
CMSA Monthly Report

Central Marin Sanitation Agency

March 2003

GENERAL

Assembly Bill AB10X

Governor Gray Davis's FY 2003/2004 budget reduces the General Fund expenditures for the Air Resources Board (ARB) and the State Water Resources Control Board (SWRCB) by 12 million and 28.5 million dollars, respectively. In an effort to minimize financial impacts to each agency and maintain the protection of our air and water resources, Davis recently signed Assembly Bill AB10X which will allow these agencies to increase their regulatory fees to generate reasonable funds to cover the lost revenue from the General Fund.

CMSA is regulated by the SWRCB and pays an annual NPDES permit discharge fee of \$20,000. We anticipate this increasing and have allocated additional funds in our FY 2003/2004 budget to cover up to a 50% increase in the fee.

Reorganization Recruitment

The job descriptions, advertisements, brochures, and salary survey data for the Treatment Plant and Business Services Manager positions have been reviewed by staff and finalized. The advertising started in mid-March in local newspapers, industry and trade publications, and on a variety of websites. The final filing date is April 18, 2003 after which Koff & Associates, our human resource consultant managing

the recruitment, will review the applications, perform an evaluation of each, and recommend a list of top candidates. CMSA will ultimately determine which candidates will be interviewed.

The interview panel for the Treatment Plant Manager position has been established and the date has been set for Monday, May 19, 2003. The Business Services Manager interview date is Thursday, May 29, 2003. We hope to have both positions filled by July.

MMWD Desalination

Staff has met with an MMWD engineering manager and their consultant, URS, to discuss the potential desalination facility and issues associated with using our outfall to dispose of the concentrated brine. An internal memo was prepared by staff outlining issues that need to be discussed and clarified regarding our concerns, which include NPDES permit compliance for metals, periodic outfall cleaning and maintenance responsibilities, hydraulics during wet weather events, blending during diurnal flow and the connection to our outfall.

We discussed each issue and all agreed that engineering solutions, operational procedures, or contractual agreement language could resolve our concerns. However, the uncertainty remaining is how the Regional Water Quality Control Board will permit this facility and the common discharge outfall.

URS identified dilution issues that depend on the concentration of the brine. If too concentrated the combined effluent becomes negatively buoyant and we do not achieve our 10:1 dilution with Bay water which could significantly impact our metal discharge limits.

Currently, MMWD is considering a facility with a potable water production of 10 MGD and a concentration of 2:1 for the brine. They would remove most solids prior to the reverse osmosis process and dispose of the material at the Redwood Landfill in Novato.

PG&E Self Generation Rebate

The PG&E administrator has stated that our project is in a particular category (3N) that does not allow reimbursement for digester gas pretreatment system costs. This decision was due to a rule stating that natural gas fuel use must be below 25%; our planned use is 66% of the time. We have presented a case in which we claim our engine is a hybrid system that will burn digester gas and natural gas, and therefore should have the pretreatment costs reimbursed. The energy division of the CPUC agreed in concept and informed us that the issue would be discussed at the next State Working Group meeting.

The meeting was held, our case presented, and then rejected. The energy division staff were not in attendance and we

believe that our case was not given fair consideration. We have subsequently approached the energy division for follow-up discussions. Our last option for appeal is to file a Petition to Modify the CPUC rule.

The PG&E administrator has confirmed that our application was approved and will be sending the PG&E contract for our signature. Their estimated reimbursement amount, minus pretreatment costs, that will be set aside for the CMSA project is \$ 560,000.

CSRMA Risk Control Survey

The CSRMA risk manager conducted the bi-annual risk control audit of the Agency. The audit focuses on worker's compensation and general liability exposure issues throughout the organization and treatment plant. Several issues were identified and a report summarizing the issues, applicable laws that govern the issue, and recommended corrective actions was submitted to CMSA in February 2003. The CMSA management team has reviewed the findings and is in the process of implementing many of the recommendations.

CAPITAL

Cogeneration Engine Replacement Project

The 90% design work is near completion and we expect to receive the submittal from CH2MHill in mid-April for review and comment. A design

workshop will then be held with CH2MHill to discuss the project team comments and plan for the remainder of the design phase of the project. Final design should be completed in May with a bid opening in July 2003.

Construction is projected to be completed by the end of 2003 which will be within the PG&E incentive program required 12 month window.

All prepurchased equipment has been awarded and delivery of the various pieces of equipment should begin in early summer.

Dewatering Improvement Project

The 3rd Centrisys centrifuge has been installed and we are waiting for the contractor to complete the instrumentation work after which we can test each unit in full automatic mode. To date we have been operating the first two machines in manual mode utilizing an existing control panel that is scheduled to be removed. A new control panel will integrate communications between the Centrisys control panels, the CMSA process control system, the multiple feed pumps, and the remote centrifuge control equipment.

The two new centrifuges are producing biosolids cake that is 20% dryer than the prior machines. This will result in substantial cost savings for biosolids hauling and disposal.

The majority of the construction is completed and CMSA has prepared an initial punch list for the contractor. We also have started preparing contract change

orders for the various field modifications and formal work directives issued during the project.

MAINTENANCE

CMMS Acquisition

We have formed an Initiative Team to look into purchasing a new CMMS (Computerized Maintenance Management System). The team's comprised of Susan Halpin, Kit Groves Russ Turnbull and Dick Lindgren. Our initial look at the project included solicitation of ideas from other staff who will work with the end CMMS product. The current method of managing our Maintenance functions utilizes three separate computer programs to handle Preventive Maintenance, Corrective Maintenance, and Inventory Control. Our goal is to select a replacement that will integrate all three programs into one system. The Initiative Team came up with a list of desired / needed features of a CMMS to fit our needs. We are very interested in an Asset Management Program for CMSA, of which the CMMS is a critical component.

Repairs and Projects

- The Electrical / Instrumentation staff has been assisting with some of the control issues with the new Centrifuge installation. Some issues have come up that have required input and help from our staff.

- The Mechanical crew is in the process of renovating the gas piping to our boilers, with natural gas replacing propane as the alternate fuel. The retrofit involves removing all the propane piping and regulating valves and installing new natural gas piping and regulators. Originally the boilers were designed with the dual fuels of digester gas and propane. Propane was also the alternate fuel for our co-generation engine at one time, but its continued use in the engine is not recommended. Advice from our engine vendors and engineers have indicated Natural gas is a better alternate fuel and abandonment of the propane system is the appropriate choice.

OPERATIONS

Secondary Digester

At the beginning of March, the Department began bringing the secondary anaerobic digester back to life and back to service. As the performance of this treatment unit is based on living organisms, the return to service process must be done slowly and delicately. Healthy, living seed sludge was transferred from the on line primary digester to the secondary digester. Based on the number of organisms in the secondary, feed sludge was pumped to the digester at very low rates. As the biological process took hold and the number of organisms

increased, higher feed sludge rates could be used. The target date for return to normal service for the digester is the first week of April. The performance parameters have been monitored throughout March and it is anticipated that the target will be met without incident.

Nitrate Odor Control Station

We have four nitrate odor control stations at strategic locations throughout the collection system. Doug Miller is preparing these nitrate stations for service, now that the new odor season is almost here. He will be filling the chemical storage tanks and verifying that all the equipment required to dose this odor controlling chemical is ready to go. The stations will be put in service when both the total plant influent flow rate decreases and the temperature of the influent increases sufficiently. With this spring being as dry as it is, these stations may be put in service earlier than last year, which was not until the last week of April.

pH Meter

Our NPDES Permit requires that we continuously monitor effluent pH and ensure that 99% of the time it is between 6 and 9. On swing shift March 14th Operator Jean Saint-Louis and Lead Tom Asdell responded well to a failure of the final effluent pH monitoring equipment. They set up a manual sampling and testing schedule to verify that the pH remained within the plant's discharge limits. Operators performed this hand testing until I&E personnel were able to repair the monitoring equipment. Tom put together a response

reference document to guide other Operators if any monitoring equipment fails again. This information is being given to all Operators through a training session.

Respirator Fit Test

During the last week of March, Operators will have their annual respirator fit tests performed. Operators go through a series of movement exercises while wearing a special respirator that verifies if they maintain a face-to-respirator seal or not. Having a good seal is critical if respirators are going to protect the employees who wear them. Respirator use is required for confined space entries and emergency response.

Grade III Exams

Operators Steve Kelly, Larry Johnson and Stanley Hagwood will be taking the SWRCB Operator Grade III exam on Saturday 5 April. Good luck to them!

LAB

Intern

Since January Angela Flocco from Drake High School's Academy X program has been interning at CMSA. She is working on a project analyzing ammonia levels at a number of points throughout the plant. She will give a Power Point presentation here, describing her project, what she hoped to learn, and summarizing her results on April 1. Academy X is holding their annual dinner on April 2,

which includes a silent auction for fund-raising. CMSA has donated some small items for the auction.

Commercial Lab Contract

We use commercial environmental laboratories to do analyses for us which are not cost-effective to do in-house. The current contract for this work expires on June 30, so we are in the process of evaluating labs that do such testing. The process is quite extensive, involving inspections of the finalist labs, analysis of an "unknown" sample by them, reference checks, and a review of quality assurance, turnaround time, costs, and a number of other factors.

INDUSTRIAL WASTE

Endocrine Disrupting Compound Workshop

IW staff attended a CWEA workshop on "Endocrine Disrupting & Pharmaceutically Active Compounds." A large amount of information was presented on these pollutants which are emerging as a world-wide environmental concern. It was determined that there are no short term impacts to CMSA expected in regard to these compounds.

School Presentations

Two staff persons from CMSA and one from LGVSD gave classroom presentations at

Neil Cummins Elementary School in Corte Madera. A total of 140 students attended the presentations. The students rotated among four stations to see a demonstration on wastewater treatment, a large screen microscope, an interactive demonstration with a watershed model, and the "Eco-Masters" computer game.