Executive Director’s Message

“It’s a PEOPLE WORLD”

WHO NEEDS TO BUY ELECTRICITY ANYMORE?

NEW FEATURE—“ASSOCIATE’S SPOTLIGHT”

One of the great benefits of my job is meeting individuals from all of the numerous agencies that SCAP serves and developing long-term relationships with them. This past couple of weeks I was able to visit with a couple of them that I consider, not only to be good friends, but mentors as well. That would be Chuck Rogers with the City of Thousand Oaks and Logan Olds with the Victor Valley Wastewater Reclamation Authority.

After seeing firsthand what these guys have accomplished, it made me realize that our agencies, as great as they may be, are nothing without the individuals who manage them and the staff that provide the blood, sweat and tears. In the immortal words of my predecessor, Ray Miller, “It’s a people world”.

Both of these individuals are exceptional in what they do and in what they have accomplished for their respective agencies. Let’s face it, public agencies are a popular target for the print media when it comes to publicizing salaries and misconduct, yet rarely are they ever lauded for their “out-of-the-box” thinking. Having spent nearly my entire career working for public agencies, I know how hard it is to implement new and sometimes controversial ideas with the hope that they don’t blow up in your face. It’s people like these that continue to inspire and motivate me to provide the best service possible to our members each and every day.

It goes without saying, that shortages have become a way of life in California, and that the drought and the lack of new power plants have changed the way that we now conduct business. As they always have, our water/wastewater agencies have figured out how to adapt. Case in point: we are running out of potable water--so our agencies figured out a way to recycle treatment plant effluent, thereby creating a new supplemental water source; Oh by the way, we are also facing power shortages—but don’t fear, our agencies now capture their treatment plant digester gas and convert it to renewable energy to power their equipment. Some have even gone so far as to be able to furnish electricity to the grid.
As I mentioned previously, two of our agencies have recently reached milestones related to developing renewable power and reducing their dependency on imported power.

Chuck Rogers with his new 675 kw cogen unit  
Chuck & John in front of new flare unit  
Hill Canyon STP’s Fog Receiving Station

As long as I have known Chuck Rogers, he has been obsessed with finding ways to utilize the waste products from the Hill Canyon Wastewater Plant (HCTP) and to do so while utilizing available government subsidies and utility credits. No one said it would be easy, and it has taken the better part of his 16 years at HCTP to get here, but the HCTP is now capable of producing 100% of its energy needs on-site.

The one thing that makes Chuck so special is that he is always willing to try a new approach, if needed. In 2007 the HCTP began producing 50% of its electricity from cogen and 15% from solar and later added another 300kw unit to boost its cogen output. Chuck soon realized that it was proving difficult to achieve the City’s goal of 100% renewable energy at the HCTP without a major overhaul of the existing cogen units. Even though he was utilizing three cogen units at the time (two 250kw units and a 300kw unit), he continued to have problems with gas conditioning and contractor maintenance. So he made the decision to change contractors and obtain a SGIP grant to construct a new 675kw cogen unit. The proof is in the pudding, as they say, as his decision to employ the 675kw unit along with the 300kw unit has resulted in energy independence for the HCTP.

Not satisfied with the current $300k to $400k annual energy savings, Chuck is convinced that through efficiencies in gas distribution and biosolids treatment he can achieve even greater cost savings. I asked Chuck for any words of wisdom he may have that he could impart to agencies that may be considering similar goals for achieving energy independence, and surprisingly, he said that he would recommend targeting 80% renewable as a realistic goal and work towards achieving the remaining 20% through efficiencies in operation. He also said that, “utilizing Power Purchase Agreements was the most conservative and solid business decision that an agency could make when it comes to developing a renewable energy program”.

Much like Chuck Rogers, Logan Olds, the General Manager of the Victor Valley Wastewater Reclamation Authority (VVWRA) in the City of Victorville, is no stranger to innovative thinking. On September 26th, Logan held a ribbon cutting ceremony to unveil, what is touted as a “first-of-its-kind in the United States”, Omnivore Biogas Renewable Energy Facility at VVWRA’s Regional Wastewater Reclamation Facility. Trust me when I say that this project is a really big deal! Dignitaries from all of the local cities, the USEPA, US Bureau of Reclamation, the CA Energy Commission, Southern California Edison, as well as Congressman Colonel Paul Cook were on hand to deliver key note speeches and participate in this momentous achievement.
What began as a pilot study in partnership with Anaergia Inc. has now turned into a full working project. The Omnivore Project uses biogas to produce power through co-digesting food waste and sludge. Anaergia retrofitted an out of commission anaerobic digester into an energy-producing co-digester capable of concentrating the volume of a typical digester. By increasing digestion capacity up to 3 times in the same tank, external feedstock such as FOG (fats, oils, grease) waste from local businesses can be added, increasing the energy output allowing the treatment plant to be 90-100% energy/carbon neutral by 2015.

A huge benefit associated with increasing tank volume is that the Omnivore saves on construction capital as the area continues to grow. Additionally, by retrofitting a digester on site, VVWRA avoids the cost of expensive new digesters as expansion continues as well as continuing the energy savings. The entire project is funded by Anaergia and an Innovative Technology Grant from the California Energy Commission.

What is even more amazing is that Logan has been able to make this project a reality along with a plethora of new construction projects, many of which have now been completed, without having to raise fees or request additional funds from his agency partners. At a recent SCAP Energy Committee meeting held at VVWRA, Logan provided an in-depth explanation of how he was able to achieve this through both sound financial planning and the use of public/private partnerships. If anyone is interested in learning more about these details, I am sure Logan will be more than willing to discuss them with you.
As mentioned, Logan has been very busy over the last several years and has completed many new projects at the VWWRA Regional Treatment Facility providing expansion projects which are necessary to accommodate rapid growth and higher than expected wastewater flows. Among the most impressive improvements are the Ultra-Violet (UV) disinfection and filtration systems, which allow for more effective treatment of the already high quality recycled water. This UV project enhanced plant safety by eliminating the use of chlorine and sodium bisulfate in sterilizing the recycled water. Additional plant improvements included four new primary clarifiers, four additional aeration basins, a second blower building, four new secondary clarifiers, two new anaerobic digesters, seven additional sludge drying beds, four additional percolation ponds, generator upgrades, a new seepage receiving station, and miscellaneous improvements.

Logan and Chuck will be the first to tell you that they have fantastic staff and that all of these accomplishments were as a result of the combined efforts of not only their staff, but their governing boards/councils as well. And while they are by no means alone in their innovative approaches to energy independence, they will soon be the first in the state with the ability to run their facilities off the grid if they so choose.

Renewably yours,

John Pastore

California Clean Water Summit Partners Update by John Pastore, SCAP

*The California Clean Water Summit Partners consist of the following associations:*

- Bay Area Clean Water Association (BACWA)
- California Association of Sanitation Agencies (CASA)
- California Water Environment Association (CWEA)
- Central Valley Clean Water Association (CVCWA)
- Southern California Alliance of Publicly Owned Treatment Works (SCAP)
- Tri-TAC
An Introduction to Anaergia
Anaergia is the global technology leader in recovering value from waste for the municipal, industrial, and agriculture sectors worldwide. Through its proven portfolio of proprietary technology, Anaergia’s integrated solutions create value for its customers in the forms of clean water, reliable energy, and quality fertilizers while dramatically reducing costs of waste disposal. Anaergia’s North American headquarters are located in Carlsbad, CA, with regional services through 14 offices located in Europe, North America and Asia. Anaergia’s technology is currently in use at over 1,600 anaerobic digestion plants worldwide, reducing greenhouse gas emissions while creating new revenue sources for their clients and partners. Anaergia owns and operates two existing renewable energy generation facilities here in California: A 1.4MW Fuel Cell at the San Jose Water Pollution Control Plant, and a 2.4MW Fuel Cell at Inland Empire Utilities Agency’s Regional Plant 1, with other Facilities in Construction.

Anaergia’s Biosolids-Powered Renewable Energy Facility
In late 2013, Anaergia purchased the world’s largest biosolids processing facility in Rialto, CA. Anaergia is remodeling the Facility to incorporate proven, state of the art technologies for biosolids drying, high solids anaerobic digestion and renewable biogas and synthetic gas production. The Facility will accept and process biosolids and other anaerobically digestable materials to help customers manage biosolid challenges while generating renewable energy. Anaergia is currently soliciting biosolids from wastewater treatment facilities at rates competitive with those associated with trucking and land disposal. For more information, contact Rus Miller at rus@dedwardsinc.com or 949.235.8677.

Innovative Approach to Increasing Digester Capacity
The Victor Valley Wastewater Reclamation Authority (VVWRA) held a Ribbon Cutting Ceremony on Friday September 26, 2014, to mark the successful start-up of the operation of its new biogas production (Omnivore™) system, supplied by Anaergia and funded in part by the California Energy Commission (CEC).

The start-up of the VVWRA Omnivore project is significant to the CEC and to Anaergia because it demonstrates how wastewater treatment plants can increase digester loading and biogas production using existing infrastructure. The innovation includes Anaergia’s high solids mixers and recuperative thickener, which change an ordinary digester into a high-solids Omnivore™ digester. VVWRA will convert the additional biogas into electricity to meet part of the treatment facility’s electrical demand.

Recovering Additional Organic Feedstock from Solid Waste Streams
On September 29, 2014, Anaergia announced that it was awarded a contract by the Metropolitan Water Reclamation District of Greater Chicago (MWRD) to design an Organics Processing Facility and also to upgrade the Anaerobic Digesters at the Calumet Water Reclamation Plant (CWRP). The CWRP’s wastewater reclamation operations are among the largest in North America and this project will help MWRD utilize this facility as a resource recovery and energy generation center. CWRP’s new Organics Processing Facility will have capacity to process 300 tons per day of Organic Fraction of Municipal Solid Waste (OFMSW) plus liquid waste and fats, oils, & grease. The OFMSW will be produced at an existing offsite solid waste facility utilizing Anaergia’s patented Organics Extrusion Press (OREX™), a device which separates unsorted municipal waste into wet organic and dry fractions, recovering up to 95% of organics without the need for source separation.
AIR QUALITY COMMITTEE REPORT

Kris Flaig, Chair  
kris.flaig@lacity.org  
David Rothbart, Vice Chair  
drothbart@lacsd.org

LOCAL AIR DISTRICT NEWS AT A GLANCE

Posted meeting dates and proposed new rule development for the following air districts can be found at these sites:

- Imperial County APCD
- Mojave Desert AQMD
- San Diego APCD
- Santa Barbara APCD
- Ventura County APCD
- South Coast AQMD

SCAQMD Permit Streamlining by David Rothbart, Vice Chair - LACSD

A SCAQMD Permit Streamlining Task Force meeting was held in early September to obtain feedback from stakeholders regarding potential measures to improve SCAQMD’s permitting process. The following suggestions regarding SCAQMD’s permit process were submitted by the SCAP Air Quality Committee. SCAQMD management appreciated our feedback and a subsequent meeting was held on September 30th to discuss how to implement many of these items. Although these meetings are encouraging, many of these items will require a long-term cooperative effort with SCAQMD staff to achieve the results we desire.

SCAP Permit Streamlining Suggestions

1. Payment options –
   * For flexibility, extend the credit card charge option to permit applications and registration plans (i.e., don’t limit it to just invoice payments).

2. Permit Processing –
   * Shorten the QA/QC time for final permit issuance.
   * Draft permits should be provided to the applicant for review and comments prior to finalizing. This can help minimize errors in the signed permit and alleviate the need to reissue permits.
   * We are unaware of any regulatory deadline for SCAQMD staff to conduct a “completeness” determination. For example, a SCAP member remitted a de minimis Title V permit revision to comply with a rule, but additional information wasn’t requested for about 9-months. To expedite the permitting process and provide more timely feedback to applicants, it might be helpful to establish a “completeness” review deadline.
   * SCAQMD management could encourage the permitting staff to accommodate applicant’s request for a “pre-application” meeting. During the pre-application meeting the applicant can explain the intentions/project scope and get better understanding of SCAQMD’s requirements.
3. Permit Content Streamlining
- Establish standardized conditions for similar equipment/process within the same facility or industry. It appears that unique permit conditions are developed each time a new permit is issued. Chemical scrubbers, biofilters, carbon adsorbers are very common technology used by many POTWs. However, permit conditions can be different from one chemical scrubber to another in the same facility and sometimes vastly different from one POTW to another.
- If a facility accepts a stringent permit condition, not required by rule or regulation, subsequent applicants tend to inherit the same restrictive condition. Requesting removal or modification of such conditions is frequently time-consuming, so applicants with construction deadlines must either accept objectionable conditions or delay needed projects.
- Detailed equipment descriptions and specific ratings force facilities to sole source at a higher cost or trigger seemingly needless permit revisions. For example, a specific horsepower rating for an electrical motor on scrubber blower fan forced a SCAP member to replace the motor with an exact hp rating at an extra cost. SCAP requests that more flexible equipment descriptions be allowed, such as a specific description followed by the phrase: “or equivalent”.
- Permits should not be required for equipment, if there are no emission points.
- Design criteria provided in applications is frequently used as permit limits with no margin for operational flexibility and no averaging period. The operating parameters such as pH, scrubbing solution flow rate, make up water flow rate, pressure drop across packing media do not change significantly on a day to day basis. These kind of conditions limit operational flexibility and optimization and valuable resources are spent monitoring and recordkeeping these operating parameters multiple times a day. Moreover, these conditions have no impact upon emissions. If facilities can sufficiently demonstrate proper operation of equipment using existing instrumentation, we feel that additional instrumentation should not be required. Please note that negotiating permit conditions sometimes can take months because the initial permit conditions can be onerous, so a streamlined approach should save industry and SCAQMD valuable staff time.

Recommendation: Work with industry to develop a set of standardized permit conditions for common equipment/process with an understanding that the site-specific conditions may need to be considered on a case by case.

4. Permit Mailing –
- Ensure the permit documents (e.g., renewal invoices, final permits) are mailed to the correct contact person stated on the permit applications (currently this seems to be inconsistent, and hence can result in the mailed documents getting lost in the mail system for larger companies with multiple mailing locations).
- Email the permittee to let them know the permit has been mailed out (so they can keep an eye out for the document), and include a scanned copy of the signed permit (this can be a benefit to companies that have multiple facilities, where sometimes the hard copy of the final signed permit can end up at the wrong facility).

SCAQMD Proposed Rule 1188 by David Rothbart, Vice Chair - LACSD

In accordance with the 2012 AQMP, SCAQMD is required to develop a rule to reduce VOC emissions from vacuum trucks through the use of traditional control devices and technologies, including carbon adsorption. Although vacuum trucks used by the petroleum industry have been identified as the primary source of emissions from this sector, SCAQMD staff has also expressed an interest in regulating wastewater vacuum truck operations. In response, SCAP has worked closely with SCAQMD staff to provide information regarding these operations. For example, a SCAP
member obtained air samples from a wastewater vacuum truck to illustrate the negligible impact from our industry. Results indicate that extremely low levels of VOCs are associated with wastewater activities.

In order to estimate the inventory of potential emissions from vacuum trucks, SCAQMD requested that all vacuum truck operators provide operational information via a questionnaire. The proposed SCAQMD questionnaire could have overestimated wastewater emissions, so SCAP worked with SCAQMD staff to develop a wastewater vacuum truck questionnaire. We anticipate that SCAQMD will distribute this questionnaire in the near future. In addition, SCAQMD indicated that SCAP members will be contacted regarding obtaining air samples from their vacuum truck operations. I’m hopeful that the information provided to SCAQMD will demonstrate that wastewater vacuum truck operations should be exempt from this rule.

**BIOSOLIDS COMMITTEE REPORT**

Matt Bao, Chair  
mbao@lacsd.org  

Tom Meregillano, Vice Chair  
TMeregillano@ocsd.org  

Diane Gilbert Jones, Vice Chair  
diane.gilbert@lacity.org

**October 9th Joint Biosolids/Energy Committee Meeting** by John Pastore, SCAP

Please join us for a joint meeting of the SCAP Biosolids and Water Issues Committees, which will be held on October 9th. The meeting will be held in conjunction with the CASA Regulatory workgroup at the offices of the Orange County Sanitation District in Fountain Valley.

**CalRecycle Informal Workshop on Initiating Formal Rulemaking for Compostable Materials, Transfer/Processing Regulations** by Tom Meregillano, Vice Chair – OCSD (Source Greg Kester)

CalRecycle announced the beginning of the formal rulemaking process for their composting and anaerobic digestion (AD) regulations. These are the important regulations for AD on which CASA have worked to include the exclusion for POTWs accepting hauled in organic waste for co-digestion. This represents a significant step in the process, since the Department of Finance has commented on the fiscal analysis completed by CalRecycle and has approved it. In short, once the formal rulemaking process begins and if there are no significant changes to language since October 2013, there will be a 45 day public comment period. Should those comments require revisions, then there will be a subsequent 15 day public comment period on the revisions. This is an iterative process where each set of revisions will be afforded a 15 day public comment period. This will continue until no new revisions are needed, but the regulations must be adopted within 12 months of the date on which the formal rulemaking begins. Link to Presentation: [http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1319&aiid=1193](http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=1319&aiid=1193)

**Revised food safety regulations to be released by FDA** by Tom Meregillano, Vice Chair – OCSD (Source Greg Kester)

U.S. Food and Drug Administration has announced that they will be issuing revisions to their regulations initially proposed in January 2013 for which the public comment period ended on November 22, 2013. The regulations are standards for the growing, harvesting, packing, and holding of produce for human consumption. CASA commented in support of the regulations because they allowed the use of biosolids for growing such produce and included pragmatic requirements for the use of recycled water for irrigation. There will be a 75 day comment period for those
parts of the regulation which have been revised, and it will begin on September 29th, which is when we expect to see the new language. This link to the announcement and includes a summary of changes:

**SCAP Biosolids Survey** by Tom Meregillano, Vice Chair – OCSD

This is a courtesy reminder for SCAP members to complete the online Biosolids Trends Survey: [https://www.surveymonkey.com/s/XNFBKVQ](https://www.surveymonkey.com/s/XNFBKVQ). Your input is important to gather critical information to capture the biosolids management trends covering 2013 and 2014 period, which will be shared with members.

**CASA 2014 Biosolids Fact Sheet Spanish Version** by Tom Meregillano, Vice Chair – OCSD (Source Greg Kester)

CASA 2014 Biosolids Fact Sheet is now available in Spanish. The fact sheet is available here.

**Biosolids Conference Announcements**

**Association of Compost Producers California Compost Summit – 2014:** Government and industry organics leaders are coming together to discuss and collaborate on key policy and regulatory issues as well as emerging technology and marketing trends facing California’s organic recycling and compost industry. Summit is on October 15, 2014 from 9:00 a.m. – 3:30 p.m. PDT at the California State Association of Counties Conference Center in Sacramento. Link to conference information and registration: [https://events.r20.constantcontact.com/register/eventReg?llr=n5rro8pab&oeidk=a07e9u9t4tu1bf8c454](https://events.r20.constantcontact.com/register/eventReg?llr=n5rro8pab&oeidk=a07e9u9t4tu1bf8c454)

---

**COLLECTIONS COMMITTEE REPORT**

Ralph Palomares, Chair  
RPalomares@etwd.com  

Dindo Carrillo, Vice Chair  
dcarrillo@ocsd.com

**Collection Systems Committee Update** by Ralph Palomares, El Toro Water District

*Editor’s Note: Our fearless leader, Ralph, is currently out of commission while he recovers from shoulder surgery. We wish him the best and look forward to hearing from him next month. Get well soon Ralph!*

**Sewer System Management Plan (SSMP) Guidance Document** by Dindo Carrillo, Vice Chair - OCSD

The State Water Board (SWRCB) and the SWRCB Data Review Committee, consisting of SSS WDR Order stakeholders, have taken on the task to write an SSMP Guidance Document. According to the SSS WDR Order, all public agencies that own or operate a sanitary sewer system of more than one mile of pipes that convey wastewater to a publicly owned treatment facility must apply for coverage under the SSS WDR and its enrollees have to complete an SSMP.

The SSMP has to be certified and approved by the agency’s governing board as required in provision D.15 of the SSS WDR. In addition, provision D.14 states that the SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification of the SSMP by the governing board of the Enrollee is required.
The SSMP Guidance Document will provide direction on how to create an SSMP for those new WDR Order enrollees and help current WDR Order enrollees update their existing SSMP so that it meets or exceeds what the WDR Order requires.

According to the Data Review Committee the final product will be ready for publication and circulation by December 2014. In addition, the SWRCB will also host an SSO Library online. Some documents that will be stored there is the SSMP Guidance Document, Regional Water Board Field Inspection Questionnaires, EPA Inspection Questionnaires, SWRCB presentations, samples of audit reports, technical reports, water quality monitoring plans, and other SSO related documents.

**Baby wipes create ‘fatberg,’ clog Putnam sewer plant** by Marcus Constantino, Multimedia reporter for the Charleston Daily News

The Putnam County Public Service District posted images on social media of flushable wipes that clogged a grinder at a grinder station at a wastewater treatment plant. [COURTESY PHOTO THE ASSOCIATED PRESS] A treatment expert says that while wipes may say they are flushable, they are not water soluble and will not dissolve. A 15-ton lump of congealed fat and baby wipes coagulated inside a main London city sewer in 2013, which required many days to clear. Sewer systems are often the oldest sections of a city’s infrastructure, yet they also provide one of its most critical services. When things other than sewage get into the pipes, problems arise — and wastewater workers are seeing gobs of sewage and other materials clog up the system more often than ever. The Putnam Public Service District tweeted photos of clusters of disposable wipes that had recently clogged a grinder station — a piece of equipment that grinds sewage down into finer particles that flow through the sewer pipes more easily. Since the wipes don’t dissolve in water, they can become entangled in the machinery and cause portions of it to burn out, potentially costing thousands of dollars to replace or repair.

Jenelle Armstrong works for Bridgeport-based civil engineering firm Thrasher. Armstrong travels across the state to work on projects at different wastewater treatment plants, and everywhere she goes, she says wastewater operators are being burdened more by clogs and problems related to disposable wipes being thrown into the sewer system. “The whole point of wastewater treatment is to separate things that aren’t water from clean water,” Armstrong said. “What wipes do is they prevent us from conveying the wastewater to the treatment plant. “While wipes are marketed as ‘flushable,’ they’re not water-soluble,” Armstrong said. “They don’t break down in water. It’s a national problem.” Scott Jones, communications coordinator for the Putnam PSD, said fat, oil and grease can combine with disposable wipes to form what are known as “fatbergs,” large conglomerations of muck that can bring sewer pipes to a standstill.

A fatberg more than 250 feet long weighing 15 tons was recently found under the streets of London; it took workers more than four days to break up the mass and remove it from the sewer. Had the problem not been found, sewage could have started backing up onto the streets and out of drains inside homes. Jones said workers have historically found many unusual items clogged up in the sewer systems that shouldn’t be — aquarium gravel, diapers, napkins, condoms and tampons are common offenders, he said — but a recent increase in wet wipes marketed “disposable” have led more people to flush the products down their toilets, even though they don’t dissolve like toilet paper does. “Try to be mindful that the wastewater system was only designed to handle No. 1, No. 2 and toilet paper,” Jones said. “We’re seeing more and more stress on our system and it’s costing us more and more man hours. If people keep these things out of our pipes, it will help us keep our rates low. “Smaller, more rural systems are more susceptible to fatbergs and other clogs, Armstrong said, because the systems often have smaller-diameter sewer pipes than bigger cities. Clogs can also happen in the service line that connects home sewage to the main line under...
the street, and if that happens, Armstrong said the customer is responsible for fixing the problem. Wherever a sewer clog happens, though, it costs someone time and money, and Armstrong said the best practice is to not flush anything down the toilet that isn’t human waste or toilet paper, “Especially if you live in an older home, don’t chance it, because you’re going to have to pay for it if it clogs,” Armstrong said. Armstrong and other sewer operators use the hashtag #WipesClogPipes on social media to spread awareness of the importance of not flushing disposable wipes down toilets.

ENERGY MANAGEMENT COMMITTEE REPORT

Steven Hernandez, Chair
shernandez@lacsd.org

Jesse Pompa, Vice Chair
jpompa@ieua.org

SGIP Program Extended by Steven Hernandez, Chair - LACSD

California’s Self Generation Incentive Program (SGIP) was extended by SB 861. SB 861 authorizes collections for the SGIP through 2019 and authorizes administration of the SGIP through 2020. The CPUC is proposing to continue to collect $89 million per year for the program. There may be additional changes to the SGIP funding levels over the next year as SB 861 also directs the CPUC to update the factor for avoided greenhouse gas emissions on or before July 1, 2015.

The SGIP provides incentives to support existing, new, and emerging distributed energy resources. The SGIP provides rebates for qualifying distributed energy systems installed on the customer’s side of the utility meter. Qualifying technologies include wind turbines, waste heat to power technologies, pressure reduction turbines, internal combustion engines, microturbines, gas turbines, fuel cells, and advanced energy storage systems. Incentive levels vary for different technologies and applications For example, a digester gas-fired CHP microturbine project would be eligible for $2.08/kW.

Applications for New Fuel Pathways under the California LCFS Are Posted for Comments by Greg Kester, CASA

The Air Resources Board has just posted their response to comments on the Low Carbon Fuel Standard for methane from anaerobically digested wastewater sludge which is then converted to transportation fuel. They can be viewed here at http://www.arb.ca.gov/fuels/lcfs/2a2b/2a-2b-apps.htm or by clicking on the Comment link for the wastewater sludge pathway on their website here. I have not yet found a link to the actual new pathway or credit values, but from my last discussions with staff, the LCFS Credit for large POTWs (greater than 20 MGD) has changed from negative 65.3 g CO2e/MJ to positive 7.9 and the credit for those less than or equal to 20 MGD has changed from positive 10.86 to positive 30.5. The changes were largely based on comments from Dr. Rob Williams at UC Davis as noted below. I will contact CARB and share the actual pathway link as soon as I get it. Several elements to note in their responses:

Dr. Williams noted that a GHG emissions credit was given for "bypassed CO2" (meaning the CO2 in biogas which does not combust) for avoided flaring of the biogas when converted to fuel, but the bypassed CO2 from the use of biogas in power producing devices was not counted as process emissions. He stated that if a credit is given for the avoidance of flaring then a debit must be accounted for on the process side, specifically in the tail gas of the biogas refining unit.
Dr. Williams also noted that the methane slip (meaning the methane content of the tail gas) and carbon dioxide in the tail gas of the biogas refining unit is generally too lean to combust alone and must be mixed with natural gas or digester gas in order to be flared or thermally oxidized. Therefore the pathway needed to account for the methane slip as fugitive emissions or as oxidized CO2 from a flare or thermal oxidizer. CARB agreed with both of these points and they account for the change in credit value in the final pathway. CASA was the only other commenter and ours were mainly clarifying points. Of note:

1. They encourage those operating at thermophilic temperatures to apply for a pathway under the site specific Method 2B application process. They did not include thermophilic digesters in the pathway since there are so few operating in the state and they assumed that more energy is required to maintain thermophilic conditions.

2. They confirmed that the co product credit applies whether you use surplus electricity generated for on-site purposes or for export to the grid.

3. They did not include the avoidance of fossil fuel based fertilizer offsets in the pathway because they (incorrectly in my opinion) assume that there is marginal value in biosolids. They do encourage anyone using biosolids as a fertilizer or soil amendment to apply for a co-product credit under the Method 2B application. I really second that view and if any of you do seek this credit and you land apply biosolids, then I would definitely encourage you to submit this site specific application. CARB has volunteered to walk one through that process and I would be interested in helping as well.

4. They do not account for food waste co-digested at a POTW but do allow for co-digestion of FOG in this pathway. Again, they assumed a higher level of energy is required in order to slurry, pump, and receive food waste but not so to accept FOG.

5. They confirmed that the pathways apply to POTWs greater than 100 MGD on the upper side and those treating less than 5 MGD on the lower side. The important piece is that the operating conditions are consistent.

While these credits are not as attractive as when originally posted, they are still much lower than gasoline and diesel (both around positive 98 g CO2e/MJ). Please let me know if you have any questions or comments.

A Deal’s a Deal, but for Whom? by Chris Raphael California - Energy Markets

In late May, Barclays downgraded the entire electric-utility sector of the U.S. high-grade corporate bond market, warning of a “permanent change” in the utility business model. “In the 100+ year history of the electric utility industry, there has never before been a truly cost competitive substitute available for grid power,” the investment bank said in a research note that made the rounds in the financial press. “We believe that solar storage could reconfigure the organization and regulation of the electric power business over the coming decade.”

The Barclays report stated that, based on projections of declining system costs, solar and storage would be cost-competitive in California in 2017, New York and Arizona in 2018, and other states soon after. The firm even went as far as to suggest that investors move out of bonds in markets where solar power and storage could be a disruptive force. Valuations of electric utilities “suggest credit investors are depending on the ‘regulatory compact,’ whereby the monopoly utility agrees to invest in assets to service customers in return for prices that are set to allow them a
reasonable return,” Barclays stated in a note carried by Barron’s. But with technological change, “slower-moving incumbents and their regulators can fall behind the curve, risking credit volatility, or disrupt the regulatory compact, possibly leading to unexpected losses for bondholders.” California, of course, is well aware of the disruptive capabilities of solar power and energy storage, though it has some tools to insulate investor-owned utilities from such disruption. Power sales are decoupled from utility revenue, and departing customers, whether through direct access or community-choice aggregation, must reimburse the utility for power already purchased on their behalf. The state’s 1.3 GW energy storage target, meanwhile, allows utilities to own half of the total amount of storage installed in their service areas, and both Pacific Gas & Electric and Southern California Edison have made investments in alternative energy companies.

Other credit agencies have not been as pessimistic about the utility business environment as Barclays. In January, Moody’s Investor Service upgraded Edison’s senior unsecured credit rating to A2 from A3. In a research note, the firm stated that the ratings “reflect the low business risk profile of a regulated utility with mainly transmission and distribution (T&D) operations and financial metrics that are consistent with its rating level” as well as assured cost recovery. Meanwhile, PG&E’s credit ratings have been more affected by looming penalties over the San Bruno pipeline disaster than solar and storage. In February, Fitch Ratings confirmed PG&E’s BBB+ issuer default rating, but said that rating “may weaken if regulatory decisions are more punitive than expected.”

A 2013 Edison Electric Institute report on “Disruptive Challenges” to the utility sector, however, stated that distributed generation is more dangerous to the utility model in states that have not adopted decoupling. The report nonetheless suggested other strategies to protect utilities from stranded costs. These include:

• Treating net-metering programs as supply-side purchases at a market-derived price.
• Factoring in the threat of disruptive forces to utilities’ cost of capital.
• Making distributed energy resources and fully departing customers pay a stranded-cost charge that would recognize the portion of utility investment deemed stranded.
• Identifying “new business models and services” for electric utilities to recover lost margin while providing customer services.

The development of such services and models “was a key factor in the survival of the incumbent telephone players post deregulation,” the EEI report stated. States such as California that have experienced upheaval in markets have had to tighten their approach to regulatory cost recovery, the report states. But it’s unclear what California would do in the case of thousands of individual customers entirely leaving the grid with solar and storage. The CPUC has acted to promote and subsidize distributed storage. But in the case of individual customers disconnecting from the grid, “there are some costs related to energy supply purchased in anticipation of serving the customer, distribution costs and public purpose program costs that, under the regulations, will be absorbed by other customers,” said PG&E spokesman David Eisenhauer. Currently net-energy metering subsidies are absorbed by other ratepayers. If solar plus storage truly takes off, there will be even fewer ratepayers to pay for rising utility costs, which include massive capital outlays for transmission, distribution, renewables and pipeline maintenance, and state programs such as rooftop solar and low-income rates. In pursuit of sustainability, California will have put utilities on unstable ground. But as the EEI report warns, “once the sustainability of the utility earnings model is questioned, investors will look at the industry through a new lens, and the view from this lens will be adverse to all stakeholders, including investors and customers.”
**WATER ISSUES COMMITTEE REPORT**

Al Javier, Vice Chair, Chair  
javiera@emwd.org  

Jennifer Shepardson, Vice Chair  
Shepardson_Je@sbcity.org

**October 9th Joint Water Issues/Biosolids Committees Meeting** by John Pastore, SCAP

Please join us for a meeting of the SCAP Biosolids and Water Issues Committees, which will be held on Thursday, October 9th. The meeting will be held in conjunction with the CASA Regulatory workgroup at the offices of the Orange County Sanitation District in Fountain Valley.

**September 23rd Water Issues Committee Meeting** by John Pastore, SCAP

On September 23rd the Water Issues Committee met at the offices of the Irvine Ranch Water District’s Michelson Water Recycling Plant in Irvine. A presentation was made by Assistant Director of Recycling Operations, Randy Lee, who provided a description of the Phase II Expansion components, including their new Membrane Reactor (MBR) and the Ultraviolet Light treatment facilities. A tour of the Plant and the Phase I Expansion facilities was also provided by IRWD Operations Manager, Gaspar Garza.

---

**IRWD's Gaspar Garza leading the tour**  
**IRWD's Randy Lee making his presentation**  
**Membrane enclosures at Michelson WRP**  
**IRWD's UV Informational Plaque**
Also making a presentation at the meeting was Steve Delson, CEO of Gate 5 Energy Partners, Inc., who introduced the committee members to his company’s Biosolids Management Alternative Process for producing renewable energy. Committee Chair, Al Javier, finished the meeting off with a regulatory update that included a significant contribution from LACSD’s Phil Markle on pesticides and toxicity.

**NPDES Cost of Compliance** by John Pastore, SCAP

According to Philip Isorena, Chief, NPDES Wastewater Unit, Division of Water Quality for the SWRCB, “Action Item 4 of State Water Board Resolution 2013-0029 directs NPDES program staff to work with the NPDES Roundtable and NPDES stakeholders to document existing practices and recommend additional actions to ensure a transparent, consistent, and efficient process for issuance and reissuance of individual NPDES permits. Water Board staff and stakeholders have jointly prepared a report per the resolution. Staff anticipates presenting the report as an informational item at the October 7, 2014 Board meeting”. A copy of the power point presentation can be found on the SCAP website [here](#).

CASA’s Adam Link has been coordinating a statewide response from the POTWs stakeholder group that has been incorporated into SWRCB staff report. It is anticipated that the report will be favorably received by the Board at the October 7th meeting.

**Registration Open for CASA Financing Seminars!**

Join CASA at one of two October seminars exploring mechanisms for financing your agency’s infrastructure projects. As we all know, regulatory requirements and enhanced opportunities for resource recovery are driving innovative projects at POTWs, but in a world of constrained budgets, financing these projects can be one of the biggest hurdles to success. These seminars will help guide your agency’s decision makers through three of the largest methods for financing wastewater projects today: the Clean Water State Revolving Fund (SRF) loan program, the Integrated Regional Water Management (IRWM) grant program, and public private partnerships (P3s).

Representatives from the State Water Resources Control Board and the Department of Water Resources will be on hand to go over the ins and outs of procuring SRF loans as well as IRWM grant funding. You will also hear from fellow member agencies about their experiences with both programs and how they ultimately made their decision to pursue these funding sources. Finally, consultants specializing in organizing and submitting these types of funding requests will lend their extensive experience, giving your agency a leg up in the process. Take this opportunity to get your questions about the SRF and IRWM programs answered, and hear about whether a P3 project might work for your agency.
For your convenience, CASA is hosting two different seminars, one in Northern California at the Regional San offices near Sacramento, and one in Southern California at the offices of the Orange County Sanitation District. Lunch and refreshments will be provided.

**REGISTER TODAY**

<table>
<thead>
<tr>
<th>When:</th>
<th>October 16, 2014, 10 am - 3 pm</th>
<th>When:</th>
<th>October 23, 2014, 10 am - 3 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where:</td>
<td>Orange County Sanitation District, Fountain Valley, CA</td>
<td>Where:</td>
<td>Sacramento Regional County Sanitation District, Sacramento, CA</td>
</tr>
<tr>
<td>What:</td>
<td>Preliminary Program &amp; Registration</td>
<td>What:</td>
<td>Preliminary Program &amp; Registration</td>
</tr>
<tr>
<td>Cost:</td>
<td>$150</td>
<td>Cost:</td>
<td>$150</td>
</tr>
</tbody>
</table>

For more information about either of these seminars, please contact Adam Link, CASA's Director of Government Affairs at alink@casaweb.org or Debbie Welch at dwelch@casaweb.org. We look forward to seeing you there!

**WASTEWATER PRETREATMENT COMMITTEE REPORT**

**September 30th Wastewater Pretreatment Committee Meeting**

A Pretreatment committee was held on September 30th at the offices of the Inland Empire Utilities Agency in Chino. The featured speaker was Julio Lara from the RWQCB-Santa Ana Region, who provided an overview of SWRCB’s POTW Pretreatment Program Requirements. A copy of the presentation that was prepared by SWRCB’s Russell Norman, can be found on the SCAP website along with the following handouts:

- EPA Model Pretreatment Ordinance
- Pretreatment Streamlining Rule Fact Sheet
- Pretreatment Program Submission Package Outline
- Checklist – Pretreatment Program Legal Authority Reviews
ANNOUNCEMENTS

SCAP welcomes our newest members: “The City of Simi Valley” and “The Town of Apple Valley”

The City of Simi Valley, with an estimated population of 126,414 (as of December 2011) is the third largest of Ventura County's ten cities. Occupying an area of approximately 42 square miles, it is located in Southeast Ventura County, adjacent to the northwestern perimeter of the San Fernando Valley, approximately 37 miles northwest of downtown Los Angeles. The City was incorporated in 1969 under the general laws of the State of California and operates under a General-Law/council-manager form of government.

The Sanitation Services Division of the Public Works Department provides an essential service to the residents and businesses in Simi Valley – the conveyance and treatment of sewage. This responsibility exists around the clock, every day of the year. In order to provide this service, the Sanitation Services Division operates and maintains the sewer system that runs underneath City streets and a Water Quality Control Plant where the wastewater is treated to a very high standard before being returned to the environment. Sanitation Services are a complex set of operations that involve trained and qualified staff, specialized equipment, deliberate planning, engineering, qualified contractors, significant electrical energy, and other resources.

The Town of Apple Valley is located in the heart of the Victor Valley in the County of San Bernardino, at an elevation of 3,000 feet. Known as the "High Desert", Apple Valley is strategically located 95 miles northeast of the Los Angeles metropolitan area, 140 miles north of San Diego, and 185 miles south of Las Vegas. The Town has 78 square miles in its incorporated boundaries, and a sphere of influence encompassing 200 square miles.

Currently, 70,754 (2010) residents make Apple Valley their home. Once a playground of movie stars, Apple Valley continues to provide a wide range of reasons for families to make Apple Valley their home. The average household income is $63,770 and our taxable sales for a year period have reached $388.6 million. The population of the entire Victor Valley region is now more than 313,000.
Getting Schooled in Water Purification

Now that school is back in session, the Project SWELL water purification lesson is close to launching! Participating San Diego Unified School District 5th grade teachers will be receiving training starting in October. Teachers will be provided with the necessary materials to successfully add the new lesson into their science curriculum. Project SWELL is a partnership between San Diego Coastkeeper and Think Blue to educate local students about the importance of the region's waterways.

As part of the new lesson, students will have the opportunity to model the City's proven three-step water purification process and to learn more about Pure Water San Diego, the City's 20-year program to provide a safe, reliable and cost-effective drinking water supply for San Diego.

An initial 15-million gallon per day water purification facility is scheduled to be online in 2023 and the long-term goal is to produce 83 million gallons of purified water per day in San Diego by 2035. Youth engagement is critical as today's students will be the water customers and decision makers of the future.

For information about Pure Water San Diego visit www.purewatersd.org.

OCWD Hydrospectives Newsletter for September 2014

Please click on the following link to view the OCWD Hydrospectives newsletter.

Please Support our SCAP Associate Members