

SAVE THE DATE!



June 25-26, 2015 – “Waste Diversion: 21st Century Concepts, Strategies and Technologies” The Maryland Recycling Network and SWANA Mid-Atlantic Chapter have put together a two-day event at the Maritime Institute in Linthicum, Maryland where you'll find:

- Technical sessions that cover the hottest topics in the industry, including changing waste management and recycling models, policy & regulation, commodities markets, new technologies & more.
- Exhibits – Come see a wide variety of products and services from vendors in the region.
- Network with your peers – Step out of your office environment and be among those who understand what you're faced with day in and day out.

Visit the MRN website at - <http://www.marylandrecyclingnetwork.org/2015ConferenceOverview> for more information.

Bicycle
East Conference

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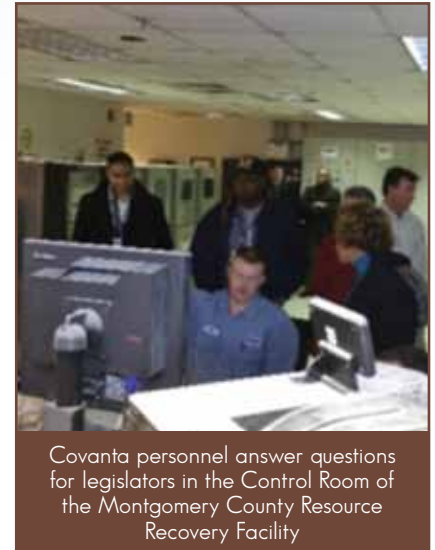
State Legislators Tour
Montgomery Facility
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STATE LEGISLATORS TOUR MONTGOMERY FACILITY

Nearly 50 newly elected Maryland State Legislators toured the Montgomery County Resource Recovery Facility in Dickerson, as part of their “Tour of the State” on December 10, 2014. They were given a close-up view of the facility's award winning operations. The tour began with an overview of the facility by Dan Locke, Chief of the Montgomery County Department of the Environment, Division of Solid Waste Services. Joining him for a brief discussion of the history and operation of the facility was Paul Gilman of Covanta Energy, parent Company of Covanta Montgomery, Inc., which operates the facility.

The tour, conducted by the County, Covanta and Authority personnel, included a more detailed discussion



Covanta personnel answer questions for legislators in the Control Room of the Montgomery County Resource Recovery Facility

of the waste combustion process, along with visits to the observation area for the tipping floor and trash pit, an observation spot for the facility's

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BIOCYCLE EAST CONFERENCE INCLUDED TOURS OF LOCAL FACILITIES AT FOREFRONT OF ORGANICS MANAGEMENT



rganics managers from throughout North America, Europe, Asia and Africa gathered in

Howard County, Maryland in October for the 2014 Biocycle East Conference, organized by Biocycle. The three-day event provided attendees with an opportunity to hear from technology experts, managers and researchers who are working in the larger field of organics processing. The opening topic was 'Millennials on the Move,' young entrepreneurs who are pushing the boundaries of organics management in significant ways. A running theme throughout many of the presentations was the need for composters to work carefully and closely with customers to ensure a clean feedstock. Repeatedly, participants were reminded, "garbage in, garbage out." Municipal and private sector operators also discussed the opportunities and challenges of food scrap co-digestion with biosolids at waste water treatment plants.

The Northern Tour

The last day of the Conference included two separate tours of organics management facilities in Maryland. The Northern Tour included a stop at Veteran's Composting in Joppa. The operation included a cart swap-out program for the customers, cart cleaning, an outdoor composting operation, an indoor vermicomposting operation and a bagging station. Founder & President



Veterans Composting is a farm based operation in Harford County that uses aerated static piles for composting of the food scrap and wood.

Justin Garrity emphasized the importance of working with clients to manage the process from separation through collection to ensure clean feedstock for his operation. Justin noted that an "added value" of customer engagement is that they gain a new awareness of the amount of food wasted at food service establishments. This point provides an opportunity for the biggest savings to the customer through reduced food purchases. Tour participants then proceeded to two dairy operations, each with digesters that process manure and food scrap



Sensenig Farm manure digester.

to produce gas that is combusted to generate electricity. Kilby Farms, in Colora (Cecil County), is a 600-head cattle farm that receives slurried food scrap from an aggregator that holds contracts with industrial food operations.

The manure management system reuses the stall wash-down water after it is processed through the digester. The on-site generator provides electricity for operations at the farm, including



Sensenig Farm receives 60 tons of food scrap per week to supplement revenues and improve the performance of the anaerobic digester.

the milking operation building and approximately 50 percent of the electricity for the family-owned farm store that sells ice cream and other products. The final stop was at the 100-head Sensenig milking operation. This farm processes cattle manure piped from an adjacent farm, along with hog and chicken manure piped from a third farm through a manure digester, and captures methane biogas to produce electricity and reduce greenhouse gases. The electricity is used on site, and the

View of the covered anaerobic digester at Kilby Farms

waste heat is used to dry grain for the feeding operations. Water is pumped through a heat exchanger that provides heat to the farmhouse all winter. The operators said that with the digester they were able to eliminate the use of 2,000 gallons of propane per year.

The Southern Tour

The Southern Tour's first stop was the Howard County Residential Food Waste Composting Pilot at the Alpha Ridge Landfill in Marriottsville. The pilot facility accepts curbside food scraps and yard trim from approximately 12,000 homes in the County. Howard County is



Howard County's Composting Pilot Facility composts food scrap in covered aerated static piles.

the first county in Maryland to provide curbside food scrap collection and recently expanded the service to a third collection route, reaching the designed pilot facility's capacity. The materials are processed through a horizontal grinder and composted under cover. Howard County plans to develop a larger composting facility at the landfill so they can expand the curbside collection program. Tour participants also visited the USDA Beltsville Agricultural Research Center (BARC) Anaerobic Digestion Facility in Beltsville, which houses 100 milking cows. The BARC

dairy operates an anaerobic digester to treat the manure liquids and is designed to reduce odors during land application. The digester's performance had never been evaluated, so researchers installed six plug-flow bag digesters to measure temperature, methane and other variables that will be used to determine overall performance. These small "bag" digesters could be a cost effective way for small farms to manage manure and produce gas for heating or electricity on site. The solid manure from the farm is composted on a nearby two-acre site in aerated windrows.

The final Southern Tour destination was the Prince George's County Food Waste Composting Pilot Project located in Upper Marlboro and operated by the Maryland Environmental Service. The pilot project began in May 2013 and is located at the County's Western Branch Compost Facility. Approximately 190 tons-per-month of food scrap is received and mixed with yard trimmings prior to being placed in windrows and covered.



Materials received at the Western Branch Composting Facility are ground in a horizontal grinder prior to being placed in windrows.

The yard waste composting portion of the facility processes between 55,000 and 60,000 tons-per-year of organics and is marketed as Leafgro.

For more information on the Biocycle East conference please contact Amanda Moore or Andrew Kays at 410.333.2730. The Conference website is <http://www.biocycleeastcoast.com/>



The BARC Plug-Flow research digesters use a "bag" system popular in Central America. Researchers plan to use the data to assist small farm operations across the US with an economical method of processing animal waste.



Northeast
Maryland
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Authority

WASTEWATCH

building a greener future

100 S. Charles Street, Tower II – Suite 402
Baltimore, Maryland 21201
410-333-2730 / Fax: 410-333-2721
E-mail: authority@nmwda.org
www.nmwda.org

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railyard and a visit to the facility's control room.

This was the largest group of elected officials to visit the site at one time since the facility began operations nearly 20 years ago. There were many compliments about the cleanliness and efficiency of the operation.

If you would like a tour of the facility for your group, please contact Mr. Steve Blake at the Authority at sblake@nmwda.org.



Covanta personnel show legislators the combustion of waste from the Control Room of the Montgomery County Resource Recovery Facility