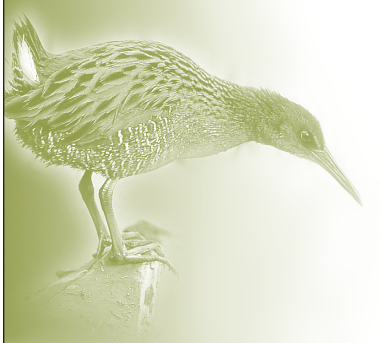
San Jose/Santa Clara Water Pollution Control Plant

Tributary Tribune

FALL 2005



Improving Industrial User Performance

During the first half of 2005, the City of San Jose's Pretreatment Program monitored over 337 companies in the Plant's tributary area. Of these, 172 were significant industrial users (SIUs). While most SIUs were found to be consistently in compliance with their discharge requirements, inspectors are still noting a few common problem areas. These are described below:

pH monitoring

All pH-monitoring equipment (including the meter, recorder, and chart paper) must be calibrated, and operating in sync **at all times** when your facility is operating *or discharging*. Ensure that your pH probes are cleaned and maintained on a regular schedule. Additional good business practices include periodic review of the operating manuals for your pH-meters and chart recorders, and providing updated training to your employees.

24-hour Notification of Violation

Verbal notification must be given to your inspector within **24 hours** of every discharge violation. It is a good record keeping practice to document all such phone conversations. A follow-up written report must be submitted within 5 calendar days of the discharge violation. You are required to keep records of all documentation submitted for a minimum of 3 years. However, it is good practice to keep records for 5 years for investigation purposes.

30-day resample

All discharge violations detected by self-monitoring require you to resample and submit the new results, complete with SMR cover sheet, within 30 days of becoming aware of the violation.

Non-Standard Waste Streams

If you have a non-standard waste stream, and depending on how this waste stream was generated, it may need to be treated as a dilution stream for purposes of calculating your discharge limits. For example, groundwater used in production areas may not be discharged to the sanitary sewer system without prior assessment by your inspector. These waste streams may need to be treated or accounted for as dilution streams.

All waste streams discharged to the sanitary sewer (including mop water) must be accounted for in your permit applications and self-monitoring reports.

Slug Control Plans

If your operation has the potential for a "slug" discharge (a non-routine wastewater discharge, such as a spill or irregular, high-strength batch discharge) and you are required to develop a slug control plan, ensure that your plan meets the requirements detailed in 40 CFR Part 403.8(f)(2)(v). All SIUs should review their existing Hazardous Material Management Plans (HMMP) or related spill-response procedures to verify that existing procedures satisfy the requirements of a slug control plan.

Self-Monitoring Reports

Submit your SMRs **on time**. This is one of the most common violations inspectors come across. Work with your laboratory and staff to ensure that they understand deadlines and due dates.

Let us know what we can do to help you achieve 100% compliance by contacting us at **(408) 945-3000**.

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

How Surface Cleaning Affects Creeks and the Bay

Many permitted Industrial Users already know the importance of keeping polluted wastewater out of the sanitary sewer system, but some may not be aware of the importance of keeping wastewater out of the *storm* sewer system. Below are a few examples of how pollutants can enter our storm drains and harm our creeks and Bay, followed by a few simple measures you can take to help protect them. Pollutants like oil and pesticides can stay on exterior surfaces until rain, excess sprinkler water, or *careless surface cleaning* wash the polluted untreated water directly into our creeks and Bay. Even soapy water (biodegradable soap included) is highly toxic to the plants and animals that live in our creeks.

Hire Trained Surface Cleaners

Some professional surface cleaning companies (steam cleaners, power washers, etc.) train their staff on proper outdoor cleaning practices, including how to properly collect and dispose of polluted wash water. The Bay Area Stormwater Management Agencies Association (BASMAA) conducts a pollution prevention training program for surface cleaners and maintains an updated list of businesses that have been trained in these best management practices (BMPs).

To see if your surface cleaner is on this list, go to: *www.basma.org/recognition* and click "Verify Training." If you have a standing relationship with a mobile cleaner that is not on the list, please encourage them to take the training. The training course is **FREE**, brief, and offered online as well as through local stormwater agencies.

Insist on Only Trained Workers

Individuals get trained, not businesses. It does little good if the contractor lost the person they trained or uses untrained sub-contractors. **For your own protection**, ask that workers trained in surface cleaning BMPs be sent to your site.

Train Your Own Employees

Whether your employees actually do the surface cleaning or manage the work done by a contractor, it is important to train them on best management practices. Ultimately, you are liable for any unauthorized discharges to the storm drain. Hiring a third party cleaner does not absolve you of this responsibility.

BASMAA TRAINING

To sign up for the **FREE** BASMAA training, go to: *www.basmaa.org/recognition* and click "Get BASMAA Training." You can also download the PDF file "Pollution from Surface Cleaning Folder", which has tips on proper cleaning and disposal methods.

For more information on the BASMAA Surface Cleaner program, call **(510)-622-2326** or e-mail *info@basmaa.org*.

Proper Lab Analysis Documentation

If the Self Monitoring Report (SMR) requirement in your wastewater discharge permit requires testing wastewater for pollutants, be sure your laboratory is both certified to analyze wastewater and is using an approved method for testing. Solid waste methods are **not** approved for verifying compliance with federal or local wastewater discharge limits. If your laboratory is using a solid waste method for analysis, it will invalidate your sample results and put your facility in violation of permit conditions.

California Accreditation

The State of California certifies laboratories, both for what they can test for (e.g., metals, volatile organics, etc.), and for what material they can analyze (drinking water, wastewater, solid waste, etc.). California laboratories certified for solid waste analyses are also certified to analyze wastewater. However, for purposes of compliance with your SMR requirement, they must be both certified to analyze wastewater and use an approved wastewater method. For example, a lab report for copper that cites 6010B as the method of analysis is **not** acceptable because this is a solid waste method. The same lab can test for copper using EPA method 200.7, provided they are certified for wastewater methods. As another example, a lab testing for TTO components that uses method 8260 is **not** acceptable because this is a solid waste method. Instead, EPA wastewater test methods such as 624 and 625 should be used.

PLEASE NOTE

Samples collected for in-house testing (to monitor day-to-day treatment system operations) do not have to be analyzed using approved wastewater test methods, even if you are asked to submit these results to your inspector.

This includes samples collected for other purposes (research, production QC/QA, etc.)

EPA Approved Testing Methods

Title 40 of the *Code of Federal Regulations*, (40 CFR), part 136.3 provides a complete list of wastewater pollutants and approved test methods. You can see this list by going to: *www.access.gpo.gov/nara/cfr/waisidx_03/40cfr136_03.html*

continued on next page

An abridged version of the 40 CFR 136.3 list has been included with this newsletter (see table insert). This table lists only pollutants commonly found in industrial user permits and is based on the most current version of 40 CFR 136.3. Use this table to check if your laboratory is using an approved wastewater testing method. The table insert acknowledges four different testing methods, but commercial wastewater labs in California typically use only two:

1) US Environmental Protection Agency approved methods,

2) Standard Methods for the Examination of Water and Wastewater (Standard Methods).

If your laboratory uses Standard Methods, please note on your lab report the edition used. This is because 40 CFR 136.3 references specific editions as being approved, and usually not the latest edition.

Alternate Testing Methods

40 CFR 136.4 discusses the application process your laboratory must follow to request use of an alternate test method. The Plant, for example, frequently uses EPA method 200.8 to analyze wastewater for metals. Method 200.8 is not on the 40 CFR 136.3 list, but the Regional Water Board has authorized the Plant laboratory to use this alternate test method.

If you have any questions about SMR lab reports, contact your Source Control inspector at **(408) 945-3000**.

Spotlight on . . . Headway Technology

Headway Technology, a Milpitas based company, produces thin-film heads that read and write data to hard disk drives. Over the past few years, the company has enjoyed a steady increase in production and currently has plans to expand their Milpitas facility.

Smart business sense has prompted the company to look for opportunities to offset the operational costs that often go hand in hand with increased production and facility expansion.

One such opportunity involved examining their facility for ways to reduce water use. Headway used a computerized model to track water use from over 30 flow meters to determine which process used the most water.

The model identified that the highest water demand came from cooling tower operations and the process used to produce ultra-pure or deionized (DI) water.

Headway researched equipment and process changes that would allow for reduced water use. After looking at several options the company decided to invest in the VRTX system and the HERO system.

The VRTX system is a patented industrial water treatment system designed to improve the performance of cooling water systems by increasing cycles of concentration (from 2-3 to 8 or higher) and decreasing blowdown frequency. In other words, the same water can be recycled and recirculated through cooling towers more times before it needs to be discharged to the sanitary sewer. Headway installed this technology on three of its cooling towers, which resulted in an estimated water savings of 19,077 gpd.

The HERO system is a patented reverse osmosis (RO) membrane technology meant to improve the efficiency of DI water production. Prior to installing the technology, the RO system produced DI water at a 75% efficiency rate, meaning that only 75 out of every 100 gallons treated was reusable DI water.

After the HERO system was installed the RO system performed at a 90% efficiency rate resulting in an estimated water savings of 8,654 gpd.

The Bottom Line

Headway realized an estimated total **water savings of 27,731 gpd** and received $54,128 in financial rebates through the Water Efficient Technologies program by implementing projects that reduced wastewater discharge to the San Jose/Santa Clara Water Pollution Control Plant.

Headway continues to search for efficiencies and recently participated in a free water use survey sponsored by the Santa Clara Valley Water District (SCVWD). The survey recommended installing several water efficient fixtures and connecting the cooling towers to the South Bay Water Recycling (SBWR) pipeline, something Headway has been considering.

Thanks to Gary Winslow and his staff at Headway Technologies for their water conservation efforts!

For more information on WET financial incentives contact Geoff Blair at **(408) 277-3828**, or visit *www.slowtheflow.com*

FREE water use surveys are being offered through the SCVWD. For more information contact Ann Guy of Energy Solutions at **(510) 482-4420x233**.

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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).

www.sanjoseca.gov/esd

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Stencil Your Storm Drains

~ Locate and label all storm drain inlets at your business site. ~

To receive **FREE** "No Dumping! Flows to Bay" storm drain stencils call the Santa Clara Valley Urban Runoff Pollution Prevention Program at **(800) 794-2482**.

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