

TRIBUTARY TRIBUNE

The Plant: Protecting the Bay

This is the first in a series of articles to inform the businesses we serve on how the San Jose/Santa Clara Water Pollution Control Plant (Plant) helps protect the Bay.

The Plant's History

The San Jose/Santa Clara Water Pollution Control Plant (Plant) has been in operation for **nearly 50 years**, and has grown along with Santa Clara Valley.

Built in 1956, the Plant originally had the capacity to treat 36 million gallons per day (mgd) but only provided primary treatment (where only suspended solids are removed from the incoming wastewater before discharging to the bay).

Since then, the Plant has increased its treatment capacity and installed secondary and advanced treatment technologies to keep up with the rising population and expanded service area.

Today, the Plant has a design **capacity of 167 mgd** and provides tertiary treatment (where incoming wastewater is treated via

biological treatment, advanced filtration, and disinfection to remove ammonia, organic matter, pathogens and some dissolved solids) to produce water so clean that it passes many of the requirements for drinking water.

Service Area

The Plant's service area includes a **300-square mile area** encompassing San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, Monte Sereno and parts of unincorporated Santa Clara County. The Plant **serves about 1.4 million residents and 16,000 businesses.**

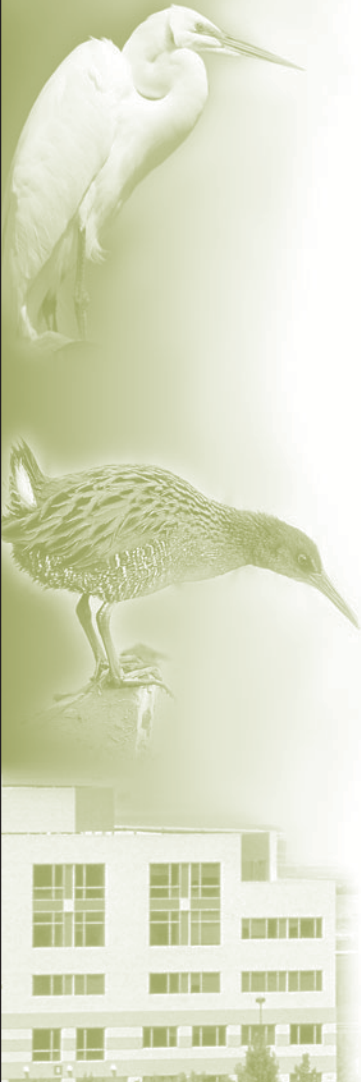
Wastewater collected from residents and businesses travels for up to 10 hours through the sanitary sewer system before arriving at the Plant for treatment.

The entire **treatment process takes up to 18 hours to complete.** The treated water is then discharged into the South San Francisco Bay.

Although most impurities are removed from the incoming wastewater, there are some (such as heavy metals, cyanide, and many pesticides) that cannot be removed by the Plant's treatment processes.

These "non-conventional" pollutants can either "pass through" and reach the Bay untreated, or may cause "interference" with the Plant's treatment processes.

To learn more about these pollutants and other pollutants of concern, and how they affect the Plant's treatment processes, look for the next article in this series in a future newsletter.



NEW! www.sanjoseca.gov/esd

The **Tributary Tribune** serves the cities of San José, Santa Clara, Milpitas, Cupertino Sanitary District, West Valley Sanitation District (including Campbell, Los Gatos, Monte Sereno, Saratoga), County Sanitation Districts 2-3, Sunol & Burbank Sanitary Districts





A Reminder on Cooling Tower Additives

A common maintenance problem that cooling water system operators face is how to control fouling of the system caused by algae, bacteria, and fungi. In the past, tri-butyl tin-containing cooling tower additives were widely used to address this problem.

Since late 1995, the Department of Pesticide Regulation (DPR) has

banned the sale and use of all products containing tri-butyl tin (TBT) for cooling water system applications in the Bay Area.

The Bay is particularly vulnerable to tri-butyl tin contamination, even in low amounts, because it has many shallow estuaries with little natural flushing or surface water recharge (i.e. mixing).

Operators of cooling towers are urged to review cooling water system chemical usage, discharges, and cleaning practices to identify and eliminate sources of tri-butyl tin. Many good alternatives exist for cooling tower conditioning.

A fact sheet on tri-butyl tin is available for download at: www.sanjoseca.gov/esd

Is Your Effluent Meter Calibrated?

If you are a permitted industrial user your permit probably includes a requirement to install and maintain an effluent flow meter for measuring the amount of process wastewater discharged to the sanitary sewer. Typically, effluent meters are required to be calibrated **annually** as a permit condition.

Check page 5 of your permit to see if you have such a requirement. If there is an "X" marked next to "Verification of Effluent Flow Meter Calibration..." you must submit proof of

meter calibration to your environmental inspector at the beginning of each calendar year along with your first self-monitoring report.

Please note that there usually is no requirement to submit calibration verification for influent meters measuring water entering a process area.

As a courtesy, a flow meter calibration certification form and a list of local vendors offering calibration services, have been provided as inserts with this newsletter.

If you have any questions on this or any other permit requirement, please contact your inspector at **(408) 945-3000**.



New Web Address

As of January 2005, the City of San Jose's Environmental Services Department (ESD) has a new web address: www.sanjoseca.gov/esd

Look for future newsletter updates on our efforts to improve our website, including improved site content and navigation tools.

For now, commonly used forms such as industrial wastewater discharge applications and self-monitoring report (SMR) can be found at: www.sanjoseca.gov/esd/water-pollution-prevention/eeforms.htm

Information on the Water Efficient Technologies (WET) program and the South Bay Water Recycling (SBWR) program can be found at: www.slowtheflow.com/business.html

Comments and suggestions on how to improve your web experience at our site, can be submitted to our webmaster at: ESDWebmaster@sanjoseca.gov

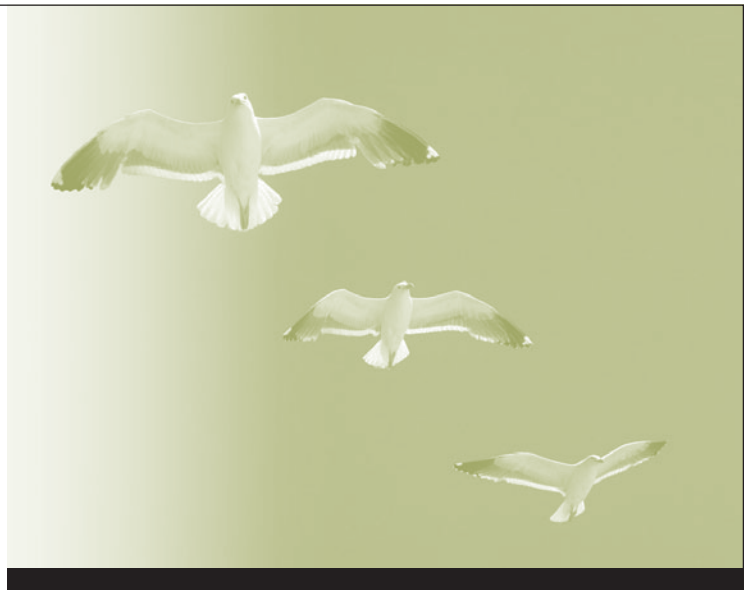
Local Businesses Win Awards

The California Water Environment Association (CWEA), an association of professionals in the wastewater treatment and pollution prevention fields, recognized the following two businesses on February 28, 2005, for excellence in wastewater treatment.

- **Novellus - San José.**
Awarded the Northern California Plant of the Year.
- **Tyco Electronics - Santa Clara.**
Awarded a Certificate of Merit.

Congratulations on earning the recognition of wastewater professionals in California!

If you are interested in learning more about the CWEA please go to: www.cwea.org



WET Success Story: Reaction Technology of Santa Clara

When **Reaction Technology of Santa Clara** received notification that they would be assessed an Excess Sewer Use Fee for exceeding their assigned discharge capacity, they took immediate action to audit their water use to look for water savings opportunities.

The water audit found that their fume scrubbers were the biggest water users, and were using the same amount of water regardless of whether toxic gases were in use or not. Reaction Technology designed a control system that reduced water flow through the scrubbers when toxic gases were not in use.

This simple process change resulted in a **water savings of 17,000 gpd** and allowed Reaction Technology to avoid paying most of the Excess Sewer Use Fee.

Reaction Technology also received a financial rebate through the Plant's **Water Efficient Tech-**

nologies (WET) program for successfully completing this wastewater reduction project.

If your company is planning a water reduction project and you want to see if you qualify for a WET rebate, please contact Geoff Blair at **(408) 382-8842** or at:

geoffrey.blair@sanjoseca.gov

A full-length copy of the Reaction Technology story and other Success Stories are available for download at:

www.slowtheflow.com/success.html



IU Academy Workshop - April 27, 2005

~ Seating is limited so we encourage you to sign up soon! ~

This year's Industrial User (IU) Academy workshop will be held on **Wednesday, April 27, 2005** at 700 Los Esteros Road in San José at the San Jose/Santa Clara Water Pollution Control Plant. This marks the 9th consecutive year that the San Jose/Santa Clara Water Pollution Control Plant has offered this workshop to its industrial users. A **NEW one-day format** replaces the two-day format offered in previous years. Topics to be covered include:

- What inspectors look for during facility inspections
- How to read your wastewater discharge permit
- How to correctly fill out Self-Monitoring Reports
- How enforcement actions are set in response to violations
- And much more.

To register for this workshop, please see the insert provided or contact Pascal Roubineau at (408) 382-8809 or via e-mail at pascal.roubineau@sanjoseca.gov

There is a **\$12 sign-up fee**, and seating is limited. All completed registration forms and payments must be received by the **April 20, 2005 registration deadline**.



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In accordance with the Americans with Disabilities Act, City of San José Environmental Services Department materials can be made available upon request in alternative formats, such as Braille, large print, audio-tape or computer disk. Requests may be made by calling (408) 945-3000 (Voice) or (800) 735-2929 (CRS).

EPA Orders Change in Source Control Program

On March 17, 2005, the Environmental Protection Agency (EPA) issued an Administrative Order to the City of San José's pre-treatment program. The pre-treatment program is administered through the Source Control section, which is responsible for the Plant's entire tributary area. Some of the required changes include:

- An evaluation of the local limits for the pre-treatment program.
- Amending 170 permits, particularly for businesses in the metal finishing industry that are currently categorized as "Existing Sources."

- Instituting a more aggressive program to identify and prevent intentional discharge of untreated process water, i.e. "bypass."
- Reanalyzing the budget, equipment, and staffing needs of the pre-treatment program.

The City and Source Control Program are in the process of evaluating this Order and addressing the requirements. There will be more information available in the next issue of the Tributary Tribune.

If you have questions regarding the EPA Order, please contact John Mukhar at (408)-382-8836. A full copy of the report is available on-line at:

www.epa.gov/region09/water/pretreatment/files/san_jose_2005-03-17_order.pdf



NEW! www.sanjoseca.gov/esd

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