

# ASTEVATCH building a greener future



### **AUTHORITY COMPLETES BALTIMORE CITY COMPOST FACILITY AND COX CREEK WATER RECLAMATION FACILITY PILOT PROJECT**

#### **Anne Arundel County Looking at Options for Processing Biosolids**

A pilot project initiated by the Authority to help find a more local way to recycle biosolids from Anne Arundel County has been completed and the results bode well for a successful collaboration between the Baltimore City Compost Facility and Anne Arundel County's Cox Creek Water Reclamation Facility (WRF).

The pilot project was designed to study the feasibility of Anne Arundel County utilizing the City Compost Facility to process biosolids produced during the wastewater treatment process. It was inspired by the fact that a portion of the County's biosolids have long been transported out of state, where it is land-applied for agricultural use. Maryland regulations regarding application and storage of nutrients have been tightening, resulting in a restriction of land application activities in Maryland to certain seasons.

With this issue in mind, the Authority, while negotiating a 2013 contract extension with Veolia North America (owner and operator of the Baltimore City Compost Facility), also negotiated an agreement for the Facility to accept and process biosolids from other Authority Jurisdictions. Veolia accepted the agreement based on the prerequisite that processing biosolids from other jurisdictions would not interfere with its ability to process biosolids from Baltimore City's Back River Wastewater Treatment Plant (WTP).

Anne Arundel County's Cox Creek WRF is a logical partner for the Baltimore City Compost Facility for three reasons: the two facilities are located less than 10 minutes apart; Cox Creek solids meet the Compost Facility's standards; and the amount of biosolids produced at Cox Creek will not impact the Facility's ability to process Back River WTP biosolids.

#### **Two-Week Trial Yielded Positive Results**

During the two-week (10 business days) pilot project, which took place in March, Anne Arundel County transported approximately 50 tons of biosolids daily to the Baltimore City Compost Facility. Observations were made about the interaction of the Cox Creek biosolids with the Back River biosolids to see if there were any problems created in the processing of the combined solids into compost. As the solids from each

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"The Authority continuously looks for innovative ways to improve operational and environmental efficiencies for our Member Jurisdictions. It's one of the many ways that the Authority plays a unique role in encouraging high quality waste management in our region. This pilot project between the Baltimore City and Anne Arundel County facilities is a prime example of how local governments can work together to reduce costs and improve the environment."

- Chris Skaggs, **Executive Director of** the Northeast Authority.

> Aerial Services Contract Awarded to BAI Group

2015 NERC Conference Featured Creative Options for Sustainable Materials Management



# 2015 NERC CONFERENCE FEATURED CREATIVE OPTIONS FOR SUSTAINABLE MATERIALS MANAGEMENT

Own the Future: Creative Options to Sustainable Materials Management was the theme of the Northeast Recycling Council's (NERC) 2015 Conference, held in Delaware, April 2015.

onference attendees consisted of various stakeholders in materials management, including representatives from the EPA, local governments, nonprofits, manufacturers, recyclers, collectors and processors. The conference opened with a discussion on the importance of reducing overall consumption and waste while focusing on the best methods for reusing and recycling leftover material. A number of important environmental facts were presented that led to further discussion. For example:

- 1. Forty percent of global greenhouse gas emissions arise from materials management and acquisition;
- 2. diminishing freshwater and virgin materials combined with increased pollution from resource extraction has encouraged stakeholders to continuously innovate their current materials management programs; and
- 3. "The State of Green Business 2015 Report" shows that corporate investment in sustainability improves overall share prices.

#### Benefits of a Circular Economy

The concept of a "circular economy" also was introduced. Conference speakers advocated that by shifting our society's current economic system toward a more circular economy, products and

packaging would be designed with less hazardous and hard-to-recycle components, along with less material overall. This type of economy would recover more original packaging and products for reuse, refurbishment and recycling. A circular economy could include extended producer responsibility (EPR) policies that place financial responsibility on the original product manufacturer and the consumer, which would distribute recycling costs among governments, producers and consumers more evenly. More specifically, EPR programs tend to exist for hard-to-recycle items, like paint, batteries, tires and electronics. With these programs, manufacturers generally pay an annual fee to state regulators, who then distribute the funds to local subdivisions to cover the costs of collection and recycling services. In some areas, consumers are even required to pay a user fee at the time of purchase for hard-to-recycle products. It was noted that currently EPR programs do not seem to impact packaging design or incentivize product stewardship. However, they do provide financial assistance for local governments to continue recycling non-curbside materials.

#### Re-emergence of Mixed Waste Processing

The re-emergence of mixed waste processing (MWP) facilities in the

United States was another featured topic. MWP facilities have been built and are being discussed in areas with traditionally low recycling rates and where very high recycling rates are mandated. MWP facilities vary in the acceptance of materials. Some facilities exist solely for commercial, multi-family or "wet" material, while also functioning as a front end sorter at waste-to-energy facilities. Others function as the sole recycling system in areas with historically low residential recycling rates. These facilities also can support areas with strong single-stream programs by providing even more diversion from regular municipal solid waste. MWP facilities are continuing to evolve and improve processing technologies in order to capture more recyclable material while also improving the quality of the recovered material. With evolving waste streams that include higher amounts of hard-to-capture plastics and lower amounts of traditional moneymakers like paper, along with the flexibility offered by mixed waste processing, these facilities may become a part of future recycling programs.



#### **AERIAL SERVICES CONTRACT AWARDED TO BAI GROUP**

n April, the Authority
Board awarded a contract
for aerial services to
BAI Group. The contract
calls for aerial services
for solid waste facilities in the Authority's
Member Jurisdictions. Those services
include aerial photography, landfill
surveying and volumetric analysis.
Aerial surveying and volumetric analysis
are needed to assist with planning,
operational efficiencies and State
permitting requirements of landfills.

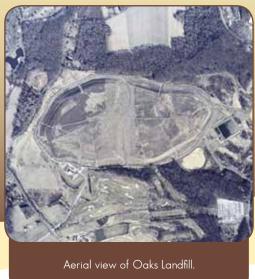
Aerial photography is performed by small aircraft, which requires favorable weather conditions. Coordination between the ground and flight are essential for developing a survey.

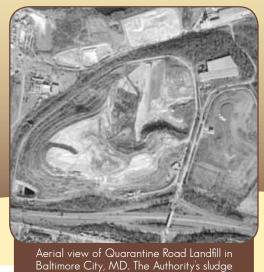
Prior to the flight, surveyors prepare ground control placement, or control points, to provide exact elevations and locations. The number of control points depends on the size and configuration of the landfill. Target information from aerial photography is used in developing topographical maps for future landfill analysis. After the maps are prepared, engineers make volumetric calculations that can determine remaining landfill capacity. This type of surveying also provides jurisdictions with assistance in ongoing monitoring and maintenance of landfills, including detection of abnormal sediment, ponding and other engineering concerns. The request for proposals was issued in November 2014 and five aerial service proposals were submitted to the Authority. With input from participating Member Jurisdictions, the Authority evaluated the proposals according to the RFP criteria and determined that BAI Group Inc. was technically qualified and provided the most value to the Authority's Member Jurisdictions. BAI Group was previously one of the Authority's three on-call aerial services vendors and Member Jurisdictions have been very pleased with the firm's work.

If you have questions regarding this contract or aerial services in general, please contact the Authority.









composting facility is also shown.

#### NEW CONTRACT FOR FREDERICK COUNTY WASTE TRANSFER AND DISPOSAL

n April 23, 2014 the
Authority issued a
request for proposals
from experienced
vendors for the

Transportation and Disposal of non-recycled waste delivered to the County's transfer station located at the Reich's Ford Landfill. The Authority's current contract with Waste Management for Frederick County Transportation and Disposal expired April 24, 2015. The Authority received five proposals with terms ranging from 2 ½ years up to 25 years. The Frederick County Board of Commissioners approved the proposal and authorized the Authority to enter into a contract with IESI MD Corporation, as they provided the lowest transportation and disposal price proposals. The initial contract term expires October 24, 2017 with renewal options up to an additional 2 ½ years.

In addition to the waste transfer and disposal contract, the Authority, on behalf of Frederick County, is currently contracting with Waste Management Recycle America for the transfer, processing, and recycling of single stream recyclable material received at the County's Transfer Station.

Please contact the Authority for additional information regarding its waste transfer and recycling contracts.



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wastewater treatment plant were processed differently, there were some minor mixings issues, but none that were deemed critical. Another potential issue was odor from the Cox Creek biosolids, as it is not digested in the same manner as the solids at Back River. However, odor issues were minimal and were not seen as an

impediment to moving forward. The pilot project determined that the Baltimore City Compost Facility would be able to process biosolids generated at Cox Creek along with the biosolids from Back River.

COX CREEK WATER RECLAMATION FACILITY PILOT PROJECT

The Authority is working with Anne Arundel County to explore the economic feasibility of a more permanent arrangement for processing solids at the Baltimore City Compost Facility. This collaboration has the potential to be a winning proposition for Veolia, Anne Arundel County, and the City of Baltimore.

## **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.

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



