Mid-Atlantic Chapter
Solid Waste Association of North America

SOLID WASTE NEWS
For Waste Professionals

March 10, 2010

2009 Environmental Achievement Award Winner Announced

The Mid-Atlantic Region of the United States Environmental Protection Agency (EPA) has recognized the Solid Waste Management Division of the Cecil County Department of Public Works for its efforts in helping to safeguard the environment by presenting the Division with an Environmental Achievement Award for 2009. The award was presented to officials of the Department of Public Works by Mr. William C. Early, the Acting Regional Administrator, in a ceremony held at the National Constitution Center in Philadelphia, Pennsylvania on September 16, 2009.

According to the EPA, the award recognizes outstanding individuals and organizations that have made significant contributions toward enhancing and protecting the quality of the environment in the EPA's Mid-Atlantic Region, which is comprised of the states of Delaware, Maryland, Pennsylvania, Virginia, West Virginia and the District of Columbia.

From over 60 nominations, EPA presented awards to ten individuals and organizations in three categories. Solid Waste Management Division was one of four winners (and the only local government winner) in the "Federal, State, and Local Governments" category. According to EPA's award citation, Cecil County's Solid Waste Management Division was selected in recognition of its highly successful recycling and environmental programs including a program to collect unwanted, unneeded, or expired medications at Household Hazardous Waste Day events, and a companion program to offer proper sharps (i.e. needle) disposal at the County landfill. Both programs were among the first to be offered in the Mid-Atlantic Region.

Director Scott Flanigan, Chief Pete Bieniek, and Recycling Coordinator, Tanya Adams accept the 2009 Environmental Achievement Award from the EPA on behalf of the Cecil County Government, Department of Public Works, Solid Waste Management Division.

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SWANA Mission Statement:

"Advancing the practice of economically and environmentally sound solid waste management in North America."

WINNER ANNOUNCED from page 1

"The Board is proud of the work being performed by the Solid Waste Division," said President Brian Lockhart. "They consistently strive to initiate innovative recycling programs that are supported by our residents." Tanya Adams, Solid Waste Management Division Recycling Coordinator, Pete Bieniek, Solid Waste Management Division Chief, and Scott Flanigan, County Director of Public Works, accepted the award on behalf of the County.

"This is the third major award which Solid Waste Management Division has received within the past year, the other two being the 2008 Silver Recycling Systems Award from the Solid Waste Association of North America and the Small Government Leadership Award from the Maryland Recycling Network," said Scott Flanigan, County Director of Public Works. "They are testaments to the great work that the staff of Solid Waste Management Division is doing as well as the tremendous support that the County's residents provide to those programs," Flanigan concluded.

Chapter Scholarships

By: Mehal Trivedi, Project Manager
Frederick County

In an effort to promote education and professional development, the Chapter Scholarship Committee has established the Mid-Atlantic Scholarship Awards Program. Completed applications must be received by the Chapter no later than May 1, 2010. Chapter applications are available on the Mid-Atlantic website or electronically from Mehal Trivedi upon request.

The names and completed applications must be received by the Scholarship Committee Staff no later than May 1, 2010 in order to be considered for an award. Eligible candidates must be sons, daughters, grandsons or granddaughters of a SWANA Member (sponsor) in good standing as of May 1, 2010. SWANA Student Members in good standing are also eligible (for more details, please visit the Chapter website at www.swana-midatl.org).

The schedule for selection is as follows:

May 1 - Deadline for submission of application materials to Chapter Scholarship Committee
June 1 - Deadline for review by International Scholarship Committee
June 15 - Announcement of Chapter Scholarship winners
July 15 - International Scholarship Committee meets to select winners
August 1 - Announcement of International Scholarship winners

The Chapter may award up to a total of $6,000 in scholarships in fiscal year 2010.

The Kevin Stearman Memorial Scholarship Award, sponsored by Office Paper Systems: One (1) most-qualified (highest total score) applicant may receive this award. This recipient will **not** receive any of the previously discussed Chapter scholarships. This award will be presented to the recipient by Office Paper Systems staff. Office Paper Systems may award one scholarship totaling $2,000 in fiscal year 2010.

The Chapter Scholarship Committee is also responsible for reviewing and selecting local winners and forwarding one representative for each scholarship category (except category 1A) to the International Scholarship Committee for review.

Application Deadline is May 1, 2010!

Summary of GHG Reporting Rule

By: Joshua Roth, P.E.
SCS Engineers

On October 30, 2009, the U.S. Environmental Protection Agency (EPA) published its mandatory greenhouse gas (GHG) reporting rule in the *Federal Register* [Volume 74, No. 209, pages 56260 – 56519]. The rule became effective on December 29, 2009.

The rule applies to MSW landfills (not industrial or C&D landfills) that accepted waste after January 1, 1980 if they generate at least 25,000 metric tons of carbon dioxide equivalents $MTCO_2e$ per year (whether or not the landfill gas (LFG) is collected). Landfills on contiguous properties under common control must be included in the estimates (even if they have been closed for years).

Applicability Determination

MSW landfills must use a mathematical algorithm to estimate gas generation. The rule prescribes a specific model algorithm and coefficient values which are different than the AP-42 and New Source Performance Standards (NSPS) values. As such, facilities cannot rely on existing site gas models to determine applicability.

MSW landfills with active gas collection systems must also use a second mathematical algorithm to estimate gas generation, and use whichever estimate is higher to determine if the rule applies.

Based on EPA's screening tool:

- Closed landfills with less than 350,000 Mg of waste in place will not be subject to the rule.

- All other MSW landfills that received waste after 1/1/80 should conduct mathematical modeling to evaluate applicability. Landfills that generate approximately 270 scfm of LFG (at 50 percent methane) in 2010 per the rule's gas generation model will be subject to the rule.

Monitoring Requirements

The rule stipulates various monitoring requirements landfills must follow. These include:

- Waste Disposal Amounts (Scalehouse)
- Continuous Gas Flow Monitoring
- Gas Flow Correction for Temperature, Pressure, and Moisture

Methane Monitoring: Continuous or at least Weekly
The rule also provides instructions for dealing with missing data points, and includes calibration requirements for the various pieces of monitoring equipment.

Key Dates

The rule requires development and implementation of a written GHG Monitoring Plan, and the associated monitoring, no later than April 1, 2010 (best available monitoring data can be used for the period January 1 through March 31, 2010). Reporting for the calendar year 2010 is due by March 31, 2011.

Other key dates include:

- December 29, 2009: Effective date of the rule.

- January 28, 2010: Deadline to request extension of grace period to use best available monitoring methods (BAMM) through calendar year 2010.

- April 1, 2010: GHG Monitoring Plan must be developed and implemented, BAMM grace period is over, and monitoring per the rule must begin (unless an extension has been approved by EPA).

Midshore II Regional Solid Waste Facility Project Status Update

By: William E. Chicca, Chief, SW Engineering
Maryland Environmental Service

The Maryland Environmental Service (MES) is continuing with construction of Midshore II Regional Solid Waste Facility near Ridgely, in Caroline County, Maryland. This new landfill is the second in a planned series of four Regional Solid Waste Management Facilities intended to serve the solid waste management needs of Caroline, Talbot, Kent and Queen Anne's Counties. The first regional landfill, the Midshore I facility opened in Talbot County in 1991 and is scheduled to cease accepting MSW on December 31, 2010. Midshore II is scheduled to commence full operations on or before January 3, 2011.

The initial phase of landfill construction includes development of the first cell, a 13.7-acre double 60-mil textured HDPE lined waste disposal cell and the necessary site infrastructure. The site infrastructure include a combination administrative / maintenance building, a scale house with in-bound and out-bound scales, two stormwater management ponds, two bottomless culvert stream crossings, a 500,000-gallon glass lined, bolted steel leachate storage tank and truck loading facility and on-site roadwork. Off-site improvements include upgrades to a one-half mile section of River Road and a roundabout to be constructed at the intersection of River Road and MD Route 480. Geosyntec Consultants developed the engineering design for the landfill system.

David A. Bramble, Inc. was awarded the construction contract, and the NTP was issued June 4, 2009. The project is currently on schedule to be substantially complete in July 2010, and MES plans to make the facility available to SWANA members for a technical tour on July 15th.

With respect to the status of the construction, the cell area grading is complete and select clay has been installed over a third of the area. Clay placement is currently on hold pending improved weather conditions. The entrance road grading and grading in the vicinity of the maintenance / administration building is complete. The building slab is completed and the building erection and interior work is ongoing. The two bottomless culverts have been constructed and the leachate storage tank is installed. Off-site road improvements will commence in 2010. MES is scheduling for placement of the initial select waste fluff layer placement in September 2010. Full-scale facility operations are scheduled to begin no later than January 3, 2011.

For further information concerning the new regional landfill, contact Bill Chicca at MES at 410-729-8303 or via email at bchic@menv.com.

Chapter Training Grant Program

By: Mark Gutberlet
EA Engineering, Science, and Technology

Due to the Chapter's desire to promote education and the difficult economic times, the Chapter Board of Directors voted to provide up to five training grants for employees of Chapter member jurisdictions to attend a recent training course for free. The course was Managing MSW Collection Systems held December 1-4, 2009 in Montgomery County, Maryland. A maximum of one grant per public jurisdiction was offered to those requesting assistance based on financial need. One employee from the District of Columbia and one from Howard County received grants and attended the training. The Chapter Officers and Directors had several discussions about the use of Chapter funds to support such a program and there was much spirited debate! The grant program was instituted on a trial basis and the Board will evaluate offering grants for future Chapter training courses.

Chapter Scholarship Recipient
Julie Hudnet's Solid Waste Essay

As a college student, my trashcan and recycling bin are piled high with empty Lays Potato Chip bags and water bottles. Although most people probably have a more diverse collection of garbage than I do, there is no denying that everyone else creates solid waste, too. Since everyone participates in the generation of solid waste, it is worthwhile to explore the effects of the economy on the solid waste industry itself. It would not be unreasonable to guess that the solid waste industry would be protected from economic recession because everyone generates solid waste, but there is much more to the industry than meets the eye.

As David Steiner told Jim Cramer on Cramer's financial entertainment show, "Mad Money", Waste Management is a mostly recession-resistant company, and that is because the solid waste industry itself is fairly recession-resistant. As he explained, the solid waste collection industry is broken up into three categories: residential, industrial, and construction. The residential sector is considered to be recession proof, because it consists of the trash generated by homes, and citizens are still generating a comparable amount of waste in their houses now as they had been last year. It is even possible that home owners are generating more solid waste than they had been previously because people generally spend less money now on luxuries such as dining out now and therefore eat at home more often. The industrial sector, on the other hand, has seen significant changes since the recession. Since businesses have not been selling nearly as many products as before, plants are producing much less than they were a year ago and consequently are not creating as much solid waste. Businesses are also closing at an alarming rate. The third sector, construction, has been the hardest hit by the recession. This is because construction is divided into residential construction and commercial construction. Residential construction has come to a stand still because home building has been one of the most badly affected markets in the economy. Additionally, commercial construction has also been devastated because the financial sector of the economy has stopped lending money. Therefore, much commercial construction has halted because banks are not willing to distribute loans.

"Between the increase in recycling volumes and the decrease in generation of solid waste due to economic conditions, this has caused a "perfect storm" of sorts at solid waste disposal sites."

The disposal market for solid waste has been hit even harder then the collection business. Since the down turn in the economy has caused solid waste volumes to shrink drastically, this has put great pressure on landfills and incinerators to find additional volumes. So, as demand for disposal capacity has decreased there is downward price pressure on the supply side. In the past few years, we have seen very large increases in the amount of recycling. This increase in recycling has added to the volume decrease of solid waste entering the traditional disposal sites. Between the increase in recycling volumes and the decrease in generation of solid waste due to economic conditions, this has caused a "perfect storm" of sorts at solid waste disposal sites.

How then, can the solid waste industry be recession-resistant? The answer is cost reduction, which will be the immediate future of the solid waste industry. Companies have already begun reducing costs by reevaluating and consolidating. These reductions to expenses will offset the harm they are receiving from the economy. Even though profits are declining, the industry is still financially sound. With proper cost management the recession will be endured; the future of the solid waste industry will not include failure but will include change. A change in: technology, capacity, consolidation and regulation.

Chapter Scholarship Recipient
Remy Clemm's Solid Waste Essay

Solid waste is any unwanted or unneeded discarded solid material produced by human activity. Solid waste can further be divided into two categories: municipal solid waste (MSW) and industrial solid waste. MSW is the materials people discard from the activities that make up their daily lives. Industrial solid waste, on the other hand, is waste produced as a by-product of the industrial process.

"How my generation opts to approach solid waste management is key to the future of the industry."

The largest problem facing those working to manage solid waste is how to get rid of it in a sustainable manner. To be honest, there is no right answer; every solution has its environmental and economic flaws. Burning solid waste in incinerators compresses waste into ash, making it easier to dispose of. If the facility is a waste-to-energy incinerator, the process of burning trash also creates a new source of energy. However, this benefit is offset as the burning of trash in incinerators releases harmful pollutants into the air even after the emissions are scrubbed and treated, and the facilities are expensive to construct.

Another common disposal option is burying MSW in landfills. Landfills can be divided into two categories: open dumps and sanitary landfills. Open dumps are essentially large holes in the ground where solid waste is dumped, and are often found in developing nations. Although relatively inexpensive to construct and operate, open dumps have high environmental risks which far outweigh its frugal price, Sanitary landfills are more commonly used as disposal facilities in the United States. These heavily regulated facilities are lined areas of ground which are filled with thin, compacted layers of solid waste covered frequently with a clay or foam covering to contain solid waste and reduce chance of harmful leachate being released into the surrounding environment. Sanitary landfills, to me, are the most environmentally friendly of all the ways to dispose of waste. If managed and built correctly, sanitary landfills contain and compact trash, keeping it from polluting the surrounding environment, and allow the land to be reused as recreational facilities once the landfill is closed.

How my generation opts to approach solid waste management is key to the future of the industry. We need to strive to reduce the mount of waste we produce. In order to do so, my generation must actively embrace the six Rs of waste reduction - reuse, repair, reduce, refuse, repurpose, recycle and apply them to our lives. We need to *reuse* items, find items that can be used more than once rather than one-use items that you throw away when you are done with them. We need to *repair* items so that we don't simply throw out an item that can easily be fixed and just buy a new one, creating unnecessary waste. We need to *reduce* our consumption of items, minimizing the waste we produce. We need to *refuse* to buy unnecessary items, just buy the necessities. We need to *repurpose* items, after using an item for its original intent, find a way to make the used item fit your lifestyle, even if it is in a way that the manufacturer didn't intend for. Lastly, we need to *recycle* items, Recycle plastic, paper, metal and glass so that they can be broken down and used as raw materials for new items rather than just making these materials trash. The simple application of these principles can substantially reduce to amount of solid waste society generates and make it much easier to handle. The future of solid waste management and the environment depends on my generation. How will we handle the responsibility?

Chapter Scholarship Recipient
Amy Goudreau's Solid Waste Essay

Solid waste management is, in a few words, just what it sounds like: the management of solid waste products disposed of by humans so that we are not harmed by an excess of trash and chemicals in our everyday lives, However, there is much beneath the surface of such a simple definition. After collection, solid wastes can be recycled or reused, burned, or disposed of in a landfill. Burning them for energy for a power plant is a good alternative source of energy, and the ash left behind must then be disposed of in a landfill or monofill. Wastes that can't be burned must be put in a landfill, where they will either decompose, or in some cases like Styrofoam, remain as is. Liquids drain to the bottom of the landfill, gathering chemicals along the way. This is leachate, which is then treated at a plant. The clean water is returned to the environment, and the solids left behind may sometimes be used for things like fertilizer (in the case of sewage sludge, for example), or they may be dried and burned, or disposed of in a landfill.

Every human being participates in solid waste management, whether he or she knows it or not, because every person generates waste. Ideally, everyone would dispose of it properly, with the help of the local government's guidelines and privately contracted companies. Their waste should be picked up and taken to recycling facilities, waste energy facilities, landfills, or perhaps composted. These companies and committees dealing with proper and efficient solid waste management are important to keeping the planet clean and healthy.

"Every human being participates in solid waste management, whether he or she knows it or not, because every person generates waste."

Issues facing the profession of solid waste management now are largely economical. In today's economic recession, much government funding has been cut or eliminated, monies received from the purchase of recyclable materials are down because the average consumer is buying less, and energy costs are increasing. Another issue is improving the efficiency of landfills; still another is finding land on which to put new landfills—which proves difficult due to community opposition. Certainly, a partial solution to this is to reduce the volume of waste in landfills, by continuing to burn it for energy and also perhaps through new technologies, like bioreactor landfills.

This is where I see solid waste management going in the future: modern technologies and new ideas will help reduce the volume of waste and speed its decomposition. Bioreactors, though still in development, may be utilized to speed decomposition so the wastes settle and the leachate is diluted, opening up new space in landfills. I think waste will prove to be an important source of renewable energy, through burning, and also perhaps by incorporating solar panels into landfill covers, as is being experimented with now. Perhaps the world will someday be able to recycle almost everything, creating less of a need for landfills. For now, however, solid waste management is important to reduce the volume of waste in landfills, and to help solve the energy crisis through renewable energy.

Request for Proposals—GSI Fellowships

The Geosynthetic Institute (GSI) is delighted to announce our third annual worldwide call for requests-for-proposals (RFPs) focusing on "innovative" geosynthetics research and development projects. This will be the Third Class of awardees, the first two being in 2008 and 2009. There will be multiple awards made, each for $10,000 per year, and they are renewable, pending an annual written report, to a total amount of $20,000 per student. It is important to note that students must have completed their candidacy examinations leading to a doctorial degree in engineering or science. The proposals must be submitted in the following four page format (with no exceptions).

Page 1 – Letter of recommendation from student's department head or advisor
Page 2 – Title and detailed abstract
Page 3 – Student's resume
Page 4 – Documentation of completed candidacy examination

The RFPs for the 2010-2011 academic years must be submitted to both of the undersigned by e-mail by June 15, 2010 and awards will be announced on, or before, August 1, 2010. Review of the proposals is by the nine person Board of Directors of GSI. For further information on the Institute and this particular program, visit us at the following website: www.geosynthetic-institute.org and click on "GSI Fellowships and Projects."

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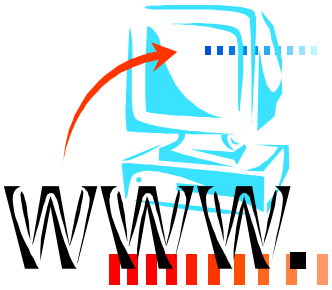
Reminders / Wanted

- **"Reporters"/writers for our Chapter newsletter.**
- **Important Websites to Remember**: ***www.swana.org***, ***www.swana-midatl.org*** **&** ***www.mdrecycles.org.***
- **Training the Trainers:** Contact a Board member if interested in being trained to be a trainer for a SWANA course.
- **SWANA E-sessions:** If your organization presents e-sessions, make them a Chapter event so that all attendees can get CEU's. Contact Steve Lippy or Dana Murray or Shirl Wright.
- **Job Vacancies in your Organization:** Contact ***swright@nmwda.org*** for inclusion in our Chapter newsletter.
- **Articles, information, recent/on-going projects of interest, active purchase orders, etc.:** Contact ***swright@nmwda.org*** to be placed in our Chapter newsletter.
- **Scholarship Sponsors:** Contact Steve Lippy, Mehal Trivedi or Hallie Clemm.
- **Name(s) of Prospective SWANA Members**: Contact either our Chapter Membership Chair, Jessica Martin ***(jmartin@tenax.com)*** or Dave Hernandez at SWANA ***(dhernandez@swana.org),*** or direct the prospective member to our Chapter website (***www.swana-midatl.org)*** or SWANA's website ***(www.swana.org)***
- **Newsletter Ads:** These are business card size ads only (2" x 3.5"); $100 for 4 issues. Send your business card or a JPG file and a check made payable to: Mid-Atlantic Chapter of SWANA and mail to Shirl Wright at NMWDA, 100 S. Charles Street, Tower II - Suite 402, Baltimore, MD 21201-2705.
- **American Academy of Environmental Engineers:** If you are an environmental engineer, you are eligible to become a member or to be certified in solid waste management by the American Academy of Environmental Engineers. See http://www.swana-midatl.org/ or http://www.aaee.net/.

Send Us Your "Links"

The SWANA Mid-Atlantic Chapter's website has a designated page for "Links," and we would like to request from all of our Chapter Members that you provide us with your organization's web link. Please feel free to check out our current links at: http://www.swana-midatl.org/links.htm. If you are interested in providing your organization's link on the Chapter website, please send to: swright@nmwda.org. Please note that only one individual from each organization need respond.



Chapter Membership Directory

Please let Jessica Martin (jmartin@tenax.com) know of any changes, additions, or deletions to either yours or someone else's contact information.

Mid-Atlantic Chapter
Solid Waste Association of North America

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We're on the Web!
www.swana-midatl.org

March 10, 2010

SWANA Guiding Principle:

"Local government is responsible for municipal solid waste management, but not necessarily the ownership and/or operation of municipal solid waste management systems."