



American Recycler

NewsVoice of Salvage, Waste and Recycling

AmericanRecycler.com

FOCUS: C&D

Recycled copper and brass markets are up



WHAT'S INSIDE

- New waste technology brought to U.S. Page A5
 - Waste Management posts increased revenues for 2016. Page A6
 - La Paz County issues proposal request for solar projects. Page A10
 - Imported steel decreases 4.3 percent in December. Page A14
 - U.S. construction equipment exports down. Page B7
- Events Calendar..... 4
 Scrap Metals MarketWatch..... 15
 Salvaging Millions..... 16
 Classified Advertisements..... 20
 New Product Showcase..... 22
 Equipment Spotlight..... B4
 Industry Profile: A Closer Look.... B6

Valuable metals discarded in America

by MAURA KELLER

mkeller@americanrecycler.com

Consider this: Each year Americans accidentally throw away over \$60 million in loose change every year. From Covanta Metals Management's calculations, this equates to enough steel to build 90 Golden Gate bridges each year.

According to Steve Bossotti, senior vice president, Covanta Metals Management, at Covanta's Energy-from-Waste (EfW) facilities, they have seen the immense quantity of metal that remains in waste – not only steel, but nonferrous metals like aluminum, copper and brass. They have even noticed coins in the waste stream. It's because of the opportunity to recover more value from the waste stream that Covanta has made investments to recover and recycle more metal.

"As part of our efforts and analysis to recover more metal, the team at our EfW facilities in Pennsylvania discovered an incredible amount of coins in the waste stream and built a system to separate and sort them from the nonferrous metals we had previously recovered at the facility," Bossotti said. Using a process that was engineered in-house by the facility team, they began collecting thousands of coins that had been swept off of restaurant tables or sucked up by vacuums.

What Covanta's team found was shocking. "Most of that money ends up in landfills where its value is lost," Bossotti said. "In keeping with our mission to sustainably manage waste and divert it from landfills, Covanta is recovering that value and is continually developing new and better ways to salvage other valuable metals."

Historically Speaking

Starting in 2011, Covanta increased the company's investment in their metal recycling program, adding new systems to recover more metals and increase the



The U.S. Mint suspended its reclamation program due to suspicions of counterfeiting by China sourced vendors.

PHOTO COURTESY OF COVANTA

quality of the product that Covanta ultimately sells to metal recyclers.

"Over 5 years we increased the amount of material we recover for recycling by over 125,000 tons," Bossotti said. "We now recover more nonferrous tons in a calendar quarter than we used to recovery annually. Recycled metal is Covanta's third largest revenue stream, totaling \$61 million in 2015."

While there are undoubtedly monetary benefits to reap in recovering discarded or mutilated coins, there are also significant environmental benefits.

"The production and mining of new steel, aluminum, copper and other metals products are carbon intensive processes that negatively impact the environment,"

Bossotti said. By recovering and recycling the nearly 600,000+ gross tons of metal each year, Covanta's operations save approximately 1.2 million tons of greenhouse gases, the equivalent of pulling 112,506 cars off the road for a year.

When Covanta first began their coin recovery program, they would return the salvaged coins to the U.S. Mint as part of its mutilated coin redemption program where damaged coins are bought in bulk and melted down to make new ones. The Mint's Mutilated Coin Redemption Program, was first implemented in 1911, historically has paid on a per pound basis for copper nickel clad dimes, quarter dollars and half dollars redeemed. By definition, mutilated coins are "all coins that are bent, broken, corroded, not whole, melted together and not machine countable."

The mutilated coins are then eventually melted for reclamation by one of two vendors that provide the U.S. Mint with coinage strip for the three denominations. However, this past November, the U.S. Mint suspended the program due to suspicions of counterfeiting by China sourced vendors.

According to federal prosecutors, several U.S.-based metal recyclers – using large mutilated quantities of allegedly counterfeit U.S. coins imported from China – conspired to bilk the U.S. Mint out of more than \$54 million under the Mint's Mutilated Coin Redemption Program. The Chinese importers of the coins claim, according to the federal complaint, that the coins they submitted for

See COIN RECOVERY, Page 4



Covanta's Delaware Valley Resource Recovery facility which operates in Chester, Pennsylvania, houses the coin collection program.

PHOTO COURTESY OF COVANTA

PRSR STD
 U.S. Postage
PAID
 Columbia, MO
 Permit No. 353

03.2017

CHANGE SERVICE REQUESTED

American Recycler

900 W. South Boundary, Bldg. 6
 Perrysburg, OH 43051-5235

RECOVER THE TREASURE IN YOUR IRONY DROSS

DIDION

CAN SHOW YOU HOW TO

TURN THIS



INTO THIS



Ever wonder about the valuable metal going out the back door of your plant? Our customers are amazed with the money recovered from the material going to landfill or going to someone else. It's very difficult to imagine the hidden treasure while looking at a big, ugly dusty pile of slag or dross.

It's extremely exciting for our customers when they recognize the huge savings that go directly to the bottom line. Testimonials have reported savings in excess of 200%.

Installations: Aluminum, Brass, Copper, Iron, Steel/Stainless, Zinc and Specialty Alloys

BEFORE



AFTER



DIDION

INTERNATIONAL, INC.

DIDION INTERNATIONAL INC.
Riverside Industrial Centre
7000 West Geneva Drive
St. Peters, MO 63376

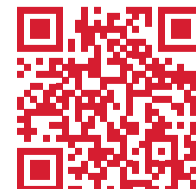
phone, 636.278.8700
fax, 636.278.3155
email, info@didion.com
web, www.didion.com



<http://www.facebook.com/DidionInternational>



<https://twitter.com/#!/DidionInternati>



The Recycling Research Foundation names national scholarship winner

The Recycling Research Foundation (RRF), a nonprofit organization closely associated with the Institute of Scrap Recycling Industries (ISRI), named Thomas Boundy as the recipient of its 2016 National Scholarship. Recognizing the need for affordable graduate education, the scholarship awards \$5,000 to an individual seeking a graduate degree in a field that supports the scrap processing and recycling industry as a whole.

“The Recycling Research Foundation is proud to honor Thomas Boundy with this scholarship as he pursues an education that will well-prepare him for a future in the recycling industry,” said ISRI president Robin Wiener. “One of the goals of this scholarship is to generate interest in recycling careers and there is no doubt that with the knowledge he gains from his education,

Thomas will be able to make significant long-lasting contributions to the recycling industry.”

Boundy received his B.S. in Chemistry Summa Cum Laude from Pepperdine University in 2013, and is currently pursuing his PhD in Metallurgical and Materials Engineering at the Colorado School of Mines Kroll Institute for Extractive Metallurgy. His graduate research focuses on developing a flow sheet that would enable the economical recycling of indium (a rare metal critical to solar panel manufacturing) from cell phones, computer monitors, and television screens.

Following graduation, Boundy hopes to find employment improving upon or developing novel recycling operations/waste management with the hope of better stewarding material resources.

Dart Container opens three foam recycling drop-off centers

Facilities accept used foam cups, foam egg cartons, foam packaging from electronics

Dart Container recently launched three foam recycling drop off centers located in Ada, Oklahoma, Urbana, Illinois and Twin Falls, Idaho. The new drop offs are publicly accessible 24 hours a day, 7 days a week, and completely free of charge. They provide an option for local residents, businesses and organizations to recycle foam, often mistakenly referred to as Styrofoam, labeled with a #6 chasing arrows symbol.

The drop offs, accept a wide variety of recyclable foam including foam cups, foam egg cartons, foam meat trays, foam ice chests, and foam packaging which is frequently used to protect fragile materials like TVs during shipping.

Once collected, the foam is recycled into many different types of products including picture frames, baseboards, and crown molding. Here are the guidelines for participation in the programs:

- Make sure foam has the #6 chasing arrows symbol on it.
- Deposit foam in a clear or translucent bag.
- Rinse or wipe foodservice containers free from food.
- Remove straws, lids, tape or any other non-foam material.
- Do not include foam packaging peanuts.

For a direct link to additional information, view this article on www.AmericanRecycler.com.

Republic Services has major economic impact in Nevada

Republic Services, Inc. shared the results of a study of its annual economic impact in the state of Nevada. The study measures the direct and indirect economic impact of the company’s subsidiaries and operations statewide in 2015, including tax revenues, payroll expenditures and supplier purchases, as well as multiplier effects when income is reinvested into the local economy.

“Our impact in Nevada goes far beyond recycling and waste solutions,” said Tim Oudman, market vice president for Republic Services. “Our people and operations afford us a tremendous opportunity to help power every segment of commerce. We make a sizeable imprint on the economy and quality of life across Southern Nevada, and we are proud to do our part by investing in Nevada’s vibrant future.”

Republic employs 1,300 people in the Southern Nevada area serving more than 535,000 local customers across the City of Henderson, North Las Vegas, Las Vegas, and Clark County. Republic owns and operates a fleet of more than 430 collection trucks, including 153 trucks powered by Compressed Natural Gas. In addition to the Southern Nevada Recycling Center – North America’s largest and smartest residential recycling center – Republic operates two transfer stations, one landfill

and one natural gas fueling station locally.

According to the study, Republic’s economic impact in Nevada includes:

- 3,000 direct and indirect jobs; 1.35 jobs created for every full-time employee.
- \$72,000 average salary, which is 157 percent of the statewide average.
- \$230 million in total Gross State Product (economic impact).
- \$185 million in total labor income impact (payroll).
- \$23 million in total annual tax revenue impact.
- \$81 million in direct purchases.

Nationwide, Republic’s gross domestic product impact is estimated at \$9.5 billion annually. This includes creating 106,500 direct and indirect jobs, and generating more than \$1.4 billion in annual tax revenues for local, state and federal governments.

The economic impact study was conducted by Arizona State University’s W.P. Carey School of Business, through the L. William Seidman Research Institute. The independent research team used an IMPLAN input-output model to estimate statewide multiplier effects, based upon data provided by Republic and other publicly available resources.

As the hostess at the casino buffet showed me to my table, I asked her to keep an eye out for my husband, who would be joining me momentarily. I started to describe him, “He has gray hair, wears glasses, has a potbelly...” She stopped me there. “Honey,” she said, “today is senior day. They all look like that.”

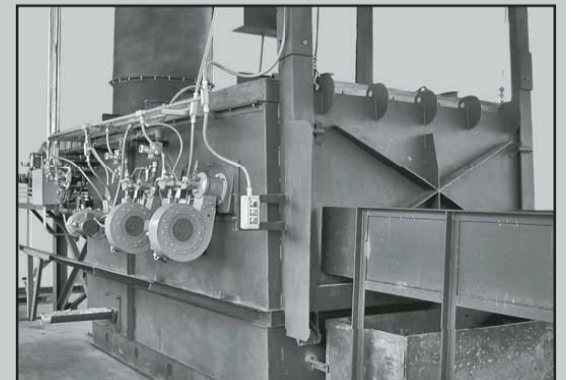
METAL RECYCLERS

Raise Profits!

INVEST IN A QUALITY-BUILT SWEAT FURNACE

With a US Furnace’s MAX-4000 Hi Efficiency Sweat Furnace, get the lowest fuel cost per lb to process than any other furnace manufacturer — GUARANTEED!

The lowest melt loss rate than any other manufacturer — GUARANTEED! On-site installation, training & service.



FULL EPA compliance GUARANTEED.



Recycling Services International
518-424-1168

www.RecyclingFurnaces.com

Permit assistance available • Large hearth opening for automotive scrap

AWS

American Weigh Scales, Inc.
Norcross, GA



Legal For Trade
NTEP SCALES

Use Promo Code AGRI for a special discount!

770-542-0230 | mail@awscales.com
Office hours: M-F, 9am - 6pm EST

www.scales.net

Coin recovery

■Continued from Page 1

“We’re hoping that the U.S. Mint will reinstate their program soon but are making alternative plans to further refine the coins for return to the U.S. Banking system,” Bossotti said.

Further Inroads

And while Covanta is leading the coin recovery efforts, Republic Services, Inc. and Lab USA recently unveiled a state-of-the-art ash metal recovery facility at the Roosevelt Regional Landfill. The advanced process allows for the reclamation of metals found in ash previously lost through traditional methods of resource recovery – including mutilated coins. The facility is set to process all newly delivered ash to the Roosevelt Landfill as well as systematically process all of the existing ash currently in the landfill.

“We strive to learn and compare knowledge with others that have scrap as their primary business like traditional metal recyclers and coin sellers, including auto shredders and heavy metal plants,” Bossotti said. “However, our process is unique by recovering coins that remain after the EfW process.”

Having creative and industrious employees has allowed Covanta to streamline their coin recovery process – spending nominal dollars on this system.

“In fact, we have had industry experts express interest in our design for its simplicity and effectiveness,” Bossotti said. “We are taking essential components of what our Delaware Valley facility engineered and are applying it to a centralized metal processing facility which we expect to be operating this year.”

So what does the future hold for Covanta’s coin recovery program? The

company is optimistic about the future of the coin collection program and hopeful that the U.S. Mint will reinstate its program.

“Several of the trade cases related to the program have been recently settled, in fact,” Bossotti said. “However, we won’t be solely reliant on the program moving forward and intend to use our innovative team to optimize the return of coins directly to the U.S. banking system.”

redemption to the U.S. Mint were recovered from salvaged automobiles shipped to China as scrap metal, or from other scrap metal sources.

However, there proved to be one big problem: The actual number of half dollars redeemed was higher than the number the U.S. Mint has produced, according to prosecutors. In fact, the U.S. Mint believes that more half dollars have been redeemed by China sourced vendors in the last 10 years than the U.S. Mint has ever manufactured in its history. What’s more, although the Chinese importers claimed the coins came from salvaged automobiles from the U.S., based on number of cars exported to China and amount of coins submitted for redemption, each car would have had to contain the equivalent of \$900 worth of coins.

Perhaps, most importantly, samples of the millions of pounds of mutilated copper-nickel clad dimes, quarter dollars and half dollars – all part of shipments from China – proved to be counterfeit.

As a result, the U.S. Mint hasn’t been purchasing salvaged coins since November 2015. A federal judge in Philadelphia dismissed the case in July after the three identified U.S. companies reached a settlement with prosecutors. While the counterfeit issue was resolved in the summer of 2016, the Mint hasn’t said whether it will restart the program.

Any recovered mutilated coins can’t be melted down or returned to a bank, so Covanta has continued to stockpile the recovered coins in droves – essentially waiting to see what the Mint does.



NewsVoice of Salvage, Waste and Recycling

877-777-0043 Fax 419-931-0740

Owner, Publisher and Editor

ESTHER G. FOURNIER
news@AmericanRecycler.com

Editorial Focus Section Editor, Production and Layout

DAVID FOURNIER, JR.
david@AmericanRecycler.com

Production and Layout

MARY E. HILL
mary@AmericanRecycler.com

Marketing Representatives

MARY M. COX
maryc@AmericanRecycler.com
MARY E. HILL
mary@AmericanRecycler.com

Circulation Manager

DONNA L. MCMANUS
donna@AmericanRecycler.com

Writers and Contributors

DONNA CURRIE
dcurrie@AmericanRecycler.com
MARK HENRICKS
mhenricks@AmericanRecycler.com
MAURA KELLER
mkeller@AmericanRecycler.com
RON STURGEON
rons@rdsinvestments.com

Production Offices

900 W South Boundary, Bldg 6
Perrysburg, OH 43551-5235
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 2016 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.

Events Calendar

March 6th-9th

Association of Postconsumer Plastic Recyclers Member Meeting. Hyatt Regency, New Orleans, Louisiana. 202-316-3046 • www.plasticsrecycling.org

March 7th-11th

CONEXPO-CON/AGG 2017. Las Vegas Convention Center, Las Vegas, Nevada. 800-867-6060 • www.conexpoconagg.com

March 12th-15th

Southeast Recycling Conference & Tradeshow. Hilton San Destin Golf Resort & Spa, Destin, Florida. 800-441-7949 www.southeastrecyclingtradeshow.com

March 14th-15th

Tennessee Environmental Conference. Meadowview Conference Resort & Convention Center, Kingsport, Tennessee. 423-854-5485 • www.tnenvironment.com

March 15th-16th

Northeast Recycling Council (NERC) Conference. Sheraton Burlington Hotel, Burlington, Vermont. 802-254-3636 • www.nerc.org

March 23rd-25th

United Recycler’s Group (URG) Annual Training Conference. Hyatt Hill Country Resort and Spa, San Antonio, Texas. 303-367-4391 • www.u-r-g.com

March 27th-29th

Aluminum Association Spring Meeting. The Ritz-Carlton Reynolds, Lake Oconee Trail, Greensboro, Georgia. 703-358-2960 • www.aluminum.org

March 27th-30th

SWANApalooza 2017. Reno Convention Center, Reno, Nevada. 800-467-9262 • www.swana.org

April 22nd-27th

ISRI Convention & Exposition. Ernest N. Morial Convention Center, New Orleans, Louisiana. 202-662-8500 • www.isri.org

April 24th-26th

North American Waste-to-Energy Conference (NAWTEC). Radison Blu Minneapolis Downtown, Minneapolis, Minnesota. 240-494-2253 • www.swana.org

May 8th-11th

AISTech, The Iron & Steel Technology Conference and Exposition. Music City Center, Nashville, Tennessee. 724-814-3000 • www.aist.org

May 8th-11th

WasteExpo. Ernest N. Morial Convention Center, New Orleans, Louisiana. 800-927-5007 • www.wasteexpo.com

May 10th-11th

15th Annual CARE Conference. Hyatt Regency, Indianapolis, Indiana. 706-428-2127 • www.carpetrecovery.org

NETWORK, CONNECT AND LEARN FROM INDUSTRY LEADERS



2½ DAYS, 75 SESSIONS, 700+ ATTENDEES
THE TIME IS NOW. THIS IS IT. REGISTER TODAY.

STRIVE FOR SUSTAINABILITY

SOLID WASTE & RECYCLING CONFERENCE WITH TRADE SHOW
MAY 21 - 24, 2017 | THE SAGAMORE ON LAKE GEORGE, NY

- Over 75 Technical Sessions
- 700 Attendees
- Adirondack Mountain Setting
- Educational Trade Show
- Comprehensive Industry Update
- Recreational Activities
- Networking and much more...



REGISTER TODAY!
www.nyfederation.org



Become an exhibitor. Contact Matt Curley, (518) 813-5126 or show@nyfederation.org
For information, registration and room reservations, visit www.nyfederation.org

YOU DON'T WANT TO MISS THIS!

New waste technology brought to U.S.

Cox Enterprises announced that its Golden Isles Conservation Center, located in Nahunta, Georgia, is bringing a new technology to the U.S. and making a positive impact on the environment. The center utilizes an Italian pyrolysis technology that is being used for the first time in the U.S. The eco-friendly process utilizes organic materials such as wood chips to generate heat, which breaks down tires into their original components and produces synthesis oil, carbon black, synthesis gas and steel.

“The Golden Isles Conservation Center shows that technology plays an important role in solving global environmental issues,” said Cox Enterprises executive vice president and chief operating officer Alex Taylor.

By repurposing the materials, the center has the capacity to daily remove the equivalent of five tons of tires from landfills and waterways. The synthesis oil can be used as a substitute for many fuel-based products. The recovered carbon black can be used in products such as rubber hoses, inks, tires and plastics. Steel is the most recycled material on the planet and can be reused to make many new products. The synthesis gas generates heat for the closed-loop process.

Initially focused on tires, the center will serve as an R&D facility and explore repurposing additional waste stream products. The center is part of the company’s national Cox Conserves sustainability program, which is celebrating its 10th anniversary. The program focuses on reducing waste and energy consumption, as well as conserving water.

In addition to providing an environmental solution, the facility is making a positive impact on the local economy. Construction on the facility began in 2016 and has infused \$5 million into Georgia’s economy, with one-third of the amount going directly to Brantley County based companies. The facility is bringing 5 full time jobs to Nahunta, which has a population of approximately 1,000 people.

Appliance Recycling Program returning for customers of FirstEnergy’s Ohio Utilities

Customers of FirstEnergy Corp.’s Ohio utilities (Ohio Edison, Toledo Edison and The Illuminating Company) can receive \$50 when they recycle an old, working refrigerator or freezer.

“Often, an outdated refrigerator either sits unused or is used for extra storage in a garage or basement,” said John Dargie, vice president, Energy Efficiency. “Customers can now respon-

sibly recycle their old refrigerators, which is good for the environment and can lead to energy savings. Refrigerators that are more than 10 years old can use twice the amount of energy of newer ENERGY STAR® models, resulting in savings of over \$100 a year in energy costs.”

Recleim, LLC manages the recycling program for FirstEnergy’s Ohio

utilities and is one of the largest appliance recycling companies in North America. Recleim removes refrigerants efficiently and effectively, destroying potent Ozone Depleting Substances (ODS) and Greenhouse Gases (GHG) on-site. Over 95 percent of the materials in the appliances are captured and sent into recycling streams including metals, plastics and glass.



SEE US AT



Booth # G4027

PURPOSE-BUILT FROM THE

GROUND UP

GET THE DETAILS ON WHY YOUR NEXT SCRAP & STEEL MATERIAL HANDLER SHOULD BE A SENNEBOGEN »



What if your purpose for a purpose-built scrap handler isn't quite the same as the other guy's purpose?

Only SENNEBOGEN scrap handlers are purpose-built one machine at a time to meet *your* goals.

Maximum Throughput • Built-in Safety

Think of the possibilities!

See how SENNEBOGEN can purpose-build the right machine for you at www.sennebogen-na.com/scrap

www.sennebogen-na.com | +1-704-347-4910

- Diesel and electric-drive machines from 44,000 to 750,000 lbs.
- Full range of rubber tired, tracked and stationary models with customized boom & stick configurations.



It only takes



With just ONE call to *American Recycler News*, you'll get the equivalent of an entire sales force.

DON'T WAIT ONE MORE MINUTE!



Waste Management posts increased revenues for 2016

Full year net cash provided by operations grew more than 18 percent

Waste Management, Inc. announced financial results for its quarter ended December 31, 2016. Revenues for the fourth quarter of 2016 were \$3.46 billion, compared with \$3.25 billion for the same 2015 period. Net income for the quarter was \$335 million, or \$0.75 per diluted share, compared with net income of \$273 million, or \$0.61 per diluted share, for the fourth quarter of 2015. On an as-adjusted basis, net income was \$320 million, or \$0.71 per diluted share, in the fourth quarter of 2015.

Income from operations in the fourth quarter of 2016 was \$617 million compared to \$502 million, or \$575 million on an as-adjusted basis, for the same 2015 period. Operating EBITDA was \$930 million in the fourth quarter of 2016 compared to \$803 million, or \$876 million on an as-adjusted basis, in the fourth quarter of 2015.

For the full year 2016, the company reported revenues of \$13.6 billion, compared with \$13.0 billion for 2015. Earnings per diluted share were \$2.65 for the full year 2016 compared with \$1.65 for the full year 2015. On an as-adjusted basis, earnings per diluted share were \$2.91 for the full year 2016 versus \$2.61 for the full year 2015.

For the full year 2016, income from operations was \$2.30 billion, or \$2.41 billion on an as-adjusted basis, compared to \$2.05 billion, or \$2.19 billion on an as-adjusted basis, for 2015. For the full year of 2016, operating

EBITDA was \$3.60 billion, or \$3.71 billion on an as-adjusted basis, compared to \$3.29 billion in 2015, or \$3.43 billion on an as-adjusted basis.(b)

Key highlights for the full year 2016:

- In the fourth quarter, overall revenue increased by 6.6 percent, or \$214 million, from the same period in the prior year. The revenue increase was driven by positive yield and volume in the company's collection and disposal business of \$118 million. Acquisitions, net of divestitures, contributed \$45 million of revenue growth to the fourth quarter.

- Recycling yield and volume also increased \$51 million. For the full year 2016, overall revenue increased by 5.0 percent, or \$648 million. The revenue increase was driven by positive yield and volume in the company's collection and disposal business of \$445 million. Acquisitions, net of divestitures, contributed \$238 million of revenue growth to the year. Recycling yield and volume also increased \$60 million.

- Core price, which consists of price increases net of rollbacks and fees, other than the company's fuel surcharge, was 5.1 percent, up from 4.3 percent in the fourth quarter of 2015. For the full year, core price was 5.0 percent, up from 4.2 percent for the full year of 2015.

- Traditional solid waste internal revenue growth from volume was 1.7 percent in the fourth quarter of 2016, an

improvement of 170 basis points versus the fourth quarter of 2015. For the full year 2016, traditional solid waste internal revenue growth from volume was 1.6 percent, an improvement of 210 basis points versus the full year of 2015. Total company internal revenue growth from volume, which includes recycling and renewable energy, was 2.0 percent in the fourth quarter, an improvement of 290 basis points from the fourth quarter of 2015. Total company volume was 1.4 percent for the full year 2016, an improvement of 300 basis points compared to the full year 2015.

- Average recycling commodity prices at the company's recycling facilities were approximately 31.6 percent higher in the fourth quarter of 2016 compared with the prior year period. Recycling volumes improved 2.4 percent in the fourth quarter. Results in the company's recycling line of business improved by almost \$0.03 per diluted share when compared to the fourth quarter of 2015. For the full year, average recycling commodity prices at the company's recycling facilities were approximately 8.6 percent higher and volumes increased 0.8 percent. These revenue increases, combined with reduced operating costs at the Company's recycling facilities, drove almost a \$0.09 increase in the Company's earnings per diluted share.

- As a percent of revenue, operating expenses were 62.1 percent in the

fourth quarter of 2016, as compared to 62.4 percent in the fourth quarter of 2015. Operating expenses improved despite a 130 basis point negative impact from commodity based costs. For the full year, as a percent of revenue, operating expenses were 62.4 percent in 2016, as compared to 63.5 percent for the full year 2015.

- Net cash provided by operating activities was \$753 million in the fourth quarter and \$2.96 billion for the full year. Capital expenditures were \$377 million in the fourth quarter and \$1.34 billion for the full year.

- Free cash flow was \$387 million in the fourth quarter of 2016 compared to \$188 million in the fourth quarter of 2015. In the fourth quarter, the Company prepaid \$150 million of expected 2017 cash taxes. The Company had \$11 million of divestiture proceeds in the quarter compared to \$31 million in the fourth quarter of 2015. Free cash flow for the full year was \$1.66 billion compared to \$1.41 billion in 2015, an increase of 18 percent.(b) The Company had \$43 million of divestiture proceeds in 2016, compared to \$145 million for the full year of 2015.

Waste Management paid dividends of \$180 million to shareholders in the fourth quarter and paid \$225 million for share repurchases. For the full year, the Company returned \$1.45 billion to shareholders through \$726 million in dividends and \$725 million in share repurchases.

2005 CATERPILLAR W345C MH



\$109,500.00

Dealer maintained from new
32'6" boom, 30' stick, 3 over 2 grapple
Work tool rotate
25kW hydraulic generator

All necessary repairs completed
Tight and dry!
Full service history

2008 VOLVO L180F LOADERS



Like new condition!

Low hour ex-governmental units
3rd valve, hydraulic coupler
Non regen tier 3 engine
ABL 72" forks - Hyd. fork position & hyd. sideshift - 36,000 lb. capacity
Bucket included
Matris reports available

from \$178,000.00



Contact Gregg Hoss • gregg@hossmachinery.com
HOSS MACHINERY INTERNATIONAL, LLC.
Irving (Dallas), TX 75062
817-553-5500
www.HossMachinery.com

Are you tired of

Clowning Around

with sales?



Get serious returns
and FREE
professional ad
design services from
American Recycler.

VIEW OUR
DIGITAL MEDIA
KIT TODAY.



FREE
AD
DESIGN

877-777-0043

www.AmericanRecycler.com

OVER
34,000
READERS

Bill introduced to create a cleaner environment

Assemblymember Jim Frazier (D-Discovery Bay) introduced AB 509, a bill designed to reduce greenhouse gases while simultaneously creating jobs by establishing a Tire Recycling Incentive Program (TRIP).

“Californians generate more than 44 million waste tires each year, which harms our environment and is a lost opportunity to stimulate the economy,” stated Frazier. “This bill ensures a higher number of waste tires are recycled, processed and re-manufactured, resulting in new jobs, less waste in our landfills, reduced local government costs and a cleaner environment.”

AB 509 requires CalRecycle to develop and establish the program, which provides incentives for recycled products. This program is expected to double the state’s tire recycling rate from

37 percent to 75 percent by the year 2020. Fifty percent of the funds generated from this program will go to fund rubberized asphalt products; the remainder will go to other recycled products.

“We are proud to support AB 509, which will significantly increase tire recycling, support local infrastructure development, and reduce the incentive for illegal dumping of waste tires,” said Nick Lapis, Director of Advocacy with Californians Against Waste. “This is a proven policy approach that will double the state’s tire recycling rate and create California jobs from a material that is largely wasted today.”

AB 509 is currently awaiting assignment to policy committee in the California State Assembly.

RIOS and CARI join forces to promote recycling standards

The Recycling Industry Operating Standard™ (RIOS™) and Canadian Association of Recycling Industries (CARI) have formed a partnership, making CARI the first association outside of the U.S. to join RIOS’ Affiliate Association program. This partnership will provide additional member benefits to CARI’s members and provide a platform for RIOS to continue to grow globally.

As part of the partnership, CARI members will receive access to RIOS

tools, resources, and membership at the Affiliated Association rate, which is a 50 percent of the standard rate.

Through this partnership, CARI and its members will be armed with the RIOS management system development resources that will allow them to improve their operations, and become safer, more efficient, and even more environmentally responsible facilities.

Vermont Law School seeks environmental journalists for Summer Media Fellowships

Vermont Law School, home to the nation’s top-ranked environmental law program, seeks applications from qualified environmental journalists for its 2017 Summer Media Fellowships. As fellows, selected journalists will participate in VLS’s Summer Session, taught by internationally recognized scholars and leaders in environmental law and policy.

Former VLS Media Fellows include Jack Cushman of InsideClimate News, Fiona Harvey of The Guardian, Brent Kendall of The Wall Street Journal, and Priyanka Vora of the Hindustan Times.

“For years Vermont Law School has encouraged members of the press to ‘think like a lawyer, report like a journalist,’” said Associate Dean Melissa Scanlan, director of the Environmental Law Center. “We continue that tradition with our 2017 Summer Media Fellowships. Selected journalists will have a unique opportunity to connect with law and policy experts on critical environmental issues affecting people around the world. These connections not only provide sources for stories, but also often evolve into years-long professional relationships.”

Fellowships are open to full time journalists who cover issues related to

the environment, from climate change to clean water and air to sustainable food systems. Fellows audit (1) two week Summer Session course and have access to Vermont Law School’s distinguished faculty and visiting policy leaders. Fellows receive a stipend, free housing and books, and a tuition waiver.

The 2017 Summer Session features courses in a variety of categories, including ethics and environmental justice, food and agriculture, energy, and environment and business. For a full schedule of 2017 Summer Session courses, visit vermontlaw.edu/summer. In addition to attending class, fellows present on a topic of their choice as part of Summer Session’s “Hot Topics” series, covering a wide range of current environmental issues.

The Vermont Law School Summer Media Fellowships program has been made possible since 2002 by a generous grant from the Johnson Family Foundation and major donors. Fellows are selected based on work history and samples, commitment to covering environmental law, and their potential for increasing understanding of environmental law and policy issues nationwide.

*An elderly man was on the operating table, about to be operated on by his son, a famous surgeon. Just before they put him under, he asked to speak to his son:
“Don’t be nervous, boy, just do your best and just remember, if it doesn’t go well, if something happens to me... your mother is going to come and live with you and your family.”*

NEW CM HYBRID SHREDDER For All of Your Shredding Needs

Is Your Shredder Not Cutting It?



Free testing in our new lab!

NEW Replaceable Knife Inserts For Multiple Applications



Improved knife materials cut better and last longer
Resharpenable/reusable knives for multiple uses
Reduces knife costs and downtime

Be sure to check out our NEW website! www.cmshredders.com
(941) 755-2621 - (800) 848-1071



Buy the **ORIGINAL Supershear Catalytic Removal Tool!**



110-Volt Supershear

De-Canning Shear



Gas Supershear



12-Volt Supershear



Building the best products on the market for over 20 years.

800-999-8100 or 480-789-3893
supershears.com / FAX# 480-304-4870

TOMRA Connect offers recycling customer rewards at the touch of a button

Recycling is going digital with the launch of TOMRA Connect for reverse vending machines (RVMs), which collect cans and bottles for recycling. The portfolio of digital products by TOMRA Collection Solutions brings new insights and engagement opportunities, both for the locations providing the RVMs and for the people who recycle with them. TOMRA's unique approach is also personalizing the recycling experience for millions of people around the globe, in turn increasing recycling involvement, ramping up profits for stores and helping the environment.

TOMRA has over 75,000 installations in more than 40 markets, often where a deposit is refunded when consumers return their used beverage containers. The RVMs identify the can or bottle, give the appropriate refund and can even compact the containers for easier transportation.

TOMRA Connect goes beyond the bin-approaching-full indicators that have so far popularized smart waste collection.

- Points programs: With engagement program ReAct (branded as TOMRA Makes Change in the U.S.), consumers can earn points and redeem them for rewards or charitable donations, and share their recycling activity to social media. ReAct already has tens of thousands of users in the U.S., who have earned millions of points. This engagement program can complement deposit refunds, or act as an incentive in markets without deposit legislation.

- Marketing and donation: The machine's touch-screen turns the system into a marketing touchpoint. Consumers can donate their deposit refund to a local charity, and retailers can promote daily

specials or show seasonal campaigns – all administered remotely. Retailers can also print coupons on refund receipts.

- Notifications: Smartphone app Notify + Assist pushes real-time notifications to personnel when machines require attention (like full bins, stops or low printer paper) and gives step-by-step guidance on how to remedy the issue.

- Insights: Analytics pulls business intelligence from big data. It shows queuing time, how well the machine was cleaned, recycling volumes for different times of day (so sites providing the machines, typically retailers, can plan ahead for busy periods) and more.

- Anti-fraud: TOMRA Connect also combats sneaky fraud attempts (like someone trying to redeem the same deposit amount twice) through real-time validation and devaluation of refund receipts.

Consumers deliver 35 billion used beverage containers every year to TOMRA's machines. This reduces reliance on raw materials to produce new containers and ensures that fewer end up in landfills, oceans and streets. One-hundred percent of containers redeemed through TOMRA RVMs are recycled.

TOMRA Connect is not TOMRA's first foray into remote communication for its recycling returns machines. In the 1980s, TOMRA used dial-up connectivity to transmit software and databases, plus download log files and statistics. The 1990s saw the implementation of networking and IP. TOMRA Connect represents third-generation connectivity, which moves that infrastructure to the cloud and unites previous local offerings under one umbrella.

Republic reports 2016 results

Republic Services, Inc. reported net income of \$189.5 million, or \$0.55 per diluted share, for the three-months ended December 31, 2016, versus \$172.3 million, or \$0.49 per diluted share, for the comparable 2015 period. Excluding certain benefits and expenses, on an adjusted basis, net income for the 3 months ended December 31, 2016, was \$193.8 million, or \$0.57 per diluted share, versus \$175.0 million, or \$0.50 per diluted share, for the comparable 2015 period.

For the year ended December 31, 2016, net income was \$612.6 million, or \$1.78 per diluted share, versus \$749.9 million, or \$2.13 per diluted share, for the comparable 2015 period. On an adjusted basis, net income for the year ended December 31, 2016, was \$763.3 million, or \$2.22 per diluted share, versus \$722.3 million, or \$2.06 per diluted share, for the comparable 2015 period.

Fourth quarter and full year financial highlights:

- Fourth quarter adjusted diluted EPS was \$0.57 per share.

- Full year adjusted diluted EPS was \$2.22, which exceeded the Company's full-year guidance.

- Full year cash provided by operating activities was approximately \$1.8 billion and adjusted free cash flow was \$885 million. Adjusted free cash flow was positively impacted by lower than anticipated cash taxes.

- Fourth quarter revenue growth from average yield was 2.2 percent and volumes increased 0.5 percent. This continues to reflect Republic's ability to grow price and volume simultaneously.

- Full year revenue growth from average yield was 2.1 percent and volumes increased 1.0 percent. Both metrics were in line with the company's expectations.

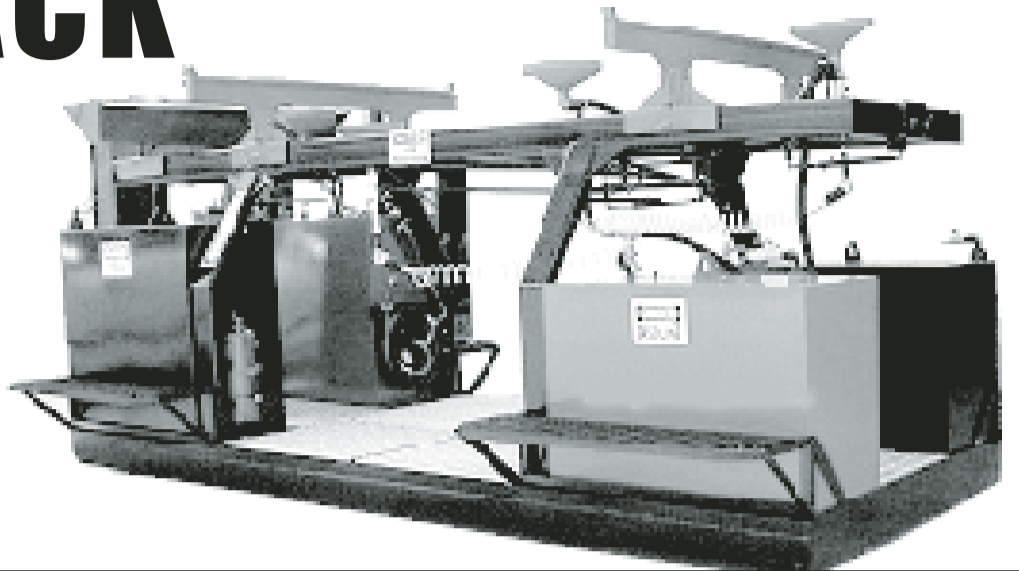
- Fourth quarter adjusted EBITDA margin was 27.9 percent, an improvement of 70 basis points from the comparable 2015 period.

- Full year adjusted EBITDA margin was 28.3 percent, an improvement of 20 basis points from the prior year.

THE ENVIRO-RACK

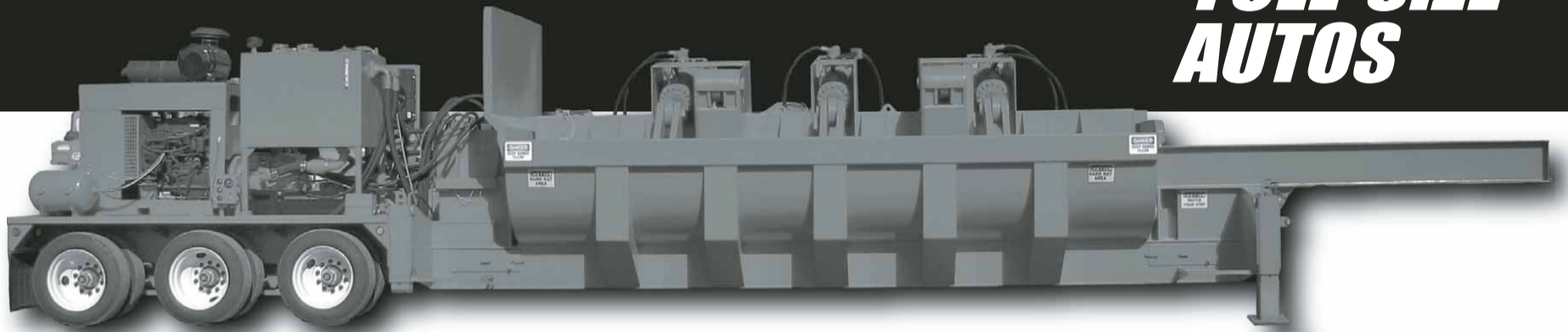
AUTO FLUID REMOVAL & DISMANTLING STATION

Complete fluid removal
in less than 5 minutes!



IRON PACK BALER

**BALE
FULL-SIZE
AUTOS**



**It only takes
1 minute!**

That's all the time you'll need to bale a car in the **Iron Pack Baler!** The Iron Pack Baler is a unique portable baler that covers all aspects of baling your material. It has *unbelievable* capabilities for a mobile machine.

This baler will log **full size automobiles and white goods** and is also capable of producing **#1 and #2 bundles**. High pressure, high volume hydraulics and digital electronic controls put this machine on the leading edge of technology.

All shears feature 360° continuous rotation.

IRON AX SHEAR PACKAGES



CHECK OUT OUR USED EQUIPMENT AT IRONAX.COM



Toll-free 877-247-6629
Fax 478-252-9030
Wadley, Georgia

IRONAX

Iron Ax, Inc.
Website: www.ironax.com
E-mail: ironax@ironax.com

ALTERNATIVE ENERGY

Shred King and Solect Energy partner to install rooftop solar array

Shred King, a shredding company located in Boston, has partnered with Solect Energy, based in Hopkinton, Massachusetts, to install a 212 kilowatt (kW) rooftop solar system. The installation will allow the company to reach its goal of reducing its carbon footprint.

The locally owned and operated Shred King Corporation is a full service document destruction and management company.

Shred King will have full ownership of the array, enabling the company to achieve energy independence. As a result, the group will rid itself of fossil fuels' price instability as well as cut its greenhouse gas emissions over the array's 25 year lifetime.

Having always strove to be a sustainable, environmentally-friendly company, Shred King recycles 100 percent of its materials. With the help of Solect, the company was able to take the next big step in its "green" journey and will continue to reap the benefits



(L to R) Brian Spillane, Don Cornell – Owner, Shred King; Kelly Cornell – President, Shred King; Valerie Ribeiro – District Sales Executive, Shred King; Tim Gordon – Town Administrator, Holbrook; Brian Herr – VP of Business Development, Solect Energy

for years to come. Not only will they see energy cost savings, but the array will improve the surrounding environ-

ment and set an example for other properties in the area to follow their lead.

EPA complex powered by solar energy

The U.S. Environmental Protection Agency will install a 1.5 megawatt solar panel generation field at the EPA's Edison, New Jersey facility. Ameresco, Inc. of Framingham, Massachusetts, will install 4,788 solar panels, which will provide approximately 60 percent of the facility's electricity needs. The project is expected to be completed and producing energy by this summer.

Under the agreement with Ameresco, the EPA will provide the company with over 5 acres of land at its Edison facility for 25 years. The solar farm will generate over 1 million kilowatt-hours per year. The EPA estimates the solar array will save approximately \$100,000 per year, due to the reduced reliance on energy from fossil fuels.

The EPA has partnered with the U.S. Department of Defense's Defense Logistics Agency to bring the solar panel generation field to its Edison facility.

La Paz County issues proposal request for solar projects

Leveraging Congressman Gosar's federal legislative effort to empower La Paz County's rural economy, the board of supervisors issued a Request for Proposals (RFP) to attract renewable energy partners

to develop large scale, utility sized solar projects to create up to 1,500 megawatts of electrical power for use in Arizona and California. La Paz County's abundant solar resources – considered among the

best in the world – and its vast land base are assets that could generate economic activity in job creation, tax revenues, and capital investment while creating long-term lease fees for the County.

Congressman Gosar's legislation has targeted 8,800 acres for local purchase that provides La Paz County an economic development zone to site new, renewable energy projects to energize the 3,200 megawatt Ten West Link transmission line currently in development when it becomes operational. The Ten West Link will include a requisite transmission line series compensation station located approximately in the middle of the transmission line route and in close proximity to the 8,800 acres. Projects being solicited through this RFP will have significant development opportunities due to the coupling of new transmission capacity and the targeted property suited for solar development contiguous to the new line.

In late December of 2016, Congressman Gosar introduced legislation in the form of House Resolution 6491 to enable the timely purchase of 8,800 acres of federal land with the intent to develop large scale, solar generation facilities. La Paz County is one of only a few counties in the U.S. with more than 95 percent of its land owned by federal, state or tribal governments. The 8,800 acres being requested for county ownership represents less than .005 percent of the more than 1.8 million acres of federal lands controlled by the Bureau of Land Management (BLM) in La Paz County.

The 8,800 acres is located southeast of the intersection of Hovatter Road and

Interstate 10 and is flat, relatively undisturbed and isolated from residents. The 8,800 acres does not contain any listed or priority species and is not considered an area of special environmental concern.

The RFP solicits proven developers to propose projects that would lease county-owned land acquired under H.R. 6491. The RFP outlines the project schedule and the requirements and invites teaming proposals that are committed to the long lead times and development costs associated with large scale, energy projects. Several firms have been pre-qualified to participate due to meeting the following criteria that includes:

- Developing, permitting, financing and operating utility sized projects in California, Arizona or Nevada.

- Successful contracting with the California Independent System Operator (CAISO).

- Securing Purchase Power Agreements in markets served by the region.

- Strong balance sheet and income statements.

- Positive references from governmental entities, and;

- Willingness to team with La Paz County to support a development process to construct and operate a utility scale project to interconnect with new or existing transmission assets in the region.

The La Paz County Board of Supervisors invites any qualified developers who meet the above qualifications to contact Kelly Sarber at 760-613-5994 in order to request a copy of the RFP.

SAVE \$\$\$!!! SAVE \$\$\$!!! SAVE \$\$\$!!!

QUICK & EASY RECOVERY
of
COPPER & ALUMINUM

EARN OVER 200% for CLEAN COPPER!

- Strips 110 ft/minute
- Self feeding
- Easy to maintain
- Runs on 110 volts
- Adjustable wire guides
- 1 year warranty
- Manufactured by:

Copper Wire Stripper Limited
888-419-3555
www.copperwirestripper.com

Special terms for rental stores Made in Canada PS

METALS

ISRI honors leaders for contributions in recycling

The Institute of Scrap Recycling Industries (ISRI), will honor retired ISRI executive director Dr. Herschel Cutler and recently retired Carastar executive Crawford Carpenter, with the 2017 ISRI Lifetime Achievement Award. The awards will be presented during ISRI's annual convention and exposition. The awards recognize extraordinary leaders for their longtime involvement, contributions, and overall commitment to the recycling industry and to ISRI.

Dr. Herschel Cutler, who holds a Ph.D. in economics, had a 33 year career with ISRI and an ISRI predecessor association, the Institute of Scrap Iron and Steel. During his tenure, Cutler led the association and the industry in its many battles against export controls, railroad freight-rate problems, publicly subsidized recycling programs, Superfund, and other challenges. Under his leadership, Cutler helped transform ISRI, growing the association's talent and scope to become the leading source of information, education, and training inside the industry and to become the

world-leader in advocacy for the recycling industry.

Crawford Carpenter has had a long and dedicated career in the paper recycling industry, with a passionate commitment to promoting the industry to the next generation of leaders. Through his service on the ISRI Board of directors and his roles as president of the Recycling Research Foundation (RRF) and president of the Paper Stock Industries (PSI) Chapter, Crawford has advocated for paper recycling and guided the greater association to new levels of industry leadership. He worked diligently to promote RRF's student scholarship program, and led the effort to create a special military veterans college stipend as a way for the industry to give back to all those who served the nation. Crawford was also heavily involved in the development and spread of ISRI's youth outreach and education curriculum designed to encourage children to recycle and teach them about the science and technology involved in the industry.

Johnson Controls and Aqua Metals sign battery recycling technology partnership

Johnson Controls, finalized an agreement covering North America, China and Europe for a cutting edge electrochemical battery recycling technology. Under terms of a multi-faceted deal, the company is investing in Aqua Metals.

"Our partnership with Johnson Controls is a tremendous step forward and is an opportunity for us to work with the global leader in automotive battery manufacturing and responsible recycling," said Dr. Stephen Clarke, chairman and chief executive officer of Aqua Metals. "We will build on this exciting relationship in order to enable clean and efficient battery recycling around the world."

Under the agreement Johnson Controls will:

- Become the first licensee for AquaRefining™ technology.
- Supply Aqua Metals with batteries to recycle as a service, as part of the Johnson Controls closed-loop network.
- Purchase AquaRefined metals produced from Aqua Metals' facilities.
- Acquire just under 5 percent of Aqua Metals outstanding shares.

Aqua Metals, which recently opened its first plant in McCarran, Nevada, uses an advanced electrochemical process for recycling batteries. As it scales up capacity, Aqua Metals plans to hire hundreds of employees for existing and future operations across the U.S.

Timken declares quarterly dividend

The board of directors of The Timken Company, a global leader in bearings and mechanical power transmission products, declared a quarterly cash dividend of \$.26 per share. The dividend is payable on March 3, 2017, to shareholders of record as of February 22, 2017.

This marks the 379th consecutive quarterly dividend paid on the common shares of the company since The Timken Company joined the New York Stock Exchange in 1922, one of the longest running dividend records among NYSE-listed companies.

ShearCore hires new sales manager

ShearCore, the first company to offer and support a full shear line for the metal recycling and scrap processing markets, has announced the appointment of a new regional sales manager, Kenny Bradshaw. He has agreed to exit retirement to make the return to the industry with ShearCore.

Bradshaw will conduct sales for the company, continuing to serve its customers throughout Western Florida, Georgia, Alabama, Mississippi and Tennessee as he comes with 13 years of industry knowledge and experience.

Gershow Recycling donates aluminum scrap to local robotics competition teams



Tony Kryl (far right) of the Westhampton Beach High School FIRST® Robotics Competition Team (#3171), presents Jonathan Abrams (center) and CJ Linsalata (left) of Gershow Recycling with a team sponsor plaque. The Scrap Metal Day event at Gershow's Medford facility was in support of the FIRST Long Island program.

For the past eight years, Gershow Recycling has opened its Medford facility to local FIRST® (For Inspiration and Recognition of Science and Technology) Long Island robotics teams, including coaches, students and their parents, to enable the teams to collect aluminum scrap metal.

Fifteen teams participated in Gershow's Scrap Metal Day donation event. Following the 2017 FIRST Robotics Competition kick-off, which took place on January 7, 2017 at Stony Brook University, each of the teams now has 6 weeks to construct a 120 pound robot and prepare for the upcoming competition, presented by School Business Partnerships of Long Island, Inc. (SBPLI).

Now entering its 18th season, the Long Island Regional FIRST Robotics Competition is held annually at Hofstra University's David S. Mack Sports and Exhibition Complex in late March or early April. More than 50 teams from Long Island, Brazil and the New York metropolitan area participated in the two day competition. During the six week build period, students work with

professional engineering mentors to design a robot that solves a problem using a "kit of parts" and a standard set of rules. They then participate in regional competitions that measure the effectiveness of each robot, the power of collaboration and the determination of the students.

The 15 Long Island teams represented at Gershow's Scrap Metal Day included Bridgehampton High School (#5659), Central Islip High School (#4006), Center Moriches High School (#4458) Half Hollow Hills High School (#3624), Hauppauge High School (#358), Huntington High School (#5016), Kings Park High School (#5736), Longwood High School (#564), Miller Place High School (#514), North Shore High School (#3950), Plainview-Old Bethpage High School (#353), Townsend Harris High School (#2601) and Westhampton Beach High School (#3171). Two rookie teams, Our Lady of Mercy and Rocky Point/Shoreham, also attended the event, under the guidance of veteran team representatives.



Testimonial



I received your publication by mail. I can confirm I have never seen it before in its hard copy version. I like the layout and it is very informative, in a league of its own in terms of quality information. No wonder it is the only recycling publication quoted on Lumistar's blog. I look forward to upcoming issues.



I have read issues of your publication in the past by accessing digital archives at one of two libraries I am a member of. Your website is also fantastic.

—Paul Angel, LUMISTAR CORPORATION

DEALER • NEW • USED EQUIPMENT FINANCING



1994 JOHN DEERE 644G WHEEL LOADER
Includes forks and bucket. Runs very well. \$38,000



2010 AL-JON 580CL LOGGER/BALER
3,800 hours, in excellent condition. \$260,000



ROTEX SCREEN
20" x 82" 2 HP drive. Includes 13 screens. \$18,000



2008 VECOPLAN TIRE RASPER
52" Rotor, 200 HP. \$98,000



2011 PELLENC M1600 OPTICAL SORT SYSTEM
Lightly used optical sort system in great condition. E-scrap, plastic, non-ferrous, muni waste, etc. \$49,000



1991 KOMATSU PC400LC WITH GRAPPLE
Includes Young grapple, generator and magnet control box. Good running machine! \$65,000



HUSTLER 32" EDDY CURRENT
Vibratory feed conveyor, eddy system, splitter box. \$29,000



1995 E-Z BALER MODEL 2
Good condition and ready for work! \$70,000



2005 SIERRA 500SL PORTABLE SHEAR/LOGGER/BALER
Recently rebuilt and in great condition. Includes picking line and stacking conveyors. \$155,000



SIERRA 350T SHEAR, BALER
In operating condition, can be demonstrated. Great deal! \$65,000



2007 POWERCAT A WIRE CLEANING SYSTEM
Includes prechopper, spare knives and screens. \$95,000



SSI 2400 PORTABLE TIRE SHREDDER
Only 2,700 hours on the meter! 290 HP engine. \$175,000



2014 SCORPION ENGINE PULLER
Great for removing engines and transmissions! \$30,000



REBUILT HARRIS 1020W BALER
Completely rebuilt with a warranty! Includes an infeed conveyor. \$290,000



JOMAR R222 RAPTOR - REFURBISHED
Four shaft shredder with a 1-year parts warranty! \$185,000

DEALER • NEW • USED EQUIPMENT FINANCING

REBUILT CM MultiStack



1987 KOMATSU 350-1

Includes forks and bucket.

\$30,000



1995 E-Z MODEL A+ CRUSHER

John Deere Diesel. 10,500 hours.

\$55,000



2006 AL-JON 400XL BALER

8,000 hours. Cummins engine. Road worthy and ready to move.

\$155,000



HITACHI EX300 WITH SHEAR

With a LaBounty MSD50 Shear. Good operating condition.

\$68,500



2008 MAGNATECH 6060 SHREDDER

1,500 HP, includes everything you need to start shredding! Dismantled and loaded on your trucks.

\$390,000



250 HP Motor

\$245,000

4.9% financing available!



DADE

Capital Corp.



DADE Capital Corp.
800-823-9688

Perrysburg, OH

GREAT RATES!

Visit the new www.DADECapital.com for other available equipment.



METALS

Imported steel decreases 4.3 percent in December

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

	DEC 2016	NOV 2016	2016 Full Year	2015 Full Year	% Change 2016 Annual vs. 2015
SOUTH KOREA	264	272	3,805	4,854	-21.6%
TURKEY	154	185	2,415	2,823	-14.4%
JAPAN	115	100	1,798	2,259	-20.4%
GERMANY	86	87	1,192	1,515	-21.3%
TAIWAN	147	86	1,083	1,205	-10.1%
VIETNAM	57	120	960	222	332.2%
CHINA	63	57	862	2,374	-63.7%
All Others	1,261	1,227	14,212	16,241	-12.5%
TOTAL	2,146	2,134	26,327	31,493	-16.4%

Based on preliminary Census Bureau data, the American Iron and Steel Institute (AISI) reported that the U.S. imported a total of 2,686,000 net tons (NT) of steel in December 2016, including 2,146,000 net tons (NT) of finished steel (down 4.3 percent and up 0.6 percent, respectively, vs. November final data). For the full year 2016, total and finished steel imports are 33,009,000 and 26,327,000 NT, down 14.9 percent and 16.4 percent, respectively, compared to full year 2015. Finished steel import market share was an estimated 26 percent in December and is estimated at 26 percent for full year 2016.

Key finished steel products with significant import increases in December compared to November include oil country goods (up 55 percent), line pipe (up 38 percent), sheets and strip all other metallic coated (up 27 percent), tin plate (up 24 percent), sheets and strip hot dipped galva-

nized (up 14 percent) and hot rolled bars (up 11 percent). Tin plate (up 15 percent) had a significant increase in 2016 vs. the prior year.

In December, the largest volumes of finished steel imports from offshore were from South Korea (264,000 NT, down 3 percent from November final), Turkey (154,000 NT, down 17 percent), Taiwan (147,000 NT, up 71 percent), Japan (115,000 NT, up 15 percent) and Germany (86,000 NT, down 0.4 percent). For full year 2016, the largest offshore suppliers were South Korea (3,805,000 NT, down 22 percent vs. the same period in 2015), Turkey (2,415,000 NT, down 14 percent), Japan (1,798,000 NT, down 20 percent), Germany (1,192,000 NT, down 21 percent), Taiwan (1,083,000 NT, down 10 percent), Vietnam (960,000 NT, up 332 percent) and China (862,000 NT, down 64 percent).

Nucor reports results for fourth quarter and year ended 2016

Nucor Corporation announced consolidated net earnings of \$159.6 million, or \$0.50 per diluted share, for the fourth quarter of 2016 and \$796.2 million, or \$2.48 per diluted share, for fiscal 2016. In the fourth quarter of 2016, the company changed its method of accounting for certain inventories from the last-in, first-out (LIFO) method to the first-in, first-out (FIFO) method which required retrospective application to prior period financial statements.

Comparative consolidated net earnings after the retrospective application of the change in accounting principle were \$305.4 million, or \$0.95 per diluted share, for the third quarter of 2016 and a net loss of \$187.5 million or \$0.59 per diluted share for the fourth quarter of 2015. Comparative consolidated net earnings after the retrospective application of the change in accounting principle were \$80.7 million, or \$0.25 per diluted share, for fiscal 2015.

Nucor's consolidated net sales decreased 8 percent to \$3.96 billion in the fourth quarter of 2016 compared with \$4.29 billion in the third quarter of 2016 and increased 14 percent compared with \$3.46 billion in the fourth quarter of 2015. Average sales price per ton decreased 7 percent from the third quarter of 2016 and was consistent with the fourth quarter of 2015. Total tons shipped to outside customers were 5,815,000 tons in the fourth quarter of 2016, a 1 percent decrease from the third quarter of 2016 and an increase of 14 percent from the fourth quarter of 2015.

Total fourth quarter steel mill shipments decreased 1 percent from the third quarter of 2016 and increased 16 percent from the fourth quarter of 2015. Fourth quarter downstream steel products shipments to outside customers decreased 11 percent from the third quarter of 2016.

For fiscal 2016, Nucor's consolidated net sales decreased 1 percent to \$16.21 billion, compared with \$16.44 billion for fiscal 2015. Total tons shipped to outside customers in fiscal 2016 were 24,309,000, an increase of 7 percent from fiscal 2015, while average sales price per ton decreased 8 percent.

The average scrap and scrap substitute cost per ton used in the fourth quarter of 2016 was \$236, a decrease of 6 percent from \$252 in the third quarter of 2016 and an 8 percent increase from \$219 in the fourth quarter of 2015. The average scrap and scrap substitute cost per ton used for the full year 2016 was \$228, a 16 percent decrease from \$270 for the full year 2015.

Overall operating rates at steel mills decreased to 74 percent in the fourth quarter of 2016 as compared to 76 percent in the third quarter of 2016 and increased compared to 68 percent in the fourth quarter of 2015. Steel mill operating rates for the full year 2016 increased to 80 percent as compared to 73 percent for the full year 2015. The utilization rates for the current and prior periods were revised during the fourth quarter of 2016 as a result of an updated analysis of our steel mill capacity.

RECYCLING SOLUTIONS

\$ BETTER TOOLS = BETTER PROFITS \$



WIRE GRANULATORS

- Granulate Copper or Aluminum
- 99.9% Clean Material
- Maximize Wire Profits



230V MAGNETS (ESM)

- Sizes Available from 28" to 72"
- Durable, Long Life
- Best Value on Market



MAGNET GRAPPLES

- Maximum Clean Up 2-in-1 Tool
- 1/2 to 1 1/4 Cubic Yard Available
- Magnet 32" - 42" Available



EXCAVATOR ORANGE PEEL GRAPPLES

- Straight, Semi-closed or Closed Tines
- Sizes from .16 - 2.6 cubic yards
- 4, 5 and 6 Tine Configurations



BATTERY MAG (ESB)

- No Generator Needed
- Easy Install
- Low Cost

METALS

December steel shipments up 6.7 percent from November

The American Iron and Steel Institute (AISI) reported that for the month of December 2016, U.S. steel mills shipped 7,173,245 net tons, a 6.7 percent increase from the 6,724,277 net tons shipped in the previous month, November 2016, and a 9.4 percent increase from the 6,556,342 net tons shipped in December 2015. Shipments for full year 2016 are 86,533,341 net tons – a de minimis change from shipments of 86,546,657 net tons for full year 2015.

Keep America Beautiful recognizes Steel Recycling Institute with award

Keep America Beautiful, a non-profit which envisions a country in which every community is a clean, green and beautiful place to live, presented the Steel Recycling Institute (SRI) with a 20th Anniversary Recognition Award at the national nonprofit's annual National Awards Ceremony, which took place during the Keep America Beautiful National Conference in Washington, D.C.

In addition to SRI, more than 80 individuals and organizations from communities across America were presented with Keep America Beautiful's National

Awards, which recognize the passion, dedication and impact of Keep America Beautiful's affiliates, partner organizations and volunteers from across the nation. Established in 1953, Keep America Beautiful consists of a national network of more than 620 statewide and community-based affiliates whose programs, initiatives and efforts, supported by millions of volunteers, help transform public spaces into beautiful places.

"As you all know, the Steel Recycling Institute has been a longtime champion of Keep America Beautiful," said Keep America beautiful chief devel-

opment officer Michael Rogers in presenting the award to Keep America Beautiful board member Jim Woods, who is senior director, sustainability communications, American Iron and Steel Institute. "Now, we're fortunate to have the ongoing support of SRI through our friend and board member, Jim Woods."

SRI has been a sponsor of Keep America Beautiful's National Conference with the highly anticipated "Steel This" session, in which Keep America Beautiful affiliates share successful program ideas with one another.

Noranda Alumina name new team of chief officers

Noranda Bauxite and Noranda Alumina, affiliated companies in the bauxite mining and alumina refining industries, have announced the appointment of their team of chief officers.

David D'Addario is chairman and chief executive officer of both companies. D'Addario brings to Noranda 30 years of leadership in the metals industry, most recently as chairman and chief executive officer of aluminum can sheet producer Wise Metals Group. He has also held senior positions in national and international recycling businesses, including NERO, TOMRA and Wise Recycling.

D'Addario spent much of the past 15 years leading Wise Metals through challenging times to resounding success, ultimately transforming Wise into the world's third largest producer of can stock for the beverage industry, with sales of more than

1 billion pounds of product per year. He is a graduate of Yale University.

Thomas Robb is the chief operating officer of both companies. Robb, who earned his M.B.A. at Vanderbilt University, is a veteran of more than a dozen years in the aluminum industry. Most recently, he served as chief executive officer of Wise Recycling, one of the nation's largest direct from the public aluminum can recycling businesses. Robb also spent a number of years at Wise Metals, where he was its executive vice president of strategy and development.

Monte Schaefer is the chief financial officer of both companies. Schaefer, a graduate of the Air Force Academy who also holds M.B.A. and J.D. degrees, brings more than 20 years of corporate finance experience to Noranda. Schaefer began his career as a tax specialist with Arthur

Anderson, and has spent the last seven years in senior finance positions in the aluminum industry. Most recently, he served as Wise Metals' executive vice president and chief financial officer.

Robert Ericson is the chief legal officer of both companies. Ericson also joins Noranda from Wise Metals, where he served as its executive vice president and general counsel. After graduating from Johns Hopkins and the University of Virginia Law School, Ericson joined the law firm of Winston & Strawn, where he enjoyed a successful legal career in the fields of mergers and acquisitions and capital markets. Ericson also established Winston's New York office, and served for 8

years as its New York office managing partner.

Anthony Laura is the chief administrative officer and general counsel of both companies. A graduate of Yale University and Fordham University School of Law, Laura has enjoyed a national litigation practice in the fields of product liability and financial services, and has served as practice group leader for several AmLaw 100 law firms. Most recently, Laura co-chaired the trade secrets practice of the firm of Epstein Becker & Green. Laura also served several years on the board of Wise Metals, and was a member of its audit committee.




Commodity		Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
#1 Bushelings	per gross ton	\$190.00	\$200.00	\$200.00	\$286.00	\$310.00
#1 Bundles	per gross ton	205.00	198.00	195.00	285.00	310.00
Plate and Structural	per gross ton	200.00	195.00	198.00	250.00	290.00
#1 & 2 Mixed Steel	per gross ton	195.00	194.00	195.00	240.00	260.00
Shredder Bundles (tin)	per gross ton	170.00	155.00	155.00	180.00	215.00
Crushed Auto Bodies	per gross ton	170.00	155.00	154.00	180.00	215.00
Steel Turnings	per gross ton	95.00	105.00	99.00	125.00	160.00
#1 Copper	per pound	2.37	2.42	2.45	2.50	2.54
#2 Copper	per pound	2.25	2.16	2.30	2.35	2.35
Aluminum Cans	per pound	.60	.57	.69	.59	.65
Auto Radiators	per pound	1.59	1.40	1.51	1.51	1.55
Aluminum Core Radiators	per pound	.56	.47	.49	.54	.59
Heater Cores	per pound	1.10	1.08	1.12	1.24	1.30
Stainless Steel	per pound	.54	.47	.52	.56	.59

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 chance for human error or unforeseen circumstances leading to error or omission. 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.

World Class MAGNETS

FOR ALL INDUSTRIES

- PULLEY
- IN-LINE
- DRUMS
- ELECTRO
- CROSSBELT
- RARE EARTH
- PERMANENT
- STATIONARY SUSPENSION



*Competitive Pricing • Short Lead Times
Sizes Available for all Magnet Types • Many Sizes in Stock*



MAGNETICS DIVISION
GLOBAL EQUIPMENT MKTG INC.



561-750-8662

info@globalmagnetics.com / globalmagnetics.com

SALVAGING Millions

by Ron Sturgeon
Autosalvageconsultant.com

Tools for Success: Need to borrow?

The first article in this series listed more than 25 tactics to increase your business success, all of them based on my experience. Each of the articles after the first takes a closer look at one of the tactics.

I have written about this topic several times, but it comes up regularly in my consulting assignments. Recyclers are typically conservative borrowers. The older generation of yard owners never borrowed. They didn't borrow because, in the period between 1970 and 1990, salvage yards were well capitalized and very profitable. Typically, in these two decades, yards had gross margins in the 60 to 80 percent range and net profits of 20 to 30 percent.

However, as the industry changed, moving from retail to wholesale, computerizing, margins have shrunk and many operators haven't made the changes needed to maintain profits. This failure to change with the times has left some yard owners with less capital. Some are thinking about borrowing for the first time.

In other cases, new operators have entered the market more recently and they are less resistant to taking on debt. Sometimes, the passing of the business to the next generation meant that children inherited a business with less capital and they often were more willing to consider using debt.

I started with almost nothing. My dad died and left me a tiny inheritance, a few thousand dollars and a half interest in a VW bug. After my father died, my stepmother threw me out. I was a senior in high school and I was homeless when I started my business career, so I don't believe that obstacles prevent determined people from succeeding.

I believe you can be anything you want to be if you work hard enough and have a passion for learning. I didn't go to college, so I don't consider earning a degree as important as having a strong work ethic. Because of my work ethic and life experiences, I am not afraid of taking on debt for the right reasons.

Unfortunately, some yard owners decide that they need to borrow once their business is losing money and they need operating cash. They believe a loan will help solve their problem. In reality, unless they examine the business and fix the underlying problems, borrowed money will just delay failure for a short time.

A few years after Ford Motor Company purchased my yard in the late 1990s, my friend Dixon Thayer and I and one other partner purchased Greenleaf, Ford's auto salvage division. At the time, it was losing lots of money every month.

Dixon became chief executive officer. He understood that the division's problem was not a lack of money. The real issue was we weren't close to being

profitable. He insisted we not try to grow Greenleaf until we could prove we could do it profitably.

The turnaround was painful. We had to lay off hundreds of employees, to overhaul buying, and to review every expense line. We did what we had to do to help the business return to profitability. We changed in fundamental ways.

The bottom line is simple: There is plenty of money out there. In most cases, banks want to make loans, especially to well-run, profitable businesses borrowing to grow. Naturally, bankers are a lot less eager to make loans to businesses with declining profits and owners drawing big salaries and not solving the issues preventing the business from being more profitable.

What is profitable from the bank's point of view? If you are paying market-rate rent (or debt service) for your real estate, and including reasonable salaries, you should be making 10 percent net profit. You should be making slightly higher net profit if your business is small (less than \$200,000 per month), and maybe slightly lower if your business is much larger (\$200,000+ per month). But those are minimums. Many yards are making 20 percent, and if you have profits above 10 percent, you likely can grow with internal cash and you probably don't need debt.

However, if you want to grow more or faster than your capital allows, earnings at these levels will prove to your banker that you can pay back a loan. I have one other bit of advice: Learn how to calculate debt service coverage. Understand what the banker is looking for before you pay him or her a visit.

Before you apply for a loan, work on becoming more profitable. Many operators wait until they've run out of cash to consider making changes they need to make. They are 20 years behind the good operators, and it can certainly be hard to grow and become profitable when you are "running on the hub" with your cash.

If you're struggling and losing money or making much less this year than last, perhaps the best investment you can make is to hire a consultant like Bill Stevens, Jim Counts, Robert Counts, or Mike Kunkle. Any of them can give you a condensed one-day course about all that must change to get yourself back to profitability. When a business is struggling, the owners often believe that they cannot afford to pay a consultant for help. In fact, they can't afford not to.

Another way to get help is to come to the annual URG convention. Often the operators who would get the most from sessions on best practices are the same ones who think they don't have the time to come. If you're struggling, dig deep, and show up.

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.

AUTOMOTIVE

EPA notifies Fiat Chrysler of Clean Air Act violations

FCA allegedly installed and failed to disclose software that increases air pollution from vehicles

The U.S. Environmental Protection Agency (EPA) issued a notice of violation to Fiat Chrysler Automobiles N.V. and FCA US LLC (collectively FCA) for alleged violations of the Clean Air Act for installing and failing to disclose engine management software in light-duty model year 2014, 2015 and 2016 Jeep Grand Cherokees and Dodge Ram 1500 trucks with 3.0 liter diesel engines sold in the U.S. The undisclosed software results in increased emissions of nitrogen oxides (NOx) from the vehicles. The allegations cover roughly 104,000 vehicles. EPA is working in coordination with the California Air Resources Board (CARB), which has also issued a notice of violation to FCA. EPA and CARB have both initiated investigations based on FCA's alleged actions.

The Clean Air Act requires vehicle manufacturers to demonstrate to EPA through a certification process that their products meet applicable federal emission standards to control air pollution. As part of the certification process, automakers are required to disclose and explain any software, known as auxiliary emission control devices, that can alter how a vehicle emits air pollution. FCA did not disclose the existence of certain

auxiliary emission control devices to EPA in its applications for certificates of conformity for model year 2014, 2015 and 2016 Jeep Grand Cherokees and Dodge Ram 1500 trucks, despite being aware that such a disclosure was mandatory. By failing to disclose this software and then selling vehicles that contained it, FCA violated important provisions of the Clean Air Act.

FCA may be liable for civil penalties and injunctive relief for the alleged violations. EPA is also investigating whether the auxiliary emission control devices constitute "defeat devices," which are illegal.

In September 2015, EPA instituted an expanded testing program to screen for defeat devices on light duty vehicles. This testing revealed that the FCA vehicle models in question produce increased NOx emissions under conditions that would be encountered in normal operation and use. As part of the investigation, EPA has found at least eight undisclosed pieces of software that can alter how a vehicle emits air pollution.

FCA US LLC is a wholly owned subsidiary of Fiat Chrysler Automobiles N.V., a multinational corporation.

IAA chooses O'Day as CEO

Insurance Auto Auctions, Inc. (IAA), named Tim O'Day as the company's chief operating officer, reporting to IAA CEO and President, John Kett.

IAA is a provider of vehicle liquidation, logistics, title processing and inven-

tory sourcing for damaged and lower value vehicles. IAA is a business unit of KAR Auction Services, a global remarketing and technology services provider with 310 operating locations across the U.S., Canada, Mexico and United Kingdom.

A farmer sent his son to the market to buy a crate of chickens. The boy went and was returning home when he dropped the crate and it broke open, letting all the chickens escape.

They scurried off in all directions. The boy was upset, knowing his father would be angry. He fixed the crate as best as he could and searched the neighborhood

until he found them all. When he returned home, he told his father that the chickens had gotten loose, but he managed to find all eight of them.

"Well, you did a great job," his father said. The boy was surprised. His father continued, "The receipt says you paid for six."

TY CUSHION SOFT RIDE SOLID TIRES for Loaders, Forklifts and Skid Steers

NO MORE FLATS!



- Excellent traction
- Added stability
- Tires for the *life* of the machine

**GREAT DEALS
AVAILABLE NOW
Call today!**

ADVANCE TIRE INC.
800-445-6647 www.AdvanceTires.com

PAPER

Clearwater Paper's Massman named board chair for AF&PA

The American Forest & Paper Association (AF&PA) has elected Clearwater Paper Corporation president and chief executive officer Linda Massman as the new AF&PA board chair and released the 2017 slate of AF&PA board officers.

Massman was elected as Clearwater Paper's chief executive officer in 2013 after serving as the company's president and chief operating officer since 2011 and chief financial officer from 2008 to 2011. Before joining Clearwater Paper, Massman served as group vice president of finance and corporate planning for SUPERVALU Inc. and as a business strategy consultant for Accenture. Prior to being elected chair of the AF&PA board, Massman served as vice chair and as AF&PA PAC co-chair.

Also elected as officers are Evergreen Packaging Inc. president & chief executive officer John Rooney (first vice chair) and

Greif, Inc. president & chief executive officer Peter Watson (second vice chair). Packaging Corporation of America chair & chief executive officer Mark Kowlzan will serve as immediate past chair.

Beginning new terms as AF&PA board members in 2017 are Michael Doss, Graphic Packaging International, Inc.; Peter Watson, Greif, Inc.; James Morgan, Interstate Resources; Matthew Kaplan, KapStone Paper and Packaging Corporation; Richard McLeod, The Procter & Gamble Company; Philip Rundle, Rolland Enterprises Inc.; Colin Moseley, Simpson Lumber Company, LLC; Christopher DiSantis, Verso Corporation; and Steven Voorhees, WestRock Company.

The AF&PA board of directors currently consists of 21 top industry leaders who represent a broad spectrum of companies in the paper and wood products manufacturing sector.

Manufacturers strive to improve

The American Forest & Paper Association (AF&PA) shared a greenhouse gas (GHG) reduction goal of 20 percent by the year 2020 under its Better Practices, Better Planet 2020 initiative.

The project includes one of the most extensive sets of sustainability goals established for a U.S. manufacturing industry. In its 2016 Sustainability Report, AF&PA announced that GHG emissions from member facilities were reduced by 16 percent, surpassing the 15 percent reduction goal ahead of schedule.

AF&PA launched Better Practices, Better Planet 2020 in March 2011 with a suite of sustainability goals for improvement from a baseline of 2005: increase energy efficiency by at least 10 percent, reduce GHG emissions by at least 15 percent, promote sustainable forestry, improve workplace incidence rate by 25 percent (baseline 2006) and reduce water use by 12 percent, while also committing to exceed a 70 percent rate of paper recovery for recycling. The target year to reach these goals is 2020.

PLASTICS

Ontario's proposed fee increase for water taking permits rejected

After months of working in a good faith consultation process with the Ontario government on its plans to introduce new regulations on water taking permits, a proposed massive fee increase for water bottling companies that take groundwater runs counter to the collaborative approach needed to protect and conserve water for future generations, according to the Canadian Bottled Water Association.

"We believed we were involved in a good faith consultation process with the Ontario government," said Elizabeth Griswold, executive director of the Canadian Bottled Water Association. "We have endorsed all along taking a more thoughtful, considered, transparent approach to protecting this precious resource. Today we are told that this increased fee will pay for new conservation and management programs, but we don't know what those programs are or how much they will cost."

The new \$500 fee represents a 1400 percent increase from the existing fee which has been in place since 2009 and comes at a time when the Ontario government is searching for ways to make life more affordable for Ontarians, not more expensive. Over 70 percent of Ontario households consume bottled

water. And the Permit to Take Water Fee is only one of a number of costs incurred by the industry.

"Bottled water companies acquire their land, explore, drill, build factories, spend millions of dollars on equipment, and payroll in this province" said Griswold. "As well, bottled water companies pay significant recycling charges and ever increasing hydro rates as a result of government decisions. Once again, bottled water companies, who produce the healthiest possible beverage for human consumption, are being singled out by the Ontario government. Companies that take enormous amounts of ground water to produce alcoholic beverages or use water to literally wash rocks, are exempt from the new charges."

To put that into perspective, the entire bottled water industry accounts for a mere 0.5 percent of all the permitted water taking in Ontario. In fact, Ontario's entire bottled water industry takes as much water from the ground every year as 10 golf courses (there are 825 golf courses in Ontario).

The Ontario bottled water industry directly employs 2,000 Ontarians, many in rural areas, and thousands more indirectly through suppliers.

I'm not saying you're lazy, but you should try out for "American Idle".



REDUCE? OPEN? BREAK? METER? SOLUTIONS.

With its aggressive bi-directional shafts, open cutting table, and load-sensing drive, SSI's PRI-MAX® line offers the most productive multi-material reducers available - up to 150 tons per hour! SSI's robust, maintenance-friendly design and world-class support deliver customers the lowest cost per ton.

Learn more at go.ssiworld.com/primary-reducer-ar



SSI Shredding Systems, Inc.

www.ssiworld.com | sales@ssiworld.com | +1-503-682-3633 See every imaginable thing being shredded at www.watchitshred.com

INTERNATIONAL

Latest poll on Canada's bottled water industry indicate government regulations misguided

A new poll of 1,500 people in Ontario reveals that the provincial government's public policies when it comes to the bottled water industry are significantly out of step with public opinion.

The poll, commissioned by the Canadian Bottled Water Association and carried out by Forum Research, includes findings that shed new light on Ontarians' attitudes towards the industry, their consumption habits, and their views on the government's approach to regulating the industry.

According to the province-wide poll which has a margin of error of less than 2 percent and was conducted between January 21 and January 24, 79 percent of Ontarians purchased or consumed bottled water in the past 12 months, confirming the popularity of the product.

Nearly a third (32 percent) of respondents said the reason they purchased bottled water was due to convenience, and more than a quarter (28 percent) buy bottled water as an alternative to other bottled beverages.

Another key finding is more than half (52 percent) of those surveyed said they drink bottled water over tap water outside of the home, and that when it comes to recycling habits, 95 percent said they recycle their empty water bottles where recycling is available.



PHOTO COURTESY OF AMERICAN CHEMISTRY COUNCIL, INC

Significantly, nearly three quarters of those surveyed (72 percent) said they don't think it's fair for the government to increase fees for commercial groundwater takings if only bottled water companies are singled out and golf courses and other industries are exempt.

The poll comes on the heels of the Wynne government's decision last month to arbitrarily increase the fee for water taking permits from \$3.71 for every million liters of groundwater taken in Ontario to \$503.71 - a fee ostensibly

designed to recover the costs of managing groundwater taken by water bottlers but one that was arrived at long before the findings of a two year review of existing rules for water bottlers.

"What these poll results tell us is that not only do the majority of people in this province consume bottled water, they don't agree with the way the Wynne government has handled this file," said Elizabeth Griswold, executive director of the Canadian Bottled Water Association. "This poll speaks to the issue of fairness and consumer choice and should be a wake-up call for the government who seem determined to make policy up on the fly, taking their cue from a small group of people intent on spreading misinformation and putting an entire industry that employs more than 2,000 people in this province at risk."

In addition to the massive 13,500 percent fee increase which only applies to the bottled ground water industry in Ontario, Premier Wynne went on the record last year suggesting she wants a bigger discussion on the entire future of the industry.

"We have been very clear that our industry is prepared to work in good faith throughout the consultation process and that a more thoughtful, science based, transparent approach needs to be taken," said Griswold. "What we aren't prepared to accept is a review process where the outcome seems to be pre-determined."

Among some of the other findings of the poll are while 76 percent of respondents indicate they primarily drink tap water at home, over two-thirds of respondents (68 percent) also rejected the Ontario Liberal government limiting consumer options when it comes to what they eat or drink. And 7 in 10 disagreed that bottled water produced in Ontario should be subject to additional government imposed charges when imported water is not required to pay those fees.

"This latest poll is just the first step our industry will be taking to set the record straight and tackle head on the misinformation and misconceptions that are being perpetuated," said Griswold. "For example, 74 percent of those polled didn't know that our entire industry takes less than one percent of permitted groundwater takings in Ontario. Singling out our industry sends the wrong message to every industry out there. And that is, locate and invest in Ontario at your own peril."

Qatar's Modern Recycling Factory now operational

Qatar's Modern Recycling Factory (MRF), based in Mesaieed Industrial City, is now operational. The \$41.3m (QAR150.06m) facility was financed and endorsed more than two years ago by Al Khalij Commercial Bank in support of Qatar's green-technology business sector.

Qatar's MRF is one of the largest recycling projects in the country. The plant supplied by Danish equipment manufacturer Eldan Recycling will be used to recycle used tires and rubber materials to make new products.

Members of Al Khalij Commercial Bank were given a tour of the facility

following the commencement of operations. Speaking during the event, Fahad Al Khalifa, the bank's chief executive officer, said: "As part of our 'Generation Green' program the MRF project contributes to the production of environmentally friendly, value-added products for commercial and industrial use, while creating economic opportunities that contribute to diversifying state revenues."

MRF stakeholders are confident that the facility will serve to conserve energy, preserve natural resources, and reduce Qatar's need for raw materials.

A man was wheeling himself frantically down the hall of the hospital in his wheelchair; just before his operation. The head nurse stopped him and asked, "What's the matter?"

He said, "I heard the nurse say, 'It's a very simple operation, don't worry, I'm

sure it will be all right.'"

The head nurse said, "She was just trying to comfort you. What's so frightening about that?"

The patient said, "She wasn't talking to me. She was talking to my surgeon!"

SIERRA

A RECYCLING COMPANY FROM THE BEGINNING

Perfect for Sorting
All Your C&D
Waste...



510

HARD RUBBER TIRE
MATERIAL HANDLER

MATERIAL HANDLING SOLUTIONS MADE EASY...

★ PHONE: (661) 327-7073 ★ USA: (800) 343-8503 ★ www.sierraintl.com

BUSINESS BRIEFS

Terramac appoints Tri-State Truck as authorized dealer

■ Terramac, a manufacturer of innovative rubber track crawler carriers, expanded its representation in the North American market to include Tri-State Truck & Equipment as part of its dealer network. Tri-State will represent the versatile Terramac product line in Montana and Wyoming.

Tri-State will offer Terramac's RT9, RT14 and RT14R crawler carriers to serve a wide range of industries including general construction, environmental, mining and utility. In addition to Terramac's three standard options – convertible dump-to-flat beds, rock dump beds and flatbeds – Tri-State will offer Terramac units customized with support attachments such as cranes, personnel carriers, water tanks and hydroseeders.

The team at Tri-State will provide professional sales, rental and aftermarket support on the Terramac product line across six branch locations. Tri-State's dependable representatives will deliver timely service and their parts and service technicians are equipped with state-of-the-art technology to ensure machines are maintained at the highest standard.

Simmons promoted to senior VP of GBB

■ Gershman, Brickner & Bratton, Inc. (GBB) disclosed that Stephen Simmons is now part of the firm's ownership group, joining president and co-founder Harvey Gershman, and senior vice presidents Chris Lund, P.E., PSS, and John Carlton, P.E., BCEE. He has also been promoted to senior vice president.

Simmons joined GBB as vice president in December 2015 after being a principal associate in 2012 – 2013. A sustainable development business leader with more than 30 years of experience in the energy and environmental services sectors, he is highly experienced in program and project management, new business development, waste and power marketing, technology evaluation, business financial modeling, profit and loss management, facility design, procurement, and construction having worked with engineering/consulting firms and leading international energy operating companies.

Throughout his career, he has helped communities and companies develop programs and projects implementing the 3 E's of sustainability: ecology, economy, and equity. He has extensive renewable energy experience, having managed the development, construction, and operation of power generation projects with capital budgets in the hundreds of millions of dollars. These facilities have produced millions of megawatt-hours of renewable energy, displacing millions of tons of fossil fuels.

Simmons has a Bachelor of Science degree in Mechanical Engineering from the University of Missouri – Rolla, and a Professional Certificate in Energy Policy and Sustainability from the University of Denver.

Morbark appoints Niziolek VP of operations

■ Morbark, a manufacturer of equipment used in forestry, recycling, tree care, landscaping, sawmill and biomass markets, has strengthened its senior management team with the appointment of Walt Niziolek as the new vice president of operations and supply chain.

Niziolek joins Morbark at a time of continued business growth to take charge of supply chain and site operational requirements. This includes managing local, U.S. and overseas vendors and suppliers, all warehouse and distribution activities, quality initiatives and liaising with business unit engineering support.

Niziolek's extensive expertise includes holding many previous senior leadership roles in manufacturing with companies such as CPG Building Products and Pride Mobility Products, where he specialized in deploying standardized work and other lean initiatives to improve safety, quality, delivery, supply chain management and cost.

Prior to his 20 plus years in manufacturing operations, Niziolek served as a captain in the U.S. Army, where he held multiple leadership and staff positions, both in peacetime and periods of conflict.

Chicago Pneumatic welcomes new personnel

■ Chicago Pneumatic Construction Equipment (CP) has added three new members to their team with the appointments of Jonathan Cook to vice president, Holly Boutot to marketing communications manager and Justin McKenzie to area sales manager for the Southeast. All three appointments are effective immediately.

Cook takes over for John Vogel, who is retiring after holding the position for the past eight-plus years. As vice president, Cook's responsibilities include assisting in developing and implementing sales and marketing activities to achieve CP brand targets and goals. He will also identify, develop and manage sales.

Cook brings nearly 20 years of experience with Atlas Copco, where he held positions as a business development manager and regional sales manager.

Holly Boutot will be responsible for positively promoting the name, image and reputation of CP to their customer base, stakeholders and employees.

Boutot comes to CP from Atlas Copco Compressors LLC, where she collected 30 years of experience in marketing and communications.

Justin McKenzie is the Southeast area sales manager. McKenzie will be responsible for growing all CP product sales through both the rental and dealer channels in his territory.

Prior to his new position with CP, McKenzie worked with Atlas Copco Construction Equipment as their areas sales manager for rental. He also previously worked with Sunbelt Rentals as a sales associate.

Advance Disposal acquires CGS Services

■ Advanced Disposal, an integrated environmental services company, has completed the acquisition of CGS Services, Inc. (CGS). Based in Morristown, Indiana, CGS services a 14 county area in central and eastern Indiana through a vertically integrated network of solid waste collection, recycling, and disposal assets that generates annual revenue approaching \$30 million.

Partnership acquires Walker Industrial Services

■ ACV Enviro, a portfolio company of Kinderhook Industries, LLC, has acquired Walker Industrial Services, Inc. a 26 year old industrial services provider in the Northeast. Walker's Skowhegan location will operate as an ACV Enviro Service Center, allowing ACV Enviro to expand its operations and broaden its current Maine market share. Specific terms of the transaction were not disclosed.

ACV Enviro intends to integrate the operations of Walker into its Northeast Region which includes existing operations in Massachusetts and Maine. ACV Enviro's Northeast Region is managed by Steve Ganley, regional general manager and Dean Crosby, general manager-Maine operations.

Walker's daily operations and project management will remain unchanged. Jeff Chase, operations manager for Walker, will continue to play an instrumental role in managing customer relationships.

Dan Gallagher named NAPA chairman

■ Dan Gallagher took his position as the 2017 chairman of the National Asphalt Pavement Association (NAPA) at a ceremony during the association's 62nd Annual Meeting. As chairman, Gallagher is responsible for guiding NAPA's efforts to support the asphalt pavement industry.

Gallagher is vice president of operations and chief financial officer for Gallagher Asphalt Corp., based in Thorton, Illinois. The company operates three permanent asphalt plants and offers paving, hot-in-place recycling, trucking, and other services throughout the Chicago Southland.

Priorities for Gallagher's term as NAPA chairman include engineering and pavement quality, workzone safety, as well as working toward a reliable funding source for infrastructure.

Gallagher has long been a strong and active voice for quality in the asphalt pavement industry since the 1990s. He has served on NAPA engineering committees and chaired NAPA task forces on recycling and energy conservation during the past decade, as well as working on industry best practices and warm-mix asphalt.

A student at a management school came up to a pretty girl and hugged her without any warning. The surprised girl said, "What was that?"

The guy smiled at her, "Direct marketing!" The girl slapped him soundly.

"What was that?!" said the boy, holding his cheek.

"Customer feedback!"

BEKA... Auto-lube that
RUNS RIGHT,
right from the get-go

SEE US AT
CONEXPO
Booth #
G72213

From the minute you get it, your BEKA auto-lube saves you time and money. Then it goes longer and more dependably year after year.

- Complete systems matched to your large or small equipment for fast, easy installation
- Expert tech support always just a phone call away
- Heavy-duty components with built-in survivability for harsh work environments



Find out why industries are choosing today's best-built auto-lube systems.

Call 1.888.862.7461 or email us at info@beka-lube.com.



1.888.862.7461
www.beka-lube.com



BEKA - LUBRICATION SPECIALISTS SINCE 1927



Classified ADVERTISEMENTS

877-777-0043

—Always Available—

PLACE YOUR TEXT AD ONLINE

www.AmericanRecycler.com

Rates	
Text Classifieds	Display Classifieds
\$65 for up to 50 words. Add \$1 each additional word.	\$70 per column inch depth, 2.5" width.

WE ACCEPT CHECKS, MONEY ORDERS,
MASTERCARD, VISA and DISCOVER.

ALL CLASSIFIED ADVERTISEMENTS
MUST BE PAID IN ADVANCE.

UPGRADE TO A FEATURED CLASSIFIED AND ADD 1 COLOR + 1st POSITION!

Featured Classifieds

412.562.0891 tel
412.562.0892 fax
info@sternerconsulting.com

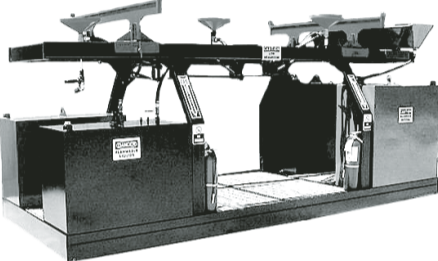
STERNERCONSULTING

**Solid Waste Business Brokers
(M&A Services)**

WE WILL SELL your Collection Business, Landfill, Transfer, or Solid Waste Facility. We have been in the US solid waste industry Mergers & Acquisitions business for three decades...and we NOW have Strategic and Financial Buyers Who Will PAY Top Dollar For Premiere Industry Companies. You will be able to work with our Four Point M&A Program to represent your hard-earned business success to real BUYERS for your company, permits, and solid waste management operations.

sternerconsulting.com

IRON AX 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.

877-247-6629 • IronAx.com

Balers

**Balers ~ Shredders ~ Conveyors
Sorting Equipment ~ Service**

**YOUR TOTAL SOURCE FOR NEW AND
USED RECYCLING EQUIPMENT**

**Buying and Selling
Recycling Equipment**



216-252-8090
sales@elyent.com
www.elyent.com

**BUILT TO BE THE FINEST
TWO-RAM
BALERS**



SIERRA
800.343.8503 | sierraintl.com

Businesses

TWO FEEDER YARDS FOR SALE in Northwestern Pennsylvania, both close to I-80, 15 miles apart, lots of support equipment and inventory, looking for offers over \$2 million. Partial financing considered. Fax for details: 814-772-9735. E-mail: dfk.amr@gmail.com.

BUFFALO, NEW YORK RECYCLING and Tire yard plus auto repair. Close to I-90, 3 buildings with over 15,000 sq.ft., 7.9 acres, zoned M-1, price: \$1.5M plus inventory. Call 800-718-0708, e-mail c21bal@aol.com.

SUBSCRIPTION SPECIAL
*Buy a 2-year subscription
and get a
1-year subscription FREE**
for a friend or coworker!
Call 877-777-0043 to order.
*US Subscriptions only.

Material Handlers

KUHN EQUIPMENT



2002 Cat M318 MH - 35 ft reach, hydraulic cab, heat & A/C, gen set, 3/4 yd3 grapple, and solid tires. **Call for Price!**



2011 Cat M318D MH - 8,000 hrs, 36 ft. reach, heat and A/C, hydraulic cab, sorting stick, and Cat G315B sorting grapple. **Call for Price!**



2011 Cat M322D MH - 5,205 hours, 37 ft. reach, heat and A/C, hydraulic cab, sorting stick, and NEW Cat G320B sorting grapple. **Call for Price!**

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

HAVE USED EQUIPMENT TO SELL?
Place it in American Recycler for only \$65!
877-777-0043 | AmericanRecycler.com

Material Handlers

MATERIAL HANDLERS IN STOCK

- Material Handlers with Cab Risers, Magnet Gen-sets & Rotating Grapples.
- Mobile Shears
- Portable Balers
 - New Grapples
 - New Gen-Sets & Magnets



NEW MAGNETS

- No gen-set required
- Runs off of machines batteries
- Up to 40" diameter



**WE BUY & SELL ALL
TYPES OF USED SCRAP
PROCESSING EQUIPMENT!**

**EQUIPMENT
INTERNATIONAL
303-699-7766**

APRIL 2017 ISSUE:
Additional
Distribution at ISRI

EQUIPMENT SPOTLIGHT:
Magnets

877-777-0043
sales@americanrecycler.com

Call Today to advertise! 877-777-0043
or visit us online 24/7 at
www.AmericanRecycler.com

Material Handlers

KUHN EQUIPMENT



2005 Cat M325C MH - 51 ft. reach, hydraulic cab, heat and A/C, auto greasing, 1 yd3 grapple, and solid tires. Very clean. **\$129,500**



2007 Cat M318D MH with 13,000 hours, Cat reman engine, hydraulic cab, MH boom, grapple, heat & A/C. **Call For Price!**



2006 Case CX240 with Genesis GXP400R shear - 6,600 hours, Heat & A/C, 2 function hydraulics, **price just reduced!**



2012 Eagle Ultramax 1200-25 CC - 4,100 hours, Impact Crusher, closed circuit, 2 deck screen, vibrating primary screen, magnetic separator, stacking conveyor and scale. **Call for price!**

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

Miscellaneous

EQUIPMENT FOR SALE

- Cumberland X1400 24" x 56" 5KN grinder
- Erema 120mm Film/Fiber pelletizing line
- Cumberland 16" x 28" grinder 40HP

Perry Videx LLC • 609-288-4046
fgarcia@perryvidex.com • www.perryvidex.com

Miscellaneous

1996 GEN-SET. 150 KW Gen Set JD diesel engine. 2,578 hours, 12v batteries, hertz 600, RPM 1800. Condition good. Was used as a backup power supply for the first 10 years of its life. Only used when using the Flo-Cait. Purchased used \$12,500. Would like to sell gen-set and Flo-Cait together. For set, asking \$30,000 OBO. Contact Shelby Strong at 503-659-4240 or e-mail sstrong@mcfarlanesbark.com for more information.

THE ORIGINAL CATALYTIC CONVERTOR REMOVAL TOOL: Our powerful and easy-to-use products are unsurpassed and we've been making them for 20 years! Choose from 110 or 12-volt, gas or de-canning models. Our three hydraulic models are fast, safe and effective. Custom applications provided as well! 800-999-8100, www.supershears.com

SARGENTS
EQUIPMENT & REPAIR SERVICE

*Recycling Equipment-
Your Complete Source!*

Moley Magnets
Harris/IPS Balers
Genesis Shears
Used Equipment
Onsite Portable Line Boring

We Service What We Sell

TO SEE OUR INVENTORY PLEASE VISIT
sargentsequipment.com
708-758-2062

2006 FLO-CAIT. In rough condition, needs new rock belt and wiring replacement. No discharge conveyors. Cost new \$150,000. Would like to sell Flo-Cait and gen-set together. For set, asking \$30,000 OBO. Contact Shelby Strong at 503-659-4240 or e-mail sstrong@mcfarlanesbark.com for more information.

THE ORIGINAL CATALYTIC CONVERTOR REMOVAL TOOL: Our powerful and easy-to-use products are unsurpassed and we've been making them for 20 years! Choose from 110 or 12-volt, gas or de-canning models. Our three hydraulic models are fast, safe and effective. Custom applications provided as well! 800-999-8100, www.supershears.com

ClearSpan fabric structures
1.866.643.1010 ClearSpan.com/ADAR

**WE MANUFACTURE • WE INSTALL
WE SAVE YOU MONEY**

KEEP YOUR RECYCLABLES DRY YEAR-ROUND

MADE IN USA

Fabric Structures Hybrid Buildings Foundation Solutions

ADVERTISING IN AMERICAN RECYCLER is one of the smartest things you can do for your business! It's also one of the easiest ways to increase your sales income. Call 877-777-0043 and tell us what you would like to share with our tens of thousands of readers! All ads are also shown on AmericanRecycler.com FREE!

Miscellaneous

**WE BUY AND SELL
USED RECYCLING EQUIPMENT**

HOVDE RECYCLING EQUIPMENT
800-617-5219 480-699-2460
scrapequip.com steven@scrapequip.com

Plastic Recycling Equipment

COMPLETE HERBOLD WASH LINE
Includes: Conveyors, blowers, granulators, dryers, friction washers, turbo washers, pumps, cyclones, vibrating screens, mechanical dryers, thermal dryers, pressing screws, safety devices, vibration sensors, support structures, maintenance platforms, electronic control panels, wiring, water treatment plant, etc. Motivated seller.
Also Available: Redwave plastics sorting equipment

E-mail ivan123@comcast.net

ORANGE PEEL GRAPPLE, BRAND NEW! 3/4-yard 4-tine orange peel grapple with 15-ton 360° rotator. Show floor model for sale, SPECIAL PRICE: \$18,800. Please call Moley Magnetics at 716-434-4023 or visit www.MoleyMagneticsInc.com.

Hi-efficiency, new technology.
**INCREASE PROFITS!
SWEAT FURNACES**

US Furnaces's
MAX-4000

Also:
PARTS • REPAIR • CUSTOM BUILDS
518-424-1168
www.RecyclingFurnaces.com

Tire Recycling

WHEEL CRUSHER TC-300. Only 50 hours, works up to 120 wheels per hour. Comes with loading table. New price was \$11,000. Now \$6,999. Pictures or videos are available at coastalauto@embarqmail.com or call 843-846-6688 SC 29906.

Trucks

1996 INTERNATIONAL 9200 TRUCK. A series 60 Detroit diesel, 10 speed transmission with a tandem axle drive. Blower system is home built with Halco walking floor. It has a Duroflow blower, model 4512. Clean title & has never been wrecked. Asking \$20,000 OBO. Contact Shelby Strong at 503-659-4240 or e-mail sstrong@mcfarlanesbark.com for more information.

5 Reasons to Advertise in American Recycler

NOW

1 While your weaker competitors are slashing ad budgets, act now and *easily* grab their market share.

2 Identify new prospects now, to counter any customer cutbacks. Your sales team could use help from advertising.

3 Customers have short-term memories. Your competitors who continue to advertise will take them from you.

4 Advertising is cumulative. Keep the ground you've gained and practice continuity for effective advertising.

5 You're a smart and savvy business person. You know advertising really is an *imperative* part of being a success!

American Recycler

877-777-0043

www.AmericanRecycler.com

NEW PRODUCT SHOWCASE



ASV'S RT-75 TRACK LOADER REVOLUTIONIZES THE MARKET

ASV's RT-75 features efficient hydraulics and a high capacity cooling system. ASV's patented Posi-Track undercarriage provides high ground clearance, low ground pressure, best traction and long track life.

The RT-75 features a Cummins 2.8-liter turbocharged diesel engine. The 75 hp engine produces 221 foot-pounds of torque.

The torque is transferred to the ground through direct-drive hydraulic motors. There is no need for servicing because the RT-75 does not use planetary drives.

The unit can be paired with standard attachments, such as backhoes, buckets, brush cutters and pallet forks.

ASV LLC
840 Lily Lane
Grand Rapids, MN 55744
800-205-9913
www.asvllc.com



BANDIT ENHANCES INTIMIDATOR HAND-FED DRUM CHIPPERS

Now called Intimidator™ XP, Bandit Industries has reintroduced the hand-fed drum chipper line with a new look, minor enhancements and new model names that reflect the chipper's rated chipping capacity.

Some of the equipment enhancements include new gasoline and Tier 4 final diesel engine options, with fuel saver systems standard on models using diesel power.

Hydraulic swivel discharge chutes are redesigned to be compatible with hand-crank discharges for increased parts commonality and easier upgrades. Hydraulic pressure check kits are standard and all Bandit Intimidator chippers now feature reversing autofeed as standard.

Bandit Industries, Inc.
6750 Millbrook Road
Remus, MI 49340
989-561-2270
www.banditchippers.com



HIRSCHMANN MCS PRESENTS NEW CAMERA INDICATOR

Hirschmann MCS introduced a new camera indicator that can be used on all types of mobile equipment. The system provides a direct view of the application (*i.e.* drum rotation) allowing the operator to have a constant visual of any situation.

The camera is compatible with Hirschmann's 4.3" and 7" color graphic vSCALE consoles and offers optional horizontal or vertical orientation. It also features an IP68/IP69k protection class rating and is shock and vibration resistant. The kits include the color graphic console, 12' power harness, camera, magnetic camera mount and required cable assemblies.

Hirschmann MCS
1540 Orchard Drive
Chambersburg, PA 17201
717-263-7655
www.hirschmann-usa.com



PRECISION D&S GRANULATOR KNIVES ENGINEERED FOR UPTIME

Designed for the plastic, rubber and recycling industries, high-performance granulator knives from D&S Manufacturing are machined to exacting tolerances for higher productivity and longer life under the toughest conditions. Whether you're recycling plastic bottles, tires, trash cans, car parts or nonferrous metals, these durable knives last long and deliver trouble-free performance.

D&S granulator knives undergo a proprietary heat-treating process to ensure extended life and are ground as a set for tighter tolerances. These granulator knives range in size up to 54" in cutting width.

**Hyde Industrial
Blade Solutions**
54 Eastford Road
Southbridge, MA 01550
800-872-4933
www.industrialbladesandknives.com



SP INDUSTRIES OFFERS CP-2102: HIGH DENSITY COMPACTOR

With a dual cylinder design, the CP-2102 easily handles institutional waste, packaging products, wood/pallets and corrugated materials. It helps reduce hauling costs and employee labor with fewer trips to the landfill.

Features of the CP-2102 include dual 5" cylinders, large, clear top opening of 42" x 57.5", a 40 gallon oil reservoir and a 10 hp motor with tri-volt 3 phase.

The CP-2102 offers extensive standard features and dozens of customizable options. The unit features structural steel supports (versus formed steel), superior breaker bar rigidity, thrust beam design and ram guide system.

SP Industries Inc.
2982 Jefferson Road
Hopkins, MI 49328
www.sp-industries.com
269-793-3232

BUSINESS BRIEFS

Caterpillar to establish headquarters near Chicago

■ Caterpillar Inc. will locate a limited group of senior executives and support functions in the Chicago area later this year and reaffirmed the ongoing importance of its presence in Peoria and Central Illinois.

As a result of continuing challenging market conditions and the need to prioritize resources to focus on growth, Caterpillar will not build the previously announced headquarters complex in Peoria. The current headquarters building will continue to be used for Caterpillar offices.

A limited number of senior executives will move into leased office space beginning in 2017. Once the new location is fully operational, Caterpillar expects about 300 employees to be based there, which includes some positions relocated from the Peoria area.

NAPCOR welcomes Stewart as staff member

■ The National Association for PET Container Resources (NAPCOR) has recently hired Laura Stewart as communications director.

Stewart comes to NAPCOR with over 20 years of experience in the thermoform packaging market. Most recently, Stewart worked as vice president of sales & marketing at Placon Corporation where she was instrumental in promoting the use of recycled PET in the company's packaging lines.

During her tenure with Placon, Stewart served as NAPCOR's first Thermoform Council chairperson after the organization expanded its membership to include PET sheet and thermoform members in 2008, working to increase membership, and to further the recycling of PET thermoforms and use of rPET content.

California Recycling extends e-waste contract

■ Crednology Holding Corp. disclosed that its wholly owned subsidiary, California Recycling, Inc. has signed a three year extension to its contract with the City of Calabasas, California to provide electronic waste recycling for the city, its residences and business community. California Recycling has been providing recycling services to the City of Calabasas, its residences and businesses since 2009.

California Recycling holds several recycling events every month for the city where local residents may bring their e-waste and appliances to locations provided by the city where they collect and recycle the products. These events are promoted by the city at no cost.

Muncie Power Products hires new director

■ Muncie Power Products, Inc. has hired a new director – zone sales team, Mike Rasnick.

Rasnick came to Muncie Power Products with 15 years of sales experience within the industry, having last served in a similar leadership role.

Within his position as director – zone sales team, Rasnick will work with his team of 11 zone sales managers to best serve the company's channel partners.

Agilyx develops first facility using its pyrolysis system

■ Agilyx Corporation has secured project financing and is proceeding with the construction of a 10 TPD production facility near Portland, Oregon that converts polystyrene (foam cups, packaging materials, and Styrofoam) into styrene monomer.

With this project development launch, Agilyx expands its commercial applications to include its first waste polystyrene pyrolysis plant. The plant is targeted to be producing styrene in Q2 2017.

The Agilyx chemical recycling technology returns polystyrene waste to its highest value – a styrene monomer product that can be blended into the virgin styrene manufacturing cycle. The process transforms previously single-use polystyrene items and a widely used, durable, and ubiquitous manufacturing material (styrene) into a resource that can be fully recycled. It is greenhouse gas favorable over traditional styrene manufacturing.

Call2Recycle Canada, Inc. celebrates 20 years

■ Call2Recycle Canada, Inc., Canada's national consumer battery collection and recycling organization, is celebrating the 20th anniversary of its commitment to help Canadians collect used batteries for recycling and record-breaking collections in 2016.

The organization was founded in 1997 by the battery industry long before provincial mandates to collect and recycle batteries. The industry sought to voluntarily control the amount of waste it was contributing to the waste stream through a national collection and recycling effort. Since its inception, the Call2Recycle program in Canada has collected more than 13 million kilograms of batteries for recycling.

2016 marks the program's best year by far – a record of more than 2.7 million kilograms of household batteries were collected in Canada in 2016 – an increase of 12 percent over 2015.



Purchase a gift subscription
for someone special today.

877-777-0043
www.AmericanRecycler.com



CONSTRUCTION & DEMOLITION

Representation in construction up 0.6 percent from last year

Union representation in the construction industry (covering all occupations) rose from 14.0 percent in 2015 to 14.6 percent in 2016, according to an annual report issued by the Bureau of Labor Statistics (BLS).

The number of union represented employees in the industry also rose over the year, from 992,000 to 1,095,000, while the total number of workers in the industry rose from 7,109,000 to 7,488,000. Union membership in the industry similarly increased, from 13.2 percent to 13.9 percent.

Among workers in construction and extraction occupations, whether employed in the construction industry or another industry, union representation and membership increased by an even greater margin in 2016. Representation rose from 18.3 percent to 19.4 percent, and membership rose from 17.2 percent to 18.4 percent.

Over the past decade, the percentage of union represented employees in the industry has gone up and down, starting at 13.6 percent in 2006 and peaking at 16.2 percent in 2008, as shown in the graph below.

BLS reports that the construction industry continues to be among the private industries with the highest rates of union membership. The industry's 13.9 percent union membership is outpaced only by the utilities (21.5 percent), transportation and warehousing (18.4 percent), and telecommunications (14.6 percent) industries.

The report also addresses earnings. According to BLS, the median weekly earnings of all employees in the construction industry rose from \$784 to \$822 in 2016. Union represented workers' earnings were 47 percent higher than nonunion workers' earnings in the industry, but they rose at a slightly lower rate over the year. Union represented workers' weekly earnings increased about 4.8 percent to \$1,146 from \$1,093, while nonunion workers' increased about 5 percent to \$780 from \$743.

The median weekly earnings for workers employed in construction and extraction occupations across industries rose from \$749 to \$784 in 2016. Here, union represented workers' weekly earnings rose significantly more than nonunion workers' over the year, increasing about 7.3 percent from \$1,064 to \$1,142, as compared to nonunion workers' earnings, which increased about 3.6 percent from \$695 to \$719.

Assessments of BLS industry data should consider that such data cover surveyed employees at all levels and classifications, including personnel that are not typically organized, such as office staff. The data also covers all sectors of the industry.

Construction employment declined in 110 out of 358 metro areas in 2016

Construction employment declined in 110 out of 358 metro areas between December 2015 and December 2016, was stagnant in another 65 and increased in 183, according to a new analysis of federal employment data released today by the Associated General Contractors of America. Association officials noted that the disappointing new jobs data coincides with data showing a drop in most infrastructure spending in 2016. This information emerged as a broad coalition of business, labor and transportation interests from across the country urged president Trump to deliver on his promise to rebuild the country's aging infrastructure.

"There are two main reasons so few areas added construction jobs last year—they couldn't find enough new workers to hire or they couldn't find enough work to require new hiring," said Ken Simonson, the association's chief economist. "In some markets, the solution is more workforce development measures, while other markets need new demand for construction before firms will begin adding jobs. In particular, spending on critical transportation, sewage and water infrastructure declined last year."

The largest job losses from December 2015 to December 2016 were in Houston-The Woodlands-Sugar Land, Texas (-11,200 jobs, -5 percent), followed by Orange-Rockland-Westchester, New York (-5,500 jobs, -12 percent); and Los Angeles-Long Beach-Glendale, California (-5,200 jobs, -4 percent). The largest percentage declines for the past year were in Kankakee, Illinois (-15 percent, -200 jobs); Casper, Wyoming (-13 percent, -400 jobs) and Wichita, Kansas (-13 percent, -2,100 jobs).

Denver-Aurora-Lakewood, Colorado (10,400 jobs, 11 percent) added the most construction jobs during the past year, followed by Orlando-Kissimmee-Sanford,

Florida (9,700 jobs, 15 percent); Las Vegas-Henderson-Paradise, Nevada (8,700 jobs, 16 percent) and Tampa-St. Petersburg-Clearwater, Florida (8,700 jobs, 13 percent).

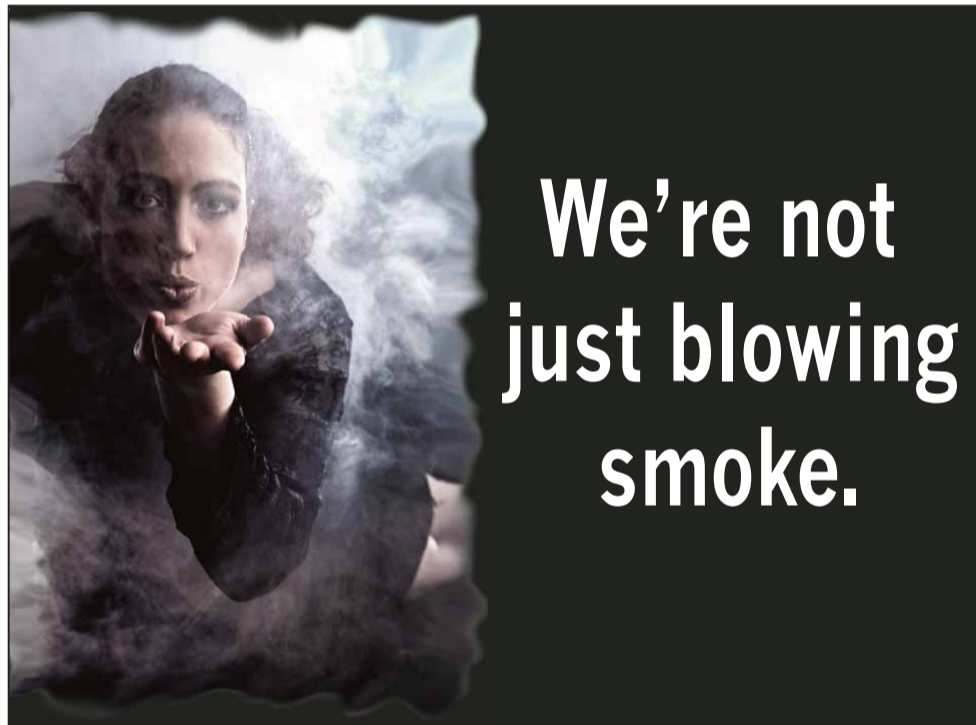
The largest percentage gains occurred in Boise City, Idaho (18 percent, 3,400 jobs), followed by El Centro, California (17 percent, 500 jobs); Las Vegas-Henderson-Paradise and Orlando-Kissimmee-Sanford. The number of metro areas with year-over-year job increases - 183, or 51 percent - was the lowest since September 2012, the economist noted.

Among major infrastructure categories, public spending fell 18 percent over the year for sewage and waste disposal systems; 5.3 percent for transportation facilities such as transit, airports and passenger rail; and 0.9 percent for water

supply. Highway and street construction posted a modest increase of 1.5 percent.

Association officials said the new metro construction employment data comes out as hundreds of employers from across the country are urging President Trump to deliver on his promise to invest in rebuilding the nation's aging infrastructure. In particular, the firms noted that aging and congested transportation networks are affecting their bottom line and undermining their ability to add jobs.

"The business community is counting on president Trump to act on his pledge to rebuild our aging infrastructure," said Stephen E. Sandherr, the association's chief executive officer. "The fact is, employers can't compete and succeed if their workers are stuck in traffic and their products are being rerouted around unsafe bridges and crumbling roads."



We're not just blowing smoke.

Advertising in American Recycler
WORKS

877-777-0043

www.AmericanRecycler.com

Call or e-mail
*NOW to receive
our 2017 Media Kit.*
A detailed quote can
be customized just for you
upon request!



R.M.Johnson Co. will be here for you and your equipment needs for years to come!



Kristy Harren, Elaine Johnson, and Kelly Donabauer
Still Original family-owned and continuing strong with second generation owners after 45 years!

In an ever-changing market and business, people and companies come and go. Here at R.M. Johnson Company (E-Z Crusher), we are the ONE solid foundation. We will continue to stay strong and be here for your recycling equipment needs.

With over 45 years' experience under the same ownership, when we say we understand your equipment needs, we mean it! Our sales team has over 87 years combined experience in the scrap and recycling industry!

R.M. JOHNSON COMPANY

890 Norway Drive
Annandale, MN 55302
www.EZCrusher.com

800-328-3613

320-274-3594
Fax 320-274-3859
davev@ezcrusher.com



DAVE VAN VLEET, SALES MANAGER
30+ YEARS OF EXPERIENCE



JAMIE MILLER, CEO/CONTROLLER
30+ YEARS EXPERIENCE



JIM ADAMS, SALES WESTERN STATES
20+ YEARS OF EXPERIENCE



TOM HARREN, TRANSPORTATION MANAGER
20 YEARS OF EXPERIENCE



LARRY DONNAY, SALES EASTERN STATES
30+ YEARS OF EXPERIENCE



DENNIS HUHN, SERVICE SPECIALIST
25+ YEARS OF EXPERIENCE



DON DONABAUER, SERVICE MANAGER
25+ YEARS OF EXPERIENCE

Stop and see us at ISRI Booth #2608 and meet one of our sales specialists!

R.M. JOHNSON COMPANY WELDING STAFF WITH AN AVERAGE EMPLOYEE RETENTION OF 20 YEARS! WE PLAN TO BE HERE FOR ALL OF YOUR RECYCLING EQUIPMENT NEEDS.



Recycled copper and brass markets are improving

by MAURA KELLER

mkeller@americanrecycler.com

During the past few years, the increased use of copper for innovative strategies combined with a strong growth in emerging economies, has resulted in significantly higher copper demand.

The recovery and recycling of copper helps to satisfy this demand and to build a sustainable future. But while scrap is a low cost avenue that provides economic and sustainability advantages, after decades of stability, the viability of the recycling stream is at risk. The primary driver is cross contamination between conventional scrap and new types of scrap from certain lead free alloys.

According to the Copper Development Association, Inc. (CDA) many copper and copper alloy semi-finished and finished products are made almost entirely from recycled material, and many more with a mix of new and recycled copper. In fact, copper holds as much as 90 percent of new copper value. The CDA is the not-for-profit, market development, engineering and information services arm of the copper industry, chartered to enhance and expand markets for copper and its alloys in North America

“Copper can be infinitely recycled without losing its properties. As such, the copper industry is highly dependent on the economic recycling of surplus products and material otherwise known as scrap,” said Thomas Passek, president of the CDA, headquartered in New York City. The CDA brings together the global copper industry to develop and defend markets for copper and to make a positive contribution to society’s sustainable development goals. “Using scrap as a low cost feedstock contributes to a sustainable planet and also keeps costs low for both producers and users of copper-based products that are vital to our way of life.”

However, as the CDA explains, if a significant portion of the scrap stream becomes unusable, producers will be forced to rely on higher scrap grades and virgin materials as feedstock which will increase the cost of the material. This will be passed down to distributors, manufacturers and end-users, which will degrade the competitive position of the entire value chain.

“Certain types of copper and copper alloy scrap need to be recycled separately to prevent the introduction of impurities to melting operations,” Passek said. For example, scrap from copper alloys containing lead should not be used as feedstock to produce copper alloys that do not contain lead.

“From a recycling perspective, separating different types of copper scrap can be challenging in practice as



Metal recyclers are breathing easier with the value of recovered copper and brass from demolition contractors brings more revenue.

PHOTO COURTESY OF ROCKAWAY RECYCLING

some scrap forms are difficult to distinguish without chemical analysis,” Passek said. “In some cases, recyclers may not be aware that certain types of scrap should be separated.”

To help address this, CDA formed an industry-working group to raise awareness and provide guidance to the value chain on best practices for scrap management. The proper segregation of various types of copper and copper alloy scrap is essential to protecting the long-term viability of the recycling stream.”

So how can recyclers handle the issues of cross contamination? Quite simply, through strictly segregating and recycling certain types of scrap in closed loop systems. This is far more difficult in practice as scrap flows are complex and there are limitations in even the most sophisticated sorting operations.

Luckily the current impurity levels are relatively low and manageable as plumbing components made from lead-free alloys have long service lives and will not be recycled en masse for 10+

years. But as this will delay the impact if no action is taken, the issue will accelerate when lead free components are inevitably recycled on a significant scale.

For secondary or end-of-life scrap that consist of brass and copper (e.g. water meters, valves, etc.), managing purity is more complicated for recyclers. According to the CDA, secondary scrap is difficult to segregate by alloy type as components have to be sorted by hand and leaded alloys are virtually impossible to distinguish from lead-free alloys on a visual basis.

Handheld spectrometers can identify alloy types, but sorting by individual part is difficult as scrap loads accumulate into larger batches. Product assemblies containing subcomponents made from different alloys also present challenges as internal components might not even be visible from the outside. As only trace amounts of impurities are needed to cause issues, the current solutions to effectively segregate secondary scrap are proving to be problematic to the industry.

According to the CDA, the recycling process for brass is less energy intensive as compared to aluminum and steel and yields a smaller carbon footprint. The ability to reuse brass from recycled materials is a tribute to an industry that is environmentally conscious regarding its use of natural resources. In fact, the entire economy of the brass industry is dependent on the economic recycling of any surplus products.

Indeed, but brass turnings can be reclaimed for 75-85 percent of the original value. The unmatched secondary value of brass scrap creates an advantageous net material cost for customers compared to alternative materials.

But like copper, the CDA is quick to point out that some lead-free alloys replace lead with other elements like bismuth, silicon and sulfur. According to the CDA, “the recycling of lead-free alloys with such additives is introducing new elements to the conventional scrap stream which act as deleterious impurities if mixed with the wrong alloy. Even at low concentrations, impurities can cause costly production and product quality issues for primary and secondary cathode producers, ingot makers, semi-finished product manufacturers, finished product manufacturers and end-users. Some impurities can irreversibly concentrate in the metal stream and cannot be removed with current refining technology. Thus, background levels of impurities could rise to problematic levels without proper management.”

Similarly, instigating a closed loop recycling system for brass can off-set the cross contamination of brass components with other materials. In addition, scrap processors can utilize a universal product marking system to help sort secondary scrap by alloy type. Many manufacturers already mark brass plumbing products with “NL” or “LF” to indicate “No-Lead” or “Lead-Free”. The CDA said a replacement marking could indicate lead-free and also identify the alloy class (e.g. binary, bismuth, silicon, etc.). Such a system would facilitate closed loop secondary scrap flows and mitigate the potential for cross-contamination. Product markings could also increase the efficiency of sorting operations and create markets for new scrap categories.

Growth Potential

According to the International Copper Association (ICA), it is estimated that since 1900 two-thirds of the 550 million tons of copper produced are still in productive use. Of this, approximately 70 percent is used for electrical applications and 30 percent for nonelectrical applications.

IF YOU NEED A CARPET STEWARDSHIP PLAN, YOU'RE NOT ALONE.

The era of AB 2398 has begun. To comply with the new California law, all carpet manufacturers must register and submit a stewardship plan to CalRecycle. Fortunately, you don't have to do it alone.

You can participate in the stewardship plan developed by Carpet America Recovery Effort (CARE). We can ensure that you comply with CalRecycle's requirements.

As of April 1, 2012, retailers and wholesalers will only be able to sell from manufacturers who are in compliance with AB 2398.

So act now.

To participate in CARE's stewardship plan, go to www.carpetrecovery.org or call 706-428-2127.



Seventy-three percent of construction firms plan to expand employment in 2017

According to the AGC of America (The Associated General Contractors of America), 73 percent of construction firms plan to expand their payrolls in 2017 as contractors expect private and public sector demand to grow in all market segments, according to survey results released by the Associated General Contractors of America and Sage Construction and Real Estate. Despite the general optimism outlined in Expecting a Post-Election Bump: The 2017 Construction Industry Hiring and Business Outlook, many firms report they remain worried about the availability of qualified workers and rising health and regulatory costs.

"Contractors have relatively high expectations for 2017 as they predict the economy and demands for all types of construction will grow," said Stephen E. Sandherr, the association's chief executive officer. "As a result of this optimism, many firms expect to expand their headcount next year."

All but a handful of contractors expect the overall construction market to expand or remain roughly the same in 2017 compared to 2016. A total of 46 percent of respondents said they expect a higher dollar volume of projects in 2017 than in 2016, versus just 9 percent who expect a lower volume, for a net positive reading (based on unrounded numbers) of 36 percent. The remaining 45 percent expect volumes to remain more or less constant.

Contractors had a positive outlook, on net, for all 13 market segments included in the survey. Respondents are most optimistic about the outlook for both the hospital and retail, warehouse and lodging markets (23 percent net positive for both). Respondents were also positive about the outlook for private office (20 percent net positive), manufacturing (18 percent), highway (15 percent) and public building construction (15 percent) construction. And they are optimistic about the prospects for higher education construction (14 percent), K-12 school construction (14 percent) construction and water and sewer construction (14 percent).

The only market segment where contractors are less optimistic this year than they were last year is the multifam-

ily residential sector, where there is an 11 percent net positive for the year vs. a 14 percent net positive last year. It is important to note, however, that most respondents completed this survey in the days and weeks following the elections and may have based some of their optimism on the recent growth in stock market values and the fact the president-elect has repeatedly promised to make new investments in infrastructure, association officials noted.

Association officials noted that 73 percent of firms say they will increase their headcount in 2017. That hiring will only lead to modest increases in the overall size of firms, however. Sixty-six percent of firms report their planned hiring will increase total headcount between 1 and 25 percent.

Among the 28 states with large enough survey sample sizes, 94 percent of firms in Massachusetts plan to expand their payrolls in 2017, more than in any other state. Meanwhile, 45 percent of firms in Illinois report they plan to reduce headcount this year, more than in any other state.

One reason many firms expect to make only slight increases to their headcounts is that they appreciate how difficult it will be to find enough qualified workers to hire. Indeed, 73 percent of firms report they are having a hard time finding qualified workers. And 76 percent of respondents predict that labor conditions will remain tight, or get worse, during the next 12 months.

Most firms report they are increasing pay and/or benefits to retain or recruit qualified staff to deal with worker shortages. Fifty-two percent report they have increased base pay rates, 35 percent report they are providing incentives and/or bonuses and 28 percent report they have increased contributions to employee benefits. Even as firms increase compensation, 52 percent report they plan to increase their investments in training and development in 2017 compared to 2016.

"Contractors remain quite concerned about labor shortages, tight margins and growing costs," said Ken Simonson, the association's chief economist. "In particular, as additional older workers reach retirement age, firms will

struggle to find qualified workers to replace them."

In addition to coping with worker shortages, contractors are also worried about the continued increase in health care and regulatory compliance costs. Eighty-four percent of firms report the cost of providing healthcare for their employees increased in 2016 while 82 percent expect their healthcare costs will increase in 2017. And 41 percent of firms report they are worried about the growth in federal regulations.

Even as firms spend more on health-care and regulatory compliance, they are prepared to increase investments in information technology (IT). According to the Outlook, 35 percent of firms report they invested at least 1 percent of their revenue in IT last year. In addition, 40 percent say their IT investments will increase in 2017.

Association officials noted that overall economic conditions indicate 2017 should continue to be positive for the construction industry. But they added that it appears the Outlook responses are based as much in high expectations for the incoming administration and the president-elect's commitment to invest in infrastructure, improve federal health care laws and reduce regulatory burdens.

"While the new administration and its stated policy objectives offer many reasons for optimism, there is a significant risk to the industry if the new Congress and administration under-deliver," Sandherr said referring to policy proposals the association is making. "If plans to invest in infrastructure, reform healthcare laws and roll back regulations are delayed, many contractors will likely scale back their plans to expand headcounts."

Sandherr added that the association has crafted two plans to help guide the administration and Congress and ensure they act quickly to deliver on their election pledges. The first plan is the association's Agenda to Rebuild Infrastructure and the Construction Workforce, which outlines a series of steps federal officials should take to finance and fund new infrastructure investments and accelerate federal reviews. The second plan identifies regulations and executive orders that new administration should cancel, improve or reconsider.

"Together these two plans offer a clear roadmap for the administration and new Congress to help deliver on the promise of this year's relatively positive construction outlook," Sandherr said. "As long as the new administration follows through on its commitments, construction firms will see more demand for their services and, potentially, slightly better profit margins."

The Outlook was based on survey results from nearly 1,300 construction firms from 49 states and the District of Columbia. Varying numbers responded to each question. Contractors of every size answered over 30 questions about their hiring, workforce, business and information technology plans.



EQUIPMENT SPOTLIGHT

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

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

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.

UPCOMING TOPICS

- APR Magnets
- MAY Waste Containers
- JUN Primary Reduction
- JUL Auto Crushers
- AUG Tire Recycling

MCA honors outstanding building projects

The Metal Construction Association (MCA) 2016 Chairmans Awards are given to the year's most exceptional building projects involving MCA member companies. Awards are based on overall appearance, significance of metal in the project, innovative use of metal, and the role of metal in achieving project objectives.

The MCA Chairman's Awards were given in eight categories: overall excellence; residential; metal roofing; education, primary and secondary schools; education, colleges and universities; institutional; municipal; and commercial/industrial.

The 2016 Chairman's Award winners in each category were:

Overall Excellence: Gemma Observatory, Southern New Hampshire
MCA Member Manufacturer: Umicore Building Products USA, Inc.

Architect: Anmahian Winton Architects

Contractor: Patriots Builders (Scott Estabrooks)

Metal Installer: Crocker Architectural

Metal Fabricator: Crocker Architectural

Residential: Tripartite House, Houston, Texas

Building Owners: Rame Hruska and Russell Hruska

MCA Member Manufacturer: Umicore Building Products USA, Inc.

Architect: Rame Hruska, AIA and Russell Hruska, AIA

Contractor: Intexure Design Build
Metal Installer: Ideal Roofing



Tripartite House in Houston, Texas won top honors from Metal Construction Association.

Metal Fabricator: Ideal Roofing
Metal Roofing: Erie Residence, Erie, Pennsylvania

Building Owner: Grack
MCA Member Manufacturer: Umicore Building Products USA, Inc.

Architect: A.J. Grack Business Interiors

Contractor: A.J. Grack Business Interiors

Metal Installer: A.J. Grack Business Interiors

Metal Fabricator: Umicore Building Products USA, Inc.

Education – Primary and Secondary Schools: Fayetteville Montessori Primary School, Fayetteville, Arkansas

Building Owner: Victoria Butler
MCA Member Manufacturer: Metal Sales Manufacturing Corp
MCA Member Coating Manufacturer: Arkema Inc.

MCA Member Coating Manufacturer: Valspar

Architect: Marlon Blackwell Architects

Contractor: Nabholz Construction Corporation

Metal Installer: Harness Roofing Inc.

Education – Colleges and Universities: University of Arkansas Champions Hall, Fayetteville, Arkansas
Building Owner: University of Arkansas

MCA Member Manufacturer: McElroy Metal Inc.

MCA Member Coating Manufacturer: Valspar

MCA Member Coating Manufacturer: Arkema Inc.

MCA Member Accessories: DI Roof Seamers

MCA Member Coil Coating Manufacturer: Precoat Metals

Architect: SmithGroupJJR / Miller Boskus Lack

Contractor: Nabholz Construction

Metal Installer: Harness Roofing Inc.

Metal Fabricator: McElroy Metal Inc.

Institutional: Saint Paul Academy Huss Center for the Performing Arts, Saint Paul, Minnesota

Building Owner: Saint Paul Academy

MCA Member Manufacturer: Accurate Perforating

MCA Member Coating Manufacturer: Arkema Inc.

MCA Member Manufacturer: Arconic Architectural Products

Architect: HGA Architects & Engineers

Contractor: McGough

Metal Installer: MG McGrath, Inc.

Metal Perforator: Accurate Perforating

Metal Fabricator: MG McGrath, Inc.

For a full list of winners, view this article on www.AmericanRecycler.com.

EQUIPMENT FOR SALE

944 LIEBHERR MATERIAL HANDLER

SN# 793-20848
HOURS 14412




2000 VOLVO EXCAVATOR #C360LCC03291
500R GENESIS SHEAR
SN# 5004071
HOURS 15147



1997 CATERPILLAR MATERIAL HANDLER WITH GRAPPLE
SN# 325BCAT325BTB6D

208-431-7400

IRON HORSE EQUIPMENT



1.866.643.1010 ClearSpan.com/ADAR

WE MANUFACTURE • WE INSTALL WE SAVE YOU MONEY

BUILDINGS OF 1,000 USES

Fabric Structures
Natural Light & Low Cost Per Sq Ft

Hybrid Buildings
Benefits of Metal & Fabric Buildings

Foundation Solutions
Build Anywhere & Quick Construction

ZERO PERCENT FINANCING AVAILABLE RESTRICTIONS MAY APPLY **MADE IN USA**

EQUIPMENT SPOTLIGHT

Truck Tarping Systems

by MARY M. COX

maryc@americanrecycler.com

In construction and demolition settings, a standard aspect of the operation is the hauling away of unwanted material. Trucks used to perform that task often utilize tarping systems to contain the load. There are a variety of options offered in the market, so the right tarp can be used for the job in question.

Deroche Canvas is a leading mid-Atlantic region manufacturer of standard and custom industrial tarps for transportation end markets such as waste removal, recycling, general hauling, construction, environmental remediation and agriculture. "We also install many different types and brands of tarping systems at our Belvidere, New Jersey and Dayton, Ohio facilities," said Kevin Gulick, vice president, operations. "Founded in 2001, we're known for high quality products and superior service. Our customers know that they can count on us for

our production methods. Product quality is maintained, our customers can return to the road faster and ease of use for the operators may even improve. For example, tarps made from our varied mesh materials are some of our most popular products. Mesh allows a tarp to be lighter and easier to handle than other material options. Also, due to the weave of the mesh, it provides the strength and durability needed for transporting many loads. Other applications may require the use of vinyl and airbag material. As a durable and waterproof material, vinyl is ideal for applying a truck or trailer custom logo and a variety of colors are available," concluded Gulick.

John Beule, sales manager, Harp's Tarps, explained, "Our tarps, manufactured in the U.S. since 1976, are used for containing aggregate in the dump truck trailer market, and to cover product in the flatbed trailer market. We also manufacture automatic tarp systems, and we take pride in the way we manufacture our products. Our main focus for tarps is durability, and for tarp systems it is ease of installation. This is our goal for how we design and manufacture our products: the product will lower the total cost of ownership and the customer saves money in the long run by avoiding repeated product replacement."

He also said that with the passing of several highway renovation bills, and with the potential for more such legislation in the future, Beule looks for continued growth as the firm's products are quickly adapted for industry changes, as they arise.

"The growth Harp's Tarps has experienced over the years is due in part, to our flexibility and responsive-



Deroche Canvas

ness to our customers' needs. Our employees are dedicated to customer satisfaction. Our sales representatives are specialists in the field, and they want to get to know you, to understand your business, and to satisfy your needs," said Beule.

Pulltarps offers a full line of tarping systems: semi-automatic systems, manual & electric arm systems, front to back cable systems, tower systems, bunker systems, and weather and shade curtain systems. Bryan Elzey, general manager, described the details: "Our semi-automatic Pulltarps systems are great for most applications and are an economical solution. Standard systems can be converted to a manual arm kit. The manual arms mount to the side of the truck body and lift the tarp over the load. Automatic arms have an electric motor to retract the tarp back into the housing. The arms automatically deploy the tarp using spring tension within the arm pivot. Automatic arms are great for any application up to 40'. Tarping

See TRUCK TARPS, Page B7



Harp's Tarps

tarps made in the U.S. from the best materials available. We understand the challenging environments in which our products are used, tailor our tarps to suit customer needs and deliver consistent quality. That is why you see our logo on truck tarps all over the East Coast," Gulick commented.

Deroche opened a Dayton location in 2016 and in addition to growth in that region, continues to expand beyond its mid-Atlantic roots. Gulick added, "We offer customers a unique proposition; tarps of the highest quality for their dump trucks, trash trucks, flatbed trailers, dumpsters, etc. installed on the system brands of their choice."

"This industry is constantly on the move, and our operations focus on speed and quality. As technology evolves, we continually improve



Pulltarps Manufacturing

MANUFACTURER LIST

- AAA Tarps**
Aaron Earnhardt
866-840-1354
www.aaatarps.com
- Aero Industries, Inc.**
Jeff Boyd
800-535-9545
www.aeroindustries.com
- A&R Tarpaulins, Inc.**
Kenny Weisbart
909-829-4444
www.artarpaulins.com
- Deroche Canvas**
Kevin Gulick
800-448-3805
www.derochecanvas.com
- Detroit Tarp Inc.**
Jim Pinter
800-457-5054
www.detroittarp.com
- Edward's Canvas Inc.**
Tina Frost
405-238-7551
www.edwardscanvas.com
- Harp's Tarps**
John Beule
800-282-4277
www.harpstarps.com
- Kaplan Tarps**
Nick Kaplan
800-464-3042
www.kaplantarps.com
- Montana Canvas**
Curt Dinges
800-235-6518
www.montanacanvasstarps.com
- Mountain Tarp**
Robin Collins
800-248-7717
www.mountaintarp.com
- Pulltarps Manufacturing**
Bryan Elzey
619-449-8860
www.pulltarps.com
- Roll-Rite, LLC**
Jim Kenyon
800-297-9905
www.rollrite.com
- Shur-Co, LLC**
Scot Fuhrman
800-327-9287
www.shurco.com
- TarpcO**
Paul Sabol
800-345-8277
www.tarpcO.com
- Tarps etc.**
Rae Brown
800-771-8277
www.tarpsorlando.com
- Tarping Systems, Inc.**
Jason Brookshire
888-838-3229
www.dumptrucksystems.com
- Verduyn Tarps**
Zak Verduyn
866-270-0065
www.verduyntarps.com

DADE
Capital Corp.



800-823-9688

Fax 419-931-9001

www.DADECapital.com

FINANCING
LOANS or LEASES • BANK RATES
ANY WASTE OR RECYCLING EQUIPMENT
NEW OR USED

Visit www.DADECapital.com
for an always-up-to-date
list of available equipment.

Photos included!

GAF is first roofing manufacturer to have Green Circle Certify Recycled Content of Polyiso insulation

GAF, a roofing manufacturer, shared that their EnergyGuard™ Polyiso insulation board has been certified for recycled content by GreenCircle Certified, which verifies the percentage of pre- and post-consumer recycled content in the product. GAF is the first roofing manufacturer to earn this distinction from Green Circle for

polyiso roof insulation, which has the highest R-value per inch of any rigid foam board.

Architects and design professionals are increasingly asking for this type of third-party certification of environmental claims. It can increase the value of the product in green building rating systems such as

LEED® and gives assurance that manufacturers' documentation is valid. The certification was awarded after GreenCircle Certified, an independent third party, performed a thorough analysis, including a site visit of three GAF insulation manufacturing plants and supply chains. This process verified the accuracy and quantity of all

recycled content claims made by the manufacturer.

EnergyGuard Polyiso insulation board is designed for use in practically any low-slope roof application, including built-up roofs, modified bitumen, or most single-ply roofing systems.

USA Insulation expands into Toledo, Ohio

USA Insulation expanded its presence into Toledo, Ohio in the beginning of February. This newest development of the national franchise will bring dozens of new jobs to the Toledo area, adding to the current trends of investment and economic stimulus throughout the city and Northwestern Ohio region.

"Demand for USA Insulation's retro fit, non-toxic product in the Toledo area was so high, we had to grow our presence in Northwestern Ohio to better help homeowners make their homes more comfortable and reduce their utility costs. We'd been servicing the Toledo market for over 10 years out of our corporate headquarters in Cleveland, and the need became too great for that to stay sustainable," said Jack Jones, general manager of the newest Toledo branch of USA Insulation.

USA Insulation franchises have provided state-of-the-art foam insulation to over 60,000 homes in the U.S. The company plans to continue this growth trend by expanding with franchises in key markets across the U.S.

Where do business leaders find their inspiration?

"WasteExpo has been inspiring me since I started my company. It set a fire underneath me and today, it helps our team keep a pulse on an industry that is constantly changing and innovating."

Josh Allen
Global Disposal
Reduction Services, Inc.
Waste360
40 Under 40 Winner



Only at WasteExpo 2017

Innovation is top of mind at WasteExpo. It's where the best and brightest, like Josh, converge to meet, exchange ideas and introduce new technologies that will impact the industry for years to come. WasteExpo is THE event—with 600+ exhibitors, a comprehensive education program and a venue ideal for doing business. There's nothing else to think about—you need to be here.

Learn more at www.wasteexpo.com

American Recycler Readers Save!

Save 25% off the Conference Program + FREE Exhibit Hall Admission.
Register at wasteexpo.com with code **VPS** today!

Conferences & Special Events: May 8-11, 2017 • Exhibits: May 9-11, 2017
Ernest N. Morial Convention Center (New Orleans, LA, USA)



an event by
Waste360™

COMMERCE • EVENTS
EDUCATION • INFORMATION

Associated with:



Produced by:



In Collaboration with:



It only takes



With just **ONE** call to **American Recycler News**, you'll get the equivalent of an entire sales force.

DON'T WAIT ONE MORE MINUTE!

Call 877-777-0043 or e-mail sales@americanrecycler.com.

INDUSTRY PROFILE

A Closer Look

by Donna Currie

Franklin Miller

Jennifer Cerruto • 973-535-9200

Jennifer Cerruto, the marketing manager for Franklin Miller, said that the company got its start in 1918, when the company started manufacturing an ice crusher. When the company began to broaden its product line, the decision was made to start building larger, more industrial machines.

Now nearing its 100th anniversary, the company manufactures a wide variety of machines for not only the recycling industry, but also machines for related industries. Among others, their products are used for waste water treatment, plastic recycling; electronics shredding; paper, cardboard, metal and rubber recycling and rock crushing. The machines are also used for solid waste and food waste processing, powder and bulk materials processing, and in the chemical pharmaceutical, concrete, agricultural, and oil and gas industries.

Some of the more unusual customers, Cerruto said, are cruise ships that must chop or shred all food products to pieces below a certain size before the food is disposed of in the ocean. She also said that jails and prisons make use of their equipment for wastewater processing. "They flush everything down the toilets," she said, "sheets, shoes – everything they can. It's a common problem."

The food and pharmaceutical industries are not the first you'd think of when it comes to the need for industrial grinders, shredders, crushers, or other machines that are typical in the recycling industry, but Cerruto said that those industries are also good customers.

In the plastics processing line, Cerruto said that the mid-size TM2300 is a popular machine for shredding bottles, containers and crates. Besides shredding plastics, it can also be used for wood. For companies that don't need something quite that large, the TM1400 and TM1600 can handle plastics on a smaller scale.

While some industries are so consistent that they can buy machinery off the shelf, Franklin Miller customizes machines for most of their customers, so that the machines do exactly what is needed.

Bill Galanty, the current chief executive officer, is the second generation of the current ownership of the company. His father, Harold, bought the company from the original owners in the 1950s. Bill joined the company in 1974 and became president in 1991. Bill's son, Jake, is the company's general manager and also works in industrial sales.

When Bill took over the company, he expanded the company's product line even further than it had been before, adding machines for chemical processing and expanding the shredding and recycling products. "I'm proud of our committed staff, that we manufacture fine equipment in the U.S., sell it worldwide and are on our third generation as a family business," Bill said.

Cerruto has been with the company for 11 years and has seen quite a bit of growth even in that short time, compared to the long history of the company. She noted that all of the manufacturing is done on-site, and to keep up with demand, the company added on to the factory last year, doubling the size. They also built a new test room where machines can do test runs of customer materials. The tests are recorded on video so the customers can watch them remotely, while some customers prefer to come to the site to watch the tests in person.

"The demand has gone up," Cerruto said, which has helped the company grow to the point where they needed the extra space, but they have also continued to expand the product line. She said that the wastewater products have opened up a lot of opportunities. But it's not all new business. "We have a lot of return customers," she said. "We retain customers very well, competing in a crowded marketplace."

While there are plenty of competitors, Cerruto said, "There are companies that do some things we do – but they might not do all of what we do."

The company employs approximately 50 people at the facility but, "there are sales reps throughout the world," she said. Besides sales reps, there are also service people who can go where the customer needs them. "We can send somebody out, no matter where."

Cerruto said that the best thing about her job is "working for a company that is dedicated to the customer. I talk to happy customers all day." Later, she added, "It's a great place to work. It's a great family atmosphere. It's a fun place to work."

AISI publishes new cold formed steel framing research reports

The American Iron and Steel Institute (AISI) has published three new cold formed steel framing research reports: 1) "RP15-3: Advancing Seismic Simulation of Cold Formed Steel Framed Buildings," 2) "RP17-1: Experimental Study on System Reliability of Cold Formed Steel Roof Trusses," and 3) "RP17-2: Monotonic and Cyclic Response of Single Shear Cold Formed Steel-to-Steel and Sheathing-to-Steel Connections."

The reports cover the following topics:

RP15-3: Advancing Seismic Simulation of Cold Formed Steel Framed Buildings. This report advances performance-based seismic design of cold formed steel framed buildings by introducing computationally efficient and accurate modeling tools that predict the behavior of the building, the individual cold formed steel components, and connections in a seismic event. The research was conducted at Virginia Tech.

RP17-1: Experimental Study on System Reliability of Cold Formed Steel Roof Trusses. This experimental study of cold-formed steel roof trusses is part of a project funded by the National Science Foundation, "Advancing System Reliability With Application to Light-Framed Structures." Test data are provided for examining cold-formed steel structural reliability in roof trusses as a system versus individual components. The research was conducted at the University of North Texas.

RP17-2: Monotonic and Cyclic Response of Single Shear Cold Formed Steel-to-Steel and Sheathing-to-Steel Connections. This research project resulted in the development of load-deformation response models to simulate the performance of screw fasteners in a seismic event. Since they are the primary connectors in light steel framing, this research provides more accurate data for conducting whole building seismic analysis. The research was conducted at Virginia Tech.

Copper and brass recovery

■Continued from Page B1

ICA, the leading authority on copper end-use, commissioned a study (which was conducted by All China Marketing Research Co., Ltd.) to analyze potential demand in China under the country's most recent FYP.

The good news is that, according to the study, projections show the potential for 15 percent growth in the Chinese copper market. Substantial growth opportunities are likely to occur based on a greater adoption of electric vehicles. It is expected that the number of electric vehicles is expected to grow more than 800 percent. This projection is significant for copper demand because a full-electric vehicle uses three to four times as much copper as its gas powered counterpart.

"The copper recycling market has been stagnant for a long period but will be growing, as China has been increasing their demand," said Herrick Lau, chief executive officer of Crownia Holdings, a global specialty steel trader and distributor, which sells specialty steel products by virtue of the integra-

tion of Chinese strategic steel suppliers and global steel customers. "The Chinese government has no choice but to increase their loans to the private sector, which means funds will still be pumped into the real estate industry. This will bring about increasing demand for the recycled copper, brass and steel."

According to Lau, there are three key factors that today's recyclers need to pay attention to when it comes to brass and copper recycling trends. These include Trump's trade policy towards China, as China is a big consumer in this area. Also pay attention to other suppliers in Southeast Asia, as they are selling more to China these days.

"Also recyclers should look into buys from South Asia, especially India," Lau said. "As China is in the process of reducing its production capacity of steel, the country will demand more from the recycling industry. We are cautiously optimistic about the future growth in this industry."

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

Solid Ground Homes and Lime Painting settle alleged violations

The U.S. Environmental Protection Agency (EPA) disclosed settlements with two Denver-area contractors as part of an ongoing initiative to protect residents of northeast Denver communities from toxic lead paint hazards during home renovations.

According to the first settlement, Solid Ground Homes, LLC has agreed to pay a penalty of \$18,000 to resolve allegations the firm performed a renovation on a pre-1978 home in northeast Denver without being EPA lead-safe certified and without performing several lead safe work practices required by the Renovation, Repair and Painting Rule (RRP Rule). These requirements prevent and minimize the release of lead-contaminated dust and debris.

The second settlement alleges that Lime Painting, LLC performed exterior paint removal on a pre-1978 home in northeast Denver using prohibited power sanding and grinding operations without being an EPA lead-safe certified firm and without following lead-safe work practices. The firm has agreed to a penalty of \$19,950 to settle the alleged violations. Both Solid Ground Homes and Lime Painting have since secured lead-safe firm certification.

Despite its ban from use in 1978, EPA estimates that lead based paint is still present in more than 30 million

homes in the U.S. When lead paint is disturbed during home renovations, proper work practices prevent toxic lead exposure to the home's occupants. Infants, children, and pregnant women are especially vulnerable to lead paint exposure, which can, even at low levels, cause lifelong impacts such as developmental impairment, learning disabilities, impaired hearing, reduced attention span, hyperactivity and behavioral problems.

The RRP Rule protects the public from toxic lead hazards created by renovation activities involving lead-based paint and requires the certification of individuals and firms involved in these activities. Contractors working on homes built prior to 1978 must test for lead in paint, or presume lead is present, and apply applicable lead-safe work practices to minimize the risk of exposure to lead.

EPA's public outreach, compliance assistance, and enforcement activity is intended to increase awareness of RRP rule requirements among both contractors and residents and create a strong deterrent for violators of the rule. Since the launch of the northeast Denver initiative in 2015, EPA has conducted outreach activities and inspected dozens of jobsites in the Five Points, Cole, Clayton, Whittier, Skyland and Park Hill neighborhoods.

installation of our systems depends on the style of the dump bodies involved, mounting point for the system and whether the system is manual or electric. We've been installing an increased number of electric systems and high mounts for new truck bodies."

Elzey noted that Pulltarps caters to the open-top hauling industry and each state has its own rules for covering a load while driving. The California regulations are 23114 and 23115: 23114 states that no vehicle shall be driven or moved on any highway unless the vehicle is so constructed, covered, or loaded as to prevent any of its contents or load other than clear water or feathers from live birds from dropping, sifting, leaking, blowing, spilling, or otherwise escaping from the vehicle; 23115 states that no vehicle transporting garbage, swill, used cans or bottles, waste papers, waste cardboard, ashes, refuse, trash, or rubbish, or any noisome, nauseous, or offensive matter, or anything being transported for disposal or recycling shall be driven or moved upon any highway unless the load is totally covered in a manner that will prevent the load or any part of the load from spilling or falling from the vehicle.

Truck tarps

■Continued from Page B4

peaked loads are made easy because the arms lift the tarp up and over the load. Front to back cable systems are rugged and reliable featuring zinc plated or aluminum parts for rust protection and better appearance. System bows are 1-1/8" galvanized steel and can be replaced without removing the cable."

Elzey said their telescoping tower system is designed specifically for the waste industry and adjusts from 72" lowered, to 120" when fully extended. Pulltarps bunker covers are spring loaded and semi-automatic in operation with safe one-man ground operation. Their weather and shade curtain systems are custom made to protect you and your property from wind, rain, snow and sunlight.

The company was founded in 1992 when the original Pulltarps spring-return truck tarping system was created and sold. "Unlike many of our competitors, all Pulltarps products are manufactured at one of three U.S. locations. Because we manufacture all parts included in our systems, customization is a quick and easy process. Setup and

Moving soon?

To ensure you continue receiving your copy of American Recycler, please notify us as soon as you have your new address!

Send changes to Circulation, American Recycler News, 900 W South Boundary St, Bldg 6, Perrysburg, OH 43551 or call us at 877-777-0043.



U.S. construction equipment exports down 25 percent

Exports of U.S. made construction equipment fell 25 percent overall for the first three quarters of 2016 compared to 2015 January – September, for a total \$8.2 billion shipped to global markets.

All world regions were in decline from single digit drops for Europe and Central America to decreases in the 50 percent range for Africa and South America, according to the Association of Equipment Manufacturers (AEM), citing U.S. Department of Commerce data it uses in global market reports for members.

Exports by World Region

January-September 2016 U.S. construction equipment exports by major world regions compared to January-September 2015:

- Canada dropped 21 percent, for a total \$3.5 billion
- Europe declined 6 percent, for a total \$1.2 billion
- Central America fell 9 percent, for a total \$1.0 billion
- Asia decreased 30 percent, for a total \$972 million
- South America declined 49 percent, for a total \$733 million
- Australia/Oceania fell 36 percent to \$427 million
- Africa declined 51 percent to \$317 million

AEM's Benjamin Duyck, director of market intelligence, provides some insights:

"For the past 15 quarters U.S. exports of construction equipment

declined year over year and in the third quarter of 2016, that trend remains unchanged. A key factor affecting the reduction in exports is most likely due to the strong dollar making U.S. manufacturers less competitive in the global marketplace. Of course, the strong currency is a problem that plagues all U.S. exports. Some international markets are still viable; exports are up year over year to Belgium and Germany, for example.

"Our expectations for the fourth quarter remain subdued as the U.S. dollar is experiencing its longest rally in 16 years. With the global economic malaise, the slowdown in emerging markets and the negative interest rates seen in several economies' bond markets, investment is flowing to the U.S. and U.S. stocks, driving up demand for our dollar, inadvertently affecting our competitiveness abroad."

Exports by Top 5 Countries

The top countries buying the most U.S. made construction machinery during the first three quarters of 2016 (by dollar volume) were:

1. Canada - \$3.5 billion, down 21 percent
2. Mexico - \$831 million, down 9 percent
3. Australia - \$392 million, down 38 percent
4. Belgium - \$294 million, up 33 percent
5. Germany - \$202 million, up 24 percent



BACK TO THE FUTURE FOR RECYCLING

... it's time!



Northeast Resource Recovery Association's

36th Annual Conference & Expo

May 22-23, 2017

2 Day Event!

Engaging Speakers
Workshops and Exhibits



JOHN CASELLA,
Chairman & CEO of
Casella Waste Management



NRRA School CLUB

8th Annual School Recycling Conference

May 23, 2017

1 Day Event!

Hands-on workshops and activities for teachers and students

MONDAY & TUESDAY

MAY 22-23, 2017

RADISSON IN MANCHESTER, NH

Presented by



Northeast Resource Recovery Association



NRRA School CLUB



NEW HAMPSHIRE
The Beautiful

Call 800.223.0150 or register/learn more at: www.NRRA.net

4.9% Financing Available!

View Used
Equipment For Sale
on DADECapital.com!

COMPLETELY RECONDITIONED HARRIS Centurion 150HP RH 2-Ram Baler

New 13" Main Cylinder

New 150HP Harris Power Unit (480/3/6)

New Harris Hydraulic / Power Unit, Comes with Harris/HSC Parts and labor Warranty

New Operators control panel which includes a touch screen

New PLC - Allen Bradley

New Paint - color of choice

New full & complete reline

The baler is equipped with a rebuilt Pinnacle II wire tier 11 Gauge.

\$375,000 FOB TX



WARRANTY...ONE FULL YEAR...Parts and Service

FINANCING AVAILABLE! ONE-PAGE APPLICATION



www.DADECapital.com
Call or Click Today



DADE Capital Corp.
800-823-9688
www.DADECapital.com

MOSLEY BULLDOG BALER *Completely Rebuilt!*



100 HP Motor
All New Liners
4.9% Financing
Available!

\$250,000