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Our long-life battery capability & simple installation options provide easy access to remote data

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Key Features include:

- Gateway packages can be installed and operational in days rather than months
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The data dashboard provides access through a web portal using any computer or mobile device. Data can be viewed in real time using graphical and tabular displays and can also be downloaded for additional analysis.

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- **Leachate Storage Tanks** – Gateway packages provide tank level monitoring as well as flow and totalizer data for truck loadout systems.

In addition to the applications listed above, our flexible interface options support custom configurations designed to meet client needs! Contact us to discuss how our gateway solutions can benefit your operation!

David Burns, Office: 863-868-8348, Cell: 407-925-6751, Email: dburns@ietteam.com

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April 2019

As I sit down to write this letter, it occurs to me that it will be my last as your chapter president. I am proud to have served two terms as president of the largest SWANA chapter, and I will remain on the chapter board for another two years as your immediate past president. This transition will occur at our summer meeting in Tampa.

To assess my performance, I looked back at my first president’s letter where I defined the following goals:

1. Improve our communications and relationship with SWANA International so that we’re working together to maximize SWANA’s value to our members—I think we’ve accomplished this. We interact with SWANA staff regularly now and David Biderman, SWANA CEO, has attended several Florida Chapter events. He was even the keynote speaker at our Safety Symposium in March.

2. Ensure that board members and committee chairs have more defined responsibilities to better manage expectations and keep moving forward—While we’ve made some strides here, this is an area where we can continue to improve.

3. Implement a system that embraces change so we can benefit from new ideas and increase opportunities for our young professionals—With several YPs now serving on the board and chairing/serving on committees, we’ve come a long way in this regard but let’s keep going!

In that first letter and at every meeting over which I’ve presided, I encouraged everyone to get more involved by doing three things:

1. Show up—Remember that board meetings are open to all members.
2. Raise your hand—This organization would not exist without volunteers.
3. Follow through—You’ll get as much out of it as you put in.

Please keep stepping up—I’ll be right there with you!

Sincerely,

Tammy L. Hayes
SWANA FL Chapter President
Optimizing Downtown Solid Waste Collection

Marc J. Rogoff and Bill Gaffigan, Geosyntec Consultants

Many municipalities across the U.S. are facing the age-old challenge of keeping busy commercial corridors clean and litter free, while at the same time reducing service fees and providing additional recycling opportunities. They are looking for ways to embrace the smart transformation of waste operations in their downtown areas enabling that their public spaces are noticeably cleaner. The streets are calmer too—reduced collection requirements mean fewer trash trucks congestion and using less fuel. This article provides a brief discussion of possible solutions to an improved downtown collection program for your city.

Valet Collection
In recent years, many cities across the U.S. have expressed an interest in improving the cleanliness of alleys in their downtown business districts. Oftentimes, these areas were developed before the era of modern solid waste management. Consequently, sanitation agencies and private haulers have great difficulty in servicing these areas with large collection trucks in the early hours of the morning while at the same time businesses are receiving traffic in these same alleys from food, beverage, and service purveyors. Typically, there is also very little room to access refuse and recycling containers or compaction equipment. Further, these alleys are unsanitary because of spilled garbage, feeding from loose animals and vermin.

The Seattle Public Utilities (Washington) implemented their “Clean Alleys Program or CAP” in historic Pioneer Square and then expanded the program to other adjacent downtown areas. Briefly, CAP has eliminated all solid waste dumpsters in the alleys requiring placement of solid waste in bags. Customers are required to purchase special garbage and recycling bags online from the franchise hauler and can be set out three hours before scheduled pick up, every day, seven days a week, 24/7. Disposal tags can also be purchased for bulky items that cannot easily fit in a CAP plastic bag. The City reports that surveys conducted indicate more than two thirds of the businesses in these areas believe that the alleys are cleaner, safety has improved and that the benefits outweigh the costs.

Vacuum Collection
An automated vacuum waste collection system, or AVAC, transports waste at high speed through underground pneumatic tubes to a collection station where it is compacted and sealed in containers. When the roll-off container is full, it is transported away and emptied. The process begins with the deposit of trash into intake hatches, called portholes, which may be specialized for waste, recycling, or compost (see Figure 1). Portholes are in public areas and on private property where the owner has opted in. The waste is then pulled through an underground pipeline by air pressure difference created by large industrial fans, in response to porthole sensors that indicate when the trash needs to be emptied and help to ensure that only one kind of waste material is traveling through the pipe at a time. The pipelines converge on a central processing facility that uses automated software to direct the waste to the proper container, from there to be trucked to its final location, such as a landfill or composting plant.

Although there are more than 100 AVAC systems operating in more than 15 foreign countries serving large city centers, residential areas, airports, and theme parks, and dozens more serving hospitals and food plants for decades in the U.S. and internationally, they were slow to be introduced for the urban waste sector in the U.S. However, things are starting to change as the real benefits of this technology become better appreciated. It should be noted that Canada has been a faster adopter of this technology, having more large-scale AVAC systems in operation than the U.S.

Underground Vault System
The City of Kissimmee, just south of Orlando, has recently installed an underground vault system. Lake Toho
Redevelopment is a new mixed-use development underway, which will encompass four city blocks downtown. A fulfillment of the City’s goals for a “live, work, play” environment, it will feature 260 apartments, 16 townhomes, 15,000 square feet of commercial space and a 120-room hotel. Nearby is a lakefront park and a train station. However, there is one thing that the project lacks—room for the typical, metal solid waste dumpsters.

The City researched various underground vault systems, both in the U.S. and Europe, finally deciding on an underground vault system offered by Nord Engineering, an Italian company. The U.S. agent for the system is Underground Refuse Systems, an Orlando-based company. Nord Engineering’s underground container is about the size of a community mailbox (Figures 2 and 3, pages 5 and 6) and can contain six and a half cubic yards of material (comparable to 15 large garbage cans). The units include a sensor that tells the collection vendor when the trash container is full and needs collection.

The portion of the trash bin above ground has a modern rounded look with a trash door that leads to underground bins in 11-foot deep vaults. A specially-designed $424,000 truck (Autocar) attaches a crane to a bell housing on the top of the bin, then hoists and dumps the bin into the truck, which has an onboard compactor. Once the waste is collected, the bin is then lowered back into the concrete housing in the street or sidewalk. A concrete lip and special drainage help avoid ground water contamination.

Since 2018, six units were installed at various locations throughout the City’s downtown area. The City plans Zones 1, 2, 3, 4, and 5 are required to use the sealed compactor units for solid waste disposal (which includes both trash and recycling) or make alternate provisions for solid waste removal.

Businesses and residential customers empty the big blue cans using tippers or place bagged trash into the compactors. Each location also has a drop-off area for recycling (bottles, cans, plastics, mixed paper, and cardboard). Businesses and residents in the compactor zone can call Downtown Roanoke Incorporated (DRI) to register for compactor use and to receive a fob (electronic key). The compactors are housed in enclosed areas with video surveillance and can be accessed only with a key fob provided by DRI.

DRI initially conceptualized the idea as an attempt to keep loose garbage off the streets. Three years after DRI installed the first trash compactor in the central business district near the City Market on private leased property, the new system is expanding and gradually has been met with more acceptance than some business owners originally were willing to provide. Business owners and employees say they have grown accustomed to the change, which initially was met with strong opposition.

The DRI and the City initially held meetings with focus groups (businesses, property owners, and residential owners) and then used these groups to implement a training

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**Figure 2** - Street view of the underground vault system in Kissimmee, FL.
*Figure courtesy of Underground Refuse Systems, 2018.*
program for use of the compactors and the recycling containers, and food preparation tips to reduce trips to the compactors.

Previously, the City provided curbside pickup of solid waste in the district to businesses and property owners. When the first compactor was installed near Market Square in the fall of 2013, business owners complained that the switch would cost hundreds of dollars a month in additional manpower. They said it would also require employees to haul large amounts of trash as many as four blocks at the end of a work shift. Under the current configuration, the farthest any restaurant is from a compactor is about a block or a block and a half.

Each compactor location cost the City approximately $150,000 in addition to the monthly rental costs. The monthly service cost is allocated to all businesses and residential units within each zoned area. Overall, the businesses, property owners and residences have seen a reduction in the cost of waste collection and an increase in the opportunities for recycling.

**Big Belly Containers**

Bigbelly was originally a solar powered, rubbish-compacting bin, manufactured by U.S. company Bigbelly Solar for use in public spaces such as parks, beaches, amusement parks, universities, retail properties, grocery industry, and food service operators. The bin was designed and originally manufactured in Needham, Massachusetts by Seahorse Power, a company set up in 2003 with the aim of reducing fossil fuel consumption. Due to the bin’s commercial success, Seahorse Power changed its name to BigBelly Solar.

The bin has a capacity of 33 gallons—one normal trash bin. However, its compaction mechanism increases the bin’s effective capacity by five. The compaction mechanism is chain-driven, using no hydraulic fluids. Maintenance consists of lubricating the front door lock annually. The mechanism runs on a standard 12-volt battery, which is kept charged by the solar panel. The battery reserve lasts for approximately three weeks. Wireless technology-enabled units report their status into the CLEAN (Collection, Logistics, Efficiency, and Notification system) dashboard that gives waste management and administration insights for monitoring and route optimization. BigBelly Solar also provides companion recycling units that allow cities, parks, and universities to collect single-stream or separated recyclable materials in public spaces.

Communities in 50+ countries now deploy Bigbell’s suite of smart, sensor-equipped waste stations. Each unit communicates its real-time status and notifies crews when it is ready to be collected. This streamlines waste management operations, increases productivity and keeps public areas clean.

**Lessons Learned**

Solutions discussed previously can play a measurable role in helping improve the collection program in your downtown area. Based on our firm’s experience, it is important to conduct a feasibility study to help assess which solutions make sense for your area. It is important then to work with your specific stakeholders to identify the implementation costs and how they can be successfully deployed.

Marc J. Rogoff, Ph.D. is a Senior Consultant with Geosyntec Consultants. He can be reached at (813) 810-5547 or e-mail mrogoff@geosyntec.com.

Bill Gaffigan, CVA is a Principal with Geosyntec Consultants. He can be contacted at (678) 718-4732 or e-mail bgaffigan@geosyntec-cat.com.
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CONTACT
Mark Rogoff, Ph.D.
mrogoff@geosyntec.com
813-810-5547
12802 Tampa Oaks Blvd., Suite 151
Tampa, Florida 33637
How the 2018 Farm Bill Affects the Biogas Industry

Ramon Rivera, Diamond Scientific

With the 2018 Farm Bill being passed by the House and Senate and signed into law by the President on December 20th, those in the biogas industry may be wondering how this affects them and their business. Here is a rundown of what the American Biogas Council has successfully lobbied for over the past two years or more.

Funding is always a stumbling block for new projects, but the Farm Bill addresses funding needs in many areas. The bill includes an energy title with mandatory funding of US$625 million allocated over a 10-year period, including US$50 million budgeted specifically for USDA’s Rural Energy for America Program (REAP). Other programs that fall under the energy title that will receive mandatory funding include the BioPreferred program, the Bioenergy Program for Advanced Biofuel, and the Biorefinery Assistance program. While the Biomass Research and Development Initiative (BDRI) and the Biomass Crop Assistance Program (BCAP) were both reauthorized, they have not been allocated mandatory funding under the Bill. However, the American Biogas Council (ABC) is negotiating with appropriators to include funding for these programs within the 2020 budget. ABC is also requesting additional funding for the Rural Energy for America Program as the number of farmers that have subscribed to this program far outweigh the number of digester projects that are being supported under this program.

Consequently, many on-farm biodigester projects are not receiving partial funding to help them get up and running due to limited funds.

The 2018 Farm Bill also includes several new provisions that address food waste, promote knowledge about biodigester technologies, and which look at establishing a task force on whose role it will be to identify biogas opportunities. The provisions are outlined in more detail below.

1. Increasing Community Composting and Reducing Food Waste—US$25 million has been allocated annually for the next five years to develop an effective plan and strategy to reduce food waste through municipal composting in 10 or more states. The aim is to produce compost; provide agricultural producers with ready access to compost in order to improve crop production; reduce farmer’s dependence on and use of chemical fertilizers; improve the quality of soils; promote waste management and the development of permaculture business enterprises; increase water retention in soils; and, ultimately, reduce the volume of food waste that ends up on municipal landfills.

2. Local Agriculture Market Program—This program has grants of up to US$500,000 available to help establish new business opportunities or to promote marketing strategies that will reduce food waste on farms.

3. Office of Urban Agriculture and Innovative Production—The bill has established a grant program “to encourage and promote urban, indoor, and other emerging agricultural production practices,” which should give sustainable urban crop production methods such as aquaponics and hydroponics a boost.

4. Food Loss and Waste Reduction Liaison—The new Bill directs the U.S. Department of Agriculture (USDA) to establish liaison who will serve as an...
intermediary promoting interagency collaboration. The USDA will also conduct a food waste study looking at methodologies used to measure food waste, factors that contribute to food waste, financial costs associated with food waste, the effectiveness of current liability protection for food donors, as well as other relevant issues.

**Interagency Biogas Opportunities Task Force**

The Bill also establishes an Interagency Biogas Opportunities Task Force who will be responsible for coordinating policies and overseeing programs to promote biogas research and investment in the biogas industry.

**Carbon Use and Biogas Education Program**

Furthermore, the Bill also establishes the Carbon Utilization and Biogas Education Program, which earmarks US$1 million annually over the next five years (from 2019 to 2023) to educate agricultural growers and other stakeholders about opportunities for collecting organic waste from various sources for processing in a single biodigester.

As we can see, the 2018 Farm Bill has earmarked a lot of funding for addressing food waste, and thanks to the American Biogas Council, the biogas industry has the potential to reap some of these benefits.

*Ramon (Ray) Rivera is CEO of Diamond Scientific (Cocoa, FL). He can be reached at (321) 223-7500 or e-mail info@diamondsci.com.*
Evaluating the performance of any existing pumps along with new pumps when a lateral expansion is designed ensures optimal performance with minimal wear on the pumps.

Regulatory and siting restrictions are such that many solid waste operators prefer to expand their existing landfill footprint as much as possible instead of finding a new disposal footprint at a different location. As landfills are getting larger in height and greater in footprint area, the location of leachate tanks, leachate ponds, or discharge points to an onsite or offsite leachate treatment plant usually does not change. A larger footprint means leachate force mains are getting longer forcing the existing pumps to work harder to push leachate through the system to a target point. Some operators carry on with the same pumps for decades and do not monitor the performance of the pumps after expanding the landfill footprint, which could be more costly in the long-term.

The longer leachate force main with possible additional bends in the line increases friction in the line and causes flow rates to reduce to unexpected levels. We recommended that landfill operators evaluate the performance of the existing pumps along with new pumps when designing a lateral expansion. Such an evaluation may require hydraulic analysis of the entire network of pipes along with pumps, or only the segment of the network affected by the expansion. However, the effort is minimal in comparison to the operating costs of inefficient flow and overtaxing the equipment.

Sometimes the results of a hydraulic evaluation may require upsizing all or specific pumps in leachate sumps because not enough flow can go through the force main due to high friction loss in the expanded leachate force main. Upsizing pumps may be achievable depending on the type of the leachate sump, i.e., riser system or vertical manholes. If the upsized pump in a riser system is too long to fit inside a riser system, or so long that it makes routine maintenance too cumbersome, your engineer may consider enhancing the functionality of the design.

Booster pumps located along an expanded leachate force main can certainly be an option. Booster pumps can be the inline or offline type. Install the inline pumps on the actual force main and position the offline type on the side so that liquids go through bends and elbows to reach the pump, and again through bends and elbows to get back in the force main. In either case, the booster pump adds hydraulic energy to the flow inside the force main to push the liquids at a compensated pressure through the remainder of the force main and to the target point.

Operators need to be aware of the dynamic nature of the leachate piping network and the role of booster pumps in the dynamic environment. Changes to the flow in the force main may change following a landfill expansion when the new cells are coming online increasing leachate generation. Alternatively, after closing portions of the landfill slopes, leachate generation decreases over time. Sometimes booster pumps have to be upsized or downsized depending on the flow and pressure in the system.

The cost of replacing pumps, upsizing, or downsizing, is insignificant
Talking Trash

Advertising Opportunities Available

It’s not too late to reserve a space in the Summer issue of Talking Trash.

Job Openings

Post an employment notice on the SWANA FL website for FREE!

Email info@swanafl.org or visit www.swanafl.org for more information.

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**SWANA FL Scholarship Program**
**Apply by June 1st**

**PURPOSE:**

The Florida Sunshine Chapter of SWANA established a Scholarship Fund to assist deserving students in obtaining a post-secondary education as long as certain requirements are met.

**AMOUNT OF SCHOLARSHIP:**

Two scholarships will be awarded. Each scholarship will be valued at $2,000 per student, per school year. It will be awarded in increments of $1,000 each, for two semesters, upon receipt by the Board of Directors of the SWANA Florida Sunshine Chapter of student status documentation. Payment will be made in the form of a check, payable to the student, to be used for tuition, books, fees, school supplies and/or living expenses as needed.

Additional information, including eligibility requirements and application, can be found online at http://www.swanafl.org/page-1134605

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*Booster pumps on a network of leachate force mains before connection to an offsite discharge line*

compared to the revenue that landfills generate. Proper adjustment of the pumping system keeps the entire network operating at the appropriate range of pressure, and velocity in the line, increasing the life of the pumping system. Less wear and tear on the system produces a reduction in maintenance costs along with less equipment downtime. Lower maintenance requirements may also reduce the number of personnel required to keep the system in operational condition. Landfills with a large pumping system employing a second technician because of the high maintenance of multiple pumps may find a single technician sufficient for the upkeep of the system. Proper sizing of pumps and operating the pumping system as designed within the evaluation parameters can significantly reduce the cost and frequency of pump maintenance.

Ali Khatami, Ph.D., P.E., is a Vice President with SCS Engineers. He may be reached at akhatami@scsengineers.com.
How Reusable Recycling Bags Simplify Recycling in Multi-Family Dwellings

Beth Wilkerson, Operations Manager, FactoryDirectPromos.com

Most property managers, landlords, and tenants will tell you that recycling in multi-family dwellings and other apartment-style homes is a challenge. The curbside recycling programs that work so well for residents of single-family homes just fail to work in multi-family dwellings (MFD). The simple solution lies in reusable recycling bags. These cost-effective and customizable bags make easy work of recycling in MFD. Here’s how.

Space Efficient Design

Space is typically tight in MFD. Limited space means there just isn’t room for the bulky in-home collection bins common to curbside programs. Reusable recycling bags offer a streamlined solution. When needed, the bags can be opened and used to collect recyclables. The bags can be carried to a building-wide recyclable collection point. When not in use, the bags can be folded to take up minimal space.

Long, dual handles enable tenants to hang these bags from a hook, coat rack, doorknob or anyplace else. This keeps the bags close by for convenience without being in the way.

Functionality

The folding design certainly adds to the usefulness of the bag design. To add further function, the dual handles are long enough to slip over a shoulder, allowing for hands-free carrying. There is also a grip handle on the bottom of the bag, making it easy to empty the contents into a building-wide collection bin without having to retouch the bag contents.

Informative

Reusable recycling bags further simplify the process by relaying information to tenants. All exterior surfaces of the bags accept full-color printing, enabling property management companies or waste management businesses to print instructions, helpful info, and tips, as well as contact information directly on the bags.

Fully Customizable

In addition to the ability to customize the artwork printed on the bag, the actual bag can be customized, too. Swap out the material, adjust the handle length or make any other change that improves the function of the bag for tenants. The easier it is for tenants to recycle the more likely they are to recycle. The ability to customize the design of these reusable recycling bags makes it possible to improve the functionality.

Affordable

The quantity ordered largely determines the price, but most reusable recycling bags come in at a very affordable price point. Under normal use, these bags will last for several years, meaning these bags deliver an amazing return on investment.

Eco-Friendly

Reusable recycling bags not only make it easy and affordable to recycle, but they are also eco-friendly. The material is made from recycled content, meaning these bags are an eco-friendly recycling solution.

Effective Solution

Reusable recycling bags make it easy for tenants in MFD to recycle by addressing the unique needs and challenges of apartments, condos, dorms, and similar types of residences. These bags provide a handy receptacle when needed but are easy to put out of the way when not needed. The durable construction, ability to customize the look and design, as well as the cost-effectiveness further help to make these bags a great investment.

Beth Wilkerson is Operations Manager for Factory Direct Promos (Coral Springs, FL). She can be reached at info@factorydirectpromos.com.
Field Experiences: My day on a Garbage Route

Michael Fernandez, Deputy Director, Miami-Dade County’s Department of Solid Waste Management

I was just recently promoted to Deputy Director for a massive integrated solid waste system. This system is the Miami-Dade County Department of Solid Waste Management (DSWM). With more than 150 residential routes and collecting twice-a-week for 340,000 customers, it’s quite a system! It is comparable to numerous private hauling firms consolidated into one. Not only do we collect curbside garbage, but we also collect bulky waste. This operation is another 35 crews, ranging anywhere from 70 to 105 trucks, with a combination of self-loading grapple trucks to cranes with trash trucks. DSWM also has three landfills and a waste-to-energy facility that support the disposal of approximately 1.8 million tons.

Hitting the Road

After months on the job, I felt it was time to roll up my sleeves and hit the road with my drivers, a practice that I have done in previous leadership roles. I am a firm believer that one must get in the trenches with their soldiers to better understand the operation, as well as build relationships with staff. I decided to hit the road with one of my automation route drivers.

It was Monday morning, 6:30 am, and while walking the yard, a route supervisor thought that I was a temp and was going to assign me as a helper to another route. I felt like I was on Undercover Boss! Then, another route supervisor recognized me, and put me together with the correct driver. Finally, I met my driver. His name was George Soriano. We got into a brand new Peterbilt ASL with a New Way packing system. What a beautiful truck! I told the driver to go ahead and start the route so I could observe. About in 1 hour into the route, I asked to drive. He looked at me and asked, “Can you drive?” I responded, “I may be rusty, but I still have my CDL”. It felt great getting behind the wheel. Last time I drove an ASL, some trucks had levers and no joysticks. The truck ran like a Cadillac!

Getting Involved

About four hours into the route and 555 carts later, I had packed the truck at about 12.5 tons. I drove to the nearest transfer station. I drove onto the scale and got off to get my scale ticket. The scale operator took a double take and froze. She smiled and said, “I know you.” I responded, “Yes, it’s me.” She gave me my scale ticket and told me to have a great day. I got back into my truck and proceeded to the tipping floor. About five to 10 minutes later, I was dumping. The New Way packer dumped the load like a charm. We still had another load to pick up as Mondays are typically heavy. It was about 1:30 pm and we were running behind. It took me a little bit to get into rhythm after 13 years of not driving. Next thing I knew, I saw a convoy of ASLs approaching my route. It felt great seeing the team come together to assist. We started wrapping up around 4 PM and began heading back to the yard. I had everyone doing double takes when I entered the yard. They couldn’t believe what they were seeing. Drivers approached me and thanked me for taking the opportunity to understand their job. They had never seen an executive get in a truck and drive. They appreciated my willingness to get involved and felt like I had their back!

I think it is very important to get out of the office and work alongside your employees on a regular basis. It is important to them, too. They are the ones that represent the organization out there. I am a firm believer in servant leadership. I like to listen to my team, find out what is going on with equipment, any operational issues, etc. I like to put the needs of the employees first. Soon after this experience, I went out with a Bulky Crew. I will share that story in the next edition.

Mike Fernandez is Deputy Director for Miami-Dade County’s Department of Solid Waste Management. He can be reached at (305) 514-6623 or e-mail mfern@miamidade.gov.
Reflections of a Solid Waste Management Professional

Periodic recounting of events and happenings—some humorous, some not—during the 30+ year career of Warren Smith, SWANA Florida member since 1980.

Still Looking for the Solid Waste Management “Silver Bullet”?

In the early 1980s, at the beginning of my professional solid waste career, Hillsborough County’s elected officials were being consumed by solid waste disposal and landfill issues. At a Board of County Commissioners meeting (and the Taylor Road Landfill area residents made certain that their issues were aired at every board meeting), I heard my first, what I will describe here as a solid waste “magic silver bullet” presentation. That is, a Municipal Solid Waste (MSW) disposal process that would solve all of Hillsborough County’s disposal problems and produce from our MSW (it was claimed) a fine, dark particulate, potting soil-like product, to be made by a private company. What follows are my recollections of this, and a few other solid waste disposal “solutions” that I have experienced.

Agripost, Inc.

At the Hillsborough County board meeting, Agripost, Inc. made a presentation that included circulating a small, clear plastic bag of potting soil-like material they claimed their process would make from the county’s garbage. I asked myself, where were the myriad of items received at our landfill every day that could not be made into compost? Agripost, Inc did not build a facility in Hillsborough County, but they did in Dade County. In September 1989 Agri-Dade, Ltd. opened a reported $30 million facility (see South Florida Sun Sentinel, March 8, 1991 article “Agripost Loses 2 Officers, Listing on NASDAQ”). A little over one year later, on January 15, 1991, the facility ceased operations, primarily due to particulate air pollution and odor complaints from nearby residents, and Dade County’s refusal to amend Agri-Dade’s operating permit to include shredder upgrades and odor control equipment. Subsequently, Agri-Dade sued Miami-Dade County for improper “taking” of its property seeking compensation to recoup its $30 million investment. The case, through appeals and counter lawsuits, took nearly a decade to resolve. On November 15, 1999 the case was finally concluded in Miami-Dade County’s favor (see “Agripost, Inc. aka Agri-Dade, Ltd. verses Miami-Dade County, Florida, United States Court of Appeals, 11th Circuit, November 15, 1999”).

Reuters Recycling, Inc.

In the early 1990s, primarily in response to rising disposal rates in Broward County, Florida, but also in reaction to Waste Management, Inc. controlling virtually all MSW disposal in Broward County, four of Broward County’s municipalities contracted with Reuters Recycling, Inc. to build and operate a facility to “separate recyclables from garbage, and compost the remaining residue (see South Florida Sun-Sentinel article, “Reuters Plant Reopens; Composting Done Off-Site”, November 16, 1994). Opened in October 1991, the plant closed in November 1992 due to odor violations. After nearly two years of efforts to remediate the odor issues, and moving the compost to agricultural land offsite, Reuters decided to sell the facility. The property was purchased by Waste Management, Inc. in 1996, and initially operated as a waste transfer station. In the 2000s, Waste Management converted a portion of the facility into a standard MRF and later into a single-stream MRF, which it still operates today.

Geoplasma, LLC

During the mid-1990s I was working for Waste Management, Inc. on several projects throughout the Southeast U.S. One of these was to attempt to site a new landfill near Atlanta, GA. On one of my trips there, we were approached by an individual (who became a high-ranking executive with Geoplasma – St. Lucie, LLC), and a Georgia Tech University professor who was experimenting with high-temperature destruction of solid waste. We met over dinner and decided to “pass”.

Then, about 2006, this same group emerged with a serious proposal to build and operate a commercial “plasma arc” facility in St. Lucie County, FL that would process 1,500 tons per day (TPD) of MSW, turning the MSW into a glass-like slag and energy. As the development of the project moved forward, the TPD proposed throughput changed from 1,500 TPD to 1,000 TPD, then 600 TPD. The project was projected, at first, to cost $425 million, then finally $140 million—both very substantial sums of money. They went through the FDEP permitting process. Sometime around 2013, the corporate entity, Geoplasma – St. Lucie, LLC ceased to exist. But the Geoplasma concept (plasma arc destruction of MSW) and the St. Lucie County, FL project created an enormous “buzz” in our industry. There were numerous articles written in newspapers and technical journals, and technical papers were presented at WASTECON, NAWTEC and ASME. There were even “Plasma Arc Technology” special areas set up at WASTECON for vendors, and “learning”. The University of Florida was given a used “plasma arc unit” to experiment with. The Hinkley Center for Solid and Hazardous Waste Management sponsored research on the topic performed by Professor Tim Townsend, and technical papers were published.

While plasma arc-type technology has been successfully used, primarily with very homogeneous wastes and on a
much smaller scale, the use of such technology to process daily 3,000 to 4,000+ TPD of MSW (a typical daily receipt of MSW at large Florida solid waste disposal facilities), has proven to be very problematic. As we all now know, for a myriad of reasons, the St. Lucie facility was never built.

**Treat Your Municipalities as Your Own**

Here, I have recounted only three of many, of what I have tagged as MSW “silver bullet” projects. There are many more, which this space does not allow me to elaborate on further. However, some others I remember are: Bedminster Bioconversion, Inc., INEOS (yard waste to alcohol), Pyrolysis (under several names), and others.

I will end with a short story which fits with the theme of this article. During my tenure as Pinellas County’s Solid Waste Director, we were occasionally asked to host and tour “dignitaries” who had ideas on how to better handle our solid waste. One day, with a call from our County Administrator’s office (he was a General in the Army Reserve), we were asked to meet with two high ranking, but now retired Army officials. They had a process that would recycle all of the county’s MSW. All they needed was some of our property on which to build their facility, and of course, our solid waste.

I gave them a complete tour of our waste complex and all of its operations but saved the waste-to-energy plant for last. That day, perhaps due to operational problems, or an unusually high amount of solid waste received, the waste was stacked at least 25 to 30 feet above the tipping floor. There was a lot of garbage visible in the plant! So, at the end of our tour, I drove our guests into the tipping building; pulled up close to the garbage pile and said “Okay … recycle that!” We never heard from them again.

My advice on implementing new, or unproven, solid waste disposal technologies at your municipally owned facilities? Let someone with private “deep pockets” do it first. Treat your municipalities’ (i.e. your employers’ money), as if it was your own. John Schert, Executive Director of the Hinkley Center for Solid and Hazardous Waste Management reminded me of something Bill Hinkley would often advise: “You don’t want to buy the new technology facility, whose Serial Number is No. 000001.”

Warren Smith has been a SWANA Florida member since 1980. He can be reached at (727) 515-0006.

For assistance with information on this article, thank you to my colleagues and friends: Kyle Adams, Consultant (formerly with Waste Management, Inc., Republic Waste, Inc., RUST Engineers, and others); Luke DeBock, Construction Manager, Waste Management, Inc, of Florida; and John Schert, Executive Director, Hinkley Center for Solid and Hazardous Waste Management (www.billhinkley.com).

**SWANAFL.org Gets a Facelift**

*Marissa Segundo, RRS & Communications Chair*

Websites are the “home base” for communities, businesses, and organizations. With more than 7,800 users and 27,000 pageviews, SWANAFL.org is no exception. Last year, the board and communications committee took on the challenge this year to amplify web visitors’ experience. The goal—to create a personalized and easy to navigate website that focused on the areas members most valued. Lucky Lindy Designs provided their web design expertise coupled with input from members in our member survey. Members and prospective members should take the time to visit the new site and follow us on Facebook/SWANAFL and share their feedback.
The Green Spotlight!

Mary Wozny,  
Education Specialist,  
SWA

The Solid Waste Authority of Palm Beach County (SWA) was proud to sponsor and present to Shriece Franks, the school food service manager for H.L. Johnson Elementary School, the 2018 Green Food Service Staff Member Award on May 16, 2018 at the 10th Annual Green Schools Recognition Program Awards Ceremony coordinated by Pine Jog Environmental Education Center. This award was given to recognize the impact Shriece had on her school’s effort to go green by working to reduce waste, increase recycling, and promote healthy eating and nutrition. Shriece received this award after only one year of service with this school, which demonstrates her and her staff’s dedication. H.L. Johnson Elementary School’s overall movement to go green is one many schools can learn from.

H.L. Johnson Elementary School has about 750 students who, through their daily activities, focus on environmental stewardship and sustainability. Each grade level has their own garden to take care of and each class has plants for which they are responsible. These smaller grade level gardens are in addition to the larger school butterfly garden. Some green features in the butterfly garden include two murals: one made of various colored bottle caps of their mascot the Jaguar; and the other depicting a flower and bee scene made of repurposed plastic bottles and aluminum cans. They even have a rain barrel to collect the rain to use in watering their beautiful garden.

Shriece implemented many changes in cafeteria operations. Some of her first changes were to replace foam trays with plastic reusable trays. She also introduced à la carte healthy and reduced fat snacks as options for students. Shriece then ensures that all cardboard boxes, and milk and juice cartons are placed in the right recycling bins. The school collects other items for recycling such as markers and Little Bites packaging. To help reduce food waste, the cafeteria now has a “sharing table” where students can place their unopened food items for other students to take advantage of. Another huge success was the installation of a water bottle refilling station at the school which saves countless plastic water bottles from entering the waste stream.

Principal Jennifer Makowski said everything that has been accomplished by Shriece and the school is due to the strong support and commitment from faculty, staff, and the PTO. Her advice to other schools for ways to motivate the staff and students to go green is to “make it fun!” The school holds an annual Fall Festival that includes activities such as building scarecrows using recycled materials.

The SWA is hopeful that by showcasing the wonderful green initiatives at H.L. Johnson Elementary School brought about by Shriece Franks and her green team, they can inspire your school to start some amazing programs of your own to Go Green and be the next recipient of the SWA award!

For more information, contact Mary Wozny, Education Specialist, Solid Waste Authority of Palm Beach County, at (561) 640-4000 or e-mail MWozny@swa.org
SWANA FL Committee Chairs

STANDING COMMITTEES

Membership
Monica Bramble
(W) 941-240-8060
mbramble@cityofnorthport.com

Conference
Tammy Hayes
(W) 813-281-2900
HayesT@cdmsmith.com

Conference Sub Committee –
Young Professionals
Wei Liu
(W) 813-281-2900
LiuWT@cdmsmith.com

Conference Sub-Committee –
Programs
Rebecca Rodriguez
(W) 234-533-8914
rrodriguez2@leegov.com

Conference Sub-Committee –
Golf
Greg Hansen
(W) 813- 630-2109
ghansen@scsfieldservices.com

Conference Sub-Committee –
Exhibits and Sponsors
Michael Gordon
(W) 727-587-6760
migordon@largo.com

Awards
Mitch Kessler
(W) 813-971-8333
mk@kesconsult.com

Awards Sub-Committee –
Scholarships
Karam Singh
(W) 904-598-8930
Karamjit.Singh@hdrinc.com

Bylaws (and Policy)
Keith Howard
(W) 941-342-2741
Keith.Howard@hdrinc.com

Audit
Tammy Hayes
(W) 813-281-2900
HayesT@cdmsmith.com

Nominating
Mitch Kessler
(W) 813-971-8333
mk@kesconsult.com

Legislative
Reginald Ofuani
(W) (850) 891-5450
reginald.ofuani@talgov.com

Communications
Marissa Segundo
(W) (727)278-7909
msegundo@recycle.com

Communications Sub-Committee –
Newsletter
Angelina Ruiz
(W) 800-358-2873 x 7
angelina@wasteadvantagemag.com

Finance and Budget
Sam Levin
(W) 407-475-9163
Slevin@S2Li.com

Training
Open

Health & Safety
South Florida
Chad Grecsek
(W) 954- 480-4386
941-240-8063
cgrecsek@deerfield-beach.com

North Florida
George White
(W) 352-438-2300
gwhite@marioncountyfl.org

Central Florida
Earl Gloster
(W) 727-562-4990
earl.gloster@myclearwater.com

Bylaws (and Policy)
Keith Howard
(W) 941-342-2741
Keith.Howard@hdrinc.com

TECHNICAL DIVISIONS

Collection and Transfer
Marc Rogoff
(W) 813-804-6729
mrogoff@geosyntec.com

Landfill Management
Rebecca Rodriguez
(W) 234-533-8914
rrodriguez2@leegov.com

Planning and Management
Euripides Rodriguez
(W) (321) 633-2042
Euripides.rodriguez@brevardcounty.us

Recycling & Special Waste
Frank Lama
(W) 941-240-8050
flama@cityofnorthport.com

Waste to Energy
John Power

Landfill Gas & Biogas
Dan Cooper
(W) 813-621-0080
DCooper@SCSEngineers.com

SPECIAL COMMITTEES

Chapter Road-E-O
Gene Ginn
(W) 727-587-6760
gene.ginn@lakelandgov.net

Facebook
www.facebook.com/swanafl
Safety Matters

If you missed our premiere Safety Symposium and Road-E-O in St. Petersburg, you missed a lot! According to the great feedback we received, this was probably one of our best programs to date.

We started off with a keynote presentation by David Biderman, SWANA CEO, who is passionate about this topic. He challenged everyone to sign the safety pledge on SWANA’s website https://swana.org/SafetyHaulerOutreach.aspx.

We then moved into panel discussions where participants shared their safety programs not only for collection but at landfills, but also for MRFs and other solid waste facilities. Equipment and maintenance programs were discussed from both a manufacturer’s and mechanic’s perspective, and technology rounded out the day with driving simulator demos that were a lot of fun.

The next day, Road-E-O participants shared their experiences and we learned about injury prevention. Everyone agreed that this combined program was very valuable. You can find all of the presentations on our website under Past Events.

On Saturday, 44 contestants participated in the Chapter Road-E-O. The winners were announced at the banquet and will be traveling to Phoenix, AZ, in October to represent Florida in the International Road-E-O.

Thank you to all of our generous sponsors and volunteers who made this event happen! If you’re interested in getting involved with the SWANA FL Chapter’s safety initiative, please contact one of our safety ambassadors:

South Florida – Chad Grecsek
cgrecsek@deerfield-beach.com

North Florida – George White
gwhite@marioncountyfl.org

Central Florida – Earl Gloster
earl.gloster@myclearwater.com

We hope to see you all at our Summer Conference in July!

Congratulations to the 2019 Chapter Road-E-O Winners

TRUCKS

TRACTOR TRAILOR
1st – Joe Marshall, City of Clearwater
2nd – Joseph Giovelli, Brevard County
3rd – Jaret Roloff, Lee County

SIDE LOADER
1st – Tim Jones, City of Clearwater
2nd – Tim Voorhees, City of Largo
3rd – Lenny Perri, City of Largo

FRONT LOADER
1st – Shauwn Clark, City of Largo - TOP GUN
2nd – Paul Healy, City of North Port
3rd – Eliseo Ramirez, City of North Port

REAR LOADER
1st – Andre Bonney, City of Largo
2nd – Galen Adderly, City of Deerfield Beach
3rd – John Garakop, City of Clearwater

ROLL OFF
1st – Rufus Whiting, City of Clearwater
2nd – John Mellor, City of Clearwater
3rd – Logan Smith, City of Largo

HEAVY EQUIPMENT

LOADER
1st – Justin Cash, Hernando County
2nd – Nick Babino, Hernando County
3rd – Brett Korince, Lee County

DOZER
1st – Just Roush, Hernando County
2nd – Keith Lane, Solid Waste Authority of Palm Beach County
3rd – Oscar Ochoa – Hillsborough County

COMPACTOR
1st – Carl Ballard, Citrus County - TOP GUN
2nd – Chris Colburn, Hernando County

MECHANICS

1st – Anthony Majkiewicz, City of Lakeland - TOP GUN
2nd – Rex Wastson, Brevard County
3rd – Michael Collins, City of Lakeland
Member News

Kessler Consulting Inc. Welcomes New Consultants

Kessler Consulting Inc. (KCI), a national leader in solid waste planning, welcomes two new consultants: Amy Marpman and Maria Hernandez. Amy Marpman joins KCI with a decade of consulting experience in waste management and recycling. Her extensive expertise includes: helping clients meet their sustainability goals for commercial business Zero Waste efforts, standardized recycling programs, data tracking and measurement across multi-use campus settings, and green purchasing advisement.

Most recently, Amy was Director of Sustainability at Recycle Track Systems, a recycling and waste services technology company. Recruited to increase credibility through her recognized subject matter expertise, she established a diversion management program for special projects and expanded a partner vendor network for recycling of non-traditional materials. She began her waste management career at Great Forest, a consulting and brokerage firm, where her programmatic success and revenue achievement as Director of Recycling Services led to her promotion as COO.

Amy holds LEED AP O+M certification and is a TRUE Zero Waste Advisor. She earned her BA in Communications at Western Washington University and completed graduate studies focused on urban environmental issues at The New School’s International Affairs program in New York. Her responsibilities at KCI include collection procurements, waste audits, solid waste management planning, and waste reduction.

Maria Hernandez brings 20 years of experience consulting with governmental organizations to help them implement strategic change initiatives. Her expertise includes developing training solutions that align employee skills and behaviors with business priorities and working with clients to design communication strategies. Past clients include military and civilian organizations within the U.S. Department of Navy, as well as AchieveGlobal, a leadership and customer service training and consulting company. Maria will be bringing her extensive expertise to assist on many KCI projects.

Maria also is a certified facilitator of AchieveGlobal leadership programs and holds a BA in English from Goucher College. Her responsibilities at KCI include project management, program implementation, facilitation of working groups, communications, and procurements.

KCI is proud to add Amy and Maria to their team of professionals dedicated to bringing clients smart, innovative solutions to their solid waste planning needs.

For more information, visit www.kesconsult.com.

Autocar® Trucks Announces Two Promotions

Autocar® Trucks has announced the promotions of Aaron Taitz and Sam Mimms as Regional Business Managers serving refuse and recycling haulers in the state of Florida. Aaron and Sam will combine their efforts to address Autocar’s strong focus on Florida customers and their specific product needs, with Aaron serving haulers in South Florida and Sam serving haulers in Central and North Florida. Both Aaron and Sam bring a breadth of experience that enable them to help their customers select products that will meet their needs for effective and safe operations.

Aaron has progressed through a number of production and supply chain roles across the Autocar organization, including product research, operations, supply procurement, and sales. Aaron was also a project manager during the startup of Autocar’s new Birmingham, Alabama production plant, helping ensure real time that trucks produced met the high performance and quality standards for which Autocar trucks are known. Aaron has spent much of his time traveling across Florida, learning the key challenges of operators in the state.

Sam has been with Autocar for several years, starting in Autocar’s renowned service team as a Field Service Engineer helping keep Autocar’s Always Up® promise. Sam worked across the U.S. managing onsite fleet startups and also trained new operators at Autocar’s Birmingham facility. Sam’s technical understanding of Autocar trucks reflects Autocar’s dynamic role in providing value to customers. We know that Sam will apply his experience to provide even more value to current and future customers.

Please join us in congratulating Aaron and Sam in their new roles. We look forward to the value they will provide to operators in the great State of Florida.

For more information, visit www.autocartruck.com.
Webinar Program CONTINUES...

Florida Sunshine Chapter is a member of the SWANA Webinar Program. This allows Chapter members to attend SWANA live webinars with no out-of-pocket cost. The registration fee has already been paid for by your Chapter.

Chapter members can register themselves for SWANA Webinars online at SWANA.org. All you need is to enter the Chapter’s NEW Debit Card Code at the time of registration.

Visit http://www.swanafl.org. Webinar Program information is under “Committees/Training.”

Limited number of registrations available at this time.

Earn CEU’s
All individuals that attend a webinar can earn continuing education units.
SWANA Florida Sunshine Chapter has purchased credits/registrations in the SWANA Webinar Program for member use. To use, members need only:

- Select live webinar from SWANA’s offerings.
- Register and enter Florida Chapter code listed below.

Visit [https://swana.org/Education/eLearning/ChapterWebinarProgram.aspx](https://swana.org/Education/eLearning/ChapterWebinarProgram.aspx) for more information.

When a group views a SWANA Webinar through the Chapter Webinar Program, all attendees can receive Continuing Education Units (CEU’s). To apply for CEU’s:

- Provide a sign-in sheet to [certification@swana.org](mailto:certification@swana.org).
- Include the webinar title and date, name of the person who registered to receive the logins, and the name and SWANA ID Number of each of the participants.

SWANA’s Training Department will allocate CEU credits for SWANA Certified professionals who attended the webinar and are verified Chapter members.

**NEW Florida Chapter Webinar Program**

Debit Card Code is: FL150617
### Chapter Officers & Directors

**President**  
Tammy Hayes  
(W) 813-281-2900  
hayest@cdmsmith.com  
CDM Smith

**Director 17-19**  
Michael Gordon  
(W) 727-587-6760  
migordon@largo.com  
City of Largo

**Vice President**  
Keith Howard  
(W) 941-321-8205  
Keith.Howard@hdrinc.com  
HDR

**Director 17-19**  
Chad Gresek  
(W) 954-480-4386  
cgresek@deerfield-beach.com  
City of Deerfield Beach

**Treasurer**  
Sam Levin  
(W) 407-475-9163  
Slevin@S2Li.com  
S2Li

**Director 18-20**  
Nathan Mayer  
(W) 561-758-7130  
nmayer@swa.org  
Solid Waste Authority of Palm Beach County

**Secretary**  
Monica Bramble  
(W) 941-240-8060  
mbramble@cityofnorthport.com  
City of North Port

**Director 18-20**  
Allan Cole  
(W) 407-836-6635  
allan.cole@ocfl.net  
Orange County Solid Waste

**Immediate Past President**  
Mitch Kessler  
(W) 813-971-8333  
mk@kesconsult.com  
Kessler Consulting

**Director 18-20**  
Bill Pickrum  
(W) 727-298-3215  
wpickrum@dunedinfl.net  
City of Dunedin

**Director 17-19**  
Becky Hiers-Bray  
(W) 904-673-6172  
bkhiersbray@gmail.com

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**Upcoming Events**

**2019 SWANA FL Summer Conference**  
July 28-30, 2019  
Grand Hyatt Tampa Bay  
Tampa, FL