

Alternative Technology Advisory Subcommittee
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force

Minutes for May 16, 2019

Los Angeles County Public Works
900 South Fremont Avenue
Alhambra, CA 91803

SUBCOMMITTEE MEMBERS PRESENT:

Chris Coyle, rep by Dennis Montano, Republic Services – Sunshine Canyon Landfill
John Kaddis, Los Angeles County Department of Public Health
Tim Hall, California Department of Resources Recycling and Recovery (CalRecycle) *
Patrick Holland, rep by Kawsar Vazifdar, Los Angeles County Public Works
Wayde Hunter, North Valley Coalition of Concerned Citizens
Ben Lucha, City of Palmdale
Ron Kent, rep by Dr. Paul Ghougassian, Southern California Gas Company
Mark McDannel, County Sanitation Districts of Los Angeles County
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force

SUBCOMMITTEE MEMBERS NOT PRESENT:

Alex Helou, City of Los Angeles
Kay Martin, rep by Jim Stewart, Bioenergy Producers Association
Kevin Mattson, Waste Management *
Eugene Tseng, UCLA Solid Waste Program
Rob Williams, UC Davis Policy Institute for Energy, Environment and the Economy

OTHERS PRESENT:

Tracy Anthony, Alternative Resources, Inc. (ARI)
Daniel Dela Cruz, Los Angeles County Department of Public Health
Carol Oyola, Los Angeles County Public Works
Margarita Quiroz, Los Angeles County Public Works
Pronita Saxena, Citizengage

* Designates participants over the telephone

I. CALL TO ORDER

Ms. Vazifdar called the meeting to order at 10:00 a.m.

II. APPROVAL OF MINUTES FROM APRIL 18, 2019 MEETING

A motion to approve the minutes from the April 18, 2019 meeting was made by Mr. Mohajer and seconded by Mr. Kaddis. The motion passed with two abstentions.

III. PRESENTATION - CITIZENGAGE

Ms. Saxena, founder and CEO of Citizengage, presented about her waste collection, recycling, and conversion technology (CT) company currently operating in India. She described her company's digital Circular platform, which characterizes existing waste streams to determine the amount of recyclables or organic waste potentially available for anaerobic digestion (AD) or thermal conversion. Ms. Saxena stated that Citizengage also coordinates waste collection and requires source separation to reduce contamination and achieve a high diversion rate. In addition, she stated that Citizengage develops small-scale decentralized waste processing facilities near the point of waste generation to reduce transportation impacts and produce energy and other beneficial products.

Ms. Saxena stated that she is interested in developing 10-ton per day AD and biomass conversion facilities to recycle organic waste in California because smaller facilities can take advantage of a shorter permitting process due to their size. She stated that, in April 2019, she launched a Task Force including staff from the Los Angeles Economic Development Corporation, CalRecycle, and the California Governor's Office of Business and Economic Development (GoBIZ) to determine the next steps to develop such facilities, including working with municipal waste haulers and waste processing sites to collect initial data on the waste stream. Ms. Saxena stated that, with help from the Task Force, she learned that Citizengage could use a 60-day option to permit the small-scale facilities through local enforcement agencies, which would be much less expensive than permitting a large processing facility. She said that she also learned that the site should have compatible zoning for a waste project to avoid requiring a California Environmental Quality Act (CEQA) review. Ms. Saxena stated that small-scale facilities that are limited to processing only the waste generated at that site, avoid the need to engage franchise waste haulers.

Ms. Saxena stated that Citizengage aims to work with asset owners such as real estate developers, existing waste companies, and energy companies as equity partners in project development to be able to take advantage of subsidized infrastructure loan programs.

Ms. Saxena estimated that a 10-ton per day AD facility operating for six years would process 22,000 tons of food waste, create 20 billion British thermal units (Btu) of renewable natural gas, prevent 40,000 vehicle miles traveled to disposal facilities, and abate 20,000 tons of carbon dioxide equivalent emissions.

Mr. Lucha asked if Citizengage has exclusive partnerships with particular technology providers. Ms. Saxena responded that her company is technology agnostic.

Mr. Ghougassian asked if Citizengage builds AD facilities. Ms. Saxena responded that Citizengage customizes the facility concepts and works with technology providers to develop, install, commission, and operate the facilities in addition to marketing the end products. Mr. Ghougassian stated that the gas produced by an AD would need to be scrubbed to remove carbon dioxide, siloxanes, hydrogen sulfides, and other contaminants to ensure that the gas meets pipeline standards, which can be very costly. Ms. Saxena responded that Citizengage works with a manufacturer that provides an efficient compression and scrubbing technology to remove contaminants. Mr. Ghougassian added that Citizengage would generate most of their revenue from Low Carbon Fuel Standard (LCFS) credits. Ms. Saxena responded that she believes that only 30 percent of the overall revenue would come from LCFS credits due to the low cost of energy and fuel in the United States and that the majority of revenue would come from subscription fees. Mr. Ghougassian asked for clarification on the subscription fees. Ms. Saxena responded that Citizengage charges generators such as residents or businesses a subscription fee for providing waste characterization, collection, and recycling services.

Ms. Vazifdar asked if Citizengage has had any discussions with waste haulers in Southern California regarding a potential partnership to divert organic waste. Ms. Saxena responded that they have not had any discussions with waste haulers.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Ms. Vazifdar stated that CalRecycle published the Senate Bill 1383 (SB 1383) Infrastructure and Market Analysis Report (Report), which will be used by CalRecycle to analyze the progress of the waste sector, state government, and local governments in reducing organic waste disposal as required by SB 1383. Ms. Vazifdar stated that CalRecycle circulated the draft Report in March 2019 and the Task Force submitted a comment letter asking CalRecycle to consider the limitations of composting for organic waste recycling and to emphasize the need to also develop AD and thermal CT infrastructure. However, few of the Task Force comments were incorporated into the final Report.

Mr. Lucha commented that the County Sustainability Office released the County Sustainability Plan (Plan) and hosted a meeting on Monday to share the Plan with cities. Mr. Lucha stated that the plan includes goals to develop organic

waste recycling capacity. Ms. Vazifdar stated that Public Works reviewed the Plan and provided comments.

Ms. Vazifdar stated that there are several bills this year regarding alternative fuels, renewable electricity, and climate change that may affect CTs. Ms. Vazifdar asked if the Subcommittee would be interested in an update on the bills at next month's meeting. Mr. McDannel responded that he would be interested.

V. UPDATE ON CONVERSION TECHNOLOGY EVENTS/MEETINGS/OUTREACH ACTIVITIES

Ms. Vazifdar mentioned the upcoming conferences:

- Waste Conversion Technology Conference, June 2 – 4, 2019, Atlantic City, NJ
- California Resource Recovery Association Conference, August 11 – 14, 2019, Rancho Mirage, CA
- Resource Recycling Conference, August 26 – 28, 2019, New Orleans, LA
- US Biogas Conference, October 1 – 2, 2019, San Diego, CA

Ms. Vazifdar stated that she will attend the Waste Conversion Technology Conference and present on the conversion of municipal organic waste. She also mentioned Public Works will likely send staff to attend and present at the California Resource Recovery Association Conference and the US Biogas Conference.

Mr. Mohajer informed the Subcommittee of upcoming Solid Waste Association of North America (SWANA) workshops in La Mirada on June 5, 2019, and in Huntington Beach on September 5, 2019. Mr. Mohajer also mentioned a California Public Utility Commission (CPUC) workshop on May 23 and 24, 2019, regarding the standard renewable gas interconnection tariff and pipeline interconnection standards for biomethane. Mr. McDannel stated that he will present at the CPUC workshop on May 23 and discuss the challenges of injecting biomethane into the pipeline, including cost, technical feasibility, and the requirement to begin pipeline injection by December 31, 2021, to be eligible for key subsidies.

VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Ms. Anthony provided updates on the following items:

- ARI and its subcontractors are continuing to work on various CT outreach and information documents. Clements Environmental recently completed a flowchart for permitting an AD project. Ultrasystems Environmental, Inc., researched the availability of thermal CT emission data to compare with emissions from conventional waste energy facilities.

- ARI assisted Public Works in developing a draft factsheet describing siting requirements and potential energy products for different types and sizes of CT facilities. Public Works staff plans to use the factsheet at an upcoming meeting with staff from the Port of Long Beach and the City of Long Beach regarding consideration for a potential CT Project.
- ARI participated in a US EPA webinar reviewing the newest version of the Waste Reduction Model (WARM), which can be used to compare greenhouse gas impacts of different waste management methods. The newest version is expected to be released by the end of the month and incorporates economic impacts such as labor hours and wages. The EPA indicated that potential future updates to WARM may further address the impacts of food donation and recycling of construction materials. ARI will provide a brief summary of the webinar for Public Works staff.
- On May 23, 2019, ARI will monitor an EPA webinar on the environmental impacts of global material use to gather information supporting the need to develop local CT facilities and related infrastructure.

VII. PUBLIC COMMENTS

No public comment.

VIII. ADJOURNMENT

The meeting adjourned at 10:53 a.m. The next ATAS meeting is tentatively scheduled for Thursday, June 20, 2019, at 10:00 a.m., in Conference Room B of Public Works Headquarters.