Individuals in the business of managing waste materials are constantly searching for methods to accept a “waste” material and transform it into a useful end product. Composting is defined as the controlled biologic decomposition of organic material that is stabilized to a point that the product is beneficial to plant growth.

Other course topics included equipment, site selection, and water and odor management. The attendees had the opportunity to tour three local compost facilities: The Baltimore City Composting Facility operated by Veolia, Howard County’s food waste composting facility at Alpha Ridge Landfill, and Montgomery County’s Yard Waste Composting Facility operated by MES in Dickerson, MD.

The final days of the compost operations training course focused on testing, analysis and marketing of the final product. Attendees learned how to test the maturity of several compost facility products and participated in troubleshooting discussions for various operational scenarios. The compost training course provided by the U.S. Composting Council is a valuable tool for individuals stepping into the world of organic materials management.

Day 5 of the course- the group compost piles are being opened to observe changes in the material.

Monitoring the temperature of the group compost pile.

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**NEW HIRE!**

Lori Gibson

In September 2013, the Authority hired Lori Gibson as a staff accountant, replacing Diane Duvall who retired after 30 years of service. Ms. Gibson comes to the Authority with accounting experience in Big 4, manufacturing, commercial services, and nonprofit organizations. She received her bachelor’s degree from Marietta College in Marietta, OH, and completed her CPA requirements at The University of Baltimore. Ms. Gibson is also a licensed massage therapist and enjoys donating her time at Saint Agnes Hospital and at The American Cancer Society’s Hope Lodge.

**Congratulations, Diane!**

Diane Duvall has retired after 30 years of dedicated service to the Authority. She was a tireless worker and terrific co-worker. Diane will be sorely missed!

**Did you know that . . .**

The clean energy created by Wheelabrator Baltimore is used to heat and power hundreds of businesses in the central business district, as well as Harbor East, and helps to reduce Baltimore City’s carbon emissions by approximately 40,000 tons per year or the equivalent of removing 7,000 cars from the roads!
Maximizing resources is a fundamental principle behind our efforts at the Northeast Maryland Waste Disposal Authority (Authority) and our Fiscal Year 2013 performance certainly exemplified that rule. The Authority and its Member Jurisdictions (Members) benefited from the Authority’s efforts, making Fiscal Year 2013 an excellent year. We saved significant money, made progress in shaping and reforming regulations and completed a significant facility contract extension. Work also continued with permitting and development of the Frederick/Carroll Renewable Waste-to-Energy Facility, actively marketing renewable energy credits and managing the many facility and disposal contracts on behalf of our Members.

**Savings, Extensions and Awards**

In March 2013, the Authority, with assistance from its financial advisor and working closely with Montgomery County, refinanced $93 million in outstanding bonds of the Montgomery County Resource Recovery Facility. This transaction, the outcome of several months of hard work, saved Montgomery County $1.3 million in fiscal year 2013 and will save almost $10 million more over the next three fiscal years. That’s a total savings of $11.3 million! This savings was realized because of the favorable market conditions, strong financial position of the facility, the strength of Montgomery County’s solid waste system and the Authority’s decision to sell the refunding bonds on a competitive basis. This is the first solid waste bond issue to be sold competitively!

Another milestone was reached with the 25th year of operations at the Baltimore City Sludge Composting facility. Contracts with the Authority, Baltimore City and the facility owner, Veolia Water North America-Central, LLC, were nearing an end. On a daily basis, this facility composes approximately 100 tons of biosolids generated at Baltimore City’s Back River Wastewater Treatment plant and is an integral part of the City’s biosolids management plan. After months of negotiations, mutually agreeable terms will allow Veolia to continue operating the facility for an additional five years. Upon completion of this term, the City may take ownership of the facility, maintaining the ability to compost biosolids if it desires. This agreement marks an excellent example of the Authority’s ability to work with the private sector in creative ways to serve the needs of our Members.

The Authority also celebrated the start-up of the Millersville Landfill Renewable Energy Facility in Anne Arundel County. This facility, which takes methane generated in the landfill and combusts it to make electricity, was recognized by the EPA’s Landfill Methane Outreach Program (LMOP) as the Project of the Year for 2012...the project’s first year of operation. The Project of the Year designation is awarded to facilities that generate renewable energy from a local source while protecting the climate and strengthening the economy. Another round of congratulations goes to Anne Arundel County, Landfill Energy Systems (LES), the company that operates the facility, and the Authority staff who all worked diligently to create a great, and now nationally recognized, award-winning facility.
Operational Highlights
The Authority continued to manage existing projects, waste disposal and recycling contracts. Operational highlights for the year include:

- Nearly 1.3 million tons of waste managed through Authority contracts
- 33,846 tons recycled through Authority contracted facilities
- Over 14 million pounds of electronics recycled through the Authority’s master service agreement
- 440,953 MWh’s of renewable energy credits generated for sale from Authority owned/managed facilities
- Authority landfill gas to energy projects and waste-to-energy processing avoided the creation of 1.1 million tons of greenhouse gases during the fiscal year

Solid Waste Processed through Authority Contracts (FY 13) (in tons)

- 121,254 | Anne Arundel County Transfer & Disposal
- 180,608 | Baltimore City - BRESCO
- 78,952 | Carroll County Transfer & Disposal
- 121,240 | Harford WTE
- 95,134 | Howard Co. Transfer & Disposal
- 138,165 | Frederick Co. Transfer & Disposal
- 556,437 | Montgomery County Resource Recovery Facility

RECS Generated for Sale in FY2013

- 354,805 | Montgomery County RRF
- 25,773 | Anne Arundel County LFG
- 7,236 | Baltimore City Biomass
- 440 | Harford County WTE
- 5,868 | Howard County LFG
- 24,314 | Montgomery LFG
- 22,517 | Prince George’s County LFG
Composting Regulations and looking to the future
During the 2013 Maryland Legislative Session, the Maryland Department of the Environment (MDE) was granted authority to issue regulations that encourage composting. The Authority participated in a technical workgroup over the past year working with MDE to establish composting regulations that will encourage the development of additional food scrap composting facilities in Maryland. This workgroup met monthly to identify a clearly defined and environmentally safe set of regulations that will provide a complete picture of what will be required as new facilities are built. The workgroup is looking forward to seeing these regulations promulgated in FY 2014. The revised regulations come at an interesting time in Maryland’s long-range solid waste management planning history. The 2013 Legislature also considered, but did not act on, a bill that would have encouraged less reliance on landfilling and more emphasis on recycling, composting and other processing of solid waste. This legislation could have significantly impacted local governments’ management of recyclables and solid waste. Authority staff will continue to provide Member Jurisdictions with legislative and regulatory support.

SWANA, MRN and MCEC
SWANA, MRN and MCEC represent valuable education and networking opportunities for the Authority staff. SWANA is the Solid Waste Association of North America; MRN is the Maryland Recycling Network; and MCEC is the Maryland Clean Energy Center. The Authority supports and is active in these organizations by either participation on the local chapter or advisory boards. These affiliations help to keep the Authority current with solid waste, recycling and clean energy technologies and policies that occur throughout the state and the country. The valuable information garnered from this involvement is shared with Members and is helpful as the Legislature discusses and considers recycling, solid waste and renewable energy bills and issues.

Frederick/Carroll County Renewable Waste-to-Energy Facility Development Continues
The Authority continued working with Wheelabrator Technologies to obtain major environmental permits to allow the project to move forward. In December 2012, MDE issued tentative determinations on the permits. Two public hearings were held by MDE to solicit comments from interested parties on the draft permits and an extended written comment period was allowed to provide ample time to review the tentative determination from MDE. This extended period resulted in nearly 2,000 individual comments. At the close of the fiscal year, MDE was working to respond to the comments in advance of its final determination. Permits are expected to be awarded in FY 2014.

Renewable Energy
Authority staff continues to be a leader in the sale of Renewable Energy Credits (RECs) in the State of Maryland. The Authority certified and sold 431,674 MD Tier I non-solar RECs which is equivalent to 34% of the 1,267,382 eligible Tier I non-solar RECs generated in MD. (1) The Authority also sought and received certification from the State of Maryland for the Anne Arundel County Millersville Landfill Renewable Energy Facility, Harford Waste-to-Energy Facility and Howard County Alpha Ridge Landfill Gas-to-Energy Facility. These facilities will increase the amount of RECs the Authority sells annually, generating additional revenues for the projects, which in turn benefits Members and their citizens with lower solid waste costs.

The Authority continues to be an active participant in the PJM electricity markets managing energy and capacity sales, which includes energy management services for six landfill gas-to-energy units and one waste-to-energy unit. In FY 2013 the Authority entered the new Millersville Landfill Renewable Energy and Howard County Alpha Ridge Landfill Gas to Energy Facilities into PJM markets.

Moving Forward
Fiscal Year 2013 was a considerable success for the Authority in many regards and some of the achievements will be realized for years to come. This success could not be achieved without the support of our Board Members and their outstanding staff. During FY 2014, we will continue to look to the future of solid waste management and providing our Member Jurisdictions with the most economical and environmentally safe solid waste and recyclables management.

If you would like a copy of our FY 2013 Audited Financial Statements, please contact us at 410-333-2730.

1 http://www.pjm-eis.com/ (10.21.13) PJM-EIS provides reporting and tracking of emissions data related to RECs. PJM is the manager for the regional electric grid.
The Authority continues to provide energy management services to its Member Jurisdictions. The Authority recently added the Anne Arundel County Millersville landfill gas recovery facility (Millersville), the Howard County Alpha Ridge landfill gas-to-energy facility (Alpha Ridge), and the Harford Waste-to-Energy Facility to its energy management services portfolio. The services provided by the Authority include management, reporting, and marketing of energy, capacity, and renewable energy credits generated from an electricity resource.

As a PJM member, the Authority can directly market the electricity generated from facilities through the available PJM markets. PJM is the regional transmission organization that coordinates the movement of wholesale electricity in Maryland, and in all or parts of 12 surrounding states, including the District of Columbia. The Millersville and Alpha Ridge facilities have been operating and exporting energy to the PJM grid through the Authority’s PJM membership since the summer of 2012. Currently, Anne Arundel and Howard Counties are receiving the hourly spot market pricing for its facilities through the real time energy market. This pricing is based on a facility’s location and actual grid operating conditions. In Fiscal Year 2013 the Millersville and Alpha Ridge projects generated $1,013,640 and $230,481, respectively, in energy revenue through the Authority’s PJM account.

A necessary component of the energy market is PJM’s capacity market, referred to as the Reliability Pricing Model (RPM). The RPM provides economic incentives to PJM market participants to stimulate investment for existing generation and planned generation resources for securing the reliability of the grid. The Authority participates in the RPM on an annual basis on behalf of its members. PJM annually hosts a base RPM auction for generators to make capacity commitments three years ahead. The Authority has been entering Millersville’s three megawatts of installed capacity in the annual RPM base auction since 2010. Starting in June 2014, Anne Arundel County can expect to receive daily capacity credits for Millersville in addition to its energy sales. Through the Authority’s participation in the RPM auctions, the average annual capacity credit is estimated to be $137,000.

Another marketable component of electricity that the Authority captures from its Members’ facilities is the renewable energy credit (REC). A REC is a tradable certificate of proof that one megawatt hour of electricity is generated by a renewable energy source or facility. There are two markets for RECs: a voluntary market driven by consumers who want to reduce their environmental footprint; and, a compliance market driven by state regulations. Most of the RECs the Authority sells are to the compliance market. Approximately 23 states have renewable portfolio standards that require electricity suppliers to supply a certain percentage of their electricity from renewable sources. The Authority certifies and markets RECs generated from six landfill gas to energy facilities and two waste-to-energy facilities. The Authority recently certified the Millersville, Alpha Ridge, and Harford Waste-to-Energy Facilities as renewable energy resources under the Maryland and New Jersey renewable portfolio standards. The Authority entered into its first REC sales agreements on behalf of Anne Arundel and Howard Counties generating $219,986 and $40,189 to date for the respective jurisdictions. The Authority is in the process of marketing the RECs attributable to the Harford Waste-to-Energy Facility’s behind the meter (in-house) generation and expects REC sales of over $12,000.

Please call the Authority’s offices at 410-333-2730 if there are any questions regarding the energy management services provided to Authority Member Jurisdictions. The Authority has been providing these services for several years and has been very proactive in seeking out additional market opportunities and/or savings to its Member Jurisdictions.
On July 19, 2013 Energy Recovery Operations, Inc. of Joppa achieved an eighth consecutive year with no lost time injuries. Energy Recovery operates the Harford County Waste-to-Energy facility located in Joppa. The facility processes more than 120 thousand tons of county generated solid waste each year. Energy recovered from the waste is transformed into high pressure steam and delivered to the adjacent Edgewood Area of APG. Energy Recovery’s staff of 44 employees includes 35 Harford County residents. Energy Recovery attributes the success of its safety program to the “team safety concept” and is a proud member of OSHA’s Safety and Health Achievement Recognition Program (SHARP).