BACWA - Information Sharing Group
Meeting Minutes
February 25, 2009
10:00-2:00 at CCCSD

ATTENDEES

Alan Weer, CCCSD
Randy Grieb, CCCSD
Larry Shepardson, CCCSD
Steve Dominguez, DDSD
Joaquin Gonzalez, DDSD
Brian Hawley, FSSD
Mick Berklich, SRWTP
Nathan Brennan, CMSA
Chris Finton, CMSA
Mike Barnes, WBA

DISCUSSION ITEMS

Grease to Energy

DDSD is planning to install a grease receiving station to add FOG to their digesters. A major goal is to get grease out of their collection system. A concern is whether they will have enough customers. They are considering using a design build approach to install the facilities, but have not had much interest in this. Steve indicated that they had seen systems in Millbrae and Watsonville. In Millbrae, the system was working well, with no scum blanket build up yet. The Watsonville system had a heater in their grease receiving tank that didn't work reliably since it collected rags. Steve noted that they take grease from everyone, making it harder to operate the system.

SRWTP has had a pilot project to add FOG to their digesters. A goal of a full scale program would be to get grease out of their primaries. They are using a Baker tank to hold the grease that they receive from only select customers. They are heating the tank, but have still experienced some stratification. They use a chopper on the recirculation line to the tank.

Marin County completed a FOG study with a goal to reduce grease disposal at the landfill. CMSA was selected as the best site for a FOG facility. The inclusion of grease trap requirements as part of SSMPs facilitates the collection of grease. CMSA recently had a study to review the feasibility of receiving food waste. The study indicated that they could increase digester gas production by almost 50%, which would allow them to operate their cogeneration engine almost full time on digester gas.

Energy Management

CCCSD has a 3.2 mW turbine that runs on natural gas to supply most of their power needs. They buy an average of 120 kW from PG&E. They spend about $4.5 million annually on natural gas. The spot market price for natural gas is now $4.40/DT. The price to buy a one year strip in 2010 is $6.12/DT. It's more cost effective to purchase NG to produce power as along as NG is less than $12/DT. They use landfill gas for their furnace, which costs about $700,000/yr. The landfill gas production is decreasing, as is its BTU content, which has dropped from 550 to 500 BTU/cf. The ADWF is about 45 mgd.

SRWTP buys electricity from SMUD at a cost of about $8.1 million/yr. They send their digester gas to the Carson generation plant. Their peak consumption is about 13-14 mW and their ADWF is about 160 mgd.

DDSD has an 800 kW generator that runs on digester gas about 65% of the time. They buy about 100 kw of electricity at peak usage.

CMSA has a 750 kW generator that runs about 10-12 hours/day on digester gas. They typically buy about 50-60 kW of electricity. They spend about $200,000/yr on natural gas. Their Waukesha engine recently failed. During the rebuild, it was noted that the internal components were very clean, probably because of their good digester gas treatment system of an iron sponge, dryer, and siloxane filter.

Digester Cleaning

SRWTP cleans their digesters using in-house staff for about $30-40k. They dispose of the materials on their dedicated land disposal

DDSD is having their digesters cleaned as part of a rehabilitation contract. They dewatered the materials with a belt press. The grit and rag quantity was minimal, and their were not major problems with the cleaning. They attribute this to their influent traveling screens and macerators. The frequency of cleaning also helps makes cleaning easier.

Disposable Wipe Problems

Nathan reported that Ross Valley and San Rafael indicated that disposable wipes were causing problems in their collection systems.

No one else was aware of problems, although some noted that they were not responsible for collection system operations, and would not necessarily hear of problems such as this.

Water Conservation Impacts

SRWTP has not seen any noticeable flow decreases.

DDSD has seen a significant flow reduction due to foreclosures; a 0.75 mgd decrease from 14.2 to 13.5 mgd. They may seen a water conservation decrease this summer since Antioch has adopted a 25% water reduction goal this summer. There has been no change in BOD or SS concentration.

FSSD has not seen any flow reductions. However, they have had a solids decrease because Anhueser Busch is pretreating their flow before discharging to the District. They have one digester out of service for rehabilitation.

CCCSD has seen flow decreases, especially from Concord. CCWD has implemented penalties for water usage above targets, so this may have an impact on flows this summer.

Impacts on Budgets Due to the Economy

SRWTP. Won't raise rates, despite a projected double digit rate increase from SMUD. They are trying to reduce their budget in a variety of ways. They now can't use temporary employees or retirees. They are also considering shift staffing changes.

DDSD. No direct budget impact other than just being careful about expenditures. Steve noted that they get revenue ($300/AF) from their recycled water delivery to the Pittsburgh golf course. They are trying to get their recycled water filters rerated from 5 to 7.5 gpm/sf.

CMSA is keeping their budget flat despite significant chemical prices.

FSSD. No significant impact.

CCCSD. No rate increase, no budget increase, and no added positions. Randy noted that they have received a very high number of applicants to fill vacant positions. In addition, bids for construction work have been below the engineer's estimate.

Hot Topics

CCCSD. Have had many failures of control boards furnished as part of their UV expansion last year due to a connector defect, so this should be a warranty issue. They asked how others handle confined space and the number of rescuers needs outside the space. Some noted that they use non-entry rescue which means that only rescuer is needed outside the space. They had a peak flow of 110 mgd in the recent storms.

SRWTP. Have had issues with grout pockets in their inboard effluent launders of their 24 secondary clarifiers. The launders on some have dropped, and they don't have a way to easier raise them to the proper elevation. They also have to dose up to 20 mg/l of chlorine to meet their permit; they use their outfall for contact time. DDSD generally has 8 mg/l out of their CCT and CMSA generally has 2 mg/l.

DDSD has many capital projects ongoing. Installing Tow Bro collectors on their secondaries, replacing the distributor on their trickling towers, replacing screw pumps,

installing a fine bubble aeration system and blowers, replacing a hypo tank. For their hypo system, they are switching to gear pumps to get a better low flow range. They will also be completing an electrical master plan. Steve noted that their PG&E electrical transformer has been lightly loaded, which has increased wear. The voltage output has decreased, and has caused power quality problems for various electronic devices.

CMSA. Redwood Landfill wants to increase the cost of using Biosolids for ADC from $27 to $45/ton. Nathan distributed a survey of costs of Biosolids disposal for various agencies. Their wet weather project is scheduled to start up on April 2010. They had a peak flow of 77 mgd for the rainfall of about 2 inches in 24 hours. Their effluent TSS was greater than 45 mg/l, which caused them to have to sample for metals every day this occurred.

FSSD. Installed smart covers on manholes upstream of all 17 pump stations. Their screw press will be on line next month. Are implementing 'pocket ops' which allows operators to enter rounds data on a PDA, which will download the data on to their SQL server. Have changed ops staffing so there is a minimum of 2 operators per shift. Plan to replace their DAFs with GBTs; they are looking for a GBT to test first. Their new secondary system is on line. They have new primaries under construction. They will begin predesign of a UV system shortly.

ACTION ITEMS

- Mike to forward the EBMUD Climate Change presentation to the group
- Mike to distribute the updated chemical commodity list
- Mike to distribute the Biosolids survey completed by CMSA
- Mike to include Barry Pomeroy of Vallejo on the distribution list. Also should contact American Canyon and Oro Loma about attending.
- Dave Livingston will contact Chuck Weir to see if he has heard anything about the chlorine residual rule.

NEXT MEETING SUGGESTION ITEMS

- Screw Press projects (FSSD, Sausalito Marin City Sanitary District)
- Chlorine Residual Rule (DL 11/08)
- Fuel Cell Projects (2/09)
- Biste 2 problems (JG 2/09)
- Livermore blowers (SD 2/09)
- Electronic O&M manuals (2/09)
- Spill reporting (Dale email of 3/7/08)
- Others?

NEXT MEETING

- May 27, 2009 at FSSD