

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

Minutes for May 20, 2021

WEB CONFERENCE

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

SUBCOMMITTEE MEMBERS PRESENT:

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

SUBCOMMITTEE MEMBERS NOT PRESENT:

Alex Helou, City of Los Angeles
Kay Martin, Bioenergy Producers Association
Kevin Mattson, Waste Management
Rob Williams, UC Davis Policy Institute for Energy, Environment and the Economy

OTHERS PRESENT:

Christine Arbogast, Tetra Tech
Paulina Kolic, California Department of Resources Recycling and Recovery (CalRecycle)
Nam Doan, Los Angeles County Public Works
Brian Moffatt, StormFisher
Carol Oyola, Los Angeles County Public Works
Coby Skye, Los Angeles County Public Works
Kawsar Vazifdar, Los Angeles County Public Works
Jeffrey Zhu, Los Angeles County Public Works
Narek Vartunian, Los Angeles County Public Works

I. CALL TO ORDER

Mr. Christopher Sheppard called the meeting to order at 10:06 a.m. Mr. Sheppard noted he was still reaching out to the City of Los Angeles to designate an alternate Subcommittee member. Mr. Mike Mohajer added that Enrique Zaldivar is leaving the City of Los Angeles which may result in staffing changes.

II. APPROVAL OF APRIL 15, 2021 SUBCOMMITTEE MINUTES

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

III. PRESENTATION – STORMFISHER

Mr. Brian Moffatt with StormFisher gave a presentation on the company's anaerobic digestion (AD) and composting facilities. One of their largest AD plants was built in Northern Germany in 2006. They also have a composting and high solids AD facility in London, Ontario, Canada that became operational in 2012. The facility is about 10 acres. The facility can process 120,000 tons per year of residential and commercial food waste to create renewable electricity, heat, and fertilizer.

Mr. Moffatt spoke about their newest facility in Drumbo, Ontario, which cost \$20 million to build. The facility pre-processes 100,000 tons per year food waste including depackaging of commercial food waste to create a feedstock for AD. The facility is capable of handling 10 to 25 percent contamination in the feedstock.

Stormfisher also designed another high solids AD facility in Canada to process commingled food and green waste. Because food waste and green waste are often collected together in North America, high solids AD is recommended to extract the energy from the feedstock effectively without creating odor issues. The facility can process 120,000 tons per year of organic waste and generate over 225,000 MMBTU per year of pipeline-quality RNG.

Generate Capital is Stormfisher's financing partner and the largest owner of non-landfill renewable natural gas (RNG) facilities in North America. Both StormFisher and Generate Capital are engaged in the development of infrastructure in California to support Senate Bill 1383, which will require over 100 new facilities to divert organic waste from landfills.

Mr. Sheppard asked if Title V air permits are specific to the South Coast Air Quality Management District (AQMD). Mr. Moffatt responded that these permits are required by Federal regulation. Mr. Mark McDannel commented that Title V permits are granted locally by the AQMD.

Mr. McDannel asked if StormFisher is working on any projects in California. Mr. Moffatt responded that they may develop projects in California and have been working with municipalities to assess available sites and determine the necessary capital investment.

Mr. Tseng asked what types of pre-processing are needed to optimize feedstock for AD or composting. Mr. Moffatt responded that hammer mills and screens are used to remove large contaminants such as utensils from food waste. The food waste is slurried to remove grit, glass, and other heavy contaminants. A strain press with a very fine screen is used to filter out plastics as small as one millimeter.

Mr. Tseng asked what types of odor control are used at the Stormfisher facilities. Mr. Moffatt responded that the London facility uses humidification, wet scrubbers, biofilters and carbon filters.

Mr. Sheppard commented that the strain press sounds more suitable to the wet digestion process and asked if there is a similar technology available to reduce contaminants in digestate from higher solids. He added that State requirements limit contaminants in land applied material to 4 millimeters. Mr. Tseng added that the contamination limit for plastics is less than a 10th of a percent in dry weight. Mr. Moffatt explained that after the commingled material is digested, the digestate is combined with green waste to reduce contaminants. The material is also screened before and after digestion.

Mr. Sheppard asked if the composting process is open or enclosed. Mr. Moffatt responded that the composting occurs indoors.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Mr. Nam Doan gave an update on policy and legislation.

- At the recent CalRecycle monthly meeting on May 18, 2021, CalRecycle stated they continue to update their Short-Lived Climate Pollutant website with resources for local jurisdictions such as webinars and guidance for identifying Tier 1 and Tier 2 commercial food generators.
- An update on Assembly Bill 341, Mandatory Commercial Recycling (AB 341) and Assembly Bill 1826, Mandatory Commercial Organics Recycling (AB 1826) was provided:
 - The Cities of El Segundo and Bell had significant gaps in program implementation for AB 1826.
 - The City of Maywood had significant gaps in program implementation for AB 341 and AB 1826.
 - All 3 Cities submitted plans to CalRecycle to address the gaps in implementation and CalRecycle approved their plans.

Mr. Mohajer asked what changes the Cities will implement to comply with AB 341. Mr. Doan responded that staff will look into this matter and provide the information to Mr. Mohajer.

Mr. Sheppard added that the revised State budget has been released and includes proposals to provide funding for recycling and organic waste processing infrastructure. He encouraged the Subcommittee members to submit support letters to the State Legislature to advocate for funding. He added that the Senate has proposed allocating \$200 million in Greenhouse Gas Reduction Fund funding to support infrastructure and that an additional \$100 million for infrastructure from various funds is proposed within the Governor's revised May budget.

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

Mr. Doan provided an update of 9 events that can also be found in the [Conversion Technology \(CT\) newsletter](#) and Subcommittee meeting minutes:

- SoCal SWANA Chapter Workshop: Disaster Recovery: June 10, 2021, virtual
- SoCal SWANA Chapter Workshop: Sustainable Materials Management Summit: June 15, 2021, virtual
- SoCal SWANA Chapter Workshop: Landfill Challenges Summit: June 1, 2021, virtual
- Waste EXPO: June 28 - 30, 2021, Las Vegas, NV
- Biomass Summit & Expo: July 13 – 15, 2021, Des Moines, IA
- SoCal SWANA Chapter Workshop: High Diversion Facilities: July 22, 2021, virtual
- Resource Recycling Conference & Trade Show: August 4 – 5, 2021, Austin, TX
- Waste Conversion Technology Conference & Trade Show: August 16 – 18, 2021, San Diego, CA
- California Resource Recovery Association (CRRRA) Conference & Trade Show: August 16 – 19, 2021, virtual

Mr. Mohajer added the following two events:

- SoCal Waste Management Forum: June 9, 2021, virtual
- SoCal Waste Management Annual Conference: Tentatively scheduled for November 10, 2021, Ontario, CA

Mr. Tseng added that the City and County Local Enforcement Agencies (LEA) have been working with Waste Management and had a conference call with CalRecycle regarding alternative methodologies to determine the organic content

recovery rate from high diversion mixed waste processing facilities. The LEA developed two alternative methodologies because the methods in the regulations were not practical or safe. Mr. Tseng said that a report on the methodologies was submitted to CalRecycle and could be shared with the Subcommittee. Mr. Sheppard responded that he would distribute the report to the ATAS members, and asked Mr. Tseng if he would give a presentation on the report at July's Subcommittee meeting. Mr. Tseng responded that he would.

Mr. Tseng added that the remote sensing of methane project was approved. The project team will conduct remote methane monitoring internationally to develop real time data for regulators and landfill operators. The pilot will begin next month. Mr. Tseng stated that he may contact the Subcommittee members for assistance in developing the project concept.

VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Ms. Christine Arbogast stated that Tetra Tech has been:

- Continuing to support Public Works in analyzing environmental benefits of greenhouse gas emission reductions associated with AD.
- Continuing to prepare responses to the Subcommittee's comments on a Fact Sheet comparing AD development in Europe vs. United States. A draft was recently submitted to EPD staff for review.

VII. PUBLIC COMMENTS

No comments.

VIII. ADJOURNMENT

The meeting adjourned at 10:57 a.m. The next ATAS meeting is tentatively scheduled remotely for Thursday, June 17, 2021, at 10 a.m.