
CMSA Monthly Report

Central Marin Sanitation Agency

June 2003

GENERAL

Interim Lab Director Appointment

Nancy Evans has announced her retirement and her last day at CMSA is August 11, 2003. As previously mentioned, we have decided to recruit internally for an interim lab director position. The interviews were conducted on June 19, 2003. The panel consisted of the following senior managers from local utilities: Bill Ellgas - Lab Manager for EBMUD; Jim Salerno - Environmental Services Manager for SF PUC; and Nathan Brennan - Operations Manager for SF PUC

The panel members developed detailed, situational based multi-part questions to assess the candidates' skill and knowledge in the laboratory and IW areas. Each candidate performed well. The panel unanimously recommended Robert Cole as the top candidate. Rob will be working closely with Nancy over the next several weeks to learn the responsibilities of the position, and will formally take over on August 12, 2003.

Recruitment Results

The recruitment effort for the two senior managers has been completed, and both top candidates have accepted our job offers and signed the employment agreements.

Steve Gittings, the treatment plant manager, will be starting on July 7, and Kurt Obermeyer, business services manager, on July 14, 2003.

Steve was formerly the Deputy Utility Director for the City of Stockton with responsibility for water and wastewater operations, while Kurt is from right around the corner in Fairfax where he has been the Administrative Services Director for the past five years. Staff looks forward to working with both new managers.

MMWD Desalination Status

A letter was sent to Pam Nicolai, MMWD General Manager, after the June Commission meeting thanking Jared Huffman for the informative desalination initiative presentation, and informing MMWD that the Commission authorized staff to participate in the EIR process and engage in formal discussions regarding the possible sharing of the CMSA outfall. MMWD recently issued an EIR request for proposals and intends to award the contract in July 2003.

We have been fielding many questions from environmental consultants that are planning to submit proposals for the EIR. The questions focused on our outfall's design, configuration, and capacity, our NPDES permit limits for metals and dilution credits, and the outfall maintenance history.

MMWD is giving a community desalination presentation at 7:00 PM on June 25 at the Marin Art and Garden Center. Staff will be attending the presentation.

Personnel Manual

The Personnel manual has been revised with the aid of Wiley Price Radulovich and significant contributions from the Agency management team. The revisions focused on clarifying policy language, conformance with the recently adopted 2002 MOU, and updating policies to reflect current employment laws. We have provided MAPE and our union stewards with the revised manual and requested that they notify us if they wish to meet and confer on any of the proposed changes.

Kris Organ, the MAPE business agent, identified some changes that affect bargaining unit working conditions and requested that we meet and confer in the future. To expedite the review process so the new manual can be presented to the Commission for adoption consideration in July, staff recommended a different approach to the meet and confer process than has been used in the past. Kris agreed to a process in which we would meet with the stewards to discuss their concerns and clarify issues, and potentially remove any sensitive changes

that could be discussed more formally in the future.

Through a series of three constructive meetings, the revisions to the manual were thoroughly reviewed and discussed. Clarification was provided when needed and a few changes were made to address bargaining unit concerns. The process was successful and a positive experience for both parties. The stewards have agreed to the manual changes that affect the bargaining unit. We intend to bring this to the July meeting for discussion.

Hearing Tests Agency personnel received their annual hearing conservation program hearing testing. A large van comes to the plant and personnel have their hearing tested and the results compared to previous results. If an employee has a loss relative to previous hearing performance, further investigation will be conducted.

Performance Plans The Agency has completed the personnel performance appraisals for the just finished 12 month period and have developed new performance plans for the next 12 months.

More emphasis is being placed on the development of goals for each employee. Future merit recommendations and performance appraisals will take into consideration completion of these goals.

CAPITAL

Dewatering Improvement

Schram construction has completed the final punch list and agreed to a final change order of \$3,500. The project has been accepted as complete and the Notice of Completion filed with the County of Marin. Change Orders were about \$16,000 or 3.2% of the construction cost.

Cogeneration Engine Replacement

The final design drawings and contract documents for the construction phase of the project have been produced and delivered to CMSA. The project team will review these documents and ensure that our 90% design comments have been addressed to our satisfaction. Public bid advertisement will likely begin the week of June 30th with a bid opening planned for August 5th. Award consideration will be brought to the Commission at the August meeting.

A preliminary review of the Waukesha engine submittal has been completed and we authorized the distributor, Steward & Stevenson Services, to release the engine-generator for manufacturing. This step will reduce the delivery time by about 6 weeks which places delivery in late September. The formal shopdrawings should be received in the near future.

The PG&E electrical interconnection application was

recently submitted as was the Proof of Project Advancement for the PG&E rebate program. To demonstrate project advancement we had to submit the interconnection application, the Permit to Construct from the Bay Area Air Quality Management District(BAAQMD), CMSA's insurance documents with endorsements for PG&E, the engine-generator purchase order, and documentation identifying any changes to the size or efficiency of the project since the initial application. We now have 9 months to substantially finish the project.

CH2MHill will be submitting a request for a design amendment which will be brought to the Commission in the near future for consideration. CH2 has been performing work and tasks beyond their original scope of work to ensure that the project advances to meet the rebate deadlines. Specifically, they spent considerable efforts working with staff on the appeal to the rebate rejection by PG&E which was successful; extra calculations and emissions modeling for the new engine which was an additional requirement of the BAAQMD engineer and needed to obtain the Permit to Construct; multiple correspondence and engine contract document revisions after Steward and Stevenson would not comply with our contract requirements; and finally reviewing submittals for the four pre-purchase equipment contracts.

Secondary Clarifier Coatings

Project We are encouraging the contractor for the coatings work to get started at the secondary clarifier as the summer is a fleeting time and we can always breath a little easier knowing that the unit is available for wet weather operation should the need arise. The contract papers are due from Redwood Painting this week and we have been told that they should arrive within a few days. They have inaugurated their work with product submittals which were received yesterday and are under review. The 'paint' systems that will be used are actually two-part epoxies that will be mixed together on-site as it is needed for application. We will have a full-time inspector on the job with engineering support. There are many parts of this work that must be carried out in a timely fashion. Recognized corroded metal surfaces need to be sand-blasted thoroughly, then followed up with the application of the first epoxy coating or 'primer' coating. Metal edges get the earliest attention and are 'stripe' coated with hand brushes. Edges get this special attention because it is difficult to get coating material to adhere to an edge, so extra coating is applied. After the stripe coating the remaining primer is applied to the prepared surfaces. Then comes the application of the 'top' coat epoxy after the entire surface area receives a 'whip' blast which creates an etched profile on the surface so that subsequent coatings will adhere better. All of this must be done

within time constraints. Uncoated blasted metal surfaces left exposed overnight tend to develop new rust layers which must be avoided since the epoxy will not stick to rust and the corrosion, once established, will continue even after the coating has been applied over it. All of this needs to be done at both the secondary clarifier and the dissolved air flotation unit within 90 days.

CMSA Web Site Planning documents have been developed for the new CMSA web site. The focus of this web site project will be on the content (as opposed to web page special effects). However, we have selected a nice set of tools (Macromedia's 'Studio' web development suite) to complement our talent pool. A four-person steering group is being formed. The development team which will do the bulk of the work will consist of a temporary employee supported by CMSA staffers who will be providing the content. A draft content outline is currently under review. Some of our staff are reading up on web development through a freely available 'e-book' URL provided by an MIT professor, Phil Greenspun (at

<http://philip.greenspun.com/panda/> . The book was written in 1997, the infancy of web page design, but still provides timeless (in the computer world) practical advice. We are also looking for a consultant to help mentor the development team and hope to find someone in close proximity who will be available on short notice and understand network security issues. Some of the web

content may involve the use of real-time plant data. A list of URLs from other special districts has been distributed to management staff for their review and comment. Not many treatment plants or special districts have web pages and these are mostly the larger plants. URLs that have been awarded 'Webbies' are also on the review list so that we can get a glimpse of state-of-the-art.

Gas Mixers In our efforts to stay 'ahead of the curve' on equipment reliability we are scouring the market place to find replacement components for the digester gas mixing system. The two CMSA digesters are where we heat and treat our sludges from the primary clarifiers and from the secondary treatment system. The process reduces the amount of sludge, kills pathogens, and produces the methane gas that we use to make electricity and heat water.

The original mixing equipment was assembled and marketed by FMC Corporation. However the compressor assemblies which are no longer manufactured (and therefore obsolete) were made by the Chicago Pump Company. The heart of the assembly was provided by yet another manufacturer, Lammert-Mann, which no longer exists. At the time this equipment was made Chicago Pump was owned by FMC. They have since separated from FMC, but no

longer make the compressor assemblies. That part of the business was acquired by US Filter which markets similar equipment out of their manufacturing facilities in Pennsylvania.

We are looking at what our options are with possible support from US Filter while also investigating what is available on the market from a variety of manufacturers. The companies that make these kinds of compressor systems are not easily referenced through wastewater-related marketing institutions, but are focused primarily on utility natural gas pumping.

Marin Map Staff attended a presentation on the "Marin Map" project. The Marin Telecommunications Agency, the County JPA which manages the Marin Map project, is proposing to add a photographic layer to the existing project. The photos would, of course, be aerial and be done for \$253,000. They expect pinpoint accuracy as far as alignment among the seven layers of the mapping project which includes parcel maps, streets, storm water systems, and "working projects." The 'drop dead' date for raising the initial sum is approximately September 15th and the work, if it proceeds, will begin in October.

They also intend to maintain the photos. With this agreement

MTA-Marine Map will selectively retake them annually (for four years) based on construction activity records. There will be two levels of resolution for urban versus rural settings. Access is browser-based, via Autocad downloads, or through other applications such as Arcview. Their geographic limits are the land forms so the marine area containing our outfall will not be shown for the most part. The presentation was made by Mike Smith, a consultant who is Program Director for Marin Map. He was ably assisted by Richard Scott (Principal Engineering Technician for Novato Public Works). Mr. Smith is available for presentations to local governments. The cost to each government agency will be an initial \$20,000 plus subsequent annual fees of \$10,000. Members gain access to Marin Map data in return. What advantage CMSA would gain from that access is not clear.

OPERATIONS

Paradise Nitrate Stations

Operations and Pump Station personnel have received training on a new SOP for operating the odor control chemical storage tanks at the Corte Madera Paradise pump station. There are two valving modes in which the two tanks may be used: both supply valves from the two tanks open to the chemical dosing pump (parallel mode) or with one supply valve open from only one tank (series mode). Previously, the tanks had been operated in parallel, but if one tank were to fail, the contents of both tanks

would be lost. By operating the tanks in series, that contingency is avoided. Pump station personnel visit the station every week day to monitor chemical usage and pump performance. Now that the tanks are operated in series, the pump station guys will change the tank supply valve positions as required to ensure a continuous supply of chemical to the dosing pump. They also report the chemical inventory each week day to the Operations Day Supervisor who schedules deliveries of the chemical. No additional station visits or chemical deliveries result from operating the tanks in series.

NPDES Reports Operations Supervisors performed a review of the Agency's electronic O&M manual as required by the NPDES permit. The results of that review are presented in an annual status report to the Regional Board. Reviews of the Agency's contingency plan and of the facility were also completed and reported to the status of both reviews were sent to the Board as completed.

Ops Supergroup The SuperGroup (consisting of the three shift supervisors and the superintendent) met for the last time on 16 June 2003. We anticipate a similar group will be formed after the new Plant Manager is on board. The agenda included a review of the Department's wet weather on call program, update and revise shifts' areas and tasks of responsibilities, and discussion

of how to improve measurement of received chemical deliveries.

LAB

Commercial Lab Contract, Concluded: The Commission agreed with staff's recommendation of Caltest Analytical Laboratory to perform commercial lab services for CMSA. The contract has been awarded and begins on July 1. We look forward to another productive working relationship with Caltest.

Bioassay Concerns (Ammonia) Our effluent ammonia levels have recently reached dry weather concentrations, which are within the range where the toxic form, unionized ammonia, can be produced at levels high enough to kill fish. Ammonia is not a problem in the Bay and we have no NPDES Permit limit for it. Other POTWs have been allowed by the Regional Water Quality Control Board to adjust their effluent pH in their routine testing so that unionized ammonia formation is minimized. In order for CMSA to do so, we have to fulfill a number of requirements. We have just completed testing of the effluent at 3 different pH levels, which resulted in different fish mortality. We hope to have the RWQCB's

okay to adjust the pH in our routine testing soon.

Bioassay Concerns (Chlorine)

In June we killed a number of fish in the control water in our routine testing. This is very unusual. The control fish have to survive; otherwise, this tells us that something is wrong and the test is no good. After looking into a number of possible causes, it appears that the reason is that MMWD has increased the amount of chlorine (in the form of chloramines) in tap water. Chlorine kills fish in very small concentrations. Our 2 activated carbon cartridges, which treat the tap water prior to its use as control water in the test, are not able to take it all out. We are in the process of adding 4 additional cartridges.

INDUSTRIAL WASTE

Marin County Fair- For the ninth consecutive year, CMSA and LGVSD will have a public outreach booth at the Marin County Fair, July 2 through July 6. Booth staff will answer environmental questions, network with local teachers, and administer environmental quizzes. See you there!

Stormwater Citation- CMSA issued an administrative citation to a San Rafael automobile dealer for violation of the City of San Rafael's storm water ordinance. The City has authorized CMSA Industrial

Waste Inspectors to issue citations for storm water violations. The citation results in a penalty of \$500.

MAINTENANCE

Security Update The San Rafael Police Department is helping us assess our security vulnerability. Staff met with three representatives of the SRPD to look at and discuss our security issues. Crime Prevention Volunteer Emil Bettini along with Sergeant Jonathan Bean and Lieutenant Jim Kelly met with Jason and Dick to go over some of the potential security issues at the plant. The recommendations previously recommended by staff were discussed and all seemed to agree with our approach. Following our "round table" discussion, Dick took the group for a tour of the facility. During the tour many ideas came out on how to bolster our security. We will receive a report from the SRPD group with their recommendations.

CMMS Selection Our Computerized Maintenance Management System (CMMS) initiative committee met with CH2MHill engineers last week. This was the first step in preparation of a Request for Proposals (RFP) to select new CMMS software.

At this meeting we identified CMSA's Asset Management

and CMMS practices and requirements. This information assisted us in creating a complete list of required and desired features that we rated with a weighting process. This weighted list will be part of the RFP that will go to qualified CMMS vendors. A draft RFP is schedule to be complete by July 1, with the final RFP going out in mid July. After purchase of the new software, the training and implementation phases will follow.

A CMMS is the first step and the backbone of an Asset Management system. Our goal is to track our asset's condition, cost, reliability, useful life and utilize this information to assist in decision making.

Sanitary District #2 Flow Meter The flow meter at the Corte Madera meter vault has not been operating properly. The vault was flooded a couple times over the years and thus some damage to the electronics has resulted. Our Electrical/Instrumentation staff has been able to resurrect the meter thus far, but we are evaluating it's current accuracy and future reliability. We will recommend a schedule for replacing when our analysis is complete.

Dechlorination Improvement Project Preparing for installation of the new

cabinets, controls, and new vault sump pumps. This is being installed into the new building that was erected above the vault. This project will be involving both Electrical/Instrumentation and Mechanical staff.

Summer PM's Maintenance staff is working on the summer Preventive Maintenance on all the equipment that is critical for wet weather operation. This includes primary clarifiers, bar screens, grit system and channel and sluice gates. We do a visual inspection of all this equipment and repair as needed in preparation for Winter.

