

# TRIBUTARY TRIBUNE

## FLOW AUDIT STUDY Industrial Recycling and Reuse

The Industrial Recycle/Reuse Program assists Industrial Users (IUs) within the San Jose/Santa Clara Water Pollution Control Plant service area to limit the amount of wastewater they discharge into the sanitary sewer system.

IUs can help by:

- reducing the amount of water they use,
- reusing water from industrial processes,
- using recycled water (supplied by South Bay Water Recycling).

In 1999, the Program focused on implementation of a *South Bay Action Plan* contingency requirement. This plan required that all **Tier I dischargers** complete a **Flow Audit Study**.

Fifty-seven companies, comprised of both permitted IUs and commercial users, discharge more than 100,000 gallon per day (gpd) and were identified as Tier I dischargers. Flows were based on 1997 data, and were obtained from (1) the Pretreatment Program's

### Flow Audit Study Potential Flow Reductions

Project Type	No. Facilities	Flow Reduction (est. gpd)
Completed	9	379,400
< 5 Years Payback	51	647,200
> 5 Years Payback	46	655,400

Source Control data-base and (2) water use data provided by water purveyors.

Of the 57 companies, 17 closed their facilities or stopped manufacturing. These included Del Monte, National Semiconductor, and four of the five Komag facilities. Three companies were exempted after verifying that their discharges to the sewer system were each less than 100,000 gpd. Of the remaining 37 facilities, 36 submitted their audits, which are now under review for completeness and accuracy.\*

The audit reviews are taking longer to complete than originally

anticipated. This is due in part to the difficulty verifying flows and the complex nature of submittals.

After the preliminary review, staff identified more than 50 projects from the audits. These active and prospective projects add up to 647,000 gpd of potential flow reduction. (See table above.) Other projects, listed as not cost-effective, may be found feasible with financial incentives.

The Pretreatment Program is updating the list of eligible Tier I dischargers, based on more recent sanitary sewer flow data. These companies will be required to complete a flow audit in 2000.

\* See the detailed list of companies and their status in the January *Clean Bay Strategy Report* (Appendix B), or view it on-line at our website <http://www.ci.san-jose.ca.us/esd/cbs>.

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[www.ci.san-jose.ca.us/esd](http://www.ci.san-jose.ca.us/esd)

The **San Jose/Santa Clara Water Pollution Control Plant**

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

The Plant still offers significant financial incentives for any project that reduces flow to the sanitary sewer. The application process is very easy and could result in an incentive award of up to \$50,000 per project. Each company may apply for more than one project.

There is no maximum limit per company and incentives will be awarded as long as money is still available. Money is distributed on a first-come, first-served basis.

Reducing flows to the Plant remains a top priority for the near future. To avoid more aggressive flow reduction measures, all sectors — residential, commercial, institutional, and industrial — are encouraged to look for new ways to help reduce wastewater flows.

Significant flow reductions have already been achieved, thanks to your facilities' efforts.

*For more information about the Financial Incentives Program, call Melody Tovar at (408) 945-3037.*



## FINANCIAL INCENTIVES PROGRAM PROFILES

Special thanks to these recent Financial Incentives Program (FIP) participants. Their efforts to reduce flows to the San Jose/Santa Clara Water Pollution Control Plant have helped conserve fresh water and protect the South Bay salt marsh habitat.

**Brett Martinez and Lockheed Martin Fairchild Systems**, in Milpitas, installed flow restrictors and controllers on a series of fab process sinks to minimize water use during idle flow periods. They estimate that this project saves an average of more than 37,000 gallons per day. FIP provided a \$32,000 rebate.

**Jack Underwood and Peninsula Coating Services**, in Santa Clara, installed a filtration/ion exchange system to recycle waters in their plating line. They received a FIP rebate of \$3,300 by saving an average of 1,700 gallons per day on their flow.

**Rebecca Bond and Agilent Technologies, Inc.** had been discharging water to the sanitary sewer from their basement dewatering project. Unable to find a suitable use for this water onsite, they have received approval and completed replumbing to route that water to the storm sewer. This means a flow savings of 42,000

gallons per day and a FIP rebate of \$10,000 for Agilent.

***Saving water saves you money now and in the long run.***

Call Melody Tovar at (408) 945-3037 to get your project started today.



## **SOUTH BAY WATER RECYCLING**

### **A Look Now and in the Future**

South Bay Water Recycling is a long-term program created to bring a sustainable, reliable, and drought-proof supply of water to the area. It now serves over 230 customers, through a system of 60 miles of pipeline, four pump stations, and a 4 million-gallon reservoir.

Last summer, South Bay Water Recycling delivered up to 10 million gallons per day (mgd) of recycled water to irrigate golf courses, parks, schools, and agricultural lands. Other customers, including San Jose State University, Calpine/OLS, and Hitachi Data Systems use recycled water for industrial purposes such as cooling towers.

Recycled water benefits business since it costs 20-30% less than drinking water, and provides a drought-proof supply of water to protect their landscaping investment.

Every gallon of recycled water used for landscaping or industrial processes saves a gallon for potable use, making the South Bay less dependent on outside water sources.

Currently, about half of our drinking water supply comes from imported sources, including Hetch Hetchy, the Central Valley Project, and the State Water Project.

Recycled water also protects the Bay habitat

by keeping too much fresh water from altering salt marshes during dry months.

To protect public health, the Regional Water Quality Control Board, and state and local health departments strictly monitor recycled water. Recycled water valves and distribution systems are color-coded purple to avoid cross-connection with domestic water supply systems.

In 40 years, there has never been a documented case of illness or disease transmitted through recycled water use in any application.

By 2020, SBWR plans to reuse up to 100 mgd of water. To stay ahead of the SJ/SC Water Pollution Control Plant's 120 mgd flow trigger, it is estimated that diversion needs to be increased by 2 mgd every year.

Alternatives for reaching short-term goals include additional landscape and agricultural irrigation, industrial reuse, and environmental uses. With so much of Silicon Valley built out with impervious surfaces, there are limits to the number of large water users that can be cost effectively reached.

Long-term recycled water uses being explored include:

- Exporting recycled water outside of Santa Clara County.
- Using recycled water for environmental enhancement.
- Using recycled water to augment potable water supplies.

To learn more about recycled water or to connect your business to the recycled water system, call Mark Casterson at (408) 945-5472.



*Recycled water costs 20-30% less than drinking water, and provides a drought-proof supply of water for landscaping investments.*



## INDUSTRIAL USER (IU) ACADEMY Now's Your Chance

The two-day course, *Pretreatment Program for Permitted Industrial Users*, is being offered again. This course is scheduled for April 6 -7, 2000. Course contents include:

- Overview of Federal Pretreatment Requirements
- Source Control Sample Analysis Paperwork
- How Source Control Sets Up Composite Samplers
- Plant Laboratory Presentation
- Report Requirements
- Federal Categories
- Local Groups 1, 2 & 3
- Protocols, Plans & BMPs
- Permit Application
- Permit & Fact Sheet
- Facility Stormwater Requirements
- Enforcement & Monitoring Programs
- Plant Tour

**Date:** April 6 -7, 2000

**Time:** 8:00 AM - 3:30 PM

**Place:** San Jose/Santa Clara Water Pollution Control Plant

Large Conference Room

700 Los Esteros Road  
San Jose

**Lunch:** Included with course on both days

**Cost:** FREE! — You must preregister! Class size is limited to 20 participants.

Please call Cheryl Dayley at (408) 945-3030 to register for the course or to ask any questions you may have regarding the course.



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*In accordance with the Americans with Disabilities Act, City of San Jose Environmental Services Department materials can be made available upon request in alternative formats, such as large print, audio tape or computer disk. Requests may be made by calling (408) 277-5533 (v) or (800) 735-2929 (CRS).*

[www.ci.san-jose.ca.us/esd](http://www.ci.san-jose.ca.us/esd)

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