
CMSA Monthly Report

Central Marin Sanitation Agency

May 2004

GENERAL

Safety - Pump Station Inspection

The annual pump station safety inspection took place on May 13th for the Belvedere pump stations. Several minor safety problem areas were identified. Steve Egbert, the Safety Committee Chairperson, has completed the inspection summary report for both Belvedere and Corte Madera pump stations (SD #2 inspection was completed April 29). Steve will schedule a future Safety Committee meeting to develop solutions for the identified problem areas.

Ergonomic Evaluation

On Tuesday, May 25, 2004, Jan Smith of Ergonomic Solutions conducted an on-site ergonomic evaluation of seven 'high-priority' workstations. The seven workstations were identified as high-priority based on a previously conducted survey of CMSA staff by Safety Specialist Elayne Haller and Safety Committee Chairperson Steve Egbert. CMSA staff workstation complaints included aching backs and numb hands from ill-fitting or improperly adjusted chairs and improperly aligned monitors, keyboards and mice. Upon completing her analysis, Jan will provide recommended

changes for each individual workstation.

BUSINESS SERVICES

Budget

The FY 2005 & 2006 budget process is continuing on schedule. The operating budget summary, operating budget detail, and capital budget have been completed and were tentatively approved by the Board's Budget Committee on May 17. The 5-year forecast detail and 5-year forecast summary documents have also been completed. Revisions to overall budget analysis and recommendation documentation are in progress and scheduled to be presented to the Budget Committee, along with the financial documents, at the June 8, 2004 Commission meeting.

Contract Management

The Board awarded the Hydrogen Peroxide contract to Univar USA, the apparent low bidder, during the April 13, 2004 Commission meeting. The contract was executed on May 7, 2004.

During the May 11, 2004 Commission meeting, the Board approved CMSA's recommendation to execute a one-year extension of the current Polymer Supply Contract with the existing supplier, Polydyne, Inc. The current polymer contract with Polydyne will expire June 30,

2004 and the supplier offered to extend the contract with the existing contracted provisions and costs until June 30, 2005. Normally, we would put this contract out to bid. However, there are significant extenuating factors which make the contract extension a more practical decision for CMSA. The most significant factor is that Polydyne is apparently the sole supplier of liquid polymer in Northern California. The extension will give us time to look for and evaluate other alternatives. The offer to extend at the same cost is also significant. The contract extension was executed on May 17 and will go into effect July 1.

The current Sodium Bisulfite contract will expire June 30, 2004. Following the distribution of bid packages to five prospective bidders and an advertisement in the Marin Independent Journal, a pre-bid tour was conducted on May 10, 2004. Bid opening took place on May 17, 2004 and the apparent low bidder was Basic Chemical Solutions, LLC. A 'Recommendation To Award' supported by a survey of current Sodium Bisulfite costs at other plants are being prepared and will be presented to the Board at the June 8 Commission meeting.

The Biosolids Hauling contract will also expire June 30, 2004. The Biosolids

Hauling bid package was completed and sent out on May 7. A bid advertisement was also placed in the Marin Independent Journal and a pre-bid tour was conducted on May 25. That bid opening is scheduled for June 1.

The Natural Gas renewal agreement with California Utilities Buyers (CUB) was executed on May 24, 2004 and will be effective July 1, 2004. The agreement allows CMSA to purchase natural gas for the cogeneration engine through CUB's cooperatively managed natural gas pool procurement process.

CMSA runs the engine about 9 or 10 hours per day on 'sludge' gas produced on-site. For the remaining 14 hours per day purchased natural gas is used in the engine.

CAPITAL/ ENGINEERING

Cogen

We were recently told by the engine generator set vendor that the long-delayed switchgear and control system would be shipped in late June and should arrive at CMSA by June 28th.

Unfortunately, the contractor, who has been back here for a few work days a week ago, has pretty much committed on other work (mostly in Marin County) and will probably not return to the job until the middle of June.

This is a pretty typical problem caused by delays in construction (that is, more delays). Work stops due to a lack of equipment or other causes, and the prime and subs scatter to find other work to keep them occupied in the meantime. It then becomes a challenge to shake them loose of their other commitments and get them back on-site.

We've asked SR Hamilton (our prime) for a new schedule and are hopeful that this job can still be completed before the expiration of the grant extension period - or at least made "substantially complete" and operational by then. However, we are prepared to go back to the utility and ask for more time if the revised completion date is close to the end of our grant extension from PG&E.

All other major pieces of equipment have arrived. The most major mechanical job left is the installation of the exhaust system and location of the silencer up on the roof. After that, it is all controls.

Coatings

With the coming dry season primary clarifiers are being taken out of service and planning has been initiated for protecting our exposed metal surfaces from the corrosive effects of wastewater. We are electing to attempt to have three of the five primary clarifiers coated this year and will keep two in operation through the summer. However, we may have to decide at some inconvenient time to press one of the three available clarifiers

into service, thus making it unavailable for coating work. To help facilitate this contingency, the bid document will be structured so that a clarifier can be eliminated from the scope of work in the event of an operational need to place it back in service.

As a result of a recent plant-wide survey, we plan on coating three primary clarifiers this year, one secondary clarifier next summer, and recoat the solids handling facility sludge hoppers three years out.

ENVIRONMENTAL SERVICES

NPDES Testing

The last two months showed elevated copper levels during our NPDES testing. The month of May had the lowest copper level we have seen in the last year and the second lowest result we have seen in the last three years. All sampling in May was in compliance with our NPDES permit limits.

Bioassay Test

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. We had 100%

survival of the fish in the May Bioassay.

Biosolids

We began land application of our biosolids at the Lakeville Site in Sonoma County on May 24. During the dry season, from May to October, we beneficially reuse our biosolids as fertilizer for growing crops that are not used for human consumption. The biosolids are incorporated into the soil before the rainy season where hay and alfalfa are grown. Synagro manages the land application program for CMSA at the Lakeville site. They are also managing similar programs at the Lakeville site for the City of Pacifica, Sewerage Agency of Southern Marin, City of Windsor, and accepting limited quantities of biosolids from the City of San Francisco and the City of Santa Rosa (if they exceed the capacity of their own composting programs).

LGVSD Assistance

We assisted LGVSD with their Wetlands Days where they had 500 third grade school children tour their plant and wetlands over a 3 day period. This was part of the 5 day outreach program this Spring at LGVSD which also includes Earth Day for first graders and CA Water Resources Day for fourth graders(150 students). We assisted them for one of the three Wetlands Days and on Earth Day helping out in the laboratory and classroom facility.

We have continued to advise and assist LGVSD with a commercial discharger that services water softeners. We have collected additional samples over a 5-day period to document the excessive chloride and zinc levels that are being discharged. LGVSD issued a compliance order to the discharger, but it was extended due an appeal from the discharger for additional time to develop options to achieve compliance. They were granted an additional 60 days from the initial order of 180 days giving them 240 days to submit their schedule and achieve compliance.

Public Outreach

On May 19th Sir Francis Drake High School had 60 students and teachers tour CMSA. We provided a short lecture explaining about wastewater treatment, collection, and storm drains and how we treat the water at CMSA. We then split them up into three groups and toured the plant explaining each process and how it functions.

Industrial Waste

In response to the elevated copper levels in our effluent for March and April, we are continuing to study sources of copper and collecting and analyzing samples from hauled waste in May. We will review the data and determine if we can identify an impact. We are also studying other potential sources of copper at individual plant processes including recycled flows and chemical additions. It was most likely a short concentrated flow of

elevated copper, but we will try to investigate any possibilities we can identify.

OPERATIONS

Operator Certification

Sandy Batis, one of our newly hired OIT's, has passed her grade I operator certification exam. Three other operators will receive their test results after June 25th.

Process Control

Al Fiore, our Process Control Coordinator, has started a process optimization program and has chosen the Bio-Tower as the first area for gathering base line data. The Lab is assisting by collecting BOD samples to measure treatment efficiencies.

Aeration Tank

We are starting to take processes out of service for dry weather mode. No. 3 aeration tank is now off line and two grit tanks are scheduled to be taken out of service next week.

Chemical Delivery

Reconciliation

In coordination with Steve Egbert, contract manager we have started a monitoring program where we will have better measure of chemical deliveries and reconciliation of inventories. This is an effort to save as much as possible on chemical costs.

Chemical Safety Training

With the beginning of two new contracts, the Operators have

received their latest training on safe handling of ferric chloride and hydrogen peroxide.

Ferric is used for primary settling during wet weather and peroxide is used for odor control.

Safety training is routinely included in the chemical supplier's scope of work as part of the supply contract.

Polymer Trials

We will have a newly identified polymer vendor come in to test their products with a full-on test with our centrifuges. They have previously demonstrated their product with two hopeful samples by performing jar test scale bench tests in our lab.

Centrifuge Testing

Swing shift operators, Jean Saint-Louis and Chris Finton have been conducting tests with our new centrifuges in an attempt to regain the 26% total solids capture rate we had been achieving earlier. We believe the recent drop in centrifuge efficiencies was due to changes in sludge conditions that normally happen between wet and dry season.

NPDES Reports

Operations Supervisor, Doug Miller is finalizing the reports on plant staffing, planning, and conditions. These are sent to the regional board every June as part of meeting our NPDES permit.

MAINTENANCE

Road Gate Entry

The security card access system has been extended to control access to the road gate for entry into the treatment plant. All of the plant vehicles have a transponder installed that will open the gate on approach.

Belvedere Pump Station Alarms

The Belvedere pump stations have been upgraded with radio telemetry replacing the data phone lines. The contractor working for the city has transferred all of the station alarms to the radio system and the data lines have been disconnected. CMSA staff has built graphic pump station status displays and alarming into the Process Control System at CMSA. The added information will help with staff response to needs of the stations. The contractor is trying to complete the project in the next few weeks. After completion CMSA will have information on the status of the pumps, wetwell level alarms, communications failures, and utility power status.

Maintenance Lead

Mike Gardea, the newly appointed maintenance lead, is taking a nine hour course at Indian Valley Campus which pertains to the use of the Excel software program. He will learn the basics of creating spreadsheets, modifying, printing and formatting worksheets, working with basic

formulas and working with charts.

Waukesha

Waukesha oil, filters and spark plugs were changed during routine preventive maintenance. The engine, which will soon be replaced, continues to save us about \$30,000 per month in electrical power costs.

Hillside Cleanup

The San Rafael Public Works Director informed us that the heavy storms of January and February 2004 caused a small mudslide into our drainage V-ditches on the hillside above Andersen Drive. It was requested that we remove the debris before the wet weather season. Maintenance crews cleaned the ditches as it is in our best interest to remove the debris and dirt in order to prevent future flooding and landslides.