



San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission



SOUTHEAST NEWSLETTER

WINTER 2015/16

CleanPowerSF – Cleaner Energy Coming Spring 2016!

CleanPowerSF is San Francisco's Community Choice Aggregation (CCA) initiative, a program that allows cities and counties to partner with their utility (PG&E) to deliver cleaner energy. PG&E will continue to maintain the power grid, troubleshoot outages, and send you a monthly bill; but you get cleaner energy, for no more than you currently pay.

Starting in spring 2016, PG&E will automatically deliver CleanPowerSF's Green product (cleaner energy at or below current rates) to the Southeast Community. CleanPowerSF will then be rolled out in phases to the rest of the City.

PG&E generates most of your electricity from nuclear, natural gas, and other unspecified energy sources, but only 27% is actually renewable. CleanPowerSF will generate more of your electricity from clean, renewable sources. We will also offer SuperGreen – 100% renewable energy – for a slight premium.

CleanPowerSF will be administered by the clean energy experts at the San Francisco Public Utilities Commission. To learn more, early enroll, or sign up for the SuperGreen product, visit cleanpowersf.org.

Would you like us to present about CleanPowerSF at your neighborhood or business association meeting? Email us at cleanpowersf@sfgwater.org.



Maverick Madison: Wastewater All-Star

Position: Electronic Instrumentation
Technical Supervisor

Location: Southeast Treatment Plant

Career Start: Apprentice, 1988

Hometown: Bayview, San Francisco

Role: Maintains automated control
systems that keep wastewater flowing
at the Southeast Treatment Plant

"I was drawn to wastewater by the field's use of innovative technologies. If you like math, are interested in the environment, and curious about how things work, you should think about a career in wastewater. I love the challenges we come across—every day is different."

*Learn more about jobs in wastewater
on back page.*



Understanding Wastewater: Southeast Treatment Plant Upgrades

Headworks: Treatment Step One

You may be aware that the Southeast Treatment Plant cleans 80% of San Francisco’s wastewater. The details of how that happens, however, might be a little fuzzy.

After the water leaves your shower, toilet, or storm drain and travels through the City’s 1000 miles of pipes, it enters the Plant at the headworks facility. This is where grit, debris, and other non-biodegradable material are removed. Removing this material prevents damage to the rest of the Plant’s treatment equipment and buildup in the biosolids digesters, allowing the treatment process to run efficiently.

The wet weather headworks facility at the Southeast Treatment Plant is over 30 years old and needs to be upgraded. The 250 MGD (million gallons per day) New Headworks Facility Project will combine what are now two facilities into one. This new facility will meet the latest seismic standards, improve odor control, and include current grit removal technology.

Biggest SSIP Project Reaches Key Milestone

The New Biosolids Digester Facilities Project, a vital upgrade to the wastewater treatment system at the Southeast Treatment Plant and the biggest project of the SFPUC’s Sewer System Improvement Program (SSIP), reached a major milestone this year. In July, the project began the environmental review phase, an in-depth analysis of the project and its potential environmental impacts, a process mandated by the California Environmental Quality Act (CEQA).

A project scoping meeting was held on July 16, 2015 where the public had an opportunity to provide comments. To prepare for the meeting, 39 presentations were made to local community groups to inform stakeholders of the project. A draft Environmental Impact Report (EIR) will be released next summer, when there will be additional opportunities for public comment.

The New Headworks Facility Project submitted its Conceptual Engineering Report (CER) at the end of November and will reach 35% design in early 2016.



Existing headworks facility along Evans Avenue near Rankin Street.

Biosolids digesters are large tanks that process solid waste at a treatment plant. The 10 that currently service the Southeast Treatment Plant are at the end of their useful life. The project will provide seismic and aesthetic improvements, as well as reduce odors. It is scheduled to break ground in 2017.



Old biosolids digesters on Phelps Street. New digesters will be built on the north side of the Plant along the Caltrain tracks.



Rain On the Way!

Though we expect rain this winter, the drought continues and conservation remains critical. Take advantage of our free water-wise evaluations and water-saving devices, check out incentives for replacing old toilets and washers, and learn how to make your yard more water efficient. We are also expanding our Laundry-to-Landscape greywater and rain barrel programs in January. Learn more at sfwater.org/conservation.

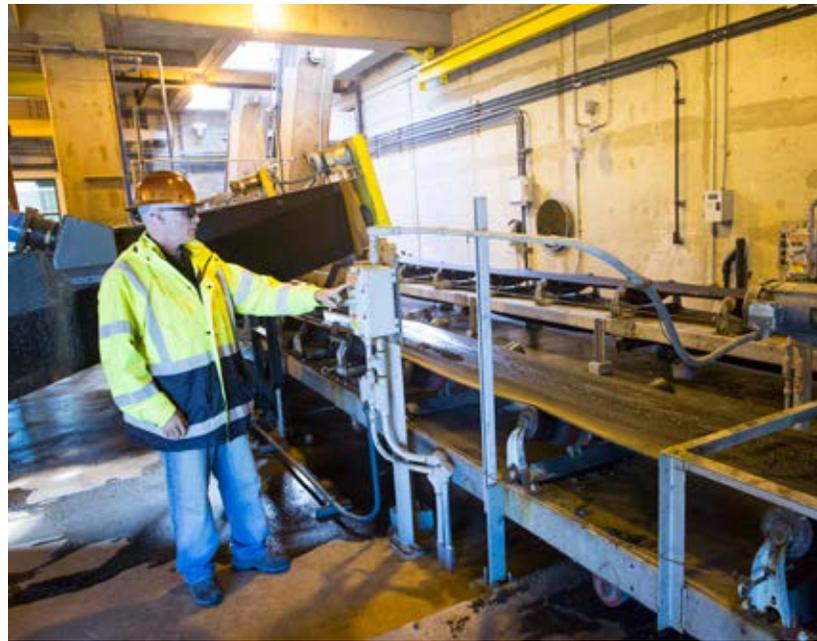


Bio-WHAT?

When you run your garbage disposal or flush your toilet, you may think your dirty water is gone for good. Not so! It has a second useful life still waiting for it.

The two most useful byproducts of our wastewater treatment plant are biosolids and biogas. Biosolids are the nutrient-rich byproduct of your treated solids. The solid waste is separated from the liquid and treated in an anaerobic (meaning without oxygen) tank called a digester, where tiny microbes break it down and turn it into biosolids. These biosolids are rigorously tested for any trace of pathogens and can be used in agriculture to improve soil quality and health, increase moisture-holding capacity, and reclaim damaged soil.

When biosolids are processed in digesters, the other byproduct is biogas, or methane, which can be used to create heat and electricity. After the upgrades are completed at the Southeast Treatment Plant, 100% of the biogas produced at the Plant will be used to power its operations. Using the biogas will reduce greenhouse gas emissions and make the Plant more self-sufficient.



Plant operator oversees the processing of solid waste into high-nutrient biosolids.



Let's Connect!

Like us on Facebook and follow us on Instagram and Twitter for weekly trivia and up-to-the-minute updates and news. Get the latest on that sink hole or share a picture on #ManholeMonday.

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Calling All Future Plant Operators!

Hundreds of engineers, electricians, machinists, instrument technicians, and wastewater treatment and collection operators work together at the Southeast Treatment Plant to manage your wastewater 24 hours a day, 7 days a week. The retirement rate of Bay Area water and wastewater utility employees is 40-60%, allowing for many opportunities to build a career in the industry.

The SFPUC is partnering with local utility consortium Baywork to ensure a high-quality workforce is available to keep our Plant running for future generations. Our engineers and operators speak directly to high school, vocational, and community college students, helping to show the breadth of possibilities available in the water and wastewater industry. The SFPUC provides students with career roadmap resources and internship opportunities within the agency so that they know what it takes to succeed in the utility industry.

If you are interested in organizing a presentation at your school or community organization, please contact Niko Rodriguez at nirodriguez@sfwater.org or (415) 920-4273. To learn more about career opportunities at the SFPUC, visit sfwater.org/careers.

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Get Storm Ready



Heavy rains are on the horizon and intense storm events can overwhelm any urban stormwater system. Many neighborhoods in San Francisco experienced flooding during the heavy storms last winter.

Since then, we have been developing a citywide flood resilience program to help property owners minimize the risk of damage. While we are working to mitigate flooding, property owners share the responsibility for minimizing their risk of flooding damage caused by rain.

Our Floodwater Grant Program reimburses San Francisco property owners for installing physical barriers such as flood walls, implementing plumbing modifications, and other special projects.

FEMA's low-cost National Flood Insurance Program is available to all San Francisco homeowners, renters, and businesses.

When storms occur, remember these safety tips:

- If water has entered a garage or basement, do not walk through it.
- If you are asked to leave your property, disconnect all electrical appliances.
- Tune-in to KCBS (740 AM or 106.9 FM) or local TV channels for emergency advisories and instructions.
- Avoid downed power lines and broken gas lines.

Learn more at sfwater.org/stormprep.