

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

**Minutes for April 18, 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, rep by Michelle Dewey and Scott Beckner, California Department of  
Resources Recycling and Recovery (CalRecycle) \*  
Patrick Holland, rep by Clark Ajwani, Los Angeles County Public Works  
Wayde Hunter, North Valley Coalition of Concerned Citizens  
Ron Kent, rep by Dr. Paul Ghougassian, Southern California Gas Company  
Kay Martin, rep by Jim Stewart, Bioenergy Producers Association  
Kevin Mattson, Waste Management  
Mark McDannel, rep by Sam Shammass, Los Angeles County Sanitation District  
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force  
Eugene Tseng, UCLA Solid Waste Program

SUBCOMMITTEE MEMBERS NOT PRESENT:

Rob Williams, UC Davis Policy Institute for Energy, Environment and the Economy  
Alex Helou, City of Los Angeles  
Ben Lucha, City of Palmdale

OTHERS PRESENT:

Charles Alvarez, Gabrielino-Tongva Tribe  
Chip Clements, Clements Environmental  
Kate Downey, Clements Environmental  
Bill Ferguson, California State University Long Beach  
Robert Ferguson, Resources Hiding in Plain Site  
Tracy Anthony, Alternative Resources, Inc. (ARI)  
Vince Holguin, Gabrielino-Tongva Tribe  
Carol Oyola, Los Angeles County Public Works  
Margarita Quiroz, Los Angeles County Public Works  
Kawsar Vazifdar, Los Angeles County Public Works

\* Designates participants over the telephone

**I. CALL TO ORDER**

Mr. Ajwani called the meeting to order at 10:05 a.m.

**II. APPROVAL OF MINUTES FROM MARCH 21, 2019 MEETING**

A motion to approve the minutes from the March 21, 2019 meeting was made by Mr. Mohajer and seconded by Mr. Hunter. The motion passed with one abstention.

**III. PRESENTATION - BIOMASS CONVERSION FACILITIES IN CALIFORNIA – CHIP CLEMENTS, CLEMENTS ENVIRONMENTAL**

Mr. Clements and Ms. Downey presented on a technical memo Clements Environmental prepared for the County on biomass conversion facilities. Mr. Clements stated that the traditional biomass combustion industry has declined throughout the state. Ms. Downey noted that the majority of the remaining operating biomass combustion facilities are located in the Central Valley with a few located in Northern California. Ms. Downey stated that only one biomass combustion facility, the Colmac Plant in Mecca, is located in Southern California. Ms. Downey stated that the decline of biomass combustion facilities is due to competition with other renewable energy sources, such as wind and solar, that have lower costs and more incentives and subsidies

Mr. Clements stated that new biomass conversion facilities using gasification technologies are either operating, under construction, or being planned. Mr. Clements stated that these biomass conversion facilities provide solutions for the lack of outlets for agricultural, forest, and urban wood waste. He added that these technologies can help improve air quality and reduce air emissions that cause climate change. Mr. Clements stated that these facilities do not require solid waste facility permits from CalRecycle.

Mr. Clements discussed three gasification-to-power facilities. He stated that these small facilities producing less than three megawatts of power are eligible to participate in the BioMAT program to sell power to utilities. Mr. Clements explained that two larger gasification-to-fuel facilities are being developed due to significant incentives for fuel production. Mr. Clements added that both gasification-to-fuel projects have received \$5 million grants from the California Energy Commission.

Mr. Clements continued that the development of many biomass combustion facilities created a high demand for biomass feedstock, forcing biomass combustion facilities to start paying for feedstock. Currently, biomass conversion facilities receive feedstock for free, but they may eventually have to pay for the feedstock when more biomass conversion facilities are built.

Ms. Downey stated that most of the cost and time to develop a facility is due to the Conditional Use Permit (CUP) and California Environmental Quality Act (CEQA) processes. She added that developing a biomass conversion facility would require an overall three-year permitting process and an estimated \$400,000 in cost.

Mr. Stewart commented that current state laws have prevented the advancement of non-combustion thermal conversion technologies (CTs) processing municipal solid waste (MSW). Mr. Stewart continued that if CTs can be demonstrated for biomass processing, the state legislature may recognize their value and take action to facilitate MSW conversion.

Dr. Ghougassian asked about the carbon emissions from the conversion of biomass into ethanol. Mr. Clements responded that they are still determining the carbon intensity (CI) scores, but that these projects will likely have a score of less than 40. Mr. Clements added that renewable natural gas (RNG) produced from dairy digesters has the lowest CI of any fuel and the use of dairy RNG to power biomass conversion facilities will further reduce the ethanol's CI.

Mr. Ajwani asked if the five biomass conversion facilities are only using agricultural waste or if they are also using forest residue. Mr. Clements responded that he thinks they are using both, but they are mostly using or going to use agricultural waste.

Mr. Ajwani asked if the biomass conversion facilities are accepting dairy waste, digestate, or sewage sludge. Mr. Clements responded that they are not because the feedstock is too wet and not suitable for gasification. Mr. Beckner commented that Mount Diablo Resources Recovery Facility in Contra Costa County is planning to build a gasifier to process a combination of biosolids from Delta Diablo Sanitation Districts and urban wood waste. Mr. Clements stated that dried biosolids could be gasified. Mr. Ajwani added that drying biosolids for gasification may not be economically feasible. Mr. Tseng mentioned that one driver to gasify biosolids are the organic waste disposal reduction requirements of Senate Bill 1383 (SB 1383). Mr. Ajwani added that biosolids gasification would need to undergo the SB 1383 technology verification process because biosolids are not a feedstock currently accepted for biomass gasification per Public Resources Code 40106.

Mr. Ajwani asked about permitting biomass conversion facilities and if they require an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). Mr. Clements responded that a large ethanol plant may require an MND, but that the Aemetis project was exempt from CEQA altogether due to the site's existing permits. He continued that biomass conversion facilities do not have significant environmental impacts and do not generate toxic residues or significant air emissions.

Mr. Tseng asked if non-recyclable paper could be a feedstock for biomass conversion. Mr. Clements answered that non-recyclable paper would qualify.

Mr. Ajwani asked Mr. Stewart if the West Coast Waste facility is looking for additional feedstock. Mr. Stewart responded that the local feedstock supply is abundant and they currently have no incentive to take additional biomass.

#### **IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION**

Ms. Vazifdar stated that the President of the California Public Utilities Commission (CPUC) issued an Alternate Decision on pipeline biomethane standards. The Alternate Decision does not change the previous decision to lower the minimum heating value of biomethane and maintain the current maximum siloxane concentration. She added that the Alternate Decision does not allow blending of biogas or a reduction in the siloxane monitoring and reporting requirements for certain sources of biomethane. She continued that the Alternate Decision would close the entire preceding, preventing future consideration of revised pipeline standards, incentives, or adoption of a definition of renewable gas. Ms. Vazifdar stated that comments on the Alternate Decision are due to the CPUC on May 2, 2019 and that the Bioenergy Association of California will be submitting comments.

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

Ms. Vazifdar mentioned the upcoming conferences:

- Southern California Waste Management Forum, May 2, 2019, Fullerton, CA
- WasteExpo, May 6 – 9, 2019, Las Vegas, NV
- Waste Conversion Technology Conference, June 2 – 4, 2019, Atlantic City, NJ

Ms. Vazifdar noted that Public Works may apply for Global Green funding for a food waste-to-biogas assessment and that they are looking for any interested parties, especially other jurisdictions, who would like to partner with Public Works.

#### **VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT**

Ms. Higgins stated ARI continues to work on various outreach and information documents, including permitting guidance for anaerobic digestion facilities and quantification of potential CT feedstocks, such as mattresses, waste tires, and dead trees. Ms. Higgins stated that ARI is following up with stakeholders that have recently explored possible CT projects, including IRS Demolition, Pitchess Detention Center, and the City of Avalon, to determine the current status and outline potential next steps.

**VII. PUBLIC COMMENTS**

No public comment.

**VIII. ADJOURNMENT**

The meeting adjourned at 10:55 a.m. The next ATAS meeting is tentatively scheduled for Thursday, May 16, 2019 at 10:00 a.m. in Conference Room B of Public Works Headquarters.

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