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Tariffs and the metals industry: Where we stand today

by MAURA KELLER

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In early December 2019, President Trump announced he would impose tariffs on steel and aluminum from Brazil and Argentina, a move that alters previous agreements with those countries. Likewise, in mid-October 2019 President Trump said he would increase the Section 232 tariffs on Turkish steel from 25 to 50 percent, as a result of the country's military actions in Northeast Syria. Additionally, during the height of 2019's holiday season, the president stated that as part of the U.S.-China trade deal, the U.S. will not charge Beijing with any new tariffs and will slightly reduce existing ones. These announcements and the ongoing changes facing the tariff environment could potentially expand the global trade war that has been on the minds of recyclers for the last couple of years. In fact, this "seesaw" effect of today's tariff environment is causing many industries, including recycling companies, to keep a constant watch on the evolving tariff situation.

It's been almost two years since Trump initiated his trade war with China in March 2018 in an effort to close a trade deficit. In the ensuing months, the president imposed tariffs on more than two-thirds of all Chinese goods. This strategy had ripple effects throughout the metals recycling market for months afterward.

According to Peter Quinter, shareholder and customs attorney at Gray-Robinson, based upon a report prepared by the U.S. Department of Commerce in March 2018, president Trump issued proclamations stating that the importation of steel and aluminum was a national security threat to critical industries in the U.S.

"Pursuant to the authority of Section 232 of the Trade Expansion Act of 1962, he imposed an extra tariff of 25 percent on virtually all imported steel and an extra tariff of 10 percent on virtually all imported aluminum effective March 23, 2018. On May 19, 2019, the steel and aluminum tariffs were removed for both Mexico and Canada as part of the U.S.-Mexico Canada Agreement (USMCA) negotiations to replace the NAFTA," Quinter said.

Mike Jenny has more than 15 years of experience in the metals industry at Livingstone Partners, and has a keen understanding on production, distribution, fabrication and recycling across a variety of metals and specialty materials.



Donald Trump and Xi Jinping shake hands at a press conference. Trump initiated the trade war with China in March 2018 in an effort to close a trade deficit.

As Jenny explained, the initial tariff effects were temporary; domestic steel producers experienced an initial jolt in earnings, however, the market has settled into a new lower pricing dynamic driven in part by supply and demand imbalances domestically.

"In the year since the tariffs took effect, benchmark steel prices have fallen well below their level before the tariffs took effect," Jenny said. "Moreover, at the steel producer level, downstream producers saw increased output costs as consumers of steel. Imported steel was expensive and priced out of reach and domestic prices increased to match import pricing, putting the steel out of reach on both sides." Tariffs have also driven industry consolidation, such as Cleveland Cliffs' acquisition of AK Steel as well as several metal recycling related deals Livingstone Partners actively participated in.

"A final tariff agreement has not been reached by the Trump administration," Jenny said. "Tariffs are still in place and they tend to fluctuate up and down for certain countries. Tariffs are largely holding constant, save in the case of Turkey where they were up and are now back down."

So what impact does the current tariff situation and its subsequent fluidity have on the metals market? As Quinter explained, if United States Steel Corporation's stock value is any indication, after Trump's steel tariffs

were implemented, the value of the stock doubled to a high of \$46. Since then, it has been on a constant downward trend, and is now only about \$11, which is about half the value when the extra steel tariffs went into effect.

"As with other industries broadly affected by President Trump's tariffs, prices of steel and aluminum were higher in 2018 when the extra tariffs were initially implemented but have been down-trending ever since," Quinter said.

Soon after President Trump imposed extra tariffs on Chinese products, China responded with tariffs of its own, including a 25 percent tariff on scrap aluminum.

According to Quinter, U.S. recycling operations found themselves on the front lines of the trade war as China shifted its purchase of scrap metals to other countries.

"Consequently, scrap metal prices have dropped in the U.S. The U.S. has an oversupply of domestically produced steel, aluminum and stainless scrap," Quinter said.

As Jenny further explained, on the recycling front, the tariffs have caused a price drop for a number of reasons:

- There were no tariffs or price protection on scrap metal for imports.
- There was decreased demand for exported scrap.
- Supply outpaced demand. Due to relatively high manufacturing rates,

See TARIFFS, Page A4

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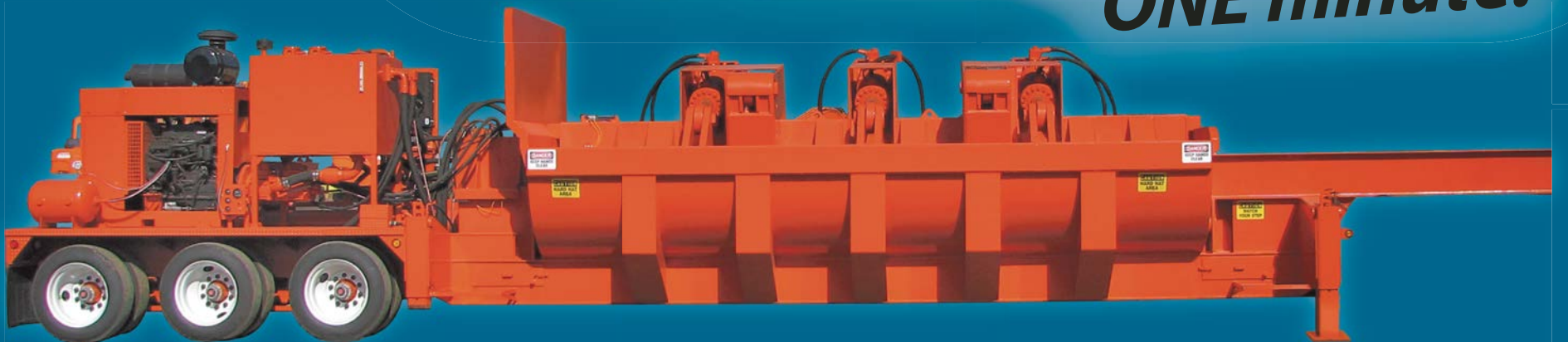


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California addresses their container recycling crisis by revamping the existing Bottle Bill

The State of California has experienced a mass of closure of their can and bottle redemption centers. Consumers are struggling to find locations to take their returns and many containers are ending up in the trash bin.

Now, some in the state Legislature want to revive and evolve California's existing Bottle Bill. A State Senate committee will hold hearings on a bill in February that would make beverage manufacturers accountable for providing consumers the ability to recycle and the revisions would also become inclusive of wine and liquor makers.

With over half of California's recycling centers closing in the last six years, the revisions are desperately needed. Out of Los Angeles County's 88 cities, a full 45 have no recycling centers at all. San Francisco has only 4 centers which serve almost 900,000 residents.

"The state can no longer put off solving this ever growing crisis," Assemblyman Phil Ting (D-San Francisco) stated. He introduced a bill meant to prop up struggling recyclers.

Jared Blumenfeld, the State's Environmental Protection secretary, said he supports the idea of "extended producer responsibility" and acknowledged that the details are crucial.

The California Refund Value (CRV) program's issues became obvious last August, when RePlanet closed



RePlanet closed all of its 284 locations in California last August, making the dire situation more obvious.

all of its recycling centers. That reflected a loss to consumers of 284 locations where they could previously recycle. Additional closures left the entire state of California with only 1,208 recycling centers.

As the prices for scrap aluminum and plastic declined, recyclers struggled while state payments meant to cover a portion of their operating costs didn't cover their actual expenses. The reduction of aluminum values meant that recyclers that once got 80 to 90 cents per pound for aluminum cans now get a little more than 40 cents. That large a drop meant that there was no way to recoup the loss.

Prices for recycled plastic also dropped, in part as a result of China's decision to stop accepting imports of the material. The Chinese said the imported plastic was contaminated with other materials.

California's container recycling rate has declined from 85 percent in 2013 to 75 percent in 2018. That includes cans and bottles collected via curbside recycling programs. Consumer advocates say the lack of recycling centers has meant that the CRV charges are often unclaimed and that, according to Consumer Watchdog, effectively makes the CRV a tax. CalRecycle put the redemption rate at 68

percent for the \$1.35 billion collected in fiscal year that ended in 2019.

With centers closing, California law envisions supermarkets and other retailers stepping up to redeem cans and bottles. But many don't. An audit by Consumer Watchdog found that up to two-thirds of stores won't complete the transactions, leaving many customers with no easy way to get their money back.

The state tried to force retailers to take back empties in December, when it proposed a record \$3.6 million penalty against the CVS pharmacy chain after dozens of its stores declined to redeem cans and bottles. CVS has not said publicly how it will respond.

The new bill envisions a four year period in which drink makers and distributors could design a new, working system. They would establish a Beverage Container Stewardship Organization by October of 2021 and submit a recycling plan to CalRecycle by the following spring. The state agency would set up regulations to transition from the current system to the new one, which would launch in January 2024.

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EPA addresses dumpsites in New Mexico with environmental justice small grant

The U.S. Environmental Protection Agency (EPA) recently announced that \$1.5 million in competitive grants will be awarded to 50 organizations working to address environmental justice issues in their communities.

As part of the announcement, Pueblo of Zia in New Mexico will receive funding to address the litter, illegal dumping and scrap tires on Tribal land.

“Rural and disadvantaged communities are often disproportionately affected by environmental health risks, and at EPA we are working to reverse this trend,” said EPA administrator Andrew Wheeler. “These grants support the President’s initiatives to invest in and revitalize distressed communities. By supporting often overlooked, local organizations that understand the unique challenges that their communities face, we’re better able to put in place long-term solutions to improve the environment and health of underserved areas of the country.”

“This year’s winners of EPA’s environmental justice small grants show creativity and determination in helping their communities thrive,” said regional administrator Ken McQueen. “From small scale organic farming to preventing water pollution, these organizations show how many ways there are to benefit people’s health and the environment.”

EPA’s Environmental Justice Small Grants program provides critical support to organizations that otherwise lack the funding and resources to address environmental challenges in underserved and overburdened communities. Nationally, EPA helped organizations in 27 states and Puerto Rico carry out projects that will:

- Educate residents about environmental issues that may impact their health.
- Collect data about local environmental conditions.
- Conduct demonstrations and trainings to shed light on those conditions.

• Work collaboratively to address environmental justice challenges in their communities.

The grants will enable these organizations to conduct research, provide education and training, and develop community-driven solutions to local health and environmental issues in minority, low-income, tribal, and rural communities. Sixteen of this year’s environmental justice grant projects are in communities that are especially vulnerable to disasters.

Specific grant projects include: reducing exposure to lead and other water pollutants; developing green infrastructure and sustainable agriculture projects; implementing basic energy efficiency measures in low-income households; and increasing overall community resiliency.

This year EPA received 208 applications, which is the highest number since 2013. The grant awards provide approximately \$30,000 per project for a one-year project period.

Tariffs

■ Continued from Page 1

scrap has continued to be generated despite diminished export demand and lower utilization rates by domestic steelmakers.

“Ultimately, it changed how people operated in 2019,” Jenny said.

As a result of the December 2019 “Phase One” deal with China, President Trump agreed to a limited trade agreement with Beijing that will roll back existing tariff rates on Chinese goods and cancel new levies. Specifically the deal reduces some U.S. tariffs in exchange for more Chinese purchases of American products, and better protection for U.S. intellectual property.

Under the deal, the U.S. will continue to levy a 25 percent tariff on about \$250 billion of imported Chinese goods, but tariffs on another \$120 billion of imports would be reduced to 7.5 percent. In addition, China agreed to increase purchases of American products and services by at least \$200 billion over the next two years – nearly doubling U.S. exports to China.

The constant ebb and flow of the tariff situation means the scrap recycling industry is facing its own share of ups and downs. In Quinter’s opinion, the scrap recycling business is unlikely to recover until the extra tariffs on imported steel and imported aluminum are removed.

“It’s a common misperception that foreign exporters to the U.S. directly pay the tariffs, however, it is always the U.S. import company which pays these extra taxes, and then passes them on eventually to the consumer, resulting in higher costs,” Quinter said. “If President Trump cancelled his extra tariffs on imported steel and aluminum, and products made from those metals, the rest of the world would cancel their retaliatory tariffs, China would probably resume its purchases of recycled metals from the U.S., and international trade would return to ‘normal.’”

Jenny added that if anything, it’s important to note the cyclical nature of the recycling industry and the fact that the tariffs aren’t permanent. That said, tariffs are the new normal within the industry and have fostered uncertainty in the market.

“Recycling companies would do well to focus on efficiency,” Jenny said. “The companies successfully weathering this challenging period work hard to never buy more than they need and sell within as short time-frame as possible – which admittedly is easier said than done.”

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NWRA recaps accomplishments in recycling

The National Waste and Recycling Association (NWRA) released its annual report highlighting its 2019 accomplishments. The association achieved significant policy goals as well as identified opportunities to make the industry safer.

“I am proud of our team and our accomplishments in 2019. We are an advocacy organization determined to achieve tangible results for the proud industry we represent and we did that last year,” stated Darrell Smith, NWRA president and chief executive officer. “We set a high standard for ourselves and I look forward to continuing that momentum into 2020.”

Policy

•Hours of Service/Electronic Logging Devices – FMCSA granted NWRA a rare Hours-of-Service exemption exclusively to NWRA members that eliminates the need for them to use ELDs as otherwise is required under new rules now in effect. This is estimated to save our members nearly \$120 million over two years. Having the name of an association written into a regulatory mandate is nearly unheard of in the public policy arena.

•Tax Extenders – Congress passed and President Trump signed an extension of the tax credits for the use of alternative fuels such as compressed natural gas, the creation of alternative fuel refueling infrastructure, and facilities producing energy from renewable resources through the end of 2020. NWRA has been aggressively lobbying for passage of tax extenders since prior to their expiration.

•USMCA Trade Agreement – The House of Representatives passed the

United States-Mexico-Canada Agreement (USMCA) supported by NWRA. Senate passage is expected in January.

•National “Move Over” – NWRA chairman Ben Harvey provided testimony on behalf of the association to the House Transportation & Infrastructure Committee’s Highways and Transit Subcommittee for their hearing on “Every Life Counts: Improving the Safety of our Nation’s Roadways.” Federal legislation aimed at reducing roadside deaths and establishing a public safety program to raise awareness of “Move Over” laws was introduced in the House and Senate.

•Slow Down to Get Around – SDTGA was signed into law in Minnesota and California. Due to the hard work of NWRA chapters, these laws now cover our industry in 30 states.

•Recycling – NWRA, along with others, jointly developed the Think Twice poster in an effort to help consumers recycle properly.

Safety

•OSHA and NWRA entered into an alliance agreement to promote workplace safety.

•NWRA redesigned Safety Monday to incorporate key perspectives from the people who work in the industry every day to include drivers, supervisors, safety professionals and NWRA members’ executive suites.

•NWRA participated in Safe + Sound Week 2019 with OSHA.

•NWRA released its Waste, Construction, Demolition, and Recycling Material Recovery Facility Temporary Worker Recommended Practices guide.

•NWRA requested and received clarification on behalf of its Florida members from FMCSA on the use of “Curotto Cans” with regard to headlight and turn signals after Florida enacted a law eliminating the statutory provision exempting waste and recycling vehicles.

Association Governance

•NWRA ended the 2019 fiscal year with a record budget surplus.

•NWRA’s Services Board of Governors elected Waste Management’s Lisa Disbrow as their chair, the first woman to serve in this capacity and as a member of the association’s Board of Trustees.

•EPA Administrator Andrew Wheeler joined Darrell Smith during the America Recycles Day Summit to honor waste and recycling industry employees for their service in the military. More than 20 veterans from NWRA member companies representing the U.S. Army, Navy, Marine Corps, and National Guard received a challenge coin specially designed for the event.

•NWRA partnered with Orion Talent to provide direct access to military veteran job seekers for association members, enable member organizations to direct market to the military community, and leverage accredited training programs that help employers learn best practices for the hiring and retention of veterans.

•NWRA developed and released an infographic highlighting the size and significance of the waste and recycling industry to the domestic economy.

•NWRA jointly developed and released documents with SWANA recommending a major shift in the process states

use to determine when closed municipal solid waste landfills are ready to end post-closure care.

•The NWRA Women’s Council released an Internship Toolkit to assist member companies with the development of internship programs.

•The Women’s Council awarded five scholarships in the amount of \$7,000 each to assist qualified individuals in their pursuit of an education that will lead to productive careers in the environmental industry.

•NWRA’s Colorado Chapter changed its name to the Rocky Mountain Chapter so as to represent the interests of NWRA members in the neighboring states of Utah, New Mexico, and Wyoming.

Awards and Recognition

•NWRA was awarded the American Society of Association Executives’ 2019 “Power of (A)” Silver Award for its multi-year Slow Down to Get Around legislative advocacy campaign.

•Darrell Smith was recognized by DCA Live as the leader of one of Washington D.C.’s most innovative and fastest growing associations. Smith was honored for demonstrating exceptional performance in advancing NWRA’s missions in 2019.

The new year will bring numerous opportunities and challenges for the waste and recycling sector. NWRA will advocate on behalf of the industry so that members can prosper and provide safe, economically sustainable, and environmentally responsible services and jobs that benefit communities throughout America.



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Update on the current state of recycling offered

Over the past year, global markets for recyclables have shifted causing a rippling effect that has hindered recycling programs across the country. As a result, many Ohio communities have seen a recent increase in the cost for recycling programs which has led to speculation regarding the future sustainability of their programs.

Thankfully, recycling is alive and well in central Ohio and has been relatively unaffected by these changes. During last month's Summit on Sustainability, hosted by the Mid-Ohio Regional Planning Commission, SWACO brought together leaders from P&G and Rumpke Waste & Recycling to discuss the state of recycling in Franklin County.

Steve Sargent, director of recycling at Rumpke Waste and Recycling, discussed how in recent years, China consumed 55 percent of the world's scrap paper and was a major destination for other recyclables. With changes to restrict the levels of contaminated materials now being accepted by the country, many communities are struggling to keep recycling programs afloat.

"For years, China has been the single largest consumer of recyclable

materials exported by the U.S.," said Steve Sargent, Rumpke director of recycling. "The Chinese government is trying to improve their environmental standards by banning anything that could come in and negatively impact that effort."

Central Ohio's residential recycling programs have been primarily insulated from those changes thanks in large part to the fact that 98 percent of the markets secured by Rumpke are located in the U.S. with many being right here in Ohio. This has resulted in stability in Franklin County's residential recycling programs.

SWACO's director of Innovation and Programs, Kyle O'Keefe, moderated the panel. He shared insights into how the U.S., with limited international markets available, can leverage international policy changes to create new lines of business for new and expanding recycling-reliant companies. O'Keefe noted that last year, SWACO completed an economic impact study which documented nearly 400 recycling reliant businesses in the central Ohio region, supporting more than 5,000 jobs and contributing over \$1.3 billion in annual revenue to the local economy. Supporting these busi-

nesses and the circular economy, as well as attracting new and emerging companies to the region continues to be an important part of keeping recycling alive.

Ohio based Procter & Gamble, one of the largest consumer goods companies in the world, has committed to reducing plastic waste and increasing the use of recycled-content packaging as part of its Ambition 2030 Goal.

During the Summit, P&G packaging expert, Brent Heist discussed the company's efforts including P&G's development of a new game-changing technology that can recycle polypropylene – a type of plastic that is currently difficult to recycle. Polypropylene is one of the Top 3 plastic resins used in the world, found in shampoo caps, pour spouts on laundry detergent, luggage, carpets, razor handles, yogurt pots, stadium cups and more. It holds onto odor and contaminants and today recycled polypropylene can be made only into low-value gray products like park benches and flower pots.

The demand for recycled material, which will continue to grow, represents a significant economic opportunity. Currently, only two kinds of

plastic, PET and HDPE, are economically viable for recyclers, and recycled PET is likely to be 1 billion pounds short of supply in the U.S. by 2025. The Recycling Partnership is predicting that a \$250 million investment is needed to improve residential waste-collection equipment, educate consumers and improve the collection of plastics at materials recovery facilities, which would result in a true circular economy.

We must keep in mind that all recycled materials, including plastics, are commodities that are bought and sold on the open market. These markets drive the economics of recycling and, like all markets, they are vulnerable to disruptions at the local, national, and global levels. Our national recycling system is in the process of experiencing a market disruption and adapting to find new solutions. Ultimately it is the demand for recycled content in the products we purchase that will help to determine the solutions for building a more resilient circular economy. As individuals and organizations, we all play an important role in growing this demand through the use of our purchasing power and advocacy.

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EPA addresses remedies for illegal dumpsites in New Mexico

The U.S. Environmental Protection Agency (EPA) recently announced that \$1.5 million in competitive grants will be awarded to 50 organizations working to address environmental justice issues in their communities. As part of the announcement, Pueblo of Zia in New Mexico will receive funding to address the litter, illegal dumping and scrap tires on Tribal land.

“Rural and disadvantaged communities are often disproportionately affected by environmental health risks, and at EPA we are working to reverse this trend,” said EPA administrator Andrew Wheeler. “These grants support the President’s initiatives to invest in and revitalize distressed communities. By supporting often overlooked, local organizations that understand the unique challenges that their communities face, we’re better able to put in place long-term solutions to improve the environment and health of underserved areas of the country.”

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and resources to address environmental challenges in underserved and overburdened communities. Nationally, EPA helped organizations in 27 states and Puerto Rico carry out projects that will:

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- Collect data about local environmental conditions.
- Conduct demonstrations and training to teach about those conditions.
- Work collaboratively to address environmental justice challenges in their communities.

Specific grant projects include: reducing exposure to lead and other water pollutants; developing green infrastructure and sustainable agriculture projects; implementing basic energy efficiency measures in low-income households; and increasing overall community resiliency.

This year EPA received 208 applications, which is the highest number since 2013. The grant awards provide approximately \$30,000 per project for a one year project period.

Alabama program a success

The Recycling Alliance of North Alabama (RANA), which began its new curbside recycling program in August, has seen much success and participation over its first three months of operations, officials said.

RANA is the Solid Waste Disposal Authority of the City of Huntsville (SWDA) funded monthly curbside recycling program that replaced the former 18 gallon bins with new 95 gallon carts which are 5 times larger than the bins. In June, residents were able to register for the new program, and the program now has approximately 61,000 households participating in the first 3 months. Based on spot audit of the last program, the number of active participants is up approximately 25,000 households.

In looking at the first 3 months of the program, more than 80 percent of residents that signed up for the program have participated and placed their cart

on the curb for their pick-up day collection. This is a fairly high number for a new program, and new carts will continue to be delivered to residents who sign up. Currently, there are 4,500 carts in the process of being delivered.

“We are pleased that the new program is off to a good start. The new program has extended eligibility to approximately 20,000 additional households, and we hear frequently that these households are glad to be included as well,” said Doc Holladay, executive director of SWDA, which manages the RANA program. “While we had a few road bumps in the beginning, we know that we are now at a point that we can look back at the last couple months and celebrate the program and our successes, learn from any mistakes, and continue to be a place that offers sustainable choices to our residents.”



Pennsylvania launches food recovery program

Grant applications are now being accepted for the Pennsylvania Department of Environmental Protection’s (DEP) new Food Recovery Infrastructure Grant Program, which will provide assistance to eligible non-profit organizations such as shelters and food banks for proper food management.

“Access to fresh food in underserved communities is a public health and quality of life issue, but it’s also an environmental justice issue. While traveling across the state, my staff and I often hear from underserved communities that access to fresh food is a significant concern, so we wanted to do our part to address this issue in a meaningful, environmentally focused way,” said DEP Secretary Patrick McDonnell. “Nonprofit organizations such as food banks, soup kitchens, and shelters provide critical sustenance to those in need, so it’s critical that the food they provide is properly transported and stored.”

Funded through the state’s Recycling Fund, grants of up to \$200,000 are available to eligible nonprofit organizations to purchase equipment like refrigerators, freezers, refrigerant vehicles, and more to use food before it becomes waste for disposal.

“Protecting food and preventing food waste is also an important way to reduce landfill waste and address climate change, as rotting food produces methane, a strong greenhouse gas,” McDonnell said. “This funding will help nonprofits afford the necessary equipment to transport and maintain food items so that they can not only continue their efforts to help those in need but also reduce and prevent food waste.”

Reducing food waste is a priority in DEP’s Climate Action Plan. In addition to releasing greenhouse gases, food waste represents a significant portion of landfill waste. The Environmental Protection Agency (EPA) estimates that in 2015, of the 39.7 million tons of food waste that was generated nationwide, three quarters – or 30.3 million tons – of food waste went to landfills, representing nearly a quarter of all solid waste landfilled.

Interested organizations are first required to meet with their DEP Regional Planning and Recycling Coordinator to apply. The grant application deadline is April 24, 2020.

For additional information, view this article on www.AmericanRecycler.com.

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to get it from!” “Oh I’m sure glad to hear that,” I replied. “I was afraid you were going to try to borrow it from me!”

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Traits of the most successful leaders

What is a successful leader? My definition, which is likely different from those of many others, is one that is well liked by all his stakeholders in his business world and loved by those in his personal world. He or she has proven the ability, maybe even multiple times, to “bring home the bacon,” build successful businesses that make money and assure their own survival as well as the survival of all the employees.

Some habits of likeable leaders:

•They’re approachable – You know those people who only have time for you if you can do something for them? Likeable leaders truly believe that everyone, regardless of rank or ability, is worth their time and attention. They make everyone feel valuable because they believe that everyone is valuable.

•They’re humble – Few things kill likeability as quickly as arrogance does. Likeable leaders don’t act as though they’re better than you because they don’t think they’re better than you. Rather than being a source of prestige, they see their leadership position as additional accountability to serve those who follow them.

•They’re positive – Likeable leaders always maintain a positive outlook and this positivity shows in how they describe things. They don’t have to give a presentation to the board of directors; they get to share their vision and ideas with the board. They don’t have to go on a plant tour; they get to meet and visit with the people who make their company’s products. They don’t even have to diet; they get to experience the benefits of eating healthfully. Even in undeniably negative situations, likeable leaders emanate hope, a confidence that they can help make tomorrow better than today.

•They’re even-keeled – When it comes to their own accomplishments and failures, likeable leaders take

things in stride. They don’t toot their own horns, nor do they get rattled when they blow it. They savor success without letting it go to their heads and readily acknowledge failure without getting mired in it. They learn from both and move on.

•They’re generous – We’ve all worked for someone who constantly holds something back, whether it’s knowledge or resources. They act as if they’re afraid you’ll outshine them if they give you access to everything you need to do your job. Likeable leaders are unfailingly generous with people they know, what they know, and the resources they have. They want you to do well more than anything else because they understand this is their job as a leader and because they’re confident enough to never worry that your success might make them look bad. In fact, they believe that your success is their success.

•They appreciate potential – Robert Brault said, “Charisma is not so much getting people to like you as getting people to like themselves when you’re around.” Likeable leaders not only see the best in their people, but they also make sure everyone else sees it, too. They draw out people’s talents so everyone is bettering themselves and the work at hand.

•They’re strategic – They think fast, really fast. They don’t think about how to start, they think about the goal and how to finish. Then they plot the steps to get there. They think, if I want that, what are the steps and how do I achieve them? And they pressure test every step by thinking if I do that, what is likely to happen, and if it’s not the desired outcome, they back up and think about what they should have done.

•They hold others, and themselves, accountable. It’s simple if you can do what they ask, you will be a hero; if not, you will be gone.

Remember, only you can make BUSINESS GREAT!

This article was provided by autosalvageconsultant.com, which was formed in 2001 by recyclers for recyclers, to help them improve their businesses.

Coffee bean skins turned into car parts



Ford Motor Company and McDonald's USA will soon be giving vehicles a caffeine boost by using part of a familiar staple in the morning routine, coffee beans, in vehicle parts such as headlamp housing.

PHOTO COURTESY OF FORD MOTOR COMPANY

Every year, millions of pounds of coffee chaff – the dried skin of the bean – naturally comes off during the roasting process. Together, Ford and McDonald’s can provide an innovative new home to a significant portion of that material. The companies found that chaff can be converted into a durable material to reinforce certain vehicle parts. By heating the chaff to high temperatures under low oxygen, mixing it with plastic and other additives and turning it into pellets, the material can be formed into various shapes.

The chaff composite meets the quality specifications for parts like headlamp housings and other interior and under hood components. The resulting components will be about 20 percent lighter and require up to 25 percent less energy during the molding process. Heat properties of the chaff component are significantly better than the currently used material, according to Ford. This is the first time Ford has used coffee bean skins to convert into select vehicle parts.

“McDonald’s commitment to innovation was impressive to us and matched our own forward-thinking vision and action for sustainability,” said Debbie Mielewski, Ford senior technical leader, sustainability and emerging materials research team. “This has been a priority for Ford for over 20 years, and this is an example of jump starting the closed-loop economy,

where different industries work together and exchange materials that otherwise would be side or waste products.”

McDonald’s is expected to direct a significant portion of its coffee chaff in North America to Ford to be incorporated into vehicle parts.

“Like McDonald’s, Ford is committed to minimizing waste and we’re always looking for innovative ways to further that goal,” said Ian Olson, senior director, global sustainability, McDonald’s.

The collaboration with Ford and McDonald’s is the latest example of the innovative approaches both companies take to product and environmental stewardship. The project also involves Varroc Lighting Systems, which supplies the headlamps, and Competitive Green Technologies, the processor of the coffee chaff.

Ford is progressing toward a goal of using recycled and renewable plastics in vehicles globally.

McDonald’s goal is to source 100 percent of its guest packaging from renewable, recycled or certified sources by 2025. In addition, McDonald’s is helping develop a recyclable and/or compostable cup through the NextGen Cup Consortium and Challenge.

McDonald’s and Ford plan to continue exploring ways to collaboratively use waste as a resource, while furthering their sustainability goals.

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Applicant: My name is Eric with a K.
Interviewer: *writes name down* And your last name?

Applicant: With a K.
Interviewer: No, I got that: Erik. What’s your last name?

Applicant: My last name is with a K.
Interviewer: Wait... your name is Erik Erik?

Applicant: My last name is With a K.

Interviewer: Okay, wait a minute, so to clarify...

Applicant: My last name is literally *air quotes* “Withakay.” It is all one word.

Interviewer: *finishes writing* So review the document to make sure I got this right.

Applicant: *looks* No, I spell Eric with a C.

RUBBER

Credential Environmental surpasses milestone

For nearly 2 decades, Credential Environmental Limited (CEL) has been at the forefront collecting end of life scrap tires in the UK and has used their experience, capability and advanced shredding technologies to recycle and safely dispose of a wide range of tires.

Employing more than 50 trained waste management staff, Credential Environmental efficiently runs tire recycling and processing sites in Selby and Wednesbury with a collections team that operates throughout 48 counties in England. CEL offers a comprehensive, fully compliant and reliable service to established customers and has a series of contracts with blue chip companies for recycled products.

Over 4,300 miles away in Sarasota, Florida, the staff at CM Shredders headquarters received an e-mail from Robert Taylor, site manager for Credential Environmental that said, "We have now produced 250,000 tonnes through and we continue to look after them with our Total Productive Maintenance (TPM) system and maintenance programs. You guys certainly build good CM machines!"

The flagship equipment of CEL's program is centered around CM Shredders Dual Speed Chipping Shredders. One of CM's most popular turnkey shredders, with mobile or in this case stationary configurations, it is capable of

processing whole passenger, truck, SUV and semi-truck tires down to a clean-cut 25mm chip. The rubber chips are sold as tire derived fuel, tire derived aggregate and can also be used as feedstock for crumb rubber production.

CM Chipping Shredders turnkey package includes infeed conveyor, discharge conveyor, sub frame, stands and platforms as well as a control panel with PLC Controls. All systems are pre-wired and tested at the factory. This CM guarantee means systems are quickly installed and commissioned in the field. Most systems are operational in two – three days after arrival on site. This saves thousands of dollars in freight, site preparation and field installation costs. Simply supply incoming power to the system and all other systems are pre-wired and ready for operation.

Equipped with patented technology, the CM system utilizes the closest knife to knife tolerances possible with replaceable knife inserts made of through hardened tool steel. This allows the system to produce the cleanest cut chips with the least exposed wire. CM knives can be reground, repositioned and reused anywhere from 3 to 6 times. On average, the CM knives will be able to process 320,000 PTE (passenger tire equivalent) per use before regrinding and are capable of processing roughly one million PTE's per knife set.

METALS

ISRI responds to Surface Transportation Board

The Institute of Scrap Recycling Industries (ISRI), the Voice of the Recycling Industry™, filed its reply comments in the demurrage proceedings at the Surface Transportation Board (STB). These comments are a result of hearings held in the spring to investigate the rail industry's practice of reducing free time for loading and unloading and subsequent demurrage fees. They are preceded by ISRI's initial comments, which were filed in November.

Excerpts of ISRI's comments follow (full text of comments):

ISRI strongly commends the Board for addressing some of the major concerns of its members, as well as other industry stakeholders, regarding recent changes in demurrage and accessorial charges and practices as implemented by Class-I railroads as part of Precision Scheduled Railroading (PSR). The Association of American Railroads (AAR) and various Class-I railroads (Railroad Parties) have asserted various points and arguments against these proposals in their opening comments. ISRI respectfully submits its reply comments on various issues raised by the Railroad Parties.

The Railroad Parties paint an inaccurate picture of the law and favor a demurrage regime that would allow railroads to over-recover penal demur-

rage charges from their customers. Second, although the railroads' comments focus on the compensatory objective of demurrage charges, they fail to acknowledge cases which conclude that where neither the carrier or the shipper is at fault, it is not reasonable for shippers to pay "the element in the demurrage charge which represents penalty."

Moreover, the Board has broad discretion to interpret the "reasonableness" standard which applies to demurrage 14 and retains the authority to develop enforcement principles and guidance that account for present-day circumstances in the rail industry, including the fact that railroad tariffs currently do not separate compensatory and penal demurrage charges.

The rail industry has undergone significant changes since 1982, including substantial consolidation of many railroads that drastically reduced competitive forces in the market. Thus, the Commission's contention that increased competition would deem these rules unnecessary does not prove to be accurate in the modern rail industry.

Finally, ISRI provides its reply comments in connection with the Board's proposal regarding regulations governing exemptions for certain commodities, including ferrous scrap, and boxcar transportation.

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METALS

Steel imports down YTD through November

U.S. IMPORTS OF FINISHED STEEL MILL PRODUCTS BY COUNTRY OF ORIGIN (Thousands of Net Tons)

	NOV 2019	OCT 2019	2019 Annualized	2018 Full Year	% Change 2019 Annual vs. 2018
SOUTH KOREA	188	170	2,627	2,764	-5.0%
JAPAN	85	75	1,282	1,383	-7.3%
GERMANY	55	79	1,053	1,339	-21.4%
TAIWAN	31	39	871	1,069	-18.5%
VIETNAM	28	28	710	1,110	-36.0%
BRAZIL	11	59	569	479	18.6%
CHINA	20	27	565	696	-18.8%
NETHERLANDS	70	30	542	613	-11.6%
All Others	824	992	13,245	16,241	-18.4%
TOTAL	1,311	1,499	21,463	25,694	-16.5%

Based on preliminary Census Bureau data, the American Iron and Steel Institute (AISI) reported that the U.S. imported a total of 1,541,000 net tons (NT) of steel in November 2019, including 1,311,000 NT of finished steel (down 29.9 percent and 12.5 percent, respectively, vs. October final data). Through the first 11 months of 2019, total and finished steel imports are 26,332,000 and 19,675,000 net tons, down 17.3 percent and 18.1 percent, vs. the same period in 2018.

Key finished steel products with a significant import increase in November compared to October are cut lengths plates (up 46 percent), hot rolled bars (up 24 percent), standard pipe (up 13

percent) and line pipe (up 12 percent).

In November the largest volumes of finished steel imports from offshore were from South Korea (188,000 NT, up 11 percent from October final), Japan (85,000 NT, up 14 percent), The Netherlands (70,000 NT, up 131 percent), Germany (55,000 NT, down 30 percent) and Taiwan (31,000 NT, down 21 percent). For the first eleven months of 2019, the largest offshore suppliers were South Korea (2,408,000 NT, down 10 percent vs. the same period in 2018), Japan (1,175,000 NT, down 9 percent), Germany (965,000 NT, down 21 percent), Taiwan (799,000 NT, down 21 percent) and Vietnam (650,000 NT, down 36 percent).

CMC reports improved financial performance

Commercial Metals Company (CMC) announced financial results for its fiscal first quarter ended November 30, 2019. First quarter earnings from continuing operations were \$82.8 million, or \$0.69 per diluted share, on net sales of \$1.4 billion, compared to prior year period earnings from continuing operations of \$19.4 million, or \$0.16 per diluted share, on net sales of \$1.3 billion. Net sales increased eight percent on a year-over-year basis driven by the company's growth strategy and strong fundamentals in its core markets.

As a result of ongoing network optimization efforts, a decision was made to cease melting operations at their Rancho Cucamonga, California facility, which resulted in a net after tax charge of \$5.0 million. Excluding these expenses, adjusted earnings from continuing operations were \$87.8 million, or \$0.73 per diluted share, as detailed in the non-GAAP reconciliation on page 12. This represents a 109 percent increase compared to adjusted earnings from continuing operations of \$0.35 per diluted share for the three months ended November 30, 2018.

Barbara R. Smith, chairman of the board, president and chief executive officer, commented, "The first quarter marked the best financial performance from our strategically repositioned portfolio of operations. This milestone reflects the continued health of the U.S. non-residential construction sector, which contributed to strong performances in our Americas Mills and Fabrication segments. We believe the metal margin performance seen over recent quarters highlights the stability of CMC's rebar and long product offerings compared to the broader steel market."

The company's liquidity position as of November 30, 2019 remained strong, with cash and cash equivalents of \$224.8 million and availability under the Company's credit and accounts receivable facilities of \$659.9 million.

On January 2, 2020, the board of directors of CMC declared a quarterly dividend of \$0.12 per share of CMC common stock payable to stockholders of record on January 15, 2020. The dividend was paid on January 30, 2020, and marks 221 consecutive quarterly dividend payments.

CMC's Americas Recycling segment recorded adjusted EBITDA of \$3.4 million for the first quarter of fiscal 2020 compared to adjusted EBITDA of \$15.4 million for the prior year quarter. The decrease reflected a challenging price environment in which average ferrous prices decreased by 33 percent on a

year-over-year basis. Low prices also reduced material flows during the quarter.

Their Americas Mills segment recorded adjusted EBITDA of \$155.0 million for the first quarter of fiscal 2020, an increase of 36 percent compared to adjusted EBITDA of \$113.9 million for the first quarter of fiscal 2019. Volumes increased 42 percent compared to the prior year period, primarily due to additional production from acquired facilities. Metal margins expanded \$10 per ton year-over-year, as a reduction in scrap costs more than offset a \$71 per ton decline in average selling prices. Results in the first quarter also benefited from the achievement of our lowest conversion costs since the November 5, 2018 acquisition.

Their International Mill segment in Poland recorded adjusted EBITDA of \$11.4 million for the first quarter of fiscal 2020, compared to adjusted EBITDA of \$32.8 million for the comparable prior year quarter. Safeguard trade measures have thus far been ineffective in deterring a surge of imported product into Europe, resulting in a compression of metal margins during the quarter. Shipment volumes declined on a year-over-year basis, primarily due to the absence of opportunistic billets sales that were made during the first quarter of fiscal 2019. Conditions within the Polish construction sector remain healthy and demand for rebar continues to be strong. Despite lower shipment volumes during the quarter, our Polish operations successfully reduced conversion costs compared to the year-ago period.

"We expect construction and infrastructure demand to remain resilient," said Smith. "Customer sentiment and our own fabrication backlog both point to a strong outlook for activity, though our second quarter will be impacted by typical seasonality related to holidays and winter weather conditions affecting construction activity."

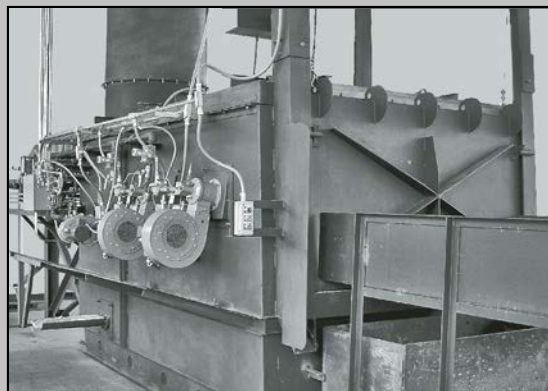
"We anticipate metal margin will remain above the historical cycle average, but will experience a decline from first quarter levels. We expect our progress in optimizing our expanded domestic mill network during the first quarter will yield benefits going forward. We anticipate fabrication will remain profitable, while recycling should see some benefit from the recent rebound in ferrous scrap prices. We expect challenges to remain for our Polish operations until the current overhang of imports to the European Union unwinds."

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my shift is almost over, so if you can give me a good excuse for your behavior, I'll let you go." The guy thought about it and said, "My wife ran away with a cop about a week ago. I thought you might be that officer trying to give her back!"

METALS

DEQ fines aluminum recycler \$1.3 million for violations

The Oregon Department of Environmental Quality issued a \$1,296,885 penalty to Hydro Extrusion USA LLC for multiple air quality permit violations at its aluminum recycling facility in The Dalles.

The fine is the largest air quality penalty ever issued by DEQ, which also regulates land and water quality in Oregon.

“DEQ found Hydro Extrusion operated with flagrant disregard for the rules and conditions of its air quality permit,” said Kieran O’Donnell, DEQ compliance and enforcement manager. “DEQ expects industrial facilities to adhere to the rules that are in place to protect the health of Oregon’s people and environment. Hydro Extrusion chose not to follow these rules, and DEQ is holding the facility accountable to ensure in the future it operates in full compliance with environmental laws.”

Hydro Extrusion is part of Norsk Hydro, a Norway based company that operates aluminum facilities worldwide, including dozens of locations in the U.S. The facility in The Dalles melts down aluminum scrap so it can be recycled into new products.

DEQ and the U.S. Environmental Protection Agency discovered the violations during an unannounced inspection in April 2019. The facility’s air quality permit allows it to melt only “clean charge”— material that’s free of oil and grease, paints or other coatings. DEQ found the facility processed unclean, coated aluminum scrap for

more than a year. Processing this material is prohibited under the facility’s permit.

DEQ also found the facility did not conduct the required tracking and monitoring intended to prevent the processing of unclean charge, failed to keep required records, submitted inaccurate certifications to DEQ, and exceeded the allowable rate of an additive used to improve product quality.

After identifying the violations, DEQ ordered the facility to stop using unclean aluminum, improve its tracking and monitoring program, and submit monthly records so DEQ can verify compliance. Hydro Extrusion has improved its scrap monitoring program at the facility and certified to DEQ that it has stopped processing prohibited material.

The majority of the penalty – \$1,063,485 – is the estimated economic benefit the facility gained by avoiding the cost to install and maintain pollution control equipment. If the facility installs control equipment, DEQ may recalculate the economic benefit portion of the penalty.

The largest prior air quality permit penalty issued by DEQ was \$303,169. The largest ever penalty in any DEQ program area was \$1.4 million for violations relating to a fuel spill from underground storage tanks.

Hydro Extrusion may appeal the alleged violations within 20 days of receiving the penalty notice.




Commodity		Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
#1 Bushelings	per gross ton	\$265.00	261.00	265.00	278.00	330.00
#1 Bundles	per gross ton	258.00	243.00	260.00	259.00	321.00
Plate and Structural	per gross ton	252.00	236.00	249.00	254.00	273.00
#1 & 2 Mixed Steel	per gross ton	185.00	218.00	230.00	234.00	279.00
Shredder Bundles (tin)	per gross ton	126.00	132.00	169.00	144.00	151.00
Crushed Auto Bodies	per gross ton	126.00	132.00	169.00	144.00	151.00
Steel Turnings	per gross ton	85.00	81.00	89.00	130.00	135.00
#1 Copper	per pound	2.42	2.36	2.45	2.50	2.49
#2 Copper	per pound	2.24	2.21	2.31	2.36	2.32
Aluminum Cans	per pound	.57	.55	.48	.50	.51
Auto Radiators	per pound	1.38	1.23	1.42	1.48	1.43
Aluminum Core Radiators	per pound	.56	.48	.39	.41	.37
Heater Cores	per pound	1.05	1.04	1.01	1.03	1.12
Stainless Steel	per pound	.56	.54	.50	.47	.48

All prices are expressed in USD. Printed as a reader service only.

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METALS

Steel import permit applications increased

Based on the Commerce Department's most recent Steel Import Monitoring and Analysis (SIMA) data, the American Iron and Steel Institute (AISI) reported that steel import permit applications for the month of December 2019 totaled 2,308,000 net tons (NT). This was a 12.3 percent increase from the 2,055,000 permit tons recorded in November and a 47.8 percent increase from the November final imports total of 1,561,000. Import permit tonnage for finished steel in December was 1,388,000, up 4.2 percent from the final imports total of 1,331,000 in November. For full year 2019 (including December SIMA permits and November final imports), total and finished steel imports were 28,660,000 NT and 21,082,000 NT, down 15.0 percent and 17.9 percent, respectively, from 2018. The estimated finished steel import market

share in December was 15 percent and is 19 percent for 2019.

Finished steel imports with large increases in December permits vs. November final imports included hot rolled sheets (up 38 percent), tin free steel (up 37 percent) and plates in coils (up 29 percent). Products with significant increases in 2019 vs. 2018 include black plate (up 110 percent) and steel piling (up 37 percent).

In December, the largest finished steel import permit applications were for South Korea (199,000 NT, up 6 percent from November final), Japan (81,000 NT, down 4 percent) and Germany (81,000 NT, up 48 percent). For full year 2019, the largest offshore suppliers were South Korea (2,606,000 NT, down 6 percent from 2018) and Japan (1,256,000 NT, down 9 percent).

China issues second 2020 import quota

China has approved a new quota for approximately 26,560 tonnes of high grade copper, aluminum and ferrous scrap imports for delivery in 2020.

It is the second quota round issued for 2020 following a larger quota issued in December.

The new quota for copper scrap – totaled 26,000 tonnes. Of this 5,050 tonnes was allocated to the port of Tianjin, 7,576 to the Shanghai-Ningbo region and 4,110 to multiple ports in southern China.

The aluminum scrap quota totaled 7,544 tonnes, with 3,090 going to Nanhai in southern China, 174 going to Ningbo, 1,030 to Dalian and 100 to Tianjin.

The ferrous scrap quota amounted to 2,280 tonnes.

The total Chinese scrap import quota currently approved for 2020 is 582,740 tonnes, of which copper accounts for 296,421, aluminum 283,041 and ferrous 2,280.

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BUSINESS BRIEFS

ASV names Gangi as national accounts manager

■ Frank Gangi has been promoted to national accounts manager for ASV Holdings Inc., a manufacturer of compact track loaders and skid steers. Gangi will be responsible for supporting and growing ASV's customer portfolio.

Gangi has 23 years of experience in the manufacturing industry, with more than 10 years in the compact loader business. He most recently worked as an ASV area manager for welding, fabrication and paint. Prior to that, he was in factory sales, where he managed the ordering process and worked closely with ASV's dealers and sales team.

Gangi completed his undergraduate degrees at Northwestern College in St. Paul, Minnesota and Northwest Technical Institute in Eden Prairie, Minnesota. He earned his MBA from The University of South Dakota. Additionally, he holds a certification in product management from AIPMM.

*What do single people say on Valentine's Day?
Happy Independence Day!*

Solar Integrated Roofing acquires Milholland Solar

■ Solar Integrated Roofing Corporation (SIRC), an integrated solar and roofing installation company, has developed a focus on acquisitions of like companies.

In their plan to build a national footprint, SIRC has finalized its terms and acquisition agreement with Milholland Solar Electric and Roofing. Milholland expects to generate approximately \$10 million in revenues for 2019.

Brian Milholland founded Milholland Solar Electric and Roofing in 1990. A former 82nd Airborne Division Paratrooper in the US Army, Milholland holds contractor's licenses in California and Arizona.

In 2012, he was a BBB Torch Awards for Ethics finalist and was named 2015 SBA California Small Business Person of the Year. He is also a Sun Power Master Dealer and Tesla Certified Power-wall Installer.

EPA appoints Kurt Thiede as Region 5 administrator

■ The U.S. Environmental Protection Agency (EPA) administrator Andrew Wheeler announced the appointment of Kurt Thiede of Wisconsin as regional administrator for Region 5, overseeing environmental protection efforts in Minnesota, Wisconsin, Illinois, Michigan, Indiana, and Ohio. Thiede will succeed Cathy Stepp, who is stepping down from her post in the Great Lakes region after several years of service to the agency.

Thiede comes to this role with extensive experience promoting and protecting the environmental health of the Great Lakes region. Most recently, Thiede served as the chief of staff to regional administrator Cathy Stepp.

Prior to joining the EPA, Thiede served as deputy secretary of the Wisconsin Department of Natural Resources from 2015 to 2017. As deputy, he served as the chief operations officer for the agency, overseeing a \$500 million annual operating budget and providing leadership and direction to the agency's 2,400 full time employees. He is an 18 year veteran of WDNR, and previously spent 4 years as the administrator for the Land Division.

Thiede has a Bachelor of Science degree in wildlife management and biology from the University of Wisconsin-Stevens Point, and in 2016 he received an outstanding alumnus award from their school of natural resources.

Events

March 10th-11th

C&D World. Bally's Hotel, Las Vegas, Nevada. 866-758-4721
www.cdrecycling.org

March 15th-18th

Southeast Recycling Conference & Tradeshow/SERC. Hilton Sandestin Beach Golf Resort & Spa, Destin, Florida. 850-386-6280
www.southeastrecycling.com

March 23rd-26th

SWANApalooza 2020. Westin Peachtree Plaza, Atlanta, Georgia. 703-449-6418
www.swanapalooza.com

April 16th-18th

United Recycler's Group. Hyatt Regency, St. Louis at the Arch, St. Louis, Missouri. 888-874-3463
www.u-r-g.com

April 20th-21st

Northeast Recycling Council (NERC) Spring Workshop. Sheraton Hartford South Hotel, Rocky Hill, Connecticut. 802-254-3636
www.nerc.org

April 20th-22nd

Aluminum Association Spring Meeting. The Broadmoor, Colorado Springs, Colorado, 703-358-2960
www.aluminum.org

April 27th-30th

ISRI Convention & Exhibition, Mandalay Bay Resort & Casino. Las Vegas, Nevada. 202-662-8500
www.isri.org

No. 1 Preferred Publication



BUSINESS BRIEFS

C&C Mfg. hires new sales representative

■ C&C Mfg., headquartered in Ottumwa, Iowa, has hired Dave Reed as a sales representative for both the scrap and solid waste divisions.

Reed has significant experience with both divisions, having previously worked for Caron Compactor, Al-jon and LaBounty. Reed will cover the Northeastern U.S.

ALLU USA names new VP of distribution and marketing

■ East Brunswick, New Jersey based ALLU Group Inc. has appointed Edison Rocha as its new vice president of distribution and marketing for the U.S. and Canada. Rocha is responsible for increasing development of distribution channels, as well as marketing throughout North America.

Rocha brings almost 25 years of experience in construction equipment sales, dealer development and marketing to this position, including 11 years with Sandvik Mining & Construction, where he held positions in aftermarket and sales management in South America and the U.S. – most recently as a division sales manager for the U.S. Prior to that, Rocha worked in sales and sales management for Linck Machines and Servcorp International. He holds bachelor's degrees from Ponta Grossa State University and University of Social Studies in Administration and Marketing, respectively, as well as MBA degrees from Kennedy Western University and Tulane University.

GRYB enters U.S. market by acquiring Winkle Industries

■ GRYB, the Canadian leader in the design, manufacture and adaptation of attachment equipment for heavy machinery, has acquired 100 percent of Winkle Industries and its subsidiaries PROEN Engineering Solutions and LiftTech Field Services. Based in Alliance, Ohio, Winkle is an industry leading diversified supplier of engineered mechanical and magnetic material handling solutions and contract manufacturing services.

In addition to gaining a U.S. presence, the move helps establish GRYB as an industry frontrunner with unmatched materials handling product offerings.

This is GRYB's second acquisition in less than a year. Earlier in 2019 they acquired Ontario based Bateman Manufacturing, which specializes in the manufacture of grapples and handling attachments for many sectors. Bringing together these three leaders of attachments for heavy machinery brings many synergies to the mobile cranes industry as well as excavators, construction, demolition, scrap processing, ports, mining and more.

Sander named to standards committee

■ The National Waste and Recycling Association announced that Kirk Sander, chief of staff and vice president of safety and standards was selected as a consensus body member for the Continuous Maintenance process of ANSI-GBI 01-2019: Green Globes Assessment Protocol for Commercial Buildings.

C&M Conveyor, OBP make top management changes

■ Brett Jaffe, chief executive officer of C&M Conveyor and Ohio Blow Pipe, has announced several top management changes.

After 32 years of leadership at Ohio Blow Pipe, Ed Fakeris has transferred from day-to-day involvement to an advisory position with the company.

Randy Grube will take on the newly created role of chief commercial officer, responsible for both C&M and OBP commercial activities. Before joining C&M Conveyor, Grube was a corporate project manager for six years with Packaging Corporation of America, Lake Forest, Illinois, and production manager and senior project engineer for 13 years with Smurfit-Stone Container, Chicago, Illinois.

Mike Connell will take on responsibilities as OBP's sales and marketing manager, including the coordination of the OBP sales team and marketing of all products. Prior to joining Ohio Blow Pipe and C&M, Connell served at Balemaster in Crown Point, Indiana, as regional sales manager and sales manager, successively. Before that he was plant engineer at The Haire Group in Merrillville, Indiana.

Cagney Clark will serve as sales manager of C&M Conveyor. He joined the company in 2006 as a shop floor employee and also has served as CAD operator, inside sales administrator, regional sales manager, inside sales manager. He also is responsible for the parts sales, inside sales and outside sales teams.

Hendrickson makes organizational changes

■ Hendrickson has promoted Matt Joy to the position of chief operating officer. Joy most recently was vice president and general manager of their truck group with previous roles of vice president and general manager of specialty product group and vice president of finance. In this new role, Joy will have the responsibility for all divisions: truck commercial vehicle systems, trailer commercial vehicle systems, specialty products, and international operations.

Two additional organizational changes have taken place at Hendrickson. Richard Mudd has been promoted to vice president and general manager of truck commercial vehicle systems. Mudd joined Hendrickson in 1998 and has since held various roles including production manager, plant manager, director of operations, vice president of operations, and most recently vice president and general manager of specialty product group.

Matt Van Meter has been promoted to vice president and general manager of the specialty products group. Van Meter began his career with Hendrickson Trailer in 1998 as a test engineer and has since held various positions including, engineering manager, director of product validation at trailer, senior engineering manager at truck, chief engineer, and most recently truck general manager of engineering and operations.

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buy the original!"*

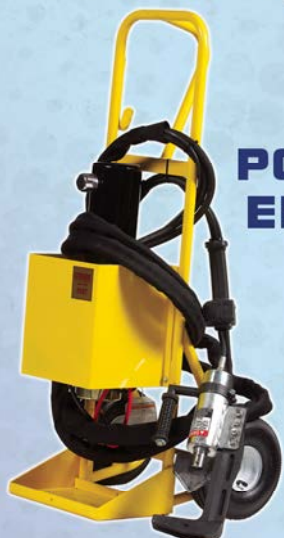


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BUSINESS BRIEFS

APR elects new board of directors for 2020

■ The Association of Plastic Recyclers (APR) recently announced its leadership team and board of directors to lead the organization for 2020.

Jaime Camara of PetStar will serve as Chair for the upcoming year, with Rozanne Spiekerman of Roplast Industries and Michael Westerfield of Dart Container serving as vice chair and treasurer respectively.

The APR membership elected the following new members to the board for a three year term:

- John Caturano, Nestle Waters
- Scott Saunders, KW Plastics Recycling
- Julie Zaniewski, Dow Chemical Company

They join APR's existing board members: Jon Stephens, Avangard Innovative; Dawn Gaines, Mohawk Industries, Greg Janson, QRS Inc.; Tony Moucachen, Merlin Plastics; and Eric Targgart, Custom Polymers, Inc.

Brokk upgrades parts warehouse

■ Brokk, a manufacturer of remote-controlled demolition machines, is enhancing customer service and parts availability with upgrades to the parts warehouse at its headquarters in Monroe, Washington. The new facility houses an array of standard and specialty parts for all Brokk models as well as older Brokk models. The facility also provides parts for hydrodemolition robots and accessories from Aquajet, a Brokk subsidiary. In combination with the other parts and service centers in St. Joseph, Missouri, and Stanhope, New Jersey, the new warehouse ensures fast, reliable support for Brokk and Aquajet customers across North America.

Optimized logistics allow for faster parts processing through the new warehouse.

In addition to swift delivery, experienced Brokk technicians are available to help customers quickly get the parts they need.

Miller Environmental completes acquisition

■ Brown Gibbons Lang & Company (BGL) announced the sale of Environmental Products & Services of Vermont, Inc. (EPS) to Miller Environmental Group (MEG). MEG is owned by GenNx360 Capital Partners, a New York City based private equity firm focused on acquiring middle market business services and industrial companies.

BGL's Environmental & Industrial Services team served as the exclusive financial advisor to EPS in the transaction. The specific terms of the transaction were not disclosed.

Headquartered in Syracuse, New York, EPS is a leading environmental and industrial services provider with 17 branches across the eastern U.S. and national coverage through its national accounts model. EPS offers a comprehensive suite of essential and highly complementary services, including waste disposal, spill response, industrial maintenance, vacuum truck, tank cleaning, geological, high vacuum extraction, and other specialty services.

GFL and American Waste agree to acquisition

■ GFL Environmental Inc. and American Waste have entered into a definitive agreement for the acquisition by GFL of American Waste's solid and liquid waste businesses in Michigan and Pennsylvania.

The closing of the transaction is subject to customary regulatory approvals.

Founded in 1971 as Northern A-1 by their father, Edward Ascione Sr., Michael and Edward Ascione have since grown American Waste and Northern A-1 to be a leading vertically integrated provider of environmental solutions for a broad base of solid and liquid waste customers. Michael and Edward Ascione will join GFL and continue to manage the American Waste businesses.

ALTERNATIVE ENERGY

Market for thermal treatment plants strong in Europe

The market for thermal treatment plants continues to be strong. Although Asia is still in a dominant position concerning commissioning and planning, the market situation in Europe is again characterized by an upward trend.

At the end of 2018, an estimated number of 2,450 thermal treatment plants were active throughout the world, with an overall treatment capacity of approximately 370 million tpy. For 2019 alone, an expected 60 plants worldwide will be commissioned, with a capacity of 14 million tpy. By the end of 2028, ecoprogram expects an increase of the global plant inventory to about 2,700 units, as well as global treatment capacities amounting to some 530 million tpy.

In this context, China will keep dominating the global market volume, even though a decrease in the build-up of waste incineration plants can be anticipated in the medium term against the backdrop of China's recent efforts to expand material recycling and a slowdown of economic growth. Other countries, such as India or Indonesia, will probably only be able to partially counteract the decreasing Chinese market volume from about 2025.

In Europe, on the contrary, a growing number of commissionings is anticipated in the years to come. For the next 5 years, ecoprogram expects about 50 additional plants to be commissioned with a capacity of approximately 18 million tpy.

The main reason for this development lies in the European Union's waste policy. Interestingly enough, the latter leads to a repeated boom, ironically in the very country which is to leave the EU in 2020. For the implementation of the EU landfill directive, Great Britain has, for instance, massively raised the landfill tax in the home country. As a consequence, exports of refuse-derived fuels increased to 3.4 million tonnes in 2018. As of 2020, these exports will be significantly hampered due to new taxes in the most important target countries, the Netherlands and Sweden. Subsequently, pressure is rising to create new capacities in the home country. In Poland as well, the increased landfill tax entails a more urgent need for waste disposal. More countries like France or Spain have already decided to raise landfill taxes or are in the process of discussing such measures.

It is above all the so-called Circular Economy Package of the EU which will create a further demand for thermal treatment capacities. By 2035, landfilling of municipal waste is supposed to be limited to 10 percent – that

is in compliance with new statistical calculations based on the output criterion. This also puts pressure on those countries which have already extensively invested in the pre-treatment of mixed wastes given their high proportion of mechanical-biological treatment plants. This includes, amongst others, Spain, France, Italy or Poland. Their waste statistics will presumably look quite different in 2027 when the percentage of recycling in mechanical-biological treatment plants will be downgraded in the statistics.

Even if the EU recycling quota of 65 percent were to be reached in 2035, this would imply a necessity for additional thermal treatment capacities in the EU. The industry association CEWEP values the latter at about 40 million tpy. Ecoprogram deems this number to be rather defensive as this calculation does not take into account a growing population. In addition to that, achievement of the recycling goals is very uncertain at the moment. Unlike in the case of landfilling, we do not know at present through which instruments these quotas can be realized. This also holds true for countries such as Germany or Austria.

“We assume that solely quotas for recyclates are promising when it comes to achieving the envisioned recycling goals”, stated Mark Döing, ecoprogram's managing director. “So far, these quotas have only been discussed – there are no actions decided. Unlike the established waste policy of the EU such recycle quotas would not only affect the waste industry, but all industries. As a consequence we anticipate major opposition to their implementation. This is why we do not expect material implementation within the next 10 years.”

For the time being, waste incineration can thus benefit from the restriction of landfilling in Europe, whereas recycling efforts only marginally reduce waste volumes for incineration.

Hence the biggest problem for the WtE industry in Europe is not so much represented by the market situation; it is rather a matter of suitable locations and political resistance in some countries. “We expect that the build-up of incineration capacities won't keep pace with the demand”, Döing said. “This is of course good news in general for the operators of existing plants in Europe.”

Ecoprogram's study, “Waste to Energy” is updated annually. In the field of thermal waste recovery, it is the most extensive market survey and data collection worldwide. The current 12th edition is available on their website, www.ecoprogram.com

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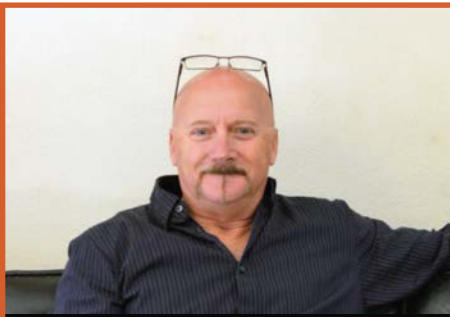
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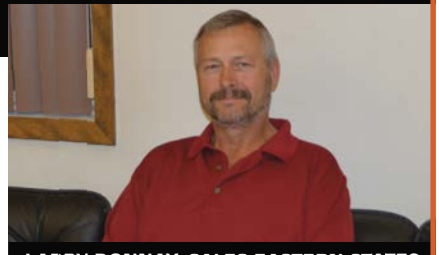
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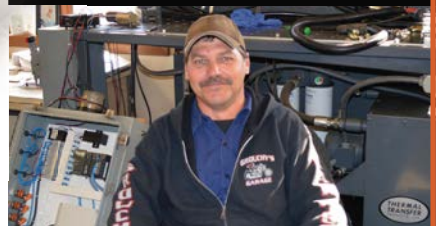
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Biochar – a viable option for C&D recyclers

by MAURA KELLER

mkeller@americanrecycler.com

Thanks to the innovative mindset of scientists, engineers and recycling industry players, leading-edge recycling techniques and initiatives continually bring new avenues of recycling to the forefront. Biochar is one such example of a growing technique that is making an impact on the biomass-recycling sector of the industry.

At Its Core

As Dominique Lueckenhoff, senior vice president for corporate affairs and sustainability at Hugo Neu explained, biochar is the epitome of the three Rs of the recycling industry: reduce, reuse and recycle.

“Biochar is a carbon-negative, beneficial re-use product resulting from eliminating many food, agricultural, forestry and landscaping biomass waste streams,” Lueckenhoff said. “This includes manure, food waste, wood debris and green waste, as well as biosolids, construction and demolition materials, containing wood waste, which are becoming more costly to dispose of due to challenges in the recycling and landfill waste management markets.”

Here’s how it works: Using the process of pyrolysis, biochar is manufactured by heating the biomass feedstock in an oxygen deprived environment. “Syngas, a flammable combination of hydrogen, carbon monoxide and methane and excess heat are byproducts of the pyrolysis process. Once the reaction is started, it is largely self-sustaining, requiring no additional input of energy,” Lueckenhoff said.

Within the reuse and recycle aspect of biochar, two viable products result from its creation – namely renewable energy and biochars. “Biochars can be used for many purposes including healthy soil amendments as compost, high performance natural fertilizer and treatment to improve water capture and storage capacity, besides removal of water



Biochars can be transformed into a multitude of new products including healthy soil amendments for compost and high performance fertilizer. It’s also shown advantageous use in sewer and water treatment applications.

PATRICK MORRISSEY | DREAMSTIME

quality pollutants ranging from nutrients to toxics and heavy metals in urban stormwater runoff,” Lueckenhoff said. It is also being added to building materials for greater carbon reduction and capture, while increasing the sustainable lifecycles of these materials, besides use as animal feed supplements that increase the health and viability of animals.

Beyond soil applications, biochars have also been used in environmental remediation for purposes such as sewage and water treatment and oil-field and land remediation. They have also been a non-soil carbon product in building products, animal feed and other applications.

“Companies seem to be coming to the understanding that materials that were once considered waste can now be a resource converted to secondary products,” said Thomas Trabold, associate professor and sustainability

department head at Rochester Institute of Technology’s (RIT) Golisano Institute for Sustainability. RIT received \$50,000 in a New York state funding commitment in 2017 to acquire food waste conversion equipment that is assisting companies seeking to effectively reduce, eliminate, and/or “upcycle” food processing and retail wastes – all part of the organization’s biochar research efforts.

In addition, Trabold and Steven Barber recently performed a research and development assessment in conjunction with the Staples Sustainable Innovation Laboratory (SSIL) to determine the potential of pyrolyzed waste paper as a cost-effective, environmentally friendly and sustainable black pigment for use in common consumer and commercial printing applications. According to the resulting study, “Waste Paper Derived Biochar for Sustainable Printing Products,” the pri-

mary focus of the project was the creation and testing of biochar to replace the heavy fuel oil derived “carbon black” (CB) pigment ubiquitously used in inks since the late 1800s.

As the report indicates, “reducing the use of CB would lessen the demand for fossil fuels, decrease printing’s environmental impact and potentially save money since biochars are typically created from free or low cost waste feedstocks which would ordinarily be disposed.”

Prior published scientific research and patents demonstrated that biochars could be successfully made from box cardboard, paper towels and glossy paper. If paper waste biochars could then be successfully transformed into a sustainable black ink pigment replacement, significant commercial potential exists. Here’s why: The global printing ink market is forecasted to reach \$23.8

See BIOCHAR, Page B7

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Contractors foresee gains in all market segments in 2020

Majority say finding workers will be challenge

Construction spending rose 4.1 percent from November 2018 to November 2019, while industry employment grew in 226, or 63 percent, out of 358 metro areas, according to a new analysis of federal data released by the Associated General Contractors of America. Association officials noted that its recent survey found most contractors are optimistic about the dollar value of projects available and expect to keep adding workers in 2020 but they are finding it hard to fill positions and anticipate it will continue to be hard to hire employees.

"Both the actual spending totals for November and our members' expectations for 2020 point to a continuing uptick in construction employment," said Ken Simonson, the association's chief economist. "It's likely that even more metros would have added workers recently if unemployment weren't at record lows in many areas."

Construction spending totaled \$1.324 trillion at a seasonally adjusted annual rate in November, up 0.6 percent from October and up 4.1 percent from November 2018, according to estimates the U.S. Census Bureau released today. There were year-over-year increases in all major segments – public, private residential and private nonresidential.

The Dallas-Plano-Irving, Texas metro area added the most construction jobs during the past year (15,400 jobs, 10 percent), followed by Las Vegas-Henderson-Paradise, Nevada (11,000 jobs, 17 percent). Las Vegas-Henderson-Paradise had the largest percentage increase, followed by 15-percent gains in Omaha-Council Bluffs, Nebraska-Iowa (4,500 jobs), Sioux Falls, South Dakota (1,300 jobs) and Auburn-Opelika, Alabama (400 jobs). Construction employment set a

new high for November in 71 metro areas and a new November low in 6 areas.

From November 2018 to November 2019, construction employment fell in 77 metros and was flat in 55. The largest declines occurred in New York City (-6,900 jobs, -4 percent) and Riverside-San Bernardino-Ontario, California (-4,300 jobs, -4 percent). The largest percentage decreases took place in Danville, Illinois (-17 percent, -100 jobs), Fairbanks, Alaska (-12 percent, -300 jobs) and Hartford-West Hartford-East Hartford, Connecticut (-11 percent, -2,300 jobs).

The new spending and employment data comes as the association's 2020 Construction Outlook survey found that for each of 13 project types, more contractors expect an increase in 2020 than a decrease in the dollar value of projects they compete for. Three-fourths of the 956 respondents expect to add workers this year, while only 5 percent expect a decrease. However, 65 percent say it will be as hard or harder to hire workers than in 2019, when 81 percent said they had a hard time finding qualified workers to hire.

Association officials added that labor shortages are forcing contractors to boost pay, invest more in training and adopt new labor-saving technologies. But they cautioned that those changes are not enough to allow many contractors to keep pace with growing demand, noting many firms report they have raised bid prices or proposed longer construction schedules because of labor shortages.

"The single greatest threat to continued growth in the construction industry is the shortage of qualified candidates for firms to hire," said Stephen E. Sandherr, the association's chief executive officer.

Milan among the top five cities in Europe for building green

According to Green Business Certification Inc. (GBCI) Europe, Milan has emerged as one of the top five cities in Europe for LEED green building. LEED, or Leadership in Energy and Environmental Design, was created by the U.S. Green Building Council (USGBC) and is the world's most widely used green building rating system. Milan has more than 80 LEED-certified buildings. These are certifications that are helping to reduce carbon emissions and provide healthier environments for people to live and work, and approximately 130 registered to pursue becoming LEED certified.

"The way we design our buildings, cities and communities impacts our quality of life and the quality of life for generations to come," said Mahesh Ramanujam, president and chief executive officer of GBCI and USGBC. "Milan's work with LEED is an example not just to Italy, but to the rest of the European region, and proves that high-performing, sustainable buildings are within our reach. By committing to practices that reduce our impact on the environment and prioritize our health, we can create a better living standard for each and every person."

"Urban development can no longer ignore the quality of the buildings in terms of sustainability, especially nowadays, when everybody can play a crucial role to face and tackle climate change," said the deputy major for Urban Planning Pierfrancesco Maran. "The recognition of GBCI is indeed a further incentive to do more and work through more performative measures towards this goal. With this perspective, the city master plan – recently approved by the city council in Milan – introduces carbon neutrality for all new construction. Furthermore, the municipi-

pality is working to implement, in the next years, the first carbon neutral social housing neighborhood within the Greco rail yard."

LEED can be applied to virtually any building and interior space and provides a framework for designing, constructing and operating healthy, highly efficient and cost-saving green buildings. Certification is a symbol of international excellence and indicates that a building has gone above and beyond to ensure it is meeting the highest levels of sustainability.

Italian leaders that have contributed to Milan's green building growth include the City of Milan and COIMA whose visionary work integrated tradition with innovation to create relevant urban regeneration initiatives, recognized worldwide, like the Porta Nuova as one of the most iconic.

"In 2005, we registered the first Italian LEED project and since then we have been developing a portfolio that includes 31 LEED buildings in Milan, representing almost 40 percent of the city's certified projects," said Manfredi Catella, founder and chief executive officer, COIMA. "We are committed to creating a sustainable environment and a positive impact on the community by integrating innovation and promoting social inclusion. This is our key strategy, which we believe brings value to our investors and the community in which we operate."

In Milan, green buildings are a critical solution for reversing the industry's impact in terms of carbon emission. From hotels and offices to schools and apartments, Milan's work with LEED sets an example for Europe and proves that better buildings can create a better quality of life.

WCA completes acquisition

WCA Waste Corporation, a non-hazardous solid-waste services company, has expanded in the state of Arkansas with the acquisition of the Little Rock Division of Central Arkansas Recycling and Disposal Services, LLC (CARDS).

CARDS currently provides roll-off and C&D disposal services to customers in Little Rock, Arkansas and surrounding areas. WCA has fully taken over the management of the operation and services of the Little Rock Division.

AR EQUIPMENT SPOTLIGHT

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Issues in C&D recycling certification

The Recycling Certification Institute (RCI) remains engaged on numerous issues directly and indirectly related to third-party certification. One of the key issues for 2019 was the United States Green Building Council's (USGBC) updates to LEED. A prior version of LEED (v4) required separation of C&D material streams for credit in the Materials and Resources section. USGBC updated v4 with a new release in January 2019 in the form of v4.1 beta. While still requiring separation of C&D materials, v4.1 beta sought to make it easier for builders who took their mixed C&D materials to facilities Certified by RCI. Unfortunately, the initial version of v4.1 beta added confusion and did not meaningfully address the issues associated with on-site separation of material streams.

RCI continued its communication with USGBC regarding their concerns and last summer the USGBC released an updated version of LEED v4.1 beta. This latest release is the closest they have seen to their original recommendations to USGBC. While it provides incentive for builders to take mixed C&D loads to RCI-Certified facilities and addresses some of the issues with onsite material separation, it still does not go quite far enough. RCI will continue their work with USGBC to bring benefits to projects taking C&D materials to RCI-Certified facilities, which in turn benefits those facilities that are or become RCI-Certified.

RCI recognizes there is still confusion in the "C&D-sphere" with multiple versions of LEED still in play (v2009, v4, and v4.1 beta, for example). To assist C&D facilities, builders, contractors, project managers/consultants, haulers, local government, etc., RCI created a sheet that simplifies the various versions of LEED and provides some basic Q&A as examples.

To download the information sheet, view this article on www.AmericanRecycler.com.

Construction employment shows an increase in 38 states

Thirty-eight states and the District of Columbia added construction jobs between November 2018 and November 2019, while construction employment increased in 18 states from October to November, according to an analysis by the Associated General Contractors of America of Labor Department data released today. Association officials noted that a survey it released on Wednesday found most contractors expect to keep adding workers in 2020 but they are finding it hard to fill positions and anticipate it will continue to be hard to hire employees.

"It is encouraging that so many contractors were able to add employees even with overall unemployment at a 50 year low and construction job openings at a record high," said Ken Simonson, the association's chief economist. "Our survey found that contractors in all parts of the country remain optimistic about demand for projects, and they intend to increase headcount in 2020, but finding workers is a major challenge."

The association's 2020 Construction Outlook survey found that 75 percent of the 956 respondents expect to add workers next year, while only 5 percent expect a decrease. Seventy-nine percent of respondents in the Northeast anticipate adding workers, as do 78 percent of respondents in the South, 73 percent in the West and 72

percent in Midwest. However, 81 percent of firms said they are having a hard time filling hourly craft or salaried positions.

Texas added the most construction jobs over the year (56,000 jobs, 7.5 percent), followed by California (29,400 jobs, 3.4 percent) and Florida (26,700 jobs, 4.9 percent). Nevada added the highest percentage of construction jobs (13.4 percent, 12,500 jobs) since last November, followed by New Mexico (11.3 percent, 5,300 jobs) and New Hampshire (9.3 percent, 2,500 jobs). Construction employment reached a record high in Oregon, Texas, Utah, and Washington.

Twelve states shed construction jobs over the latest 12 months. Louisiana lost the largest number and percentage of construction jobs (-9,200 jobs, -6.2 percent). Other states with large job losses include Ohio (-7,800 jobs, -3.5 percent), Tennessee (-4,000 jobs, -3.1 percent) and Illinois (-4,000 jobs, -1.8 percent). Other states with large percentage losses include Wyoming (-5.6 percent, -1,200 jobs) and Connecticut (-4.8 percent, -2,900 jobs).

Texas added the most construction jobs between October and November (5,800 jobs, 0.7 percent), followed by Georgia (2,300 jobs, 1.1 percent), Nevada (2,200 jobs, 2.1 percent) and Oregon (2,200 jobs, 2.0 percent). Nevada added the highest percentage of

construction jobs, followed by Oregon and Montana (1.4 percent, 400 jobs).

Construction employment decreased from October to November in 30 states and was flat in Kansas, New Hampshire and D.C. Minnesota lost the largest number of construction jobs (-4,900 jobs, -3.8 percent), followed by Illinois (-2,800 jobs, -1.2 percent) and Pennsylvania (-2,800 jobs, -1.1 percent). Minnesota also had the largest percentage decline for the month, followed by Rhode Island (-2.0 percent, -400 jobs) and Wyoming (-1.9 percent, -400 jobs).

Association officials note that their survey found that two-thirds of respondents expect it will be as hard or harder to hire workers in the coming 12 months, although firms are adopting a variety of recruitment, retention and technology approaches to attract, train and retain workers. The association urged Washington officials to increase funding for career and technical education and to reform employment-based immigration programs.

"Many firms are eager to find workers to fill high-paying and rewarding craft career positions in most parts of the country," said Stephen E. Sandherr, the association's chief executive officer. "But Washington officials need to do more to encourage people to pursue rewarding career in construction to boost employment further in many states."

A frustrated man went to see his lawyer and explained his situation to him. He said, "My neighbor owes me \$500 and he won't pay up. What should I do?"

"Do you have any proof he owes you the money?" asked the lawyer.

"Nope," replied the man.

"OK, then write him a letter asking him for the \$5,000 he owes you," said the lawyer.

"But it's only \$500," replied the man.

"Precisely. That's what he will reply and then you will have your proof!"

Certified commercial projects surpass 100,000 milestone

The U.S. Green Building Council (USGBC) celebrated a new LEED milestone, announcing it has surpassed 100,000 registered and certified LEED commercial projects.

"In 1998, we created LEED to measure and define what green building meant, and to provide a roadmap for developing sustainable buildings," said Mahesh Ramanujam, president and chief executive officer, USGBC. "Today millions of us are living, working and learning in LEED-certified buildings around the world. These spaces are using less energy and water, mitigating the environmental burden on

their communities, saving money and offering the people who occupy them a better quality of life. This latest milestone demonstrates how the global green building community is delivering on the vision we set forth more than 20 years ago with better buildings and spaces that equal better lives."

With more than 2.6 million square feet of space certifying each day, millions of people around the world have access to LEED spaces that are reducing carbon emissions and providing healthier environments where they can live, work, learn and play.

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EQUIPMENT SPOTLIGHT

Dust Control

by MARY M. THORNTON

maryt@americanrecycler.com

It is impossible to have construction and demolition and not also have dust and other airborne elements that are typically involved.

BossTek is a global leader in solutions for dust suppression, odor control and crowd cooling. Utilizing the latest in atomized misting technology, BossTek products have been serving a wide range of industries, including waste, recycling, demolition, construction, mining, power generation, material handling, food processing and aggregate.

For over 15 years, DustBoss® has proven to be far more effective than traditional spraying techniques, reducing labor costs and helping operators meet compliance guidelines. With cannons available in sizes that range from 100 to 328' of throw and optional 359° oscillation, DustBoss can cover more than 337,000 sq.ft. Numerous mounting options provide mobility and versatility for specific jobsite needs.

The OdorBoss® family of products features high efficiency odor management using innovative technology to eliminate unwanted emissions. Frequently used for soil remediation, waste handling and food processing, OdorBoss Fusion offers a mobile, fully self-contained solution for mitigating odors.

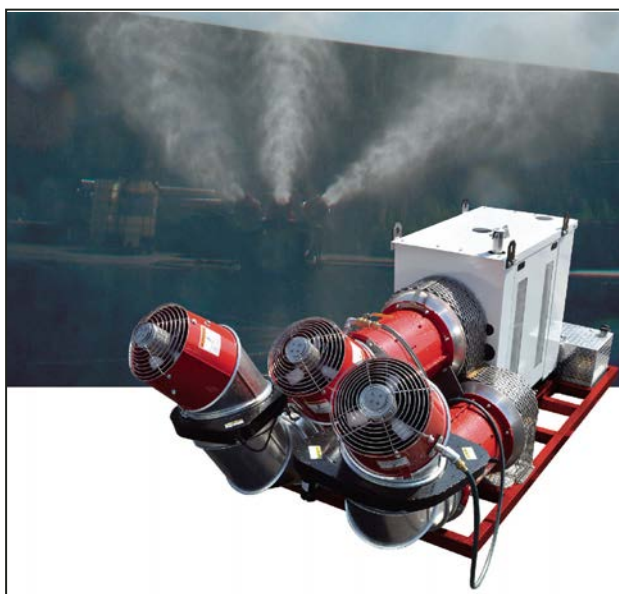
As awareness and enforcement of environmental regulations increases, companies frequently use methods for controlling dust and odor onsite. Mike Lewis, sales vice president, explained, "Implementing the suppression equipment that we offer is an important step towards meeting compliance standards set forth by local and federal agencies like OSHA (Occupational Safety and Health Administration). Our DustBoss DB-60 is a popular unit used for capturing hazardous dust particles like crystalline silica, which can become airborne during the demolition present in transportation and recycling of concrete, metal and other debris.

"At BossTek, we pride ourselves in providing customer oriented solutions that create

cleaner, safer and more productive environments. Our high quality, industrial strength equipment carries a no-excuses guarantee of customer satisfaction and is available for rental or purchase."

Buffalo Turbine manufactures dust/odor control equipment for various applications including concrete crushing, demolition, scrap recycling and mining. According to Brian Singer, sales manager, "We offer gasoline, diesel and electric powered options based on customer application. Our standard single turbine units are capable of 40,000 sq.ft. of coverage area. With the use of our gyratory atomizing nozzle, we're able to pull water from almost any source without running the risk of clogging, unlike standard nozzle tips. The gasoline and diesel units are self-contained on their own trailer packages, making them easy to maneuver and position, whatever the job-site and regardless of relocation and dust/odor control needs throughout a job. We also manufacture these turbines for dust/odor control in PTO and hydraulic driven settings and one off applications when a tractor or skid-steer is in use at a job-site."

"This year we're introducing an industry first for dust and odor controllers – the Trident. The Trident has three separate turbines all powered by the same Kohler 74 hp diesel engine. It is capable of three times the coverage area of our single turbine dust controllers. Compared to other dust control units on the market this is



Buffalo Turbine

self-contained – so it doesn't require a generator. Also, the Trident offers lower maintenance cost, and is self-contained. Each turbine uses our gyratory atomizing nozzles, like our single turbine units, which do not clog the way conventional nozzle tips



BossTek

do. With the Trident, one to three oscillation kits are available, for more coverage area. All of our products include industry leading warranties, a 2 year limited parts warranty, a 3 year unlimited hour Kohler engine warranty, and a 10 year manufacturer's warranty on the turbine and frame."

"Proven effective for more than a decade, Midwest Industrial's Dust-Buster® dust suppression systems have changed the way recycling companies operate," Liz Campbell, marketing manager, stated. The shredding and recycling of certain materials, whether involving an indoor and outdoor facility, comes with its fair share of hazards — the dust and debris generated from these operations can not only harm the health of employees, but it can also dramatically slow down the entire process. Having been tested extensively and proven successful and long-lasting, Midwest's low-maintenance Dust-Buster dust suppression systems are built to

withstand the harsh environment in which they work and do not require water filtering.

"These products are top-of-the-line and far more effective, reliable, and safer than many other available dust control products or systems. Midwest will work with you to develop an application process tailored specifically to your site, and will make sure your solution is as easy-to-use and cost-effective as possible. Already proven to have reduced dust by up to 85 percent, Midwest's products will tackle your dust issue before it has the chance to harm your operations. In an industry with its fair share of risks and hazards, it's even more important to take the necessary precautions — Midwest knows how to make your facility safe and keep your operations running smoothly, Campbell concluded.

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Greenbuild Europe 2020 opens for registration

The U.S. Green Building Council (USGBC), creators of the LEED green building rating system, announced that registration is now open for Greenbuild Europe. The conference will be held March 24-25, 2020 in Dublin, Ireland, at Croke Park and features a keynote from former Irish Times editor and author Frank McDonald, as well as remarks from USGBC and Green Business Certification Inc. (GBCI) president and chief executive officer Mahesh Ramanujam.

Now in its third year, Greenbuild Europe is the flagship event for sustainability professionals helping to shape the future of green buildings, cities and communities. The conference offers a forum for the region's growing green building community to share best practices, learn about the latest LEED and green building developments, and connect with peers and market leaders. Europe is currently home to more than 6,500 LEED projects, representing more than 185 million gross square meters of space. In 2018, Turkey, Germany and Spain were among the top 10 countries and territories globally for LEED green building.

The reasons for building green vary country by country, but the level of green building activity in Europe is expected to grow through 2021. Greenbuild provides the building, design and construction industry a method for staying updated on the latest practices and strategies. Education sessions will cover net zero, health and well-being, materials and resilience, as well as LEED v4.1 and other green rating systems, such as WELL, Passive House

and BREEAM. USGBC is partnering with the Irish Green Building Council (IGBC) for the 2020 conference.

In addition to education and networking opportunities, attendees will hear from speakers who are involved in some of the most pressing issues facing cities and communities. One of those people, Frank McDonald, author and award-winning journalist and former editor at the Irish Times, will provide the closing keynote at Greenbuild Europe. McDonald has written several books on building and urban development in Ireland, notably "The Destruction of Dublin," and has also been vocal about the city's housing crisis in recent years, as well as the climate crisis. He started his journalistic career as a freelance New York correspondent for the Irish Press, subsequently working as a sub-editor and reporter for the paper. McDonald then went on to a long career at the Irish Times, becoming environment correspondent in 1986 and environment editor in 2000. He retired from the paper in 2015.

Continuing education hours will be offered for attendees to help maintain their LEED professional credential. The conference full program is available online. In addition to Europe, Greenbuild events are hosted annually in India, China, Mexico and the U.S., and are the premier convener for the green building industry.

For more information on Greenbuild Europe 2020 and to register, visit greenbuild.usgbc.org/europe, follow @GBCIEurope and @USGBC on Twitter and tweet #GreenbuildEurope to join the conversation.

DTG acquires Anderson Rock and Demolition Pit

DTG Recycle, the largest recycler of C&D, industrial and manufacturing waste in the Northwest, acquired Anderson Rock and Demolition Pit, a limited purposes landfill for construction and demolition materials located in Eastern Washington.

"In a first of its kind application in the Pacific Northwest, we will be installing a material recovery facility at the landfill. All material that is received by the landfill will be sent across a sort line to recover wood, plastic, metal, and other recyclable materials," said Tom Vaughn chief executive officer of DTG Recycle.

The acquisition opportunity was a result of a long term relationship between Dan Guimont, president and founder of DTG Recycle, and Ron Anderson, founder of Anderson Rock and Demolition Pit.

The Anderson Rock and Demolition Pit acquisition marks yet another milestone in DTG's rapid expansion. In 2019, DTG has opened two new material recovery facilities, acquired Recov-

ery 1's material recycling facility in Tacoma, Washington, and now acquired the Anderson Rock and Demolition Pit. Additionally, in 2019, DTG has significantly increased its recycling collection fleet to almost 1,500 roll off and recycling containers. DTG this year also added significant new transportation capabilities with the addition of a fleet of end dump trailers, side dump trailers, and numerous walking floor trailers. "Our widespread geographic presence, multiple means of debris collection, innovative sorting techniques and groundbreaking end market developments allows us to fulfill DTG's planet obsession and our customers sustainability goals," said Vaughn.

The Anderson Rock and Demolition Pit accepts the following materials: concrete, wood, asphalt, lumber, crushed rock, dirt, brick, metals, glass, rock, roofing material, sheet rock, spent lime, steel, stumps, trees, brush and certain types of contaminated soil.

R&B Debris names Patrick Dauria general manager

Patrick Dauria has been named general manager of R&B Debris. In his new role, Dauria will oversee all operations for the South Jersey company which provides transportation and disposal solutions.

Since 2016, Dauria served as director of business development and division director for Active Environmental Technologies in Mt. Holly, New Jersey working with all lead project managers to coordinate a variety of projects, from timelines to budgets to scheduling.

Before joining Active Environmental Technologies, Dauria was the director of business development for Atlantic Industrial Recovery in Southampton, New Jersey, where he worked with the company's president to build the company's presence

in a new geographic area, overseeing everything from real estate acquisition to staffing, the development of safety and healthcare plans to contract negotiations.

Dauria also has experience with Haas Environmental, where, during a seven year tenure, he served as assistant regional director of business development and division manager, project manager and marketing manager.

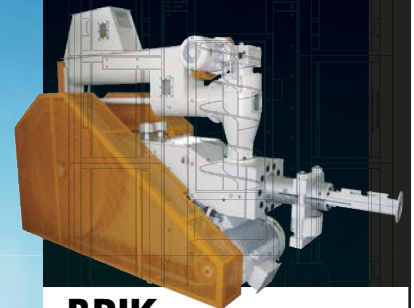
Dauria holds these certifications: OSHA 40 hour Hazwoper, Safe Transportation of Hazardous Materials, Confined Space Entry, OSHA 8 Hr. General Industry, OSHA 8 Hr. Construction, RCRA Regulatory Review Course, DOT Training Certification, and Environmental Audits and Site Assessments.

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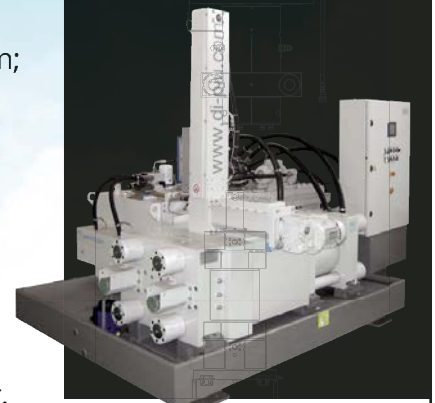
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The shredder is also available in a variable speed version — the PacMaster VS — which automatically optimizes shredding speed based on load. As a result, the PacMaster VS can be operated on a 230V outlet.

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BROKK INTRODUCES BHB HYDRAULIC BREAKER SERIES

The new Brokk Hydraulic Breaker (BHB) series is perfectly matched with the company's full range of remote controlled demolition robots. In essence, each robot is designed from the attachment backward, providing the exact amount of flow, pressure, backpressure and downward force that the hammer requires.

The BHB series includes 8 breaker models, starting with the 110 lb. BHB 55 breaker for the compact Brokk 60 remote controlled demolition machine. The range goes all the way up to the 1,543 lb. BHB 705 for the Brokk 500 and Brokk 520D.

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KINSHOFER OFFERS VERSATILE BREAKER ATTACHMENTS

Kinshofer, a manufacturer of high quality excavator and loader crane attachments, added the new KFX-Series hydraulic breaker excavator attachments to its product line. The new series offers features that improve operator comfort and safety, reduce wear and improve productivity and longevity.

The 14 models in the KFX-Series offer operators a wide range of weight and power options. This makes it easy to find a breaker that fits individual needs in road work, demolition, recycling, tunneling and underwater applications.

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The new Cat® 777G off-highway truck builds on the legacy of performance, reliability, and long term durability established by 777 models since 1977, both in mining and large earthmoving applications.

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Q.E.D. ENVIRONMENTAL SYSTEMS ANNOUNCES NEW SEM ROVER

Q.E.D. Environmental Systems, Inc. now offers the SEM Rover which provides functional improvements to the LANDTEC SEM5000 methane (CH₄) detector, and is ideal for landfill surface emissions monitoring (SEM).

The SEM Rover is a wheeled sampling wand which enables compliance with sampling regulations, regardless of terrain or field conditions.

The SEM5000 methane detector and new SEM Rover make up a lightweight, ergonomic surface emissions monitoring package which weighs about half as much as competitive alternatives.

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DOOSAN INFRACORE EXPANDS ITS MINI EXCAVATOR OFFERING

Doosan Infracore North America, LLC, is bolstering its mini excavator lineup with the addition of 3 new models in the 3.5, 4 and 5 ton classes.

Doosan DX35-5, DX42-5 and DX50-5 mini excavators will be available with an enclosed cab, including heat and air conditioning, or an open canopy.

All three new Doosan mini excavators can be equipped with a quick coupler, bucket and thumb attachment package. Operators have access to 17 to 20 gallons per minute of auxiliary hydraulic flow, depending on the model, to provide power to other attachments, such as augers, breakers and plate compactors.

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STANLEY OFFERS NEW MULTI-JAW DEMOLITION TOOL

Stanley LaBounty's new Multi-Jaw Demolition Tool (MRX) and Mobile Rotating Pulverizer provide maximum productivity with minimal maintenance. Designed for efficient down-sizing and equipped with 360° rotation, these attachments are useful for both primary and secondary demolition and off-site concrete processing.

The MRX features interchangeable jaws: concrete pulverizer, concrete cracker, or shear. Large jaw widths, dual rotation motors, and replaceable wear areas make these tools extremely efficient, durable and easy to maintain.

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HITACHI ZW250 INCORPORATES DASH-6 TECHNOLOGY

The new ZW250-6 is the latest addition to the fleet of top tier wheel loaders featuring Hitachi "Dash-6" upgrades and technology.

The ZW250-6 ships at just over 46,000 lbs. It is amply powered by a highly efficient 250 hp Cummins Tier 4F engine with 37,090 lbs. breakout force. The standard GP bucket offers a heaped capacity of 4.8 cu.yd. and can load over 35,000 lbs. to dumping heights exceeding 13'11".

The loader's variable displacement hydraulic pump and an auto shutdown feature provide savings on fuel and emissions, adding up to about a 7 percent reduction.

Hitachi Construction Machinery Loaders
60 Amlajack Blvd.
Newnan, GA 30265
800-819-5770
www.hitachiwheelloaders.us



TOMRA LAUNCHED NEW X-TRACT X6 FINES MACHINE

The X-Tract X6 Fines can detect and sort grains of metal of almost half the size of what was previously sortable.

This capability is achieved by developing Tomra's high speed X-ray transmission technology, which sorts materials according to differences in their density.

Increasing the sensitivity of the high resolution X-ray camera has made it possible to detect and sort grain sizes as small as 5 to 40mm, thus measurably reducing product losses. Extensive validation runs demonstrated the ability to consistently attain purity levels of 98 to 99 percent.

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Biochar

■Continued from Page B1

billion by 2023 and converting biochars into usable ink pigment would provide consumers with a more 'green' alternative.

"Companies seem to be coming to the understanding that materials that were once considered waste can now be a resource converted to secondary products," Trabold said.

Benefits of Biochar Within the Recycling Industry

Wood from building construction and demolition are common municipal solid waste streams and are becoming increasingly difficult to recycle.

According to the U.S. Environmental Protection Agency, over 569 million tons of construction and demolition debris were generated in the U.S. in 2017, which is more than twice the amount of generated municipal solid waste.

In addition, as Michael McGolden, president & chief executive officer of Ecochar explained, landfill tipping fee costs are rising exponentially in several areas across the U.S., more significantly in heavily populated locales on the West and East coasts.

"Much of the organic waste can be gasified and converted into biochar. And as more states are mandating landfill diversion for organics, converting to biochar not only removes the organics from landfills, but also produces a negative carbon footprint, with a zero-waste result," McGolden said. "Utilizing biochar to help control odors and promote revegetation are also very beneficial for landfills, besides recycling operations handling food and other waste streams with nuisance odors.

Exploring Opportunities

The opportunities for biochar in the recycling industry fall across several areas. As McGolden explains, some of these include:

- Reduced greenhouse gas emissions versus simple landfilling of organics – creating opportunities to tap into the fast-growing carbon market – with providing new, carbon-negative technologies and beneficial reuse markets, through which the recycling industry can continue to be economically viable.

- Use as alternative daily cover to not only control odors, but increase water retention, eliminating and treating any leachate issues, besides expediting vegetation growth, improving soil, water and air quality, in addition to greater aesthetics appeal.

"Depending on the chars used, it also can be used for remediation of both soils and water – especially in the capture of heavy metals," McGolden said. "For example, there are also studies showing the ability to capture and then harvest valuable metals with certain biochars.

Biochars also can capture and reuse valuable nutrients – such as phosphates – for food production, while reducing, if not eliminating nutrient pollution to rivers and streams, often creating algal problems and eutrophication or dead zones, destroying aquatic plant and animal life, due to lack of oxygen.

As with all new technologies, there are several challenges in biochar production. For example, most biochar technologies produce biochar from wood; however, changes in the feedstock to other types of organic biomass resulting in changes to composition create processing issues, besides issues regarding quality of the resultant chars.

"However, there are systems that can process a wide variety of feedstocks and can handle many of the waste materials being handled and discarded. Use issues are related to lack of data," McGolden says. "While there is ample research-related data, there are very few commercial-scale applications – given various biochar markets are still being developed. Biochars are widely promoted and accepted as carbon-negative, pollutant neutral, and safe for use as viable ways to increase soil carbon content and reduce carbon emissions."

On the Horizon

As more people are being educated about biochar's value, the use is spreading.

"And as governments review and accept its value, perhaps providing greater incentives for its use as a climate environment friendly economical alternative, acceptance and use will grow and drive continuous improvement," Lueckenhoff said. "Also, as climate change, environmental issues, and overall waste management receive more attention from the general public; there will be much more focused efforts on solving these problems."

Some key concerns surrounding biochar are related to landfills and C&D waste – specifically that landfills are sources of per-and poly-fluoroalkyl substances (PFAS), which are very harmful pervasive chemicals to human health and the environment. PFAS are in solid waste, landfills and surrounding soil, groundwater, leachates, landfill gas, wastewater effluents, and biosolids.

"Because PFAS are used in a broad range of consumer goods and in industrial products and applications, these chemicals are likely to be in diverse and different waste streams from manufacturing, industrial applications, and end-of-life commercial and consumer products," Lueckenhoff said. "However, treatment options are limited, as many conventional treatment methods are ineffective."

Challenges aside, gasification and biochars are emerging as very promising, sustainable solutions, based upon work that Hugo Neu and Ecochar, LLC

have been conducting with other research partners and global experts.

"The production of biochar not only produces a valuable product to help the environment, but also helps to eliminate several environmental pollutant waste-related issues," McGolden said. "This is very consistent with the goals of the recycling industry via beneficial reuse." Also, biochar is emerging as an important solution in mitigating many historic and emerging environmental issues – particularly in this age of climate disruption, where communities are also challenged with waste sites underwater and the spread of solid waste and toxic pollution.

"As world population continues to increase, so does the need to produce more food, and dispose of more waste," McGolden said. "The methods and technologies that have succeeded through the years are not viable, given our new challenges. There is a strong need for innovation and adaptation – new cradle to cradle solutions. Biochar is a product that will allow us to take the resources we have and overcome some challenges."

Quanex names Wilson president and CEO

Quanex Building Products Corporation announced that George Wilson, Quanex's chief operating officer, has been elected by the company's board of directors to succeed Bill Griffiths as Quanex's president and chief executive officer. Wilson will also join the company's board. Griffiths will remain as executive chairman of the board and will continue to support Wilson.

Prior to Wilson's appointment to chief operating officer in 2017, he served as president – Insulating Glass Systems from 2011-2017, and in the 18 years prior to joining Quanex he held various operational and financial positions of increasing responsibility at Lauren International and Federal-Mogul. Wilson holds a Master of Business Administration degree from Indiana University and a Bachelor of Science degree from The University of Akron.

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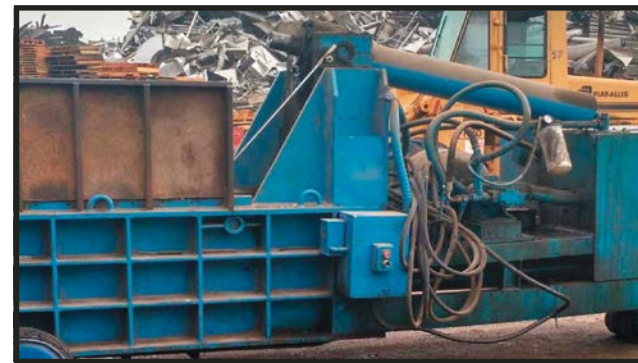
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