

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

June 20, 2024

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

SUBCOMMITTEE MEMBERS PRESENT:

William Chen, Los Angeles County Sanitation Districts
Wayde Hunter, North Valley Coalition of Concerned Citizens, Inc.
Ron Kent, rep by Ethan Simonoff, Southern California Gas
Ben Lucha, Antelope Valley Resident
Dee Hanson-Lugo, Los Angeles County Department of Public Health
Fahim Rahimi, rep by Kawsar Vazifdar Los Angeles County Public Works
Barbara Romero, rep by Ronaldo Milo, City of Los Angeles Bureau of Sanitation
Heather Williams, California Department of Resources Recycling and Recovery
(CalRecycle)

SUBCOMMITTEE MEMBERS NOT PRESENT

Steve Cassulo, Waste Connections
Kate Downey, Republic Services
Kay Martin, Bioenergy Producers Association
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force
Kevin Mattson, Waste Management
Eugene Tseng, UCLA Solid Waste Program

OTHERS PRESENT:

Cesar Leon, Tetra Tech
Michael Schmitz, ReCarbon
Josephine Chen, Los Angeles County Public Works
Darren Kwan, Los Angeles County Public Works
Omar Carrillo Maldonado, Los Angeles County Public Works
Carol Saucillo, Los Angeles County Public Works
Airon Tee, Los Angeles County Public Works
Kim Yapp, Los Angeles County Public Works
Caleb Yun, Los Angeles County Public Works

I. CALL TO ORDER

Ms. Kawsar Vazifdar called the meeting to order at 10 a.m.

II. APPROVAL OF MAY 16, 2024, SUBCOMMITTEE MINUTES

Mr. Wayde Hunter made a motion to approve the May 16, 2024, minutes, and Mr. Ethan Simonoff seconded. Motion passed unanimously.

III. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Mr. Cesar Leon from Tetra Tech stated that Tetra Tech submitted the following documents to Public Works for review:

- First Draft Anaerobic Digestion (AD) White Paper which provides an objective overview of AD technologies and the state of the industry.
- Draft Countywide Siting Evaluation for the development of AD and/or thermal conversion technology (CT) facilities within unincorporated County.
- Draft Long-Term Solid Waste Disposal Needs Study for Antelope Valley in compliance with Lancaster Landfill Conditional Use Permit, Condition 92; which includes the performance of a high-level review of economic, environmental and technical considerations for CT facility options.
- Workplan to perform a detailed feasibility evaluation of three closed landfill sites that will evaluate limits of waste and surrounding utilities.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Ms. Vazifdar provided the following update:

- On May 21, 2024, CalRecycle hosted a monthly meeting where they welcomed Ms. Zoe Heller as their newly appointed director.
- On June 18, 2024, CalRecycle hosted this month's meeting where they announced that solid waste disposal and co-disposal site cleanup program grants totaling \$2.5 million were awarded to six applicants. Recipients include Los Angeles County, who will receive \$500,000, and Los Angeles Department of Water and Power, who will receive \$375,000.
- CalRecycle's most recent Senate Bill (SB) 1383 chat was on May 15, 2024, and covered jurisdiction enforcement programs. The upcoming SB 1383 Chat is scheduled for June 25, 2024, from 1 p.m. to 3 p.m.
- Due to the Juneteenth federal holiday, the U.S. Department of Energy extended the deadline for the "Waste Analysis and Strategies for Transportation End-Uses" Grant concept paper to June 20, 2024, at 5 p.m. Eastern Time.

Ms. Vazifdar provided updates on recent developments for SB 54:

- CalRecycle received over 300 letters and thousands of individual comments on the SB 54 draft regulations during the comment period that ended on May 8, 2024.
- CalRecycle is currently accepting comments on the needs assessment component of SB 54.
- The SB 54 Advisory Board is scheduled to convene on June 21, 2024, at 10 a.m.
- CalRecycle advertised a Request for Proposal (RFP) for the SB 54 source reduction baseline study contract in April 2024, and an RFP for the needs assessment material characterization study was advertised in May 2024.

Last, Ms. Vazifdar provided updates on recent developments for Assembly Bill 2514:

- AB 2514 was amended on May 16, 2024, and the hearing date is pending.
- The amendments would allow jurisdictions that use a mixed waste organic collection system to produce renewable hydrogen and be able to procure it as a recovered organic waste product.

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

Mr. Omar Carrillo Maldonado provided an update on upcoming CT events and conferences that may also be found in the [CT Newsletter](#) and Subcommittee minutes:

- Air and Waste Management Association's 117th Annual Conference and Exhibition: June 24 - 27, 2024, Calgary, AB
- The 15th Waste Conversion Technology Conference and Trade Show: August 12 – 14, 2024, San Diego, CA
- California Resource Recovery Association Conference and Trade Show: August 18 - 21, Anaheim, CA
- The National Zero Waste Conference: October 2 – 3, 2024, Virtual

VI. PRESENTATION BY RECARBON

ReCarbon provided a [presentation](#) on the Antelope Valley Circular Hydrogen initiative.

Mr. Simonoff asked about pre-processing of the biogas and whether the carbon dioxide (CO₂) and contaminants such as siloxanes and hydrogen sulfide are removed prior to the biogas entering the reactor. Mr. Schmitz replied that CO₂ is not removed prior to the biogas entering the reactor. He stated that, based on testing of the biogas, they pre-process the biogas to remove the known contaminants and they typically use a scrubber to remove siloxanes and other contaminants.

Mr. Ben Lucha asked if the hydrogen that they produce from biogas is considered “green.” Mr. Schmitz replied that it meets the definition of “green,” but that they prefer using a full life cycle assessment using carbon intensity and the global warming potential of the fuels. Mr. Simonoff asked if the \$12 per kilogram rate is sufficient to finance the Lancaster project. Mr. Schmitz replied that it is.

Mr. Hunter asked if potential odors are destroyed through the processing of waste gas. Mr. Schmitz replied that the processing depends on the chemical composition of the gases and that sulfur and volatile organic compounds are removed during pre-processing. Mr. Hunter asked how much gas is being processed by a standard Plasma Carbon Conversion Unit (PCCU). Mr. Schmitz replied that the PCCU processes 5,500 tons of CO₂ equivalent. Mr. Hunter noted that some local landfills in Los Angeles County can generate substantial quantities of methane gas. Mr. Schmitz noted that a new revenue stream can be generated from landfill gas and that the PCCU is scalable to handle various quantities.

Mr. Lucha asked if renewable natural gas (RNG) can be used in place of biogas and if it requires the addition of CO₂. Mr. Schmitz replied that RNG can be used and they do not need to add CO₂.

Mr. Simonoff asked if ReCarbon has an engineering, procurement, and construction contractor that they work with. Mr. Schmitz mentioned that they have worked with a couple of firms and are looking at others as well including firms in California. Mr. Simonoff asked if they would license their product to other developers. Mr. Schmitz replied that they may consider licensing their product and that currently they are offering their equipment for sale. Mr. Simonoff asked about the nature of the reformation process. Mr. Schmitz replied that it is partial dry methane reformation which uses oxygen to complete the process. He continued that the temperature inside the reactor is over 2,000 degrees Celsius, resulting in highly efficient conversion. Mr. Simonoff asked if oxygen separation is necessary. Mr. Schmitz replied that an oxygen separation unit will be used for the Lancaster project.

Ms. Vazifdar asked if the renewable hydrogen receives low carbon fuel standard and renewable fuel standard credits. Mr. Schmitz replied that they receive both credits. Ms. Vazifdar asked if the Lancaster water reclamation plant is only processing

sewage sludge or if there are plans to add food waste. Mr. William Chen replied that the Lancaster plant does not have co-digestion, and that potential future plans for processing food waste is dependent on demand from haulers in the area or from the City of Lancaster.

VII. PUBLIC COMMENTS

No public comment.

VII. ADJOURNMENT

The meeting adjourned at 10:56 a.m. The next ATAS meeting is tentatively scheduled for Thursday, July 18, 2024.