



In This Issue:

- **Benefits of Automated Composite Samplers**
- **Ask Your Inspector**
- **Tips for Maintaining an Automated Sampler**
- **West Coast Green Moves to Silicon Valley**
- **Did You Know?**
- **Watershed Workforce**

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 and Burbank Sanitary Districts.

Benefits of Automated Composite Samplers

There are two methods of collecting composite samples — using an automated sampling device or hand-compositing (collecting several grab samples and combining them). Of the two, the best way to produce uniform, representative samples is by using automated sampling.

When composite sampling is required, it is because of varying flow rates or pollutant concentrations. If your company has high and low flow rates affected by the time of certain processing activities, or varying levels of pollutants in the wastewater, you should consider automated sampling. Automated composite sampling provides a more consistent and accurate sample than hand compositing sample methods.

As an example, an electroplating facility may not have continuous production. The size and shape of pieces vary each time they plate, so the amount of plating chemicals and metals that end up in the rinse water to be treated varies. Because of this variation, taking a sample at one point in time might produce either a very concentrated or a very dilute sample — one that is not really representative of what the company actually discharges over time.

Automated samplers reduce contamination of samples due to handling and do a better job of representing the average characteristics of wastewater from a facility than grab samples. Per ordinance, a hand composited sample must contain the mixture of "...at least six (6) individual

samples from each sample point..." so hand compositing can be labor intensive. Most hand sampling problems can be traced to the variations between the individually collected samples. During hand sampling events, unwanted or varying concentrations of particles (and pollutants) can end up in the sample if:

- The samples are collected at differing depths.
- The samples are collected at different locations within the sample point.
- The same sample collection container is used for each sample, and the container was contaminated during one of the previous samples.
- Bumping the side of the sample point loosens material on the side of the sample point, affecting pollutant concentrations in the final sample.

Automated composite sampling can minimize these errors, and it saves time because you don't need to be present for six sample events.

Automated sampling devices must be maintained properly to function properly. See the "Tips for Maintaining an Automated Sampler" article in this issue for suggestions on how to maximize automated sampling device performance. Automated sampling can make complying with your permit requirements more convenient, more consistent, and less time consuming. 🐦



Ask Your Inspector

Q: My Industrial Wastewater Discharge Permit (Permit) requires me to submit a Self Monitoring Report (SMR). Can I obtain the form on the Internet?

A: Yes, download the form in either MS Word or PDF format at the following website: www.sanjoseca.gov/esd/water-pollution-prevention/eeforms.htm. SMRs addressed to your Source Control Inspector, are always due to the Source Control offices (170 West San Carlos Street, San José, CA 95113), on or before the last day of the month(s) listed in Section B.1 of your Permit (postmarks are accepted). Include all attachments with your SMR submittal.

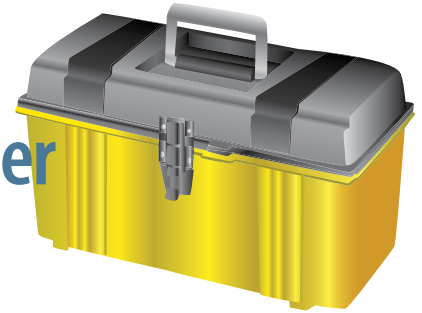
These may include:

- Laboratory results
- Documentation of the “chain of custody” for your sample
- Additional sampling results, if required
- Quality Assurance/Quality Control (QA/QC) documentation
- Support flow documents such as water bills
- TTO certification, if listed in your Permit

If you are not 100% clear about any of the above (e.g. “chain of custody” or TTO), ask someone at your analytical laboratory or your Source Control inspector to explain it.

Additional forms and information relevant to your business, including Industrial Wastewater Discharge Permit applications and TTO certification forms, can also be found on the website. ➔

Tips for Maintaining an Automated Sampler



Have you ever started your automated sampler and returned the next day only to find an error message and/or no sample? There’s always the possibility that your sampler needs some factory maintenance, but sampling failures are often the result of maintenance and setup problems that can be avoided. Always follow the manufacturer’s instructions for your specific sampler. In addition, here are some general maintenance tips for using samplers with peristaltic pumps to collect composite samples:

1. Check for worn tubing — Replace worn tubing before it fails. Worn tubing will prevent your sampler from bringing up the proper sample volume. Check the tubing inside the pump housing, as well as the external tubing, for wear and cracks each time you set up your sampler. Even durable tubes will crack and break under the strain of the peristaltic action — pump tubing flattens noticeably when it is worn out.
2. Check tubing for an accumulation of suspended solids — Tubing fouled with suspended solids can prevent your sampler from bringing up the proper sample volume. The suspended solids could end up in your wastewater sample, which could result in a violation. Sometimes a cleaning processes or chemical is not compatible with the tubing materials or the sample to be collected. Consult a laboratory or in-house chemist to ensure cleaning processes and solutions are compatible with your facility’s analytical needs. When in doubt, replace the tubing.
3. Hot weather conditions affect automatic samplers located outside.
 - Choose a shaded area
 - Place sampler inside a temperature controlled enclosure.

- If cold preservation is required, fill or replenish ice regularly during sampling if your sampler is not refrigerated.
 - Paint sampler white if not already light in color to reflect light.
 - Document transport temperature e.g. any changes in temperature from time of collection until laboratory pick-up or drop-off.
4. Make sure to calibrate the sample volume by running the calibration system of sampler into a measuring cylinder.

Other Sample Collection Problems

For composite samples:

- The sample is not thoroughly mixed before pouring into smaller containers.
- The sampler bottles are not kept clean.

For any sample:

- Correct holding times are not observed.
- Correct preservation procedures are not followed.
- The Permit requires both instantaneous “grab” samples in addition to composite samples, but only composite or grab samples have collected.
- The correct volume of sample is not collected.

Remember to consult your Industrial Wastewater Discharge Permit for the sampling requirements specific to your facility, and discuss any issues or questions with your Environmental Inspector. ➔

2008 Industrial User Academy



Thanks to you, the 2008 Industrial User Academy was once again a great success.

The Academy was held on May 14, 2008 at the San Jose/Santa Clara Water Pollution Control Plant (Plant) and was attended by 34 representatives from 26 different Industrial Users. Attendees heard several presentations covering regulatory issues, Bay monitoring, review of the wastewater permit application process, and the inspection program. The day concluded with a tour of the Plant facilities and operations. Attendees received information about important compliance issues prepared and delivered by the same inspectors that inspect your companies.

The topics and presentations were selected in part from comments collected at last year's Academy. Are there topics you would like to have covered during next year's Academy? We would like to hear from you. Contact José Anaya at jose.anaya@sanjoseca.gov with your suggestions.

Congratulations to all that attended and received their certificate. Do you have yours? If not, give José Anaya a call at (408) 277-4574. 🐉



Understanding the Recent Changes to Monitoring Requirements in your Permit

Recently, your business received an Industrial Wastewater Discharge Permit (Permit) amendment letter changing your wastewater discharge and monitoring requirements. Understanding your new discharge requirements can prevent violations and save you money. Your Permit can have 2 sets of limits — local and federal. It's important to read and compare the amended local and federal limits in your Permit. Failure to monitor for a required pollutant can result in a violation, while monitoring for pollutants you are no longer required to sample for is a waste of time and money.

The amendments affect the limits and requirements contained in the following sections of your Permit:

- Section A.2 Local Discharge Conditions — Interfering Substances and Average Limits
- Section B.2 Self-Monitoring Requirements — Interfering Substances
- Section B.3 Average Concentration Limits — Monitoring Requirements

ALL OF THE CHANGES AFFECT LOCAL LIMITS ONLY. Even if the new changes eliminated a local limit in your Permit, the **FEDERAL SECTION** of your Permit may require sampling for that pollutant. Check both the federal and local sections of your new Permit requirements for copper, nickel and Total Toxic Organics (TTOs).

If you have any questions on any of these changes, you can contact your inspector at (408) 945-3000. 🐉



Shahin Baghdassarian



Shahin Baghdassarian has been with the City of San José's Source Control team as an Assistant Environmental Inspector since May 2005. His duties include collecting wastewater samples at industrial and commercial locations. He also performs basic inspections to assist customers with meeting federal, state and local regulations. Before he came to the City of San José, he worked at Zycon and Sanmina as an Environmental Supervisor. Shahin has degrees in Chemistry and Water and Wastewater Technology, and has earned a long list of certifications including a Grade 4 Water Quality Analyst certification. Shahin is a very hard working and courteous member of the Source Control Team, and is happy to share his knowledge and expertise to assist all of his customers with meeting their water quality requirements. 🐉

TributaryTribune

Watershed Protection Division
City of San José Environmental
Services Department

170 W. San Carlos Street
San José, CA 95113
Phone 408-945-3000
Fax 408-277-5775

PRESORTED
STANDARD
U.S. POSTAGE
PAID
SAN JOSÉ, CA
PERMIT NO. 502

TributaryTribune San Jose/Santa Clara Water Pollution Control Plant | Summer 2008

West Coast Green Moves to Silicon Valley

World's Largest Residential Green Building Event Picks San José for 2008



join us in **2008!**

"...This place is absolutely blazing hot with good stories and great people. I wish I had more time!"
—LISA CHAN, CBS CHANNEL 5 NEWS ANCHOR

west coast green
silicon valley 2008
building innovation conference + expo
september 25-27
san jose convention center, ca

In September of 2008, West Coast Green will host the largest and most inspirational residential green building conference & expo in the nation.

400 Exhibitors
Over 150 Presenters
14,000 Attendees including green building decision-makers from every state nationwide

West Coast Green 2007 was recognized in over 300 feature editorials including The Economist and broadcast news segments and attended by more than 315 registered journalists from all over the world – reaching over 32 million people world wide.

West Coast Green, the world's largest residential green building conference, is moving to San José. West Coast Green 2008, which will take place at the San José Convention Center from September 25-27, offers over 100 presenters, 380 exhibitors, and is expected to attract more than 13,000 attendees.

West Coast Green aims to empower and inspire the design, architecture, and construction industries by focusing on environmentally and socially responsible practices. Event organizers cite the Silicon Valley's "fresh thinking and innovative culture" for their motivation to change venues.

For more information on West Coast Green 2008:
www.westcoastgreen.com/

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).



Printed on recycled paper.

bf/07-08/1400cp/1400/JY/DM
© 2008 City of San José Environmental Services Dept.