NewsVoice of Salvage, Waste and Recycling

AmericanRecycler.com

FOCUS: **Paper/Plastics**

Municipalities challenged by contamination



Scrap Metals MarketWatch	11
Salvaging Millions	12
Classified Advertisements	15
Equipment Spotlight	В4
New Product Showcase	В6

- SWACO plans solar energy facility. Page A6
- World Steel Association expects demand recovery in 2021. Page A10
- Experts unite to define recycling pathways. Page B3

SERVICE REQUESTED



Chinese ban on scrap metal continues to affect market

by MAURA KELLER

mkeller@americanrecycler.com

Not long ago, China was the global purchaser of scrap metal. Tons of scrap metal were purchased and shipped to China, so it could be melted and re-used for new products. The fact that we had open trade made the purchase of scrap metal financially viable with China. China recently decided that it did not want to be a "global dump" and moved to impose trade barriers to scrap metal, announcing in 2018 its intention to ban the import of all recycled materials by 2020. So where does this ban of scrap metal stand now that we have entered the third quarter of 2020?

According to Villanova University's professor of chemistry, Dr. Marta Guron, China is further restricting the purity of scrap metal they will accept from foreign countries in an ongoing effort to limit imported "garbage" from other countries.

"This is in addition to the tariffs already placed on American scrap metal and continuing tightening on the purity of the metal they will accept," Guron said. Additionally, for the companies that do ship to China, many are required to demonstrate to the Chinese government that they have the capability to purify metals to the degree sought after by China.

As Babak Hafezi, partner at Hafezi-Capital International Consulting and Investment and adjunct professor of international business at Kogod School of Business at the American University explained, currently China is imposing import quotas (a form of non-tariff barrier) on high-grade copper and aluminum scrap (Category 6 in China), and banning other imports such as low-grade copper scrap (Category 7). Furthermore, the number of Chinese ports that can now accept the materials has decreased to just 18.

"It is important to understand that scrap metal was the epicenter of China's growth model in the late 1970s-1980s," Hafezi said. "China's free trade zones started breaking down scrap metals of old Chinese ships to be traded via Hong Kong, and that started the initial foreign direct investment into China. China is looking to move up the supply chain of development, and thus the new outlook of metals will be focused on high-value metals that are a necessity of high-tech."

As Hafezi further explained, the current China ban on scrap metal is part and parcel of a slow economic migration within China from a manufacturing hub to a tech hub. By forcing limits on manufacturing, it forces domestic economic forces to migrate to other investments. Hence,



The ban from China has impacted U.S. companies. They are now looking for alternative markets for their recycled goods.

the decree issued by Chinese authorities was a means to remind the domestic market that the focus within the Chinese economy is changing.

"The language and implementation changed from a full ban, to a softer language stating 'the state shall gradually and basically realize zero imports of solid wastes," Hafezi said. "The focus within the Chinese economy has been to slowly change and move up the development ladder of production, innovation and consumption."

Given that scrap metals were the genesis of the Chinese economic growth and primary means of Foreign Direct Investment into the Chinese economy by Hong Kong investors, the industry has matured in a way that no longer benefits the domestic Chinese market in terms of cost and environmental factors.

Short and long term outlook

It is critical to understand that the China ban does not eliminate global demand for scrap metal, but rather displaces it to other countries and regions of the world. According to Hafezi, new and growing manufacturing hubs such as Vietnam, India, Malaysia, Mongolia, Thailand, Indonesia and the Philippines will gain as China leaves the void. However, many of the companies in those countries will be either Chinese subsidiaries or Chinese minority investors.

In the short term Hafezi said scrap metal prices will be impacted with a decrease in price.

However, we should not see major movements in price, given that the ban was announced over a year ago, and the market has been ready for the change. As

Hafezi explained, global demand for commodities in general has decreased for most of 2020 given the global impact of COVID-19.

"We saw prices decrease in the first quarter of 2020 because of the quarantine imposed by the Chinese government in the Hubei Province, which is the manufacturing epicenter of China," Hafezi said. "The closing of factories forced a lack of demand thus decreasing prices, but once those factories slowly opened, we saw price stabilization to its previous 12month range-bound rate. Once the global economy recovers from the impacts of COVID-19, overall demand will once again increase."

Furthermore, as Hafezi explained, the price of steel and scrap metals in the U.S. market will be primarily impacted by the level of domestic economic growth. The growth of the American economy post COVID-19 will be a primary element that will impact the price within the U.S.

"As the U.S. slowly emerges from the quarantine and factories, retail and services businesses open-up, the level of demand and domestic economic growth will impact the price of scrap metal within the country," Hafezi said. "If tariffs are removed in the coming years, we should see U.S. steel prices reach equilibrium with that of global prices.

And the Chinese ban may impact U.S. companies in that they may have to look at new markets to sell their goods.

"Again, demand will not be eliminated but rather displaced and thus new and emerging companies will form in other countries that will be buyers for

See CHINESE BAN, Page A4

HIGH-SPEED BALER/LOGGER







- 20' Charge Box
- Heavy-Duty Knuckle Boom
- Superior Lift and Reach



"WHAT OUR CUSTOMERS SAY"

We have been using our new overbuilt baler for a little over 2 years now and continue to be impressed. It has been dependable and much more efficient than our balers in the past. This has been a durable machine with little down time other than routine maintenance. We recently replaced the grapple with their new and improved version and couldn't be more pleased. The overbuilt design is simply easy to operate and makes a quality bale that is easy to load. Thank you for making a quality and dependable baler that we can count on and enjoy operating.

—Kevin Stroebel

Manager, Pacific Steel & Recycling

Operates 5 OverBuilt Balers Rock Springs, WY

We purchased our OverBuilt Car Crusher new in early 2012. This is the best crusher we have ever owned. The Sales and Service Staff have been great to follow up making sure we have all our filter and maintenance items needed to keep our machine running smoothly and efficiently.

—Doug Butler

Owner, Butler Salvage Torrington, WY

See you at ARA! Booth #217

HIGH-SPEED CAR CRUSHER



- Largest Opening on the Market
- Advanced Oil Recovery System with Sludge Traps and Large Clean-outs
- State-of-the-Art Automation System
- 400-gallon Fuel Cell and Optional Lockable Auxiliary Fuel Pump
- Optional High-speed Oil Bypass System
- 22' & 24' Crusher Chambers Also Available
- Twin Lid Safety Lock System Engaged from the Ground
- Ground-accessible gang grease stations.







800-548-6469 605-352-6469 www.OverBuilt.com sales@overbuilt.com





American Recycler August 2020, Page A3

Casella and Goodwill win award for sustainable partnership

Casella Waste Systems, Inc. and Goodwill Northern New England received the 2020 NHBSR Partnership for Innovation Award.

The business/nonprofit partnership lets people in New England act more sustainably while also helping people who have significant barriers to employment get and keep great jobs.

"This partnership is an extension of our company's 40 year history of building community and environmental sustainability," said John Casella, chairman and chief executive officer of Casella Waste Systems, Inc. "Working with Goodwill to give people facing challenges a 'second chance' is an important part of our focus on finding, training, and growing talented employees from all walks of

The award recognizes a seven year collaboration that created synergy and progress on a sustainability initiative where it might not otherwise have been possible. The partnership demonstrates a creative approach and measurable results that inspire other business leaders in New Hampshire to take action.

"We realized a unique collaboration could help build stronger communities. Goodwill's Job Connection program was that sweet spot," said Rich Cantz, president and chief executive officer of Goodwill Northern New England. Casella helped fund Job Connection's expansion into Vermont.

According to Paul Ligon, senior vice president of sustainable growth at Casella, the power of the partnership begins with resource management. "Casella's staff are experts in recycling - Goodwill is an expert in reuse. We collaborate to make the highest use of every item and the planet benefits. Obviously, both of us see sustainability as going beyond that, to a strong focus on people and building stable lives through meaningful work.'

Goodwill reuses and recycles more than 60 million pounds of stuff every year. Casella's investment of volunteered time and industry resources has been key to furthering Goodwill's sustainability goals. Goodwill also provides a re-use option sometimes. For instance, when Casella does a "college clean up" after students leave, home goods like clothing and furniture can go to Goodwill.

EPA at 50: Improving and increasing recycling

tection Agency's (EPA) 50th anniversary celebration, the agency highlighted the progress the nation has made on recycling and how EPA is working with its partners to address today's challenges. Recycling benefits communities, the environment and the American economy. Recycling accounts for nearly 757,000 jobs and \$36.6 billion in wages.

"Since EPA was founded in 1970, the U.S. recycling rate has risen from 10 percent to 35 percent and we aim to push it even higher," said EPA administrator Andrew Wheeler. "Later this year, EPA will establish new national recycling goals and take steps to support the recycling industry in new ways.'

"Recycling is a tangible way that everyone every day can help protect human health and the environment," said EPA office of land and emergency management assistant administrator Peter Wright. "The positive impacts on both our environment and economy are more important than ever."

When EPA was founded in 1970, the national recycling rate was less than 10 percent. Curbside recycling did not start until 1980 when Woodbury, New Jersey. become the first city to offer curbside recycling. Today, recycling programs can be found across the country and the national recycling rate has risen to about 35 percent.

Despite this incredible progress, the U.S. recycling system is facing a number of challenges. Recognizing this opportunity, Administrator Wheeler hosted the first

As part of the U.S. Environmental Pro- America Recycles Day Summit on November 15, 2018. The Summit brought together stakeholders from across the U.S. recycling system to join EPA in signing the America Recycles Pledge and identifying four action

- •Promote education and outreach
- Enhance materials management infrastructure
- •Strengthen secondary material markets
- •Enhance measurement

Last year, at the 2019 America Recycles Day Summit, EPA released the National Framework for Advancing the U.S. Recycling System, and Administrator Wheeler announced that EPA would establish a national recycling goal in 2020.

EPA and the now more than 200 America Recycles Pledge signers have made significant progress since first convening in

Over the past year, EPA has been continuing to work with the pledge signers to develop a "virtual clearinghouse" to assist municipalities and local governments find important recycling resources in one place. The America Recycles network has also developed a map of the U.S. recycling system to help set the national recycling goals. EPA has hosted recycling market development workshops, issued public service announcements encouraging recycling "right" during COVID-19, and published a Federal Register notice seeking comment on the federal government's "buy recycled" program, under the authority of EPA's Comprehensive Procurement Guidelines (CPG).



Maximize your Stainless Steel Recovery with Bunting's Stainless Steel **Separation Conveyor (SSSC)**

- Patented High-intensity Neodymium Magnetic Circuit magnets deliver intense power to pull out Shredded stainless steel.
- Remove up to 94% of large fraction stainless steel and up to 98% of small and mid-fraction 300 series stainless steel.
- Achieve higher product purity and the greatest scrap metal recovery profitability with the SSSC.
- Our engineers will test your material and design your specific SSSC System to suit your exact needs.



800.835.2526 or 316.284.2020 / Sales.Newton@BuntingMagnetics.com Visit BUNTINGMAGNETICS.COM

Page A4, August 2020 American Recycler

Chinese ban

■Continued from Page 1

these commodities," Hafezi said. "These countries may be less sophisticated, and lack the necessary infrastructure, however those barriers will dissipate with time as demand forces these positive changes within the segment of the industry. Eventually with time, these new emerging countries and companies will become globally competitive in terms of supply chains, sales and marketing and leading human capital."

However, Guron said that if other countries, including the U.S., step up their purification processes or manufacturing abilities, there is a chance the market can bounce back from these changes made by China. In many ways, Guron expects these changes would have the same effect as when China began to require more stringent purity of recycla-

ble plastics for manufacturing, dropping their accepted impurity levels to a basically unattainable 0.5 percent.

"We are still facing the consequences of this, because we don't have the infrastructure to make use of this recycled plastic in the U.S., so unfortunately, some of it has been forced to go to landfill or at best, be incinerated for fuel," Guron said.

As Guron explained, there also is a push to change the wording associated with scrap metal from "solid waste" to "resource" in an attempt to circumvent China's goal of having no foreign scrap by the end of 2020.

"If that works, countries may still be able to export some of their high purity scrap metal there," Guron said. "If that does not work, however, countries foreign to China will no longer have the ability to ship scrap metal to China."

Stevenson Crane awarded for safety

The Association of Union Constructors (TAUC), based in Washington, D.C., recently celebrated the safe workplace achievements of Stevenson Crane Service Inc. (SCS), a heavy lifting equipment company located in Bolingbrook, Illinois.

SCS received a Thomas J. Reynolds Award for Excellence in Construction Safety and Health in the third category, which relates to 100,000 to 500,000 hours of work performed to exceptional degrees of safety.

To be eligible for recognition, companies had to perform 25 percent better than national averages for the preceding year in their Days Away, Restricted or Transferred (DART) rate, based on Bureau of Labor Statistics national averages as a benchmark.

Awards were given based on performances for the 2019 calendar year.



August 16th-18th

Waste Conversion Technology Conference & Trade Show. Hyatt Regency Mission Bay Spa & Marina, San Diego, California. 850-386-6280

www.wasteconversionconference.com

August 18th-20th

Agricultural Plastics Recycling Conference & Trade Show. Hyatt Regency Mission Bay Spa & Marina, San Diego, California. 850-386-6280

www.agplasticconference.com

August 31st-September 3rd

AISTech 2020. Huntington Divention Center of Clevel Colleveland, Ohio. 724-814-3000 www.aist.org

September 14th-17th

WasteExpo TOGETHER Online. 203-523-7044 www.wasteexpo.com

September 22nd-24th

2020 Annual MORA Conference. Hilton-Branson Convention Center, Branson, Missouri. 573-491-4255 www.moraconference.org

October 4th-7th

Strive For Sustainability: Solid Waste and Recycling Confedence with Trade Show. The Salamore, Bolton Landing, New York.

www.conference.nyfederation.org

October 20th-21st

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



877-777-0043 | Fax 419-931-0740

Owner, Publisher and Editor

ESTHER G. FOURNIER news@AmericanRecycler.com

Print and Digital Production

MARY E. HILL mary@AmericanRecycler.com

Marketing Representatives

MARY M. THORNTON maryt@AmericanRecycler.com MARY E. HILL mary@AmericanRecycler.com

Circulation Manager

DONNA L. MCMANUS donna@AmericanRecycler.com

Writers and Contributors

MAURA KELLER mkeller@AmericanRecycler.com

RON STURGEON rons@rdsinvestments.com

MARY M. THORNTON maryt@AmericanRecycler.com

Production Offices

1789 Indian Wood Circle, Ste 250 Maumee, OH 43537 877-777-0043 fax 419-931-0740 www.AmericanRecycler.com

American Recycler is published 12 times per year, postage paid at Columbia, Missouri.

SUBSCRIPTIONS: Call our offices at 877-777-0043 or visit www.AmericanRecycler.com. US 1 year \$48; 2 years \$72.

© COPYRIGHT 2020 by American Recycler News, Inc. All rights are strictly reserved and reproduction in whole or in part is prohibited without prior written permission from the publisher.

Submission of articles, artwork and all photography must be accompanied by a self-addressed stamped envelope if a return of materials is wanted. Byline contributors' views should not be construed as representing the opinion of the publisher.

American Recycler reserves the right to edit any and all material submitted for publication. All Letters to the Editor must be signed and include a telephone number for verification. The editor of this publication does not accept responsibility for statements made by advertisers herein.



DI PIÙ SYSTEMS

Your Partner in Productivity

1114 East Wabash Ave. | Crawfordsville, IN 47933 - USA



BUILT FOR THE DAILY GRIND.

Precision Husky Corporation leads the forest products industry, building the highest quality, most rugged equipment available since 1964.

Our horizontal and tub grinders are the most powerful, easiest to use grinders in the industry. They are designed with innovative features and advanced technologies to give you the power and production needed to tackle the most demanding grinding operations.

You can invest in our equipment with confidence, and know it will do the job for many years to come. Call us today to discuss your needs and learn more about our high-performance products.



ENGINEERED FOR PERFORMANCE. BUILT FOR ENDURANCE.



P.O. Drawer 507, Leeds, AL 35094 • 205-640-5181 • www.precisionhusky.com • sales@precisionhusky.com

Page A6, August 2020 **American Recycler**

ALTERNATIVE ENERGY

SWACO plans solar energy facility

Central Ohio (SWACO) has entered into an agreement with BQ Energy Development, LLC, to lease the approximately 173 acre property that once served as Franklin County's sanitary landfill between Jackson Pike and I-71 in Grove City, Ohio. The property will be put back into productive re-use as a solar energy facility. BQ Energy's intent is to develop, build and operate a solar energy facility once the purchase agreements of the renewable energy are committed to underwrite the project.

At its meeting in June, the SWACO Board of Trustees approved a contract with Columbus Solar Park LLC to design, build, operate and maintain a solar facility on the former Model Landfill. Columbus Solar Park is an affiliate of BO Energy Development, LLC, a New York company that specializes in developing wind and solar projects on closed community landfills and other brownfield sites.

As part of the contract, Columbus Solar Park has up to three years to complete the development and construction of a solar facility.

Once the solar farm is built, Columbus Solar Park will operate the facility and sell the electricity, which will be available to local entities to purchase. SWACO will receive an escalating rental payment per megawatt of installed electricity 25 years with an option to extend it with mutual consent.

"This innovative partnership with BQ Energy exemplifies what SWACO and Central Ohio are all about," said SWACO executive director Ty Marsh. "Together we are turning waste into resources by transforming an otherwise unusable piece of property into an economic engine that will generate jobs and revenue for this community while creating a visible representation of the Columbus Region's commitment to clean, renewable energy."

The Model Landfill site served as the county's sanitary landfill from 1967 to 1985. SWACO began managing the closed landfill in 1987, eventually opening the Phoenix Links Golf Course atop of it in 2000. In 2015, the golf course was closed because of difficulty finding an operator. To this day, SWACO remains responsible for the annual costs to maintain the closed landfill and its underground piping

With a desire to repurpose the land to benefit all of Franklin County, SWACO conducted a land-use study last year to determine what type of development – if any – the site could accommodate. The results indicated that it's well suited for a solar energy

"Solar is a perfect option because it meets our sustainability goals and it

The Solid Waste Authority of capacity. The lease runs approximately should generate more than enough revenue to cover the nearly \$400,000 cost to maintain the site each year," SWACO's operations director Scott

Beyond the significant economic benefits of a solar array, Perry noted other potential benefits. "A solar field would not only generate revenue and make the site self-sustaining, it also would reflect central Ohio's innovative culture, commitment to environmental sustainability and serve as an educational tool to teach children and adults in central Ohio about the benefits of renewable energy."

Paul Curran, managing director of BQ Energy Development, LLC commented, "We applaud the leadership and vision of SWACO as they transform a current liability into a long-term environmentally positive asset for the community. When constructed this will be one of the largest solar arrays on a landfill in the country providing clean, renewable electricity for decades to come."

SWACO will use any additional revenue from the solar facility to offset its own operating expenses, develop more educational programming, add to central Ohio's existing recycling and composting infrastructure, and/or keep the fees low for haulers that deliver waste to the landfill.

Michigan solar energy program earns award

The Michigan Department of Environment, Great Lakes, and Energy's (EGLE) Michigan Solar Communities -Low to Moderate Income Access Program has been named one of this year's State Leadership in Clean Energy award winners by the Clean Energy States Alliance (CESA).

The EGLE program, led by Clean Energy Engineer Lisa Thomas, aims to reduce roadblocks for low to moderate income Michigan homeowners so they can access alternative energy and save money on their energy bills. It provides information on technical assistance and programs to obtain community solar power as well as energy efficiency upgrades.

The Low to Moderate Income Access program, which launched in 2018, allows customers of two utilities, Cherryland Electric Cooperative near Traverse City and the Village of L'Anse in the Upper Peninsula, to purchase shares or panels in a community solar array and receive credits on their monthly bills. Cherryland installed 450 solar panels that produce two megawatts of power shared by 50 subscribers. The Village of L'Anse installed 200 solar panels that produce 110 kilowatts of power for 25 subscribers. Both arrays received partial funding through grants from EGLE's Energy Services.

NEW & USED EQUIPMENT FINANCING AVAILA

Get the cash you need — quickly and at a great rate!

As experts in the industry, we'll find you the best deal!

Give us a call today and we'll discuss your options.



800-823-9688

35 Years of Specializing in:

- Salvage
- Recycling
- Waste



www.DADECapital.com



See all equipment at www.DADEAuctions.com!



1997 E-Z PORTABLE METAL BALER In good shape, ready to start baling!



MAC DUMP TRUCK Equipped with a Prentice 110 grapple.



OBERLANDER 1650-TON SHEAR Model HY10. 800 HP.



STRIP-TEC MODEL 600 WIRE GRANULATOR Includes a Worldwide pre-chopper.



MAGNATECH 30 x 24 HAMMERMILL SHREDDER Entire system can be demonstrated!



TRUCK TIRE DEBEADER & DERIMMERCompletely rebuilt! 60 tires per hour minimum!



BONFIGLIOLI DRAKE 2000 M-16 SHREDDER 2011 with 960HP motor. Ready to ship!



COLMAR 800 TON SHEAR BALER Model SB66200-800R. Only 2,000 hours!



CP200 CAN FLATTENER



VULCAN FOX MODEL 2C-40 CUT-OFF SAW 40" blade. Includes overhead crane.



2017 VOLVO EC160EL W/SCORPION ENGINE PULLER Only 2,900 hours on the meter! Great condition.



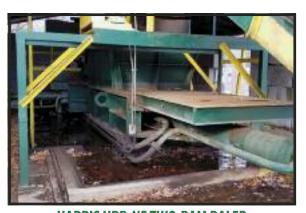
1995 AL-JON PROTOTYPE IMPACT V Only 1,100 hours. Great condition!



GLOUCESTER GRANULATOR MODEL G1842-5K 48" rotor, 100 HP motor.



KOEHRING MODEL 6630 MATERIAL HANDLER Works well. 20kW generator.



HARRIS HRB-NF TWO-RAM BALERRecent liners. USS auto-tie.

Financing available at DADECapital.com

Sell YOUR equipment with us, call today: 844-222-2020



2007 SIERRA S6000 PORTABLE BALER Only 215 actual hours!



2015 WENDT NON-FERROUS SYSTEM Excellent condition. Ready to ship!



CLEMENT HIGH-SIDE END DUMP TRAILERHas passed recent DOT inspections!



1998 CATERPILLAR IT28G LOADER Includes grapple bucket and solid tires!



2018 RM JOHNSON A+ E-Z CRUSHER John Deere engine. Only 865 hours!



2016 ERDWICH DUAL SHAFT SHREDDER 78" x 53" cutting chamber. (2) 120 HP motors.



VECOPLAN VAZ 1100XL Currently shredding paper and cardboard.



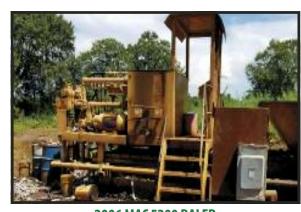
2014 AMERICAN PULVERIZER JAW CRUSHER Like new! 10 HP. Two spare plates.



48" ALUMINUM WOUND OHIO MAGNET Good condition. Includes harness and shackles.



CUMBERLAND MODEL 30 TIRE GRANULATOR Recently rebuilt, 100 hp.



2006 MAC 5200 BALER 16" x 16" x variable bale size.



WOLVERINE TIRE DEBEADER Light truck and passenger tires.



2015 WENDT TOMRA X-TRACT Dismantled and ready to ship!



ASSET MANAGEMENT FOR SALVAGE, RECYCLING & WASTE

844-222-2020

www.DADEAuctions.com

Page A10, August 2020 American Recycler

World Steel Association expects demand recovery in 2021

(worldsteel) shared its Short Range Outlook (SRO) for 2020 and 2021. In 2020 worldsteel forecasts that steel demand will contract by 6.4 percent, dropping to 1,654 Mt due to the COVID-19 crisis. In 2021 steel demand is expected to recover to 1,717 Mt, an increase of 3.8 percent over 2020.

This year's reduction in global steel demand will be mitigated by an expected faster recovery in China than in the rest of the world.

The forecast assumes that most countries' lockdown measures were eased during June and July, with social distancing controls remaining in place, and that the major steelmaking economies do not suffer from substantial secondary waves of the pandemic.

Commenting on the outlook, Al Remeithi, chairman of the worldsteel economics committee stated:

"The COVID-19 crisis, with its disastrous consequences for public health, also represents an enormous crisis for the world economy. Our customers have been hit by a general freeze in consumption, by shutdowns and by disrupted supply chains. We therefore expect steel demand to decline significantly in most countries, especially during the second quarter. With the easing of restrictions that started in May, we expect the situation to gradually improve, but the recovery path will be slow.

"However, it is possible that the decline in steel demand in most counglobal financial crisis as the consumption and service-related sectors, which have been hit hardest, are less steel-In many developed intensive. economies, steel demand was already at a low level, having still not fully recovered from 2008.

"Let me underscore that this forecast is presented at a time of high uncertainty. As economies are reopening without a vaccine or cure in place, significant downside risks exist. If the virus can be contained without second and third peaks, and if government stimulus measures are continued, we could see a relatively quick recovery."

Prospect of recovery

As most countries have been gradually reopening from lockdowns since mid-May, recovery of economic activities is expected in the third quarter.

Even though all steel-using sectors are affected by the lockdown measures, the mechanical machinery and automotive sectors are highly exposed to a prolonged demand shock, as well as to disruption in global supply chains. Changes in working procedures in the steel-using sectors to fulfil the requirements of social distancing have been carried out. This change in the working environment will potentially lead to lower productivity and an extended production cycle.

China

Coming out of the lockdown ahead of other countries, China's economic recovery started in late February. Its

The World Steel Association tries will be less severe than during the economy is fast approaching normalization, except for the hospitality and tourism sectors. The deep freeze in economic activity during February resulted in a decline of 6.8 percent in GDP and 16.1 percent in fixed asset investment in the first quarter. Industrial production fell by 8.4 percent, with the automotive sector showing the worst decline of 44.6 percent in the first quarter.

> By the end of April, all major steel-using sectors were back to near full productivity, even though the full operation of the manufacturing sector is hindered by the collapse in export demand. Following the lifting of the lockdown in Wuhan, the construction sector has already reached 100 percent productivity.

> The recovery of steel demand will be more visible in the second half of 2020. It will be driven by construction, especially infrastructure investment, as the government has put forward several new infrastructure initiatives.

> Recovery in manufacturing will be slower due to a severe recession in the global economy, but the automotive industry will get some support from incentive measures.

> They expect Chinese steel demand to increase by 1 percent in 2020. We also expect that the benefit from infrastructure projects initiated in 2020 will carry over and support steel demand in 2021.

> A substantial stimulus program as seen in 2009 is not expected as this

might work against the government's desire to continue rebalancing the economy. However, if the global economic environment affects the recovery of the Chinese economy more profoundly, the government might need to provide a further boost to the economy, implying an upside risk to steel demand.

Developed economies

Steel demand in the developed economies is expected to decline by 17.1 percent in 2020. Although the downturn is led by consumer and service sectors, massive dislocations in spending, labor markets, and confidence are fueling broad-based declines in steel-using sectors. A spillover from substantial job losses and bankruptcies, weak confidence and continued social distancing measures suggest only a partial recovery of 7.8 percent in 2021.

EU steel demand suffered a contraction of 5.6 percent in 2019 due to the sustained manufacturing recession. The manufacturing sector, which was forecast to enter a recovery phase in early 2020, was pushed back into a deeper recession as lockdown measures led to a massive fall in orders. The automotive sector is expected to be the worst hit, whilst the construction sector could remain relatively resilient.

> To continue reading more on this topic, view this article on www.AmericanRecycler.com.





American Recycler August 2020, Page A11

METALS

Steel imports down 19 percent through May

Based on preliminary Census Bureau data, the American Iron and Steel Institute (AISI) reported that the U.S. imported a total of 1,792,000 net tons (NT) of steel in May 2020, including 1,486,000 net tons (NT) of finished steel (down 35.5 percent and up 13.2 percent, respectively, vs. April final data).

Through the first five months of 2020, total and finished steel imports are 10,981,000 and 7,308,000 NT, down 19.2 percent and 26.7 percent, respectively, vs. the same period in 2019. Annualized total and finished steel imports in 2020 would be 26.4 and 17.5 million NT, down 5.7 percent and 16.7 percent, respectively, vs. 2019.

Finished steel import market share was an estimated 23 percent in May and is estimated at 18 percent over the first five months of 2020.

Key finished steel products with a significant increase in imports in May compared to April are oil country goods (up 71 percent), standard pipe (up 44 percent), heavy structural shapes (up 37 percent), tin plate (up 31 percent), hot rolled bars (up 28 percent), sheets and strip all other metalcoatings (up 18 percent), mechanical tubing (up 17 percent) and line pipe (up 15 percent).

In May the largest volumes of finished steel imports from offshore were from South Korea (229,000 NT, up 42 percent from April final), Japan (103,000 NT, up 50 percent), Turkey (85,000 NT, up 61 percent), Taiwan (81,000 NT, up 70 percent) and Germany (65,000 NT, up 1 percent). For the first five months of 2020, the largest offshore suppliers were South Korea (937,000 NT, down 27 percent vs. the same period in 2019), Japan

U.S. IMPORTS OF FINISHED STEEL MILL PRODUCTS BY COUNTRY OF ORIGIN (Thousands of Net Tons)							
Preliminary	JUN 2020	MAY 2020	2020 (annualized)	2019 (12 months)	% Change 2020 Annual vs. 2019		
SOUTH KOREA	187	229	2,247	2,576	-12.8%		
JAPAN	61	103	868	1,242	-30.1%		
GERMANY	79	65	753	1,043	-27.8%		
TAIWAN	65	83	667	830	-19.7%		
TURKEY	29	85	646	328	97.1%		
BRAZIL	23	52	570	534	6.6%		
NETHERLANDS	34	54	374	550	-31.9%		
CHINA	39	35	345	544	-36.6%		
All Others	793	794	10,795	13,405	-19.5%		
TOTAL	1,310	1,500	17,265	21,051	-18.0%		

many (298,000 NT, down 42 percent), Turkey (294,000 NT, up 59 percent)

(373,000 NT, down 39 percent), Ger- and Taiwan (267,000 NT, down 39 percent).

Steel import permit applications decrease in June 2020

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 June totaled 2,003,000 net tons (NT). This was a 12.3 percent decrease from the 2,285,000 permit tons recorded in May and a 10.9 percent increase from the May final imports total of 1,806,000. Import permit tonnage for finished steel in June was 1,415,000, down 5.7 percent from the final imports total of 1,500,000

in May. For the first six months of 2020 (including June SIMA permits and May final imports), total and finished steel imports were 12,999,000 NT and 8,737,000 NT, down 16.9 percent and 25.3 percent, respectively, from the same period in 2019. The estimated finished steel import market share in June was 21 percent and is 19 percent yearto-date (YTD).

Finished steel imports with large increases in June permits vs. the May final imports included light shapes bars (up 77 percent), sheets and strip hot dipped galvanized (up 68 percent), cold finished bars (up 55 percent) and line pipe (up 39 percent). Products with significant year-to date (YTD) increases vs. the same period in 2019 include light shapes bars (up 25 percent) and tin free steel (up 20 percent).

In June, the largest finished steel import permit applications for offshore countries were for South Korea (211,000 NT, down 8 percent from May final), Brazil (86,000 NT, up 66 percent), Taiwan (72,000 NT, down 13 percent), Germany (72,000 NT, up 11 percent) and Japan (57,000 NT, down 44 percent). Through the first six months of 2020, the largest offshore suppliers were South Korea (1,148,000 NT, down 21 percent) and Japan (430,000 NT, down 41 percent).



Commodity		Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
#1 Bushelings	per gross ton	\$249.00	248.00	251.00	264.00	270.00
#1 Bundles	per gross ton	250.00	234.00	237.00	253.00	264.00
Plate and Structural	per gross ton	250.00	225.00	228.00	245.00	265.00
#1 & 2 Mixed Steel	per gross ton	178.00	212.00	218.00	226.00	240.00
Shredder Bundles (tin)	per gross ton	121.00	124.00	145.00	133.00	125.00
Crushed Auto Bodies	per gross ton	121.00	124.00	145.00	133.00	125.00
Steel Turnings	per gross ton	80.00	86.00	87.00	137.00	140.00
#1 Copper	per pound	2.64	2.22	2.28	2.43	2.74
#2 Copper	per pound	2.51	2.08	2.20	2.29	2.54
Aluminum Cans	per pound	.42	.50	.49	.50	.47
Auto Radiators	per pound	1.30	1.23	1.24	1.39	1.49
Aluminum Core Radiators	per pound	.47	.48	.42	.49	.51
Heater Cores	per pound	1.00	.98	.97	1.02	1.08
Stainless Steel	per pound	.46	.45	.44	.47	.46

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

DISCLAIMER: American Recycler (AR) collects pricing and other information from experienced buyers, sellers and facilitators of scrap metal transactions throughout the industry. All figures are believed to be reliable and represent approximate pricing based on information obtained by AR (if applicable) prior to publication. Factors such as grades, quality, volumes and other considerations will invariably affect actual transaction prices. Figures shown may not be consistent with pricing for commodities associated with a futures market. While the objective is to provide credible information, there is always a charce for human error or uniforeseen circumstances leading to error or or orisission. As such, AR is not responsible for the accuracy or completeness of the information provided, or for outcomes arising from use of this information. American Recycler disclaims any liability to any person or entity for loss or damage resulting from errors or omissions, including those resulting from negligence of AR, its employees, agents or other representatives.



Page A12, August 2020 American Recycler

Salvaging Millions

by Ron Sturgeon
Autosalvageconsultant.com

Being cheap is unlikely to make you really rich

(And it's a crummy way to live)

The first article in this series listed more than 25 tactics to increase your business success, all of them based on my experience. I started with nothing and didn't attend college, so I know you can achieve maximum success, regardless of your education.

Those of you who know me well can recall when I lived in a mobile home. I wasn't broke, but I wasn't rich. But, even back then, I like to think I was never too cheap. Yes, I can remember having a pole truck to pull engines and move cars around, and I can recollect making fence poles with driveshafts. I was frugal. There is a time and a place for thriftiness.

As I've grown emotionally, however, I've learned an important lesson. You can't do it on your own. You need others to help you. What does this have to do with being cheap? No, it's not about paying employees more, although you must be fair and competitive. It's about having all stakeholders and friends wanting you to be successful. It's about having them wanting to help and wanting to be a part of your success.

As part of my new book, Homeless to \$100 Million, I had to think carefully about the road map to building wealth and how best to articulate it to others. To write the book, I had to think about all the things that have led to my success. One of the most important insights is that, if you want real financial success, you need lots of folks pulling on the oars and doing so happily That's hard to achieve if you're not sometimes generous with those you depend upon. You are unlikely to achieve a good amount of wealth being cheap because not enough people will be invested in wanting you to succeed if they perceive you as tightfisted.

What is a good amount of wealth? We can likely agree that \$1

million isn't what it used to be, and most business owners want more than \$1 million to retire with. So, it's more than \$1 million. I picked \$5 million; you choose your own definition.

You can retire with \$1 million by being cheap - thrifty - frugal. Call it what you like. My upcoming book is about an actionable road map to building wealth, not income. They are very different. You can save money by not valet parking your car, or tipping the bare minimum. You can save money by driving to the Southside to save \$.10 a gallon on gas. If you pile up all those savings for a lifetime, you can retire with \$1 million. But why not aspire for more? Perhaps not a huge number, some of us are more competitive and ambitious than others.

Does anyone have one of those friends who always seems to forget his wallet at lunch? Or tips exactly 15 percent for over the top service? You don't dislike him, but no one likes to think that you got ahead because you did it at others' expense. I never change a vendor for a price savings of less than 10 percent. And I make sure the current vendor knows that, and that they need to be competitive in their pricing. And I never tell another vendor the price to beat.

Be kind, thoughtful and generous, within your means. Always be perceived as fair. Under promise and over deliver. Make sure everyone knows which oar to pull, how hard to pull, and for how long. Don't be a spendthrift. Live modestly, within your means. Folks don't work as well for a boss who plays golf all the time. (Unless he's 70 and they know he worked his ass off for a long time and was always fair to everyone. Then they want him to enjoy the fruits of his labor. And they couldn't care less that he has \$5 million in the bank.

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.



EVEN ON THE BEACH, INDUSTRY NEWS IS ON YOUR MIND. TAKE US ALONG.

SUBSCRIBE TODAY 877-777-0043

AUTOMOTIVE

Hydro and Northvolt launch joint venture to recycle electric vehicle batteries

Hydro and Northvolt announced the formation of a joint venture to enable recycling of battery materials and aluminum from electric vehicles. Through Hydro Volt AS, the companies plan to build a pilot battery recycling plant, which will be the first of its kind in Norway.

Hydro Volt AS plans to establish the recycling facility in Fredrikstad, Norway, with an expected production start in 2021. The 50/50 joint venture is established between the Norway-based global aluminum company Hydro and Northvolt, a leading European battery manufacturer based in Sweden.

Output from the planned battery recycling plant in Fredrikstad will include so-called black mass and aluminum, which will be transported to Northvolt's and Hydro's plants, respectively. Other products from the recycling process will be sold to scrap metal buyers and other off-takers.

The pilot recycling facility will be highly automated and designed for crushing and sorting batteries. It will have capacity to process more than 8,000 tonnes of batteries per year, with an option of expanding capacity later.

In a second phase, the battery recycling facility could handle a considerable share of the commercial volumes

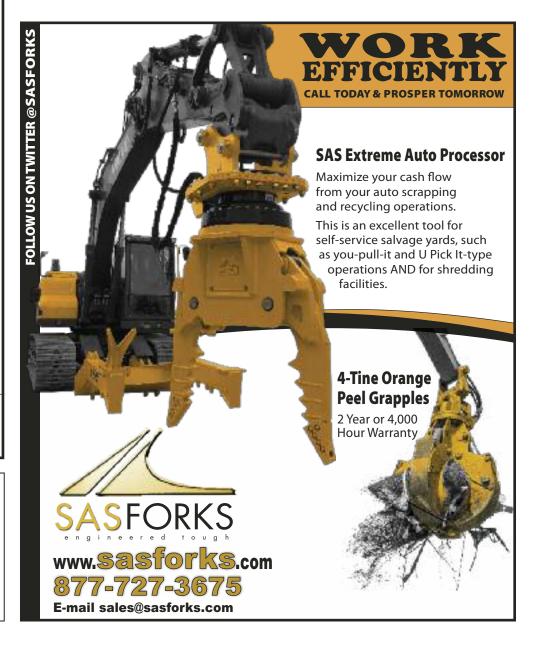
Hydro and Northvolt announced from lithium-ion batteries in the electormation of a joint venture to tric vehicle fleet throughout Scandinger recycling of battery materials navia.

A typical EV (electric vehicle) battery pack may contain more than 25 percent aluminum, totaling about 70-100 kg aluminum per pack. The aluminum retrieved from the new plant will be sent to Hydro's recycling operations, enabling more production of low-carbon Hydro CIRCAL products.

By establishing this facility in Norway, Hydro Volt AS can access and handle battery recycling directly in the most mature EV market in the world, while reducing the number of batteries sent out of the country. The Norwegian company Batteriretur, located in Fredrikstad, will supply batteries to the recycling plant and is also planned as operator of the pilot plant.

The launch of the battery recycling joint venture follows Hydro's investment in Northvolt in 2019. It will further strengthen the partnership between the battery manufacturer and the aluminum company.

For Hydro, the partnership also represents an opportunity to ensure that aluminum from Hydro will be used in tomorrow's batteries and battery system.



American Recycler
August 2020, Page A13

AUTOMOTIVE

NJ files lawsuit against Manheim Remarketing

New Jersey attorney general Gurbir S. Grewal, Department of Environmental Protection (DEP) commissioner Catherine R. McCabe and division of consumer affairs (DCA) director Paul R. Rodriguez announced multiple legal actions to protect the public from the sale of tampered vehicles that release excessive amounts of air pollution.

To protect the environment and public health, automobile manufacturers are required to reduce pollution from vehicles by installing emissions control technology that meets air quality standards. Despite these clean air requirements, some unscrupulous auto dealers, auctioneers, repair shops and individuals modify vehicles by altering or removing the emission control systems or installing software that can disrupt their operation. This tampering violates the law, depletes air quality and threatens public health.

In the first action, Grewal and McCabe announced a lawsuit against Manheim Remarketing Inc., the nation's largest vehicle auction company, alleging that it violated New Jersey's pollution control laws by facilitating the sale of hundreds of tampered vehicles.

According to the complaint, DEP identified over 200 vehicles offered or sold through Manheim that were clearly disclosed as tampered, and a surprise DEP inspection at a Manheim facility last year found that 28 percent of these

inspected vehicles were unlawfully tampered. The complaint seeks to prevent Manheim from allowing sales of tampered vehicles, which would significantly disrupt the resale market for the vehicles.

At the same time, Grewal and Rodriguez announced that DCA issued Notices of Violation to eight auto dealers who sold tampered cars directly to consumers.

Grewal stated, "Environmental protection is directly tied to the public's health, including for environmental justice communities. Tampered vehicles in particular, release harmful air emissions that affect our residents' well being, but national companies like Manheim refuse to protect our residents from this problem. Today, companies and dealerships across the state are on notice: we will hold accountable anyone in New Jersey who seeks to profit through the sale of these unlawful, polluting vehicles."

"When someone intentionally tampers with emissions controls, they are not just cheating the market – they are cheating our environment and the health of our communities," said Commissioner McCabe.

Manheim operates nearly 80 vehicle auction facilities across the U.S., including 2 in New Jersey. The larger of Manheim's New Jersey operations, Manheim New Jersey, is located on 300 plus acres in Mansfield Township. The

company's other New Jersey operation, Manheim Metro Skyline, is located in Fairfield Township, Essex County. Together, the two auction sites offer hundreds of thousands of vehicles for sale annually, many of them allegedly in violation of the State's pollution control laws.

Filed in New Jersey Superior Court in Mercer County, the State's lawsuit alleges that Manheim either sold or offered for sale at least hundreds of tampered vehicles between December 2016 and March 2019 – some of which were "clearly and explicitly" listing vehicles with missing pollution control devices or containing deliberately compromised pollution controls.

The allegations against the defendants are based on a two year DEP investigation focused on the sale of unlawfully tampered vehicles, particularly diesel trucks.

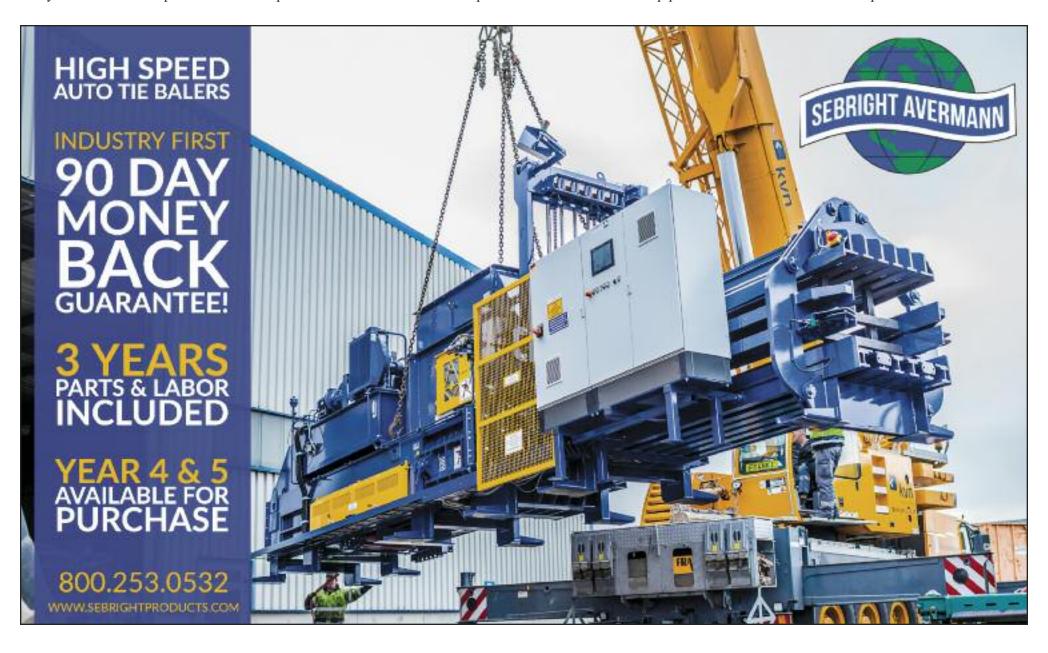
The complaint notes that disabling the exhaust recirculation controls and removing the catalytic converters on a diesel pick-up truck can increase the truck's emission of ozone-pollution-contributing NOx (nitrogen oxide) by approximately 20 times the federal limit. And removing the diesel particulate filters from diesel trucks can increase PM2.5 emissions by 10 times the federal limit. Likewise, the complaint notes, disabling air pollution controls on gasoline-powered vehicles can cause increased tailpipe emissions of

company's other New Jersey operation, NOx, as well as certain volatile organic Manheim Metro Skyline, is located in compounds and carbon monoxide.

Between December 2, 2016 and March 15, 2019, Manheim's two New Jersey auction sites offered a total of more than 850,000 vehicles for sale. The lawsuit alleges that, based on an analysis of Manheim's records for the period on which DEP focused, Manheim either sold or offered for sale at least 214 vehicles that were "clearly and explicitly" disclosed in sales listings as emissions tampered. The sales listing disclosures that flagged the 214 vehicles that included such statements as "NO CATS," "ALTERED EMISSIONS" or "EGR DELETE."

The complaint alleges that the actual number of tampered vehicles offered for sale at Manheim's two auction facilities "was most likely much higher" than 214 during the period focused on by investigators because "only a fraction" of tampered vehicles are actually identified as non-compliant.

The lawsuit seeks an order requiring Manheim to take critical steps to avoid the sale of these vehicles to New Jersey buyers in the future. Those precautions include screening vehicle listings for common tampering indicators, and performing basic visual inspections of vehicles at its in-state facilities. At the same time, the complaint also seeks imposition of civil penalties against Manheim and the three other defendant auto dealerships.



Page A14, August 2020 American Recycler

BUSINESS BRIEFS

Vortex adds new representation in Norway

Vortex Global, a solids and bulk handling components company, is expanding with Mespo, its representative in Denmark. With the addition of a Swedish office, Mespo will be responsible for creating customer relationships, arranging site visits, and following up on Vortex customer inquiries received in Denmark, Norway and Sweden.

Mespo sells high quality components, machines, and customized solutions for powder handling manufacturers. With a combined 50 years of experience in the powder handling industry, Mespo founders Bo Christoffersen and Anders Fridman have extensive experience and knowledge of powder technologies and application installations.

Customers in Denmark will continue to be served by the Danish location while customers in Norway and Sweden will be served by Mespo Sweden AB.

INEOS Styrolution names new CEO

■ INEOS Styrolution, a styrenics supplier, has named Steve Harrington as the company's chief executive officer (CEO). Kevin McQuade, who has led the company as CEO since 2015, has been appointed as chairman.

Harrington has a 30 year career in the chemical industry, the last 19 years working for INEOS in commercial and senior management roles.

Capital Waste launches Charleston operations

Capital Waste Services, LLC (CWS), a portfolio company of Kinderhook Industries, LLC, announced has acquired Priority-1 Residential, LLC, a municipal collection company in Ridgeville, SC. Priority-1 offers residential waste collection as well as curbside recycling and yard debris collection. Priority-1 represents Capital Waste's first add-on acquisition and Kinderhook's 45th environmental services transaction since inception.

Founded in 2005 and headquartered in Ridgeville, South Carolina, Priority-1 was owned and operated by Clint Odom, a waste industry veteran. Under Odom's ownership, Priority-1 became a leading collection company, utilizing ten trucks to provide hauling services for over 15,000 homes.

Financing for the transaction was provided by Comerica Bank.

DTG Recycle names new chief financial officer

■ DTG Recycle, Mill Creek, Washington, has hired Andrew Pickering as the company's chief financial officer.

In addition to corporate and operational accounting responsibilities, Pickering will oversee upfront evaluation and the integration of the financial aspects of DTG's acquisitions. He will also lead an upgrade of the management reporting system to help optimize profitability across its lines of business.

Stevenson Crane replaces director of engineering

■ Illinois-based Stevenson Crane Service Inc. (SCS) has recently added Jess MacMillan, P.E., as the company's new director of engineering. He brings more than 22 years of experience from numerous aspects of the construction industry, including project management, engineering, sales and executive management.

MacMillan's most recent role was as an associate engineer with HAAG Engineering in California. He's also held roles as a director of business development and as a chief operations officer with other West Coast based crane and heavy lifting companies. MacMillan earned his Executive MBA from Chapman University in 2012 and earned his civil engineering degree from California Polytechnic in 1998.

In his new role, MacMillan will be adding improved engineering efficiencies to internal planning strategies, providing engineered and stamped drawings to discerning customers, and will bring increased project management bandwidth to some of Stevenson Crane Service's most complex client projects.

Recology appoints new chief operation officer

San Francisco-based Recology announced the retirement of executive vice president and chief operation officer (COO), Mark Arsenault. Arsenault worked at Recology for nearly 15 years, serving as the company's COO for the past three years.

Recology named Salvatore Coniglio as the new executive vice president and COO. Since 2000, Coniglio has worked in the resource recovery industry providing oversite for collection, transfer station, material recovery facility, landfill and composting facility operations.

Since joining Recology in 2015, Coniglio has held various leadership positions. Most recently, he served as regional manager, overseeing many of the company's collection and processing facilities in Central Valley, California.

Prior to joining Recology, Coniglio worked for Garaventa Enterprises and Republic Services. He earned a bachelor's degree in leadership and organizational studies from Saint Mary's College of California.

John Brett named AISI's chairman of the board

The American Iron and Steel Institute's (AISI) board of directors formally elected John Brett, president and chief executive officer of ArcelorMittal USA, as AISI's chairman of the board for the 2020-2021 term.

Brett has been serving as interim chairman since mid-March after the retirement of previous chairman Roger Newport, former chief executive officer of AK Steel. He has over 30 years of experience in the steel industry.

Epax Systems forms lease and rental division

Epax Systems of Los Angeles, California, has formed a new lease and rental division. Operating as Eco Rentals (www.ecorentals.com), the new division will focus on providing waste compaction solutions to businesses across North America. Leasing or renting equipment is an economical alternative that allows users to gain the benefits of compaction with no capital investment.

With a large inventory of new, demo and pre-owned equipment, Eco Rentals can supply a wide range of compaction equipment including self-contained compactors, stationary compactors, vertical compactors, apartment compactors, as well as horizontal and vertical balers.

In addition to conventional systems the company also offers solutions for open top containers and dumpsters with its line of Ropax Rolling Compactors. These unique compactors use a heavy rolling drum with large metal teeth attached to an articulating boom. As the drum rolls back and forth it crushes, rips, tears, macerates and compresses waste in the dumpster.

Eco Rental systems can be installed anywhere in the continental U.S. Shipping, installation, setup and routine maintenance are all covered in the low monthly maintenance fee. Rental rates start at as low as \$235 per month.

American Chemistry Council adds four members

The American Chemistry Council's (ACC) board of directors approved the addition of three new regular members and one affiliate member at their annual meeting.

Regular members approved include: KMTEX, LLC, with over 40 years of experience in separating and purifying many chemistries (including glycols, solvents and aromatic hydrocarbons) is the largest, most flexible toll distillation provider in the Gulf Coast.

Nylon Corporation of America (NYCOA), is a manufacturer of engineered nylon resins. It has one of the broadest product portfolios in the industry, and has established itself as a leading supplier of specialty high performance nylons.

Synthomer plc, is a global supplier of aqueous polymers. These polymers help customers create new products and enhance the performance of existing products in key industries such as coatings, construction, textiles, paper and synthetic latex gloves.

At the affiliate level, ACC's board approved the addition of Leschaco, Inc., a global logistics service provider.

A small boy swallowed some coins and was taken to a hospital.

When his grandma called to see how he was doing, the nurse reported, "No change yet!"

The Best Plastics Recycling Systems Start with the Best Wash Lines



Herbold wash line systems do the dirty job of plastics recycling with ease. Our system components handle every step of the process.

- Separation
- Intensive Washing
- Drying
- Size Reducing
- Material Conveying

Every system we build is custom designed and engineered to meet specific application requirements. From feed rates to throughput to physical plant conditions, we'll design a system that satisfies all of your needs.

888.612.7774 | HerboldUSA.com info@herboldusa.com

Herbold Wash Line Systems may incorporate the following:

- Wet Granulators
- Friction Washers
- Separation Tanks
- Hot Wash SystemsMechanical Dryers
- Thermal Dryers
- Hydrocyclones
- PVC Label Removers



August 2020, Page A15 American Recycler



Classified ADVERTISEMENTS

877-777-0043

—Always Available—

PLACE YOUR TEXT AD ONLINE

www.AmericanRecycler.com

UPGRADE TO A FEATURED CLASSIFIED AND ADD FULL COLOR!

Featured Classifieds

OUR SERVICES

Mergers & Acquisitions Consulting Business Valuation & Brokerage Specialty Waste Transportation Management Consulting and Advisory Asset Preservation & Reorganization Waste To Energy Consulting New Business Opportunities



609.854.3520 tel 609.854.3596 fax rs@sternerconsulting.com sternerconsulting.com

Businesses

LOCATION, LOCATION, LOCATION! For lease, \$9,000 NNN, 5 miles from downtown Atlanta, in between two major interstates, 6.6 acres cleared and fenced, 2,400 sq.ft. office, 5,000 sq.ft. warehouse, ready for a scrap or salvage yard. Call or text 678-664-8780.

RECYCLING BUSINESS, 25 years old, \$65,000. Includes: trailers, metal bins, forklift, customer list. Will work with buyer for two months, minimum. Income \$65,000 to \$100,000 annually, potential additional revenue: hauling lumber, organic soil and cardboard. Call Chuck after 7pm, MST: 928-587-2021.

SELLING YOUR BUSINESS? Finding the right buyer, at the right time, can be like finding the needle in a haystack! It may take time to sell, so place your classified ad here at the low cost of only \$70 per issue and have it seen online, too, for the same price! Call us at 877-777-0043 or email sales@americanrecycler.com today.

NOW PLACE <u>YOUR TEXT</u> **CLASSIFIED AD** ONLINE!

—Always Available— 24 HOURS PER DAY/7 DAYS PER WEEK

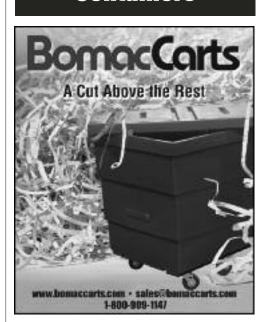
www.AmericanRecycler.com

Complete fluid removal in less than 5 minutes!

The Enviro-Rack is the most superior auto fluid removal and dismantling system on the market today.

877-247-6629 • IronAx.com

Containers



Material Handlers

Hyundai Robex 160LC-9A



2014, 3,200 Hours, SAS **Extreme Processor Head,** located in Atlanta, GA \$150,000 or OBO Call or Text 404-863-8603

Material Handlers

Fuchs — **Liebherr** Sennebogen — CAT

MATERIA HANDLERS

20 Machines with Cab Risers, **Gen-sets & Rotating Grapples**



New and Used Grapples

New Magnets and Gen-sets

New 24V Magnets

EQUIPMENT INTERNATIONAL 303-699-7766

KUHN © EQUIPMENT

FEATURED MACHINE

Komatsu Auto Dismantler 2005 Komatsu PC228USLC-3



6,498 hours, equipped with a NEW Auto Dismantler package. Excavator has EROPS cab, heat, A/C, cab guard, aux hydraulics, and complete, NEW U/C. **Call for Price!**

KuhnEquipment.com TODAY FOR **MORE QUALITY MACHINES!**

800-225-0623 after hours: 843-324-8487 sales@kuhnequipment.com

NEXT DEADLINE: AUGUST 14

Miscellaneous

SCORPION ENGINE PULLER SAS FORKS | NEW IN 2013!



STRIP-TEC WIRE STRIPPER

Purchased new in 2011. Barely used for a few years. \$3,500



WE BUY AND SELL USED RECYCLING EQUIPMENT

HOVDE RECYCLING EQUIPMENT 800-617-5219 TEXT 320-760-5688 scrapequip.com steven@scrapequip.com

Herbold Screens, Knives, Parts & Wide Range of **Recycling Equipment**



In-stock at our east coast facility for quick shipment



888.612.7774 · HerboldUSA.com

Hi-efficiency, new technology.



PARTS • REPAIR • CUSTOM BUILDS 518-424-1168

www.RecyclingFurnaces.com

Software

SCRAPRIGHT SOFTWARE IS THE #1 TOP RATED, fully featured, best supported, most innovative, intuitive and easiest-to-use recycling software in the scrap industry. We want every scrapper to be in compliance affordably! We offer plans starting at \$49/month! Free 7 day trial available. Call 877-897-6422 or visit www.scrapright.com





Iron Ax is an OEM that produces high quality mobile shears, balers, Enviro Racks, material handlers, booms, lowboy trailers, hydraulic cylinders, fluid couplings & grapples. We also carry Walker Magnets, Square D Controllers, Ohio Magnetics Controllers & Baldor Generators.

IRON AX SHEAR PACKAGES



All shears feature 360° continuous rotation.

> Iron Ax is the ONLY shear manufacturer in the entire industry that offers a complete package consisting of a shear and an excavator.

THE ENVIRO-RACK

Complete fluid removal in less than 5 minutes!

The Enviro-Rack is the most superior auto fluid removal and dismantling system on the market today!









Toll-free 877-247-6629 Fax 478-252-9030

www.ironax.com | ironax@ironax.com



View the Iron Ax YouTube Channel to see the Iron Pack Baler In Action Today!



FOCUS on ELECTRONICS/GLASS

SECTION B www.AMERICANRECYCLER.com OCTOBER 2020

Municipalities are challenged with contaminated paper recycling issues

by MAURA KELLER

mkeller@americanrecycler.com

Recently, two cities in Broward County, Florida - Deerfield Beach and Sunrise – temporarily suspended their curbside paper recycling program due to contamination issues. The need to suspend mixed paper recycling stems from residents who continue to throw garbage in amongst the paper and so it is too 'dirty' for recyclers to sell. In its announcements to residents, Deerfield Beach officials stated, "Due to continued excessive contamination rates contributing to the rising costs for recyclable processing and low global demand for materials, the city commission voted to suspend the city's curbside recycling collection programs starting July 1, 2020. The suspension will remain in place until at least October 1, 2020."

Terese Colling, president of the Paper Recycling Coalition, said that, although Broward County's discontinuation of paper recycling is disappointing, her organization is actually seeing programs trying to educate residents on what can and cannot go in the curbside recycle bin.

"Very few public entities are quitting the program or quitting on specific pieces of the program. Paper had a 66 percent recovery rate in 2019 and has the most sustainable end use markets compared to other materials," Colling said. "Paper can be recycled up to seven times. Without recycling programs, paper could be burned or landfilled and lost forever along with its economic and environmental benefits."

In order to save all programs, not just paper, Colling said we need to get back to basics and only allow what is truly recyclable in the recycling bin.

"Our industry has worked tirelessly with policy makers and elected officials at every level to urge a strong education program," she said.



Greasy pizza boxes seem to be a hotpoint of contention with recycling administrators and seem to cause the most disruption for paper recyclers.

In fact, the U.S. EPA recently released public service announcements encouraging consumers to "Recycle More Recycle Right" which the Paper Recycling Coalition helped to develop.

Further reading, see: "Pizza boxes are recyclable, grease and cheese should not be a recycling issue" on Page B6

"Administrator Wheeler has a video which further addresses the importance of keeping the supply chain moving so that our industry can make the vital boxes, and shopping containers for food, beverage and pharma packaging and critical shipping cartons," Colling said. "Consumers want to recycle. Our challenge is to help educate them and the programs on the importance of avoiding

contamination and the gravity of continuing their recycling efforts now more than ever. We are working with communities across the country to help make that happen. We are a resilient and spry industry. Eliminating vital recycling programs is not an option."

Indeed, as Jeremy Cooper, MRF plant manager at WCA Waste Corporation in Harrisonville, Missouri explained, in the Kansas City area, the elimination of paper recycling due to contamination issues has not been done – yet.

"I have heard some programs are shutting down due to COVID-19 but nothing related to stream cleanliness," Cooper said. "The material cleanliness is and always will be an issue but we are cleaning it up the best we can and continue to invest in equipment to help clean it up further, including using robots and optical sorters."

In fact, as Cooper pointed out, there has been a surge in technology regarding the paper streams. Right now, WCA is currently in the works with third-party companies to install two robots on its system and possibly an optical sorter to clean the paper stream even further.

Brian Hawkinson, AF&PA's executive director, recovered fiber, pointed to the innovations being embraced by the industry, including the application of artificial intelligence and robotics to improve materials sortation and processing at materials recovery facilities that enable them to send cleaner recovered paper to mills.

"At mills, trash catchers in pulpers help mills process lower quality paper, while enzymatic technologies break down chemical bonds of adhesives in pulpers to reduce stickies and improve

See CONTAMINATION, Page B7



From Distribution & Warehousing to Post Consumer Recycling!



Find your next Maren Baler at: 800-875-1038 marenengineering.com • sales@ marenengineering.com

Brightmark pioneers boat wrap recycling program

Brightmark, a waste solutions provider, has successfully completed a pilot collection program for boat wrap with a local marine services dealer located near the company's Ashley, Indiana plastics renewal facility.

Supported by the Northeast Indiana Solid Waste Management District (NISWMD), the project established the viability of diverting from the waste stream used boat wrap from leisure crafts that were placed into winter storage. The collected material will now be used as a feedstock to produce transportation fuel and wax at the Ashley facility.

Expansion of the program to additional marinas located in the four counties serviced by NISWMD is now being planned. Those counties are: DeKalb, LaGrange, Noble and Steuben. Seasonal boating, watersports and fishing are leading contributors to the local economy with more than 100 freshwater lakes located in the region.

"Boat wrap is a pure waste stream that has always been difficult to properly recycle," said Steve Christman, executive director of the Northeast Indiana Solid Waste District. "This program fits perfectly because it allows us to turn the waste into something of value to boaters."

The wrap, a linear low-density polyethylene (LLDPE), is similar in structure to heavy duty garbage bags and is difficult to recycle as a somewhat contaminated, seasonal material. By collecting the wrap from local marinas, Brightmark ensures that it does not end up in local landfills and instead, finds a productive second use as a fuel source for local vehicles and power boats.

The ultra-low sulfur diesel and gasoline blendstocks produced from the boat wrap and other co-mingled plastic waste will be sold to BP where it will then go into the wholesale transportation fuel pool in the Midwest.

"A lot of our boat owners have asked what they can do with the boat wrap because they want to do right by the environment, but we haven't been able to give them a good solution," said Terry Archbold, owner of Dry Dock



Tina Walters, human resources manager at Brightmark's Ashley, Indiana plastics renewal facility, helps to collect boat wrap from Dry Dock Marine Services in Angola. This wrap will be used as feedstock to produce transportation fuel and wax.

Marina in Angola, Indiana. "Now we can give them a suitable option and fulfill that need to act sustainably."

There are more than 11 million boats registered in the U.S. A significant portion of those boats need to be wrapped when they are in dry dock during the winter months. The amount of boat wrap removed each year adds up to approximately 110,000 tons of waste, which, when recycled, would equal nearly 21,000 barrels of renewable fuel.

"The numbers show this waste problem goes far beyond just the state of Indiana," said Bob Bowell, chief executive officer of Brightmark. "But to us, it represents one of those really big problems Brightmark was created to solve."

Brightmark's proprietary plastics renewal process accepts co-mingled, single stream plastics and transforms them into fuel and wax. The process leads to a 14 percent reduction in greenhouse gas emissions vs. traditionally captured oil. Brightmark's first commercial-scale plastics renewal facility in Ashley, Indiana – which is where the boat wrap will be shipped – will recycle 100,000 tons of mixed plastic waste each year.

AF&PA releases updated paper reports for June 2020

The American Forest & Paper Association released its June 2020 U.S. paper reports.

Containerboard

Total Containerboard production in June increased one percent compared to June 2019. It was up five percent when compared to the same six months of 2019.

•June 2020 production of containerboard for export increased five percent compared to the same month last year; it was up 34 percent year-to-date.

•The containerboard operating rate was 90.1 percent, up 1.8 points from June 2019 and up 3.9 points year-to-date.

•Mill inventories of containerboard at the end of June decreased 4,000 short tons from the previous month and were up 48,000 short tons compared to June 2019.

Printing-Writing Paper Report

According to the report, total printing-writing paper shipments decreased 25 percent in June compared to June 2019. U.S. purchases of total printing-writing papers decreased 25 percent in June compared to the same month last year. Total printing-writing paper inventory levels decreased six percent when compared to May 2020.

•U.S. purchases of uncoated free sheet (UFS) papers in June decreased 28 percent compared to last June while the inventory level decreased eight percent compared to May 2020. UFS imports and exports both decreased compared to May 2019, down 26 percent and 44 percent respectively.

•Coated free sheet (CFS) paper shipments decreased 13 percent compared to June 2019 while the inventory level

decreased two percent compared to May 2020. CFS imports increased two percent while exports decreased 42 percent in May 2020

•U.S. purchases of coated mechanical (CM) papers in June decreased 40 percent compared to last June while the inventory level decreased two percent compared to May 2020. CM imports and exports both decreased compared to May 2019, down 42 percent and 16 percent respectively.

•Uncoated mechanical (UM) paper shipments decreased 35 percent compared to June 2019 while the inventory level remained essentially flat (-0.3 percent) compared to May 2020. UM imports and exports both decreased compared to May 2019, down 16 percent and 64 percent respectively.

To continue reading this report, view this article on www.AmericanRecycler.com.









Leaders in Glass Recycling Technology





Process all types of glassBottles to mixed waste glass

Produce glass aggregate

With rounded edges or glass cullet systems – 1-20 tons per hour

Local processing for local markets

Andela Products.com 315-858-0055 info@andela products.com

A EQUIPMENT SPOTLIGHT

To be included in the spotlight, you must **manufacture** the equipment featured. We require a company name, one contact person, a telephone number and, if applicable, a website address.

To be listed in the appropriate spotlight, please call 877-777-0043.

UPCOMING TOPICS

OCT Pulverizers

NOV Auto Balers/ Loggers

DEC Attachments

JAN Conveyors

American Recycler is not responsible for non-inclusion of manufacturers and their equipment. Manufacturers are to contact American Recycler to ensure their company is listed in the Equipment Spotlight.

Verso to idle paper mills after declines from Covid-19

Verso Corp. expects to lay off about 1,000 employees, as it indefinitely idles mills in Duluth, Minnesota and Wisconsin Rapids, Wisconsin this summer.

The firm will explore viable and sustainable alternatives for both mills, including restarting if market conditions improve, marketing for sale or closing permanently. The decision to reduce production capacity is driven by the accelerated decline in graphic paper demand resulting from the COVID-19 pandemic. The stay-athome orders have significantly reduced the use of print advertising in various industries, including retail, sports, entertainment and tourism. According to Fastmarkets RISI, North American printing & writing demand fell by 38 percent year-over-year in

"It is critical that we maintain a healthy balance sheet and focus on cash flow, while balancing our supply of products and our customers' demand," said president and chief executive officer Adam St. John. "After a comprehensive review of post-pandemic demand forecasts and capacity, we made the difficult decision to idle the Duluth and Wisconsin Rapids mills. We expect the idling of these facilities to improve our free cash flow. The sell through of inventory is expected to offset the cash costs of idling the mills."

Verso expects to idle the mills by the end of this summer, resulting in the layoff of approximately 1,000 employees. Verso will continue to supply graphic and specialty papers in roll and sheet form, as well as packaging papers and pulp.

"Decisions to idle facilities are always difficult because they impact employees, their families, and communities," said St. John. "Verso is committed to treating all of our affected employees with fairness and respect. As always, safety is our highest priority and will be our primary focus during this difficult time."

A doctor and a lawyer were talking at a party. They were interrupted by people describing their ailments and asking the doctor for free medical advice. The exasperated doctor asked the lawyer, "What do you do to stop people from asking you for legal advice when you're out of the office?"

"I give it to them," replied the lawyer, "and then I send them a bill."

The doctor is shocked, but agrees to give it a try. The next day, still feeling slightly guilty, the doctor prepared the invoices. When he placed them in his mailbox to be picked up, he found a bill from the lawyer.

Experts unite to define recycling pathways

The Foodservice Packaging Institute has organized a group of industry partners to examine recycling of PET thermoform packaging. The group is conducting a study to further understand the PET thermoform packaging recycling stream and define the most cost effective and practical pathways for recovering it. Through the study, the group hopes to establish a common understanding of the most impactful opportunities to increase PET thermoform recycling. PET thermoform packaging includes cups, lids, clamshells, bowls, produce, deli, bakery and takeout containers, as well as other types of consumer packaging.

In partnership with FPI, the Association of Plastic Recyclers (APR), the National Association for PET Container Resources (NAPCOR), the Northeast Recycling Council (NERC) The Recycling Partnership and the Sustainable Packaging Coalition (SPC) will pool data and resources to gain a more thorough understanding of this complex issue. The study is being conducted by Resource Recycling Systems (RRS)

"Each partner has been working to increase recycling of PET thermoforms in different ways, so it's important to bring all parties together to find a solution," said Natha Dempsey, president of the Foodservice Packaging Institute. "While we're making progress, it just makes sense to combine efforts to define a unified path to increased recyclability for PET thermoforms."

Project partner NAPCOR reports that the volume of PET thermoform material recycled in the U.S. surpassed 100 million pounds in 2018. Most of this volume was captured in curbside PET bottle bales and processed with bottles by PET reclaimers who accept them at up to specified percentages of the bale weight. However, as thermoform recycling increases, so does the prevalence of thermoforms in residential PET bales, bumping up against the limits of PET bottle reclaimer acceptance levels. The study will further explore this, along with other potential PET thermoform recovery pathways.

"We know there is a shortfall of available postconsumer recycled PET to meet stated content goals. PET thermoforms offer significant performance benefits to consumers and producers and can help increase the overall supply of this valuable raw material," said Darrel Collier, executive director of the National Association for PET Container Resources (NAPCOR). "Our research indicates that PET thermoforms can, and are being recycled, though they do pose some technical and logistical collection and sorting challenges. We are pleased to join with our colleagues to explore and overcome these challenges."

This project will explore the potential limitations and obstacles, viability, costs and related metrics of PET

thermoform curbside recycling and other potential recycling pathways. Recycled PET thermoforms can be utilized in the manufacture of new PET containers, strapping and other types of packaging, as well as in polyester fiber applications.

"Common food items are sold in PET thermoform containers and the desire of the public to contribute to the environment through recycling drives their expectations to recycle this material," noted Lynn Rubinstein, executive director, NERC. "These packages are being put in recycling containers and often treated as a contaminant. Finding a positive economic solution to productive recycling will help the industry and the economy."

"PET thermoforms represent a viable feedstock to feed the growing demand for recycled PET resin," said Steve Alexander, president and chief executive officer of the Association of Plastic Recyclers. "We are hearing from more and more markets that are interested in using this recycled material; now we need to figure out how to get it to them."

This study will utilize combined partner organization knowledge pertaining to potential technical, logistical and market obstacles to increasing PET thermoform recycling, building on collective work to date.

The study is expected to be completed in the fall of 2020.

Cardboard cutouts used to fill stadiums

Sports teams looking to resume games without spectators can safely fill their empty seats and create some much needed atmosphere, thanks to DS Smith. A leading provider of sustainable corrugated packaging, the company has readied production of recyclable cardboard replacement fans for use at arenas forced to limit attendance of the real thing.

DS Smith announced the launch of its design and manufacturing plans, which includes an initial approach to the National Basketball Association, Major League Baseball and Major League Soccer – offering quick, reliable and sustainable options for teams wanting to fill empty venues.

They'll have arms raised, some in a V for victory, and with in-house preprint capabilities, can be custom designed in a combination of tones, in solid or striped clothing to match team colors and even holding images of a foam finger or baseball bat.

Sporting events across the country are working on safe ways to move forward, some limiting the number of spectators and others prohibiting any on-site, the result of physical-distancing measures to curb the spread of the coronavirus.

DS Smith will reach out to universities, high schools and others eager to fill their seats with a bit of normalcy during games.



EQUIPIVIENT SPOTLIGHT

Shredders

by MARY M. THORNTON

maryt@americanrecycler.com

Paper and plastic make up a large portion of the trash discarded today. As a result, there are a wide variety of machines available in the recycling and waste industries, designed for the processing and further use of those materials.

"CM Shredders has long been at the forefront of game-changing innovations with recycling system installa-

tions hard at work in hundreds of locations, spanning 5 continents in more than 28 countries," Mario Vazquez, sales and marketing director, said.

CM's new product R&D and engineering team have recently introduced two completely new lines of dual and single shaft shredders with the ability to process and provide turn-key solutions for nearly every market in the industry. The first introduced "hybrid" series of dual shaft shredders include models ranging from 10 to 250 hp.

This series was designed to process a wide range of ferrous and nonferrous materials, including plastics, paper, metal, MSW, wood and tires. The CM Hybrid Series are low-speed, wear, noise, dust and vibration machines, combining CM high torque and cutting technologies with high capacity and precision processing.

CM next introduced a line of high-performance, single shaft shredders – the CM SOLO Series. Ranging from 30 to 150 hp, these machines were designed to provide a consistent and exact finished particle size. The product line also features a "smartram" system that automatically and precisely adjusts ram pressure for maximum efficiency. Ruggedly built and engineered for performance, the machines also offer low cost of operation. "The CM Shredders reputation for high quality and precision manufacturing is evident from the steel frame and electrical controls. Easy service access for screen changes and maintenance are also engineered with the user and simplicity in mind. Also, four-way reversible steel knives drastically lower operating cost. These into a shredder and machines have a small footprint and it is not unusual for

can be utilized as a stand-alone machine, or integrated with a CM Hybrid primary shredder to reach high capacities very cost efficiently. For even further processing the line can be further integrated downstream with a CM Granulator or CM Hammermill, serving as a complete fine grind system," stated Vazquez.

For over 50 years, Granutech-Saturn Systems has designed and manufactured size reduction equipment for



CM Shredders

many recycling industries. Offering single, dual, and quad shaft shredders in both hydraulic and electric drive, most of their clients are large volume processors, typically ranging anywhere from 1,500 lbs. per hour up to 12,000 lbs. per hour and some run 24/7.

"The plastic recycling industry is in an interesting place right now. When China stopped the import of scrap plastic, it resulted in a large volume of scrap material in America. Then the collapse of oil prices made virgin plastic the cheaper option compared to recycled plastics. The effects

of COVID-19 are still playing out too," commented Greg Wright, sales manager.

He added, "Contamination in recycled products is always a challenge. Many times an entire bale of paper or plastic might be thrown

there to be a large piece of metal or other contaminant in it. Some customers manually break open the bale before shredding to look for such items, and others might use multiple stages of shredding with a dual shaft shredder initially, which is much more tolerant of contaminants, followed by a magnet and/or metal detector before going into further shredding."

Herbold, a fourth generation size reduction company, serves markets around the world that process paper, plastics, rubber, fiber and post-consumer materials. Equipment sizes range from 8 x 10" to 30 x 80" and machine speed ranges from 5 to 500 hp. Herbold products can process 50lbs. per hour to 15,000 lbs. per hour, depending on the final particle size and feed stock. Typically, a Herbold client may process 1,500 lbs. per hour at a minimum.

David Lefrancois, president, reports that clients are sometimes challenged by adequate floor space, power availability, experienced equipment operators and maintenance personnel. He noted the dominant factors that shape the market, stating, "It's all about volume and equipment flexibility... the larger the volumes the better the ROI and the more flexible the equipment, the more plentiful the opportunities out there for additional feed stocks."

Virtus Equipment's SG size reduction machine combines a shredder with a granulator in a single spacesaving system for the processing of production waste. The shredder top is equipped with a 400 mm diameter E rotor, which involves the Virtus proven knife and knife holder design. Driven by a high-torque gear drive and

See SHREDDERS, Page B6



Granutech Saturn Systems

MANUFACTURERS

BCA Industries John Neuens 414-353-1002 www.bca-industries.com

CM Shredders Mario Vazquez 800-848-1071 www.cmshredders.com

Ecoverse Chris Pap 440-937-3225 www.ecoverse.net

Eldan Recycling Ken Moulin 716-731-4900 www.eldan-recycling.com

Franklin Miller, Inc. **Dave Schuppe** 800-932-0599 www.franklinmiller.com

Gradeall International Ltd Stephen Murphy 44 28 8774 0484 www.gradeall.com

Granutech-Saturn Systems Greg Wright 877-582-7800 www.granutech.com

> **Herbold USA David Lefrancois** 401-597-550 www.herboldusa.com

Jomar Machining & Fabrication John Werntz 574-825-9837 www.4jomar.com

Jordan Reduction Solutions Richard Pyle 888-733-8248 www.jrs.com

> **Lindner America Chris Howard** 800-235-1391 www.lindner.om

Metso USA Lou Martins 413-244-8832 www.metso.com

Pallmann Industries Inc. **Jeff Taylor** 973-471-1450 www.pallmannindustries.com

Continued on Page B6





Complete size reduction solutions

Virtus is the leading supplier of size-reduction solutions. From our wide range of powerful Shredders, Granulators and Pulverizers, a large variety of companies rely on Virtus for their primary and auxiliary processing equipment.

Applications from beside-the-press granulators, to multi-stage shredders, to our new combination units – **We cover the entire spectrum for your size reduction needs!**



NEW PRODUCT SHOWCASE



Best Process Solutions 1071 Industrial Parkway Brunswick, OH 44212 330-220-1440 www.bpsvibes.com

BPS VIBRATORY SCREENERS DEFTLY SEPARATE RECYCLABLES

Model CSL vibratory screeners from Best Process Solutions (BPS) are highly effective for applications requiring material separation.

Powering these screeners are two rotating vibratory motors designed to give a linear and straight-line type conveyance action. The unit propels the product forward with a positive conveyance action designed to offer better stratification than typical sloped gravity or orbital type screeners. Screen options are wire mesh, finger screen deck, perforated plate, grizzly deck and wedge wire.

BPS will custom engineer screeners for customers' specific needs.



Brokk Inc. 1144 Village Way Monroe, WA 98272 800-621-7856 www.brokkinc.com

BROKK CREATES ATOMIZED WATER MIST DUST SUPPRESSION SYSTEM

Brokk created the Brokk Atomized Water Mist System to combat harmful silica dust and other airborne particles created by the demolition process.

This system produces atomized fog that effectively binds dust particles in the air while also providing ground level dust suppression. Additionally, the mist dissipates, rather than forming puddles, for a safer, cleaner job-site. Available for all Brokk remote controlled demolition robots, the Atomized Water Mist System offers an ideal solution to mitigate hazardous dust in demolition applications such as concrete cutting.



Intercomp 3839 County Road 116 Medina, MN 55340 763-476-2531

www.intercompcompany.com

INTERCOMPWIM DELTA SOFTWARE SIMPLIFIES INVENTORY TRACKING

Intercomp has now made IntercompWIM™ Delta software available to the global industrial scale market. The software is a stand alone interface for customers to take advantage of the efficiency and cost savings of weighin-motion (WIM) technology while more accurately tracking bulk material inventory, in real time.

The software automates weight collection to compare and calculate gross/net weights for vehicles hauling incoming and outgoing materials. It compares records with matching vehicle IDs to calculate net, tare and gross weights and is then able to forward details to third party inventory software.



TALBERT'S TAG-A-LONG AC SERIES TRAILERS MAXIMIZE EFFICIENCY

Talbert Manufacturing offers its Tag-A-Long Austin Carry-All Series (AC Series) Trailers to minimize load times and maximize productivity for everyday hauling of small to mid size equipment. The line of 10 to 25 ton tag-a-long trailers features loaded deck heights, durable construction and a low, 7° load angle to transport a variety of equipment.

For ultimate maneuverability, the dual axle AC-10 offers a 10 ton, 20,000 lb. capacity with an overall transport length of 29' 6" with a 24' deck length.

Talbert Manufacturing 1628 West State Road 114 Rensselaer, IN 47978 800-348-5232 www.talbertmfg.com

Tomra Sorting, Inc. 11121 Carmel Commons Charlotte, NC 28226 980-279-5650 www.tomra.com

TOMRA RECYCLING'S AUTOSORT SYSTEM HAS HIGH VERSATILITY

The compact, highly versatile new Autosort® sensor-based sorting system can be used across a vast range of material sorting applications. Highly flexible and upgradable, the system brings together the very latest in Tomra's technologies to deliver advanced accuracy of complex sorting tasks at high throughput rates. The system can be easily integrated into any existing or new sorting processes.

Standard equipped with improved Sharp Eye and Flying Beam® technologies with optional Deep Laiser, Autosort consistently delivers high performance – even in the most complex of applications.

Pizza boxes are recyclable

The American Forest & Paper Association (AF&PA) released new industry guidance that aims to clear up consumer confusion regarding the recyclability of pizza boxes. The guidance resulted from a study conducted by WestRock that found the presence of grease and cheese at levels typically found on pizza boxes does not impact manufacturing in a negative way.

"Corrugated pizza boxes are successfully recycled every day at paper mills throughout the country, yet consumers remain confused by mixed messages suggesting that some boxes should not be put in the recycle bin," said AF&PA president and chief executive officer Heidi Brock. "So, let's be clear: pizza boxes are recyclable. Consumers should not be concerned about grease or cheese — simply remove any leftover

pizza and place the box in the recycle bin. We encourage communities to update their residential recycling programs guidelines to explicitly accept pizza boxes that are free of food."

In a recent membership wide survey, AF&PA members representing 93.6 percent of the total amount of Old Corrugated Containers consumed by member companies, said they accept corrugated pizza boxes for recycling.

"When speaking at recycling conferences, the question I'm asked most often is: 'Are pizza boxes recyclable,'" said Dennis Colley, president and chief executive officer of the Fibre Box Association. "This guidance from AF&PA should give municipalities, recycling centers and households the information they need to confidently recycle pizza boxes."

Shredders

■Continued from Page B4



Herbold USA

compared to a direct drive, the unit handles tougher input materials thoroughly. The large hopper and the powerful horizontal pusher allow the processing of voluminous as well as heavier materials. The granulator lower part of the system consists of a three blade rotor based on the Virtus compact C series. "The shredder and granulator are matched to work in conjunction with an advanced control system and this ensures smooth, reliable operation," Tom Breslin, president, stated. The Virtus SG system was developed to focus mainly on blow and injection molding, but it can be used in many other applications as well.

Due to the compact design, the SG is ideal for in-house recycling applications. The closed system reduces the risk of contamination in the output material, when compared to a traditional two stage system. Features include a compact space saving design, low noise emission, a versatile size reduction concept and flexible discharge options. The SG is for any application that requires predictable shredder and granulation quality. Typical applications include, but are not limited to: recycling, injection molding, roto and blow molding, extrusion and thermoforming.

Virtus Equipment also offers beside-the-press granulators to large,

MANUFACTURERS cont.

SSI Shredding Systems, Inc. Lee Sage 503-682-3633 www.ssworld.com

Untha America, Inc.
Bernhard Martinz
603-601-2304
www.untha-america.com

Van Dyk Recycling Solutions Adam Lovewell 203-967-110 www.vdrs.com

Virtus Equipment
Tom Breslin
847-291-1800
www.virtus-equipment.com

Weima America Inc. Madison Burt 888-440-7170 www.weimaamerica.com



Virtus Equipment

heavy duty shredders and compact, soundproofed granulators. Specialized systems for in-house granulation, large diameter pipes and tires are also available. Pulverizers and accessories round out the Virtus Equipment product line with production of approximately 5,000 machines annually.

Contamination

■Continued from Page B1

machine runnability and sheet quality," Hawkinson said. "And new innovations in pulping technology, like cavitation pulpers, can separate fiber from polycoatings and laminates, enabling mills to process more products like foodservice packaging."

And as Hawkinson said, all of these innovations allow mills to reuse more fiber from used paper products – from cereal boxes, mail, magazines and tissue tubes to corrugated and paper bags used to deliver items to a doorstep.

"Each of these products has something in common – recyclability," Hawkinson said. "Recycled fiber can be used at least seven times to create new products, and approximately 80 percent of U.S. paper mills depend on recovered fiber from recycling operations to make the everyday and essential products that consumers rely on."

Challenges Aplenty

Graham Rihn, founder and chief executive officer of Roadrunner Recycling, is continuing to see that single stream recycling is a broken system across the board. While mixing all materials together seems like a straightforward enough approach, there's a lot that can go wrong in terms of contamination.

"There is an overall lack of education when it comes to what is recyclable and what is not, and more often than not, traditional recycling programs leave little room for error," Rihn said. "A larger problem for many areas is that in addition to contamination, some waste companies aren't profiting from mixed paper, so they're less likely to encourage recycling it."

In fact, a single piece of contaminated material can send an entire bin of recyclables to a landfill and lead to costly fees, essentially defeating the purpose of the recycling program. Common items that make their way into the recycling stream by mistake include plastic bags, food residue, used paper and plastic products, non-recyclable plastics (usually #3-7), disposable cups, plastic straws, and broken glass.

What's more, due to the drastic waste volume shift experienced throughout the pandemic, certain recyclable commodity prices have experienced volatility. For instance, as Rihn explained, prices for materials like mixed paper were historically kept low as the industry had a surplus of recyclable inventory readily available. But as the current COVID-19 situation has caused a significant drop in volumes across the board, low supplies have caused the prices of these commodities to rise 50 to 75 percent over the last 60 to 90 days.

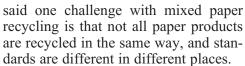
"Mixed paper itself has become a largely sought-after material," Rihn said. "Some of the most important products that were in low supply during the pandemic are manufactured from recycled materials. These materials are essential, and the industry needs to confront the problem head-on and think through the best solution."

One way that Material Recovery Facilities (MRFs) are addressing the paper recycling contamination issue is by installing more automated equipment, such as optical sorters, to clean up the paper and keep contaminants out before the paper is baled and sold.

"But again, keeping the paper clean, dry and free from contaminants from the start is ideal and makes for the

most successful program," Colling

Combined
Resources, Inc. is
a commercial
recycling company based in
Addison, Illinois
with over 30 years
of experience in
the recycling
industry. Thomas
Woznicki, vice
president of Combined Resources



"Things like adhesives and coatings on paper products may make that paper unrecyclable in certain facilities and creates challenges when it comes to sorting mixed paper," Woznicki said. "This is a systemic problem in our industry because households have not attempted to try and sort out the paper from the non-recyclables. I believe that municipalities are trying their best to force households to clean up the materials that are placed in the co-mingled bin or just dispose of it."

Woznicki also pointed to some MRFs installing additional sorting equipment to help clean up recycled papers. "Municipalities also are charging higher disposal fees for material that isn't clean enough to recycle," Woznicki says. "Paper recycling is going be around for years to come but it's a continuous moving target yearly. Some countries are using more recycled fiber and others are getting out of paper recycling in its current form."

As Cooper explained, education and holding communities accountable is paramount in the fight against contamination of the paper recycling process. "When you service a community and have a high contamination level it needs to be addressed with education and understanding so everyone is on the same page," he said.

So do experts envision more municipalities like those in Broward County, pulling the proverbial plug on paper recycling programs? Not really. In fact, Colling has a positive outlook for paper recycling and the industry in general.

"Remember, five out of the last six paper mills built in the U.S. have been 100 percent recycled. And all of the 100 percent recycled mills provide tens of thousands of well-paid jobs with benefits. As such, they are key to the U.S. economy in their communities,"

Colling said. "They are sustainable because we have long-term markets for paper and it is a needed feedstock for many end users. We have developed an astounding modern infrastructure to get the raw material we need by investing billions of dollars of private capital over the past 20 years," Colling said. "However, no amount of infrastructure spending can clean up contaminated recyclables entering the supply stream – that starts at the household and only improves with a vigorous consumer education effort."



Older recycling equipment is not capable of handling adhesives, such as tape, during the recycling process.

And there is good news for mixed paper consumption. This year, U.S. paper and paperboard mills have increased their consumption of mixed paper. Through May, mixed paper consumption increased 8.1 percent compared to same period in 2019.

And Hawkinson added that, while there are inherent challenges facing the paper recycling industry, paper recycling continues to be an environmental success story. And the importance of paper recycling to the industry continues to grow over time. Currently the industry satisfies more than a third of its fiber requirements from recovered paper, more than at any time in our history. According to The Recycling Partnership, there is approximately 2 million tons of publicly announced new capacity using mixed paper or old corrugated containers (OCC) that is expected to come online in the U.S. between 2020-2021.

"More than twice as much paper is recycled than is sent to landfills, saving an average of 3.3 cubic yards of landfill space for each ton of paper recycled," Hawkinson said. "This is a testament to consumer behavior and an industry commitment to recycle more paper in the years ahead."

Unifi achieves 20 billion bottle milestone

Unifi, Inc., an innovator in recycled and synthetic yarns, reached a key goal set in 2017, transforming more than 20 billion PET bottles. The driver of this new milestone was Unifi's Repreve® platform of recycled performance fibers, which has been adopted by more than 500 global brand and textile partners.

To put the milestone into context, 20 billion single serve plastic bottles can physically circle the earth approximately 100 times or fill the Empire State building more than 13 times.

Recycling and transforming these bottles has the potential to:

•Save enough energy to power more than 189,000 average homes for one year;

•Save more than 1.7 billion liters of water, the equivalent of one year of drinking water for approximately 2.3 million people; and

•Improve air quality by avoiding more than 517 million kilograms of CO2 emissions, the equivalent of eliminating CO2 emissions from the consumption of 1.2 million barrels of oil.

This milestone is also the equivalent of keeping 156 plastic bottles per U.S. household (assuming approximately 128 million U.S. households) out of the landfill and transforming them into sustainable fabric with Repreve recycled performance fibers that are used in apparel, upholstery, automotive and industrial applications.

The idea for Repreve was born in the early 2000s when Unifi was looking for a way to recycle its own fiber waste. The solution evolved to include using recycled plastic bottles as raw material for fiber, with the option to add performance capabilities like moisture-wicking and odor control.

In addition to keeping bottles out of landfills and giving them a second life, Repreve production uses less energy and water, while also producing fewer greenhouse gas emissions compared to manufacturing virgin synthetic fibers.

Call John Monaghan, CPA, CVA for your *expert* financial advice.

EXPERIENCED IN SOLID WASTE & RECYCLING BUSINESS VALUATIONS

What's Your Business Worth?



VZN Group, LLC

419-882-1886 www.vzncpa.com

- Accurate Business Valuation
- Financial Forecasting
- Consulting
- Tax Preparation & Planning

John Monaghan, CPA, CVA



FEATURED BUY NOW LISTINGS



2019 Al-jon 580 Auto Logger. Only 570 hours! Selling due to market conditions.



American Pulverizer 60 x 60 Ring Mill. 1,250 HP diesel, can be demonstrated.



Fairbanks 70' Truck Scale. Load cells and digital readout are in good shape.



2005 John Deere 330LC.Equipped with a 2011 Genesis 440R shear.



Case 721 Wheel Loader.
Includes a bucket and two sets of forks!



American Pulverizer Ring Mill Model 4800. Recently rebuilt!



GE 3000HP Shredder Motor. In storage. 60Hz, 4,160 Volt, 712 RPM.



2005 Al-Jon Impact V Auto Crusher. Road ready. Start crushing today!



Guidetti Sincro 315 Wire Granulator. Only 267 hours!