14.44%	\$ 464.51

Notes: *Security has been moved from Division 430 to Division 810
 ** Division 850 now includes Central Generation, Division 870 in prior years.

% of Fiscal Year 01/02 has passed.	16.67%
O&M Personnel Costs as % of Total O&M Costs	52.41%
O&M Costs as % of OCSD Total Costs	73.72%

Description	FY 01/02 Budget Compared to FY 02/03				FY 02/03 Budget Data		
	FY01/02 Exp.	FY02/03 Exp.	Inc/Dec	Inc/Dec	FY02/03	Expended	Cost
	8/31/2001	8/31/2002	\$	%	Budget	%	\$/mg
	(1)	(2)	(3)	(3)/(1)	(4)	(2)/(4)	
Biosolids Removal	\$ 894,742	\$ 1,082,606	\$ 187,864	21.00%	\$ 6,222,000	17.40%	\$ 72.49
Chemicals**	\$ 894,986	\$ 1,261,611	\$ 366,625	40.96%	\$ 5,192,700	24.30%	\$ 84.47
Natural Gas	\$ 411,345	\$ 290,829	\$ (120,516)	(29.30%)	\$ 1,640,000	17.73%	\$ 19.47
Power	\$ 161,345	\$ 117,963	\$ (43,382)	(26.89%)	\$ 737,000	16.01%	\$ 7.90
Water	\$ 164,273	\$ 141,794	\$ (22,479)	(13.68%)	\$ 1,145,000	12.38%	\$ 9.49
Personnel	\$ 3,330,631	\$ 3,636,302	\$ 305,671	9.18%	\$ 23,063,000	15.77%	\$ 243.47
Other*	\$ 558,346	\$ 406,473	\$ (151,873)	(27.20%)	\$ 10,032,900	4.05%	\$ 27.22

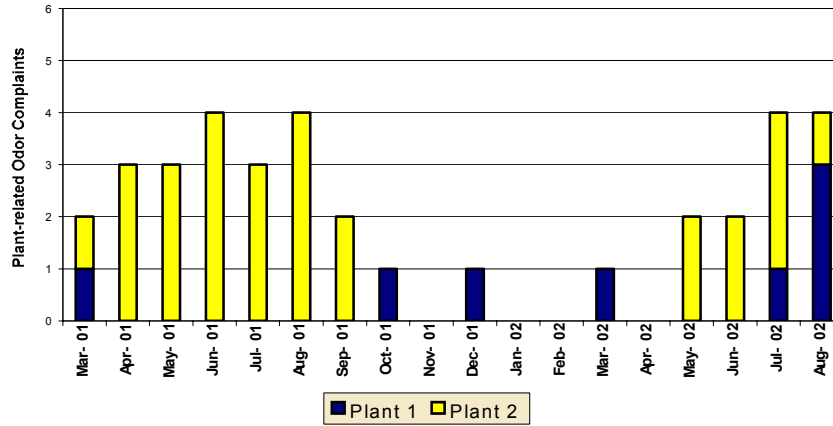
* Includes all line item budget expenses other than the six major cost centers listed above.

\$ 464.51

**The disinfection program chemical expenses are 24.3% of the total chemical expenses through 8/31/02.

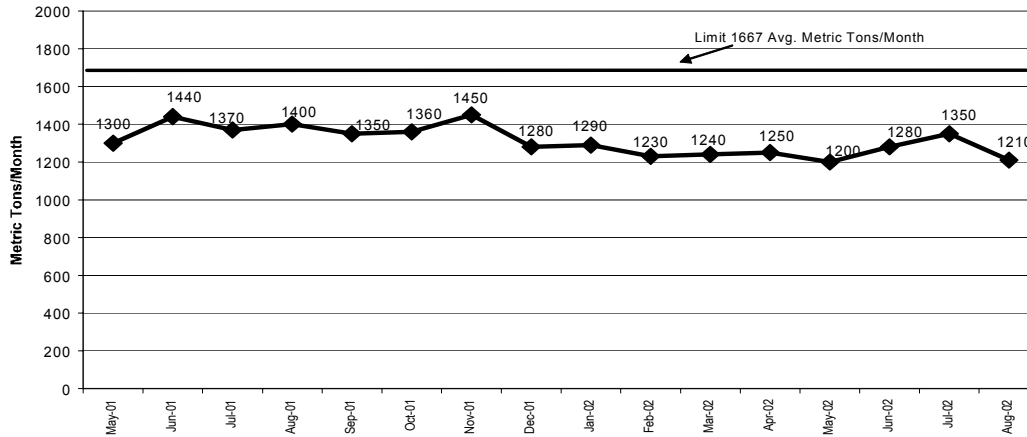
PLANT-RELATED ODOR COMPLAINTS

Odor Complaint History



FINAL EFFLUENT

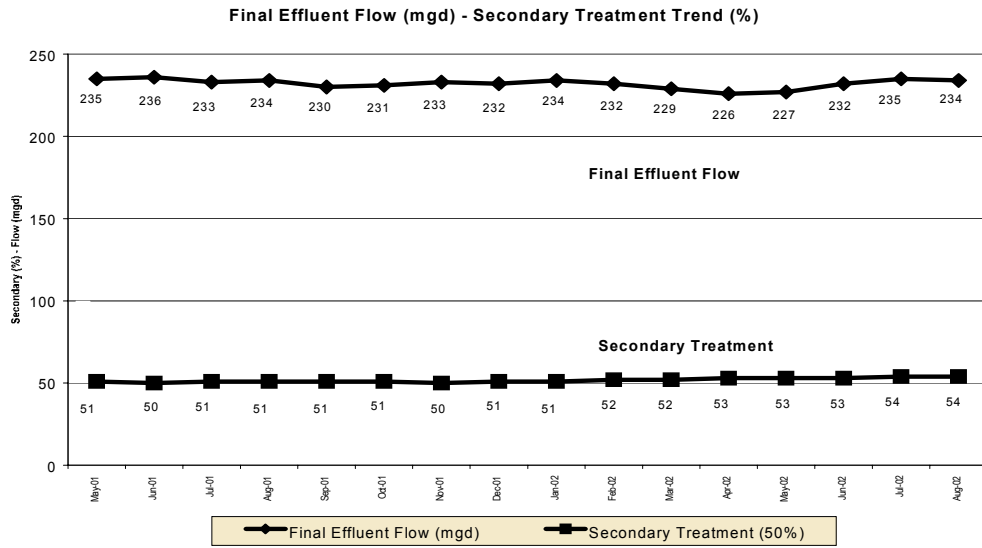
FINAL EFFLUENT SOLIDS MASS



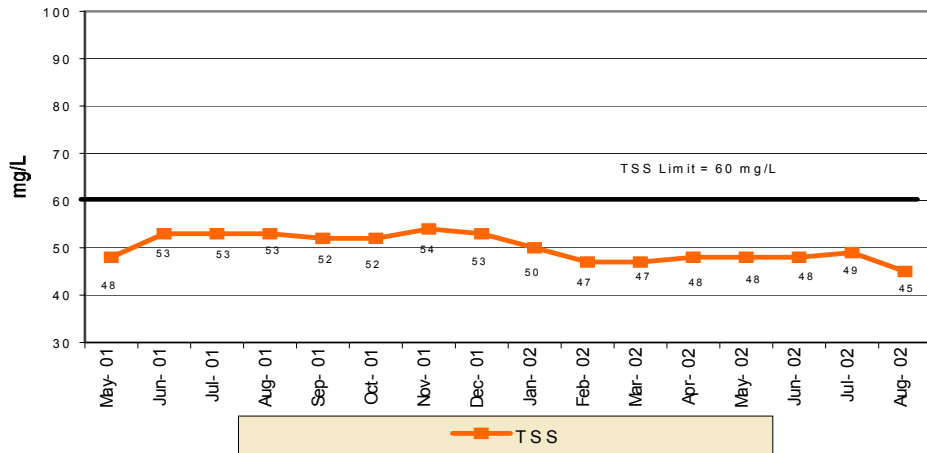
TOTAL SUSPENDED SOLIDS (TSS)

Calculation: Metric tons = $\frac{\text{Flow} \times \text{TSS} \times 8.34}{365 \text{ days}}$ rounded to three significant figures
(2204 #/MT) (12 months)

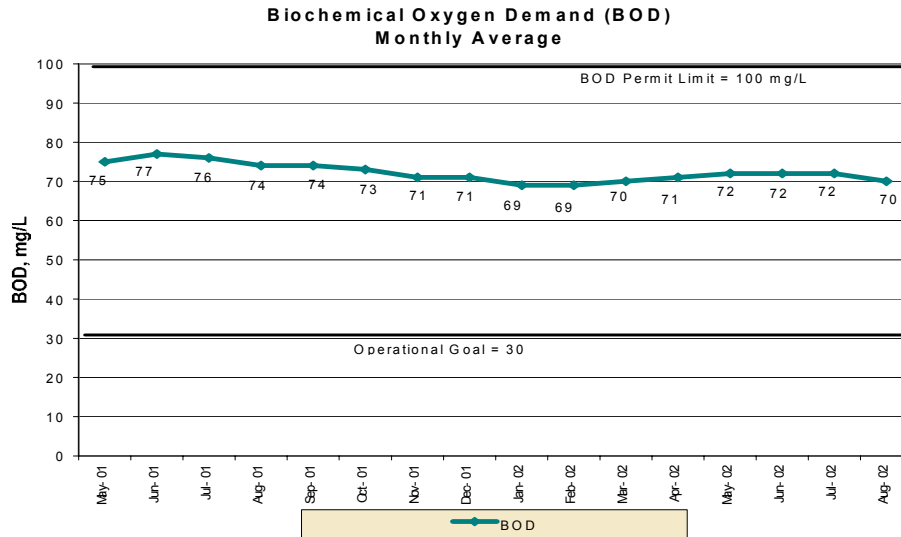
FINAL EFFLUENT (continued)



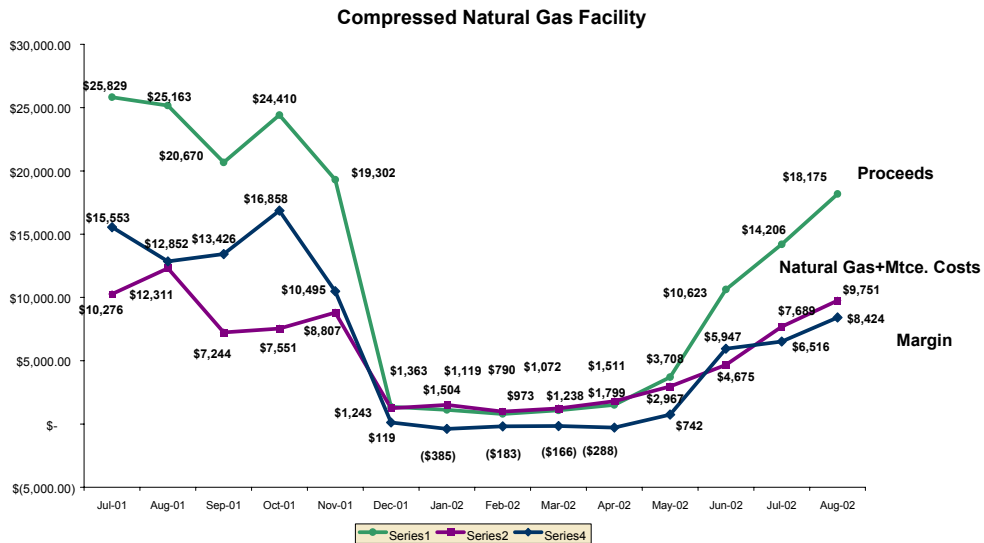
Total Suspended Solids (TSS) Monthly Average



FINAL EFFLUENT (continued)

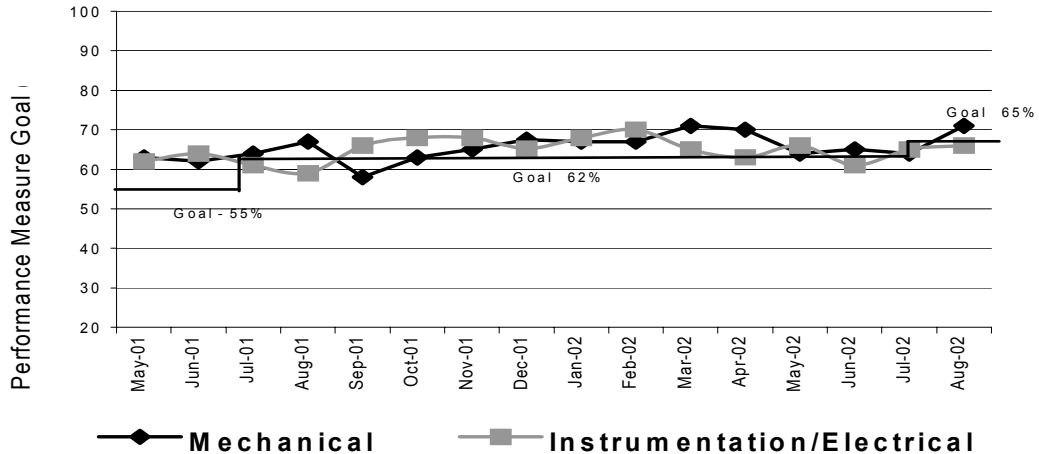


COMPRESSED NATURAL GAS



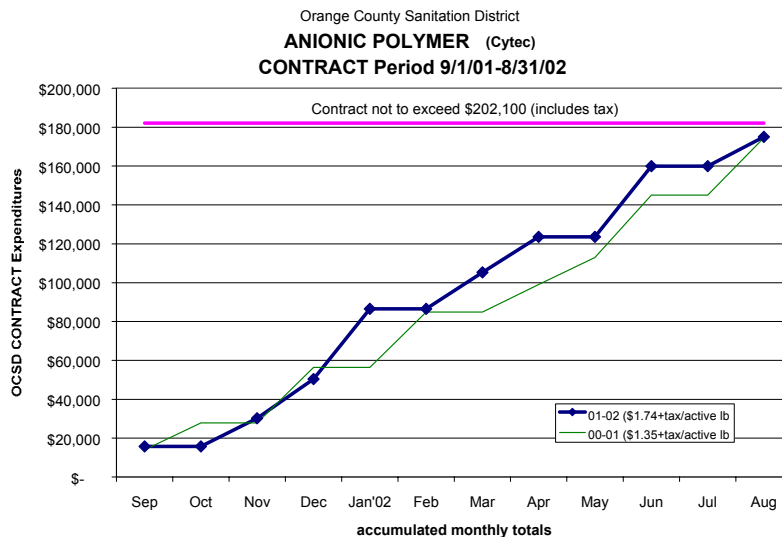
MAINTENANCE MEASURES

Wrench Time

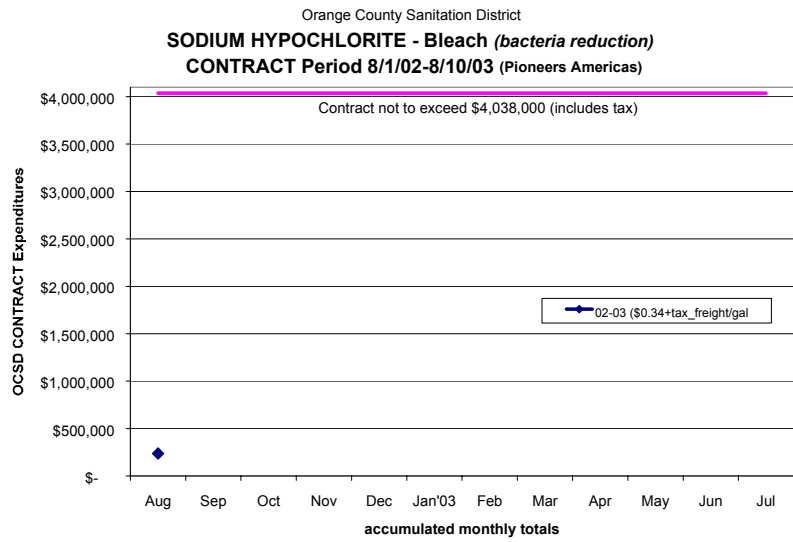
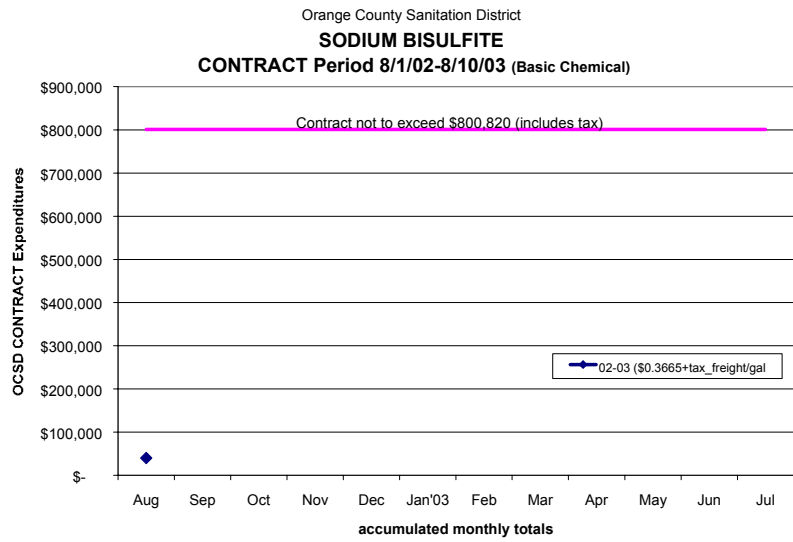


Definition: The wrench time definition is based upon all available employee work hours when they are at work. Wrench time consists of the preventative, predictive, and corrective maintenance, construction, managed maintenance, and support time consisting of job-to-job travel time, parts acquisition and work order documentation. Training, meetings, performance reviews, breaks, and other overhead reduce wrench time because it takes away from available maintenance duties. The goal of 62 percent is an in-house standard based upon reinvention techniques and industry standards. This goal will increase slightly as the reinvention project is completed.

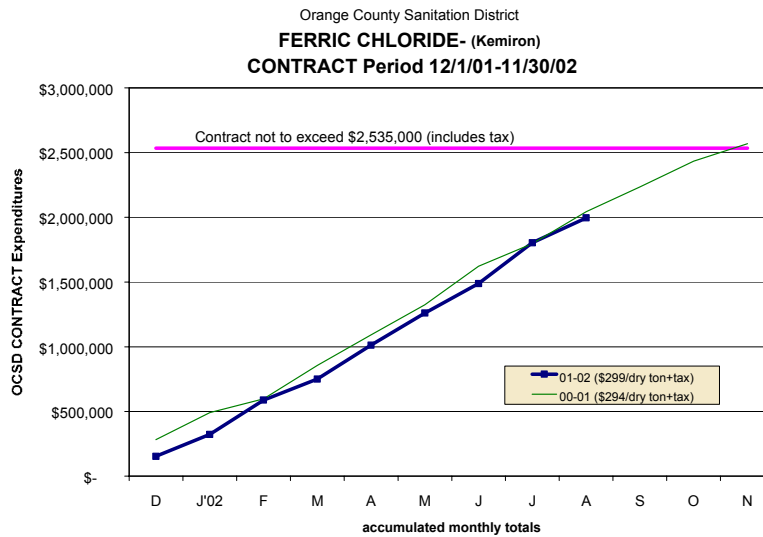
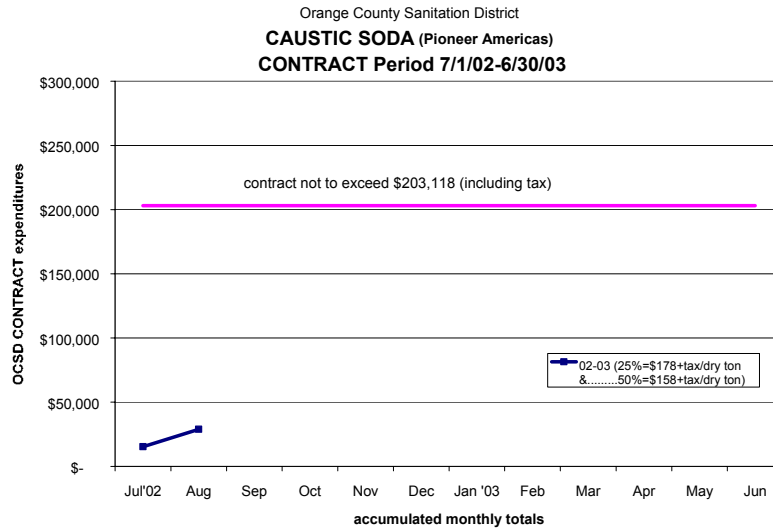
CHEMICAL GRAPHS



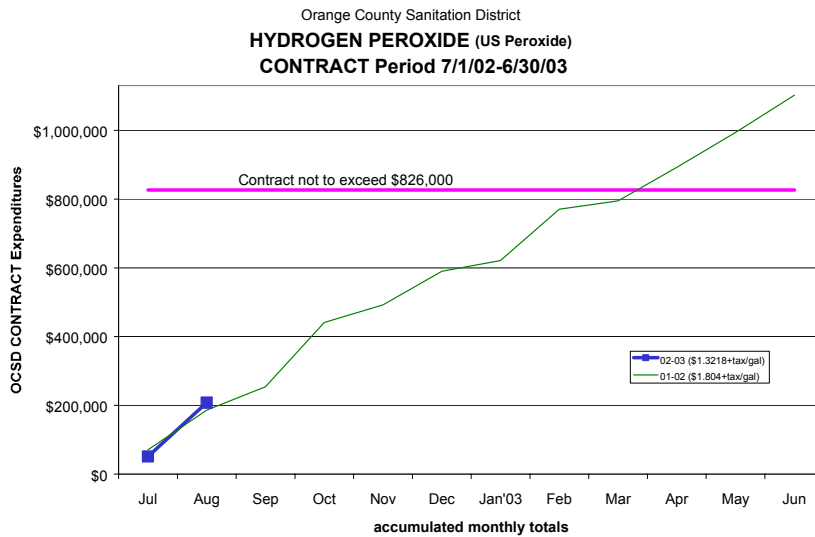
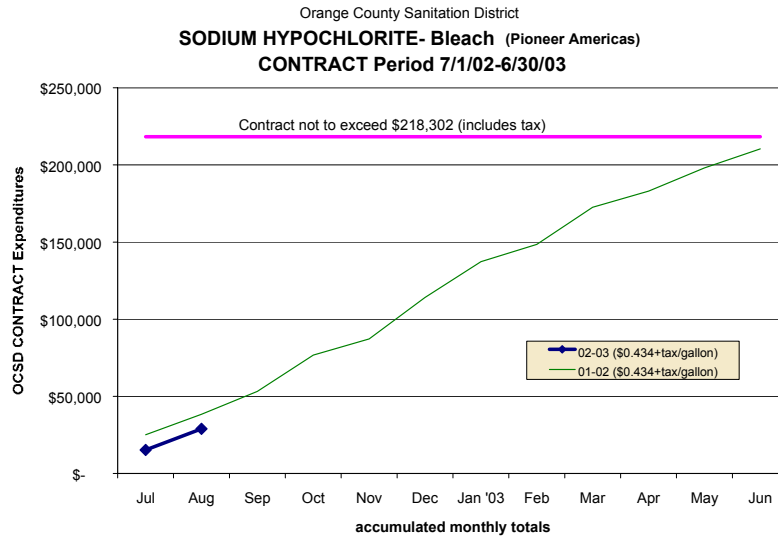
CHEMICAL GRAPHS (continued)



CHEMICAL GRAPHS (continued)



CHEMICAL GRAPHS (continued)



OMTS COMMITTEE

AGENDA REPORT

Meeting Date 10/02/02	To Bd. of Dir.
Item Number OMTS02-61	Item Number

Orange County Sanitation District

FROM: Patrick B. Miles, Director of Information Technology
Originator: Pinky Lopez, Administrative Assistant

SUBJECT: INFORMATION TECHNOLOGY DEPARTMENT QUARTERLY REPORT
July - September 2002

GENERAL MANAGER'S RECOMMENDATION

Information only.

SUMMARY

The Information Technology Department Quarterly Report to the OMTS Committee is contained herein. This report is intended to provide information on current performance trends and key technology business applications. Please contact me at (714) 593-7280 if you have any questions regarding the material provided in this report.

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.
- X Not applicable (information item)

ADDITIONAL INFORMATION

ATTACHMENTS

[Information Technology Quarterly STATUS Report](#)
[Information Technology Quarterly PROJECT Report](#)

INFORMATION TECHNOLOGY QUARTERLY STATUS REPORT

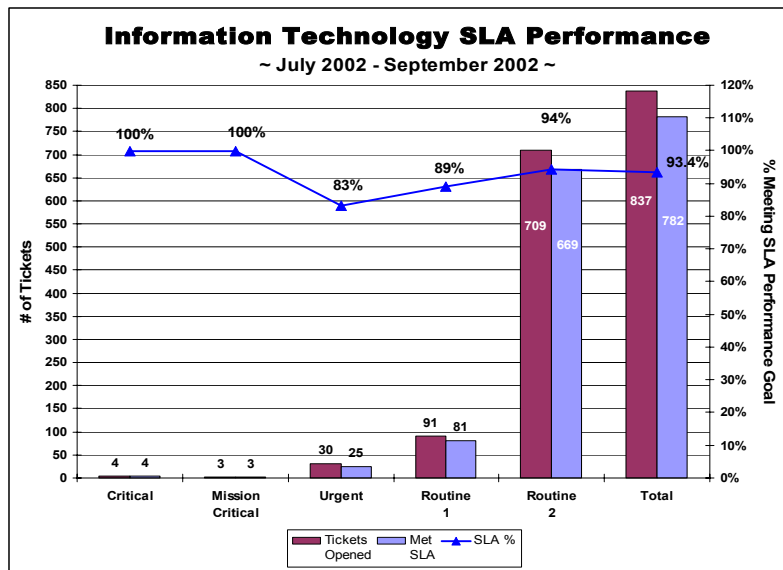
~ FISCAL Q1/2003 ~

Service Level Agreement Performance

The Information Technology (IT) Department is committed to providing world class support in the administration and management of technical resources supporting the District's IT assets and applications. To that end, IT has negotiated a service-level agreement (SLA), which describes the responsibilities, expectations, and anticipated resource commitments necessary to provide an appropriate level of support.

While specific individual commitments are negotiated, general SLA responses are as follows:

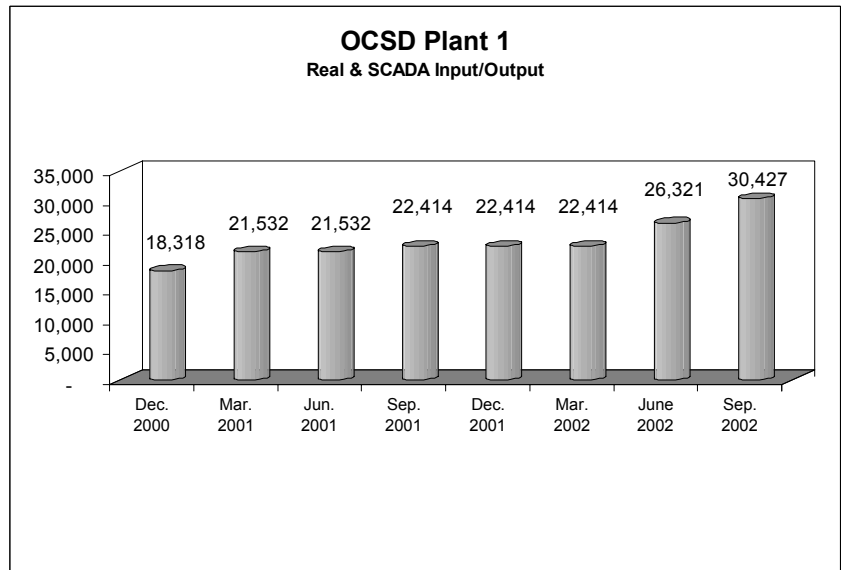
Category	Initial Response	Resolution	Standby Action	Performance Goal	Definition
1. Critical	<= 1 hour	1 - 4 hours	Yes	100%	Large Scale negative impact on Process System
2. Mission Critical	<= 4 hours	<= 24 hours	Yes	100%	Large Scale negative impact on Office Automation or Mission Critical Systems
3. Urgent	<= 4 hours	<= 2 business days	No	90%	Small Scale negative impact on Office/Process Automation
4. Routine 1	<= 3 business days	<= 5 business days	No	90%	Limited negative impact on Office/Process Automation
5. Routine 2	<= 3 business days	<= 10 business days	No	90%	Inconvenience or end user responsibility



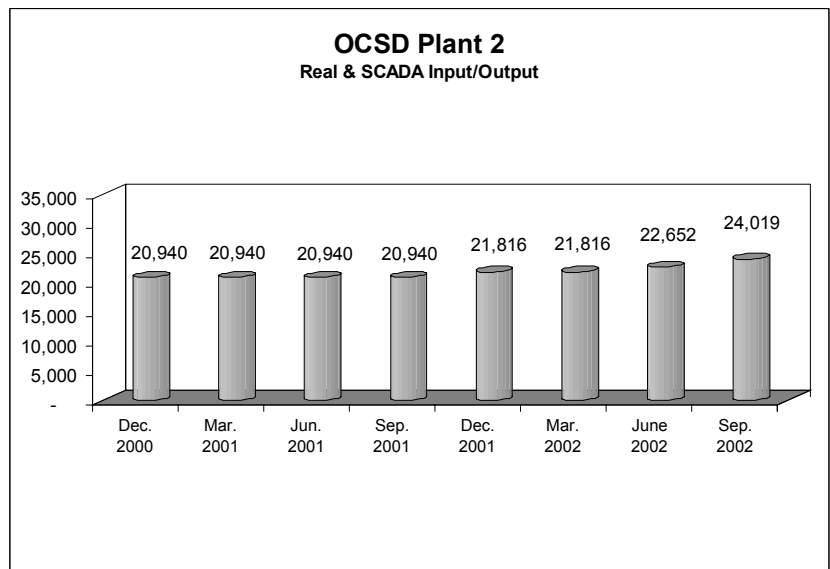
Process Control System Status

The District's relative Input/Output (I/O) counts are a general indication of the Process Control System's capabilities. More I/O generally corresponds to more monitoring information and a greater ability to remotely control equipment.

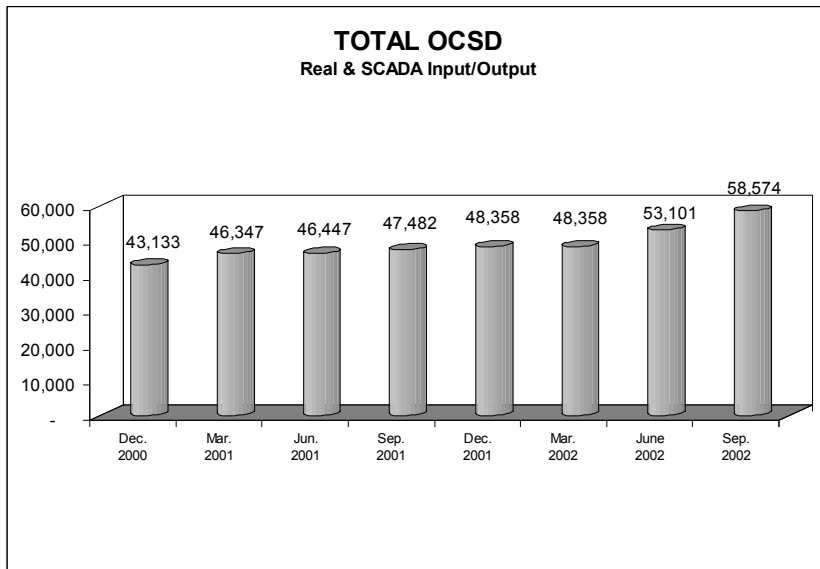
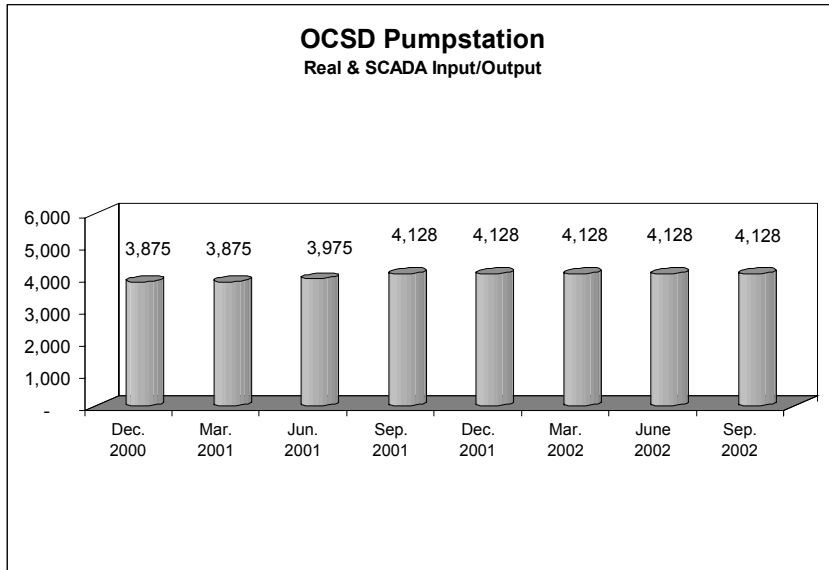
Three improvements were added to the Plant No. 1 SCADA system. Advanced chemical controls and monitoring were added for 13 foul air scrubbers and improved influent hydrogen peroxide dosing control and monitoring. These systems will more accurately dose and flow pace chemical addition at Plant No. 1 to reduce odors and corrosive gases in the treatment plants. The third improvement at Plant No.1 was the addition of controls and monitoring for the temporary bleach systems for the bacteria reduction project. Operations has the ability to remotely monitor the system and automatically control the flow of bleach.



The major change in the Plant No. 2 SCADA system is the addition of controls and monitoring for the temporary bleach systems and dechlorination system for the bacteria reduction project. Operations has the ability to remotely monitor the system and automatically control the flow of bleach and sodium bisulfite for dechlorination.



The Pump Station I/O count did not change during this quarter.



INFORMATION TECHNOLOGY QUARTERLY PROJECT REPORT

~ FISCAL Q1/2003 ~

Project Name	Project Description/Objective	Customer	Project Dates	% Cpt.	Project Benefits	Remarks/Accomplishments
COMPLETED PROJECTS						
JDE Integration	<p>The O&M Department has a goal to plan and schedule facility work with minimal impact to process operations. Supporting this process is the ability to match required materials to planned maintenance activities.</p> <p>The objective of this project is to deliver limited integration between the Computerized Maintenance Management System (CMMS) and the Financial Information System (FIS). Maintenance staff will have the ability to assemble a list of parts required for a maintenance activity and transmit the list as a sales order to FIS. CMMS warehouse tables will be populated with FIS warehouse inventory data and refreshed on a regular basis.</p>	O&M	Apr. 2001 To Sept. 2002	100%	<ul style="list-style-type: none"> Allows Maintenance planners to plan and schedule large scale maintenance activities within a single application. Maintenance planners will access "live" warehouse data allowing the O&M department to optimize the maintenance activity within an operational process window. Allows Maintenance to build prioritized equipment spare parts lists for capital and managed assets. The equipment spare parts lists are used during a review of warehouse stock in an effort to reduce inventory. Parts lists required for asset maintenance will be constructed and associated with maintenance activity codes. 	<ul style="list-style-type: none"> Completed CMMS/JDE integration effort, purchase order transmitted from CMMS to JDE in the production environment. Knowledge Transfer and AS400 code environment and Oracle Procedures documented. This project has been closed.
JDE Reports (Ad Hoc Reporting)	<p>Business Objects, a leading provider of Business Intelligence (BI) reporting solutions lets organizations access, analyze, and share information via the Internet or Intranet.</p> <p>The objective of this project is to implement the Business Object's reporting system to greatly improve the accessibility of data from the Financial Information System, Laboratory Information Management System, CMMS, and other operational databases.</p>	All Depts.	June 2001 To Sept. 2002	100%	<ul style="list-style-type: none"> Enables end-users to quickly develop reports without the complexity of understanding the database. Creates web enabled reports. Accrual reports now available online saving accounting two days per month in report preparation. Reduces Accrual Payout process from 3 days to 30 minutes. Significantly reduces customized programming required to develop project management reports. Provides project managers with key information concerning capital projects. 	<ul style="list-style-type: none"> Completed the Rollout Phase of CMMS general Universe for user testing. Completed the Rollout Phase of the Training Server Universe. Provided CUC stakeholders status of Business Objects project. This project has been closed.
ONGOING PROJECTS						
JDE Phase II (OWXE Migration)	<p>The current Financial Information System (FIS) requires upgrading. The existing user</p>	Finance / All Depts.	Jan. 2000 To Oct. 2003	20%	<ul style="list-style-type: none"> Stabilize current system. Avoid planned obsolescence of World Vision. Provide improved access to financial reporting data for all divisions. Streamline and ease end 	<ul style="list-style-type: none"> Finalized Contract Terms and Conditions Official Project kickoff meeting conducted on July 31, 2002. Standard OneWorld XE testing scripts provided to OCSD for all modules.

	<p>interface is non-intuitive and data extraction is limited within the system.</p> <p>The objective of this project is to upgrade FIS from JDEdwards WorldVision to the JDE OneWorld XE product (OWXE). The resulting system will deliver data entry, inquiry and reporting improvements while establishing an open system capable of adapting to the current and future technology needs of the agency.</p>				<p>user data entry and inquiry procedures.</p> <ul style="list-style-type: none"> Realize efficiencies for time reporting and project management 	<ul style="list-style-type: none"> Initial QA checklist completed. Conducted migration of libraries from FIS (A7.3 cum 8) to ERP (A7.3 cum 8.) The next phase involves the loading of OneWorld XE.
<p>Performance Management Reporting</p>	<p>The O&M Department manages over 40,000 assets. The management and performance tracking of these assets are tied to District Assessment Reinvention Team (DART) goals.</p> <p>The objective of this reporting project is to develop key performance indicators that reflect the results of future maintenance management enhancements as they are implemented over time.</p>	<p>O&M</p>	<p>Feb. 2001 To Nov. 2002</p>	<p>85%</p>	<ul style="list-style-type: none"> Allow the Maintenance division to track productivity and performance of staff and work process to defined metrics. Provide reports at the individual, craft, maintenance group, divisional and Plant levels. Address DART recommendations with the implementation of performance tracking and reporting. 	<ul style="list-style-type: none"> Identified coding standards for Collections and Vehicle reports. Create workflow for vehicle request work orders. Draft vehicle report submitted for review. The next phase involves developing and finalizing the draft Collection and Vehicle reports.
<p>Permit Process Streamlining</p>	<p>New Metal Products and Machining (MP&M) regulations by EPA will drive existing non-permitted businesses to fall under new MP&M discharge regulations. As a result, Source Control's workload may double.</p> <p>The objective of this project is to automate the current manual</p>	<p>Technical Services</p>	<p>Sep. 2001 To Dec. 2002</p>	<p>40%</p>	<ul style="list-style-type: none"> Streamline and make the permitting process more efficient. Increase overall data management capability. Allow processing of more permits without increasing staff. Reduce overall permitting workload Make the Permit Fact Sheet more comprehensive by improve the quality and consistency of the permit writing process. Make the permit evaluation report available to permittees in a self-explanatory and presentable format. 	<ul style="list-style-type: none"> Conducted user testing of version 2.4.5 Inspection Report module. Technical review of Compliance and Flow Base Evaluation module is under programmer testing.

system and improve core competency in the evaluation of permits. This project will also assist in the development of a "Pre-Permit Inspection Report" and a "Permit Fact sheet," (PFS) which includes a technical review of compliance as required by EPA.

ONGOING PROJECTS

Trunk Sewer Mapping Project

The District manages over 650 miles of Collections infrastructure. Detailed knowledge of geographical placement of Collections assets is required to effectively manage the infrastructure.

The objective of this project is to develop paper map books of the District's trunk sewers. This data will be available also in an electronic format for use by field staff. Maps developed by this project will be maintained as AutoCAD Map files. Trunk sewer data collected by this project will be imported into the Computerized Maintenance Management System (CMMS).

Eng.

May 2001

50%

To

July 2003

- Provide a complete map set of the District's trunk sewers.
- Enables the Collections division to accurately track maintenance and compliance issues geographically
- Assists Engineering in capital asset management and project tracking.
- Creates a Map Product Generator application (MPG) to update and maintain the maps produced by this project.

- Pilot Program to verify data quality started.
- Software site acceptance test scheduled.
- A Scope change required the project team to expand the data collection and survey phase of this project. The Project schedule has been re-baselined to reflect this change.

Online Technical Specification & SOW Library

The Purchasing staff spends many hours on addenda to clarify or correct technical specifications and scope of works.

The objective of this project is to create a

Finance

July 2001

25%

To

May 2003

- This application should save OCSD staff time in creating scopes of work and technical specifications.
- This system should improve the precision and completeness of these documents, thereby reducing the amount of corrections and clarifications.

- RFP process and vendor demonstrations have been completed.
- Currently creating the Agenda Report for OMTS and board approval.
- Due to the approval process and requirements for additional funding, this project's completion date has been moved to May 2003.

web-based solution to assist OCSD staff to search a repository of approved sample documents and use them to create complete technical specifications and scope of works for their projects. Designated Purchasing staff will be trained to administrate and update the web site on an on-going basis.

Records Mgmt.

In October 2000, the OCSD Board of Directors approved a comprehensive, District-wide Records Management Policy and Records Retention Schedule.

General Mgmt.

Aug. 2001

65%

To

Nov. 2002

- The system will produce more effective and consistent archiving, retrieval and destruction of District records in accordance with the Records Management Policy and regulatory requirements.

- Completed test system development, administration training and production System testing.
- The production system is currently being tested for compatibility and functionality.

The objective of this project is to implement a system that will automate and organize the Records Management procedures and retention schedule. The focus will be to develop a system that will categorize and capture the metadata (information about the data) related to District records and store this information for easy retrieval when required.

ONGOING PROJECTS

<p>Total Toxic Organics</p>	<p>EPA regulations require OCSD to monitor the discharge of 'Total Toxic Organics' on a constituent-by-constituent basis.</p> <p>The objective of this project is to develop a program which allows engineer to assign a test method to analyze the sample, print self monitoring forms on a scheduled basis, summarize the results and print a wastewater analysis report.</p>	<p>Technical Services</p>	<p>Sep. 2001</p> <p>To</p> <p>Oct. 2002</p>	<p>85%</p>	<ul style="list-style-type: none"> • Allow the District to comply with EPA regulation on sampling of all 'Total Toxic Organics' on a constituent-by-constituent basis. • This program helps in minimizing the discharge of toxic organic materials into the sewer. • Protects the maintenance personnel. 	<ul style="list-style-type: none"> • Completed Alpha and Beta testing. • Program has been moved to production as scheduled and is currently under warranty mode.
<p>Online O&M Manuals and SOP's</p>	<p>Currently the O&M Department utilizes a paper-based system to document O&M manuals, Standard Operating Procedures (SOP) and Emergency Operating Procedures (EOP).</p> <p>The objective of this project is to develop a content management process and application that will encompass the provisions of the District's permits and Cal-OSHA requirements. The latest tools will be used as well as proven methodologies and best practices gathered from related industries. Designated O&M staff will be trained in the administration and change management procedures and processes.</p>	<p>O&M</p>	<p>Jan. 2002</p> <p>To</p> <p>Oct. 2003</p>	<p>20%</p>	<ul style="list-style-type: none"> • The online O&M Manual will contain specific information that demonstrates to regulatory agencies and Cal-OSHA that the District has a program in place to safely and effectively operate its facilities. • OCSD staff will be able to access any O&M Manual, SOP or EOP via a web browser from any District computer saving staff time compared to the current paper-based system. 	<ul style="list-style-type: none"> • On-site demonstrations were held. • Brown and Caldwell was selected as vendor of choice. • Board approval granted in August. • A kick-off meeting is planned for October 15, 2002.
<p>Corrective Action Tracking System</p>	<p>The District's Engineering Department has initiated a Quality Management program based</p>	<p>Eng.</p>	<p>Jan. 2002</p> <p>To</p> <p>Nov.</p>	<p>65%</p>	<ul style="list-style-type: none"> • The system will automate current business processes, thereby saving staff time • The system will develop a comprehensive audit trail of 	<ul style="list-style-type: none"> • The RFP has been completed and AssurX, Inc. has been selected as the preferred vendor. • CATSWeb software has been

<p>on the International Standards Organization (ISO) model.</p> <p>The objective of this project is to implement a Quality Management tool that will improve the execution and documentation of projects. The tool is used to capture data gathered through the capital project management process.</p>	<p>2002</p>	<p>problems and their resolutions for future reference. This is a key component of a quality program.</p> <ul style="list-style-type: none"> • The system will be used for managing problem reports, change requests, customer complaints, and corrective and preventive actions. • The data will be tracked and actions taken will be documented in the system. Management reports can be generated throughout the process. 	<p>purchased.</p> <ul style="list-style-type: none"> • Complications involving resource allocation necessitate the project team having to re-evaluate the schedule. The date has been moved accordingly.
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ONGOING PROJECTS

<p>Internet Redesign</p> <p>The District Internet site is currently composed of static pages that are difficult to update without additional cross division or vendor support. Content providers do not at this time have direct access to updating the site. This in effect has limited the availability of current information delivery to the public</p> <p>OCS D is in the process of re-developing the current website. The new website will contain dynamic content that is informative, intuitive and easy to navigate. The website will also be easy for content providers to update by the use of templates and tools that make use of workflow for approval of such content. Phases of work will include design, development and implementation of a content management system and an updated Internet site.</p>	<p>Comm.</p> <p>July 2002 To Dec 2002</p> <p>34%</p>	<ul style="list-style-type: none"> • American Disabilities Act compliance of web site • Automated workflow for approval and revision control of content for the site • Automated posting and archival of job announcements • Improved navigation of web site • Online subscription to electronic newsletters and electronic public notices • Template driven pages to facilitate publishing of content 	<ul style="list-style-type: none"> • Notice to proceed was released by purchasing • Project charter has been developed and signed by the Communications division. • Designed home page layout. • Preliminary site map structure defined.
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Enterprise-wide GIS Development: Strategic Planning	<p>With the culmination of three Engineering and O&M projects: Facility Records and Engineering Drawings (J-25-1), Facility Atlas Maintenance (J-25-6), and Trunk Sewer Mapping (01-98), OCSD has made a substantial investment in creating GIS facility data for the two treatment plants and the sewer collection system.</p>	All Depts.	July 2002	5%	<ul style="list-style-type: none"> • Ensure that GIS data and layers are shared throughout OCSD to improve employee efficiency. • Maintain a single, accurate repository for asset management. • Ensure GIS data is maintained and kept current and that proper change management procedures are in place to support this goal. • Reduce cost of researching OCSD utilities for the planning, design and construction of capital and small projects. • Develop custom GIS applications when the return on investment is justified. • Provide guidelines for GIS software and hardware expenditures. • Prioritize short and long-term GIS projects • Document GIS standards • Define GIS roles and responsibilities within each department 	<ul style="list-style-type: none"> • Developed Enterprise-wide GIS strategic planning requirements with key project stakeholders from Engineering and IT. • Identified Enterprise-wide GIS Principal Strategic Objectives. • Identified Enterprise-wide GIS Vision. • Planning to create a GIS steering committee to evaluate and prioritize GIS needs. • Putting together "this is GIS" demo for department managers to inform, instruct and promote GIS.
	<p>Now that much of the GIS foundation is nearly in place, the objective of this project is to determine OCSD's future GIS direction and goals as an enterprise. Some of the prominent fiscal year goals include:</p>		To June 2003			
	<ul style="list-style-type: none"> • Determine how other departments can leverage the GIS investment to increase employee productivity • Determine how other data sources can be merged so that OCSD has a single, current facility model for asset management • Form an enterprise-wide GIS committee responsible for GIS direction to meet future OCSD needs. 					

OMTS COMMITTEE

AGENDA REPORT

Meeting Date 10/2/02	To Bd. of Dir. 10/23/02
Item Number OMTS02-62	Item Number

Orange County Sanitation District

FROM: Bob Ooten, Director of Operations and Maintenance
Originator: Ed Torres, Air Quality & Special Projects

SUBJECT: PHASE II BIOTRICKLING FILTER DEMONSTRATION PROJECT

GENERAL MANAGER'S RECOMMENDATION

1. Approve a budget amendment of \$285,000 for Phase II Biotrickling Filter Demonstration Project, SP-90, for a total budget of \$735,000, as an alternative treatment to control odors; and,
2. Approve Amendment No. 1 to the Study Agreement with the University of California, Riverside to provide continued support for testing biotrickling filters as an air emissions control technology for an additional amount of \$60,000, which includes a \$15,000 contingency, for a total amount not to exceed \$205,000.

SUMMARY

- In June 2001, the Board authorized a sole source agreement with UC Riverside to perform research on a new scrubber technology designed to reduce odors at the treatment plants. The biotrickling filters successfully remove the odorous chemical hydrogen sulfide equal or better than the present scrubbers. Further research is recommended by staff to improve removal of other odorous compounds that are not removed by the District's conventional scrubbers.
- The research included retrofitting an existing District chemical scrubber to a biotrickling filter, monitoring and analyzing its performance in removing hydrogen sulfide, developing capital and operating cost estimates for future retrofits, providing technical expertise and guidance and developing a final report, which is expected in November 2002.
- Our research has shown that compounds other than hydrogen sulfide, although present in very low concentrations, are the major causes of odors in some foul air streams. Therefore, further research is needed to determine the operating conditions and treatment retention times needed to remove these other odorous compounds.
- The following Phase II research is recommended by staff to increase the likelihood of successful biotrickling filter applications and to take advantage of the knowledge that already has been gained from earlier research:
 1. Expand the current testing program by focusing on improving the biotrickling filters' effectiveness in removing compounds other than hydrogen sulfide that are contributing to offsite odor impacts.
 2. Test rigid structured foam packing (compared to the existing random foam packing) as a possible way to reduce the higher than expected pressure drop through

biotrickling filters (and thus reduce the operating costs). Three additional chemical scrubbers will be retrofitted with the structured foam packing.

- Staff recommends continuing the collaboration with the University of California, Riverside to provide technical assistance and consulting expertise in evaluating biotrickling filter applications. University of California, Riverside personnel have acknowledged expertise in the field of biological filtration and have provided very valuable assistance in the current project.

PROJECT/CONTRACT COST SUMMARY

The estimated cost for the proposed Phase II Biotrickling Filter Demonstration project is shown below:

University of California, Riverside contract for technical Assistance (including \$15,000 contingency)	\$ 60,000
Retrofit cost for 3 scrubbers (including \$25,000 Contingency)	\$ 145,000
District internal and laboratory costs	<u>\$ 80,000</u>
Estimated Cost	\$ 285,000

There are savings in chemicals and maintenance costs with biotrickling filters compared with chemical scrubbers. In addition there are other benefits of biotrickling filters over chemical scrubbers including less hazardous work environment and ability to treat additional air pollutants (smog forming compounds and hazardous air pollutants) that are regulated by the SCAQMD.

For perspective, a summary of the total costs incurred to date including the proposed cost for Phase II is provided below:

Original feasibility study and laboratory work by University of California, Riverside	\$ 25,000
Biotrickling Filter Demonstration Project Phase I contract with University of California, Riverside	\$ 145,000
District internal costs including laboratory work for Phase I	\$ 80,000
Conversion costs for 5 scrubbers in Phase I	\$ 200,000
Total Phase I Cost	\$ 450,000
Total Estimated Cost for Phase II	<u>\$ 285,000</u>
Total Project Cost	\$ 735,000

BUDGET IMPACT

This item has been budgeted (Line item :)

- This item has been budgeted, but there are insufficient funds. (Line item: Special Projects, Section 8, Page 10)
- This item has not been budgeted.
- Not applicable (information item)

ADDITIONAL INFORMATION

Project Background

- The District and the wastewater treatment industry have been interested in biological approaches of biofilters and biotrickling filters (which are a particular type of biofilter) for air emissions control for several years.
- The potential advantages of biological technologies over traditional chemical treatment approaches are reduced Operations and Maintenance costs, the ability to treat a wider range of air pollutants [odors, volatile organic compounds, and air toxics], and improved safety by eliminating the use of dangerous chemicals.
- Biological treatment capability is becoming more important as the South Coast Air Quality Management District focuses their attention on ever-expanding numbers of compounds. Biological filters are able to remove volatile organic compounds and toxic compounds that chemical scrubbers do not remove.
- The safety of plant staff is improved when hazardous chemicals used in conventional scrubbers are no longer used.

Previous Work

- Staff investigated various types of biofilters about seven years ago using pilot-scale equipment. That work demonstrated the ability of biofilters to treat various foul air streams containing various odorous compounds.
- An important goal has been to find cost-effective ways to convert existing scrubbers into biofilters rather than building entirely new units. The problem has been that the high air velocities in the District's typical scrubbers would not allow enough contact time for a biofilter to be effective.
- An initial District-funded study at the University of California, Riverside evaluated the feasibility of converting scrubbers to biofilters using special foam packing from Germany. The results were very encouraging and suggested that a number of the District's scrubbers were conversion candidates, with potential cost savings resulting in payback periods of less than one year in some cases.
- One existing scrubber initially was converted in Phase I and evaluated. Based on its success, four additional scrubbers were converted.
- The District has saved more than \$100,000 (at FY 2001-02 chemical prices) in chemical costs as a result of retrofitting 2 high chemical use scrubbers last fiscal year. Staff estimates an additional \$100,000 in chemical savings when the 3 additional scrubbers are retrofitted, resulting in a payback period of less than 1.5 years.

Phase II Project Scope and Objectives

The project will expand the testing, evaluation, and optimization of the 5 scrubbers that have been converted to biotrickling filters, convert 3 additional scrubbers, and prepare interim and final reports.

ALTERNATIVES

No action; do not continue testing biological alternatives to conventional wet chemical scrubbers. This is not recommended due to the potential cost savings and safety improvements that would not be realized in both current operations and future odor control facilities.

CEQA FINDINGS:

This research effort is categorically exempt from CEQA (Section 15306).

ATTACHMENT

None

OMTS COMMITTEE

AGENDA REPORT

Meeting Date 10/02/02	To Bd. of Dir.
Item Number OMTS02-63	Item Number

Orange County Sanitation District

FROM: Robert P. Ghirelli, D.Env., Director of Technical Services
Originator: George Robertson, Environmental Compliance and Monitoring

SUBJECT: UPDATE ON RECENT SOUTHERN CALIFORNIA COASTAL WATER
RESEARCH PROJECT ACTIVITIES

GENERAL MANAGER'S RECOMMENDATION

Informational item

SUMMARY

Dr. Stephen Weisberg, Executive Director, will present an update on recent SCCWRP activities to the Committee.

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

N/A

OMTS COMMITTEE

AGENDA REPORT

Orange County Sanitation District

Meeting Date 10/2/02	To Bd. of Dir. 10/23/02
Item Number OMTS02-64	Item Number

FROM: David A. Ludwin, Director of Engineering
Originator: Wendy Sevenandt

SUBJECT: GROUNDWATER REPLENISHMENT SYSTEM, JOB NO. J-36
JOINT EXERCISE OF POWERS AGREEMENT

GENERAL MANAGER'S RECOMMENDATION

Information Item Only. (1) Approve a budget amendment of \$28,700,000 increasing the OCSD share to \$229,906,000, and, (2) Approve Joint Exercise of Powers Agreement for the Development, Operation and Maintenance of the Groundwater Replenishment System and the Green Acre Project.

SUMMARY

- An increase in Orange County Sanitation District's (OCSD) budget share of \$28,700,000 is being requested, increasing the overall OCSD project cost to \$229,906,000. Additional grants totaling \$14,500,000 are shown in the attached Budget Information Table, increasing OCSD's share of grants (reimbursable costs) to \$45,000,000. OCSD's net project cost, with anticipated grant receipts deducted is \$184,906,000, a net increase of \$14,200,000 over the previous budget.
- The Joint Exercise of Powers Agreement for the Development, Operation, and Maintenance of the Groundwater Replenishment (GWR) System and the Green Acres Project (Agreement), provides a detailed plan for water delivery for both the Green Acres Project (GAP) and GWR System, including financing, limits of spending authority, OCSD delivery of wastewater, OCSD use of reclaimed water, operations, and maintenance of the GWR System.
- The Agreement was unanimously approved by the Joint Cooperative Committee (JCC) on September 16, 2002. An earlier draft of the Agreement was last reviewed with the OCSD Committees in February 2002.
- Approval of the Agreement will be recommended at the October 2002 OCSD FAHR, OMTS and PDC Committees.
- The delegation of authority contained in the Agreement has been revised to grant the Orange County Water District (OCWD) General Manager authority to award contracts up to \$50,000. The Agreement also gives the OCWD Board authority to award contracts up to \$10,000,000, following approval by the JCC. This revision was made to be consistent with provisions in OCWD's enabling legislation.
- The OCSD Board and OCWD Board would both have to approve contracts in excess of \$10,000,000.

PROJECT/CONTRACT COST SUMMARY

Please refer to the attached Budget Information Table. No expenditure authorization is being requested at this time.

The Boards of Directors of Orange County Sanitation District (OCSD) and Orange County Water District (OCWD) approved the Groundwater Replenishment (GWR) System on March 28, 2001, with the cost of design and construction to be paid in equal 50% shares by each agency. In June 2002, the OCSD Board approved a budget of \$201,206,000.

In August 2002 a revised Engineer's Estimate was prepared. OCSD's share of the project cost is \$229,906,000 in the revised Budget Information Table. If the \$45,000,000 in anticipated project grants is deducted, OCSD's net cost share is \$184,906,000.

BUDGET IMPACT

- This item has been budgeted. (Line item: 2002-03 CIP Budget Sec. 8, page 157)
- This item has been budgeted, but there are insufficient funds.
- This item has not been budgeted.
- Not applicable (information item)

An increase in OCSD budget share of \$28,700,000 is being requested, increasing the overall OCSD project cost to \$229,906,000. Additional grants totaling \$14,500,000 are also shown in the attached Budget Information Table, increasing OCSD's share of grants (reimbursable costs) to \$45,000,000. OCSD's net project cost, with anticipated grant receipts deducted is \$184,906,000, a net increase of \$14,200,000 over the previous budget.

ADDITIONAL INFORMATION

Background

The GWR System to date has been developed under a cost sharing agreement as amended. Under this agreement, the Joint Cooperative Committee (JCC) was established to provide project management, authority was delegated to the JCC, and provisions were prescribed for cost sharing.

In accordance with direction received from the JCC, Staff and General Counsel of both agencies have prepared a new comprehensive agreement, which, if approved, will supercede the GWR System cost sharing agreement and all other agreements between OCWD and OCSD. The new agreement, titled the Joint Exercise of Powers Agreement for the Development, Operation, and Maintenance of the GWR System and the Green Acres Project (Agreement), provides a detailed plan for water delivery for both the Green Acres Project (GAP) and GWR System, including financing, limits of spending authority, operations, and maintenance of the GWR System.

A draft Agreement was presented at the October 10, 2001 FAHR Committee and the November 1, 2001 PDC Committee meetings.

Findings of the National Water Research Institute (NWRI) regarding their review of the equity of the cost sharing provisions were presented at the January 14, 2002, JCC meeting. A revised draft Agreement was presented at the January 28, 2002, JCC meeting, and was presented at the PDC, FAHR, and OMTS meetings in February.

Delegation of Authority Provisions

Under the proposed Joint Exercise of Powers Agreement (Agreement), the General Managers, the Joint Cooperative Committee (JCC), and the full Boards of Orange County Water District (OCWD) and Orange County Sanitation District (OCSD) have contracting authority. The procedure for approval of Purchase Orders, Task Orders, Professional Services Agreements, and Construction Contracts is to go through the General Managers, the JCC, and then to the full Boards as delegated in the Agreement.

Authorizations for contracting, per the Agreement, do not include other Board Committees at OCSD or OCWD. The contracting authority of the OCWD General Manager will be increased to \$50,000. For all contracts, agreements, or purchase orders between \$50,000 to \$10,000,000, the General Managers and the JCC will recommend approval to the OCWD Board. Through this agreement, the OCSD Board would be delegating authority to the OCWD Board (with recommendation from the JCC) the award of contracts that are under \$10,000,000. Contracts in excess of \$10,000,000 would require both the OCWD and OCSD Boards authority to award.

OCSD Outfall Relief

OCSD considered multiple peak flow management options in the 1999 Strategic Plan. One option was construction of a second 5-mile ocean outfall to discharge peak daily and wet weather flows. Other options included attenuation of peaks using in-plant storage, and reducing peak discharges by maximizing effluent flow to the Groundwater Replenishment (GWR) System during high flow events.

The preferred alternative adopted by the OCSD Board included (1) Using existing in-plant storage (7 million gallons), (2) Maximizing flow to the GWR System (100 mgd), and (3) Using the emergency 1-mile (78-inch diameter) outfall with an estimated frequency of once every three years at flow rates projected for the year 2020. It was assumed that as much secondary effluent as possible would be routed to the 78-inch outfall during such an emergency, and that no disinfection would be used.

In July 2002, the OCSD Board of Directors adopted a resolution requiring that all of the treated wastewater being discharged to the ocean meet the Clean Water Act definition of secondary treatment (30 mg/L TSS, 30 mg/L BOD). This action followed an earlier commitment by Orange County Sanitation District (OCSD) to provide a level disinfection that would meet State bathing water standards (AB-411) after initial dilution. Questions have been raised regarding how OCSD might use the 78-inch diameter (1-mile) emergency outfall given this new level of treatment.

Recognizing that conditions had changed since 1999, the Interim Strategic Plan Update was prepared in June 2002. This update incorporated, among other changes, revised flow estimates. The projected OCSD average daily flow rate in 2020 was revised downward from 352 mgd to 321 mgd.

The combination of lower flow projections and a commitment to secondary treatment standards with pathogen reduction provides new conditions in which consider the OCSD usage of the Groundwater Replenishment (GWR) System as a peak flow management tool. Total flow projections for OCSD in 2020 as developed in 1998 and revised in 2002 are shown below:

Projection	1999 Strategic Plan	2002 Interim Update
2020 Average Dry Weather Flow, mgd	352	321
2020 Peak Daily Dry Weather Flow, mgd	502	459
2020 Peak Wet Weather Flow, mgd	750	624
Discharge Capacity		
5-mile Outfall, mgd	480	480
1-mile (78-inch dia.) emergency Outfall, mgd	240	240
Combined Capacity, mgd	720	720

The projections above show that the Interim Update projected peak wet weather discharge is 126 mgd lower than the 1999 Strategic Plan (624 mgd vs. 750 mgd). The 1999 Strategic Plan predicted emergency use of the 1-mile outfall once per three years in 2020 with the GWR System providing 100 mgd of flow relief, and 1.7 times per year without the GWR System. Since these scenarios included discharging undisinfectated effluent, which could be a blend of primary and secondary effluent under certain conditions, it was assumed that beaches would be closed for several days following such an emergency. With the lower flow projections for 2020 in the Interim Strategic Plan Update, there would be less risk of discharging effluent through the 1-mile outfall.

This less frequent discharge of more highly treated effluent adds a considerable factor of safety to peak wet weather beach closure concerns. While this is a positive outcome from the July 2002 treatment level decision, preliminary discussions with regulators indicate that the 1-mile outfall would continue to be permitted for emergency use only, and that beach closures would still be likely during an emergency event even with secondary treated effluent. This preliminary opinion is based on the fact that our effluent would not be completely disinfected during a peak flow event, and that past history has shown that discharges through the 1-mile outfall routinely reached the shoreline prior to it being taken out of service in the 1970's.

While the Board of Director's July secondary treatment standard decision will help mitigate the impact of peak wet weather discharges, it does not eliminate the need for peak flow relief from the Groundwater Replenishment (GWR) System.

ALTERNATIVES

Without the approval of an agreement between the two agencies, the agencies would continue to operate under the existing agreements, which do not sufficiently address all the issues facing the two agencies.

CEQA FINDINGS

The Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Groundwater Replenishment (GWR) System was certified by the Orange County Sanitation District (OCSD) and the Orange County Water District (OCWD) Board of Directors 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

[Budget Information Table](#)

Draft Joint Exercise of Powers Agreement for the Development, Operation, and maintenance of the GWR and the Green Acres Project

BUDGET INFORMATION TABLE
GROUNDWATER REPLENISHMENT SYSTEM
JOB NO. J-36

PROJECT/TASK	ORIGINAL AUTHORIZED BUDGET	CURRENT PROJECT BUDGET	PROPOSED BUDGET INCREASE	PROPOSED REVISED BUDGET	FUNDS AUTHORIZED TO DATE	THIS AUTHORIZATION REQUEST	PROPOSED TOTAL AUTHORIZATION	ESTIMATED EXPENDITURE TO DATE	ESTIMATED EXPENDED TO DATE(%)
Project Development	\$ 700,000	\$ 4,000		\$ 4,000	\$ 4,000		\$ 4,000	\$ 4,000	100%
Studies/Permitting*		3,313,000		\$ 3,313,000	\$ 3,300,000		\$ 3,300,000	\$ 3,313,000	100%
Consultant PSA*	\$ 7,500,000	\$ 18,631,849		\$ 18,631,849	\$ 16,830,784		\$ 16,830,784	\$ 4,737,000	28%
Design Staff	\$ 2,349,000	\$ 5,357,000		\$ 5,357,000	\$ 5,357,000		\$ 5,357,000	\$ 1,122,000	21%
Construction Contract**	\$ 86,481,500	\$ 157,200,000	\$ 28,700,000	\$ 185,900,000	\$ 9,642,655		\$ 9,642,655	\$ 2,600,000	27%
Construction Administration***	\$ 2,653,900	\$ 6,653,000		\$ 6,653,000	\$ 5,496,519		\$ 5,496,519	\$ 209,000	4%
Construction Inspection	\$ 9,345,600	\$ 326,000		\$ 326,000				\$ 82,000	0%
Contingency	\$ 12,895,000	\$ 9,721,151		\$ 9,721,151					0%
PROJECT TOTAL	\$ 121,925,000	\$ 201,206,000	\$ 28,700,000	\$ 229,906,000	\$ 40,630,958	\$ -	\$ 40,630,958	\$ 12,067,000	30%
Reimbursable Costs		\$ 30,500,000	\$ 14,500,000	\$ 45,000,000				\$ 1,653,000	
PROJECT NET	\$ 121,925,000	\$ 170,706,000	\$ 14,200,000	\$ 184,906,000	\$ 40,630,958	\$ -	\$ 40,630,958	\$ 10,414,000	26%

* Funds authorized to date includes multiple contracts issued under the terms of the Cooperative Agreement for Project Planning for the Groundwater Replenishment System with the Orange County Water District

**Funds authorized to date include Pipeline at Theo Lacy Jail, SCE substation construction, temporary office facilities, agreement and easements, production of MF/UV vendor design documents, and Owner Controlled Insurance Program.

*** Funds authorized to date include Construction Management Services awarded on February 27, 2002

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