

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

September 21, 2023

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)
Kate Downey, rep by Rachelle Huber, Republic Services
Ben Lucha, Antelope Valley Resident
Wayde Hunter, North Valley Coalition of Concerned Citizens, Inc.
Ron Kent, rep by Ethan Simonoff, Southern California Gas
Kevin Mattson, rep by Kimberly Ohrt, Waste Management
Barbara Romero, rep by Ronaldo Milo, City of Los Angeles Bureau of Sanitation
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force
Fahim Rahimi, Los Angeles County Public Works
Sam Shammass, Los Angeles County Sanitation Districts
Eugene Tseng, UCLA Solid Waste Program

SUBCOMMITTEE MEMBERS NOT PRESENT:

Steve Cassulo, Waste Connections
Dee Hanson Lugo, Los Angeles County Department of Public Health
Kay Martin, Bioenergy Producers Association

OTHERS PRESENT:

Patricia Alma, Strategic Government Affairs
Seri Berelson, Mainspring
Matt Shumway, Mainspring
Marrion Gestat, Tetra Tech
Josephine Chen, Los Angeles County Public Works
Charles Darensbourg, Los Angeles County Public Works
Tran Kiem, Los Angeles County Public Works
Darren Kwan, Los Angeles County Public Works
Genevieve Osmena, Los Angeles County Public Works
Carol Saucillo, Los Angeles County Public Works
Airon Tee, Los Angeles County Public Works
Kawsar Vazifdar, Los Angeles County Public Works
Kim Yapp, Los Angeles County Public Works

I. CALL TO ORDER

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

II. APPROVAL OF AUGUST 17, 2023, SUBCOMMITTEE MINUTES

Mr. Mike Mohajer made a motion to approve the August 17, 2023, minutes and Mr. Wayde Hunter seconded. Motion passed unanimously.

III. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Ms. Marrion Gestat from Tetra Tech provided the following update on current projects:

- Preparing a Long-Term Solid Waste Disposal Needs Study for Antelope Valley in compliance with Lancaster Landfill Conditional Use Permit, Condition 92; which includes a high-level review of economic, environmental and technical considerations for anaerobic digestion (AD) and/or thermal conversion technology facility options;
- Performing a Countywide siting analysis for the development of anaerobic digestion and/or thermal conversion technology facilities;
- Performing a detailed evaluation of three closed landfill sites which will investigate land availability and land use compatibility; and
- Preparing Fact Sheets for the proposed AD Facility at the Calabasas Landfill in support of community outreach.

Mr. Mohajer requested Tetra Tech's update be placed in the Minutes.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Ms. Tran Kiem provided the following update:

- At CalRecycle's most recent meeting on September 19, 2023, they announced they will release a draft of the Senate Bill (SB) 54 regulatory language and hold additional workshops this fall before starting the formal rulemaking at the beginning of 2024. The next informal workshop will be held on September 27, 2023, and will focus on the covered material category list, source reduction, and a needs assessment.
- CalRecycle mentioned that the latest round of SB 1383 local assistance grant applications is due on November 15, 2023. The \$90 million in funding can go to cities, counties, regional or joint powers authorities, and/or special districts that provide solid waste collection services. Awards are anticipated in March 2024.

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

Ms. Tran Kiem provided an update on events and conferences, which can also be found in the [Conversion Technology Newsletter](#) and Subcommittee meeting minutes:

- Southern California Solid Waste Association of North America (SWANA): September 21, 2023, Buena Park, CA
- WASTECON 2023: September 27 - 29, 2023, Boston, MA
- National Zero Waste Conference: October 25 – 26, 2023, Virtual
- Southern California Waste Management Forum (SCWMF) Annual Conference: November 8, 2023, Ontario, CA
- California State Association of Counties: November 13 – 17, 2023, Oakland, CA

VI. PRESENTATION BY MAINSPRING

Mr. Matt Shumway of Mainspring provided a [presentation](#) on their linear generator, which uses organic-waste derived biogas to produce renewable power.

Mr. Mohajer asked what source of energy they used to start the oscillator. Mr. Shumway responded they use biogas for the Napa Sanitation District project, but he noted the Yolo County Landfill uses landfill gas. He added that a small amount of electricity is needed, which is supplied by batteries or by the grid. Mr. Mohajer asked if the gas needs to be cleaned. Mr. Shumway responded that they remove liquids and siloxanes but they do not need to upgrade the gas to pipeline quality standards.

Mr. Ethan Simonoff asked about the startup time and turndown capability. Mr. Shumway responded that the system could start up in 10 seconds and can turn down to 50 percent or below, but at reduced efficiency. Mr. Simonoff asked how the system is physically started. Mr. Shumway responded that they either pull power from the grid to start the first reaction process or can black start, without grid power, using small lithium batteries.

Mr. Sam Shammass asked if there was a minimum methane content in the fuel source. Mr. Shumway responded that they have tested the linear generator using gas with as low as 30 percent methane content, and theoretically could use gas with a lower methane content. He indicated that they need approximately 2 million British thermal units (MMBtu) per hour to produce the maximum power generation of 230-kilowatt hours per linear generator unit. He added that fuel pressure needs to increase if the methane content is too low.

Mr. Eugene Tseng asked how reaction chemicals are controlled to meet air emission requirements. Mr. Shumway indicated that their operations have obtained air quality permits and that they have met with the South Coast Air Quality Management District to explain their technology. Mr. Tseng asked about emissions of nonmethane organic compounds in landfill gas, such as benzene. Mr. Shumway confirmed benzene emissions had not been an issue at any of their permitted locations.

Mr. Hunter asked how the linear generator would be operated if biogas pretreatment was not available. Mr. Shumway responded that they would review the source fuel volume and quality to recommend solutions.

VII. PUBLIC COMMENTS

Mr. Mohajer asked which three closed landfill sites Tetra Tech planned to analyze. Ms. Gestat responded that information on the sites would be provided after the meeting. Mr. Mohajer also asked what additional analysis Tetra Tech planned to conduct. Ms. Kawsar Vazifdar commented Tetra Tech was conducting a high-level analysis of factors such as land use and zoning. She suggested that Tetra Tech present their analysis at a future meeting. Mr. Mohajer asked that their analysis include the [Countywide Organic Waste Management Plan](#).

Mr. Mohajer stated that the Task Force approved a letter of support for H Cycle's technology to be considered as organic waste disposal reduction by CalRecycle under the SB 1383 regulations. He asked why the support letter had not been sent. Mr. Mohajer requested that this item be placed on next month's agenda.

Ms. Genevieve Osmena agreed to have the item placed in the agenda and said that Mr. Coby Skye, with Public Works Administration, would be attending today's Task Force meeting to assist in answering some of the questions.

VIII. ADJOURNMENT

The meeting adjourned at 11:01 a.m. The next ATAS meeting is tentatively scheduled for Thursday, October 19, 2023.