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

Minutes for March 18, 2021

WEB CONFERENCE

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

SUBCOMMITTEE MEMBERS PRESENT:

Steve Cassulo, rep by Brenda Eells, Waste Connections

Chris Coyle, rep by TJ Singh, Republic Services, Inc. – Sunshine Canyon Landfill

Michelle Dewey, rep by Paulina Kolic, 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

Ben Lucha, City of Palmdale

Kevin Mattson, Waste Management

Mark McDannel, County Sanitation Districts of Los Angeles County

Mike Mohajer, Los Angeles County Integrated Waste Management Task Force

Christopher Sheppard, Los Angeles County Public Works

Eugene Tseng, rep by Vincent Holguin, 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

Kay Martin, Bioenergy Producers Association

Rob Williams, UC Davis Policy Institute for Energy, Environment and the Economy

OTHERS PRESENT:

Janelle Auyeung, California Department of Resources Recycling and Recovery (CalRecycle)

Nam Doan, Los Angeles County Public Works

Thomas Gratz, Hitachi Zosen INOVA

Darren Kwan, Los Angeles County Public Works

Emily Lucic, CalRecycle

Victoria Ngo, CalRecycle

Adrian Perea, Los Angeles County Public Works

Margarita Quiroz, Los Angeles County Public Works

Coby Skye, Los Angeles County Public Works

Jim Stewart, City of Los Angeles, Los Angeles City Council 6th District

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 10:01 a.m.

II. APPROVAL OF FEBRUARY 18, 2021 SUBCOMMITTEE MINUTES

A motion to approve the minutes from the February 18, 2021 meeting was made by Mr. Ben Lucha and seconded by Mr. Mike Mohajer. The motion passed with one abstention.

III. PRESENTATION – HITACHI ZOSEN INOVA

Mr. Thomas Gratz of Hitachi Zosen INOVA (HZI) gave a presentation on their high solids anaerobic digestion (AD) technology called Kompogas which converts organic feedstocks such as green waste and food waste into renewable natural gas (RNG) fuel, electricity, and/or compost. HZI's first North American AD facility is located in San Luis Obispo, California and has been operating since 2018. HZI previously constructed an AD facility in Ontario, Canada and is currently constructing an AD facility in Escondido, California. HZI is also developing their own facility in Lancaster, California in partnership with Waste Management.

HZI offers standardized pre-engineered digester sizes that are scalable. HZI executes their own projects and can provide complete engineering, procurement, and construction services for a third party owner or build and operate their own facilities with feedstock contracts from local jurisdictions or waste haulers.

Mr. Sheppard asked how much compost HZI expects to produce at the Lancaster facility from 180,000 tons per year of organic waste feedstock. Mr. Gratz responded that about 113,000 tons of compost will be produced each year. Mr. Sheppard asked if they expect the Lancaster facility to produce certified organic compost, similar to the San Luis Obispo facility. Mr. Gratz responded that the organic certification depends if the amount of heavy metals and contaminants in the finished product meet the CalRecycle threshold.

Mr. Sheppard asked if HZI will have a testing or load rejection program for contaminants such as heavy metals. Mr. Gratz responded that they cannot test the feedstock for heavy metals, but they do have a visual rejection criteria on the front end as well as a 2-1/2 inch screen. Mr. Kevin Mattson of Waste Management commented that residuals of contaminated loads can be taken to the Lancaster Landfill.

Mr. Sheppard asked why the Lancaster facility will generate electricity instead of RNG. Mr. Mattson answered that the emissions profile for the biogas engines might jeopardize existing air permits at the Lancaster Landfill and connecting to the SoCalGas pipeline has a lower emissions profile.

Mr. Wayde Hunter asked to confirm the throughput for the San Luis Obispo facility. Mr. Gratz responded that the San Luis Obispo facility processes 36,000 tons per year of organic waste.

Mr. Jim Stewart asked about the capital expense for the San Luis Obispo and Escondido facilities and about HZI's biomethane upgrading process. Mr. Gratz responded that the capital expense for San Luis Obispo was \$25 million including the permitting and soft costs, which were approximately \$3 million. Mr. Gratz could not disclose the capital expense for Escondido since HZI does not own or operate the facility. Mr. Gratz added that the capital expense for Lancaster is about \$100 million. Mr. Gratz stated that they have two in-house technologies for biomethane upgrading including a three-stage membrane and chemical scrubbing.

Mr. Mattson stated that the Lancaster facility will use a UV/carbon filter for odor control. Mr. Sheppard asked if Mr. Mattson envisions similar odor filtration technologies being used at other types of facilities such as materials recovery facilities (MRF). Mr. Mattson responded that, unlike organics processing facilities, MRFs do not traditionally use biofilters.

Ms. Christine Arbogast asked about the footprint of the various facilities in California. Mr. Gratz responded that the San Luis Obispo facility occupies about 2-1/2 acres and the Lancaster facility will occupy about 10 acres.

Mr. Mohajer asked if the technology can process cannabis waste. Mr. Gratz answered that it can, but they have not tested it at San Luis Obispo. Mr. Mohajer asked if he would be opposed to any legislation prohibiting the processing of cannabis waste at AD facilities. Mr. Gratz replied that he would oppose such legislation. Mr. Sheppard asked if HZI would have any concerns about compost produced from cannabis waste. Mr. Gratz responded that he does not know if any tetrahydrocannabinol (THC) remains in the compost, but he does not see any issues with the compost being used as fertilizer. Mr. Mattson commented that due to federal regulations, pure cannabis trimmings cannot be received at an AD facility without a full chain of custody.

IV. UPDATE ON CONVERSION TECHNOLOGY POLICY AND LEGISLATION

Mr. Nam Doan gave an update on policy and legislation. CalRecycle provided the following updates at the public monthly meeting on March 16, 2021:

- CalRecycle continues the SB 1383 Regional and Statewide webinars. The next webinars are:
 - Central Coast: March 25, 2021, from 1 p.m. 4 p.m.
 - o Northern California: March 30, 2021, from 9 a.m. noon.

Attendees are not limited to only their region's webinar. Registration is available on the CalRecycle website. Recordings of the webinars will soon be posted on the CalRecycle website.

- CalRecycle published the SB 1383 formal rulemaking comments and responses.
 The documents are located on the Short-Lived Climate Pollutant webpage under "SB 1383 Regulations."
- A webinar for non-local entities and local education agencies will be scheduled. Invites can be received by signing up for the Short-Lived Climate Pollutant listserv.
- CalRecycle is offering to meet with local Boards of Supervisors or City Councils to clarify the regulations. To request a meeting, individuals can contact their local CalRecycle representative.
- CalRecycle provided an update on Assembly Bill 341 (AB 341, Mandatory Commercial Recycling) and Assembly Bill 1826 (AB 1826, Mandatory Organics Recycling).
 - CalRecycle continues to review each jurisdiction's compliance with AB 341 and AB 1826 and is working with jurisdictions to approve plans for implementing the requirements of the laws.
- On Tuesday, March 16, 2021, Public Works released a Request for Information (RFI) to gather information on existing and planned organics infrastructure. The RFI with instructions for submitting a response was also sent out through the Conversion Technology (CT) newsletter listserv yesterday. Anyone interested in receiving the RFI may contact Mr. Doan. The deadline to submit responses is Tuesday, April 6, 2021, by 5:30 p.m.

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

Mr. Doan mentioned the following conferences, which are also listed in the CT newsletter and will be included in the Subcommittee meeting minutes:

- SoCal Waste Management Forum Spring Conference: March 24, 2021, Virtual
- VerdeXchange, March 30, 2021, Virtual
- SoCal SWANA Chapter Workshop Legislative Updates: April 8, 2021, Virtual
- SoCal SWANA Chapter Workshop Safety Summit: May 13, 2021, Virtual
- Waste EXPO, June 28 30, in Las Vegas, NV

Mr. Mohajer mentioned that the keynote speaker for the SoCal Waste Management Forum Spring Conference will be the new CalRecycle Director. Mr. Mohajer recommended that all Subcommittee members attend the webinar and requested that staff forward a copy of the flyer to all Subcommittee members.

Mr. Sheppard stated that the VerdeXchange conference on March 30, 2021, will discuss solid waste including extended producer responsibility for batteries and electronic waste, single-use plastics, and organic waste. Mr. Sheppard recommended that the Subcommittee members register for the conference.

Alternative Technology Advisory Subcommittee Meeting Minutes for March 18, 2021 Page 5 of 5

VI. UPDATE ON CONVERSION TECHNOLOGY PROJECT DEVELOPMENT

Ms. Christine Arbogast stated that Tetra Tech has been:

- Supporting Public Works in analyzing environmental benefits of projects that divert organic material from landfills to AD.
- Preparing responses to the Subcommittee's comments on the fact sheet comparing AD development in Europe vs. the United States.

VII. PUBLIC COMMENTS

No comments.

VIII. ADJOURNMENT

The meeting adjourned at 10:55 a.m. The next ATAS meeting is tentatively scheduled remotely for Thursday, April 15, 2021, at 10 a.m.