### **SPRING**, 2012

#### **CMSA COMMISSIONERS**

- $\Diamond$ John Dupar, President
- $\Diamond$ Kathy Hartzell, Vice Chair
- $\Diamond$ Albert Boro, Secretary
- $\Diamond$ Marcia Johnson, Commissioner
- $\Diamond$ Patrick Guasco, Commissioner
- $\Diamond$ Barbara Heller, Commissioner

# What's Happening Now... **Environmental Services**



Public Outreach On April 21st, the Wastewater Treatment Agencies of Marin County participated in the 40<sup>th</sup> Celebration of Earth Day Marin, a busy and well-attended event. Nearly 300 attendees took the CMSA environmental quiz, while others posed a variety of questions and discussions about

wastewater treatment and related topics. CMSA also participated in the Novato Business Showcase, San Rafael and Sausalito Farmer's Markets, Tiburon Salmon Release, and the

Marin County Household Hazardous Waste Collection Day events.

Our "Go With The Flow," environmental education program for grades K-2 has been extremely popular this year. It has been presented to nearly

3,600 students from over 20 schools, making it our busiest year ever.



We've also been busy touring students through the treatment plant, including Marin Academy, Dominican University, Redwood High School, and the Marin Waldorf School. Several hundred students tour CMSA every year where they learn about how wastewater is treated and what should not go down the drains in their homes.

At the April 5 Las Gallinas Valley Sanitary District Board meeting, CMSA staff shared a PowerPoint presentation on the Mercury Reduction Program focusing on the successful dental outreach program. Dentists in the Las Gallinas and CMSA service areas are 100% fully compliant with installed mercury amalgam separators resulting in a reduction of mercury in their wastewater.

A NACWA Platinum Peak Performance Agency

1301 Andersen Drive San Rafael, CA 94901 Phone 415.459.1455 www.cmsa.us

Environmental Compliance/Source Control Program		Inspections Every year C staff perforn
PERMIT TYPE/INSPECTION FREQUENCY	<u># OF</u> <u>PERMITS</u>	wide variety regulatory inspections of
Significant Industrial Users/ Quarterly	3	businesses requiring
Lg. Industrial/Quarterly or Semi- Annual	6	<ul> <li>permitting the our Pretreat</li> <li>and Pollution</li> </ul>
Carwash Steam Cleaners/Semi- Annual	13	Prevention Programs. N
Carwash/Annual	33	the discharg
Coin Operated Car Wash/Semi- Annual	2	industrial fac or businesse having the
Radiator/Annual	2	potential to
Dry Cleaner/Annual	4	discharge
Auto Zero Discharge/Annual	135	hazardous materials the
Restaurant/Every 4 Months	180	damage the
Dentists/Annual	81	sanitary sew

ry year CMSA ff performs a le variety of ulatory pections of sinesses uiring mitting through Pretreatment d Pollution vention grams. Most of dischargers are ustrial facilities businesses ing the tential to charge ardous terials that may nage the itary sewers, or e a negative

impact on the treatment processes, or require NPDES permit testing. In addition, other inspections are performed during the year for corrective actions, remodeling, storm water violations, or increased inspections due to a poor compliance history. During a normal year, Environmental Services staff inspect over 1,000 businesses. The above table summarizes the testing we perform.

**NPDES Permit Testing** CMSA lab testing was in compliance with NPDES permit requirements, with 100% survival in all of our recent bioassays. No priority pollutant organic compounds were detected in our semi-annual comprehensive sample analyses. We applied for our National Association of Clean Water Agencies Platinum Peak Performance Award for the 7<sup>th</sup> consecutive year of no NPDES permit exceedances, and fully expect the application to be accepted and the Agency to receive a Platinum 7 Award. Very few wastewater treatment agencies in the United States have attained this status.

# **Central Marin Sanitation Agency**

### **Capital Improvement Projects**

**Digester Improvements/FOG-Food to Energy (F2E) Facility** This project continues to progress well. The first digester's dual-membrane cover is slated to be installed after pump testing is

completed. The FOG-F2E Facility (right) is structurally complete, and its equipment and piping are largely installed.





Meanwhile, the existing gas mixing and iron sponge scrubbing equipment is operating well in their new temporary location on the service road behind the Digesters. The new pump mixing system construction is on schedule, and the pumps are planned for startup and testing in early June, with the digester cover installation and testing due to be completed by early July. Once the first digester is restarted and stabilized with the new mixing and fuel scrubber equipment, the second digester will be taken off-line, cleaned, its floating steel cover and the remaining gas mixing equipment recycled, and that digester will then be fitted with the pump mixing piping and a membrane cover. The project should be completed in early 2013.

Hydrogen Sulfide (H2S) scrubbers (right) have been erected and filled with the H2S removal media, and the service platforms and piping have been largely installed.



<u>Reclaimed Water System Improvements</u> This system (below) provides reclaimed treated effluent for process-related uses around the facility, reducing potable water usage. The main elements of this project were originally scheduled for FY 15 work, but recent condition assessments indicated that the hydropneumatic tank, strainers, and pumps are at or nearing the end of their useful lives and need to be refurbished or



replaced. Also, new treatment systems at the Agency, such as the headworks filter screens and wash-down monitors for the chlorine contact tanks, have changed the need for reclaimed water at various locations in the Treatment Plant, which may require some other minor piping or equipment modifications. Staff recently sent a Request for Proposals (RFP) to various design consultants. Four proposals were received on May 10 are being evaluated by staff, and a design consultant will be recommended at the Board's meeting on June 12.

Aeration Blower Replacement Western Water Constructors (WWC) the project's general contractor, requested a change of manufacturers for the project's high speed blowers. Agency staff reviewed and concurred with the request, the new blowers' technical submittals were expedited, and in May, the blowers were witness tested by both Agency staff and Carollo Engineers. The tested blower (below) met all the specification



requirements and will be delivered in the next few weeks. The new turbo blowers will provide a wider range of flow rates for our operational needs and will provide savings on energy costs. With this

quick turnaround, the project is on track, with WWC planning to mobilize onsite in early June, and the project due to be for a late August completion. **SPRING 2012** 

### **Finance News**



#### FY 2013 Draft Budget

The FY 13 Draft Budget was presented at the May, 2012 Board meeting. This Draft Budget incorporated valuable guidance received from the Board Finance Committee, and showed that the Agency will have sufficient revenues to fund our operating and capital expenses in FY 13.

F/Y 2013 DRAFT BUDGET UPDATE	MILLIONS OF DOLLARS	
Operating Revenues	\$9.7	
Operating Expenditures	\$9.5	
Capital Improvement Program Expenditures	\$7.1	

Revisions to budget figures and other department information were reviewed by management staff, with Finance staff then preparing the final budget.

<u>Selection of New Auditors</u> The Agency recently hired our new auditors, Chavan & Associates, to prepare and audit the Agency's financial statements for the current and next two fiscal years.



Chavan & Associates, LLP Certified Public Accountants

On May 22, Finance Staff hosted an orientation meeting with Mr. Sheldon Chavan to discuss his

approach to auditing the Agency's financial statements. An audit schedule was planned and confirmed with Finance Staff. Mr. Chavan was briefed on the significant financial issues which occurred during the current year and requested that Chavan & Associates review the Agency's debt coverage ratio calculations and the establishment of a rate stabilization fund for FY 11-12. Readers interested in learning more about the debt service ratio and rate stabilization fund can refer to Item #9 in the April 2012 Board Agenda packet (available online at www.cmsa.us) or refer to Item #9 on the upcoming June Agenda.

### **Award Winning Recognition**



Congratulations to the Finance Staff for their receipt of the Government Finance Officers Association Distinguished Budget Presentation Award. CMSA and the City of Novato are the only two agencies in Marin County to receive this prestigious award.

The GFOA established the Distinguished Budget Presentation Awards Program in 1984 to encourage and assist state and local governments to prepare budget documents of the very highest quality that reflect both the guidelines established by the National Advisory Council on State and Local Budgeting and the GFOA's best practices on budgeting and then to recognize individual governments that succeed in achieving that goal. Documents submitted to the Budget Awards Program are reviewed by selected members of the GFOA professional staff and by outside reviewers with experience in public-sector budgeting.

# **Safety & Training**



CMSA has accumulated over 1,880 days without a lost work time injury due to our employees' diligent efforts to work safely and follow the Agency's safety policies and procedures.

As a valuable component of the CMSA safety program, the Safety Committee, comprised of employee representatives from each department, meets monthly to help deliver safety information both to and from their respective departments. They discuss recent safety issues, employee safety concerns, new or revised safety programs, and upcoming safety training. Recent completed and planned training is detailed on the table to the right.

	Staff Training	<u>Class</u>	
	April	Respiratory Protection	
	Мау	Lock Out/Tag Out Lawful Hiring	
t	June	Defensive Driving Heat Illness Prevention	

# **Treatment Plant Updates**



Spring is here and with the change in weather, influent flow into the treatment plant is settling into a normal dry season flow pattern. Annual process tank preventive maintenance begins as equipment is taken out of service for the season. Staff has secured one Primary Clarifier for coating and refurbishing work (left); the remaining six clarifiers will be removed from service systematically for condition assessments and maintenance over the summer. As temperatures rise, staff will bring additional odor control equipment online. Once the plant influent wastewater reaches 21 degrees centigrade (around 70 degrees Fahrenheit), strategically placed odor control stations will be started throughout the collection system to inject calcium nitrate into force mains to control hydrogen sulfide generation.



Staff has successfully performed four plant shutdowns this year with one more scheduled for the immediate future. The procedure involves temporarily unplugging CMSA from PG&E, shutting-down our Cogeneration system, and using a portable generator (left) to power the Administration building. Treated water is diverted to offline tanks and the storage pond during the shutdowns while contractors and staff perform electrical upgrades for the Digester Project.

Utility Laborer Bob Bally (right) is heading-up a project to repair irrigation lines, valves, and boxes, and to standardize the irrigation fixtures to

streamline how CMSA manages irrigation. In November of 2011, Bob and staff began the task of repairing, re-routing, and re-drawing three generations worth of irrigation system piping. Recycled water for irrigation comes from the plant's discharge facility. By February of 2012, a majority of the irrigation system had been mapped, and control power and irrigation valve boxes that service the I-580 corridor foliage repaired and made ready for service. In late April, as the wet weather season came to an end, Bob and staff made repairs to the main irrigation piping that runs adjacent to the front lawn. They are finalizing this project by adding a border section



between the lawn and the storm water drainage ditch. The border serves as a physical reminder of where the main irrigation piping is embedded and prevents soil erosion.

A critical, annual staff maintenance task is the removal of struvite from the biosolids feed piping in the Solids Handling process. Operations and Maintenance staff work together to disassemble feed piping (right), inspect 20 foot sections at a time, and remove this naturally occurring material. What exactly is struvite? As first described from medieval sewer systems in Hamburg, Germany, in 1845, and named for geographer and geologist Heinrich Christian Gottfried von Struve, struvite is a scale deposit which naturally occurs under specific conditions of pH and energy mixing in areas of wastewater treatment plants (e.g., pipes, anaerobic digesters) when concentrations of magnesium, phosphate, and ammonium accumulate in equal parts.



# **Staff Ingenuity**



The Redwood Empire Section of the California Water Environment Association (CWEA) recently presented CMSA with its 2011 Gadgets & Gimmicks award for our solar powered radio telemetry antenna installation (left). The project was then placed in the State competition where the project competed with the award winners from 19 other CWEA sections. The CWEA notified us that our project placed second in the State competition, awarding CMSA with a check for \$200 which was used to host an on-site staff lunch on May 31.

Central Marin Sanitation Agency is a proud member of the Marin County Green Business

