



## MONTHLY NEWSLETTER

September 2009

### PROJECTS

#### **Wet Weather Improvement Project**

The WWIP continues to progress ahead of schedule with structural work at the new primary clarifier area nearly completed. Primary clarifier #7 has been water tested and the new primary effluent and blending channels are nearly completed. The new plant road between the new primaries and the retaining wall has been graded, and will be paved by mid-September. The paving should be wrapped up by mid-October.

All the equipment is installed in the new chlorine contact tanks and their final measuring weirs are being adjusted. The effluent pump station equipment is all wired and the wiring terminations and loop testing are underway. Startup, operational testing, and training will take place in September, and should be wrapped up by early October, so that the effluent pump station will be ready for wet weather.

Lotus Contractors is making good progress; nearly all of the original construction joints have been reconditioned, and the deck coating at the chemical storage building and the original CCTs have been replaced. The biotower and Gallery B roof recoating is well along, and all work should be finished by mid-September.

#### **Outfall Crack Investigation**

Staff is obtaining permission from the landowner to stage equipment and access the outfall for the

investigation and, if needed, repair. Once permission is granted, staff will apply for permits and authorizations from the relevant regulatory agencies to perform the work. In June, the Board authorized delivery of this project under an extra work order to Western Water Constructors, the WWIP contractor, and work will go forward as soon as regulatory authorizations are obtained.

#### **Outfall Cleaning**

This project was completed ahead of schedule, and will be presented at the September Board meeting for acceptance. Veolia ES Special Services and Tidal Marine, their diving subcontractor, worked expeditiously and economically. Unexpectedly rapid shifts in Bay floor sediments during this project allowed additional diffuser extensions to be performed within the dredging limits in the nationwide permits for the original project. Doing the additional riser extensions now produced overall cost savings by reducing mobilization costs and taking advantage of the divers' familiarity with the current conditions. Accelerating the extra riser extensions also made the diffuser section ready for pumped effluent flows this winter.

#### **Bar Screen Replacement**

The Ross Valley side barscreen was started up and appears to be working well and removing much smaller rags and debris than the previous equipment did. Operational testing is expected

to last until September 8, and once that's successfully completed, the San Rafael side barscreen will be demolished and replaced by mid-October, in time for the onset of wet weather. Once both new barscreens are operational, we expect to see a reduction of plastic and other debris throughout the rest of the treatment plant processes.

#### **Emergency Generator Improvements**

All the work has been completed on this project, and it is being taken before the Board for acceptance at the September meeting. There was one small change order on this contract arising from minor field changes to the design. The Electrical and Instrumentation Department will be integrating the various controls for this system, as originally planned, and the Engineering and Operations staff are collaborating on the standard operating procedures for the new systems.

#### **Operations**

Summer dry weather operation continues. August had steady daily flows and no measurable rain. The four nitrate systems continue operating to control odors and corrosion in the collection system. The system applies hydrogen peroxide polishing into the two forcemains before flow enters the plant. Operations continued to swap unit process equipment to make equipment available for annual maintenance.

On August 15<sup>th</sup>, CMSA received multiple septage trucks from the annual facility servicing for the Skywalker Ranch.

In August, Operations personnel had to troubleshoot the degradation of the centrate of Centrifuge #2. A leaking valve on the 3-water line allowed hypochlorite into the mix water which poisons the polymer mixture (flocculant). Maintenance replaced the valve, returning the centrifuges to efficient operation.

The Waukesha engine and generator ran reliably through the fourth month of PG&E's summer electricity rates. It is important that the cogeneration system supplies most of our power needs for the summer peak power period: noon to 6 PM, M-F, otherwise CMSA must pay double for each kilowatt and also pay a \$14/KWH demand charge each month. PG&E's peak period summer rates run from May 1st through October 30<sup>th</sup>.

The plant was hit by a PG&E power drop on August 11th that tripped most plant equipment and the cogeneration engine. The plant was brought back on line smoothly, although the PG&E surge damaged the lab turbidity meter.

On August 13<sup>th</sup>, a contractor for California Public Utilities Commission (CA PUC) installed a power meter to track our cogeneration power production. The contractor will use the information to produce a report on the production and efficiency of CA PUC grant funded power projects.

Senior Engineer Ken Katen attended the JPA Forcemain Committee to discuss the WWIP

contractor's request for a collection system shutdown. The shutdown will allow the contractor to enter the plant influent channel to complete work on the influent structure for #3 Grit Tank. Maintenance made adaptors for the portable electric closers for Ross Valley and San Rafael forcemain isolation valves in preparation for the September system shutdown.

### **Preventative Maintenance**

This month all the chest electrode pads for our AEDs were replaced. This is one of the AED preventive maintenance tasks; like the batteries, the pads have a shelf life and a scheduled replacement plan.

The Waukesha regular preventive maintenance included changing the oil, air filters and spark plugs, as well as adjusting the 16 valves. We are working with one service company to test a new spark plug that has a longer operating life. This test will run six to twelve months.

### **Repairs**

There were many repairs made over the month, including: Grit pump #5 had a bad mechanical seal, and Maintenance installed a rebuilt pump in its place. E/I adjusted the San Rafael influent flow meter to repair some intermittent signal jumps. DAF #1 had a flight rotate and jam on the beach; Maintenance adjusted track guides to keep flights aligned and running.

The plant-wide annunciator system could not be heard in all areas; E/I replaced several horns, checked and adjusted the volume levels.

Maintenance replaced Site Sump pump #1 with a rebuilt pump. Problems with the brand new pumps were traced to alarm wiring discrepancies.

This month Maintenance replaced the outlet bearing on Aeration blower #1 and replaced both inlet and outlet bearings on blower #4.

### **Other O&M Projects**

The arborist inspected the forest above Andersen Drive and gave us guidelines on felling and removing the dead oaks.

The installation of the second half of scum skimmer on Primary Clarifier # 3 was completed. Maintenance had to modify the skimmer to match the trough that was not straight. Maintenance rebuilt hydraulic control valve block for #5 primary tank gate.

CMSA received a new Ford Ranger pick up, which was purchased under the State Contract. This truck replaces the last of three vehicles that under the new 2009 Air Board Regulations could not be filled at the CMSA fuel station.

A new stainless steel bubbler tube was installed in the hillside CCT. This completes the bubbler tube replacement on the CCT. The old plastic tubes were warped from the sun and may have been changing length during the day with the changing temperature. This would cause inaccuracy in the CCT flow calculations.

Under the WWIP contract all the Grit Hoppers #1 through #4 were blasted and recoated. Maintenance took this

opportunity to replace the rollers and hydraulic cylinders for all four hopper doors.

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## **ADMINISTRATION**

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### **Monthly Budget Performance**

As of July 31, the Agency has received 40.5% (\$6.2 million) of budgeted revenues (\$15.4 million) and incurred 8.4% (\$600k) of budgeted operating expenses (\$8.5 million). The revenues received in July include the first quarter sewer service charges and the September 2009 debt service contribution from the Member Agencies.

Asset Management activities under the Capital Improvement Program are currently at 4.9% (\$56k) of budget (\$1.2 million). There are outstanding purchase orders totaling \$48,000 for a pickup truck; hydraulic power system, clarifier turntable drives, plant pumps, process tank and centrifuge maintenance.

The Revenue Bond Program is at 81.5% of budget and includes \$9.5 million in contractual obligations associated with executed WWIP contracts and change orders, and \$2 million in contractual obligations for Outfall Improvement and other Revenue Bond projects.

### **Preparation of Financial Statements**

With the assistance of all CMSA staff, the Finance department has been reviewing outstanding purchase orders and revenues due to CMSA, and recording fixed asset acquisition and disposition for FY08-09. Once all FY09 accounting transactions have been reconciled and recorded, the department will produce preliminary financial statements

that report the Agency's Revenues, Expenses and Assets, and Cash Flow.

The Agency's outside auditors, Vavrinek, Trine & Day & Co., will be back in early September to review and audit the Agency's financial statements for the fiscal year ending June 30, 2009. The findings from both the internal control audit and financial audit will be presented to the Agency in October and the Board in November 2009. The Board-accepted financial statements will then become part of the Comprehensive Annual Financial Report for FY08-09.

### **CalPERS Health Plan Rates**

CalPERS has published the 2010 rates for its health plans and touts its success in managing the smallest increase in 14 years with an overall statewide increase of 2.9%. However, the Agency continues to experience increased costs greater than the 2.9% because of the increased costs for the plans that are available for the Bay Area Region.

The Open Enrollment period to change CalPERS health care plans for 2010 is from September 14th - October 9th.

### **Procurement Contracts**

Staff developed and advertised a new nitrate salt contract for bidding and for award at the September Board meeting. Nitrate salt solution is injected into the collection system to oxygenate the wastewater and reduce the production of corrosive, odorous hydrogen sulfide gas. Controlling hydrogen sulfide production is a key element of both the odor control

and corrosion control programs. The new contract includes periodic cost adjustment provisions similar to our other procurement contracts, and we expect that to produce more accurate bids.

### **Safety**

Du-All Safety Consultants began performing the top-down review of our safety policies and programs. Safety specialists from Du-All were on-site three times in August to survey our plant and to talk to personnel. The primary focus during these visits was looking at our fall protection protocols, inspecting our confined spaces, and inspecting general facility safety. Du-All will return in September for two days to complete their site work.

### **Personnel and Training**

Two Operations' Leads attended a class on Communications in Santa Rosa on August 10<sup>th</sup> and 11<sup>th</sup>.

On August 26<sup>th</sup> the Waste Tech representative trained O&M personnel on operations and maintenance of the new barscreen.

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## **ENVIRONMENTAL SERVICES**

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### **Laboratory**

We have received the results for the performance evaluation samples we analyzed in order to maintain laboratory certification. All of the results we submitted were judged acceptable and very close to the true values. We submit our sample results to the Environmental Laboratory Accreditation Program (ELAP), State Water Board, and the

EPA in order to maintain our laboratory certification and to perform testing that is required in the NPDES permit.

### **NPDES Testing**

The CMSA lab testing was in compliance with permit requirements, with 100% survival in our July bioassay.

### **Public Outreach**

We set up our public education booth at the NorCal Spirit Festival at Stafford Lake Park in Novato. The all day event took place August 15 and it was a Northern California wide event. Although attendance was less than expected, staff gave away 81 quizzes.

### **Biosolids**

Land application of our biosolids continued during August. We land apply our biosolids as a beneficial soil amendment at a land application site in Sonoma County, located between highways 116 (Lakeville Highway) and highway 39. The site is used to grow crops that are used as feed stock for animals. We began land application on May 8 and we will continue through the end of October as long as there are no early rains.

### **Environmental Compliance**

We have completed 100 of the 130 zero discharge inspections within our service area. These automotive repair and industrial facilities do not discharge process wastewater or auto wash water, but do have materials on site that may present a concern to the collection system or wastewater treatment plant if discharged.

A strike-out version of the Draft 2009-1 Sewer Use Ordinance (SUO) was included in the August CMSA board packet for Board

review. Changes were made to the SUO as a result of our 2008 Pretreatment Compliance Inspection (PCI), which required changes to incorporate the streaming rules for 40 CFR Part 403. The previous SUO 95-1 had not been updated since 1995. All changes are non-substantive and do not require regulatory agency approval. Additional changes were made to make language gender neutral and update permit fees and analytical charges to 2009 rates.

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## **CONTRACT/OUTSIDE SERVICES**

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### **SRSD**

We are finishing up the inspections for the Food Service Establishments (FSEs) that have pump permits requiring an outside firm to pump their Grease Removal Device (GRD). Only one FSE was not in compliance and a Notice of Violation (NOV) was issued to Citrus and Spice for not having their GRD pumped as frequently as specified in their permit. The NOV requires the GRD to be pumped and it will result in a re-inspection fee for follow up to ensure pumping has occurred.

### **LGVSD**

We are finishing the inspections of FSEs that have pumping permits. One NOV has been issued to Roast Haus for not pumping their GRD which will result in a re-inspection fee to ensure the pumping has occurred. We are following up on the FSEs that are currently in the process of installing new GRDs. Peking Wok completed their installation and two additional letters have been issued to Pine Ridge Care Center and Eduardo's.

### **RVSD**

Administrative Orders were issued to 15 FSEs that did not have approved plans for installation of GRDs. We discussed what actions RVSD staff would like to take when the compliance deadlines were reached in May for the GRD installation letters that were issued in October of 2008. RVSD staff requested we issue AOs with an additional 6 months to comply with plan approval and GRD installation. This gives FSEs time to comply with the requirements during the current economic climate. We have been contacting many of the FSEs who received AOs to help them comply with their requirements.

### **SD#2**

Maintenance completed regular checks and preventive maintenance (including generator checks and wet well cleaning) for all 19 pump stations for August. The PLC at Pixley pump station is an old Siemens controller that is obsolete and the software is not supported on anything newer than Windows 98. A new ScadaFlex controller was purchased and a control program was written for it. The ScadaFlex is now being used for radio communications. The program was loaded and is being tested before we remove the old PLC and rewire the station. CMSA coordinated with the contractor that replaced the radiator, hoses, and belts on the Trinidad #1 generator.

Maintenance completed 62 USA (underground services dig requests) mark-ups of pump station piping in August.