



The Keystone

Written For the Solid Waste Professionals of the Keystone Chapter SWANA

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Remarks Regarding: Robert Zorbaugh, SWANA’s Past President

Robert (Bob) Zorbaugh is among the ranks of numerous Lancaster County Solid Waste Management Authority (LCSWMA) employees who have volunteered their time and efforts to support Keystone SWANA. Bob began his career with LCSWMA in 1990 and has served as LCSWMA’s Chief Operating Officer since 2010. In this role Bob plans and manages all operational activities. He also directs all facilities management, capital projects and technical services activities. Despite shouldering significant responsibilities for LCSWMA, Bob has actively served as a Board Director, elevating to President in 2014 until turning over the reins to Bryan Wehler in 2016. Mr. Zorbaugh is currently an Ex Officio member of the Board of Directors.

During his tenure as President, Mr. Zorbaugh helped the organization recoup from some financially challenging years and create renewed interest from Pennsylvania’s waste and recycling industry. Through Bob’s leadership, the organization realized a membership growth spurt which continues today. Revenues from Keystone SWANA events and activities increased during Bob’s term as President allowing the chapter to offer a variety of scholarships and support numerous mini technical seminars at minimal cost to its

members. Bob guided the Board of Directors through a new phase of management responsibility during the retirement of Kay Dougherty, long standing Chapter Secretariat.

We thank Mr. Zorbaugh for his contributions and welcome his continued participation as a valued member of Keystone SWANA.

Written By: Michele Nestor, Nestor Resources



Robert Zorbaugh receiving his plaque from Kay Dougherty.

Photo Credit: Chanda Martino

2016 BLS Data Shows Drop in Waste Worker Fatalities

Given the industry's sensitivity around safety in recent years, there had been some concern that refuse collection might actually rise in the top five. However fatalities in Waste Collection are down this year; even when each of the top four occupations (logging, fishing, piloting and roofing) saw fatality increases for 2016. This tracks with a national fatality increase for the third consecutive year to 5,190, the highest number recorded since 2008.

Other national trends included an increase in fatalities among workers age 55 and over, the highest since data was first recorded in 1992, and the fact that foreign-born workers comprised about one-fifth of all fatalities. Private industry workplace fatalities were also up 7% from 2015.

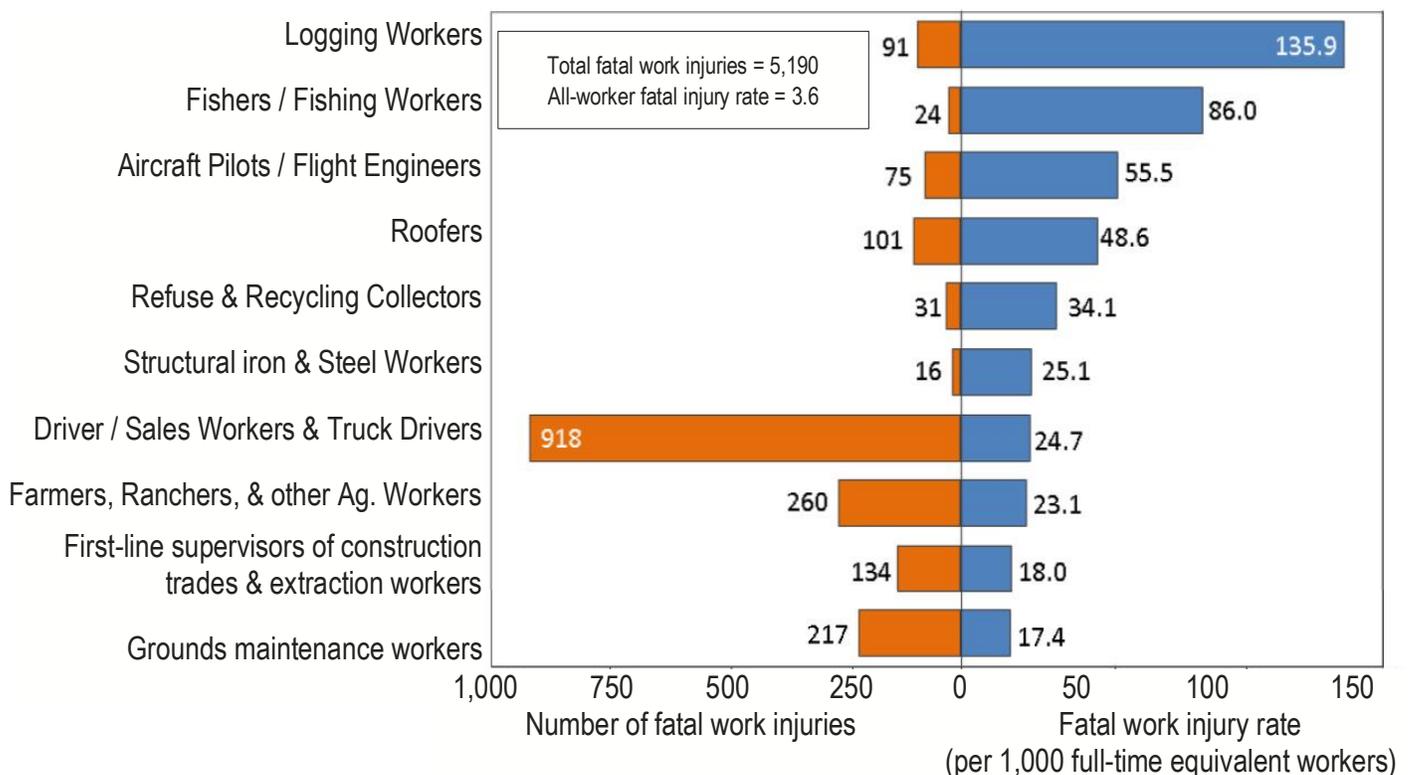
Across all occupations, transportation incidents were the most common, accounting for 40% of all 2016 fatalities. This was followed by "violence and other injuries by persons or animals," "falls, slips, trips," and "contact with ob-

jects and equipment." While the second category may be less relevant, all of the others can be common factors in waste industry safety incidents.

This data provides a welcome counterpoint to recently released 2016 injury data showing that injury and illness rates for landfills and MRF workers were up. Fatalities for both categories are down compared to 2015, showing no direct correlation last year. Though vigilance will still be required in both areas following multiple landfill fatalities this year and an increase in staffing at some MRFs to meet China's new contamination standards. While some executives believe this confluence of events could actually improve safety by encouraging automation, it's too early to know.

Overall a decline in 2016 injury rates and fatalities among collection workers is clearly welcome news after multiple years of industry focus on that area. A growing number of

Civilian Occupations with High Fatal Work Injury Rates, 2016



states have now passed "Slow Down to Get Around" laws, training has become more common and technology is improving to act as a safeguard. All of this points to a potentially positive direction for industry safety, but the occupation's continued place on the top five list is still a reminder that companies and local governments must continue working to change the status quo.

The Statistics

- ◆ Fatality rates for refuse and recyclable material collectors declined in 2016, though the occupation still remains the fifth most dangerous in the U.S., according to the Census of Fatal Occupational Injuries Summary from the Bureau of Labor Statistics (BLS).
- ◆ A total of 31 workers in this occupation died on the job last year, with a fatality rate of 34.1 per 100,000 people. This is down from a rate of 38.8, in 2015.
- ◆ Transportation incidents were cited as the primary cause.

The broader category of "waste management and remediation services," which includes other occupations besides traditional solid waste and materials management, had 67 recorded fatalities for 2016. The vast majority occurred among private sector versus government workers. Within that overall category, five fatalities were reported at solid waste landfills and one at a material recovery facility.

Written By: Cole Rosengren, Waste Dive
Published: December 19, 2017
Source: <https://www.wastedive.com/news/bls-refuse-collection-fatality-rate-down-still-fifth-most-dangerous-job/513413/>

Chinese Gov't Finalizes Waste Import Restrictions

The Chinese government has finalized the proposed waste import restrictions and, unfortunately, have not made any changes to the categories of material that are banned or the contamination levels applicable to paper and plastic. SWANA is, and will be, speaking with U.S. and Canadian government officials, municipalities, other industry groups, recycling companies, and foreign stakeholders, to identify next steps. On January 11, SWANA issued a press release about the finalized standards which has been picked up by various industry news sites.

SWANA have been contacted frequently by the media in the U.S. and Canada over the past several weeks about this issue, and we expect there will be additional press inquiries in the days and weeks ahead. With 2018 import quotas at dramatically lower levels than in previous years, some material is already going to alternative foreign markets in Asia. However, we understand that storage of baled material is occurring in numerous locations in the United States and Canada, and that in several states and provinces, certain material is being disposed in landfills and waste-to-energy facilities. We expect this to continue, and potentially occur in additional locations, as the waste restrictions take effect. A round-up of some of these news stories were published in this week's I Am SWANA newsletter.

The impact of China's waste import restrictions on North American recycling programs and operations will be the subject of a high-profile Keynote Session at SWANApalooza in Denver on March 6. EPA and Waste Management, along with municipal and state officials to be identified shortly, will discuss how they are responding to this challenge. I hope you will join us for this timely session and the other networking and educational opportunities that we will be providing – with the assistance of our Colorado chapter – in Denver. Please encourage members in your chapters and Technical Divisions to register for SWANApalooza.

SWANA Press Release by Jesse Maxwell, Advocacy & eLearning Program Manager, SWANA.

Recap: LFG Operations and Maintenance Training



Training Members are sitting comfortably as they learn about proper operations and maintenance

Photo Credit: Chanda Martino

Even though I have been involved in SWANA's Landfill Gas and Biogas Technical Division I had not found the time to take this course. Not only did I find the time, but twenty others from PA, MD and KY also attended this course in November. Scott Messier from SCS Field Services was the lead instructor and did a great job putting the two days of instruction and information together.

Scott also enlisted help from Josh Roth from SCS Engineers to give an engineer's perspective on some of the ten lessons that make up this course. Another nice touch was that Scott had two salesmen talk about their landfill related products over the two lunches. We had David Ryan from Ryan Equipment the first day and Randy Oppenheimer from QED the second day. It was great to have these two competitors answer questions and talk about their products.

I almost always pick up at least one new idea from SWANA's conferences, mini-techs and courses. This course was no exception – we decided to buy a few four gas analyzers that can be clipped on your belt. These analyzers have added to the safety of our employees working around the landfill. I hope you can make the next SWANA training course hosted by the Keystone Chapter that is planned for November 2018 – Zero Waste Principals and Practices.

Written By: Bob Watts, Chester County Solid Waste Authority



Participants follow along with the presentation.

Photo Credit: Chanda Martino

Fifth Graders Show off Their Poster Making Skills

Congratulations to the “Reduce, Reuse, Recycle, Read” Poster Contest Winners!

This fall, the Centre County Recycling & Refuse Authority, Weis Markets and the Centre Daily Times kicked off a poster contest that was open to all 5th grade students in Centre County. The students were asked to design a poster around the theme “Reduce, Reuse, Recycle, Read.” We received hundreds of entries, and on October 13, fifteen artists were selected as our winners.

We would like to congratulate the following students for their winning posters: Ally Duncan, Gray’s Woods Elementary School; Blake Wheeler, Wingate Elementary School; Cedric Bagwell, Benner Elementary School; Emily Lovrak, Pleasant Gap Elementary School; Emma Haagen, Marion Walker Elementary School; Erika Lucas, Philipsburg-Osceola Middle School; Hannah Rose Craig, Our Lady of Victory; Isabel Olson, Gray’s Woods Elementary School; Jade Brown, Pleasant Gap Elementary School; Lillian Hodges, Centre Learning Community Charter School; Madison Stimer, Port Matilda Elementary School; Marinn Peters, Penns Valley Intermediate School; Poppy Rusca, Park Forest Elementary School; Sena Andrews, Mountain Top Elementary School and Taylor Brown, Marion Walker Elementary School.

The 15 winning posters will be made into a 2018 “Reduce, Reuse, Recycle, Read” wall calendar that will be distributed to all 5th grade students in Centre County. The calendars will also be

available free of charge at our five local Weis Markets stores.

For additional information, please contact Joanne Shafer at 814-238-7005, or

aschirf@centrecountyrecycles.org

Written By: Amy Schirf, Centre County Recycling & Refuse Authority



Pittsburgh Seeks to Expand Recycling in 2018

Pittsburgh City Councilman Dan Gilman listed expansion of the city's recycling program among his priorities for 2018. Although mayor Bill Peduto recently announced that Gilman would leave his city council post in January to take over as Peduto's chief of staff, Gilman laid out four primary objectives for 2018:

- ◆ moving from bi-weekly to weekly pickup,
- ◆ providing blue bins to residents,
- ◆ launching an e-waste and hazardous waste recycling program, and
- ◆ increasing the number of recycling receptacles in parks and on city streets.

Gilman said though conversations with the Public Works Department are underway now, the initiatives will take some time to implement. *"It's not going to happen in one year,"* Gilman said. *"We're going to have to be strategic about where we can find money from corporate partners and foundations and non-profits. We're going to have to be strategic about what's the most important and going to have the highest rate of success and work together to really look at more of a two, three, four year plan to roll all these out."*

One of the obstacles to expanding options for recycling in the city is funding, said Gilman. Recycling Supervisor Kyle Winkler said a robust blue bin program, for example, could cost \$2 to \$3 million. That's not just the cost of the approximately 120,000 blue bins themselves, Winkler said. It would also include distribution of the bins, special sensors on the trucks to read microchips embedded in the bins that link them to particular addresses, and a back-end interface to help the team understand the data collected.

But Winkler said city-provided blue bins and weekly pickup could end up being cost neutral or even cost-savers in the end if they encourage more people to recycle. *"As we switch over from less landfill (to) more recycling, we'd be able to take more trash trucks out of service and consolidate trash routes,"* he said.

The city actually offered weekly pickup when the recycling program first launched under former Mayor Sophie Masloff in the early 1990s, said Winkler. He did not know when exactly the change to bi-weekly pickup was made, but said it was likely due to a lack of participation in the program.



Photo Credit: thrillist.com

The possibility of offering e-waste and hazardous waste recycling to residents is currently being explored. The city is seeking proposals for a company to offer the service, which varies in cost depending on the type of material. At the high end, it's \$.90 per pound for tube televisions. *"There's not a lot of economic drivers for this right now. It's not*

a winner," Winkler said. *"It certainly would be a huge resource or a value-added resource if the city could make this happen."*

Winkler said putting more recycling receptacles in city parks and on streets would also require a significant investment, but that the city wants to *"walk the walk"* when it comes to recycling. Winkler said city-wide, there is about one recycling can for every ten trash cans; recyclables put into trash receptacles end up in the landfill.

Chief resilience officer Grant Ervin said the proposed initiatives are all part of a broader effort to pursue a zero waste strategy. *"It is a lofty goal, but it's also more of a*

journey than it is a destination,” Ervin said. “Thinking in terms of zero waste allows us to take a step back and think about how materials could be reused, re-purposed or recycled.”

Ervin said the administration is interested in pursuing economic development opportunities around the re-use and remanufacture of recyclable materials. *“The political will is there,”* said Ervin, adding that such initiatives could help off-set the cost of expanding recycling in the city.

In addition to the capital budget, Gilman said other financing could come from grants or partnerships with corporations or foundations. He said recycling as a whole used to be a more lucrative endeavor for the city, but that the value of recyclable materials has fallen over the years.

“We were able to take the money we made in recycling and invest it into the program for many years so that we were able to advance new efforts,” he said. *“That revenue stream is gone, so we have to find new revenue streams to make these new advancements.”*

Written By: Liz Reid

Published: December 18, 2017

Source: <http://wesa.fm/post/expanded-recycling-pittsburgh-could-include-blue-bins-weekly-pickup#stream/0>



Photo Credit: wesa.fm

PA Biomass Energy Assoc. Elects Three New Directors

On October 31, 2017, the Pennsylvania Biomass Energy Association (PBEA) announced the election of three new Directors to its Board.

- ◆ John Costlow, President and CEO of the Sustainable Energy Fund;
- ◆ Tim Williams, the Regional Marketing Representative for Barton & Loguidice; and
- ◆ Chris Clark, the Energy Program Manager for Clean Energy, Biomass for the Maryland Energy Administration.

PBEA is the non-profit trade association representing the use of biomass to produce clean heat, power, biogas and soil amendments in Pennsylvania and around the Mid-Atlantic region. The association is focused on the use of biomass in the residential, small business, commercial, institutional, agricultural, and industrial sectors.

PBEA Board Chair, Paul Lewandowski of AFS Energy Systems, Inc., remarked: *“We are very fortunate to have both a strong architectural and engineering company who understands the variety of biomass systems as well as the energy department for Maryland join the PBEA Board to help grow the biomass industry in our region. We’re also thrilled to have John Costlow return whose expertise and organization has provided foundational support for many clean energy industries and knows the impact biomass can have.”*

The new Directors join current Directors Paul Lewandowski from AFS Energy Systems, Inc., Paul Kohl from the Philadelphia Water Department, Michael Jacobson from the Penn State Department of Agricultural Sciences, Geoffrey Bristow from the Pennsylvania Department of Environmental Protection, Dan Rider, from the Maryland Department of Natural Resources and Patrick Serfass, Executive Director of the PA Biomass Energy Association.

Released by: PA Biomass Energy Association
Release Date: October 31, 2017

Save the Date!

...for the upcoming Mini-Tech Seminar and Ryan Equipment Demonstration.

What

Keystone SWANA is hosting a half-day seminar to highlight products of manufacturers that Ryan Equipment Sales Company represents, many of those used by SWANA members every day. Beyond the physical and beneficial sales uses of these products, David Ryan will also review the technical applications and uses as well as operational nuances of these products. This session will also give you a forum to ask questions on the use and performance of the products. Lunch will follow.

Some products that David Ryan will highlight include:

- ◆ John Zink Enclosed and Open flares and blower skid, gas compression/dehydration skids and leachate evaporator system;
- ◆ Blackhawk Gas Well and Condensate Piston Pumps - pneumatic, electric, and solar applications;
- ◆ Elkins Earthworks ENVISION Portable Gas Analyzer and Flo-Wing Wellheads; and
- ◆ Thermal Instrument Thermal Mass Flow Meters.

When:

April 18, 2018
At 10 A.M.

Where:

Greater Lebanon Refuse Authority
1610 Russell Road
Lebanon, PA

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

Mini-Tech Recap: Geotechnics Lab in East Pittsburgh

In November 2017, Geotechnics Lab hosted a Mini-technical Seminar on soils and geosynthetics testing followed by a tour of their labs. Before getting into the nitty-gritty Randy O'Rourke, the President of Geotechnics, gave an interesting history about the former Westinghouse manufacturing facility in which the lab is located. He showed a short video from the early 1900s of workers building machinery wearing button down shirts, ties and slacks. A little different than the style today.

Randy and JP Kline, Technical Director, each shared some best practices for collecting and shipping samples as well as updates on testing methods. It's always a good idea to check with the lab to make sure you are collecting a large enough sample size and labeling it. And for soil samples, putting paperwork in a Ziploc bag can save lots of trouble because otherwise the paperwork absorbs the moisture from the soil and then the writing is hard to read.

JP explained how some of the geosynthetics testing is run, and how some of the testing has evolved over time. Interestingly, geotextile testing methods originally came from the garment industry since there was nothing else to go by. For instance, Mullen Burst testing was meant for elbows on shirts.



JP Kline Discussing Geotextile Testing Methods

Photo Credit: Chanda Martino

Today test methods are being developed that are specific to use of geosynthetics in construction, such as CBR Puncture testing which more closely matches conditions which a geotextile would be subjected to in construction applications.

After the presentations, the group split into two. Randy lead a tour of the geotechnical lab and JP lead the tour through the geosynthetics lab. We were treated to an outstanding lunch from Blowfish BBQ food truck. I certainly learned a lot at the mini-tech, left with a full belly, and was glad to have attended.

Written By: Denise Wessels, SCS Engineers



Above: Randy O'Rourke leading the tour in Soils Lab.
Below: JP Kline leading the tour in Geosynthetics Lab.

Photo Credit: Chanda Martino



Lanchester Landfill Hosts Annual Disabled Veterans Hunt

Volunteers drive herds of deer through the Lanchester Landfill in Lancaster County. Helping some disabled veterans do what they love: hunt.

It's called the 'Disabled Veterans Hunt' taking place once each year, during Pennsylvania Rifle Season, 3 days of potential deer harvests for 3 different veterans each day.

"I have agent orange, I have Parkinson's from agent orange," explained Fithian. Fithian, a Vietnam War Veteran, hasn't hunted in years. He was very appreciative of the hunt. "It meant a lot - it meant a lot to all three of us I think," he said.

The Pennsylvania Game Commission granting a one day special license to the veterans and the landfill, a safe place for the hunters to take a shot or two. *"We noticed a few years ago we had an overpopulation of deer, and we look for different ways to manage them and keep the herd healthy,"* said Gary Laird, a Wildlife Manager for the Chester County Solid Waste Authority. All in all, a day of giving back: men and women taking the morning off to help out and donations and sponsors which make the hunt possible.

"You know we're always looking for other businesses that want to participate, you know give us something simple - a gift we can give to each hunter, little things like that, go a long way," said Zach Bair, organizer of the hunt and a wildlife biologist for USDA Wildlife Services.

If you or someone you know wants to go on the hunt next year, contact Bair at 717-319-0697.

Written By: Grace Griffaton

Published: December 4, 2017

Source: <http://fox43.com/2017/12/04/annual-disabled-veterans-hunt-takes-place-at-lanchester-landfill-in-lancaster-county/>

Behind-the-Scenes Secrets of Trash Collectors

There are more than 116,000 garbage collectors in the United States, which sounds like a lot until you consider the staggering volume of waste Americans toss out every year: 250 million tons (and growing). And yet, these intrepid men and women are shrouded in mystery. Maybe that's because we only think of them when running to the curb in our undies at 6 a.m. or when stuck behind a truck on our way to Costco.

Well, let ignorance go the way of open-air incinerators. To help clear the mystery surrounding the only people who—unlike mom—will keep cleaning up after you for the rest of your life, we interviewed dozens of garbage collectors around the country about their work, motivation, and, yes, that smell. Here's what we learned:

It's OK to call us garbage men

Politically correct terms are "sanitation engineer" and "waste management professional," but if you ask the men and women who actually do the work there's nothing to be ashamed of in a description that's less euphemistic. Veteran "engineer" Scott Fultz, of Portland, Oregon, speaks for most of his peers when he says that the classic moniker is still the best. "Just call me the garbage man," he implores. "I'm the guy that picks up your sewage. I'm the guy driving the big green truck." Trash collector, trash hauler and, across the pond, "bin men" are also acceptable. (So is their actual name.)

Or garbage women

About 99% of U.S. garbage collectors are men, but that still means that more than 1,000 women are out there hauling trash. And all the garbage women we interviewed say they encounter real surprise when they share their vocational choice. Not that such reactions deter them. "I wear it like a badge of honor," says veteran Memphis collector Kim Hardeman. "I'm a garbage woman, and I love it. I'm outdoors all day. And I don't have to worry about the garbage can talking back to me." And while female collectors may not match their male counterparts when it

comes to strength in numbers, they often have a stronger stomach. Says Baltimore garbage woman Kristen Anderson, "If you could see these grown men going crazy when things get gross..."

These are not jobs for the faint-hearted

Trash collecting routinely shows up on lists of the most dangerous jobs in America, with roughly 30 fatalities per 100,000 workers annually. (Logging, the most dangerous profession, averages nearly 60 deaths per 100,000.) Small wonder: Every aspect of a trash collector's job has the capacity to injure. From heavy lifting to man-eating gears to glass and needles hidden in black garbage bags, disaster is never far away. "The toughest job is the position on the back," says Dallas trash collector Jimmy Johnson. "Mostly because you're jumping on and off the truck." But the most common accident is sadly preventable: collectors getting hit by cars. "It's a very dangerous job," says Orlando garbage man Edwin Hernandez. "A lot of us get hurt. A driver is flying around a curve and doesn't see the garbage man—or the truck—and ..." Part of the solution might just be a change in attitude. "Some people do not see you," says Joe Udice, a trash collector in the suburbs of New York City. "It's a mentality: The garbage truck is there, but it's not really there. Everyone is in a rush. Everyone's the most important person."

These are also not jobs for the faint-nosed

It may be the No. 1 reason more people don't get into garbage collection as a career: that unholy odor, impossible to parse but instantly recognizable. "It all combines into one sour swirl," explains Udice. But after a while, you just stop noticing. "On the way home I might pick up a friend and he'll be like, 'Joe, you stink!' And I can't even notice it." Odor is only one part of an overall gross-out factor that quickly and brutally weeds out the weaklings from the rest of the herd. Minneapolis garbage man Al Gruidl says, "Our running joke—after we dump the garbage from the truck and it's just water and maggots sloshing around—is to see if you can say, 'Mmmm, looks like great soup!'" Not

everyone can. *“One summer, a new guy was standing there just puking his guts out. We always have fun with the new guys.”*

Your trash is not your father’s garbage man’s truck

For many sewage picker-uppers, the days of lifting over-stuffed cans by hand are over. *“In Phoenix, all the trash collectors are drivers,”* says Valley of the Sun veteran Tim Femrite. *“Everything’s automated. We call it curbside pickup, where we drive up next to the bins, pick them up and dump them in. So it’s just me in the truck. It could get lonely for some people, but I like it. It’s my office.”* Even in places where the sanitation department and citizenry are less in-tune, today’s trucks are often high-tech wonders equipped with motion-activated cameras (for avoiding unseen hazards) and onboard tablets that help drivers track houses that have missed collection. *“I’ve had a customer that I need to go back for because they didn’t have their stuff out in the morning,”* says Fultz, the Portland collector. *“I can get that info in real time, whip right back around the corner, get it picked up and not have to worry about the phone calls.”* Trash haulers can also flag residents for particularly poor garbage etiquette, like overfilling cans. *“We call it ‘snow-coning,’”* says Femrite.) You know who you are—and they do, too.

Your trash is our treasure

You know that flat screen you dumped because it was last year’s model? Or that bike your child begged for and never rode? You might have thought those were destined for the compactor, but garbage folk often find new homes for the unloved but usable goods we toss. *“A lot of people throw out vacuum cleaners that are really just clogged,”* Udice explains. Those get a good cleaning and are put to use again. Lamps get fixed and recycled. Old TVs are taken back to headquarters, tested and then installed somewhere else. Just because you don’t have use for it doesn’t mean someone else won’t.



Photo Credit: ChuckleADuck.com

Your trash is our titillation

Most trashcans are filled with the humdrum detritus of day-to-day living: spoiled food, broken appliances, waxen Q-tips, and threadbare underpants. But every so often—a.k.a. pretty much every day—there’s a titillating surprise for the guys and gals who dispose of your rubbish. *“Pornography,”* says Udice. *“A lot of pornography.”* And while some may be shocked that anyone still buys X-rated magazines and videos, Udice is mostly amazed at the volume. *“Never just a couple of magazines,”* he says. *“It’s always like someone just threw out their trove.”*

Your trash is you

Minnesotan Gruidl recalls, *“At the facility where we dump our garbage, one of the trucks, a front-end loader that picks up private dumpsters, was getting ready to offload. Somebody must have jumped in the dumpster that night to stay warm. They dumped it, and there he was down in the pit. The entire operation stopped. The guy was rolling around in there.”*

It’s the bag, stupid

The next time you’re shopping for trash bags, take a moment to consider all the stakeholders. Cheap bags are cheap for a reason, and when they fail it’s your garbage collector who will pay the price. *“Guys throw bags into the truck and the garbage busts right out of the bag,”* says Terrell Thompson, a trash collector in Kansas City, Missouri. *“If they’ve been cleaning out the yard where their dog was, well...”* And Thompson wants you to know that it’s not just about the quality of the bag. *“On a hot day,”* he explains, *“bag material will thin.”* In other words, people: Don’t be afraid to double-bag it in the summer.

It’s a jungle out there

“We run into animals all the time,” says Gruidl. And not just raccoons. *“Squirrels have a way of chewing through the lids and getting in and out of the garbage,”* he says. *“So when you dump it into*



Photo Credit: Sqwabb

the hopper, the squirrels fly out and scare the living day-lights out of you.” Kristen Anderson, a Baltimore garbage woman, had a slightly closer encounter: *“I opened a can, and I felt something go up my arm. The guy I was working with jumped back and yelled, ‘Did you see that?!’ It was a rat, and it ran right up my arm. I didn’t notice till it jumped off. I was glad. I might have quit my job right there.”*

We hate autumn

Summer, with its bag-thinning and trash-ripening heat, isn’t easy on garbage folk. And winter’s snow banks are certainly a pain (even if the smell lessens). But the real nightmare season? When the leaves start falling. *“Memphis in the fall,”* says veteran Bluff City collector Kim Hardeman, *“The piles—oh my goodness, it’s overwhelming.”*



Photo Credit: Texastrashhaulers.com

We’re generally pretty flexible

In San Francisco, where Mario Montoya has spent 27 years hauling trash, the Public Works Department “does it all.” That not only means emptying cans, but also cleaning out illegal waste dumps and cleaning up after car accidents and fires—even scrubbing down biological waste on the street. And yes, the job can get frustrating, but for Montoya and many of his peers there’s a pervasive sense of pride in their work. *“We all grew up in this city,”* he says, *“and we’re proud of that. My dad used to say, ‘Whatever you do, whether you’re flipping burgers or flipping dollars, take pride in what you do.’ I think that’s very important, especially in this job.”*

And sometimes we’re very flexible

Joe Udice has a story for you. *“There’s a lot of nice areas in Westchester,”* he says. *“You wouldn’t think sanitation workers would really hook up on route because they smell, but there’s this wealthy divorcee who kept joking with one guy on a three-man crew. So eventually he says to one of the other guys, ‘Do you think you could cover my route for like a half hour?’ And the other guy is like, ‘Are you kidding?’ And the first guy says, ‘I’m gonna try.’ He hit the lottery with that one. The guy has skills.”*

And Finally...

These are not jobs of last resort

“As a kid I always wanted to be a garbage man,” says Orlando garbage man Edwin Hernandez. *“I used to live in the projects, and the garbage men had to come to the back of the house, grab the cans and pull them all the way around the house. I liked helping them. This guy, he was probably about 18 years old. He worked on the garbage truck. His name was Lester. And I followed that garbage truck everywhere it went. So that’s one of the things that inspired me. I always wanted to do it.”*

Written By: Elland Road Partners (Kevin J. Ryan and Deanna Cioppa), Waste Advantage Magazine

Published: October 19, 2017

Source: <https://wasteadvantagemag.com/14-behind-the-scenes-secrets-of-garbage-collectors/>

Penn Waste Debuts Upgraded MRF

Penn Waste has added new optical sorting and artificial intelligence (AI) technologies to the company's single stream materials recovery facility (MRF) in York, Pa. Provided by Bulk Handling Systems (BHS), the upgrade boosts the facility's capacity by almost 30 percent from 35 tons per hour to 45 tons per hour. This comes on the heels of Penn Waste's addition of a Nihot SDS 800i drum separator earlier in the year to increase the facility's capacity to purify glass.

"While others are slowly adapting to the new reality, our system is running more material than ever," Penn Waste Director of Recycling Operations Tim Horkay said in a statement. "This upgrade was accomplished in just nine days and thanks to our partnership with BHS, we did not have to divert even a single load of material. The new container logic allows us to react to our new container-rich waste stream and capture more materials at higher levels of quality with fewer sorters. Commercial recycling isn't easy right now, but thanks to this system and its upgrades, we are out in front and in a position to take on more material."

The \$3.5 million investment includes three new NRT optical sorters and a Max-AI Autonomous Quality Control (AQC) unit. The Max-AI AQC employs a neural network-based AI to identify materials in a similar way to a person. Rather than using deterministic sensors, Max relies on its vision system and probabilistic decision making to provide robotic quality control for the plant's PET containers.

To enhance container quality and improve fiber recovery, a new NRT SpyDIR optical sorter removes small cardboard boxes from the container line. The plant's HDPE sorter was replaced by a new, larger NRT SpyDIR, which is followed by a new NRT ColorPlus that sorts the HDPE by color. A new eddy current separator increases UBC recovery. At the end of the line, the SpyDIR that had previously recovered HDPE was combined with an integrated MetalDirector™ that boosts the plant capture rate by re-

covering the last few plastic and metal containers that were missed by the main sorting process.

"This investment in new technology is a testament to the ownership and management of Penn Waste and their commitment to their customers and employees," BHS CEO Steve Miller said in a statement. "Completing a project like this in such a short timeframe was a challenge we did not take lightly, and our teams really stepped up and delivered. BHS is honored to have this ongoing and very successful partnership with such an excellent company."

Written By: Waste 360 Staff

Published: November 2, 2017

Source: <http://www.waste360.com/mrfs/penn-waste-debuts-upgraded-mrf-featuring-bhs-technology>



Images of the new sorting equipment installed at the York, PA Penn Waste Facility.

Photo Credit: PennWaste.com

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For more information on upcoming events and opportunities, or to register, please visit: <https://swana.org/Training/SWANAOOnline/Webinars.aspx>.

Keystone Sanitary Landfill Expansion Challenge Sent to Commonwealth Court



Photo Credit: Scranton Time Tribune

Friends of Lackawanna’s zoning challenge against Keystone Sanitary Landfill’s controversial expansion plan reached Commonwealth Court - about three years after members first questioned whether the proposal would violate a Dunmore height restriction. Friends of Lackawanna appealed Judge Leonard Zito’s decision in Lackawanna County Court that the grass-roots organization and a group of residents who live in the Swinick development lack legal standing to challenge the nearly 45-year expansion proposal.

Zito, a visiting judge, heard the case on appeal from the Dunmore zoning board after the entire Lackawanna County bench recused itself. The zoning board unanimously agreed a 50-foot height restriction doesn’t apply to Keystone and both Friends and the Swinick residents lack standing. Zito’s April 24th order did not address complex zoning issues such as whether Keystone should be classified as a structure or if Dunmore’s 50-foot height restriction applies to structures rather than just buildings.

That means the state’s second-highest appellate court will decide whether Friends of Lackawanna and the Swinick residents have the right to challenge the expansion. Commonwealth Court could end the battle if it sides with Keystone, unless the Supreme Court of Pennsylvania agrees to hear the case. If it sides with

Friends of Lackawanna, it could send the dispute back to county court for a full hearing on all of the legal issues. *"For over three years, we have continued to take every step necessary to achieve a just result,"* said Pat Clark, one of the Friends of Lackawanna leaders. *"This zoning matter is one of those steps. As to how long will we fight: as long as it takes to win."*

Both sides expressed confidence in their position, with Keystone attorney Marc Jonas saying the Dunmore residents don't live close enough to qualify for the right to challenge the plan and have complaints that are too general, such as how the expansion would look. *"If you don't live right near something and you can't argue you're affected in a way that's different than everyone else, you don't have standing,"* Jonas said. *"(Their objections) don't distinguish them in a way recognized by zoning law."*

Friends of Lackawanna attorney Jordan Yeager said he believes that interpretation is too narrow for something on the scale that the state's third-busiest landfill is proposing. *"I think it's really quite clear they do have standing,"* Yeager said. *"With a significant land use like a landfill, the notion is that people who are impacted by it are not just the people who live right next door. People are also impacted when they can see it and they can smell it and they have to clean up after it every day."*

In the brief Yeager filed to Commonwealth Court, he described some of the residents as living within a quarter of a mile of the landfill and having to clean landfill-related dust and seagull droppings from their homes. Clark contended Keystone is trying to distract the court from the merits of the case, and also felt the standing issue is important. *"We need zoning regulations to allow citizens to protect themselves, their property and their way of life from exactly this sort of uncontrolled growth,"* he said.

So far, Keystone objected to portions of Friends of Lackawanna's brief that outlined its broader case, and Senior Judge Keith Quigley agreed to strike 20 pages of the 70-page document to focus the appeal on Zito's ruling. Keystone has until Nov. 16th to file a brief to the court outlining its position.

*EDITORS NOTE: As of the time of publication no updated information on the pending litigation was available.

Written By: Kyle Wind, Staff Writer at the Time Tribune
Published: October 30, 2017

Source: <http://thetimes-tribune.com/news/keystone-landfill-expansion-challenge-reaches-commonwealth-court-1.2261657>



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EREF Awards \$577K for Waste Research

The Environmental Research & Education Foundation (EREF) announced this December, that it awarded four grants in the area of solid waste research totaling over \$577,000. It's easy to think of innovation in the waste industry as artificially-intelligent sorting machines, video software, and other technology; but innovating the fundamentals, like odor control and waste containment, are equally important to keep the industry up to date with evolving environmental standards.

All of the grantees could make significant findings in those solid waste management fundamentals. The study out of Florida Atlantic University, looking to standardize odor detection for landfills, could work to improve relations between landfills and nearby communities. Developments in leachate containment would also likely be seen as welcome, considering the fact it's substantially cheaper to contain waste and leachate in landfills than it is to clean up contaminated land.

- ◆ Florida Atlantic University was granted \$150,000 to research a standardized, non-subjective measure for nuisance odor detection;
- ◆ California State University, Long Beach, was granted \$125,000 to research and design a material to improve the efficiency of converting landfill gas to energy;
- ◆ Florida State University was granted \$152,105 to gain a better understanding of how "aggressive" leachates (like leachate generated from WTE ash) affect geosynthetic clay liners; and
- ◆ George Mason University was also granted \$150,000 to develop and evaluate composite geosynthetic clay liners to manage aggressive leachate.

EREF extends its reach beyond grant programs. The group provides scholarships, continuing education programs, publishes reports and hosts webinars, all focusing on the waste industry.

Original Article By: Cody Boteler, WasteDive

Published: December 22, 2017

Source: <https://www.wastedive.com/news/eref-awards-grants-to-4-solid-waste-researchers/513417/>

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Note of interest—sponsors to either the Road-E-O or the annual Fall Conference are eligible for a free advertisement in an upcoming issue of the Keystone SWANA Newsletter.

Everyone Wins in Pittsburgh Garbage Olympics



1st Place Trophy

The first Pittsburgh Garbage Olympics turned picking up litter into a sport. On a beautiful Saturday morning five East End neighborhoods went head to head in the competition to see which can pick up the most trash.

Lena Andrews, an organizer and member of the neighborhood group East Liberty Trash Warriors, spoke before the event. *“Everyone has between 9 and 11 to pick up*

as much trash as you can, and put it in a designated place, and at 11 you have to stop,” Andrews said. Then the Clean Pittsburgh Commission, which works on the city’s litter and dumping issues, will weigh the collected trash bags in East Liberty, Lawrenceville, Bloomfield, Garfield and the Strip District to determine which neighborhood takes home the gold.

Andrews said as far as rules go, teams weren’t allowed to take trash out of garbage cans or dumpsters, or place heavy non-trash items into the bags to get an advantage. She was not too worried about that, anyway. *“I mean, I think people who pick up litter aren’t really cheaters,”* Andrews laughed. And anyway, she added, it’s not about who wins. *“I like the nature of competition, to me the Olympics says ‘competition.’ But it also says ‘participation.’”*

Andrews said in the two years she’s been participating in bi-monthly cleanups in East Liberty, she’s really appreciated getting to know her neighbors and working together on the problem of litter. Sarah Shea from Pennsylvania Resources Council is the chair of the Clean Pittsburgh Commission, and she was the one out there on Saturday weighing each bag of trash. She thinks the Pittsburgh Trash Olympics is a great way to get neighborhood resi-

dents excited about something that can feel tedious, even for hardcore volunteers.

Shea said while litter is a pervasive problem in the city, it manifests itself in each Pittsburgh neighborhood in particular ways. Some neighborhoods, like the South Side, struggle with an influx of people coming in on the weekends. That can overflow trash cans. In other neighborhoods, overgrown lots and vacant properties attract litter.

She said neighborhood cleanups are just one way to deal with the problem. *“It’s looking at enforcement of those dumpsters; it’s making sure our trash cans are emptied--educating the public on trying to recycle items versus what they can throw out,”* Shea said. Regardless of how it gets there, Shea said litter has an impact on how people perceive their neighborhood and city.

It’s that perception that Lena Andrews and other organizers of the Pittsburgh Garbage Olympics are trying to change. *“Pittsburgh has a lot of litter, and litter is something that makes a neighborhood look like it’s not cared for--like people don’t care about it,”* Andrews said. *“And Pittsburghers really do care about their neighborhoods.”*

Andrews hopes this year’s pilot will inspire other neighborhoods to join the friendly competition next year. Participants were welcomed from all areas, even if you weren’t a resident of one of the participating neighborhoods. There was even a trophy!

Editor’s Note: The competition resulted in the collection of 1,400 pounds of waste, with the winning team collecting over 560 pounds of bagged waste alone. The East Liberty Trash Warriors were awarded their trophy, featuring Sesame Streets Oscar the Grouch, on Saturday October 14th.

Written By: Kara Holsopple, Allegheny Front

Published: October 12, 2017

Source: <http://wesa.fm/post/first-pittsburgh-garbage-olympics-makes-trash-clean-competition#stream/0>

“Town That Garbage Built” to Be on TV

The small company town of Reduction, aka the “town that garbage built,” is getting a national spotlight. Reality television series “Strange Inheritance” will detailed the village’s history during the second half of its two-day premiere on Fox Business Network on January 16th.

Village owner David Stawovy learned about the series last year while watching a Steelers game, and he emailed the show immediately. His father purchased the town 70 years ago, years after the company had vacated the area. Now David runs the town. *“I talked to some of the people who live in the community, and they’re equally blown away by being an unofficial mayor, the handyman, and the lawyer,”* said TV series host Jamie Colby. *“He’s a retired schoolteacher, and he is 100 percent there for them.”*

The 75-acre property features 19 single family homes and a 1914 school-house-turned-duplex. Residents pay rent to the Stawovy family. The family has kept the village in excellent condition considering its age. Many Reduction residents have lived there for years. Their biggest complaint is having bathrooms in each home’s basement instead of the main floor. About 60 people live in Reduction. During the village’s heyday, it had about 400 residents.

The village was built by the American Reduction Company to house its employees at the waste processing plant along the Youghiogheny River. The City of Pittsburgh paid to ship its metal, household garbage and animal carcasses down the rail tracks for high-temperature “reduction” at this facility in Westmoreland County. The

reduction products would then be sold and turned into items like soap and fertilizer.

“This was the original recycling plant,” David Stawovy told Reuters. American Reduction Company shut down its facility after Pittsburgh opened its own plant in 1936. In 1948, John Stawovy set out to buy one of the vacant homes in Reduction. He owned a dairy farm nearby and thought the land would be a good location for his family. The company official convinced him to spend \$10,000 on the entire village. When he dies in 2014, the property was passed down to his heirs.

“We find a lot with inheritances of this magnitude that the kids really don’t want the responsibility,” Colby said. *“They would have to manage it in the same way his dad did, because he insisted, and that’s not what they want to do.”*



David put the property on the market last year. The land is listed for \$1.5 million with Howard Hanna Real Estate Services. Some interested buyers have come forward in the past several months, but the family is insisting the

new owner will allow tenants up to one year to move. None of the prospective buyers have agreed to those terms.

“For him, as a retired person, he could use that money tomorrow,” Colby said. *“But he set parameters that he thinks are fair and in everyone’s interest.”*

Written By: Lisa Wardle, The Patriot News
Published: January 16, 2018
Source: The Patriot News

Upcoming Conference and Training Opportunities

If you are interested in getting some extra training and meeting fellow waste industry professionals, be sure to check out some of the upcoming conference and training opportunities.

Event	Date	Location
2018 Plastics Recycling Conference	2/19/18-2/21/18	Nashville, TN
SWANApalooza/Annual Landfill Gas & Biogas Symposium/ Road to Zero Waste Conference 2018	3/5/18-3/7/18	Denver, CO
2018 Waste and Recycling Industry Conference	3/5/18-3/6/18	Ponte Vedra Beach, FL
33 rd International Conference on Solid Waste Technology and Management	3/11/18/3/14/18	Philadelphia, PA
Zero Waste Principles and Practices	4/7/18-4/10/18	SWANA HQ , Silver Spring, MD
Medical Waste Management Association 2018 Conference & Expo	4/13/18-4/15/18	Nashville, TN
Institute of Scrap Recycling Industries Convention & Expo	4/14/18-4/19/18	Las Vegas, NV
Ryan Equipment Demo Mini-Tech.	4/18/18	Lebanon, PA
Annual International Biomass Conference & Expo	4/16/18-4/18/18	Atlanta, GA
2018 Waste Expo	4/23/18-4/26/18	Las Vegas, NV
Waste Heat Recovery Expo	5/1/18-5/3/18	Cleveland, OH
2018 Keystone SWANA Safety Summit	5/9/18	Harrisburg, PA
North American Waste-to-Energy Conference	5/14/18-5/16/18	Lancaster, PA
MOLO Bootcamp: Manager of Landfill Operations	6/11/18-6/15/18	SWANA HQ , Silver Spring, MD
1018 PROP Conference	7/25/18-7/27/18	Harrisburg, PA
WASTECON 2018	8/20/18-8/23/18	Nashville, TN
Keystone SWANA/PWIA Joint Conference	9/5/18/9/6/18	Harrisburg, PA
2018 NWRA Mid-Atlantic Annual Conference	10/2/18-10/3/18	Hot Springs, VA
2018 E-Scrap Conference	10/9/18-10/11/18	New Orleans, LA
2018 Resource Recycling Conference	10/22/18-10/24/18	St. Louis, MO

Grand Central Landfill Hosts Chili Cook-Off



The Grand Central Landfill hosted the first of its kind in the Slate Belt on November 11, 2017. A Chili Cook-off that supported ten (10) Slate Belt non-profit organizations.

The cook-off was part of the landfill's open house. Residents from all over the Slate Belt came to taste chili made by The Lookout Fire Company, Families First of Pen Argyl, The Slate Belt YMCA and The Slate Belt Regional Police to name a few.

It was a perfect day for a hot bowl of chili. The sun was shining; the winds were low and it was a high of 38 degrees! But that didn't stop the 100 or so participants from nominating their favorites. There was even some trash talk by the local firemen; teasing one another about who has the better crock of chili.

Participants of the event voted for their favorite to be included in the People's Choice Award. Pennsylvania State Representative Marcia Hahn and Senator Scavello's office joined Waste Management in a

blind taste test of the ten pots of chili to vote for the Grand Prize Winner.

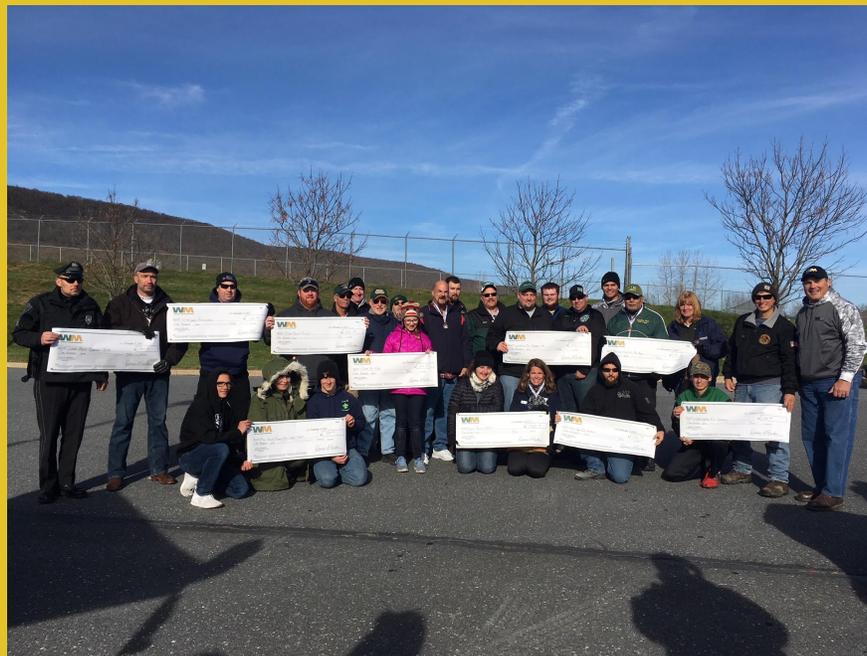
While guests tasted chili, children played games and families took tours of the landfill. Before the announcement of the winners, Grand Central's Gas Operations Manager Jeffrey Fors, an Iraq War Veteran, lead the attendees in a moment of silence for Veterans Day.

Waste Management donated \$3,000 for the prize money and awards. The Slate Belt Regional Police was awarded the Grand Prize of \$1,250. The Lookout Fire Company was awarded the People's Choice award, winning \$750.

"Grand Central Landfill supports many non-profits in the area, but we wanted to find a way to help bring awareness

to as many as we could. An event like this was fun and got the crowd excited to see who was going to win. We're looking forward to the 2018 event!" said Community Relations Manager, Adrienne Fors.

All ten organizations that participated went home with \$100, compliments of Waste Management.



Cook-off participants display their prizes!

Photo Credit: Waste Management Inc.

Written By: Adrienne Fors, Waste Management

A Look at Residential Food Waste Collection

BioCycle and the Institute for Local Self-Reliance (ILSR) undertook a survey of residential food waste collection programs across the U.S. from June to November of this year. BioCycle contracted with ILSR to conduct the *2017 BioCycle Residential Food Waste Collection Access Study*, which was last updated in 2014 (see “Residential Food Waste Collection In The U.S.,” January 2015). This year’s study - the eighth since BioCycle began the national survey in 2005 - includes residential food waste drop-off programs for the first time.

The 2017 survey is utilizing the term “access,” defined as number of households able to participate in a given program, regardless of actual participation. Therefore the number of households with access does not necessarily equal the number of households partaking in the service - not all households in service areas will choose to participate.

The 2017 BioCycle Residential Food Waste Collection Access Study only includes programs that are actively offered or supported by local government. It does not cover private haulers offering subscription service for residential food waste collection independent of the government’s involvement. A number of private collection programs offer residential services, providing another means of access to numerous communities, but these programs are outside the scope of this study.

This article is a Preview of the full report, available as a PDF that can be downloaded at BioCycle.net by BioCycle readers with a paid subscription. The full report includes tables listing all the curbside and drop-off programs in the U.S., numerous charts and graphs illustrating survey data, and an analysis by ILSR and BioCycle. We thank all the residential food waste collection program managers, state U.S. households with access to curbside food waste collection organics recycling agencies and many others for their participation in the 2017 BioCycle Residential Food Waste Collection Access Study. BioCycle also thanks the

Foodservice Packaging Institute and the Biodegradable Products Institute for their underwriting of this study.

The Big Picture — Curbside

The number of curbside collection programs has increased from 79 in 2014 to 148 in 2017, or 87 percent (Table 1). As many programs are administered by counties or solid waste districts, not individual cities, the number of communities being serviced is also counted. This year, households in 326 communities have access to food waste collection, up from 198 at the time of the last study (a 65% increase). There are curbside programs in 20 states; three of those states added programs since 2014, and thus are totally new to this study. Finally, 5.1 million households have access to curbside collection, a growth of 2.4 million since the last study (Table 1).

Scale and Type of Curbside

Curbside programs are classified as either standard offering, opt-in, or mandatory. Of 77 programs reporting data for this question, 47 are “standard,” meaning organics collection is offered alongside trash and recycling, with no extra steps needed for residents to participate. “Opt-in” programs, which represent 21 of the 77, require residents



A “Love but not Waste” Food Waste Bin
Photo Credit: KMTR



Photo Credit: Wake County Government

to sign up to receive food waste collection service. Often, these programs are serving only a small portion of households with access. For example, in Bellingham, Washington, 19,000 households have access to

curbside collection, but only 5,000 have signed up to participate. Finally, there are the mandatory programs, where all residents must participate. There are eight mandatory programs, half of which are in California. A summary table in the full study report identifies these 77 programs and the type of service.

Programs are also classified by their scale of service — either pilot, partial, full-scale single-family dwellings, or full-scale all. Out of the 73 programs reporting this data, 11 are pilots, serving a relatively small number of households. Seven programs are partially rolled out, with plans to expand service. The majority of programs are full-scale single-family dwellings, meaning all single-family households receive service. (This may include small multifamily dwellings in cities that provide trash service.) Full-scale “all” means every single household has access to service, including multifamily dwellings. Only 11 programs have reached this scale of service.

Curbside Materials Accepted

This year, the access study delved further into what materials each program accepts. All 148 programs take fruit and vegetable scraps, and over 90 percent of programs accept meat, fish and dairy. After that, however, there is quite a lot of variation. The majority of programs take paper bags and uncoated food-soiled paper. Less than half of programs are accepting compostable plastic products, such as compostable plastic bags, compostable plastic-coated paper products, and compostable plastic packaging and foodservice items. Molded fiber containers and food-soiled paper coated with conventional plastics round out the bottom of the list, with less than a quarter of programs accepting the fiber containers, and about 7 percent taking conventional plastic-coated paper.

Curbside Program Success

Fifty-four out of 71 survey respondents reporting for their programs consider their program successful. Fifty of those provided reasons for success. Meeting diversion goals was by far the most prevalent reason (41 of 50), followed by cost effectiveness (26 of 50) and avoided disposal costs (25 of 50). Only five out of 71 consider their program unsuccessful.

Twelve of 71 survey respondents reporting for their programs weren't sure whether their programs are successful. Most commonly, this was due to the newness of the program. Five of the programs are still in the pilot phase, and four had just started or were still in the process of rolling out at the time of the survey. The other three programs deemed they did not have the necessary tools to measure success.

The Big Picture: Drop-Off

As noted, the 2017 BioCycle Residential Food Waste Collection Access Study includes data on drop-off programs — a growing phenomenon — for the first time. While no historic data is available for comparison, according to survey participants, 26 of 49 drop-off programs reporting this data have started in the past three years. In total, 67 drop-off programs are included in 15 states — five of which have no curbside programs, demonstrating the value of drop-off programs in introducing food waste collection to new areas (Table 2). These drop-off programs serve 318 communities; 6.7 million households have access. (Note: Due to New York City's extensive drop-off program, all residents are considered to have access, meaning that NYC accounts for 3.9 million households of the 6.7 million.)

Types Of Drop-Off

The types of drop-off programs are varied, from round-the-clock access to weekly availability at farmers markets. Some are located at transfer stations or recycling depots, where residents can bring their food scraps along with household recyclables. New York City has been operating drop-off sites at more than 50 farmers markets for a number of years. More recently, drop-off locations were

opened at subway stations, public libraries and other heavily trafficked areas.

Drop-off Materials Accepted

Like the curbside programs, all drop-off programs accept fruit and vegetable scraps, and the vast majority also take meat, fish and dairy. Other feedstocks that the majority accept include uncoated food-soiled paper, paper bags, and compostable plastic bags. The remaining materials are all accepted by less than half of programs, including yard trimmings and compostable plastic items other than bags. Once again, molded fiber containers and food-soiled paper coated with conventional plastics are the least accepted feedstocks. Around a quarter of all programs allow molded fiber containers, and only 6 percent include the plastic-coated paper.

Success Of Drop-Off

Of 30 survey respondents reporting on the success of their programs, not a single one considers their program to be unsuccessful. Twenty-five of the 30 programs were labelled a success. Among those 25, the most commonly cited reasons were meeting diversion goals and avoided disposal costs, which were also two of the top three reasons seen in curbside programs. Interestingly, only two of the 25 programs considered participation rates as a reason for success.

Written By: Virginia Streeter and Brenda Platt, Biocycle

Published: December, 2017

Source: <https://www.biocycle.net/2017/12/06/residential-food-waste-collection-access-u-s/>



Wake County Food Waste Drop-Off Center.
Photo Credit: Wake County Government

WM Hosts Creatures of the Night Seminar



Barred Owl

Photo Credit: Waste Management

More than 100 children and adults from the slate belt community gathered to learn about creepy and scary animals on October 12th - Or so they thought. The Creatures of the Night program hosted by Waste Management at the Grand Central Environmental Education Center discussed nocturnal animals and provided a first-hand look at animals most would never get close to or see in a tree.

nocturnal but went along with the program's Halloween theme was the Albino crow named Einstein. Guests found Einstein to be exciting as he squawked "hello" to everyone.

"We are very thankful for Pocono Wildlife Rehabilitation Center for coming out to teach us about their line of work," commented Grand Central's District Manager, Ron Myer. Community Relations Manager, Adrienne Fors added, *"It was especially exciting to see the kids walking the trails that education center property offers. The space provided by Waste Management allows the public to hike and learn more about the environment."*

The Grand Central Environmental Education Center is open to the public to hike and enjoy. The community can learn more about the Grand Central Environmental Education Center via their Facebook page. Just search for "grand central environmental education center"

To learn more about this program visit: www.wm.com or www.thinkgreen.com.

Written By: Adrienne Fors, Waste Management

The program included a live animal show as well as an opportunity to meet scout troops around the slate belt. The mini scout recruiting event supported various girl and boy scouts from the area. The event is just one of many education programs that Waste Management hosts throughout the year.

One of the highlights of the evening showcased an opossum. *"Many folks don't realize the importance of opossums. They eat ticks, and clean themselves constantly like a cat. These little creatures are likely cleaner than your dog,"* said Pocono Wildlife Director Kathy Uhler.

One particular animal that isn't considered



Children making craft owls during the seminar
Photo Credit: Waste Management

Waste Collectors Share Their Craziest Finds

What do garbage men find in the trash? It's an intriguing question. Waste Collectors have an interesting job. They deal with the remnants of people's lives, after all, and see everything that people throw away. Have you ever wondered what the collector finds weird about your trash? Maybe they're secretly judging how many pints of ice cream you consume, or noticing how you sort your recyclables (or not).

Of course, those are pretty typical trash situations. But waste collectors also find all sorts of interesting things tossed away, from drugs and drug paraphernalia to dead bodies and everything in between. If you're interested in the details, you can either approach your local trash collector for an interview, or do it the easy way and check the internet. Reddit contains countless stories about what trash collectors found and decided to share with readers. Keep reading to check out their wildest stories, and be especially cautious the next time you pass a dumpster.

Editors Note: The content below was written by users of the popular website, Reddit. The following may contain subject matter that is upsetting to some readers.

A Dead Body

Shared by *tiorted726*: *I wasn't a driver but a mechanic on garbage trucks for a large municipality. In my 4 years in that department we had to dump fully loaded trucks on the ground 2 times and spread out the load looking for a body; found one once. I decided not to look at it, I think I made the right choice.*

Part of a Meth Lab

According to *Moosepondvacation*: A Former Sanitation Department Supervisor - My guys called me frantic one day after an explosion in the hopper of the truck. Thankfully no one was injured, but I called the fire department and police always come on fire calls too. Turns out they had been watching the house we were in front of because the guy was cooking meth. He threw away some of the

ingredients and the pressure when it compacted caused it to explode. The best part was the fact that the guy sat out front watching the show in a bathrobe. He eventually got dressed and came back out. When he was arrested he had drugs in his pants. Apparently he didn't own any pants without drugs in the pockets.

Metal War Veteran Grave Markers

Reddit user *londongarbage* said: The only thing I brought to the police's attention were a bunch of brass WWI and WWII grave marker medallions I found in the recycle bins. Hopefully they went back to where they belonged.



WWII Grave Marker
Photo Credit: Wiki.

Dead Animals, a Prosthetic Limb, and Headstones

This one is from *weedandguitars*: I used to manage garbage men in Oakland. Routinely [they] found dead animals, remnants of large marijuana harvests, and weapons. Once we found a rejected prosthetic limb. Also, pretty regularly, the FBI will have a trash company pick up the trash of someone under investigation so they can go through it. I spent some years in the trash/recycling industry. I remember a guy at a metal recycling center trying to cash in bronze grave headstones. He was arrested.

Leaking Blood and a Religious Sacrifice

Reddit user *98FordContour* added: NYC sanitation worker here. I have seen just about everything you can imagine. Dead animals such as dogs and cats are thrown out like every day trash. We are required to just take them and the police are not notified at all. One time, my partner and I saw huge amounts of blood leaking from multiple trash bags that we had just thrown into the truck. We called our supervisor and he looked at it and just said keep going. It could have been anything. I have also seen plenty of drug paraphernalia being thrown out. Thousands of little

plastic bags, scales and plenty of white "powder" all over the place.

One single incident sticks with me. Me and my partner were called to a location that was far away from our regular route one day. We met our supervisor at the location. I ask him what's up? He points to a tree we were standing near. He says look up. I look up and see a huge mass hanging in the tree about 20 feet off the ground. I couldn't really make out what it was but it was dark and about 3X3 feet big. Turns out, it was a huge pile of dead rats all tied together in a big mass. The police and fire department showed up about 5 minutes later. The fire department had to use a ladder to get to the branch and cut it down. When it hit the ground with a thud, the smell was so bad that us, the PD and FD all backed up very quickly. Me and my partner had the pleasure of grabbing this thing and tossing it into the truck. There had to be between 50-75 dead rats on this thing. We asked the police what it was all about and they said most likely a form of religious sacrifice. I've been working for the sanitation department for 14 years and that had to be the nastiest thing I have ever seen. I'll never forget the smell. Forgot to mention that it was probably about 90 degrees that day and God knows how long that thing was hanging around.

Guns and Antiques

As stated by [steve2058](#): Never found any body parts in 35 years, but guns and antiques and was requested by the ATF to pickup the trash at one home and pull around the corner and let the "Special Agent in Charge" take the trash bags and put them in his black Chrysler 300 undercover car. This happened for several weeks in a row, never did find out what they were looking for.

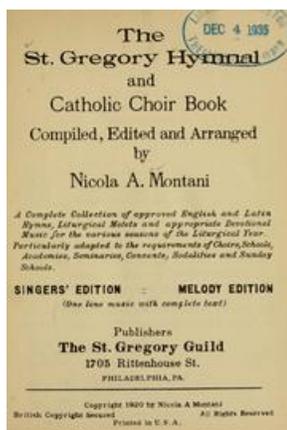


Photo Credit:
archive.org

A Choir Book from 1864

From Redditor [mvincent17781](#): I worked at a landfill for one summer and didn't find anything grotesque, but I did find a choir book from 1864 in a box in the dumpster. I took that.

Retailer Wastes

Wasn't criminal but should have been was the amount of good things Wal-Mart and other retailers threw away. You return something due to scratch etc. and it doesn't sell they have to throw it away. Tools, tvs, computers, clothes, toys etc. some not even out of the box. All of it in working condition but they had to throw it out to write it off is what I was told.

A Bag of Arcade Tokens



Photo Credit: Mathnasium

Contributed by theoption-explicit: This was in the 90s... my friend's dad found a big sack full of arcade tokens. Not sure how it is now, but back then the tokens were mostly standardized. My friend was in heaven.

Expensive Watches and iPhones

According to [GoodnightKevin](#): My father in law is a bin man here in Northern Ireland. He is forever bringing home stuff he finds on his rounds, most recently a Tag Heuer watch and more iPhones than you could shake a stick at. Guy even has a huge jar filled with coins he finds – all the guys he work with dump any loose change or notes they come across into it throughout the year, and they split it between them at Christmas.

The Lovelorn Rejection Package

This is from [YouKnowABitJonSnow](#): A friend whose dad was a garbage man (distant I know but still), once told me he found an engagement ring and a pack of condoms in a small disposable bag, he always wanted to know the story behind it.

A Stabbed Family Photo Album

Added by Redditor [VoiceCrack](#): I worked as a summer student at a landfill "directing traffic." One day, a customer came in and asked for a hole to be dug as he wanted something to be buried. He was driving an all black Cadillac with tinted windows and some seriously nice rims. The somewhat lazy machine operator was reluctant to dig

a hole as it required switching machines, so he offered the animal pit instead. Half-expecting a dead body, I watched as he threw out what appeared to be a book. Once he drove off, I held my breath and peered into the animal pit, only to find a (presumably) family photo album with a knife lodged right in the middle. It still gives me the creeps.

A Human Finger

By Redditor hothotsauce: Had a college classmate who worked summers at his uncle's dump on Staten Island... He found a human finger once. Lots of bodily excretions in containers. Bags of brand new (possibly unsold) clothing.

A Tiny Live Kitten

From an anonymous Redditor: My dad drove a recycling truck. He found a lot of stuff on his runs. I haven't asked him what the craziest thing was but one thing he told me a long time ago sticks out in my mind. At one stop, he heard something in a garbage bag. He saw the bag moving. So he ripped it open and found a kitten. He took the kitten with him. He put it in his lunch box (left it open, obviously). I don't know how young the poor thing was. This was so long ago though, that's the only part of the story that I remember. I don't know if he brought it to the shelter or a vet or a friend. Not sure how it turned out.

It wasn't the first time he rescued an animal on the job. It's sort of related to my story above but not to the main question. When my dad was a cab driver, a man got in with a bag and told him to drive to the canal. Somewhere along the way, my dad realized there were cats in the bag (meowing, I guess). He stopped the car and told the guy to leave the bag and get out. The guy was going to drop the cats in the canal. My dad ended up bringing the cats home. He found homes for all of them.

Brand New Electronics

According to HiFiMetal64: I run my town's transfer station and recycling center. The amount of perfectly good or even brand new

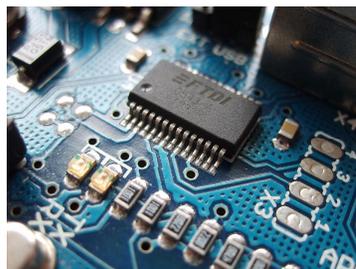


Photo Credit: Wikipedia

stuff I see thrown out daily is absurd. I collect and restore antique radios so one of my personal favorites was a Thomas Edison phonograph from 1906. I have a 55" Samsung in my living room I got from work [because the] guy wanted a smart TV and just tossed the old one. I even have a decent size trailer, because some guy couldn't be bothered to sell it. Also the money you save is amazing if you have mechanical and/or electrical knowledge. I've never had to buy lawn mowers or snow blowers weed whackers, etc. even things like shovels, garden tools, and hoses. Microwave dies? One will come in at work in a few days.

Used Toys for Adults

Redditor MasterPip added: I've picked up all sorts of things. I've gotten a 32 inch flat screen. Sound cable had disconnected inside the TV. Took 5 minutes to fix. Worked perfectly fine. Even came with a remote! I've gotten new shoes, lamps, vacuums that were just clogged, fans, tools, etc... All sorts of things. Then the craziest was a cardboard box with several deflated used sex dolls and an empty adult toy package. Worst part was I knew the older gentleman who lived there; never could look at him the same way again.

Beer Signs and Other Antiques

This one was added by Phantom Scarecrow:

Weirdest - A whole, skinned sheep head. A very large, used adult toy. Entire rooms full of furniture. (We called them "Move-out piles", because it looked like the people were moving out of the house and just threw everything away.) 18 large trash bags of brand-name clothing, at the same house, three weeks in a row. (18 each week.)

Coollest - A big box of brand-new Rolling Rock Beer embossed metal signs. Two beautiful 1950s pastel-colored sewing machines, one turquoise, one coral pink, with all their accessories. 12 working VCRs (This was in 2002, so DVD players were taking over). And one time, my loader, found two antique baseball cards. They were the small ones from cigarette packs, and were worth several thousand dollars. He found them in the hopper, so he had no way of knowing which house they had come from, and no one ever claimed them.

The Homeless Guy in the Trash Can

Reddit user GolfPr0 added: In my younger days I owned a large waste hauling company. Tons of stories over a 20 year career.

Scariest - When I first started I would run the routes if someone needed off or was sick. I was running our front end loader one night and was dumping a McDonalds at 2:30 in the morning. After I opened the gate I climbed back in my truck and was just starting to raise the can to dump it and a very surprised homeless guy jumped out of the container. Had it been another half second I wouldn't have seen him, as he would have been out of my sight line, and he would have been dumped and compacted. We hauled some chicken farms and butcher shops so you always had dead animals to contend with. Nothing like starting the day dumping 40 cy of dead chickens.

Free Stuff - All the time. Our company did a lot of specialty work. One time we were contracted to get rid of 20 trailer loads of leather furniture, because it had mold on some pieces. Everyone at work that day got a free leather sofa and loveseat. We also hauled a nationwide coffee roaster. FDA is pretty nasty. So we would get perfectly good packaged coffee all the time. If even the shrink wrap was damaged, they would throw out a whole skid. I don't think we ever paid for coffee. Almost everyday, someone was coming in with something. We also did all the USPS locations. If you wrote "return to sender" on most stuff it went into the dumpster. I had over 10,000 cd's from Columbia House at one point. Also, we do a lot of estate cleanups (when someone's parents die). When dumping a load one day a small wooden box opened up and was filled with about 50 silver dollars from 1922. I still use one today to mark my ball in golf.

An Undetonated Live Grenade

By Reddit user Adski673: I worked at my local recycling plant sorting different materials into different bins on a fast moving conveyer belt. Most people don't know what can and cannot be recycled so we often found lots of rubbish to sort through. We would often find dead pets, money, dirty needles, half eaten food (once a whole turkey was thrown out). By far the best thing we found was an old,

unexploded grenade. The whole plant was shut down until the bomb squad came. They ended up taking the grenade to the tip (massive piles of rubbish, I don't know what you call it in America) and blew it up. Chunks of rubbish went everywhere...and the smell, oh god the smell! It'll outlast religion.

A Dumpster Full of Dead Horse

Up2KnowGood said: I was a sanitary engineer back in the early 90s. One of our regular stops was a veterinary clinic. We arrived one hot summer day to find a dead horse on top of the dumpster. We said "screw that, we aren't taking a horse!"...so we pushed the corpse off the dumpster, emptied the container and went on about our business. The next week, we get back to the vet to find the horse inside the dumpster. Bloated like a creepy caricature of its former self. Because it's inside the dumpster, we take it. We empty the dumpster into the hopper and start to compact the corpse. Suddenly there is POP, followed by a juicy gurgling sound. Before we knew what was happening, it was raining horse gore, I swear for a moment it blotted out the sun. To date, this is the single most disgusting event of my life.

An Enigma Machine

From Darkpasta: My good friend who used to work at a recycling plant found an Enigma machine. That's an encryption device the Nazis used. It was worth like 10,000 dollars. He also found the wooden box for another one, that had been used as a bait box.



Four-Rotor
German Enigma
Cipher
Machine
made during
WWI
Photo Credit:
BBC

Written By: Reddit Users, compiled by Ranker
Published: November 2, 2017

Source: <https://wasteadvantagemag.com/23-garbage-men-describe-crazy-stuff-they-found>

The Keystone SWANA Family

The Keystone Chapter of SWANA is going strong. Over the past four months we have added 13 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 last publication.

- Richard Moyer, Green Mountain College
- Sheena McCarthy, Montauk Energy Capital
- Matthew Leffard, Michael Brothers Hauling
- Danielle Myers, Thermostat Recycling Corp.
- George O'Mahony, Montauk Energy Capital
- Jake Smith, Iron City Express
- Jonathan Callura, Carnegie Mellon University
- Ronald Mersky, Widener University
- William Keba, Self
- Jerry Zona, County of Lawrence
- Matthew Foltz, Civil & Environmental Consultants, Inc.
- Kelly Lynch, Widener University
- Michelo Kalambo, Africa Union Financial Services DRC

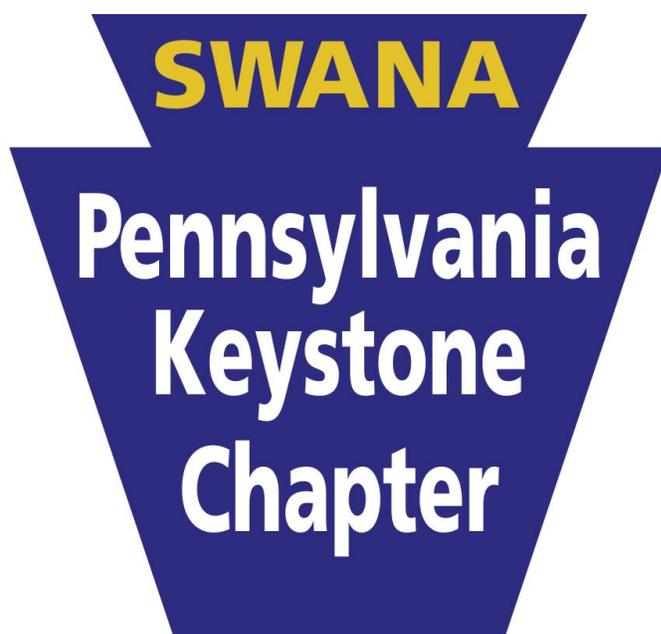
The Keystone Chapter strives to share pertinent information and provide continuing education that serve members' interests. The Chapter sponsors a variety of activities and programs including; academic scholarships, the annual regional landfill equipment and truck road-e-o, certification training, mini-technical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

**Interested in becoming
more active in your
Chapter?**



**We are currently looking for members
to join the Safety and Young
Professionals Committees.
Email Chanda at:
chanda@keystoneswana.org for more
details.**



**SOLID WASTE ASSOCIATION
OF NORTH AMERICA**

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 in-

clude:

FEBRUARY 2018

- Thursday, 2/1, 10 am - **Board Meeting Conference Call.**
- Receive Scholarship applications from SWANA Headquarters.
- Send Scholarship announcement to members.
- Distribute Winter Edition of *The Keystone*.

MARCH 2018

- Thursday, 3/1, 10 am - **Board Meeting Conference Call.**

APRIL 2018

- Thursday, 4/5, 10 am - **Board Meeting Conference Call.**
- Wednesday, 4/18, **Ryan Equipment Demo Mini-Tech**, Greater Lebanon Refuse Authority, Lebanon, PA.

MAY 2018

- Tuesday, 5/1, Chapter Scholarship Application Deadline.
- Thursday, 5/3, 10 am - **Board Meeting, Lanchester Landfill, Narvon, PA.**
- Wednesday 5/9, 10 am - **2018 Keystone SWANA Safety Summit, Best Western Premier, Harrisburg.**
- Tuesday, 5/15, Article Deadline for Summer Edition of *The Keystone*.
- Nominating Committee presents Slate of Officers and Directors for election.

JUNE 2018

- Friday 6/1, Deadline for submittal of Grant H. Flint Scholarship recommendations to SWANA HQ.
- Thursday, 6/7, 10 am - **Board Meeting Conference Call.**
- Review Annual Budget.
- Distribute Summer Edition of *The Keystone*.

JULY 2018

- No Activities Planned.

AUGUST 2018

- Thursday 8/2, 10am - **Board Meeting Conference Call.**

SEPTEMBER 2018

- Wednesday - Thursday, 9/5 - 9/6, **19th Annual Joint Fall Conference, Hilton Harrisburg.**
- Thursday 9/6, - **Chapter Annual Business Meeting and Election**, immediately following Fall Conference.
- Friday, 9/14, Deadline to submit articles for fall edition of *The Keystone*.
- Chapter Fiscal Year Ends

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

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

Sr. Engineer / COO
ARM Group, Inc.

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Robert Hasemeier, P.E., B.C.E.E.

Sr. Managing Engineer
Barton & Loguidice, D.P.C.

Tom Lock

Northeast Region Manager
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Public Services Manager
Waste Management

Denise Wessels, P.E.

Project Manager
SCS Engineers

▶ International Board Member

Robert Watts

Executive Director
Chester County Solid Waste Authority

▶ Young Professional Director

Tessa M. Antolick, P.E.

Project Manager
Arm Group, Inc.

Keystone SWANA Chapter Committee Members

Articles and By Laws

Sean C. Sweeney - Chair

Phone: 717-737-8326 x 2315

ssweeney@bartonandloguidice.com

Robert Watts

Phone: 800-626-0067 x 227

bwatts@chesterccswa.org

Bryan M. Wehler

Phone: 717-508-0546

bwehler@armgroup.net

Legislative / Policy Committee

Charles Raudenbush, Jr. - Chair

Phone: 609-798-3003

craudenbush@wm.com

Audit / Budget / Financial Committee

Larry Taylor - Chair

Phone: 717-867-5790 x 308

ldt@goglra.org

Robert Watts

Phone: 800-626-0067 x 227

bwatts@chesterccswa.org

Membership & Marketing Committee

Michele Nestor - Co-Chair

Phone: 724-898-3489

michele@nestorresources.com

Scott McGrath - Co-Chair

scott.mcgrath@phila.gov

Kelly Megonnel

Phone: 717-845-1066

k.megonnel@ycswa.com

Chapter Safety Ambassadors

John B. Aliveto II

Phone: 412-747-8713

jaliveto@montaukenergy.com

David W. Horne

Phone: 484-796-4047

dhorne@chesterccswa.org

Personnel & Nominating Committee

Sean C. Sweeney - Chair

Phone: 717-737-8326 x 2315

ssweeney@bartonandloguidice.com

Robert Watts

Phone: 800-626-0067 x 227

bwatts@chesterccswa.org

Communications & Newsletter Committee

Robert Hasemeier - Chair

Phone: 717-737-8326 x 2310

rhasemeier@bartonandloguidice.com

Alison D'Airo - Newsletter Editor

Phone: 717-737-8326 x 2325

adairo@bartonandloguidice.com

George Barstar

Phone: 610-547-0096

gbarstar@geiconsultants.com

Jennifer Cristofolletti

Phone: 717-845-1066

J.cristofolletti@ycswa.com

Michele Nestor

Phone: 724-898-3489

michele@nestorresources.com

Charles Raudenbush, Jr.

Phone: 609-798-3003

craudenbush@wm.com

Denise Wessels

Phone: 610-568-9034

dwessels@scsengineers.com

Program and Training Committee**Michele Nestor - Fall Conference Chair**

Phone: 724-898-3489
michele@nestorresources.com

Denise Wessels - Mini Tech Seminar Chair

Phone: 610-568-9034
dwessels@scsengineers.com

Larry Taylor

Phone: 717-867-5790 x 308
ldt@goglra.org

Charles Raudenbush, Jr

Phone: 609-798-3003
craudenb@wm.com

Tom Lock

Phone: 717-363-7492
tlock@scsfieldservices.com

Scholarship Committee**Daniel Brown - Chair**

Phone: 717-871-6420
dbrown@lcswwa.org

Jennifer Cristofolletti

Phone: 717-845-1066
J.cristofolletti@ycswa.com

Tom Lock

Phone: 717-363-7492
tlock@scsfieldservices.com

Charles Raudenbush, Jr.

Phone: 609-798-3003
craudenbush@wm.com

Robert Watts

Phone: 800-626-0067 x 227
bwatts@chesterccswa.org

Road-E-O Committee**Robert Watts - Chair**

Phone: 800-626-0067 x 227
bwatts@chesterccswa.org

Scot Sample - Road-E-O Site Coordinator

Phone: 570-297-4177
ssample@ntswa.org

George Barstar

Phone: 610-547-0096
gbarstar@geiconsultants.com

Bobby Barton

Phone: 717-871-6420
bbarton@lcswwa.org

Charles Raudenbush, Jr.

Phone: 609-798-3003
craudenbush@wm.com

Roger Russin

Phone: 717-397-9968
rrussin@lcswwa.org

Karl Schmit

Phone: 610-223-0922
kschmit@republicservices.com

Larry Taylor

Phone: 717-867-5790 x 308
ldt@goglra.org

Secretariat Subcommittee**Bryan M. Wehler - Chair**

Phone: 717-508-0546
bwehler@armgroup.net

Larry Taylor

Phone: 717-867-5790 x 308
ldt@goglra.org

Scot Sample

Phone: 570-297-4177
ssample@ntswa.org

Young Professionals Committee**Tessa M. Antolick - Chair**

Phone: 814-272-0455 x 2205
tantolick@armgroup.net

Kathryn Sandoe

Phone: 717-735-0188
ksandoe@lcswwa.org

*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, please contact **Alison D'Airo** at Barton & Loguidice, Newsletter Secretariat Production Services, or any member of the Newsletter Committee listed below:

Robert Hasemeier - Chair

Phone: 717-737-8326 x 2310

Fax: 717-737-8328

rhasemeier@bartonandloguidice.com

Alison D'Airo - Newsletter Editor

Phone: 717-737-8326 x 2325

adairo@bartonandloguidice.com

George Barstar

Phone: 610-547-0096

gbarstar@geiconsultants.com

Jennifer Cristofolletti

Phone: 717-845-1066

j.cristofolletti@ycswa.com

Michele Nestor

Phone: 724-898-3489

Michele@nestorresources.com

Charles Raudenbush, Jr.

Phone: 609-798-3003

craudenb@wm.com

Denise Wessels

Phone: 610-568-9034

dwessels@scsengineers.com

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 broadcast faxes and other communications, will only be sent via email. Her 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.*



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