



The

► 2018 FALL EDITION

Keystone

Written For the Solid Waste Professionals of the Keystone Chapter SWANA

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A Message from SWANA President, Sean Sweeney.

I would like to start out by first saying I am honored to be able to serve this Chapter as the next Chapter President for the next 2 years, and I hope to be able to continue the great trajectory that was established by all of the hard working members over the past 30 years. I would also like to extend a sincere thank you to all of the outgoing members of the Board for your dedication and service over the past two-plus years.

As the Pennsylvania Keystone Chapter of SWANA marks its 30th birthday this year, I wanted to let you know about a three-part article series that is being run in our Newsletter "The Keystone". Beginning with this issue, we will be taking a look at the history of the solid waste industry as a whole, the early years of the Chapter, and at the Keystone Chapter of today. With all of the various backgrounds within the Chapter, including Solid Waste Professionals, Municipal Government Officials, and Product Sales Representatives, the history and growth of the Chapter is certainly diverse; and nothing showcases the diversity of the Keystone Chapter better than the day and a half of topical speakers, education, good food, networking and "catching up", which occurred at this year's Annual

PWIA/SWANA Fall Conference. A big thanks goes out to all of you who attended and sponsored the event, and especially all those integral in organizing and running the event making it such a success.

Now, with this year's conference behind us and the weather turning cooler, I wanted to encourage everyone to continue attending the wonderful educational Mini-Tech seminars and trainings that the Keystone Chapter has to offer. With all of the diversity of our members, I look forward to the various activities we can add to the schedule for the coming months. If you have a suggestion for a topic that you want to learn more about, an idea for a Mini-Tech seminar, or other member services that the Keystone Chapter should consider, be sure to let us know. With a group of members that stay active and involved within the Chapter, we can continue to advance the field of solid waste, and begin writing the next thirty years of Chapter History. 🗓️

Written By: Sean C. Sweeney, P.E.,
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30 Years of the SWANA Keystone Chapter - Part 1

Waste Management in the 1970s and 1980s

Garbage, or as the professionals prefer to describe our business “waste management”, had been a well debated topic across Pennsylvania and the US during the 1980s. A group of Pennsylvania waste management professionals came together to form the Keystone Chapter in late 1988 of a national trade association now known as the Solid Waste Association of North America (SWANA). The individuals were prominent in the state waste business at the time and many held positions of leadership in the Chapter during its early years. But discussion of those persons will wait until a later date. First, a short review of waste management preceding the formation of the Keystone Chapter is informative.

The 1970s were times of environmental recognition in the US that included the 1976 passage of the Resource Conservation and Recovery Act (RCRA). We know it today as Subtitle C for the management of hazardous waste and Subtitle D for management and disposal of municipal solid waste (MSW). With the passage of RCRA, the initial regulatory and societal effort was on the management of hazardous waste and the USEPA focused its initial efforts and available funding on hazardous waste issues. RCRA was amended and USEPA had other related legislation during the 1970s and 1980s with TSCA, CERCLA and SARA that impacted waste generators and managers. The goals of RCRA were defined as protection of the environment, conservation of resources, and reduction of the

amount of wastes being generated. Subtitle C required development of a comprehensive hazardous waste management scheme to ensure those wastes were safely managed from the moment they were generated until final disposal (affectionately known as “cradle-to-grave”). Subtitle D was designed to deal with disposal of non-hazardous wastes and ensure non-hazardous waste disposal sites were constructed in a manner to greatly reduce environmental impacts. The EPA “Waste Hierarchy” came from RCRA.

- ◆ Source Reduction
- ◆ Recycling
- ◆ Energy Recovery
- ◆ Proper Disposal

In 1984, Congress amended RCRA by passing the Hazardous and Solid Waste Amendments of 1984 (HSWA). HSWA not only put into effect tough, new requirements for hazardous waste management and disposal, but also mandated that EPA develop criteria for new solid waste landfills to drastically reduce the likelihood that new Superfund sites can be created due to poorly constructed and operated landfills. Thus, in 1991 EPA promulgated a regulatory framework for the construction and operation of landfills receiving municipal solid waste. The criteria required all existing municipal waste landfills in the nation to either: (1) install a comprehensive groundwater and gas monitoring program, establish financial assurance to ensure funds were available for proper closure and monitoring after closure, and meet certain operational requirements; or (2) closure of the landfill. New landfills were required to be constructed with an engineered liner system capable of preventing landfill liquids from migrating into groundwater, in addition to implementing the groundwater and gas monitoring, financial assurance, and more stringent operational requirements. From a regulatory standpoint, the “open dump” was finally history giving way to the “sanitary landfill”.

In Celebration of the Keystone Chapters 30 year anniversary, *The Keystone* will be running a three-part series recapping the history of the Industry and the Chapter

Be sure to look for Parts 2 and 3 in our upcoming Newsletters!

Pennsylvania's legislation following RCRA

Remember Act 241 (P.L. 788, No. 241) of 1968? If not, that's okay, as even those of us in the business do not recall much other than this legislation began the process of solid waste planning. The Act also closed open dumps and created legislative authority for regulatory control (permitting) of SWM facilities. Authority was established to grant permits based upon past history of performance ("bad actors") which carried over into the current PADEP Form HW-C. PADER (predecessor to PADEP) created Chapter 75, adopted August 1, 1971, which established the first rules and regulations for PA landfills. Looking at an old landfill permit from this time period (less than 40 pages), the application process was very simple compared to today's rigor.

Act 97 (P.L. 38, No. 97) of 1980 repealed the Pennsylvania Solid Waste Management Act (1968) and provided for regulation of the management of municipal, residual and hazardous waste within the Commonwealth. The Act established a permitting process for the transportation, processing and disposal of wastes. This legislation mirrored the RCRA requirements and required every landfill to have a permit. Further, the Act established the basis for financial assurance by landfill owners. Prior to the USPEA Part 258 regulations for landfills coming out in 1991, PA's landfill regulations became effective in 1988 and required double lined landfills.

1988 also had another momentous piece of legislation, Act 101-Solid Waste Recycling & Planning Act. This act is remembered primarily for its recycling mandate to communities of over 5,000 population. Act 101 is filled with other important solid waste management (SWM) requirements that included a directive for counties to have primary responsibility for SWM planning and disposal. Counties received control over the flow of solid waste if PADER approved the SWM Plan.

Act 101's recycling focus was to make recycling easy for the generator by having curbside collection for mandated communities if they had a threshold population. Mandated municipalities are to collect at least 3 of the following materials: clear glass; colored glass; plastics; aluminum;

steel and bimetallic cans; high grade office paper; corrugated paper and newsprint. Mandated municipalities are required to separate leaf waste from other municipal wastes. The Act makes it illegal to discard automotive and other lead acid batteries. The Act encourages HHW collection programs to ensure recycling or safe disposal of these wastes, and requires program sponsors to register with PADER.

Because of the difficulty in getting communities to host a municipal solid waste (MSW) disposal facility, Act 101 addressed some of the public relation issues facing SWM. The Act mandated a minimum of \$1.00 per ton paid to host communities of solid waste disposal facilities. The Act also imposes a \$2 per-ton fee on municipal waste entering landfills and resource recovery facilities that can be used by PADER, now PADEP to offer grants to encourage recycling and SWM planning.

Among Act 101's provisions, it gives host communities an opportunity to employ a certified host municipality inspector for landfills and resource recovery facilities. The host community is also allowed to employ a professional engineer to review a waste management facility's permit application. As additional recognition of the rights of the host community, landfill operators must conduct quarterly testing of water supplies upon written request of a contiguous landowner, and restore or replace water supplies contaminated as a result of landfill operations.

1988 was a busy year in Pennsylvania as PADER released the new Municipal Waste Management Regulations in April. The regulations represent a comprehensive revision to the previous municipal waste regulations as Pennsylvania now required double lined landfills.

Publicity surrounding MSW during the 1980s

The story of Pennsylvania municipal solid waste management (SWM), cannot be separated from our neighboring states, particularly New York and New Jersey. The dumping of waste does not just take place on land as some ocean disposal continued until 1992. While Pennsylvania was importing MSW to be landfilled, Philadelphia has certainly sent some MSW to New Jersey over the years for

Philadelphia Solves Its Problem For Six Years! . . . Maybe . . .

It's a godsend.

That's what Mayor Wilson Goode of Philadelphia said after agreeing to a contract that could have a Waste Management, Inc., subsidiary dispose of all the city's refuse for six years.

Cost in the first fiscal year: as much as \$47 million.

That's based on a cost of \$54 per ton for as much as 870,000 tons of Philadelphia refuse. The rate is to increase by a rate of 5% per year or the area's consumer price index rise, whichever is greater.

It's worth it to Philadelphia. It gives the city "a reliable, dependable, predictable plan and cost for our solid waste disposal," said Goode.

The city has seen trash disposal costs rise by 20% annually in the past four years.

Philadelphia has not had such reliability, predictability, or cost solidity since late 1984, when Kinsley's Landfill (Deptford, N.J.) was closed to the city.

Another key to the contract: An option within it has Waste Management agreeing to accept incinerator ash from a not-yet-built, large-scale, in-city refuse-to-energy plant. The option would have the company accept the ash for disposal over 20 years.

But City Councilman David Cohen, who derailed plans for a large refuse-to-energy plant, also appears opposed to this proposed contract. If he succeeds in this effort, too, said a *Philadelphia Inquirer* editorial, "taxpayers . . . would pay through the nose."

Ash in two countries: According to reports, ash from Philadelphia is now a problem for the small countries of Guinea (in West Africa) and Haiti

(in the Caribbean Sea).

Guinea wants 15,000 tons of the city's ash removed. It was accepted by a company there that planned to use the ash to make bricks and road-building material. The country's officials, however, think the ash presents a hazard due to the country's wet climate.

Haiti has asked the U.S. EPA to tell it what it can do with the 3,000 to 5,000 tons of Philadelphia ash that remain on the island. In February, the EPA sent three field specialists to the country to take a look at the problem.

Ash on one ship: The *Khian Sea*, a ship containing more than 10,000 tons of Philadelphia ash, as of this

writing, remains moored 80 miles outside of the city. It left port more than 18 months ago, but returned in March when the ship could not find a place to drop the bulk of its load.

The *Khian Sea* did successfully unload 3,000 to 5,000 tons in Haiti.

Pennsylvania environmental officials say the ash has not tested out as hazardous. But a local lawyer for the firm that is responsible for Philadelphia's ash disposal (under a city contract) says the ash "could have tested out to be chocolate pudding" and would still be a problem because of the public's fears.

Michigan plans big waste changes

Under proposals made recently by the administration of Gov. James J. Blanchard of Michigan, the way refuse is managed in that state would change completely.

The goals, using today's waste generation as 100%:

- burn 35% to 45%;
- recycle 20% to 30%;
- compost 8% to 12%;
- "reuse" 4% to 6%; and
- use waste reduction to eliminate 8% to 12% of what is now generated.

Waste reduction strategies would include promoting re-usable products (i.e., substituting cloth diapers for disposables) and eliminate the use of things like disposable dinner plates made out of foam.

Recycling notions would include expanding the state's bottle deposit law to encompass all beverage containers, including all plastics

and even glass bottles containing fruit juices and liquor, by 1995.

Composting would be compelled by banning yard wastes from landfills.

Recycling dispute causes resignation?

Howard Green, the 68-year-old public works director for the town of Orange Park, Fla., reportedly quit in April when his proposal for a mandatory curbside recycling program was rejected. Green would not confirm for reporters that his resignation was caused by the town board's choice of a voluntary program over his mandatory proposal.

But the two may have been tied together. The local newspaper's headline on the event: "Orange Park director of public works quits after recycling dispute."

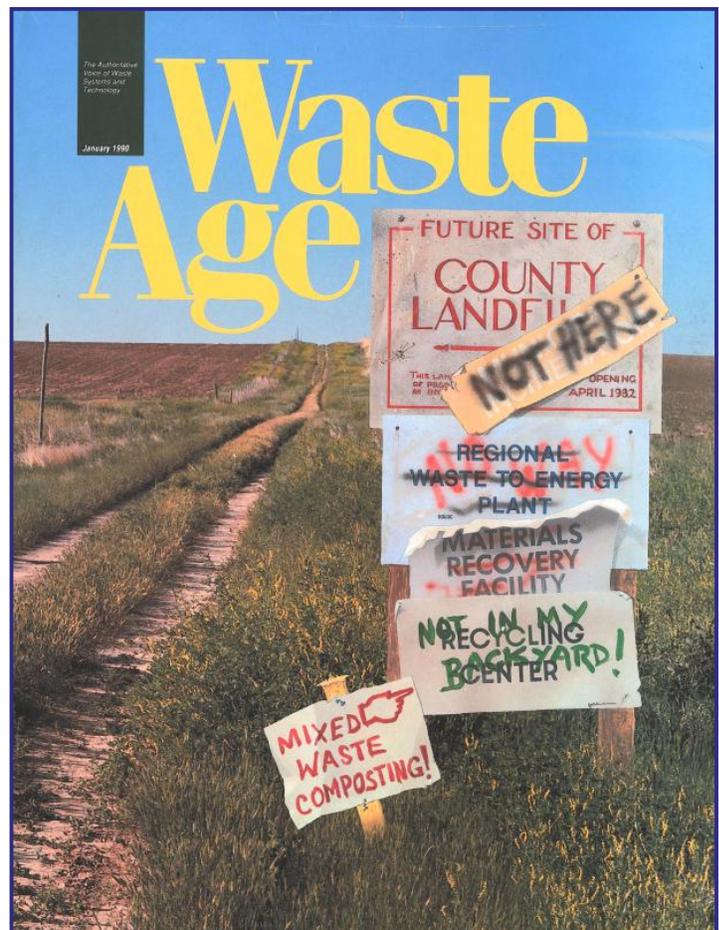
Article from July 1988 issue of Waste Age Magazine

disposal. The truth is that with the passage of RCRA in 1976, the public became aware that MSW might not be good for the community and vocal citizens called NIMBYs for "not in my back yard" opposed new and redeveloped landfills. The number of landfills in the northeast and PA began to diminish along with disposal options for the large population centers of Philadelphia, New York City and north Jersey. [Just a note of reference, by the end of the 1990s, Pennsylvania had 51 permitted landfills that were RCRA compliant.]

This SWM relationship is important between Pennsylvania, New York and New Jersey is both a symbiotic and adversarial relationship when it came to SWM. Waste flowed across borders depending upon the cost and availability of disposal options. In 1988, an event captured the

dreaded SWM reality that people did not waste disposal in their community, even if it pays money. The story of New York garbage barge Mobro revealed the northeast has a trash problem. The story of the Mobro barge captures the desire to find options for the disposal of municipal solid waste (MSW) in the late 1980s as disposal locations compliant with RCRA were getting more difficult for a geographic area that generated a lot of MSW due to its large population.

Dan Rather dubbed it "the most watched load of garbage in the memory of Man." Johnny Carson joked about it in his nightly comedy routine. It grabbed headlines around the world. But for all the attention, Americans have never heard the full story of the Mobro garbage barge (a.k.a., "the gar-barge," "the Flying Dutchman of Trash," "the barge to nowhere," "the floating hot potato.") If you weren't around in 1987 – or just need a reminder – the Mobro carried six million pounds of New York garbage, got turned



Cover from January 1990 issue of Waste Age Magazine

away from its destination in North Carolina, and spent the next five months adrift – rejected by six states and three foreign countries. The public faced fears that ranged from AIDS-infected flies to tropical vermin.

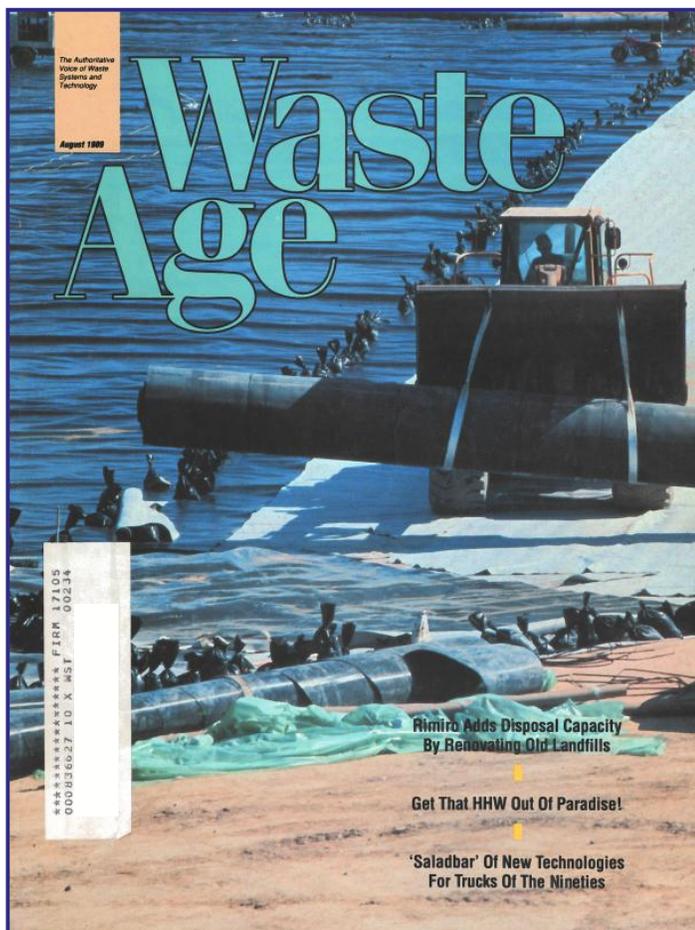
The pundits of the day portrayed the Mobro as a symbol of our nation's growing garbage crisis, stoked by fears of declining landfill space. But the real reason the Mobro stayed at sea so long had more to do with the growing pains of the garbage industry, new environmental laws, and a textbook public freak-out. It's a classic tale with a twist: a get-rich-quick scheme that changed the way Americans take out the trash.

On March 22, 1987, a tugboat named the Break of Dawn sailed out of New York Harbor pulling a barge full of Long Island's finest trash. The trip was supposed to be a simple shipment of trash to a southern landfill. Instead, Mobro 4000 (the barge's real name) became a modern day Fly-

ing Dutchman, wandering from port to port but never allowed to stay and unload.

The garbage barge wasn't just redolent with remarkable names. The misbegotten cruise quickly became a media sensation. The economy was hot, and news was slow. Garbage, which is just the effluence of our affluence, was the perfect target. Greenpeace, Phil Donahue and Johnny Carson all used the barge as fodder. Six months after it sailed, the garbage barge's trash was burned in a Brooklyn incinerator, and the ashes buried back in Long Island. The media didn't attend the funeral.

After the circus was over, the barge had a profound impact on solid waste and recycling. Within three years, most states passed laws requiring some kind of municipal recycling. The United States went from about 600 cities with curbside recycling programs to almost 10,000. Our recycling rate is three times higher now than it was in 1987.



Cover of August 1989 edition of Waste Age Magazine

Keystone Chapter of SWANA has a beginning

With all of this waste publicity and new awareness of the MSW issues, a group of waste professionals came together to create a local Pennsylvania chapter of SWANA. Pennsylvania has declared landfills to be lined and recycling to be required at the curb for residents.

In the next newsletter article, the 1990s will be explored as the new Keystone Chapter seems to assimilate the different opinions about managing MSW, landfilling versus burning, is zero waste possible? The 1990s were also filled with many new laws and regulations as the waste industry evolved.

Members with photos from this time period are requested to share.

Written By: Robert Hasemeier, Barton & Loguidice Sources:

- <https://www.retroreport.org/video/voyage-of-the-mobro-4000/>
- <http://www.deq.state.ok.us/lpdnew/wastehistory/wastehistory.htm>
- <https://www.encyclopedia.com/history/united-states-and-canada/us-history/waste-disposal>

The Results are in...and the Chapter has a new President

As the Keystone Chapter closed in on the end of the Fiscal year, elections were held for the Chapter Officers and Board of Directors. Following this years elections, the Chapter is seeing some new faces in new places.

Among the Chapter Officers, the former Vice-President, Sean Sweeney, has shifted to the helm as Chapter President, with former Secretary, Michele Nestor, moving into the Vice-President position. New to the Officers ranks are Tom Lock, formerly a Private Sector Director turned Secretary, and Lynne Jeffries as Treasurer.

Bob Watts has once again been re-elected to the Chapters International Board. And while the Public Sector Directors saw both "Scott's" (Scott McGrath and Scot Sample) re-elected, the Private Sector Directors are welcoming two new members, Jill Hamill and Carolyn Witwer, who have filled the positions left by Robert Hasemeier and Tom Lock on the Board.



Bryan Wehler receives a plaque given to the outgoing president from the new Chapter President Sean Sweeney.

- Photo Credit: Chanda Martino



The Elected Officers and Board Members pose for a photo. From left to right - Bob Watts (International Director), Sean Sweeney (President), Michele Nestor (Vice President), Tom Lock (Secretary), Lynne Jeffries (Treasurer), and Bryan Wehler (Past President).

Photo Credit: Chanda Martino

Also newly elected to the Keystone SWANA Board of Directors is Daniel Brown, who is taking over for Tessa Antolick as the Young Professional Director.

From everyone within the Keystone SWANA community, let's welcome aboard the newly elected Keystone SWANA officials and Directors for the 2018-2020 term.

If you are interested in becoming more involved within the Chapter consider running for the Board. Elections are held every year, with 2019 promising to have at least four openings between the Public and Private Sector Boards. 🍷

Written By: Alison D'Airo
Editor of *The Keystone*

Municipal Measure Program Aims to Standardize Data

On September 10, 2018, Re-TRAC Connect and the Recycling Partnership launched the first phase of the Municipal Measurement Program (MMP) to provide municipalities with a robust and accessible materials management program analysis and planning tool. It was designed, with industry assistance, to standardize terminology and harmonize methodologies in support of consistent measurement across the U.S. and Canada. This innovative program will empower municipalities to benchmark performance and then identify and replicate bright spots, leading to better investment decisions and a stronger U.S. recycling system.

The new measurement program's goal is to reach the majority of municipalities in the U.S. and Canada to advance the standardization and harmonization of material measurement of curbside recycling across the countries and facilitate decision-making to improve recycling program performance. Without adequate performance data, municipal program managers can struggle to identify the best course of action to improve recycling.

"The Re-TRAC Connect team is extremely excited about launching the Municipal Measurement Program in collaboration with The Recycling Partnership," says Rick Penner, President of Emerge Knowledge. *"The MMP is designed to help municipalities measure the success of their programs while creating a national database of standardized information that will benefit the entire industry. Working with The Recycling Partnership to promote, manage, and enhance the MMP over time will ensure that the many benefits of this exciting new program are fully realized."*

Based on data submitted to the MMP, municipalities will be introduced to effective tools and resources developed

by the Recycling Partnership to transform recycling across the United States. Participation in the program is free to communities.

"The Municipal Measurement Program will revolutionize the way we collect performance data, including capture rates and contamination, and transform our recycling systems for the better," states Scott Mouw, Senior Director of Strategy and Research, The Recycling Partnership. *"Currently every municipality has its own way of measuring and assessing their community's performance. The MMP will streamline that data and connect municipalities to The Recycling Partnership's free online toolkits of best practices to help communities improve recycling by operating more efficiently."*

Municipalities interested in participating in the beta testing phase of the MMP can visit: www.recyclesearch.com/profile/mmp/. The official launch is scheduled for January 2019. 🇺🇸

Released By: Re-TRAC Connect
September 10, 2018

Source: https://resource-recycling.com/recycling/wp-content/uploads/sites/3/2018/09/Re-TRACTRP-Release_FINAL_9.10.18.docx.pdf



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The 2018 Scholarships Have Been Awarded!

The Keystone SWANA is proud to announce that a total of \$6,000 was distributed to this year's six scholarship recipients! A big thank you goes out to all of the advertisers who sponsor *The Keystone*, The Road-E-O, and the Annual Fall Conference; by advertising with us, you are helping to award future young professionals scholarship money to help fund their education.

The winners of this years scholarships are:

Lauren Jasitt, (Daughter of Douglas Jasitt of York County Solid Waste Authority.)

Lauren will be attending Eastern University.

Veronica (Sally) Tafuto, (Daughter of William S. Tafuto of ARM Group, Inc.)

Sally will be attending Ohio State University.

Paula Groff, (Daughter of Michael Groff of Lancaster County Solid Waste Authority)

Paula will be attending Elizabethtown College.

James Dougherty, (Grandson of Kay Dougherty of Keystone Chapter of SWANA.)

James will be attending University of Pittsburgh, Johnstown

Alexander Laubsher, (Son of Lee Laubsher of Cummings & Smith.)

Alexander will be attending Lycoming College.

Ashton Elvanian, (Daughter of Christopher Elvanian of McNeilus.)

Ashton will be attending Bloomsburg University.

As is tradition, each of their scholarship essays are published in this edition of *The Keystone*, so be sure to take a look at what this group of upcoming professionals has to say! 🗑️

Working Together for the Environment

Working Together for the Environment - A SWANA Scholarship Essay by: James Dougherty



Just about everything that we do leaves behind some kind of waste whether is it within our homes, schools, or businesses. Solid Waste Management is the collection, transportation, processing, and monitoring of those waste materials. Waste materials can be sent to a landfill, incinerator or recycled and we can even take care of our yard waste through composting. Everything that we do affects our environment and if we take the time to think about some of our choices, we can make a big impact on the environment in which we live. The most important part of waste management is the continuing, ongoing efforts to protect our environment.

Some of the current issues facing solid waste management include surface and ground water pollution, toxic emissions, and other nuisances such as odors, dust, and noise. To make a difference we each can practice the 4 R's: reduce, reuse, recycle, and recovery. Reduce what we buy and use all that we do buy to avoid throwing away. Reuse what we can such as refilling water bottles. Recycle all that you can which can include glass, plastic, newsprint, and cardboard. Plastics and other man-made substances take hundreds of years to break down in the environment. We need to find new and creative ways to reuse these harmful objects. It is an ongoing struggle to manage and reduce waste, it takes all of us working together to make a better and healthier environment. 🗑️

Written By: James Dougherty, Grandson of Kay Dougherty of Keystone Chapter of SWANA. James will be attending University of Pittsburgh, Johnstown.

What “Waste Management” Means to Me

What “Waste Management” Means to Me - A SWANA Scholarship Essay by: Ashton Elvanian



The term “Waste Management” means many things to me. For the past 25 years (all of my life), my dad has worked in the Waste Management Industry. He is employed with a refuse truck manufacturing company and is very

involved in the Refuse Industry committees, SWANA being one of them. His goal has been focused around safety in the industry. I have taken interest in this industry over the past two years and now have the understanding that collecting garbage is the 5th most dangerous occupation. I would like to see safety awareness in the industry taken to another level through improved safety practices, marketing safety, and, most importantly, safety legislation, where big ideas can truly come to life.

My father talks about Zero Waste and what the term Waste Management entails. China has played a crucial role in the importing of recycled material from the United States. With materials coming in being contaminated, China has taken a hard stance against accepting our recyclables. This leaves a very important question. How do we best dispose our recyclables?

The disposal part of the business is what has intrigued me. What will happen to the contaminated recycling if no one can safely dispose of it? Will it go into the landfills with the garbage? How can it be disposed of without contaminating the soil, water, and air? With these serious issues our Zero Waste future is in jeopardy. We need the current and next generations to get involved and take action. Countries like Denmark are leading the way in strategies to reduce food waste. As much as one third of food is spoiled or squandered globally that could possibly be

redirected to feed millions of people. Is Zero Waste truly a viable option? I believe it is, but it will be challenging.

My family, high school, and the restaurant where I work are all active participants in every day recycling. Food recovery from restaurants and events is one option that can be implemented locally with apps such as Feeding Forward.

I will be attending Bloomsburg University this year with a major in business. I plan to engage the Zero Waste platform to speak about, research, and participate in improving these areas of the industry. We need to continue research and planning in order to find viable solutions to each issue of waste. Perhaps working together globally we could discover and lawfully implement waste solutions, safety, reduction, and redirection for the future health of our planet.

Thank you for your scholarship consideration, encouragement, and platform for our upcoming generation. 🍷

Written By: Ashton Elvanian, Daughter of Christopher Elvanian of McNeilus.
Ashton will be attending Bloomsburg University.



A New Path for Solid Waste Management

A New Path for Solid Waste Management - A SWANA Scholarship Essay by: Alex Laubscher



Solid Waste Management involves collecting and treating solid material that no longer has a use. One of the most popular methods involves recycling, by turning solid waste back into useful resources. Other ways involve incinerators, composting, and landfills. People

who participate in solid waste management are those who manage solid waste management facilities, which includes recycling centers and landfills. People who work at those centers and those who take the time to recycle also play a role in solid waste management.

To continue, companies who take care of municipal and hazardous wastes, are often met with drawbacks. Besides being a major expense for the government, the most obvious issue is the rapid population increase in recent years. With the huge influx of people, the landfills are filling up at a faster rate than ever before. If the population continues to grow exponentially, land for these facilities will become even more scarce than they already are. In foreign countries, some have resorted to illegal dumping grounds due to limited land provided and the apparent fact they don't have the same regulations as the United States.

In the long run, it seems that overpopulation and lack of space to discard municipal and hazardous waste will continue to be a reoccurring problem. Yet, technology is continuing to grow and products are becoming more environmentally friendly. I believe that the solid waste industry will take a new path. One with innovative methods to limit pollution and the long-term use of landfills. I believe that if SWANA continues to advocate for finding better and efficient ways to turn solid waste into reusable resources through education and research, these issues will become a thing of the past. 🗑️

Written By: Alex Laubscher, Son of Lee Laubscher of Cummings & Smith.
Alexander will be attending Lycoming College.

Save the Date!

...for the upcoming Lancaster County SWMA Waste-to-Energy Facility Tour

What

Tour the 1,200 ton-per-day (TPD) Lancaster Waste-to-Energy (WTE) Facility in Conoy Township. Owned by the Lancaster Solid Waste Management Association (LCSWMA) and operated by Covanta, this 36MW facility processes around 400,000 tons of waste annually.

Also on this tour, learn about LCSWMA's collaboration with Perdue Agribusiness. LCSWMA provides 15–20% of the steam from the Lancaster WTE Facility to Perdue's adjacent soybean processing facility. This unique partnership assists Perdue with reducing its environmental footprint and lowering emissions, thus making it the most highly efficient, technologically advanced, and environmentally sound soybean processing plants in the country.

Speakers include:

- ◆ Bob Zorbaugh, Co-CEO, LCSWMA;
- ◆ Kevin Connor, Area Facility Manager, Covanta Energy; and
- ◆ Michelle Marsh, Chief Business Development Officer, LCSWMA.

When:

Thursday, November 1, 2018
10 A.M. to 2 P.M.

Where:

Lancaster County Solid Waste Management Authority - Administration Building
1911 River Road,
Bainbridge, PA 17502

Registration is \$15 for SWANA members and \$25 for non-members. Lunch will be provided. 🗑️

Space is limited so be sure to reserve a spot today!

How Waste Can Be A Resource

How Waste Can Be A Resource - A SWANA Scholarship Essay by: Lauren Jasitt



A vending machine sits in the corner of the room with a single light bulb overhead. My friend and I walk toward the machine, dollars in hand. Pressing the number and letter combination 3B, my friend buys a chocolate

bar. After eating the candy, she disposed of the wrapper in the trash can next to the vending machine and walks away without another thought of the discarded wrapper. My mind, on the other hand, is racing. My eyes trail from the wrapper in the trash can to the energy source of the light bulb hanging from the ceiling—one of the many examples of how waste can be a resource.

According to the Environmental Protection Agency, the Resource Conservation and Recovery Act defines solid waste as “any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities.” Therefore, solid waste management deals with the storage, collection, transportation, processing, and disposal of solid waste that is done in a way that is considerate to the environment, economics, and public health.

Almost everything we do produces some sort of waste. Therefore, to some extent, everyone participates in solid waste management. Residential, commercial, and industrial consumers buy products and often discard part of the

product or packaging. This waste must be collected in order to be further processed or disposed. Many individuals in various professions are involved in

accomplishing this aspect of solid waste management. Both of my parents work for the York County Solid Waste Authority, which is a municipal government entity that participates in solid waste management activities. My mother is an accountant, and my father is a manager of engineering and operations. Geologists, community service representatives, and skilled laborers are other examples of professions involved in solid waste management.

There are many challenging issues in the solid waste management industry. The United States is one of the biggest generators of recyclable material and China is the world’s largest buyer of recyclable material. Beginning in 2018, the Chinese government imposed new laws that restrict the amount of contaminants allowed in recyclable materials from 5% to 0.5%. These changes have had a negative effect on the recycling industry in the United States as waste vendors try to meet these new limits. Another challenge is complying with the various laws associated with solid waste management activities. Professionals in the industry need to stay abreast of the many laws that govern solid waste management to know whether their equipment and processes meet the correct standards. Also, reporting requirements may change which could require additional data to be collected and reported.

In the future, there will continue to be a need to recover and capture the valuable resources in the waste through the use of waste-to-energy plants, increased recycling, and development of new waste management technologies. There are components in the waste stream that can be used as raw materials for new products or as a source of renewable energy. As the world’s population continues to increase, so will trash generation. Sustainable solid waste management practices will help preserve the environment for future generations. 🗑️

Written By: Lauren Jasitt, Daughter of Douglas Jasitt of York County Solid Waste Authority.
Lauren will be attending Eastern University.



The Benefits of Waste-To-Energy Over Landfilling

The Benefits of Waste-to-Energy Over Landfilling - A SWANA Scholarship Essay by: Paula Groff



A Britannica Dictionary would tell you that solid waste management is, “the collecting, treating, and disposing of solid material that is discarded because it has served its purpose or is no longer useful.” However, that definition fails to identify the true value and need of solid waste management and its professions. Solid waste management focuses on the proper discarding of waste as to ensure the surrounding environment is kept clean and unpolluted. In turn, a healthy environment aids in the health and well-being of people. Every citizen of the world is involved in the process of solid waste management. We all inevitably produce waste throughout our lifetime, and Ultimately, solid waste management is the system that we use in hopes of ensuring that the waste we create does not negatively impact the environment or the future generations.

Although solid waste management professionals have many issues facing them, there is one large problem that towers above the rest: too much waste is being produced and there’s nowhere to put it. As the world becomes ever increasingly industrialized, the amount of waste that is generated increases as well. So, the question arises: other than disposing of waste by placing it in landfills, what alternate options do we have? Most people would answer with recycling. While recycling does certainly help to reduce the amount of waste put in landfills slightly, it’s not the best option. The best option is to convert the waste to energy. This is already being done in many cases, but with further research and more advanced technology this could nearly eliminate the largest problem facing solid waste professions. This, along with the education of the importance of proper solid waste management will ensure a healthy environment for years to come. ♻️

Written By: Paula Groff, Daughter of Michael Groff of Lancaster County Solid Waste Authority. Paula will be attending Elizabethtown College.



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Views on Solid Waste Management

Views on Solid Waste Management - A SWANA Scholarship Essay by: Veronica Tafuto



Effective solid waste management is becoming increasingly important as waste is polluting our oceans and water resources more than ever, and land resources are diminishing. New sources continue to report trash

(with a lot of plastics) ending up in our oceans and affecting fish and other aquatic creatures. Images displayed on various forms of media are disturbing, and they continue to show up more and more each day. Sound waste management is necessary not only to the safety of the natural environment, but to human health as well.

All levels of waste management: creation; accumulation, transportation; treatment; removal; and eventual disposal or conversion of waste must be considered. It can or should also involve reuse, recycling, and reclamation of waste or materials that would otherwise become waste. Responsible management of waste involves many profes-

sions, including but not limited to: many types of engineers and scientists; equipment operators; field technicians and laborers; truck drivers; various government positions such as administrators, regulators, and politicians; and businessmen and entrepreneurs. Moreover, virtually every person on the planet is involved in the creation of waste. Hence, waste affects everyone in the world.

There are various methods of waste management/disposal. The most common method in the United States is disposing of garbage into landfills. Another common but less utilized type of waste disposal is incineration (preferably termed “waste-to-energy”). In this management method, solid wastes are burned at high temperatures so as to convert them into ash residue. The steam from this process can be used to generate electricity, but another big advantage of this type of method is that it reduces the volume of solid waste to about 20 percent +/- of its original volume, thus decreasing the space it takes up in landfills. This process is also known as thermal treatment because solid waste materials are converted into heat, gas, steam, and ash. Incineration is something that is very popular in countries where landfill space is no

longer available, which includes Japan and European countries. My opinion is that waste-to-energy should be the trend in the United States so that waste is used an energy resource and so that less material is land-filled.

Both landfilling and incineration face public criticism and a “NIMBY” attitude (or the “Not-in-my-backyard”). Although incineration reduces the

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amount of waste that ultimately requires disposal, it emits air pollutants into the atmosphere. In addition, the ash from the incinerator must be disposed of as well, usually in landfills, though there are some potential reuse and recycling and incineration opportunities, which are not always available in all communities.

The technology progression of landfills has helped solid waste management create less pollution and environmental impacts, but with limited space and with reservations that people have toward having landfills near their homes, the amount of trash or residue (from incineration or other processes) that ultimately arrives at landfills must be reduced.

Recently, due to government mandates or self-governing strategies, companies are considering how the waste from their products can be reused or recycled, and often returned to them. With raised awareness and education, consumers consider sustainable practices, and after they use products, they may attempt to reuse and recycle the products where feasible.

Finding ways to reuse as much of the waste as possible for as long as possible seems to be what the future looks like in waste management, including using packaging made from recycled goods, using incineration to reduce disposal volume and create energy, and limiting the trash that every single person produces. While more innovative solutions may come in the future, waste is produced every day, without interruption. In order for us to keep a clean environment, safe for human and animal life, we must come up with innovative solutions for waste management and, unfortunately, the political process in the United States seems to slow this process. 🇺🇸

Written By: Veronica (Sally) Tafuto, Daughter of William S. Tafuto of ARM Group, Inc. Sally will be attending Ohio State University.



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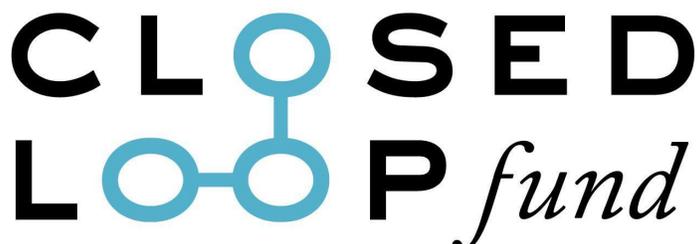
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Closed Loop Fund Announces \$5M Investment Pledge



The PA Recycling Markets Center and Closed Loop Fund announced a statewide partnership to make a \$5 million investment in recycling infrastructure in Pennsylvania on Monday, September 3rd. The investment will come in the form of zero-percent loans to municipalities and below market loans to private companies with substantial business operations in Pennsylvania.

RMC will assist in the identification and initial due diligence screening for applicants. Closed Loop Fund will make the final evaluation on funding projects. This statewide program follows Closed Loop Fund's successful 2017 investment in AeroAggregates in Philadelphia.

"We welcome any interested, qualifying party to work with us to access the Closed Loop Fund," said RMC Executive Director Robert Bylone. *"In unprecedented volatility of recycled materials markets, we need to aggressively pursue recycling infrastructure and recycled content product manufacturing in Pennsylvania; a recycled item is not truly recycled until it is a new product. We are grateful to the Closed Loop Fund for their assistance in putting Pennsylvania recycling markets at the forefront of their efforts nationwide,"* said Bylone. *"We look forward to continuing our work with entrepreneurs, manufacturers, processors, and collection programs but now with the Closed Loop Fund directly paired to these Pennsylvania opportunities."*

"In this regard, the Closed Loop Fund greatly aligns with the mission of the Pennsylvania Recycling Markets Center," said PRMC Secretary, Bob Anderson.

"This is our first formal partnership with a non-profit corporation to help deploy below market rate capital to enhance and create recycling systems across Pennsylvania. We are eager to make an impact with the Pennsylvania Recycling Markets Center who has a track record of recycling economic development successes," says Ron Gonen, Managing Partner of Closed Loop Fund.

The Closed Loop Fund is committed to investing in municipalities and private companies developing new technologies focused on elimination of waste or the development of new or improved recycling technologies; for projects designed to improve recycling rates, increase demand for products made from recycled content; and grow existing markets and create new markets for recycled material for which conventional sources of funding are unavailable. Among the members of the Closed Loop Fund are Keurig Dr. Pepper, Coca-Cola and PepsiCo.

For more information, contact the PA Recycling Markets Center by calling 717-948-6660. The Center is located at Penn State Harrisburg, 777 West Harrisburg Pike, Church Hall, Third Floor in Middletown, Dauphin County. 📍

Written By: PA Environmental Digest
September 3, 2018
Source: <http://www.paenvironmentdigest.com/newsletter/default.asp?NewsletterArticleID=44412&SubjectID=&SearchWord=closed+loop>

WM Announces Winner of Think Green Grant



A \$5,000 Grant check was awarded to Friends of Minsi Lake

Photo Credit: Waste Management

Grand Central Landfill has awarded a \$5,000 Think Green® grant to the Friends of Minsi Lake, a committee of the Northampton County Junior Conservation School. The grant was announced today by Grand Central Landfill Manager Ron Myer and Community Relations Manager Adrienne Fors.

The Waste Management Think Green® grants are part of the company's effort to encourage organizations and work that improve the environment in the communities where Waste Management operates. Waste Management operates Grand Central Landfill and Grand Central Hauling Co. in Plainfield Twp.

In June of 2017, the Northampton County Junior Conservation School established the Friends of Minsi Lake, a grassroots organization that has been leading the charge for the Minsi Lake Habitat and Park Improvement Project over the past 14 months.

Friends of Minsi Lake has been working closely with the Northampton County Division of Parks and Recreation and the Pennsylvania Fish and Boat Commission to develop the Minsi Lake Habitat Improvement Plan. The plan was completed in July.

"This plan calls for the construction of 641 large-scale fish habitat structures on the lakebed and 210 small-scale fish and turtle habitat structures, which will be built by volunteers outside the lakebed and later placed in the lake, after it is refilled, following the dam rehabilitation project," said Northampton County's Recreation Specialist James Wilson.

"Grand Central Landfill is pleased to support the Northampton County Junior Conservation School and the Friends of Minsi Lake. Their work is the kind of work our company believes in," Mr. Myer said.

"The Minsi Lake Habitat Improvement project is the first step in the comprehensive rehabilitation plan for the park. We are excited that a habitat project like this aligns with what we do at Grand Central. We look forward to seeing the results." Mrs. Fors said.

Grand Central and its community partners have developed an award-winning wildlife habitat that continues to enhance Northampton County's grassland initiative.

For more information about the Minsi Lake project or to get involved, please visit <https://www.facebook.com/FOML.org/>. 🇺🇸

Submitted By: Adrienne Fors, Waste Management
September 13, 2018

PWIA and DEP influencer, Mary Webber, Retires

For those who have been attending the Pennsylvania Waste Industry Association (PWIA) and SWANA events, you likely know Mary as the person who everyone knows ... and who knows everyone. She is also the person who seems to know everything that's going on and, more importantly, what's supposed to be going on ... and what's not. In quiet, unassuming fashion, Mary has been the hand at the helm, providing leadership, forging consensus, and advancing sound public policies and balanced regulatory goals.

Mary has committed her entire professional career to conservation, stewardship and environmental protection, while working in both the public sector (within DER, now DEP) and the private sector. Mary had a long tenure as executive director of the PA Waste Industries Association, and was a guiding influence as all factors – legislators, regulators, community inspectors, and the regulated industry - dealt with the vast array of issues (and personalities) that have bucked and twisted through the world of waste: She has seen the advent of the new order of environmental activism; the implementation of Act 97 and associated cutting edge technical regulations; the waste capacity “crisis” of the late 1980s and passage of Act 101; flow control, host agreements, out-of-state waste concerns, and moratoriums; Operation Clean Sweep and Growing Greener. The list goes on and on – and through it all, Mary has provided invaluable guidance and has worked tirelessly toward real world solutions using her vast experience, in-depth institutional knowledge, and calm, reasoned demeanor – typically in the midst of highly emotional and often strident competing interests.

But to think of Mary as only about “waste” would be a serious understatement. Mary has brought her enduring energy, enthusiasm and leadership to a vast array of causes and community projects. To touch on but a few: Mary is well known for her advocacy and service on the Board of Keep America Beautiful and she has been a major driver of the Great American Clean Up in PA. Mary has been

recognized for her long-term dedication to the Ben Franklin Technology Partners, one of the nation's longest-running technology-based economic development programs. For years, Mary has been actively involved with the Whitaker Center, from fund raising (who remembers the Cow Parade) to serving as a past President of the Center. Again, the list goes on and on.

And Mary's involvement with these groups and causes does not seem to end when she “graduates”. Mary has for many years served as a mentor to individual DEP staff members, helping them to understand their role and become better regulators and better people. Despite nearing retirement, Mary continues to work with the Whitaker Center as they develop and prepare to launch a new I-max documentary about the Chesapeake Bay. Mary and her husband, Tim Weston, have long maintained an active charitable fund to promote their interests in art, emergency management and the greater Harrisburg area community.

So, with the hope that Mary will continue to stay connected with PWIA and all of us in the industry, please join me in appreciation of Mary Webber's many years of friendship and guidance, and in wishing her all the best in her very active retirement. 🍷

Written By: David Buzzell
September 5, 2018

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MD's 40-West Stops Accepting Film Plastic for Recycling

Washington County's Forty West Landfill will continue to recycle glass, but will no longer accept plastic bags and shrink wrap for recycling.

The county commissioners unanimously approved a recycling contract on July 17 with Apple Valley Waste of Kearneysville, W.Va., to take over recycling bins at the landfill west of Hagerstown and at the county's transfer stations in more rural areas.

None of the recycling items are changing under that contract. However, the landfill will no longer accept plastic bags and shrink wrap under a different agreement with Maryland Correctional Enterprises, said Dave Mason, the county's deputy director of solid waste.

Maryland Correctional Enterprises stopped accepting plastic bags and shrink wrap from the county and public on July 1, according to a county news release and Mason. The county doesn't collect enough of those materials on its own to make it worth recycling, Mason said. According to Mason, most grocery stores have a container to accept plastic bags and clean shrink wrap for recycling.

Because Apple Valley is the new contractor for providing recycling bins at the landfill and transfer stations, the county is extending its current contract with BFI until Sept. 1. That will give Apple Valley time to deliver its equipment to the sites, according to Mason and agenda documents. The first year of the contract with Apple Valley for the drop-off center services and to provide containers for cardboard is for \$113,600. The county can renew the contract for up to two additional one-year periods.

Separately, the commissioners approved a contract for Apple Valley Waste to haul trash dumpsters from the transfer stations and at the residential drop-off area at the landfill to the pit at the landfill, Mason said. That contract is for \$318,550. It includes hauling cardboard to Maryland Paper for recycling, Mason said. The county also can renew that one-year deal. 🗑️

Written By: Julie Greene
July 24, 2018

Source: https://www.heraldmillmedia.com/news/local/washington-county-stops-accepting-plastic-bags-shrink-wrap-for-recycling/article_3090f342-8f85-11e8-a5cd-



Recyclable items dumpster at the Forty West Landfill

Photo Credit: Herald Media

Philly Refiner Plans \$120M Digester Plant for Food Scraps

Too much fatty, gassy food in your diet? A renewable methane producer, RNG Energy Solutions, can't get enough food waste from restaurants and groceries, and the fattier and gassier it is, the better. RNG converts the wretched refuse of our teeming stores into transportation fuel.

RNG Energy announced Monday it has formed a joint venture with Philadelphia Energy Solutions, which operates the giant South Philadelphia refinery complex, to build a \$120 million digester that can convert more than 1,100 tons of food waste a day into methane gas. The Point Breeze Renewable Energy Project would be built on 22 acres of vacant land in the refinery's North Yard area, off Maiden Lane to the west of the four spherical butane tanks along the Schuylkill Expressway. The project would take from two to three years to permit and to build.

The biogas project aims to divert food wastes from landfills, and also to reduce the escape of methane from decomposing landfill waste into the atmosphere. The facility would produce 3 million cubic feet of gas a day, for which there is a strong market from owners of truck fleets and municipal buses for renewable methane to satisfy green-energy targets, said James Potter, president of RNG Energy Solutions LLC. "People definitely want to pay a premium for this type of renewable product, which will be used as transportation fuel," said Potter.

The Point Breeze project presented its plans to the city's Solid Waste and Recycling Advisory Committee in May, and Mayor Kenney welcomed it on Monday. "The project will bring hundreds of much-needed jobs over its two-year construction, as well as dozens of permanent jobs, and I look forward to seeing this effort move forward," Kenney said in a statement.

RNG is developing similar systems in Seattle, Boston and Linden, N.J., aimed at capturing food waste in metropolitan areas, to reduce the distance that the raw material

needs to be transported. "We've learned that communities want to achieve certain sustainability goals, and will seek to divert their own organic waste streams to our facility," Potter said.

The digestion process also produces a high-value agricultural fertilizer as a byproduct that will be sold and marketed as a soil amendment and landscaping material, said Potter. He likened the loam to peat moss, rich in nitrogen and phosphorus. "We've secured an organic rating for it," he said.

Philadelphia Energy Solutions (PES), which emerged from bankruptcy protection last month, is supplying land and steam energy to the project, and will buy and market the renewable gas produced. For PES, often criticized as the largest source of air pollution in the region, the biogas plant gives a small bit of green cover.

The refinery will retain the renewable energy credits generated from the sale of biogas, which will reduce its need to buy the credits on the open market. The high cost of those credits, called RINs or Renewable Identification Numbers, was one of the main sources of financial pain that sent the refinery into bankruptcy. "The project will help, though it certainly won't solve the problem with RINs for us," said Cherice Corley, PES spokeswoman.

RNG built and sold what it says is the world's largest codigester in Colorado, the Heartland Project, which converts food waste and cattle manure into methane. That project has been plagued with complaints about odor that Potter blamed on its owner and operator, EDF Renewable Energy. "It was easily solvable, but EDF took forever to solve it," he said. The Philadelphia project, which will use only food waste and not manure, would be a totally closed system and odor-free, said Potter. "Everything is in vessel," he said. "There is no holding of material in open tanks, or outside. There won't be any odor issues here."

The fuel for the Point Breeze digesters will come from food that is "no longer consumer viable" discarded by grocers, restaurants, institutional kitchens and food processors. Residential food waste won't be targeted because "the complexities of collecting that waste are prohibitive for this type of project," Potter said. The food waste would be concentrated at two or three satellite plants located at trash-transfer stations, where it would be converted into a slurry that is trucked to the biogas plant. In the closed digesters, bacteria that thrive in an environment of 110 to 115 degrees, consume the slop and generate methane as a byproduct.

The gas produced from such digesters is about 60 percent methane, which needs to be concentrated and converted into pipeline quality gas, which is typically about 95 percent methane. A critical part of the process at the satellite facilities is the handling of the food waste, which arrives in bulk or packaged form, including individual retail items past their expiration date. RNG uses European "de-packaging" equipment that opens up cans, bags and boxes and extracts the food in a high-speed centrifuge that Potter likened to a washing-machine spin cycle. "A loaf of bread in a plastic bag, a damaged can, yoghurt or cottage cheese — anything that needs to be discarded comes to us, the packaging gets removed and the packaging is taken to a landfill," he said.

For humans, the food slurry that makes up the fuel source for the biodigesters is not an appetizing mixture. "But to the bacteria in the tank, it is," said Potter. 🍷

Written By: Andrew Maykuth

August 28, 2018

Source: <http://www2.philly.com/philly/business/energy/philadelphia-energy-solutions-food-waste-digester-methane-gas-fuel-20180828.html>

What Are the Worst Types of Litter?

Plastic straws aren't the only environmental contaminants missing the trash can, or, rather, the recycling bin. As companies such as Starbucks move away from plastic straws, environmental advocates say these items aren't the worst litter offender. "Straws are getting a lot of news, but on a volume basis, straws are literally ... a drop in a bucket," Noah Ullman, CMO of Keep America Beautiful, told USA TODAY.

The national nonprofit works with more than 600 community-based affiliates and organizations to end litter. Plastic straws didn't even make it into the organization's top five most common forms of litter, according to the group's latest national study. Cigarette butts, paper, food wrappers, confections and napkins/tissues topped the list.

While some of these items might get into the environment by accident, experts say in most cases, people are to blame. "The products themselves generally aren't bad in and of themselves," said Mark Dancy, president of Waste Zero, which leads hundreds of waste-reduction programs nationwide. "They become bad if you don't recycle them. The worst is if they become litter."

Here's what you should know about some of the most common items littering our nation:

Cigarette butts:

Even though smoking rates are down nationally, tobacco trash is among the most frequently littered items in America, according to Keep America Beautiful. Cigarette butts are easy to toss on the ground, especially when ashtrays aren't nearby. "Some people don't consider cigarette butts litter," said Angela Spears, communications specialist at Keep Florida Beautiful. Spears said improperly discarded cigarette butts in Florida often end up in waterways, posing serious risks for marine life.

The Ocean Conservancy collected more than 2.4 million cigarette butts with plastic filters along the world's beaches and wa-

terways, according to its 2018 report. That's enough cigarette butts to line the distance of five marathons.

Texas Transportation Commissioner Jeff Austin III, also behind the Don't Mess with Texas litter prevention campaign, told USA TODAY cigarette butts are a repeat offender in his state, where more than \$30 million a year is dedicated to trash collection along roadsides.

Most cigarette filters are made of a form of plastic that isn't biodegradable. So, they can remain in the environment for months or years, and are known to start wildfires. Cigarette butts recently sparked two wildfires at Lake Tahoe, local California station KCRA reports. In 2014, an improperly discarded cigarette ignited a fire that killed four people in a New Jersey motel. Becky Lyons, COO of Keep America Beautiful, advises smokers to keep a portable ashtray with them.

Fast food wrappers and cups

Plastic, paper and Styrofoam cups are a common find along California roadways. Mark Dinger with the California Department of Transportation said litter removal totaled about \$67 million last year. Jagjiwan Grewal, acting chief of the stormwater program there, advises drivers to keep a small bag in the car for cups, wrappers and bags leftover from meals on the road. *"By doing a small due diligence, we can keep our roadways clean,"* Grewal said.

Plastic bags

Plastic bags, both empty and full of trash, are among some of the most prevalent pieces of litter in New York, according to the New York State Department of Transportation. The department reports collecting more than 73,000 bags of trash and other litter between April 2017 and March 2018. Joseph Morrissey, a spokesperson for the department, encourages drivers to *"keep trash inside their vehicles."*

Plastic bags – actually, plastic of any kind – is also a huge problem in coastal areas such as Brevard County, Florida, where advocates report turtles, birds and sea mammals

eating the litter, which can clog animals' digestive tracts, Spears said.

Food

Some don't realize that by tossing an apple core out the window, they are littering. While food might break down faster than plastics, Austin noted the act of leaving it outside of a trashcan is still considered illegal in many states, Texas included. Aside from making areas dirty, leftover food can also attract animals to busy roadways, which poses serious risks to the animals and motorists.

Other common litter offenders:

- ◆ Tissues
- ◆ Receipts
- ◆ Gum wrappers
- ◆ Plastic bottles
- ◆ Beverage cans

Written By: Ashley May
August 9, 2018

Source: <https://www.usatoday.com/story/news/nation-now/2018/08/09/plastic-straws-litter-common-trash-common-america/840806002/>





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WM Pollinator Gardens Wins Friends Awards

About two dozen environmental volunteers and community partners ducked darting butterflies and buzzing bees recently to celebrate an auspicious accomplishment.

The achievement: Waste Management's 5-year-old pollinator garden built and monitored by the partners was named the Wildlife Habitat Council's Pollinator Project of the Year and Landscape Project of the Year for 2017 and received the organization's Gold Conservation Certification for wildlife habitat creation and improvement work. The awards were presented to the team during the Council's November symposium in Baltimore.

The team came together on the beautiful evening of July 26 to enjoy the color and activity of their garden and to dedicate a sign that memorializes the recognition they earned. The garden, which includes a meadow area, covers about 1.5 acres and is located along Pennsbury Road near Pennsbury Manor.

In 2013, the wildlife habitat team from Waste Management's landfill complex invited partners from the Falls Twp. Senior Center, The Pen Ryn School and Pennsbury Manor to help launch what the Council calls a "Laboratory for Learning Demonstration Pollinator Garden" in a grassland on the company's property. The plan was to create an oasis for pollinators, including bees and monarch butterflies.



A Halloween Pennant Dragonfly resting within the Garden.
Photo Credit: Waste Management

As the garden, its plants, and number of winged visitors grew, the project team grew to include more than 50 Waste Management employees, 20 Falls Twp. Senior Center Garden Committee members, students and teachers from The Pen Ryn School, and staff and volunteers from Pennsbury Manor. The project also sprouted a second garden – at the senior center.

Work performed by the team included preparing the soil for planting, planting the dozens of native pollinator-attracting perennials, mulching, weeding, watering, trimming and monitoring the bird and inspect pollinator species drawn to the garden.

"It's been a wonderful learning experience for our members," Falls Twp. Senior Center Manager Cecelia Murphy said. *"Our Garden Committee came together when Judy (Archibald, Waste Management wildlife habitat coordinator) approached us about the garden."*

"It was our training garden," Mrs. Murphy said of Waste Management's plot. She said the center's committee members quickly caught the pollinator bug and began making plans to turn a center lawn into a pollinator garden. *"It's been a terrific learning experience for me and our members, the whole planning stage, how to lay out the garden, how to install the pavers, what plants go where, what plants to get. It's been fantastic,"* Mrs. Murphy said.

Mrs. Murphy said about 20 Garden Committee members tend to a long list of maintenance tasks performed each week in the center's garden and some of the committee's members continue to help with monitoring at Waste Management's garden.

"It's been a terrific experience learning about the butterflies and the needs of these creatures and how we can help. Our members have learned how to tag butterflies, which is amazing. You don't think about it. Who puts a tag on a butterfly?" Mrs. Murphy asked. *"Without Judy com-*

ing up and saying ‘how would you like to do a garden?’ I don’t think we would have done it on our own ... I don’t think we would have thought of anything like that. The pollinator garden is a wonderful asset to our Senior Center and we appreciate the continued help and support of Judy Archibald and Waste Management as our partners in this wonderful venture,” Mrs. Murphy said.

“We attribute the projects’ success to the commitment and dedication of our employees and community partners,” Waste Management District Manager Bobby Jones said. “We’re proud of what this project has done for the environment and how it is expanding community awareness, knowledge and commitment to biodiversity, increasing healthy habitats and advancing pollinator survival and monarch butterfly conservation.”

Waste Management’s project team produces a growing-season newsletter and its citizen scientists, trained by the Pennsylvania Department of Agriculture, monitor, collect data, and share information about bees and other pollinators. The garden was certified as a Monarch Waystation



Viceroy Butterfly on Coneflower
Photo Credit: Waste Management

in 2017 and recently certified by the North America Butterfly Association.

In 2018, 36 different species of pollinators, including, bees, moths, wasps, butterflies, and dragonflies, were identified within the WMPA Pollinator Garden. The Garden contains 41 different varieties of plants. 🦋

Submitted By: Waste Management
August 16, 2018



Celebrating a big win for the environment at Waste Management of Pennsylvania’s Falls Twp. Pollinator Garden, left of sign, front from left, Mary Ellen Schuler and Diane Schuler; back, Amy Fleming, Dan Taylor, Joe Schuler, Joseph Schuler, Joe Schuler, David Archibald and Scott Perin; in front of sign, Judy Archibald, Kim Souyack, J.J. McDonnell, Mason Souyack; right of sign, front, Jenna Souyack and Christine Lopez; middle, Bobby Jones, George Souyack, Betty Ann Rotella, Carolyn Forester, Robert Beard; back, Paul Bermillo, Emma Bermillo, Daniela Bermillo, Karl Forester, and Falls Twp. Senior Center Garden Committee Representative Carl Lang.

Photo Credit: Waste Management

The Keystone SWANA Family

The Keystone Chapter of SWANA is going strong. Over the past eight (8) months we have added 63 new members to the family. The Keystone Chapter provides many benefits by fostering cooperation among solid waste professionals and by providing educational opportunities to enhance the knowledge and expertise in the solid waste management field. We would like to take a moment to thank everyone who has joined the family since the winter publication.

- Richard Moyer, Green Mountain College
- Sheena McCarthy, Montauk Energy Capital
- Tara Hemmer, WM Safety Services
- Leah Blinn, Civil & Environmental Consultants, Inc. (CEC)
- Matthew Neely, Tunnel Hill Partners
- Amanda Davidson, Penn Waste Inc.
- Abbey Foltz, Seneca Landfill, Inc.
- Kenneth Jones O'Brien & Gere
- Bill Forrest, Brigade Electronics, Inc.
- Carolyn Witwer, Penn Waste Inc.
- Tim Horkay, Penn Waste, Inc.
- George Rettew, LCSWMA
- Terry Keene, Keene Environmental Consulting LLC
- Lynne Jeffries Chester County Solid Waste Authority (CCSWA)
- Michael Schmidt, Gold Medal Environmental
- Steven Burn, Southeastern Chester City Refuse Authority
- Wesley Wagner, CCSWA
- Troy Cooper, City of Philadelphia
- Garry Howell, City of Philadelphia
- Wanda Jones, City of Philadelphia
- Bianca Reid, City of Philadelphia
- Faruq Scott, City of Philadelphia
- Michelle Simmons, City of Philadelphia
- William Smith, City of Philadelphia
- Maria Vamvakidou, City of Philadelphia
- Keith Warren, City of Philadelphia
- Carlton Williams, City of Philadelphia
- Lamar Williams, City of Philadelphia
- Mikel Woods, City of Philadelphia
- Mark Brace, Otto Environmental Systems
- Yvonne Plakot, East Penn Sanitation, Inc.
- Peter Kendall, Dumpster Market
- Marge Buttray, Deist Industries
- Swati Hegde, Rochester Institute of Technology
- David Spang, CEC
- Caleb Nauman, Millersville University
- Bryan Largent, ARM Group Inc.
- Lindsay McGuire, LCSWMA
- Patrick Hart, Edge Insights
- Catherine Sultzbaugh, LCSWMA
- Jill Hamill, CEC
- Brett Reinford, Reinford Farms Inc.
- Robert Kelly, Pennsaco, LLC.
- Michael Trupin, Trinity Consultants
- Carl Hursh, MSW Consultants
- Lee Laubscher, Cummings & Smith
- Gregory Miller, West Virginia University
- Dave Moniot, Venture Engineering & Construction
- Randall Zortman, Tire & Rubber Inc.
- Tim Matthews, Commonwealth Drilling Company
- Stan Siegel, ARC Technologies Corp.
- Randy Deardorff, Republic Services
- Evan Onuskanych, BAI Group Inc.
- Sirous Djafari, APTIM
- David Sharp, Covanta Energy
- Matthew Walp, Foley, Incorporated (CAT Dealer)
- Scott Kupper, Kupper Engineering, Inc.
- Don Olmstead, Venture Engineering & Construction
- Jeff Laskey, Venture Engineering & Construction
- Ford Berg, Berg Construction, LLC
- Aaron Rice, LCSWMA

See "Family" continued on page ##

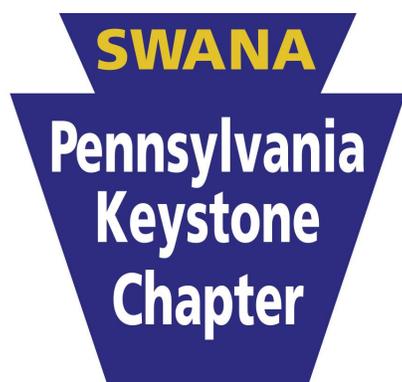
“Family” continued from page ##

- Mengxi Tan, Carnegie Mellon University
- John Wood, CH2M Hill
- Pat McCain, PSB Industries
- Xinyi Peng, Carnegie Mellon University

The Keystone Chapter strives to share pertinent information and provide continuing education that serve members' interests. The Chapter sponsors a variety of activities and programs including; academic scholarships, the annual regional landfill equipment and truck road-e-o, certification training, mini-technical seminars, and more!

If you are or someone you know is interested in joining the Keystone Chapter SWANA, please visit our website at <http://www.keystoneswana.org/> or contact Chanda Martino by phone at (866) 467-9262 or by e-mail at:

chanda@keystoneswana.org 📧



SOLID WASTE ASSOCIATION
OF NORTH AMERICA

Joseph J. Dougherty, Jr. - Passes at 82



Joseph J. Dougherty Jr., 82, of Ephrata, PA, a frequent judge for the SWANA Road-E-O, passed away peacefully on Friday, July, 6, 2018 surrounded by his family.

Born in Miners Hospital in Ashland, PA, Joe was proud to have grown up in Mt Carmel, PA. He was the son of the late Joseph J. Dougherty Sr. and Marguerite (Bloom) Dougherty. He was the loving husband of Catherine A. (Beaver) Dougherty with whom he shared 52 years of marriage.

Joe was a 1954 graduate of Mt Carmel Catholic High School. He enlisted in the United States Air Force after high school and served honorably during the Korean Conflict as a Staff Sergeant, Cryptograph Operator. Joe retired from Federal Mogul after 35 years of service as a receiving and parts clerk. Following his retirement, he worked part time in the circulation department at Lancaster Newspapers for 10 years.

Joe was a member at St. Anne's Catholic Church where he served as a Eucharistic Minister and enjoyed volunteering with the kitchen crew. Joe was a life member of the Anthracite Steam Fire Co., Mt Carmel, PA. He was a founding charter member and past Grand Knight of the Knights of Columbus Council #6810. He was also a member on the Knights of Co-

lumbus 4th Degree Assembly #915 as well as a member of the American Legion Post #56 Lititz.

In addition to his wife he is survived by two children, Joseph J. Dougherty III, husband of Kimberly (Huegel) Dougherty of Lancaster and Colleen Ann Dougherty of Ephrata; four grandsons Dalton Charles Dougherty, Sean Milton Dougherty, James Anthony Dougherty and Michael Ryan Dougherty; two sisters, Regina Smith (Clark) of Ocala, FL, and Patricia Simmons Splitt (Kenneth) of Kulpmont, PA and also many nieces and nephews who he loved very much.

In addition to his parents he was preceded in death by his son, Sean Edward Dougherty and two sisters, Mary Lou Shultz and Joan Paul.

Joe was known for his love of family and friends and was seldom missing a family event. He followed his grandsons from event to event and game to game. He loved following football especially the Notre Dame Fighting Irish and Pittsburgh Steelers. Joe was known for his many anecdotes and quick witted responses such as *“such as the way of life”* and *“silver new nothing to hang on your nose”*. 📧

“Joe had lots of good times at the ROAD-E-O's and would take time off to be a judge for the Chapter and even for National events. He talked of them often and I know he enjoyed SWANA.” ~ Kay Dougherty

SWANA Keystone Chapter Calendar of Events



For more Information, event registrations, and updated information please go to the Keystone Chapter's website:

<http://www.keystoneswana.org/>

Some events to plan for include:

OCTOBER 2018

- Chapter Fiscal Year Begins
- **No Board Meeting**
- Thursday, 10/7 - 10am: **Young Professionals Tour, LCSWMA, PA**
- Treasurer prepares fiscal audit packets
- Distribute Fall edition of *The Keystone*

NOVEMBER 2018

- Thursday, 11/1 - 10am: **LCSWMA Waste-to-Energy Tour Mini-Tech, Bainbridge, PA**
- Thursday, 11/1 - 2pm: **Board Meeting, LCSWMA, Bainbridge, PA**
- Audit Committee meeting, immediately following Board Meeting
- Treasurer submits Chapter fiscal report to accountant
- Plan to renew Administrative and Marketing Director Contract for next year

DECEMBER 2018

- **No Board Meeting**
- Submit Chapter annual reports to SWANA international

JANUARY 2019

- Thursday, 1/3 - 10am: **Board Meeting Conference Call**
- Tuesday, 1/15: Article deadline for winter edition of *The Keystone*
- Accountant audits financial report and prepares 990 IRS tax filing

FEBRUARY 2019

- Thursday, 2/3 - 10am: **Board Meeting Conference Call**
- Receive Scholarship application from SWANA Headquarters
- Send Scholarship announcement to members
- Distribute winter edition of *The Keystone*

MARCH 2019

- Thursday, 3/7 - 10am: **Board Meeting Conference Call**

APRIL 2019

- Thursday, 4/4 - 10am: **Board Meeting Conference Call**

MAY 2019

- Wednesday, 5/1 Chapter Scholarship Application deadline
- Thursday, 5/2 - 10am: **Board Meeting, TBD**
- Nominating Committee presents Slate of Officers and Directors for election
- Wednesday, 5/15: Article deadline for Summer edition of *The Keystone*

NOTE Schedule is subject to change

The SWANA Newsletter is published 3 times a year in **February, June and October.**

If you would like to have your article included in *The Keystone*, please submit it by the 15th of the month prior to the scheduled release date. Any late articles will be held until the next issue.

As a reminder articles are accepted throughout the year and while we encourage original articles they do not have to be originally written as long as a proper source is cited.

Chapter Officers and Board of Directors

▶ Officers

Sean C. Sweeney, P.E...... **President**

Associate

Barton & Loguidice, D.P.C.

Tom Lock..... **Secretary**

Northeast Regional Manager

SCS Field Services

Michele Nestor..... **Vice President**

President

Nestor Resource, Inc.

Lynn Jeffries..... **Treasurer**

Operations Administrative Assistant

Chester County Solid Waste Authority

Bryan M. Wehler, P.E., P.G...... **Immediate Past President**

Senior Engineer / COO

ARM Group Inc.

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Environmental Services Director

Streets Department, Sanitation Div. City of Philadelphia

Scot Sample

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David W. Horne

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Chester County Solid Waste Authority

Mike Engel

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Wayne Township Landfill

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Public Services Manager

Waste Management

Denise Wessels, P.E.

Project Manager

SCS Engineers

Jill Hamill, P.E.

Project Manager

Civil and Environmental Consultants

Carolyn Witwer

Director of Sales Development

Penn Waste

▶ International Board Member

Robert Watts

Executive Director

Chester County Solid Waste Authority

▶ Young Professional Director

Dan Brown

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*Thank you to all of our
 committee members for
 everything that you do to
 make the Keystone SWANA
 Chapter great!*

► This Publication is for the Solid Waste Professionals of the Keystone Chapter of SWANA

The Keystone is published three times per year (winter, summer, and fall). If you have ideas for future articles, updates, or general suggestions for *The Keystone*, or you would like to advertise with us, please contact the Newsletter Editor, **Alison D'Airo** at Barton & Loguidice, or any member of the Newsletter Committee members listed below:

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Chapter members: please freely share this info with others that you work with or who have an interest in waste news in PA. **Please remember to send Chanda Martino, Administrative and Marketing Director, your current email address** as all future newsletters, as well as informational broadcasts and other communications, will only be sent via email.

Chanda's email is: chanda@keystoneswana.org. If you did not receive your copy of this newsletter emailed from Chanda, *you are not on our email list for news.*

Barton & Loguidice

This publication was produced by Barton & Loguidice on behalf of the SWANA Keystone Chapter.