



**Meeting Summary**  
**SFPUC Southeast Working Group**  
**Wednesday, July 16, 2014**

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Southeast Working Group Members present for the tour are indicated in **bold**:

<b>Torrance L. Bynum</b>	<b>Edward Hatter</b>	Sululagi Palega
<b>Ed Donaldson</b>	<b>Dr. Espanola Jackson</b>	<b>Karen Pierce</b>
<b>Drew Gaxiola</b>	<b>Michael Janis</b>	<b>Sunny Schwartz</b>
<b>Marjorie Goodwin</b>	<b>Mark Klaiman</b>	<b>Lydia Vincent-White</b>
<b>Diane Gray</b>	<b>Marcus Mullen</b>	Tracy Zhu
<b>Janine Greer</b>	Misha Olivas	<b>Eddy Zheng</b>

**Call to Order**

Eddy Zhang called the meeting to order

SEWG meetings overview Leamon Abrams welcomed Working Group members to the meeting and recognized the members from the public who were in attendance. Leamon outlined the upcoming purpose and objective for the calendar of SEWG meetings each designed to build upon the previous in informing and soliciting input from the Working Group. The purpose of the today's meeting walk the SEWG members through the rigorous process the SFPUC has undertaken with regards to the biosolids project and the digester technology alternatives and to receive input on how the information, when presented, would be received. The importance of discussing it today is that it will help further the internal analysis and enable the SFPUC to come back to the working group in October and November with further details about the project's aesthetic elements. Next month's meeting will focus on community investments and partnerships in the Southeast (e.g. workforce development and small business).

**SSIP Overview**

Karen Kubick, Wastewater Enterprise Capital Program Director, gave the background of the Sewer System Improvement Program and encouraged those interested to take a walking tour of the plant to see the plant operations and to get a look at the scheduled project locations. She walked the group through the flow and storage of waste water through the city and the current capacity we have for transport and storage of waste water. Our challenge with the existing sewer system is that the system is old and has not been seismically upgraded unlike ever other city utility and infrastructure division.

Karen discussed the history of the SSIP and all of the work that has taken us to where we are today. Planning began about 7 seven years ago. We had 18 months of public hearings at the Commission where we discussed the SSIP plan and developed Levels of Service Goals. We had stakeholder input along that way. Karen highlighted the Digester Task Force, a 9 member group made up of neighbors, people in the neighborhood, and people who worked in the neighborhood. The group was assembled in 2010 and was instrumental in helping SFPUC narrow down the site location for the equipment to help guide how we would move forward with the project. The Digester Task Force also deliberated on aesthetics,

design standards and the plant and its relationship to the neighboring community. The SEWG's charge is to take the product developed by the Digester Task Force and move forward to implement the project plan.

Karen expressed that there is and will continue to be an emphasis on all SSIP projects for local hiring, job training, and to ensure local firms are ready to compete and participate in the opportunities through the SSIP. Karen mentioned the 99 10 programs and other programs SFPUC engages to identify firms and individuals, train them and get them ready for city project work and/or other projects in targeted industries.

SFPUC hired a Program Manager who took us through a validation process because our Commission, Mayor, and Board of Supervisors wanted to ensure we were building the right projects, using right schedule and cost estimates. After a year of another series of workshops, the Commission authorized Phase 1 of the program which represented 2.7 billion dollars. Two key projects slated for these funds are Central Bayside System Improvement Project, which will replace that Channel 4 main, and the Biosolids Digester Project. Construction to begin in 2018.

### **Questions/Comments**

**Comment:** We need to involve community and to not forget importance of Southeast Community Facility as the Southeast Community College.

**Comment:** A request was made for the project team to find out and report back as to how much sewage the plant receives from Brisbane, Colma, Daly City and the Presidio.

### **Biosolids Technology**

**Emilio Cruz**, Asst. General Manager for Infrastructure, presented on Biosolids Digester technology for rebuild of Southeast Treatment Plant. The facility has been in operation 24/7 since 1952, and Our goal is to create a modern treatment facility that meets present and projective regulatory requirements—we want to build something that will last into the future. We currently produce a Class B biosolid and with the installation of the new technology we will be able to produce Class A.

Our charge is to figure out how we contribute to society both as a physical asset and an operational asset. How can we do what we need to do without negative impact to the community--minimizing odors and noise, lowering truck traffic and leveraging job creation as we move forward with the program? The Planning Phase started in January 2013 and continues thru September 2015 with the environmental phase. Key point in this phase of the process is alternative analysis report which is the technology we will review tonight. The goal is by January 2018, is to move into first phase of construction of the Biosolids Digesters which will be the first piece of rebuilding for the Southeast plant.

The criteria for analysis we used to evaluate the technology alternatives for the Biosolids Digesters project are: the SSIP Level of Service Goals, technical and adaptability to future regulatory changes, net renewable energy generation (zero carbon footprint), system maturity and reliability (new and proven technology), greenhouse emission levels, diversity of the end use of the biosolids and what markets are

out there for its distribution, maintenance requirements, operation complexity, net energy production and cost of construction. The non-financial components that were a part of the analysis were: minimizing odors, getting acceptability from the community, how we deal with greenhouse gases emissions, air quality, noise and vehicle traffic.

The 4 viable digester technology options analyzed and assessed for the SEP are:

1. **Mesophillic Anaerobic Digestion + Drying (MAD)**, heats up to 100 degrees and uses a lot of energy to heat the materials.
2. **Mesophillic Anaerobic Digestion + Composting (MAD)** would require the purchase of land or contracting to another city to store or dispose of the Class A biosolid material.
3. **Temperature Phased Anaerobic Digestion (TPAD)**, material is heated to 130 degrees and is digested twice. To accomplish this process requires more time to digest the materials 2 times, or additional space for additional digesters to process the materials.
4. **Thermal Hydrolysis Process with Mesophillic Digestion (THP+MAD)**, non-traditional digestion process where the material is pretreated with a heating process of 300. The materials are broken down to a molecular level which reduces the volume of the material and speeds up the digestion time. The benefits of this technology are that you reach Class A and produce 50% less biosolid.

The selected technology is Alternative 4 Thermal Hydroloysis Process with Mesophillic Digestion (THP+MAD). This technology achieves the following: gets us closest to adaptability toward regulatory compliance; there is redundancy built into the infrastructure; , limits the odors at the fence line; produces 100% biosolids for reuse; increases our economic stability in the future because we do not need to rely on outside contracts.

The cost analysis between all alternatives was all within 10% of each other. Our technology choice is aligned with our level of service goals for all SSIP projects. This process also generates gas that we can turn into compressed natural gas and sold on the open market or can be turned into energy to be feed back into the plant operations. We currently spend 7 million dollars a year on electricity to operate the SEP. By the end of this process with the technology alternative we have selected we will generate more energy than we need.

### Questions/Comments

**Question:** Given the high temperature and the high pressure generated by the selected CAMBI technology alternative, how stable is the system?

**Answer:** We reviewed and visited several cities with this technology and others that are considering this technology and we all voiced their satisfaction operationally with the technology. We also toured the company that manufactures the technology and were impressed with the research and development operations.

## Questions/Comments (con't)

**Question:** Of all the plant sites visited, what was the reaction from the surrounding communities where these facilities were located? How did those communities engage—were there benefits, employment for example that was a part of the benefits back to the communities?

**Answer:** Most of the plants visited were not adjacent to residential communities.

**Comment:** On the issue of composting, we should acquire adjacent properties and start a composting business.

**Comment:** Residents in 94124 should not have to pay rates because we are hosting all of the city's sewage materials.

**Question:** Between the reduction in the size of the treatment units and the reduction in the size of the amount of solids that need to be treated after the fact, how much space will be saved?

**Answer:** We will have to build the new plant while operating the plant, so our plan is to acquire property adjacent to the plant. If that acquisition happens we would likely build the new biosolids operations there. Then tear down the old biosolids facilities and move our administrative functions in that location.

**Question:** What is in place for the community to truly benefit from these projects—the decision making bodies where community benefits, grants, jobs etc. should be made and led by the community and not the staff.

**Answer:** The arts money is money the SFPUC was required to give the Arts Commission. Our General Manager went to the commission and insisted that all of the money come back to the Bayview, which is something that historically has never been done.

**Question:** Is there any discussion as to addressing the open settling ponds (clarifiers)

**Answer:** The clarifiers are one of the odor control components we looked at within the fence line. It is an expensive proposition with some operational impacts—we are looking at clarifiers and have not made a decision—we are doing a cost benefit and SSIP goal benefit.

**Question:** How are the community and families being informed about the process of addressing the odors produced by the SEP?

**Answer:** We can agendize that and get staff out to meetings to address those issues. We have partnerships with the schools and are doing educational training to engage youth and their families.

## Conclusion

Leamon announced that Javieeree Pruitt-Hill would be stepping down as co-chair of the SEWG and introduced Marjorie Goodwin as the new co-chair representing the Waste Water Subcommittee of the Citizens Advisory Council. He concluded the meeting informing the group that we are dedicating a future meeting to address workforce investments, arts, education, grants and other issues related to SSIP.