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

Minutes for December 17, 2020

WEB CONFERENCE

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

SUBCOMMITTEE MEMBERS PRESENT:
Steve Cassulo, Waste Connections
Chris Coyle, rep by Dennis Montano, Republic Services, Inc. – Sunshine Canyon Landfill
Michelle Dewey, California Department of Resources Recycling and Recovery (CalRecycle)
Wayde Hunter, North Valley Coalition of Concerned Citizens, Inc.
Ron Kent, rep by Paul Ghougassian, Southern California Gas Company
Kevin Mattson, Waste Management
Mark McDannel, County Sanitation Districts of Los Angeles County
Christopher Sheppard, Los Angeles County Public Works
Eugene Tseng, UCLA Solid Waste Program
Carolyn Watson, rep by Dorcas Dee Daniel-Lugo, Los Angeles County Department of Public Health

SUBCOMMITTEE MEMBERS NOT PRESENT:
Alex Helou, City of Los Angeles
Ben Lucha, City of Palmdale
Kay Martin, Bioenergy Producers Association
Mike Mohajer, Los Angeles County Integrated Waste Management Task Force
Rob Williams, UC Davis Policy Institute for Energy, Environment and the Economy

OTHERS PRESENT:
Traecey Anthony, Alternative Resources, Inc.
Christine Arbogast, Tetra Tech
Janelle Auyeung, California Department of Resources Recycling and Recovery (CalRecycle)
Elijah, Carder, Los Angeles County Public Works
Will Chen, County Sanitation Districts of Los Angeles County
Nam Doan, Los Angeles County Public Works
Gerald Ley, Los Angeles County Public Works
Carol Oyola, Los Angeles County Public Works
Shayne Petkiewicz, Anaergia
Yaniv Scherson, Anaergia
Neil Shapiro, City of Santa Monica
Coby Skye, Los Angeles County Public Works
Charles Tripp, Long Beach Department of Energy
Kawsar Vazifdar, Los Angeles County Public Works
Jeffrey Zhu, Los Angeles County Public Works

I. CALL TO ORDER

Mr. Christopher Sheppard called the meeting to order at 10:02 a.m.

II. APPROVAL OF NOVEMBER 19, 2020 SUBCOMMITTEE MINUTES

A motion to approve the minutes from the November 19, 2020 meeting was made by Mr. Mark McDannel and seconded by Mr. Eugene Tseng. The motion passed with one abstention.

III. PRESENTATION – ANAERGIA AND WASTE MANAGEMENT

Mr. Yaniv Scherson of Anaergia and Mr. Kevin Mattson of Waste Management gave a virtual tour of the organics diversion operation at the Waste Management Materials Recovery Facility (MRF) at its Sun Valley Recycling Park that features Anaergia's OREX (organics extrusion press) technology.

Waste Management's Sun Valley Recycling Park consists of a 105,000 square-foot enclosed building designed and permitted as a transfer station, organics processing facility, and MRF. They started organics processing on October 12, 2020, and the MRF is scheduled to open in January 2021. The MRF is permitted for 7,100 tons per day total including 2,100 tons per day of green waste. The MRF is fully enclosed and equipped with a ventilation system designed to maintain negative air pressure. The MRF is equipped with auger screens, optical sorters, and four temperature-controlled sorting rooms designed to minimize noise and dust.

The OREX is part of the MRF's organics processing line, with a capacity of 50 tons per hour. The OREX removes contaminants from source separated organics (SSO) and separates the organic fraction of MSW. The OREX applies about 4,000 pounds per square inch of pressure to the SSO and MSW to extrude a wet organic fraction through a perforated screen. The processing line is also equipped with a shredder to open bags and a screen to filter out a six-inch fraction that is sent to the OREX.

The Anaergia facility located in Rialto, CA uses anaerobic digestion (AD) to convert the organic fraction into biogas which is used to make renewable natural gas (RNG). The facility also includes dryers for biosolids. The facility has a capacity of 1,000 tons per day, including 700 tons per day of organic fraction and 300 tons per day of biosolids, but is receiving less feedstock than expected due to COVID-19. The facility is capable of producing up to 850,000 MMBTU (British thermal unit) per year of RNG.

The total cost of the facility is about $180 million and is fully owned, operated, and financed by Anaergia. The Facility received $170 million of tax-exempt bonds, equity contributions from Anaergia, and grant funding from government agencies such as CalRecycle, the California Energy Commission, South Coast Air Quality Management District, and the U.S. Department of Energy.

Mr. Neil Shapiro asked whether the OREX processes landscape material. Mr. Scherson answered that the inbound feedstock includes yard trimmings and green waste. Mr. Sheppard asked if there is separate green waste processing at the MRF. Mr. Mattson responded that they accept about 900 tons per day of green waste that goes to composting. The green waste processed by the OREX is commingled with food waste or MSW.

Mr. Eugene Tseng asked how Anaergia's system differs from a high solids dry AD process. Mr. Scherson responded that Anaergia's system is considered high solids wet digestion containing 6 to 8 percent solids. He added that high solids dry AD processes 45 to 50 percent solids and AD at a wastewater treatment plant processes about 2 percent solids. He added that wet digestion is beneficial because it maximizes the gas yield and minimizes digestate. However, wet digestion requires the feedstock to be preprocessed to remove contaminants.

Ms. Christine Arbogast of Tetra Tech asked how long it took to permit and build the facility, the percentage of rejects that are disposed, and the acreage of the facility. Mr. Scherson responded that the Rialto facility is 5.7 acres. The facility uses vertical construction with 80-foot-tall digesters to minimize the footprint. He stated that SSO contains 20-30 percent contaminants that are disposed and MSW contains 50-70 percent contaminants. He added that it took two and a half years to construct and commission the facility, and that acquiring the permits and completing the California Environmental Quality Act requirements took 18 months. Mr. Mattson commented that permitting for the Sun Valley facility took three years.

Ms. Michelle Dewey asked about the source of the OREX feedstock, how the digestate is processed, and the source of the biosolids. Mr. Mattson responded that the feedstock is from grocery stores as well as organic rich MSW mixed with SSO. He added that SSO volumes are limited due to COVID-19. Mr. Scherson responded that the digestate goes to compost. He added that the facility has received biosolids from the Los Angeles County Sanitation Districts, Orange County Sanitation District, and the City of Los Angeles.

Mr. Sheppard asked if the polishing process eliminates contaminants from chemicals that might be in the MSW. Mr. Scherson responded that the polishing system removes physical contamination through screening and centrifugal force. He added that preprocessing and sorting, prior to the OREX, also removes contaminants. He continued that the digesters use metabolic processes to degrade contamination.

Mr. Tseng asked if the digestate could meet physical contamination and land application standards. Mr. Scherson responded that the polishing system reduces contamination to 0.1 to 0.2 percent.

Mr. Sheppard asked Mr. Mattson if the electric vehicle (EV) chargers at the MRF are open to the public. He also asked if they incorporated community education at their

facility. Mr. Mattson responded they have provided tours, and he added that he did not know if the EV chargers were open to the public.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Mr. Nam Doan provided the following update:

- At the CalRecycle public monthly meeting on December 15, 2020, CalRecycle provided an update on the new SB 1383 webpage, featuring a new homepage with documents related to the final rulemaking, final approved regulation language, and other resources for organics collection, procurement, and food recovery. CalRecycle will also be releasing a procurement calculator in January 2021 and hosting a webinar in late January or early February 2021.
- On November 23, 2020, Governor Newsom announced the appointment of Ms. Rachel Wagoner as the new Director of CalRecycle.
- In late October, the California Public Utilities Commission (CPUC) issued a Proposed Decision to adopt a voluntary biomethane tariff for customers of Southern California Gas and San Diego Gas and Electric. The tariff includes both biomethane from AD and from non-combustion thermal conversion of biomass, so that all organic waste feedstocks and biogas sources will be eligible. The CPUC is expected to vote on the proposed decision this month. If approved, it will create a three-year pilot program and then the CPUC will re-assess to decide whether to make the voluntary tariff permanent.
- The California Board of Forestry adopted a Forest Biomass Utilization Plan, which includes specific recommendations to increase the use of forest biomass for electricity, combined heat and power, pipeline biogas, hydrogen generation, vehicle fuels, microgrids, and energy storage.

  Mr. Mohajer recommended the Subcommittee monitor CalRecycle's monthly meetings and provide updates on cities' compliance with AB 1826, AB 341, and soon, SB 1383. Mr. Sheppard concurred and noted it would be part of the regular update.

  Mr. Tseng stated that CalRecycle is working on facility performance measurement guidelines for SB 1383 and that he would provide updates at future ATAS meetings.

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

Mr. Doan mentioned the following conferences that are also listed in the Conversion Technology (CT) Newsletter.

- VerdeXchange 2021 – held virtually January 25 – 26, 2021.
- COMPOST 2021 – held virtually January 26 – 27, 2021.
- Virtual WASTECON, held virtually January 26 – 28, 2021.

- International Biomass Conference & Expo – held virtually March 15 – 17, 2021.

Mr. Mohajer shared that the Southern California Waste Management Spring Conference will be held virtually on March 24, 2021 and WasteEXPO will be held on June 28 – 30, 2021, in Las Vegas, NV.

VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Mr. Doan stated that Public Works prepared new information regarding small-scale on-site organic waste processing technologies, including AD, composters, and dehydrators, and the information is now available on the SoCal Conversion Technology website.

Ms. Christine Arbogast provided the following updates on projects that Tetra Tech is currently working on:

- A fact sheet comparing the progress of AD in the European Union and the United States.
- Topographic maps for potential alternative technology sites in Los Angeles County.

VII. PUBLIC COMMENTS

No comments.

VIII. ADJOURNMENT

The meeting adjourned at 10:59 a.m. The next ATAS meeting is tentatively scheduled remotely for Thursday, January 21, 2021, at 10 a.m.