

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

Minutes for November 15, 2018

900 South Fremont Avenue
Alhambra, CA 91803

SUBCOMMITTEE MEMBERS PRESENT:

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

SUBCOMMITTEE MEMBERS NOT PRESENT:

Rob Williams, UC Davis Policy Institute for Energy, Environment and the Economy
Alex Helou, City of Los Angeles
Kay Martin, Bioenergy Producers Association
Eugene Tseng, UCLA Solid Waste Program

OTHERS PRESENT:

Tracy Anthony, Alternative Resources, Inc. (ARI)
Clark Ajwani, Los Angeles County Department of Public Works
Elijah Carder, Los Angeles County Department of Public Works
Nam Doan, Los Angeles County Department of Public Works
Carol Oyola, Los Angeles County Department of Public Works
Margarita Quiroz, Los Angeles County Department of Public Works

* Designates participants over the telephone

I. CALL TO ORDER

Mr. Holland called the meeting to order at 10:03 a.m.

II. APPROVAL OF MINUTES FROM OCTOBER 18, 2018 MEETING

A motion to approve the minutes from the October 18, 2018 meeting was made by Mr. Mohajer and was seconded by Mr. Hunter. The motion passed unanimously.

III. PRESENTATION FROM JUSTIN ANTHONY KNAPP OF ALL POWER LABS

Mr. Knapp presented for All Power Labs (APL), a start-up company founded in Berkley, CA. APL makes small-scale mobile biomass gasification powerplant units that convert dry organics such as wood and agricultural waste into power, heat, and biochar and produce carbon-negative energy. APL's technologies operate worldwide in several countries, such as Mexico, Columbia and Italy.

APL has a current demonstration project in Ontario, CA processing woody biomass waste into electricity, heat, and biochar. Mr. Knapp stated that biochar is valuable for agriculture, as it helps soil retain nutrients and water and can remediate depleted soil. APL has partnered with nonprofits and small businesses, such as Ontario Agricultural Commodities, who can use biochar.

Mr. Knapp stated that this demonstration project received funding from a California Energy Commission grant. He stated the goal is for the project to be financially viable after the grant funding is exhausted.

Mr. McDannel asked how APL obtained permits in South Coast Area Quality Management District (SCAQMD) and Bay Area Air Quality Management District (BAAQMD). Mr. Knapp responded APL has been successful at obtaining some air quality permits and is in the process of obtaining others.

Mr. Holland asked about the costs of the units. Mr. Knapp stated that the smallest unit is \$50,000 and the industrial-sized unit, which is not yet available for commercial sale, will be about \$400,000. Mr. Holland asked if the unit could process organics generated at a Los Angeles County facility, including food scraps and food-soiled paper. Mr. Knapp stated that the unit would not be suitable for the feedstocks with high moisture and best for dry wood waste. Mr. Holland asked Mr. McDannel if the unit could be used at a Sanitation Districts of Los Angeles County (LACSD) materials recovery facility (MRF). Mr. McDannel responded that LACSD has not historically used small power production due to the large scale of their operations.

Mr. Kent asked how economics of biomass gasification would work if the feedstock must be purchased. Mr. Knapp recommended using the units near an existing

source of biomass and stated that paying for the feedstock would delay the breakeven point.

Mr. Hunter asked how many people are needed to operate the equipment. Mr. Knapp responded that the unit requires at least one person for startup and shutdown, and also needs cleaning and oil changes. Otherwise, the machine is mostly automated and has fail safes as well.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Mr. Holland stated that there were no updates due to a break in the legislative season.

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

Mr. Doan mentioned the upcoming conferences:

- VerdeXchange Conference, January 27 – 29, 2019, Los Angeles, CA
- US Composting Council Compost 2019, January 28 – 31, 2019, Phoenix, AZ
- Zero Waste Symposium, February 12, 2019, San Diego, CA
- Rethink Methane Symposium, February 26 – 27, 2019, Sacramento, CA

Mr. Doan stated that Public Works staff attended the Southern California Waste Management Forum Annual Conference on November 14, 2018 in Pomona, CA.

VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Ms. Anthony stated that ARI continues to assist with the potential in-vessel composting project at Pitchess Detention Center and the potential gasification project for Interior Removal Specialist, Inc. (IRS). She stated that, based on the most recent economic modeling, a project at IRS with a 20-year financing period and a favorable long-term power purchase agreement selling renewable electricity at 12.7 cents per kilowatt hour with a tipping fee of \$42 per ton would need to process at least 200 tons per day (tpd) of biomass. She stated that, without a favorable power purchase agreement, a project with the same financing period would have to process 750 tpd of biomass with a higher tipping fee of \$50 per ton.

VII. UPDATE ON WOOLSEY FIRE

Mr. McDannel gave a brief [presentation](#) on the Woolsey Fire and its impact on the Calabasas Landfill (Landfill), located in the City of Agoura Hills. LACSD operates a landfill gas-to-energy powerplant at the Landfill. Neither the powerplant nor the Landfill are occupied at night. Mr. McDannel stated that at about 2:00 a.m. on November 9, 2018, the operator started receiving alarms and Edison cut power to

the Landfill as part of their fire prevention program. At about 4:00 a.m. or 5:00 a.m., the fire was heading towards the powerplant, but irrigated landscaping helped prevent the fire from reaching the powerplant. By sunrise, the fire had spread over parts of the landfill and significantly damaged the landfill gas collection system. The superintendent's building at the Landfill was destroyed but the scale houses were not impacted. On Saturday, November 10, 2018, the flare station was running at 60 percent capacity with no detection of odors. The Landfill opened on November 14, 2018 and the gas collection system is being repaired. Even though the powerplant was unharmed, there may not be enough gas available to run the plant. Mr. McDannel displayed photographs to the subcommittee showing the impacts of the fire.

VII. PUBLIC COMMENTS

Mr. Holland proposed that the subcommittee not meet in December due to the holiday season. There were no objections.

Mr. Mohajer commented that Mr. McDannel presented a chart at the Southern California Waste Management Forum quantifying the amount of organic waste disposed at Los Angeles County landfills. Mr. Mohajer stated that LACSD quantified the types of organic waste as defined in Assembly 1826, which is not consistent with the expanded definition of organic waste in the draft Senate Bill 1383 (SB 1383) regulations. Mr. Mohajer recommended that the SB 1383 definition and corresponding data should be used in future presentations to prevent confusing other counties, cities, and elected officials. Mr. McDannel and Mr. Holland concurred.

Ms. Anthony commented that she met a representative from Anaergia at the Southern California Waste Management Forum who said that Anaergia would be hosting a groundbreaking event at their Rialto bioenergy facility on December 7 if anybody was interested in attending. Mr. Mattson of Waste Management stated they would have representatives attending.

VIII. ADJOURNMENT

The meeting adjourned at 11:12 a.m. The next ATAS meeting is tentatively scheduled for Thursday, January 17, 2019, at 10:00 a.m., in Conference Room A.