
CMSA Newsletter

Central Marin Sanitation Agency

June 2004

GENERAL

Staff Retirement

Our Staff Engineer, Tom Rose, has announced that he will be retiring from CMSA on October 8, 2004, and will be taking advantage of the recently adopted 2-yr PERS service credit.

Tom has been an employee since 1983 and was originally hired to assist with the testing of the facility's instrumentation and process control systems prior to start-up of the treatment plant. Since then, Tom has been in-charge of the majority of engineering and capital related studies and projects at CMSA. He is responsible for initiating many of the facility improvements during his tenure.

We congratulate Tom on his retirement and wish him the best in his future endeavors.

Reclaimed Water

Earlier in the year, Joe Garbarino from Marin Sanitary Service (MSS) expressed interest in using CMSA's reclaimed water for dust control at the MSS transfer station and recycling facility. Reclaimed water is regulated by the Regional Board and must meet enhanced disinfection standards (Title 22). Joe and our General Manager discussed a potential arrangement in which CMSA could provide

water in exchange for some garbage service.

Staff has completed a program that assessed what is needed to provide MSS with the water. Our findings are that providing the water is feasible. Marin Municipal Water District has an open permit with the Regional Board that can be used for MSS needs. We have a loading facility that can be used with their water truck, and we implemented a program to meet the disinfection levels. MSS has been advised of our findings, and we will hopefully meet in the near future to discuss site access, filling procedures, and an equitable arrangement as previously discussed.

Strategic Business Plan (SBP)

In early June, the strategic objective development workshop was held with Red Oak Consulting and our management committee. For each of the six organizational goals previously developed we proposed between 2-4 objectives. The objectives are specific, measurable, action oriented, time dependent actions to achieve the goals. The staff focus group met the following day to review the SBP progress to date and to contribute their ideas, which will be considered and likely incorporated into the draft SBP.

Phase 1 of the SBP is now completed and Red Oak will be presenting the draft SBP to the

Commission at their July 13th Board meeting. Phase II, implementation, is scheduled to kick-off in late July/early August.

Regionalization Study

The Commission recently requested a proposal from Red Oak Consulting to conduct a regionalization study. The scope of work is comprised of two phases. The first will assess the strengths and weaknesses of the current multi-agency governance model. In the second phase, the Commission will work with Red Oak to identify three scenarios for change. Advantages and disadvantages of the alternatives will be presented, and each will be compared to the current organizational structure.

The proposal was approved at the June Board meeting, and the Strategic Business Plan agreement has been amended to include the regionalization scope of work and fee. The study will commence in early July with the Phase I findings to be presented at the September Commission meeting.

Building Permits

One of the documents that we need to submit to PG&E to receive our \$560K grant for the cogeneration project is an approved building permit from the City of San Rafael. Our understanding has been that CMSA is a self-regulating entity and thus did not have to apply for building inspections/permits on our maintenance and capital related projects. We searched our administrative files and could not find a formal document stating this from San Rafael.

Staff researched the topic and discovered a Government Code (GC) section that exempts water, wastewater, and power generating entities from City and County inspection requirements. The relevant sections of the GC were reviewed by our legal counsel and they provided an opinion letter advising that we are exempt as long as our projects are within the definitions of the GC provisions. San Rafael has indicated that they are in agreement with this interpretation and will be sending us a letter shortly.

BUSINESS SERVICES

Business Services Manager

CMSA's prior Business Services Manager (BSM) resigned in early February 2004, and since that time, the Agency has had a temporary employee, Robert Niccolai,

serve as acting BSM. Robert integrated well into the organization and contributed significantly to the development of the strategic business plan, improvements to departmental policies and procedures, and implementation of the newly reformatted 2-year budget.

In lieu of performing an open recruitment process to hire a permanent BSM (as stated in CMSA's Personnel Policy), the Agency's General Manager (GM) recommended to the Board during the June 2004 Commission meeting, to make an exception to the policy and authorize the GM to appoint Mr. Niccolai into the permanent full-time BSM position. The Board agreed with the General Manager and approved the recommendation.

Budget

The fiscal year (FY) 2004/2005 budget was adopted at the June 8, 2004 Commission meeting. The budget for FY 2005/2006 has not yet been adopted due to pending Commission decisions regarding future sewer service charges (SSC) and reserve funding.

The budget document includes funding sources, EDU summary, operating account summary and detail, a 5-year capital improvement program, a 5-year summary and detail forecast projecting the Agency funding and spending to 2009, proposed appropriations for restricting funds for the Agency's reserve cash and investments, and descriptions

for each operating account and capital project/initiative.

The operating budget has been significantly modified from our prior budget format, which was organizational based. The new format is department based and has individual staff members responsible for the management of each account. This provides the Agency with a greater understanding of our expenditures and therefore can be more accountable for them.

Contract Management

During the June 8, 2004 Commission meeting, the Board approved staff's recommendation to award the biosolids hauling contract to Total Waste Systems, Inc. (TWS). CMSA contracted with TWS on its prior biosolids hauling contract, which expired on June 30th, 2004. Bid packages were sent to seven potential biosolids haulers, and received only one responsive bid. The new contract bid cost is 17.6% higher than the prior contract, due to greatly increased workers compensation insurance and fuel costs. CMSA produces 7,200 wet tons of biosolids annually, which is transported to the Redwood Landfill for beneficial reuse as alternative daily cover, and to the Lakeville land application site for use as a soil amendment for hay crops.

The Board also approved staff's recommendation to

award the sodium bisulfite supply contract to Basic Chemical Solutions, LLC, during the June 8, 2004 Commission meeting. CMSA contracted with Basic Chemical Solutions on its prior sodium bisulfite supply contract, which expired July 1, 2004. Three responsive bids and two no-bid responses were received. Of the three responsive bids, Basic Chemical Solutions was the low bidder with a unit cost of \$0.424 per gallon. The \$0.424 represents a 12.14% reduction in unit cost. With an annual sodium bisulfite usage at 110,000 gallons, CMSA expects to save approximately \$6,446 annually. CMSA uses sodium bisulfite to neutralize residual chlorine in its final effluent, prior to discharging into the San Francisco Bay.

Contract Invoicing Credits

CMSA's Contract Manager, Steve Egbert, has been reviewing all vendor and service contracts to ensure full compliance with all terms and provisions. Auditing of the Polymer Supply, Nitrate Salt Solution and Sodium Bisulfite Solutions contracts identified several contract provisions that were not being properly adhered to. The enforcement of these provisions generated the following: 1) a \$10,000 credit from our sodium bisulfite supplier, 2) a \$7,600 credit from our nitrate salt supplier, 3) a correction in billing from our polymer supplier that will save CMSA \$7,000 annually.

CalPERS Regional Pricing

The California Public Employee's Retirement System (CalPERS) Board of Administration approved health care cost "regional pricing" for public agency members enrolled in Basic plans. Five regions have been designated by the CalPERS Board and include: San Francisco Bay Area/Sacramento and adjoining counties, other Northern California counties, Los Angeles/Ventura/San Bernardino counties, other Southern California counties and out-of-state. The pricing will go into effective January 1, 2005.

Since health care costs vary throughout California, regional pricing was implemented to adjust premiums to reflect the actual cost of health care in a specific region. Without regional pricing, those living in a low-cost region would be paying premiums in excess of market rates. Those in high-cost regions would pay less than market rates. In 2004 alone, the CalPERS Health Program lost 37,000 public agency members (mostly in low-cost regions) from employers who quit the Program, since regional pricing was not offered. Regional pricing ensures that CalPERS premiums are competitive throughout California, stabilizes costs, and provides contracting employers an increased incentive to remain in the CalPERS Health Program.

Each health plan will have price premiums to reflect market

costs in the five regions. Northern California region however, will pay more than 11% over the premium for all State members. Agencies in the Sacramento/Bay Area and Northern California regions will pay more than those in the Los Angeles and other Southern California regions. Regional premium rates, however, will remain competitive.

CAPITAL/ ENGINEERING

Wet Weather OPS Manual

CH2MHill has submitted a working draft version of the Wet Weather Operating Procedures Manual. The draft is based on a similar document that the State of New York has adopted, which provides direction on activities to be performed for each treatment process before, during, and after a storm event. This template incorporates information from our recently developed Wet Weather Monitoring Program, an existing standard operating procedure, and the recent engineering studies that indicate how much wastewater can be pumped to CMSA by our members and how much we can discharge to the Bay.

Staff are currently reviewing the manual and will be providing comments to CH2MHill within the next few weeks. After a workshop in

July, the draft manual will be submitted and there is another opportunity for review and comment. Our goal is to create a sound well developed document that captures our operations staffs experiences and will be used as a best management practice during these wet weather events.

Forcemain Model

Nolte Engineering has provided the preliminary results of the forcemain collection system model. The information used to construct the model was provided by our member agencies, primarily by Nute Engineering who does most of their sanitary sewer related capital work. The first scenario, all normal pumps operating, indicates that 125 MGD can be pumped to CMSA. The second scenario modeled is for all pumps, including back-ups, operating which shows 155 MGD can be pumped to CMSA. It is unknown if the collection system can transport this much to the primary pump stations. When Nolte was asked this question they responded that if the sewers can if they are surcharged.

The preliminary report will be presented by Nolte at the July 14th JPA manager meeting. The final report will include responses to any JPA manager questions, and the third scenario, which models planned future improvements. All modeling is done in a SewerCad software program

and the electronic files will be provided to the JPA members for their future use.

Cogeneration

The prime contractor, SR Hamilton Inc (SRH), for the cogeneration job was back on-site on June 11th. However, the electrical subcontractor, Mike Brown Electric (MBE), has returned for only a brief visit to refresh their memory of where they left off. Even though we informed them that the crucial switchgear panel had arrived they did not respond to the news immediately and when they did respond they stated they would be returning on June 21st, but were a no-show. We had requested a new schedule from them on May 19th and made repeated requests to them for that schedule. Their work is the most critical to the project at this point.

Now they are saying they were severely impacted by the delays in equipment delivery and also saying that overtime will be necessary for the remainder of the job. We've asked them to target the time frame between now and August 15 for completion of the electrical and control work. They've guaranteed that a revised schedule will be delivered on July 7th along with a detailed accounting of the overtime and extra costs.

At the same time, we've asked another electrical contractor to consider the work and give us a quote. The best and easiest thing that can happen is that MBE will return to the job site full time and devote the resources

necessary to complete the work by August 15th with reasonable claims. The most extreme scenario would involve a subcontractor substitution which would need to be formalized at the next Commissioner's meeting (July 13). Fortunately, we will have information to compare estimates for the remainder of the work.

On another front, this one with our engine vendor, our counsel Steve Lawrence, wrote a letter on June 25th to Stewart and Stevenson which gives them an advance description of the kinds of damages they can expect and advises them to respond to our continuing needs quickly.

Back on the ground, SRH has been preparing to put the silencer up on the roof and complete the assembly of the exhaust system. They have anchored the heat recovery unit with 1-inch diameter threaded rod embedded in epoxy which will be tested at 9,000 lbs of pullout tension. They have also hoisted the heat exchangers into their wall mountings and connected up the piping around them.

We are in the process of tracking down the remaining instrumentation. It turns out that Stewart and Stevenson (engine supplier) has not provided all of the gages and transmitters, particularly around the engine cooling systems (heat exchangers). There are about a dozen of these and they have promised a response by today.

Next week, post July 4, will mark a very intense week of decision-making as we receive and consider the newly revised schedules from the contractor and alternative estimates for the remaining electrical work.

Primary Clarifier Coatings

We are going to attempt to coat three primary clarifiers this summer. The bids were advertised in mid-June and the bid opening will be on Tuesday, July 13th - in time to be considered for award at the Commissioner's meeting that evening. We had some difficulty in getting the scope of work defined as one of the three clarifiers was pressed into operation due to a mechanical failure in one of the operational tanks. We finally got that one cleaned up, pressure-washed, and marked up with red paint to define those areas that will need sand-blasting down to "near white metal."

Many of the components will receive the complete treatment, but most of the focus of our attention and most of the surface area involves the effluent launders. To help facilitate the scope we broke each of 18 launders into 14 components for evaluation. That is 252 components which need to be estimated for near white metal blasting. Two estimators, working independently, came to within a few percent of each other overall for the three clarifiers. We try to limit the extent of near-white blasting to the minimum surface area needed

as it is the most expensive part of the coating work.

Operations has requested that we hold one of the three out-of-service clarifiers as a "contingency" clarifier. That is, they may need to put it back into operation in an emergency. For that reason we are asking the bidders for a 'per clarifier' price and will compensate depending on how many of the clarifiers are available. There is an outside chance that we may not be able to complete all three clarifiers this summer if there is a process need and the third clarifier is put back into operation. The likelihood is that we will complete all three.

Capacity Study

We prepared a Request for Qualifications (RFQ) letter for our Capacity Management Alternative Study and sent the document to over a dozen engineering firms. If interested in the study, they are to respond by sending their Statement of Qualifications (SOQ), which we have asked them to focus in the areas of pump station design, hydrograph development, and similar capacity related projects. Staff plans to evaluate the SOQs over the next week and select the top four firms to continue in the evaluation process.

Award is anticipated at the September 2004 commission meeting.

SERVICES

NPDES Testing

All sampling in June was in compliance with our NPDES permit limits. Our copper levels for June and May were very low indicating the elevated copper levels we experienced in March and in one of the two samples we collected in April are not typical of our effluent. The additional testing of recycle flows from the centrifuges, different influent and effluent locations, chemicals that are added to treat the wastewater, and hauled waste loads did not show elevated copper in any of those sources. The same effluent sample was analyzed using a different laboratory and the results showed a 41% lower value indicating the possibility of laboratory error or contamination. Novato experienced a similar elevated copper level at the same time using the same contract laboratory.

Bioassay Test

We had 100% survival of the fish in the June bioassay. Every month we are required to perform a 96-hour bioassay that runs continuously from Monday to Friday. The purpose of this test is to assess the effects of our effluent on the survival of rainbow trout.

Biosolids

Late in the afternoon on Thursday June 10th, we were informed by Synagro, our land

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application manager, that there was trash mixed in with our biosolids. Synagro also mentioned that Sewerage Agency of Southern Marin had some trash mixed in their biosolids. The representative from Synagro said the trash had not passed through the digestion process at a wastewater treatment plant and was mixed into the pile indicating it was in the truck that had hauled the biosolids and not dumped on top of the pile.

They requested we remove the trash as soon as possible because it could rescind their permit to land apply biosolids in Sonoma County if the County inspected the site. On Friday, June 11th we inspected the biosolids pile and removed the trash which was traced to offices at a subsidiary of the North Bay Corporation from names on the trash that was removed. North Bay Corporation is the parent company for Total Waste Systems, who currently hauls our biosolids. They were informed of the problem and the consequences of adverse publicity, possible regulatory actions, and an increase in cost of \$10,000 if Synagro's contract with CMSA is terminated resulting in disposal at Redwood Landfill. Total Waste Systems assured us that the problem would be addressed and would not occur in the future.

LGVSD Assistance

We drafted a letter for Las Gallinas that will be mailed to

all of the food service establishments in their service area informing them that they will be implementing a program to reduce the amount of Fats, Oil, and Grease (FOG) released to the sanitary sewer. It educates and informs them that FOG causes problems in the sewer lines and that LGVSD with assistance from CMSA will be visiting the businesses to survey what FOG control measures are in place and their maintenance practices.

Public Outreach

We have been preparing for the Marin County Fair, which is our largest public outreach of the year. Last year over 2300 people visited our outreach booth and took our environmental quiz. This averages to over 40 people an hour taking the quiz. We also had many people stop by to ask environmentally related questions and inquire about who we are and what we do. It is a chance for everyone to learn about CMSA and sanitary related issues, and is an effective tool for public participation and education.

Remillard Pond Reclaimed Water

We provided Remillard Pond in Larkspur with reclaimed water from CMSA to protect an endangered species of turtle that lives in the pond. The level of water in the pond had dropped substantially due to the warm weather and we provided water the weeks of June 13th and 20th to increase the water to a safe level. This will continue during the dry season as-

needed to maintain a safe environment for the turtles.

Industrial Waste

We re-issued the permits to all of the facilities in our service area that have interceptors for the control of washwater that is released to the sanitary sewer. The interceptors are pretreatment devices that help separate out petroleum, metals, and solids from water. The interceptors are located at all of the auto dealerships, body shops, and detail operations that wash automobiles. We inspect each facility to ensure that the water leaving the interceptor complies with our discharge limits and that the interceptor is maintained properly. Additionally, we do a general inspection of the facility to ensure their chemical inventory is stored in a manner to reduce accidental or deliberate release to the sanitary sewer.

OPERATIONS

Certification Exams

Virgil Sevilla one of our newest employees has successfully passed the Grade III Operator certification exam. Once he has had enough time in grade or education he will automatically move from OIT level to his highest certification .

Nitrate Dosing/Odor Control

A Nitrate Salt solution is added at four pump stations in

the service area. This chemical prevent the formation of odorous sulfide compounds, which are the most commonly associated with wastewater. Due to increased temperatures and hydrogen sulfide levels of our influent, we are increasing the dosing rates closer to our normal summer levels

Digester Gas Compressor Capacity Study

We are currently doing a capacity study to determine replacement needs for these compressors. With this information we will be able to purchase the correct size compressors with a more efficient motor.

Process Control Team (PCT)

The current projects being worked on by the PCT are the gas compressor capacity study, followed up by tests on improving our Dissolved Air Flotation process. If we can achieve better performance from this unit it has many impacts on all facets of our solids handling.

Aeration Diffuser Cleaning and Performance Checks

Operations has begun cleaning the "tube sock" style diffusers used in our activated sludge basins. Each year during dry weather flow periods, we clean, inspect and test these diffusers for wear. They are currently 5 years old and have a recommended life span of 5-7 years.

MAINTENANCE

Training

Our groundskeeper attended a workshop put on by the Marin County Department of Agriculture. The discussion focused on the issues relevant to landscape and maintenance operations in parks, schools and open space area. Topics included updates on common pest and weeds, bird management, pesticide safety and irrigation and water management.

Coating Preparation

Maintenance and Operations systematically removed the effluent weirs from Primary Clarifiers #2 and #3 launders. This will facilitate the blast cleaning and industrial coating of the launders in the upcoming primary clarifier coating contract.

Waukesha Engine

Performed Waukesha monthly oil, filters and spark plug change. Our weekly results from the Waukesha emissions testing were good. Each oil/spark plug change costs approximately \$900. We anticipate less frequent oil changes with the new engine.

SD#2 Contract Work

District 2 pump station's wet wells were all washed down and vactored out. This will prevent grease build up and odors.

Aeration Inspection

Staff Inspected the #3 & #4 aeration tanks, which is part of our yearly PM program to check

for torn rubber diffusers or air leaks on the piping system. We have dollars in our CIP to replace one tank's diffusers this year.