

In this Issue...

Baltimore Compost Remedies Lead Contaminated Soil

A recent study shows that Baltimore compost added to contaminated soils lowers the bioavailability of lead...an important breakthrough in the search for remediation. **Page 2**

BGE Showcases mdrecycles.org

Thank you BGE for including the Authority's recycling website in the company's recycling window display! The display is pictured on **Page 2**

Biosolids Conference Highlights Baltimore Compost Facility

A guided tour of the compost facility was a key feature of the February conference. **Page 3**

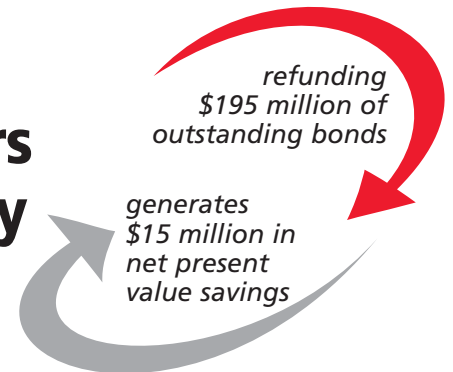
Ideas Exchanged at Solid Waste Management Conference

Authority Analyst Andrew Kays attended the 18th International Conference on Solid Waste Technology and Management where nearly 200 participants shared new ideas and analyzed current waste management programs. **Page 4**


Authority's Refunding Saves Millions of Dollars for Montgomery County

The Authority recently completed a refunding of \$195 million of outstanding bonds for the Montgomery County Resource Recovery Facility, which will provide the County with \$15 million in net present value savings. Authority staff along with the Authority's financial advisor and bond counsel worked closely with Montgomery County to complete the cost savings transaction. At the same time, the county also refinanced \$30 million of solid waste system bonds, providing an additional \$2 million in present value savings.

The bond rating on the refunding bonds was increased by both rating agencies to AA (Fitch) and Aa3 (Moody's). This raising of the



bond rating reflects the solid operation of the resource recovery project and the strength of the overall solid waste system in Montgomery County. Both the Authority and the Montgomery County bonds obtained bond insurance, which resulted in the final rating of AAA.

If you are interested in learning more about the refinancing, please contact Cathy Coble at the Authority or the Authority's financial advisor Billy Cobbs at Public Resources Advisory Group. 

Waste Energy Partners Provides Document Destruction Service

Waste Energy Partners, LP, has launched a program for destroying confidential documents and other forms of information. It's called Document Safe and is available throughout the greater Baltimore area.

Document Safe can destroy documents of many different forms, including papers and magnetic media such as computer disks and videocassettes. Rather than merely shredding sensitive material, Document Safe combusts it. The material goes through the company's waste-to-energy system, which converts trash into steam.

"Document Safe is an exciting move forward, because it assures total destruction of confidential materials and does so in an environmentally responsible manner," said Jeff Poulton, facility manager. "We're pleased to offer this key new service to the Baltimore metropolitan area."

Document Safe is expected to be of interest to a wide range of organizations, including medical facilities, financial institutions, government agencies, military installations, contractors and law firms.

"Corporations have an increasing responsibility in regard to private and personal information and new laws are focusing on disposal practices," said Robert Johnson, executive director of the National Association for Information Destruction.

Waste Energy Partners established Document Safe after performing market research that showed substantial demand for document destruction services in the Baltimore region. The company has offered the program for several years.

For more information, contact Jeff Poulton at 410-679-6200 

KUDOS: W-T-E Industry Applauded for Emission Control Upgrades

(Excerpt from a February 14, 2003 letter to Maria Zannes, president of Integrated Waste Services Association from the United States EPA)

“Upgrading the emission control systems of large combustors to exceed the requirements of the Clean Air Act Section 129 standards is an impressive accomplishment. **The completion of retrofits of the large combustion units enables us to continue to rely on municipal solid waste as a clean, reliable, renewable source of energy.** With the capacity to handle approximately 15 percent of the waste generated in the US, these plants produce 2800 megawatts of electricity with less environmental impact than almost any other source of electricity. With fewer and fewer new landfills being opened and capacity controls being imposed on many existing landfills, our communities greatly benefit from the dependable, sustainable capacity of municipal waste-to-energy plants.”

Correction

The cover story in the Winter 2002 issue of *WasteWatch* should have read twenty, 200-foot long windrows instead of 20,000 feet long. Additionally, Joe Rutherford was the superintendent of the landfill from 1989 to 2001. *WasteWatch* regrets these errors.



Baltimore Gas and Electric Company has set up a window display about recycling at its corporate headquarters building in downtown Baltimore. It features the mdrecycles.org website and a number of recyclable materials including electronics.

Baltimore's Compost Lowers Bioavailability of Lead in Soil

From the Science Daily Website

Researchers from the University of Washington and the US Department of Agriculture's Agricultural Research Service recently published an article about the experimental use of biosolids compost for the remediation of lead contaminated soil. The findings of the study are published in a recent edition of the *Journal of Environmental Quality* (citation below). Investigators sampled soil contaminated with lead from around homes in Baltimore City and mixed the samples with compost from different sources, representing different processing methods. One of the contributing compost generators was the Baltimore Compost Facility, a partnership project between the Authority, Baltimore City and US Filter.

Samples of garden soil that contained high levels of lead (2000 mg kg⁻¹), were mixed with samples of compost (100 g kg⁻¹). The mixture was incubated for 30 days. Samples from the amended soil were then fed to young mice to mimic the exposure human children would

have while playing in a yard. The results demonstrated that the compost-amended soils had a reduced amount of lead that is bio-available; that is lead that is free to be taken up if it is consumed. Comparisons within the study show that compost from the Baltimore Facility was the most effective at reducing the bioavailability of lead in the soils.

The existence of lead in soil around homes in Baltimore is a legacy of using lead-based paints decades ago. For public health agencies looking to clean contaminated soil sites within an urban setting, the results of the study are promising. Employing compost for contaminated soil remediation is a cost effective and practical alternative to costly soil removal and treatment.

JOURNAL CITATION:

Brown, S., Chaney, R., Hallfrisch, J.G. and Xue, Q. (2003). Effects of Biosolids Processing on Lead Bioavailability in an Urban Soil. *Journal of Environmental Quality*. 32:100-108.

Baltimore Compost Facility Featured at 2003 WEF/AWWA/CWEA Conference

The large winter storm that brought the region to a virtual standstill could not stop the 2003 *Joint Residuals and Biosolids Management Conference* from taking place at the Baltimore Marriott Waterfront, February 19 – 22. A tour of the Baltimore Compost Facility was one of the key conference events. On the gray morning of February 20, a busload of conference attendees arrived at the facility for a tour and to learn more about this successful operation.

John Myers (facility manager), David Hill (project manager) and Preston Cloke, (technical manager), greeted the group of approximately 40 visitors. They were given a brief introduction to the facility before splitting into smaller groups for the tour and presentation. Preston Cloke and John Myers led tour participants through the processing facility while describing the operation. They walked through the production process starting with the reception of processed biosolids. From there they proceeded to the area where amendments are added to the biosolids. The mix is then placed into individual batch cells. Finally, they

observed the Extractovator, an enormous machine that turns the in-process compost. The tour continued outside to a covered pad where compost is placed in piles to meet Federal requirements for pathogen reduction (55°C in the piles for three days). The piles are further cured and then passed through screens to produce a high quality, consistent product.

David Hill presented a history of the project. Initial trials of the facility, improvements in technology and awards the facility has won were discussed. Within his presentation, Mr. Hill discussed the current status of the facility's production capabilities and the types of customers the facility serves such as the Caves Valley Golf Club (host of the 2002 PGA Senior Open), the Washington Redskins, Congressional Golf Course and the residence of the Vice President of the United States (the old Naval Observatory) in Washington D.C. The visitors, representing composting professionals from around the country, were impressed with the Baltimore Compost Facility's marketing success. ❧

Conference participants were guided on a tour of the Baltimore Compost Facility, which was one of the featured events of the four-day conference.



The tour included all aspects of compost processing and curing. Preston Cloke, technical manager and John Myers, facility manager lead the tour through the entire facility.

Other Conference Highlights...

The conference opening was preceded by the Mid-Atlantic Biosolids Association (MABA) meeting, in which participants discussed the results of a recent member survey. The meeting provided a discussion platform for MABA members to position the association to meet member needs and shape actions for the coming year. The WEF Residuals and Biosolids Committee also met during the conference. The meeting included discussions of current research projects, public education and government affairs as they relate to residuals and biosolids.

The more than 650 attendees could select from a diverse array of lectures. Presentations

by industry leaders in government, the private sector and academia included topics such as new odor control techniques, research in all aspects of biosolids, public relations and marketing. The final day of the conference featured regulators and researchers addressing the recent NAS Biosolids report (summer 2002), research currently underway to demonstrate the safety of properly managed biosolids and the future of the residuals and biosolids industry.

Copies of conference papers can be purchased from www.wef.org.

speaking
OUT

Local Recycler Commends Baltimore E-cycling

(Excerpt taken from WasteNews, March 17, 2003)

"Our company has been in existence for three years. We do an incredible volume of electronics recycling via demanufacturing, resale and donating to our nonprofit partner, the Lazarus Foundation. Most of the work is generated at the county level, and some from the state level, in Maryland, the District of Columbia and Virginia.

What bothers me is that I read week after week that the Federal government should be involved, that studies are being conducted, that this should all be handled soon, and that it is so important to deal with it on the national level ["Lawmakers to tackle e-waste issue," Jan. 6, Page 15]. **Meanwhile the entire area around Washington and Baltimore, as well as most of Northern Virginia and Newport News, have been quietly conducting collections and have already saved area landfills hundreds of thousands of tons of e-waste.**

If this e-waste issue were left up to a national solution, it scares me to think of what would not have been accomplished by now.

So please, by all means, nationalize this so we can slow it down and take the momentum away from the entire area, as consumers are too stupid to understand differing state guidelines and get confused by not knowing e-waste policy." ❧

— Sarah Manning, Subtractions LLC

**The opinions expressed in "Speaking Out" are not the opinions of the Authority staff or members. From time to time, WasteWatch simply passes along interesting perspectives expressed by a variety of individuals working in the world of waste management.*

solid waste management

International Waste Conference Presents New Developments from Around the World

e-waste....




Authority Analyst Andrew Kays was one of the 170 conference participants from 30 countries who came to learn about advances in solids waste management at the 18th International Conference on Solid Waste Technology and Management sponsored by Widener University in Philadelphia, March 23-26. Advances in the treatment and utilization of biosolids, mathematical modeling and the growth of electronics recycling were just a few of the featured topics.

Many of the papers presented at the conference were the result of joint academic/private sector research projects conducted for municipal organizations. The proliferation of collaborative projects like these demonstrates the growing trend of public/private cooperation for the effective management of solid waste. A series of case study papers focused on the creation of recycling clubs for small to medium size businesses in Southeast England. Recycling clubs are groups of businesses in

a small area that can use each other's "waste" in their own processing. Club members share information and recycling resources with each other. The authors found that information resources and a support network must be firmly in place for the waste reduction and recycling programs to work effectively.

The hands-on consulting services highlighted in many of the papers are similar to those services offered by the Authority through its award-winning website, www.mdrecycles.org.

Another popular seminar series covered the topic of e-waste (computers and other electronic products) and the growth of this particular category of waste. Research regarding the recycling of e-waste and the change in consumer attitudes about e-waste was presented.

The conference allowed for an open exchange of ideas regarding solid waste management. It highlighted programs that work as well as those that have failed. Analyzing unsuccessful programs along with successful ones makes it more possible to design superior waste management services. 

recycling clubs



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