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The Authority recently toured the Claremont Dredged Material Recycling Facility in Jersey City, NJ. Pages **2** and **3**

### Harford's eCycle Event a Success

All sorts of old electronics were collected at the State's first eCycle event held in Harford County. The event yielded eight tons of used electronics, which is well above the average amount collected at similar events around the country. Page **4**


## Website Update:

# A New and Improved [mdrecycles.org](http://mdrecycles.org)

Authority staff members have been busy working to enhance navigation and information on the [mdrecycles.org](http://mdrecycles.org) website. The most recent addition to the site is a Recycling Contract Training Manual. The manual explains how to develop effective recycling contracts and avoid contract pitfalls, such as litigation.

The popular Recycling Directory has been updated and now includes more than 300 recycling vendors and processors in 21 different categories throughout Maryland. An exciting new feature in the Recycling Directory is the addition of map links to vendor locations. Users can simply click on a map link to determine exactly where the vendor of a particular material is

located. Once the link is clicked, a map of the area surrounding the vendor will open in a separate window. The user can also easily generate driving directions from their location to the vendor of their choice.

The Authority is very proud of the [mdrecycles.org](http://mdrecycles.org) website and is constantly updating and upgrading the information. Many users have written to express their gratitude for providing a website that offers reliable and valuable recycling information and contacts. Future upgrades to the site will provide users with even more interactive capabilities and information. Visit [mdrecycles.org](http://mdrecycles.org) for recycling information and web links or call Cliff Dowling at 410-333-3060. 

## Ronald E. Bowen Named Director of Public Works for Anne Arundel County

Ronald E. Bowen has succeeded John Brusnighan as Director of Public Works for Anne Arundel County. Mr. Bowen has worked for Anne Arundel County for nearly 19 years. As the director of public works, Mr. Bowen will oversee planning and operations for the Bureaus of Highways, Utilities, Waste Management, Administration and Engineering.


He began his career with Anne Arundel County in 1983 as deputy director for the Bureau of Utility Operations where he was responsible for overseeing and coordinating the operations and maintenance of all water and wastewater infrastructure for the county.

Ten years later, Mr. Bowen became deputy director for the Bureau of Engineering. His responsibilities included managing the development and execution of approximately

\$400 million of capital improvement projects for the county. He directed projects in the storm water management facilities, water, wastewater and solid waste facilities; recreation and parks facilities; libraries; fire and police stations; office buildings, and detention centers. Mr. Bowen also directed the recently completed renovation of the historic Anne Arundel County Courthouse, which included the construction of an enlarged facility. Mr. Bowen served in this position for eight years until his most recent appointment as director of public works.




Ronald E. Bowen

Mr. Bowen has a Bachelor of Science degree in engineering from Pennsylvania State University and is a registered professional engineer. He and his wife Linda have two children and reside in Severn. 



## The Art of Recycling

On November 23, 150 discerning dumpster diggers and evolutionary recyclers turned out for the Scrap Heap Creatures and Other Aliens workshop. The workshop is one in a series offered by the American Visionary Arts Museum in its Exquisite Trash series of workshops. Participants were given the opportunity to experiment with creating art out of recycled aluminum cans and a variety of other recyclables. The Susquehannock Environmental Center donated 250 aluminum cans while other materials were recovered from scrap heaps and dumpsters in Baltimore and Philadelphia. 

### Member Spotlight:

# The Baltimore City Compost Facility Operational Excellence

USFilter recently honored the Baltimore City Compost Facility with the 2001 USFilter Operational Excellence Award. The award recognizes achievements in operational excellence based on safety and regulatory compliance as well as financial performance.

The Baltimore City Composting Facility was built in 1987 and officially began commercial operations in March of 1988. Construction was financed with tax-exempt bonds issued by the Authority. Service agreements were established between the composting facility and the City of Baltimore for the acceptance and processing of biosolids. This was the first facility, constructed for Baltimore City, to process biosolids and produce a Class A, exceptional quality product for beneficial reuse. Today, the City of Baltimore has established a diversified biosolids management program that utilizes two Class A technologies — composting and thermal drying — and a Class B land application operation.

### Hard Times Early On

Shortly after its commissioning, the facility fell victim to a period of unreliable operation and the production of a low quality product. In 1996, the compost facility hit its lowest point as it was plagued with high operations and maintenance costs in addition to turning out a product that offered little market value and generated minimal market demand. USFilter Operating Services and the current staff became involved and took over the operation, maintenance and management of the facility and product marketing. Responding quickly, USFilter invested in and implemented a Process Improvement Plan and Marketing Plan that continue to be the cornerstone of the technical and financial success of the 2001 USFilter Operational Excellence Award-winning facility today.

### Process Improvements Lead to Turnaround

The most notable improvement was a modification made to the in-feed compost mix, resulting in significantly enhanced finished-product quality. USFilter eliminated the use of fresh wood chips and began utilizing a mix consisting of double-ground, kiln dried pallet wood, sawdust, and high carbon ash as amendments. This change maximized the processing capacity of the facility by increasing the percentage of biosolids within the in-feed compost mix from 45 percent to more than 55 percent (by weight). Process improvements and cost-effective predictive and preventative maintenance have led to the elimination of production downtime and have resulted in extremely reliable service to the City of Baltimore. USFilter also concentrated on product marketing, which combined with improved product quality has led to high market demand.

The Baltimore City Compost Facility utilizes an enclosed in-vessel biosolids composting technology that can accept and process up to 210 tons of dewatered biosolids per day. The City of Baltimore supplies the compost facility with biosolids produced at its Back River Wastewater Treatment Plant. The biosolids are transported to the facility, unloaded into large bins and are then mixed with various wood amendments. From that point, the material begins a fourteen-day process of in-vessel composting that takes place in two large concrete reactor channels. Each channel is divided into cells equipped with independent aeration systems, capable of either negatively aerating (drawing air down through the compost mixture) or positively aerating (forcing air upwards through the mix) the blend. Oxygen, moisture and temperature are carefully monitored and controlled to achieve maximum decomposition efficiency. The

## Ash Recycling Site Visit

*The Claremont Dredged Material Recycling Facility in Jersey City, NJ combines dredged material from area waterways with ash from the Essex County Waste-to-Energy Facility.*



# Recognized for

compost is turned within the reactor cell once within the fourteen-day retention period to further agitate and aerate the mix and ensure homogeneity. The use of a two-stage chemical mist scrubber reduces odor emissions and complies with air permit requirements.

Once the in-vessel process is complete, the compost is placed on an aerated curing pad where its temperature is elevated and sustained to provide complete sterilization required under Federal 40 C.F.R. Part 503.32 and 503.33 for a Class A end product. Completing the compost cycle requires a minimum of 44 days from introduction into the reactors and continuing through the extended curing period. Finally, the material is screened to separate fines, and the primary product is ready for sale.

## Finished Product Shows Up in High Places

The finished compost is registered and sold as a soil amendment under the trade name ORGRO® High Organic Compost. ORGRO is sold in bulk to topsoil manufacturers, nurserymen, contractors, landscapers, golf courses and professional turf managers and commercial growers throughout Maryland and Virginia. The compost contains valuable nutrient and soil amending properties and is beneficial in the manufacture of topsoil, production of sod and turf grass, nursery shrub and tree propagation and commercial potting soil blends. ORGRO compost is purchased regularly for use on numerous high profile properties, including the lawn of the United States Naval Observatory, official residence of the Vice President of the United States.

Marketing efforts and product quality improvements have paid off. The Compost Facility increased production and sales revenue for 1999 and 2000 by 14 percent and 11 percent,



respectively. Currently, the facility markets and distributes approximately 75,000 cubic yards of compost per year and has consistently sold out of its high quality compost product since 1997. For the first time since beginning commercial operations in 1988, and for the past two years, product sales revenues have escalated to a level at which revenue is shared with the City of Baltimore.

Under the operation, maintenance, and management of USFilter Operating Services, the Baltimore City Compost Facility continues to thrive as an award-winning biosolids composting facility and demonstration site. The facility is toured annually by the University of Maryland's nationally recognized Better Composting School, a training program for compost operators and professionals. Johns Hopkins environmental engineering students also tour the facility as part of their curriculum. In October 2001, the Solid Waste Association of North America (SWANA) offered a tour of the facility to those attending its annual national convention. USFilter is committed to continuing to deliver the quality, reliability and outstanding service that have become expected at the Baltimore City Compost Facility. ❏

*The Baltimore City Composting Facility has been operating since 1988. It has evolved into an award-winning facility that produces a top-quality organic compost product.*



**ORGRO®**  
**HIGH ORGANIC COMPOST**

*is purchased regularly for use on numerous high profile properties, including the lawn of the United States Naval Observatory, official residence of the Vice President of the United States.*

In December, a delegation of staff members from the Authority, Montgomery County and Harford County visited the Claremont Dredged Material Recycling Facility in Jersey City, New Jersey. The facility, owned and operated by Consolidated Technologies, Inc. (CTI) of Blue Bell, Pennsylvania, combines dredged material from the New York and New Jersey waterways with ash from the Essex County Waste-to-Energy Facility, as well as other materials. The resulting product is used as organic fill material for brown fields redevelopment in New Jersey and for surface mine reclamation in Pennsylvania. The fill material supports the re-vegetation of unsightly barren land. CTI also owns and operates a dredged material recycling facility in Penfield, Pennsylvania. For more information, contact Laura Thomson at 410-333-2730. ❏

## Congratulations!

### Baltimore County Wins Award

The Solid Waste Association of North America (SWANA) recently awarded the Baltimore County Bureau of Solid Waste Management its 2001 Integrated Solid Waste Systems Bronze Award.

### 2001 SWANA International Road-E-O Winners:

**Kenneth Burke, Jr.,**  
Anne Arundel County for winning 2nd place in the Roll-Off Competition

**David McNicholas,**  
Anne Arundel County for winning 2nd place in the Track/Dozer Competition

## Maryland's First eCycle Event Held In Harford County

The State of Maryland's first eCycling event, where electronic equipment is collected for recycling, was held on October 27 at the Harford County Waste Disposal Center and Composting Facility. It was sponsored by the Maryland Department of the Environment (MDE) in cooperation with the US Environmental Protection Agency. The eCycle Project is a national effort to promote industry and government partnerships that will lead to increased electronics recycling.


During the four-hour event, state and county volunteers collected eight tons of computers, monitors and television sets from 150 vehicles. That's 107 pounds per car! Similar events nationwide average about 90 pounds per car.

Residents appreciated the opportunity to recycle their old electronics. Console televisions were especially popular. "People kept those huge console TV's for just such an event," remarked Bob Ernst, Harford County's Recycling Coordinator.

Subtractions, an electronic recycling company, will process at least 90 percent of the equipment collected at the event.



Bob Ernst, Harford County Recycling Coordinator (top center) and MDE Secretary Jane Nishida (bottom right) worked with volunteers to collect used electronics.

For more information on the eCycle Project, including dates of future events and how to get involved, visit [mdrecycles.org](http://mdrecycles.org) for a link to MDE's official eCycle website. 



# WASTEWATCH

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