

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

Minutes for August 19, 2021

WEB CONFERENCE

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

SUBCOMMITTEE MEMBERS PRESENT:

Dorcas Dee Daniel-Lugo, Los Angeles County Department of Public Health
Michelle Dewey, California Department of Resources Recycling and Recovery
(CalRecycle)
Mark McDannel, County Sanitation Districts of Los Angeles County
Wayde Hunter, North Valley Coalition of Concerned Citizens, Inc.
Ben Lucha, City of Palmdale
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force
Christopher Sheppard, Los Angeles County Public Works
Eugene Tseng, UCLA Solid Waste Program
Dennis Montano, rep by Chris Coyle (Sunshine Canyon), Republic Services
Brenda Eells, representing Steve Cassulo, Waste Connections

SUBCOMMITTEE MEMBERS NOT PRESENT:

Alex Helou, City of Los Angeles
Ron Kent, Southern California Gas Company
Kay Martin, Bioenergy Producers Association
Kevin Mattson, Waste Management

OTHERS PRESENT:

Christine Arbogast, Tetra Tech
Will Chen, County Sanitation Districts of Los Angeles County
Charles Darensbourg, Los Angeles County Public Works
Paulina Kolic, California Department of Resources Recycling and Recovery
(CalRecycle)
Carol Oyola, Los Angeles County Public Works
Sarah Solomon, Los Angeles County Public Works
Kawsar Vazifdar, Los Angeles County Public Works
Jeffrey Zhu, Los Angeles County Public Works

I. CALL TO ORDER

Mr. Christopher Sheppard called the meeting to order at 10:00 a.m.

II. APPROVAL OF JULY 15, 2021 SUBCOMMITTEE MINUTES

A motion to approve the minutes from the July 15, 2021 meeting was made by Mr. Mike Mohajer and seconded by Mr. Wayde Hunter. The motion passed with 1 abstention.

III. PRESENTATION – CLEAN CARBON ENERGY

Mr. Craig Pichach of [CleanCarbonEnergy](#) (CCE) presented on their pyrolysis technology which can convert organic materials into drop-in renewable fuels, electricity, and biochar. CCE is working on a bench-scale facility in Alberta, Canada and hope to build a commercial facility in Nampa, Canada. They are proposing to build a \$25 to \$30 million pilot facility in Imperial Valley to initially process 100 tons per day of wood waste, scaling up to 500 tons per day and eventually adding municipal solid waste (MSW).

Mr. Tseng commented on the waste characterization that showed food waste with a moisture content of 36 percent, which he said looked low for food waste. Mr. Pichach responded that the system can accept up to 70 percent moisture content, so it can still accept food waste even if the moisture content is higher than 36 percent.

Mr. Tseng commented that the mechanical pre-processing of the MSW feedstock uses an air density separator and the food waste will be removed in the heavy fraction. He asked how their process deals with the variability of the MSW. Mr. Pichach responded that CCE uses fry drying to remove moisture, allowing the process to handle ultra-wet feedstocks.

Mr. Tseng asked how the process handles the variability of other components of the waste stream such as plastics. Mr. Pichach responded that plastics are beneficial to the process because of their hydrocarbon content. However, because plastics are not considered a renewable feedstock based on Intergovernmental Panel on Climate Change (IPPC) guidelines, CCE would need to approximate how much of the feedstock is organic versus plastic.

Mr. Sheppard commented that the 5 million tons of organic waste is managed by the County and 88 different cities, multiple haulers, and numerous franchise contracts. He stated that a pilot scalable project would be a better approach. He added that, in California, projects managing forest waste to reduce wildfires would be preferable to projects processing purpose grown crops. Mr. Sheppard also added that, due to

State electrification goals, generating hydrogen or vehicle fuel that can be used in heavy-duty compressed natural gas (CNG) or renewable natural gas (RNG) vehicles that are difficult to transition to electric vehicles would be beneficial. He asked about CCE's potential to generate hydrogen or electricity. Mr. Pichach responded that a project could make electricity and that he could estimate the amount of electricity generation based on a sample waste characterization. He added that feedstocks with more moisture would generate less electricity.

Mr. Sheppard asked about the footprint for a 100 ton per day pilot scale project. Mr. Pichach responded that the site in Imperial Valley is about 10 acres.

Mr. Sheppard reiterated that Mr. Tseng could provide CCE with waste characterization data. Mr. Pichach responded that he would analyze the data, and he also noted that CCE may offer virtual or in-person tours of their facilities in Alberta, Nampa, and Imperial Valley.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Ms. Sarah Solomon provided an update on policy and legislation.

- At the CalRecycle monthly meeting on July 20, 2021, CalRecycle stated they continue to update their Short-Lived Climate Pollutant website with implementation tools and guidance. CalRecycle has produced several edible food recovery tools including capacity planning guidelines, a safe surplus food donation guide, and grant resources. They also have organic waste capacity planning tools and a procurement calculator tool that jurisdictions can use to help track their procurement requirements. CalRecycle has similar tools available for other entities, such as food donors and local enforcement agencies. CalRecycle will also be publishing webpages dedicated to waste haulers, local education agencies, and non-local entities.
- At the CalRecycle monthly meeting on August 17, 2021 CalRecycle stated that they are continuing to develop new resources and planning tools for all agencies and businesses impacted by SB 1383 requirements. This included several new websites, such as a new hauler page that outlines the requirements for waste haulers collecting organic waste, a department-approved waivers page which outlines waivers available for SB 1383 collection, and a page dedicated to the determination of technologies that constitute a reduction in landfill disposal.

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

Ms. Solomon provided an update of 4 events that can also be found in the [Conversion Technology \(CT\) newsletter](#), and Subcommittee meeting minutes:

- CEAC Policy Conference: September 15 – 16, 2021, virtual
- Renewable Natural Gas Works Technical Workshop & Trade Expo: September 29 – 30, 2021, Nashville, TN
- WasteCon 2021: November 1 – 4, 2021, Kissimmee, FL
- Southern California Waste Management Forum (SCWMF) Annual Conference & Exhibit: November 10, 2021, Ontario, CA

VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Ms. Christine Arbogast stated that Tetra Tech is:

- Supporting Public Works in preparing a report back to the Board of Supervisors due in September 2021, in response to a June 8, 2021 Board motion to Enhance Countywide Solid Waste Management through Expanded Programs and Infrastructure Investments. The report will include a discussion of conversion technology (CT) facilities and their role in diverting hard to manage materials and organic waste that cannot feasibly be source reduced, recycled, composted, or digested. The report will include information on potential sites for new AD facilities in the County.
- Supporting Public Works in developing factsheets on different types of AD.

Mr. Sheppard asked Ms. Carol Oyola if there were any updates on the Brown Act requirements and the reinstatement of in-person meetings. Ms. Oyola responded that effective October 1, 2021, the Brown Act requirements will resume and that conference rooms have been booked for future in-person meetings. There will be further discussion with Environmental Programs Division Administration. Mr. Sheppard commented to the ATAS that staff would explore options for dual virtual/in-person meetings.

Mr. Mohajer requested an update regarding sludge management at the Hyperion Water Reclamation Facility at future meetings. Mr. Sheppard responded that staff would reach out to the City of Los Angeles to give a presentation.

VII. PUBLIC COMMENTS

No public comments.

VIII. ADJOURNMENT

The meeting adjourned at 10:58 a.m. The next ATAS meeting is tentatively scheduled remotely for Thursday, September 16, 2021, at 10 a.m.