

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

October 17, 2024

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

SUBCOMMITTEE MEMBERS PRESENT:

Siya Araumi, Los Angeles County Public Works
William Chen, Los Angeles County Sanitation Districts
Kate Downey, Republic Services
Ken Habaradas, Los Angeles County Department of Public Health
Wayde Hunter, North Valley Coalition of Concerned Citizens, Inc.
Barbara Romero, rep by Ron 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
Ron Kent, Southern California Gas
Ben Lucha, Antelope Valley Resident
Kay Martin, Bioenergy Producers Association
Kevin Mattson, Waste Management
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force
Eugene Tseng, UCLA Solid Waste Program

OTHERS PRESENT:

Rob Kee, Astera
Vered Nisim, Astera
William Bridge, Global Green
Basil Cantu, Long Beach Public Works
Cesar Leon, Tetra Tech
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

Mr. Siya Araumi called the meeting to order at 10:02 a.m.

II. APPROVAL OF SEPTEMBER 19, 2024, SUBCOMMITTEE MINUTES

There was no quorum, so the approval of the minutes was postponed to the next subcommittee meeting on November 21, 2024.

III. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Mr. Cesar Leon from Tetra Tech stated that they:

- Have presented on Senate Bill (SB) 1383 RNG Procurement to the October 2024 Infrastructure LA Sustainable Waste and Recycling Management Committee (SWARM). This presentation was previously given to the September ATAS subcommittee.
- Are preparing a presentation for the November Task Force and ATAS meetings, which will provide a broad perspective on regional organic waste management challenges, anaerobic digestion (AD), and conversion technologies (CTs).
- Have submitted a first Draft AD White Paper, which provides an objective overview of AD technologies and the state of the industry.
- Have submitted a Countywide Siting Evaluation Report for the development of AD and/or thermal CT facilities within Los Angeles County. This initial site assessment identified parcels throughout the County that met screening criteria based on State and local siting and permitting guidelines. The next steps include further evaluation of the feasibility of developing infrastructure at parcels identified in the initial site assessment.
- Have submitted a Draft Long-Term Solid Waste Disposal Needs Study for Antelope Valley in compliance with the Lancaster Landfill Conditional Use Permit, Condition 92, which includes a high-level review of economic, environmental, and technical considerations for CT facility options.
- Are performing further evaluation of three closed landfill sites to assess the limits of waste and surrounding utilities for the potential development of AD and/or thermal CT facilities.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Ms. Kim Yapp provided the following update:

CalRecycle Meeting

During the October 15, 2024, monthly meeting, CalRecycle:

- Provided an update on the draft SB 54 regulations released on October 14, 2024. The public comment period closes October 29, 2024.
- Announced that the SB 54 advisory board will meet on October 25 and November 1, 2024, from 10:00 a.m. to 4:00 p.m. Information on how to participate in these meetings is available on CalRecycle's events page.
- Provided an update on the biomass conversion facilities in California. They mentioned that active biomass conversion facilities in California have decreased to 25 from over 50 in the 1980s. They attribute this reduction to a more competitive energy market, landfilling alternatives, and fluctuations in subsidies, among other factors.

Mr. Ron Milo asked whether CalRecycle included eco-modulated formulas in the SB 54 regulations and updated the covered materials list. Ms. Yapp replied that staff would review the update and provide a response.

V. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Ms. Yapp provided an update on upcoming CT events and conferences, which may also be found in the [CT Newsletter](#) and subcommittee minutes:

- Solid Waste Association of North America (SWANA), WASTECON 2024: October 21 – 24, 2024, Dallas, TX
- Southern California Waste Management Forum Annual Conferences & Exhibit (SCWMF): November 13, 2024, Ontario, CA

VI. PRESENTATION BY ASTERA AND CARBON CONVERSION GROUP

Mr. Rob Kee provided a [presentation](#) on plastic to graphene conversion technology.

Mr. Araumi asked about the challenges in the permitting process for the facility in Paramount, California. Mr. Kee replied that permitting has not been a challenge because there is an existing industrial use at the facility. Mr. Araumi asked about emissions from the process. Mr. Kee replied that they use a dry, closed-loop process that captures all gaseous emissions, including hydrogen, and the remaining solid carbon black material is refined into graphene.

Ms. Kate Downey asked if an air permit was required for the syngas production and how much material will be processed at the Paramount Facility. Mr. Kee replied that

he is still obtaining information on the air permitting process and that the facility would process about 100 tons of plastic waste per month. Ms. Downey asked who supplies the feedstock. Mr. Kee replied that they are currently receiving feedstock from industrial plastic manufacturers and expressed a desire to partner with Los Angeles County to obtain additional feedstock. Ms. Downey asked if most industrial plastic waste is composed of high-density polyethylene. Mr. Kee replied that it includes polyethylene, along with a variety of other plastics, some of which cannot be recycled.

Mr. Wayde Hunter asked the minimum footprint that would be needed to operate a site. Mr. Kee replied that they can operate in a five to ten thousand square feet building in an industrial zone. Mr. Hunter asked if they would consider co-locating with a materials recovery facility or a landfill. Mr. Kee responded that they would consider this option.

Mr. Ron Milo asked how much Astera charges for the processing of plastic materials. Mr. Kee replied that Astera can likely offer a better rate for the processing of plastic materials than landfilling because they are producing a valuable product from the waste.

Mr. Araumi asked when the Paramount facility will be online. Mr. Kee replied that it expected to be operational by the first quarter of next year.

Mr. Hunter asked if the throughput could be scaled up within the existing footprint. Mr. Kee replied that they are planning to build microsites to grind the material to expand their operation within the region.

Mr. Araumi asked how the graphene is used. Mr. Kee replied that graphene is often used in the aerospace, medical device, and electronics industries. Mr. Kee added that it can also be used as a building material to strengthen concrete walls and could also be used by the battery industry.

Mr. Milo asked about the quality requirements for plastic waste used in graphene production. Mr. Kee replied that he would follow up with additional information.

VI. PUBLIC COMMENTS

No public comment.

VII. ADJOURNMENT

The meeting adjourned at 10:40 a.m. The next ATAS meeting is tentatively scheduled for Thursday, November 21, 2024.