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NewsVoice of Salvage, Waste and Recycling

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Steel recycling rate hits record

The Steel Recycling Institute (SRI) announced that the overall steel recycling rate for the world's, and America's, most recycled material - steel reached a record high of 83.3 percent. This means that more than 82 million tons of domestic steel scrap was charged into furnaces, both in the United States and abroad, to make new steel products to be used by the steel industry's customers in meeting consumers' needs.

It is important to note that the steel recycling rates are for 2008. Steel recycling rates are compiled based on data from scrap processors, steel producers, the United States Geological Survey and the United States Environmental Protection Agency, which can take up to a year to compile.

The first three quarters of 2008 marked high levels of production and scrap usage in the United States and that, along with a full-year of high levels of steel scrap exporting, contributed to these record numbers. These high levels of production drew upon record levels of steel scrap, as new steel simply is not made without steel scrap.

See STEEL, Page 16

What you don't know about rubberized asphalt

by MIKE BRESLIN

mbreslin@american recycler.com

Today, recycling tires by grinding them down to crumb rubber and mixing into asphalt formulations is finding wider acceptance by more state Departments of Transportation (DOT). And, as the price of oil goes up, so does the interest in A-R.

A-R is defined by ASTM (American Society Testing Materials) as a blend of hot paving grade asphalt cement, reclaimed tire rubber and additives where rubber content is at least 15 percent by weight of the liquid asphalt binder, and has reacted sufficiently to cause swelling of the rubber particles. Rubberized asphalt has less than 15 percent by weight rubber content. Both terms are used interchangeably in this article.

Proponents of using old automobile tires to make A-R claim that the practice is better than landfilling, and cleaner than burning the tires as a fuel. Used A-R can also be recycled endlessly by milling it off roads and adding it to new asphalt mixes. According to the Rubber Pavements Association (RPA), a 2-inch thick overlay of A-R hot mix will consume about 2,000 tires per lane mile. In the spray applied method for seal coats, about 500 tires are used in a lane mile. Approximately 18 million tires are recycled annually in paving applications.

See RUBBERIZED ASPHALT, Page 4



A rubber mix being compacted in Puerto Rico in November 2009.

EPA issues tougher rules for shipping hazardous waste

The United States Environmental Proardous waste for recycling between the

United States and other countries. The new measures are meant to increase the level of regulatory oversight, provide stricter controls, and greater transparency.

The final rule aligns EPA's hazardous waste import/export/transit shipment regulations with the procedures of the Organization for Economic Cooperation and Development (OECD), an international consortium that comprises 30 countries including the United States.

EPA's new measures bolster regulations regarding hazardous waste shipments into or out of the United States and strengthen the extensive set of regulations under the Resource Conservation and Recovery Act (RCRA) governing the shipment of hazardous waste within the United States.

Specifically, this rule revises existing RCRA regulation regarding the transboundary movement of hazardous wastes for recovery among countries belonging to the OECD to conform to legally required revisions made by the OECD, such as:

See TOUGHER RULES, Page 8

Products from recycled tires decided harmless



■ Focus Section Cover, Page B1

tection Agency (EPA) is strengthening the regulations that govern the shipping of haz-

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The Enviro-Rack Auto Fluid Removal & Dismantling Station

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regulations cor

We offer all steel tanks along with a grated catwalk for operator safety. Underneath the catwalk is a 249 gallon catch pan and also a 360 gallon tank to catch any spills. No other system on the market comes close to the Enviro Rack. Meet EPA and State level regulations concerning fluid removal. The Enviro Rack is totally air operated.

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New York State recycler of the year awarded

The New York State Association for Reduction, Reuse and Recycling (NYSAR3) announced their 2009 Recycler of the Year awards in Cooperstown. Recognition went to Resa Dimino of the state Department of Environmental Conservation (DEC) as 2009 Public Sector Recycler of the Year; to Jean Bonhotal as 2009 Private Sector Recycler of the Year, and to Tompkins County Waste Reduction and Recycling Team for the Team Recycler of the Year.

Dimino, who works in the DEC Commissioner's Policy Office, was honored for her successful efforts to enhance municipal recycling programs, increase public awareness, and develop waste reduction policies.

She is currently drawing on her years of expertise to update DEC's Solid Waste Management Plan for New York State. Dimino's most recent accomplishment has been working with others to form the New York State Product Stewardship Council, which focuses waste reduction strategies on the design, production, sale and use of a product, rather than solely on the disposal. She was also elected to the national board of directors of the Product Stewardship Institute.

Winning for Recycler of the Year, Private Sector, was Jean Bonhotal of the Cornell Waste Management Institute. Bonhotal has been an untiring advocate of recycling and composting for over two decades. Her main goal has been to help bridge the gap between those responsible for managing wastes and developing policy with the research world, of which she is an integral part.

The Tompkins County Waste Reduction and Recycling Team, (made up of Leo Riley, Linnett Short and Kat McCarthy), was awarded the newly developed 2009 Recycling Team prize. The Tompkins County team combined two successful programs to develop exceptional recycling programs in schools, significantly reducing waste in the County school districts.

By promoting the international Go Green Initiative and ReBusiness Partners, the team has impacted 25 county public schools to date. As a result, on average, schools in Tompkins County have increased their waste diversion rate to 34 percent, up from 21 percent previously. In 2008 alone, 105 tons of organic waste was composted. Further, a culture of environmental sustainability has been created in schools at all levels.

Florida DEP releases recycling goal report

Florida generates almost 2 tons of waste per resident annually

After gathering extensive public input, the Florida Department of Environmental Protection (DEP) released its report with recommendations to achieve a new statewide recycling goal of 75 percent by the year 2020 to Governor Charlie Crist and the Florida Legislature. The Energy, Climate Change and Economic Security Act of 2008 established this new goal and directed DEP to submit a comprehensive program to achieve it by January 1, 2010.

"The 75 percent recycling goal is the highest of any state," said DEP Secretary Michael W. Sole. "It will be a challenge to achieve, but it can be reached through partnerships among state government, local governments, trade organizations, schools, businesses and industries as well as the people of Florida."

The information and recommendations in the report were developed based on broad research and contributions of more than 500 stakeholders who participated in four public workshops. An even wider range of ideas were submitted through e-mails and DEP's web forum, which received nearly 12,000 visits.

Florida generates more than 32 million tons of municipal solid waste annually, almost two tons per resident per year. Today, more than two decades after the Legislature passed Florida's first 30 percent recycling goal, Floridians collectively recycle only 28 percent of their solid waste. The report explores ways to increase the percent of material recycled in an economically responsible way through heightened public awareness, state leadership, development and expansion of recycling markets as well as increased investments throughout the local government and commercial sectors.

The report outlines initial steps low in financial impact but high in recycling value in order to make the report practical in today's economic climate. Some of the key recommendations in the report include:

•Require state agencies to meet the 75 percent goal.

•Apply the new recycling goal to counties with a population greater than 100,000 and cities with a population greater than 50,000.

EPA Region 10 administrator chosen

United States Environmental Protection Agency (EPA) Administrator Lisa P. Jackson announced President Barack Obama's selection of Dennis J. McLerran to be the Agency's regional administrator for EPA's region 10. This region encompasses Alaska, Idaho, Oregon, Washington and Pacific Northwest Indian Country.

Dennis J. McLerran has over 20 years experience as an advocate, attorney and administrator. Most recently, McLerran

served as executive director of the Puget Sound Clean Air Agency, a state chartered regional agency that adopts and enforces air quality standards.

As executive director, McLerran led the development of a strategy to reduce emissions at the ports of Seattle, Tacoma and Metro Vancouver. Prior to that, McLerran served as city attorney for the City of Port Townsend and director of the Seattle Department of Construction and Land Use.

•Require commercial recycling in large counties and cities to include multifamily residential units such as apartments and condominiums, as well as institutional facilities such as schools and hospitals.

•Direct school districts to implement recycling programs.

•Create a Recycling Grants or Revolving Loan program to help local governments reach a 75 percent recycling goal in their jurisdictions.

•Require that all unlined construction and demolition debris (C&D) disposal facilities be modified to incorporate a Materials Recovery Facility (MRF). A MRF is a specialized plant that receives, separates and prepares recyclable materials for marketing to end-user manufacturers. By incorporating a MRF or some similar sorting and separating operation at C&D facilities, recyclable materials such as wood waste, asphalt, concrete, etc., would not end up in traditional landfills.

•Create a recycling business assistance center to promote markets for the entire spectrum of recyclable municipal solid waste materials.

The next step in the process is for the Legislature to consider these recommendations during the 2010 legislative session.

For a direct link to the report, view this article on www.AmericanRecycler.com.

Lockheed Martin Camden wins recycling award

Lockheed Martin's facility in Camden, Arkansas, has been selected as the Arkansas Corporate Recycler of the Year by the Arkansas Recycling Coalition.

The award, along with the plant's recent Shingo Silver Medallion award for manufacturing excellence, places Lockheed Martin's Camden facility among a select group of World Class Lean Manufacturing companies focused on manufacturing excellence.

The Corporate Recycler of the Year Award recognizes businesses or organizations that have developed successful waste reduction programs, which include beneficial reuse and recycling practices, and the purchase of recycled products for their own operation. The award is intended to recognize businesses and organizations for implementing recycling into the office and manufacturing setting as a method of saving landfill space, preserving resources and reducing waste disposal costs.

As part of Lockheed Martin's program, Camden Operations has recycled over 85 percent of its waste products and reduced landfill waste by more than 30 percent. More than 384 tons of total waste has been diverted from the local landfill and 63,966 pounds of recycled materials are diverted on a monthly basis, reducing the facility's environmental footprint.

Lockheed Martin's Camden Operations is the final assembly site of the Patriot Advanced Capability-3 Missile, the world's only fielded, combat-proven terminal air defense missile employing hitto-kill technology.



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Rubberized asphalt

■Continued from Page 1

One of the predominant uses of A-R is in Asphalt-Rubber Open Graded Friction Course (AR-OGFC) To appreciate one of AR-OGFC's most outstanding qualities, you have to drive on it. It's much quieter than conventional asphalt or concrete.

"A few years ago, we did a project that was a 7-mile section on Interstate 95 near our Ewing offices. We received dozens calls from drivers asking what is that stuff? It's great, the noise is less. People driving on it can tell the difference over regular asphalt and they say, 'Wow! What a big difference.' It's very unusual for us to get that kind of positive public reaction," said Eileen Sheehy, manager of New Jersey's DOT Bureau of Materials.

Mike Harrington, sales manager for CRM told a similar story. His company has been supplying crumb rubber for asphalt for over 20 years and is the largest crumb rubber producer in the western United States. "Several years ago, they paved about a quarter mile of Loop 101 in Phoenix with rubberized asphalt. The people who lived next to the freeway said things like: 'What happened, it's so quiet?' Then, the people in the next community asked why they didn't have it. There was such an outpouring of demand, that over the next few years the state wound up having to pave the whole thing."

"With rubberized asphalt, we were getting about a three decibel reduction in noise over conventional asphalt, but over concrete you may get up to a ten decibel reduction. And, that's really significant," said Sheehy.

According to NJDOT, tires on concrete pavement generate between 100 and 110 decibels of sound, depending on the age and surface texture. On conventional asphalt the noise is in the high 90s to low 100s. Rubberized open-graded friction courses are in the 95 to 97 decibel range.

Doug Carlson, executive director of RPA put it this way – "Sound reduction largely depends on what method is used to measure the sound. There are many different ways. From feedback we have received from numerous wayside data sources, noise reductions can be in the 40 to 70 percent range, depending on the preexisting surface type and condition."

A-R helps reduce noise emanating from tires at higher speeds. At speeds over 35 mph, the predominant noise is made by



Rubber being added to the hopper for a project in

the tires. At lower speeds much of the sound comes from the engine, exhaust and rattles. The quietness of A-R is largely due to its smoothness. A Texas DOT study found that ride quality improved by 61 percent on A-R. Because this pavement lasts longer and cracks less over time, smoothness is maintained. WesTrack, a Nevada road test facility built under a grant from the Federal Highway Administration, found a 4.5 percent fuel efficiency increase riding on smoother pavements.

"What we are really trying to do is cut the noise at the source," said Sheehy. New Jersey has completed most of the sound walls and barriers mandated by federal requirements to mitigate noise pollution. Sound walls and other types of barriers are expensive, costing between \$200 to \$400 dollars per linear foot. In many urban areas there is not enough space to build them. "Now we are dealing with what we consider nuisance noise - noise not high enough for mandated sound barriers, but nevertheless bothersome to residents. That's why we put rubberized asphalt on Route 280, because of noise complaints. It's also useful in areas where it's very hilly, because we can't always build sound barriers tall enough," Sheehy said.

"The noise benefit has been the unsung hero. It's kind of a perfect marriage between the business and the envi-

ronment. Here is something that is ecological viable and technologically sound so it really turns out to be a win-win," said CRM's Harrington.

According to the United States Environmental Protection Agency (EPA), rubberized asphalt is the single largest consumer of ground rubber. California and Arizona use the most in highway construction, jointly accounting for over 70 percent of crumb rubber used.

"Over 90 percent of state highways in Arizona are paved with it. In California it's huge. They don't have good data, but of 65,000 miles of roadway I would say that about 20 percent has been rubberized at one point or another," said Carlson. Florida uses A-R exclusively on every state highway for friction courses. Among others, Texas, Nebraska, South Carolina, New York, New Jersey, New Mexico, Maryland, Massachusetts and Puerto Rico are currently testing or using A-R. In Canada it's being used in British Columbia, Alberta and Saskatchewan.

Naturally, each state DOT must test and approve various formulations before general use. This can take years, and in some cases decades. Like many states, New Jersey began testing rubberized asphalt in the early 90s in response to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The act suggested there would be mandates for states to use one percent rubber in asphalt in order to receive federal funds. Later, the mandate was dropped, but ISTEA had the effect of getting many states to test A-R. "We did some projects at that time to see how it would work. Two projects were quite successful using asphalt rubber in an open-graded friction course. There are benefits with the opengraded friction course. It has a very open texture so it drains very well. You don't have as much spray off the surface in rainy conditions. Because you do not have as much water on the surface you don't get as much hydroplaning. So it's safer in the rain. We identified that as a very valuable asset for those areas that have high wetweather accidents," said Sheehy.

New Jersey's oldest project, a short test section of Route 195, was constructed in 1992 and is scheduled to be removed and replaced this year. Like conventional asphalt, when a rubberized road reaches end of life, it can be milled up and recycled into new mixes of A-R, or into new mixes of regular asphalt. "We did a project back in 1991 where we took an asphalt rubber road and recycled it. We tested the emissions and properties of the mix and found no problems with recycling. It can go to an asphalt plant and be mixed in with unrubberized asphalt. We are confident that the percentage in the mix after reprocessing won't make any difference at all," said Sheehv.

New Jersey uses between 15 to 20 percent crumb rubber in the asphalt binder, which constitutes about 8 percent of the overall pavement mix. The state uses conventional asphalt plants and paving equipment, but out-of-state blending units are currently being trucked-in to make A-R. Sheehy said that New Jersey asphalt producers are waiting to see how A-R develops before investing in equipment.

The A-R on Route 195 lasted 18 years as compared to the average 12 year life

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Massachusetts maintains incinerator moratorium

The Patrick-Murray Administration in Massachusetts announced that it would maintain the existing moratorium on new facilities for incineration of municipal solid waste. In addition, Energy and Environmental Affairs Secretary Ian Bowles outlined Governor Patrick's priorities for expanding the recycling of key products like water bottles and consumer electronics, as part of a push to reduce the amount of waste sent to landfills and incinerators.

"We are serious about managing the waste we generate in a way that saves money for cities and towns, curbs pollution and protects the environment for our children and grandchildren," said Governor Deval Patrick. "There are better ways than traditional incineration."

"Focusing on incineration and landfills is the wrong end of the waste equation," said Secretary Bowles. "While Massachusetts is ahead of the national average in recycling and some communities like Nantucket are leading the way, there is a lot more we can do to increase recycling and reduce disposal of useful materials."

The Department of Environmental Protection (MassDEP) has had in place a moratorium on new municipal solid waste combustion facilities since 1990. As MassDEP prepares a new Solid Waste Master Plan, which it is expected to issue as a draft in early 2010, the announcement specifies that the new plan will maintain the moratorium, but also strengthen it in two ways – by reducing dramatically the amount of recyclable material going into the waste stream, and by developing stringent new performance standards for existing waste-to-energy facilities that require higher recycling rates in waste collection areas, lower emissions of greenhouse gases and other pollutants, and higher efficiency in energy recapture. MassDEP will work toward developing these performance standards for the next 10-year Master

Secretary Bowles noted that anaerobic digestion, advanced biofuels, and other proven types of waste-to-energy technology applied to organic wastes, will continue to be encouraged in the new Master Plan, but that incineration of mixed municipal solid waste will continue to be restricted to existing facilities.

To complement the incinerator moratorium, the Patrick-Murray Administration is committed to an aggressive agenda of recycling and waste reduction that gives cities and towns assistance to expand and improve their recycling efforts and

requires greater responsibility from manufacturers for products - ranging from water bottles to televisions – that end up in our waste stream.

The Patrick-Murray Administration's priorities to expand recycling and waste reduction include:

•Consumer Electronics: The Administration calls for passage of comprehensive producer responsibility legislation for discarded electronics, the so-called "E-Waste" bill, relieving municipalities of this

•Expanded Bottle Bill: The Administration urges approval of an expanded bottle bill to cover water and sports drink bottles, which will reduce litter, increase recycling rates for containers from the fastest-growing segment of beverages and provide additional resources to support local recycling efforts.

•New Protections for Communities: The Administration will seek greater authority for MassDEP to intervene in problem landfills, such as the one on Crow Lane in Newburyport, and new authority to require waste haulers to provide full recycling services to their customers.

•Helping Municipalities Increase Recycling Rates: The Administration will work with the Legislature, municipalities, and stakeholders to devise new standards and programs to help cities and towns reach higher rates of recycling by offering assistance for municipalities to adopt more effective methods, such as single-stream recycling, which eliminates the need for households to sort their recyclables.

At the same time, Secretary Bowles announced that he has directed MassDEP to suspend review of permit applications for facilities proposing to use construction and demolition materials (C&D) as fuel for energy generation, including the proposed Palmer Renewable Energy facility, until a comprehensive assessment of the environmental impacts of using such materials is completed. This assessment will include a review of potential for emissions of greenhouse gases and other air pollutants related to C&D, an analysis of level of contaminants commonly found in C&D feedstocks, and a review of the most effective means for minimizing, sampling and monitoring of toxics and other contaminants of concern in these feedstocks. Further, the Secretary has directed Mass-DEP, in coordination with the state Department of Public Health, to conduct a review of the potential public health impacts associated with the combustion

City Wide Recycling acquired by Waste Management

the recycling services it provides to construction and demolition contractors by acquiring City Wide Recycling LLC.

City Wide Recycling developed southeastern Wisconsin's largest, and only automated, processing facility for recyclable wastes collected at construction and demolition job sites, said John Kelly, Midwest group recycling director for Waste Management.

The plant, located in Milwaukee, receives mixed loads of waste from job sites, sorting the materials by type and preparing them for shipment to manufacturers that can use the reclaimed plaster, wood, masonry, plumbing, wiring, soil, rock, cardboard, plastics and other materials. It began operating in October

City Wide founders John Hansen and Eric Konik will become consultants to Waste Management, helping the company grow its construction-sector recycling services around the country, Kelly said.

Construction and demolition work produces about 1.4 million tons of debris annually, nearly 29 percent of the total waste produced statewide, accord-

Waste Management has expanded ing to a 2006 report by the Wisconsin Governor's Task Force on Waste Materials Recovery and Disposal.

> Environmentally sensitive contractors are fueling booming growth in recycling at construction sites in southeastern Wisconsin, said Kelly, and those companies are recycling voluntarily. Wisconsin laws mandating segregation of materials such as cardboard and beverage containers don't require recovery of wood, cement and other waste types typically produced in large volumes during building and demolition work.

> Contractors' recycling initiatives are in turn driven by a growing demand for green building practices among the institutions and homeowners purchasing building services, Kelly noted. For example, on January 1 the state of Wisconsin began requiring construction contractors it hires to recycle at least 50 percent of the waste produced during construction of state building projects of \$5 million or more and all demolition projects.

> Some 61 percent of contractors rate waste management plans as the second

Pennsylvania DEP highlights benefits of mercury-free thermostat law

exposure to mercury as a result of the Mercury Free Thermostat Act, which took effect in December 2009. The law bans the sale, installation and disposal of mercurycontaining thermostats and requires contractors and homeowners to recycle out-of-service thermostats.

Under the new law, only mercury-free thermostats can be sold in Pennsylvania. In addition, manufacturers that have sold

Pennsylvanians are at lower risk of mercury thermostats in the state must collect and recycle waste mercury thermostats at no cost.

Wholesalers located in Pennsylvania must serve as collection sites for the thermostats. The law also requires retailers and contractors to either participate as collection points or provide notice to customers that mercury thermostats must be recycled and identify locations of nearby collection points.

most important aspect of green building, just behind energy efficiency, according to a November 2009 study conducted by McGraw-Hill Construction with support from Waste Management. The study found that waste diversion activity is

increasing despite the recession, with 20 percent of contractors diverting half of their construction waste on 60 percent or more of their projects, and 25 percent expecting to do so within the year.



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ALTERNATIVE ENERGY

Air carriers agree to use synthetic jet fuel

Rentech, Inc. announced that it has signed a Memorandum of Understanding (MOU) with thirteen domestic and international passenger and cargo carriers that will serve as a framework for a future definitive supply agreement for certified jet fuel from Rentech's proposed synthetic fuels and power facility in Adams County, Mississippi (Natchez Project).

The non-binding MOU signed by Rentech and Air Canada, AirTran Airways, American Airlines, Atlas Air, Delta Air Lines, FedEx Express, JetBlue Airways, Lufthansa German Airlines, Mexicana Airlines, Polar Air Cargo, United Airlines, UPS Airlines and US Airways includes terms that are anticipated to serve as the basis of a possible definitive purchase agreement by these carriers for the Natchez Project's entire synthetic jet fuel production of approximately 250 million gallons per year.

Fuel based on the Fischer-Tropsch process, including Rentech's RenJet®, is the only alternative jet fuel currently certified for use in commercial aviation at up to a 50/50 blend with traditional jet fuel.

A recent study completed by Alcorn State University concluded that the Natchez Project would create over 2,100 direct jobs and over 3,400 indirect jobs during the project's construction phase. Once operational, the facility is expected to create over 400 high paying direct jobs and over 3,200 indirect jobs, according to the study.

First solar-powered electric car charging station now in New York

Beautiful Earth Group (BE), a New York-based sustainable energy company announced it has built New York's first solar-powered electric vehicle (EV) charging station. The solar-powered charging station is the first in New York City and one of only a few in the world.

The charging station sits on an industrial lot near the company's head-quarters in Red Hook, Brooklyn, overlooking New York Harbor and downtown Manhattan. Designed and built by BE, the station is off-grid, modular, constructed with recycled, decommissioned steel shipping containers and entirely powered by state-of-the-art Sharp 235 watt photovoltaic panels. The project is part of BE's effort to showcase urban sustainable energy solutions in New York City.



The charging station is currently used to charge BE's 100 percent electric MINI E, making it one of the few cars in the world to run exclusively on solar power. BMW Group's MINI E has a

range of just over 100 miles and takes around three hours to charge.

"It never ceases to amaze me, when I get behind the wheel of this 95 mph sports car, that it doesn't use a single drop of gasoline, and that all of its power comes from the solar energy we collect right here on the Brooklyn waterfront," said BE president and CEO Lex Heslin.

With a capacity of about six kilowatts, BE's charging station also produces enough energy to power a small home, and its battery bank stores electricity 24/7 for on-demand usage. Many of the major car manufacturers are planning to launch electric or plug-in hybrid cars starting next year. The BE charging station is a tangible example of how to dramatically reduce carbon emissions.

Enerkem awarded \$50 million in funding

Enerkem Inc. announced that Enerkem Corporation, its wholly-owned United States affiliate, has been selected by the United States Department of Energy to receive \$50 million in funding for the construction and operation of its waste-to-biofuels facility to be located in Pontotoc, Mississippi.

Enerkem's application is one of only four that have been selected in the larger demonstration scale project category of the Recovery Act – Demonstration of Integrated Biorefinery Operations Program.

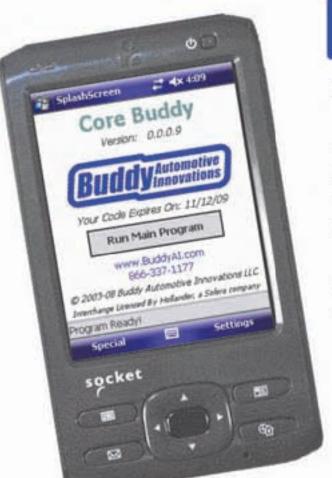
Enerkem Corporation will build and operate the 300 ton-per-day biorefinery in Mississippi, which will produce 10 million gallons of ethanol annually, as well as green chemicals, from sorted municipal solid waste and wood residues and will reduce the pressure to landfill. Since the announcement of its Mississippi project last March, the company has made substantial progress on

the environmental permitting process and has further developed the project with its local partners, the Three Rivers Planning and Development District and the Three Rivers Solid Waste Management Authority.

The project is expected to create 130 jobs. The company also intends to double the size of its Mississippi biorefinery plant by adding a second module, bringing the total production capacity to 20 million gallons.

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ON TOPIC — Q&A

by Irwin Rapoport

More than 300 million tires are discarded annually in the United States.

Michael Blumenthal, a vice president of the Rubber Manufacturers Association (RMA), not only monitors the amount of tires that are discarded and how they are recycled and reused, but also has a role in helping to find alternative uses for the rubber and bring together the various stakeholders to find effective solutions.

Are steps being taken to tackle the issue of the stockpiled tires that were discarded in the past?

Blumenthal: The last time that we did a market survey, which was in 2007, we found that nearly 90 percent of all the tires generated annually are going to an end-use market. At that time there were only 128 million tires remaining in stockpiles. When you consider that we started with over 1 billion in stockpiles that is a tremendous decrease. Since we did the last market survey, the number of tires in stockpiles decreased even further. I'm confident there are less than 100 million remaining in these stockpiles.

Is the use of tire-derived-fuel (TDF) increasing or declining? Does the use of this alternative fuel source continue to raise objections? Have measures been developed to make it a cleaner burning fuel?

Blumenthal: Over the last one and a half years, the number of tires going to TDF has decreased a little bit because a number of cement kilns or the cogeneration plants that were using TDF, have closed because of the recession. The current rate of tires used as TDF is around 52 percent. There are a good number of users still making use of TDF, but the increases were not enough to offset the decreases. Is this going to be a temporary situation? It all depends upon how quickly and how strong the economy comes back. If it doesn't come back in a way that gets the construction industry going, we won't see too many cement kilns come on-line and that is going to have an impact on the overall percentage of tires used as fuel.

The air pollution control technology remains about the same. TDF is a relatively clear burning fuel. People have gotten to a great level of hysteria about TDF and there are myths about the fact that if you use TDF, you will turn your smoke black. That is not true. Tires burn hot and burn clean, so they have always been a relatively clean burning fuel.

To what extent has the RMA been successful, working with the industry to develop more efficient systems for tire collection and storage?

Blumenthal: These issues are dealt with by the industry itself. The industry has developed a very efficient transportation and processing capacity on its own. What the RMA has done is to work with state regulatory agencies to make sure that the reg-

ulations are enforced – enforcement is the most important thing a state can do to maintain the collection and processing efficiencies. We have worked with the International Fire Code and the National Fire Protection Association on outdoor and indoor storage regulations of tires.

Are citizens, businesses and government aware of the issues surrounding the recycling of tires and what more can be done to address the problem?

Blumenthal: The vast majority of the people working at the federal, state and local agencies, as well as the public, are really not aware of what is going on in the scrap tire industry, what the issues are and what needs to be done. There are a small number of people at the federal and state level working with the issue of scrap tires, but when you look at the overall marketplace for secondary products, scrap tires are typically not a priority for most states or municipalities. This is because the industry is handling the problem and the amount of tires produced are overwhelmed by larger issues such as e-waste recycling and municipal recycling.

Some state governments charge an advance disposal fee (ADF) in the price of tires. Do these fees reflect the true cost? Would a nationwide fee on tires help to create funding for grants to deal with discarded tires?

Blumenthal: I don't think that we'll see a federal fee on tires. A good number of states have cleaned up their tire stockpiles and have markets for all their tires and they won't want to see new fees. The ADF that a state charges is not used for collection or processing of tires – that fee goes to the state agencies for the abatement of stockpiles, market development projects and enforcing the regulations.

The cost of disposal is reflected in the disposal fees that the retailers assess consumers when they buy a new set of tires. That money – \$3 per passenger car tire – are used to cover the cost of transporting the tire from the point of purchase to the tire processor, because there are still negative costs when the processor gets the tire. The idea is to turn the tire into a higher value added product and then sell it to the market place. That helps the economics, so the fees that the states assess, are not a true indicator of the costs of disposal.

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Tougher rules

■Continued from Page 1

•Requiring United States recovery facilities to submit a certificate after recovery of the waste has been completed,

•Adding provisions to ensure that hazardous wastes are returned to the country of export in a more timely and documented manner when it is necessary to do so, and

•Adding new procedures for imported hazardous wastes that are initially managed at United States accumulation and transfer facilities to better track and document that subsequent recovery by a separate recycling facility is completed in an environmentally sound manner.

RCRA regulations for spent leadacid batteries (SLAB) have also been revised to add export notification and consent requirements to provide stricter controls and greater transparency for exports of SLABs to any country, and should ensure that the batteries are sent to countries and reclamation facilities in those countries that can manage the SLABs in an environmentally sound manner.

Hazardous waste import-related requirements for U.S. hazardous waste management facilities are now to confirm that individual import shipments comply with the terms of EPA's consent.

Finally, the address to which export exception reports are to be sent has been revised as well.

The United States participates in a number of bilateral waste agreements between countries and in the multilateral waste agreement controlling the shipment of hazardous waste for recovery between OECD member countries.

For a direct link to the final rule, view this article on www.AmericanRecycler.com.

Rubberized asphalt

■Continued from Page 4

expectancy of non-rubberized Open Graded Friction Course. New Jersey is planning to use more AR-OGFC because of its durability. Sheehy commented on 195: "It's lasted longer than expected. We have been happy with that performance and believe it justifies the increased cost."

In Phoenix, A-R is only about 5 percent more expensive per ton than conventional mixes. "An interesting thing has happened as a result of recent economics. As the price of asphalt per ton increases, the cost saving value of recycled tire rubber in the asphalt increases. The crumb rubber market has been steady and stable at about \$300 dollars per ton. Back in the late 90s, liquid asphalt cost about \$70 dollars a ton. Now it costs \$500 a ton! By using crumb rubber there is about a 20 percent displacement of oil," said Carlson.

Despite the higher initial cost in other states, RPA claims other significant cost savings based on several factors: longer life cycle, decreased maintenance, and in many instances half as much material is required.

"[California Department of Transportation] has a layer equivalency guideline for rubberized asphalt based on almost 30 years experience. If the conclusion is to give a roadway a 10 year service life, you can pave it with four-inches of conventional asphalt, or use 2 inches of rubberized asphalt and expect the same results," said CRM's Mike Harrington.

There are climate and topography issues related to the use and they can vary greatly from state to state. Each area must

test and evaluate which formulations best suit their roadways and conditions. Warmer weather in Arizona, California, Texas and Florida has undoubtedly led to heavier usages there. But A-R has been tested and successfully used in many cold regions.

Arizona routinely uses a combination of gap-graded A-R hot mix and an open graded A-R friction course in the Flagstaff area at elevations over 7,000 feet with winter temperatures of 20 below zero. California has also successfully used A-R in the high Sierra Nevada Mountains. "In 1992, one of the very first California highways using rubber was at Donner Pass. At over 7,000 feet elevation and snow up to 30 feet, it has held up beautifully. It was recently repaved using rubber," Carlson noted.

New Jersey, however, is working on the issue of snow and ice removal. They found that salt seeps into the pores of the open-grade and does not stay on the surface and continue to work. This resulted in the need for more frequent salt applications. "Unless that issue is resolved, we will probably see it only in areas that we identify as either a wet weather problem, or a noise problem that we want to mitigate. Our maintenance people are looking at different snow and ice removal techniques. We are also considering a slight change in the gradation, porous enough to work well in wet weather, but not as porous to work well in ice and snow."

NJDOT has more asphalt rubber projects planned for 2010. "Generally, we are optimistic about rubberized asphalt. It has been performing well for us and I think we are going to be using it more," concluded Sheehy.



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ALTERNATIVE ENERGY

Manure energy becomes reality for New York

Methane digesters on dairy farms could soon be a common source of energy for residents and businesses in the state of New York. That is one result of the Dairy Power Summit in Syracuse, New York, which brought together more than 200 New York dairy farmers and industry stakeholders from across the country to discuss the potential for dairy-supplied renewable energy.

Summit attendees set a 2020 goal that 40 percent of all manure from New York dairy farms goes through the anaerobic digestion process, which captures methane from manure and generates clean, renewable energy. The energy produced from this effort could power 32,000 homes while strengthening the economic vitality of New York's dairy farms. It also would reduce New York's greenhouse gas emissions by 500,000 metric tons of carbon, equivalent to taking 100,000 cars off the road.

The Innovation Center for United States Dairy, with sponsorship from GE Energy, coordinated the Dairy Power Summit in order to identify and act on opportunities to increase anaerobic digester adoption by dairy farms of all sizes. Participants represented dairy farms, utilities, milk cooperatives, digester developers, financial institutions, academia, and local, state and federal governments.

Governor Paterson's "45 by 15" program is one of the nation's most aggressive energy efficiency and renewable energy initiatives. By 2015, New York State will meet 45 percent of its electricity needs through improved energy efficiency (15 percent) and clean renewable energy, such as methane (30 percent). This goal is in line with the commitment of the Innovation Center for United States Dairy to reduce industrywide greenhouse gas emissions associated with fluid milk by 25 percent by 2020.

To achieve 40 percent anaerobic digester use by 2020, attendees of the summit collaborated to develop an action plan made up of more than a dozen projects. Some of the projects include:

•American Agricultural Biogas Coalition – Form a nationwide, crossindustry alliance to provide a unified voice promoting renewable, sustainable biogas solutions. This new organization would advocate at the local, state and national levels.

•Small-Farm Digester Initiative – Host an innovation contest that would award \$1 million toward the development of a digester system for a smaller-scale farm with between two and 200 cows.

•NY Cow Power – Develop a voluntary rate-payer program to enable electric consumers to support anaerobic digesters (e.g., residential or commercial customers pay 4 cents per kWh extra on utility bills to help fund digesters). This program would be modeled on the successful program of Central Vermont Public Service

•Digester Implementation Project – Collaborate with 20 farms to issue a joint request for proposal to install 20 digesters. This will reduce the cost and complexity that farmers could experience individually.

•Model Community Digester System – Develop a best-in-class model for a community digester. Projects will be explored in Lowville, New York, and potentially near Skaneateles, New York.

•Rolling Biogas – Research opportunities to clean and compress biogas for use as natural gas in vehicles, a viable alternative to diesel fuel.

While the summit primarily focused on anaerobic digester opportunities in the state of New York, these pilot projects could lead to solutions for farms and communities across the country.

Wastewater authority dedicates treatment plant solar system

Western Riverside County Regional Wastewater Authority, Wells Fargo and SunPower Corp. dedicated a one megawatt solar power system at the West Riverside Wastewater Treatment Plant in Corona. SunPower designed and built the high-efficiency system, and financed the system with Wells Fargo through the \$100 million sale leaseback program.

"Solar power systems help public agencies reduce costs and benefit the community by reducing the amount of greenhouse gases released into the atmosphere," explained the Authority's chairperson, Brenda Dennstedt, who is on the board of directors at Western Municipal Water District, an Authority partner. "This system will generate the equivalent of about 25 percent of the power needed to run the wastewater treatment plant, which is also about the same amount of power

that would supply roughly 200 homes each year."

Under the financing program used for the project, SunPower enters into power purchase agreements with qualified customers, and Wells Fargo finances and owns the system that SunPower designs, builds, operates, and maintains. The Authority is buying the electricity at prices that are competitive with retail rates, and benefiting from a long-term hedge against rising power prices. The Authority is not using the environmental claims associated with the system.

On the nine acre site, SunPower's solar panels were installed with the Sun-Power T20 Tracker® system. The Tracker follows the sun's movement during the day, increasing sunlight capture by up to 30 percent over conventional fixed-tilt systems, while significantly reducing land use requirements.

Landfill gas projects recognized by EPA

The United States Environmental Protection Agency (EPA) is recognizing eight landfill methane capture projects for their innovation in generating renewable energy and reducing greenhouse gas (GHG) emissions. The winners include one of the largest landfill gas (LFG) to liquefied natural gas facilities in the world, located in Livermore, California

Methane, a primary component of LFG, is a GHG with more than 20 times the global warming potential of carbon dioxide. Using LFG provides a significant energy resource, prevents GHG emissions, and reduces odors and other hazards associated with emissions.

This year's Landfill Methane Outreach Program (LMOP) winning projects will avoid the emissions of 546,000 tons of carbon dioxide equivalent per year, the equivalent of annual GHG emissions from nearly 100,000 passenger vehicles.

Projects of the Year were given to the University of New Hampshire EcoLine™ Project, Rochester, New Hampshire; Jefferson City, Missouri Renewable Energy Project, Jefferson City, Missouri; The Altamont Landfill Resource and Recovery Facility, Liver-

more, California; Ox Mountain LFG Energy Project, Half Moon Bay, California; Sioux Falls Landfill and Poet LFG Pipeline, Sioux Falls, South Dakota, and the Winder Renewable Methane Project, Winder, Georgia.

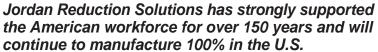
The State Partner of the Year was given to the Kansas Department of Health and Environment, and the Community Partner of the Year was awarded to the Kent County Department of Public Works, Byron Center, Michigan.

EPA's LMOP has assisted with more than 450 LFG energy projects over the past 15 years. The United States currently has about 509 operational LFG energy projects. The LFG electricity generation projects have a capacity of 1,563 megawatts (MW) and provide the energy equivalent of powering more than 920,000 homes annually.

The direct-use projects provide an additional 304 million standard cubic feet of LFG per day and provide the energy equivalent of heating more than 715,000 homes annually. Direct-use LFG energy projects do not produce electricity, but instead use LFG as an alternative to replace another fuel such as natural gas or coal.

A man said to his wife one day, "I don't know how you can be so stupid and so beautiful all at the same time."

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PAPER

Total printing-writing paper shipments up in November

According to the American Forest & Paper Association's November 2009 Printing-Writing Paper Report, total printingwriting shipments increased 2 percent in November compared to November 2008 – this is the first year-ago increase in nearly two years, the last coming in February 2008. For the year to date, shipments were down 17 percent – all four major printingwriting grades recorded the lowest year to date decline when compared to 2008 for the fifth consecutive month. United States purchases (shipments + imports - exports) of printing-writing papers increased in November, up 1 percent versus year-ago November yet are still down 19 percent.

Total printing-writing paper inventory levels increased 6,500 tons, less than half a percentage point, from October.

Other key findings include:

- •Uncoated free sheet shipments were flat compared to November 2008.
- •Coated free sheet (CFS) shipments were up versus year ago for the first time since November 2007.
- •Year-ago increase of coated mechanical (CM) shipments hits highest percentage since July 2007.
- •Uncoated mechanical (UM) shipments alone among four grades to decline compared to November 2008.



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AF&PA unveils workplace and community recycling guides

Commercial property owners and managers concerned with sustainability and community recyclers have new resources to help them build and improve upon their recycling programs thanks to updated recycling guides recently unveiled by the American Forest & Paper Association (AF&PA). The guides are free and available at paperrecycles.org as part of AF&PA's mission to increase paper recovery.

In 2008, 57.4 percent of the paper consumed in the United States was recovered for recycling. The industry has set a 60 percent recovery goal for 2012.

The workplace recycling guide provides tips on establishing a workplace recycling program and on educating and motivating employees.

Since 1990, when the industry established its first recovery goal, paper recovery has grown by 78 percent.

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Texas recycling facilities sold by **AbitibiBowater**

AbitibiBowater announced the closing of the sale of its recycling division's material recycling facilities located in Arlington, Houston and San Antonio, Texas to Waste Management Recycle America for \$12 million.

The Company will continue operating its recycling programs in Arlington, Houston and San Antonio, as well as in 20 other major metropolitan areas across North America. With this transaction, AbitibiBowater will refocus its recycling efforts on its innovative community recycling Paper Retriever program, as well as on the EcoRewards recycling initiative for commercial customers. The Company will ensure a smooth transition and remains committed to delivering top-quality service to its recycling customers.

As part of the sale, the Company's recycling division has also reached an agreement where Waste Management Recycle America will process the materials generated by the Paper Retriever and EcoRewards programs in Arlington, Houston and San Antonio.

These transactions are part of AbitibiBowater's ongoing restructuring efforts to streamline its businesses and work through its creditor protection filings.

Smurfit-Stone closes two mills

Smurfit-Stone Container Corporation permanently closed its Ontonagon, Michigan and Missoula, Montana

The Ontonagon mill ceased operations in September when it began taking market-related downtime. The Ontonagon mill has 182 employees and the Missoula mill has 417 employees.

"These decisions were made to ensure the Company's long-term growth and profitability and do not reflect on the hard work and commitment of the employees at the Ontonagon and Missoula mills," said Steve Klinger, president and COO.

The Ontonagon mill, which produces 280,000 tons of medium annually, and the Missoula mill, which produces 620,000 tons of liner annually, are high-cost facilities that do not provide adequate returns over the long term for the Company.

The company expected to incur a restructuring charge of approximately \$284 million, of which approximately \$246 million is non-cash, in the fourth quarter of 2009.

Kindness is more important than wisdom, and the recognition of this is the beginning of wisdom.

—Theodore Rubin

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WASTE

Choice Environmental launches CNG fleet for waste collection in Fort Lauderdale

Choice Environmental Services rolled out a new fleet of CNG compressed natural gas (CNG) refuse trucks, becoming the first private waste hauler in south Florida to abandon diesel fuel for a portion of its operations



in favor of cleaner-burning natural gas.

The ten-truck fleet will reduce harmful emissions by over 25 percent compared to diesel-fueled trucks, according to company officials. The new trucks are also fully automated residential collection vehicles, with high compaction bodies that will reduce the number of trips they'll need to make to the landfill. The Autocar chassis are equipped with Hercules ASL bodies supplied by E-Z Pack Manufacturing of Cynthiana, Kentucky.

The Autocar trucks feature Cummins Westbrook engines, designed for natural gas. The refuse bodies themselves are mounted with four natural gas fuel cells – two that are "saddle mounted" on the chassis frame and two additional fuel cells that are integrated into the body above and behind the hopper, in a unique configuration that does not increase the vehicle's overall height.

E-Z Pack modified the ASL body with the additional fuel cells in direct response to Choice Environmental's request for greater fuel capacity. The total CNG fuel capacity is equivalent to 60 gallons of diesel, which gives each truck the range of a typical diesel-fueled vehicle. At the end of a workday, operators return to the fueling station in Pompano Beach, where the trucks are automatically refueled and ready for work by the next morning.

The Hercules ASL features a high compaction body, a 6 cubic-yard hopper capable of handling containers up to 400 gallons, simple controls without computers or PLCs.

The natural gas used to produce CNG fuel onsite at the station is supplied by TECO Peoples Gas, Florida's largest natural gas distribution company.



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WASTE

Alameda County bans plant debris from landfills

To facilitate composting and to reduce the amount of yard trimmings routed to landfills, Alameda County, California, will begin enforcing its landfill ban, which requires that plant debris be separated from trash and properly deposited in designated "clean green" areas of disposal facilities.

The target audience of the Alameda County landfill ban includes landscapers and gardeners who produce and haul substantial amounts of plant debris (grass, leaves, shrubbery and tree trimmings) to Alameda County facilities.

Other large producers/haulers of green debris, such as property managers,

municipalities, parks and institutions in Alameda County will also be impacted. The ban was issued in early 2009 by StopWaste.Org, the Alameda County Waste Management Authority. Fines for landfill ban violations went into effect on January 1, 2010.

Enforcement of the landfill ban is critical to helping Alameda County realize its goal of diverting 75 percent of all waste from county landfills by 2010. Plant debris can be composted and turned into valuable soil amendment. However, if landscapers and other maintenance workers mix even a small amount of garbage, such as fast food

containers and construction materials, with the plant debris, the entire load is contaminated, and cannot be accepted at the designated clean green areas of disposal facilities.

Landscapers and gardeners that violate the ban by mixing plant debris with trash in collection bins or by bringing plant debris contaminated with other materials to disposal facilities are subject to citations of \$100, \$200 or \$500 for first, second or additional violations within a year, or to equivalent penalty surcharges on the dump fees.

Individual residents of Alameda County can continue to place yard trim-

mings into their green organics carts, along with food scraps and food-soiled paper, to be collected for composting.

Plant debris is defined as:

- •Grass
- Leaves
- Shrubbery
- Vines
- •Tree branches and trimmings

Palm tree trimmings and sod are not accepted at most composting facilities and should be separated from the plant debris types listed above.

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

Department of Labor reports improved safety in solid waste

According to recent reports by the United States Department of Labor, the number of injuries by solid waste collection workers continued to decline in 2008. The Federal Bureau of Labor Statistics (BLS) announced that the injury rate during 2008 for both solid waste collection and landfill employees continued to decline, as it has in recent years. Similarly, the United States Occupational Safety and Health Administration (OSHA) announced that there was a decline in OSHA citations issued to the solid waste industry during fiscal year 2009.

The BLS report indicates that the injury rate for solid waste collection workers decreased marginally to 7.4 from 7.5

per 100 full time employees, and that the injury rate fell dramatically for landfill company employees from 7.1 to 5.4, a 24 percent reduction.

In its industry-specific enforcement data for fiscal year 2009 (October 1, 2008 through September 30, 2009), OSHA reported that 279 citations were issued to the United States solid waste industry, with about \$250,000 in penalties assessed. The number of citations compares very favorably with fiscal year 2008, when 445 citations were issued and more than \$333,000 in fines were assessed. Violations of the Hazard Communication, Lockout-Tagout and Respiratory Protection standards were the most common.

WCA to acquire landfill, transfer station and rail haul operation

WCA Waste Corporation has signed a definitive agreement to purchase the subsidiaries and certain assets of Live Earth, LLC, including the Sunny Farms Landfill, Champion City Recovery Transfer Station and the related rail haul operation.

The Sunny Farms Landfill is located near Fostoria, Ohio. The landfill is permitted to accept up to 5,000 tons per day of municipal solid waste and construction and demolition debris. The landfill is currently accepting approximately 3,200 tons per day on average, most of which is delivered by railroad from the east coast.

Champion City Recovery transfer station is located south of Boston, Massachusetts. The transfer station is permitted to accept 1,000 tons per day and is currently accepting and transporting approximately 600 tons per day by rail to the Sunny Farms Landfill.

The purchase price for the Live Earth subsidiaries and assets consists of \$18.75 million of cash, 3,555,556 shares of WCA Waste Corporation common stock to be issued at closing and up to an additional 2,000,000 shares of common stock that will be issuable in the event that the acquired Live Earth businesses obtain certain EBITDA thresholds.

2004 60 x 90 FERROUS AUTO SHREDDING SYSTEM COMPLETE

SYSTEM INCLUDES:

RipSteel Pre-Shredder 200 h.p.

Infeed conveyor 80" wide with 35' incline load section, 5' top horizontal section, with hydraulic motor and gearbox.

Infeed belt replaced two years ago.

American Pulverizor 60 x 90 Top Feed Shredder.

DC 1500 HP Quad Plus Motor with controls (Primary Motor).

AC 1500 HP Toshiba Squirrel Cage Motor with starter (Spare Motor).

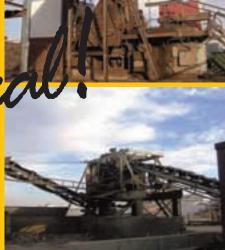
Transformer

Drive Shaft

Pin Puller

Dual Magnetic Separator - refurbished 4 years ago. Stearns 4272 drums, gearmotor/chain drives.







Undermill Oscillator

Vibratory Feeder, frame, and chutes.

Various conveyors.

Complete Motor Control.

Osborn two stage Non Ferrous trommel (fines removal, and oversize scalping).

Hydraulic Units for Shredder and other components.

Spare parts.

This system is in good working order and can be demonstrated.

Was producing 30 to 35 tons per hour.

It was replaced last year by a larger shredding system.

Dismantled and re-erected on your foundation for under \$1,750,000.

Financing Available 800-823-9688

American Recycler February 2010, Page A15

METALS

Entries being accepted for ISRI award

The Institute of Scrap Recycling Industries, Inc. (ISRI) announced that the competition for its Design for Recycling Award is now open and entries from interested companies are being accepted. This award recognizes and honors those companies that design and manufacture goods that, at the end of their useful life, can be recycled safely and efficiently.

While many products are inherently recyclable, other products – due to design or constituent materials used in production – are not. Manufacturers can eliminate or reduce these barriers to recyclability by substituting or altering these hard-to-recycle materials or components, thereby increasing recycling yields and providing even greater benefits to the environment as well as economic benefits.

The Design for Recycling Award is of particular relevance with today's desire for a more sustainable environment and economy. For more than two decades, ISRI has promoted Design for Recycling, a voluntary program that encourages manufacturers to fully consider end-of-life recyclability in the earliest stages of product design. The Design for Recycling Award honors a program, company, or individual whose product or program design has incorporated one or more of the following:

A reduction in the number of different recyclable materials;

A reduction or elimination of hazardous constituents;

An increased yield of the product's recyclables;

An improvement in the safety of recycling;

A design that allows for easy disassembly for recycling.

The most recent award was presented in 2009 to furniture manufacturer Herman Miller for its 40-year commitment to improving recyclability and reducing waste in the design and manufacture of its products.

The EPA was honored in 2006 for its overall leadership in creating innovative design partnerships, and its dedication to empower businesses and industry sectors to incorporate environmental considerations, along with performance and cost considerations, into decision-making processes.

Computer manufacturer Hewlett-Packard was honored in 2005 for its documented efforts to reduce the use of hazardous substances, to simplify component design, and to build computers and printing products for easy disassembly and recycling.

Companies interested in being considered should submit a letter outlining how they have embraced the concept of Design for Recycling in their design and manufacturing process to Mark Reiter, Institute of Scrap Recycling Industries, Inc., 1615 L Street, N.W., Suite 600, Washington, DC 20036 by March 2, 2010.

Steel imports decrease

Based on preliminary Census Bureau data, the American Iron and Steel Institute (AISI) reported that the United States imported a total of 1,321,000 net tons (NT) of steel in November 2009, including 954,000 NT of finished steel (down 19 percent and 23 percent, respectively, vs. October final data). Finished steel import market share was an estimated 15 percent in November and is an estimated 22 percent year-to-date through eleven months.

Key finished steel products with increases in November 2009 compared to October include tin plate (6 percent), standard pipe (5 percent) and hot rolled sheets (4 percent).

In November, the largest volumes of finished steel imports from offshore were from South Korea (105,000 NT, down 6 percent), China (61,000 NT, up 10 percent), The Netherlands (60,000 NT, down 39 percent), Japan (55,000 NT, down 40 percent) and Brazil (49,000 NT, up 170 percent).

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

				· ·		
	DEC 2009	NOV 2009	OCT 2009	2008 Annual	% Change 2009 Annual vs. 2008	
CHINA	44	61	55	4,821	-69.7%	
SOUTH KOREA	124	105	112	2,305	-41.8%	
JAPAN	100	55	91	1,614	-39.5%	
INDIA	58	19	52	1,102	-45.7%	
GERMANY	37	31	45	1,122	-56.5%	
BRAZIL	30	49	18	436	-9.5%	
NETHERLANDS	16	60	99	474	-23.7%	
ITALY	38	30	48	336	-11.3%	
All Others	669	544	722	13,746	-40.4%	
TOTAL	1,116	954	1,243	25,956	-45.7%	

Valley Brass and Aluminum penalized by Oregon DEQ

The Oregon Department of Environmental Quality (DEQ) recently issued a penalty of \$7,382 to Valley Brass and Aluminum Inc., Salem, for illegally disposing of foundry sand waste that was contaminated with hazardous levels of lead.

DEQ had originally issued the penalty because the company stored piles of sand generated at the foundry at 1055 Hilfiker Road SE in Salem directly on the ground at its site, without cover and not contained. Valley Brass and Aluminum promptly cor-

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

rected the violation by having the leadcontaminated waste sand treated to render it non-hazardous.

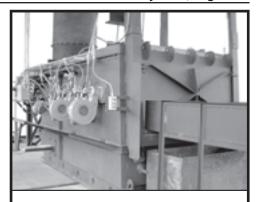
The \$7,382 penalty was for disposing of the hazardous waste at the company site rather than at a permitted hazardous waste disposal site. DEQ also cited the company for failing to determine if the waste it generated was hazardous.

Valley Brass and Aluminum appealed the penalty and is now negotiating with DEQ to settle the case.



						·
Commodity		Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
#1 Bushelings	per gross ton	\$265.00	\$220.00	\$285.00	\$265.00	\$360.00
#1 Bundles	per gross ton	265.00	220.00	285.00	265.00	359.00
Plate and Structural	per gross ton	290.00	210.00	281.00	283.00	317.00
#1 & 2 Mixed Steel	per gross ton	289.00	210.00	286.00	280.00	294.00
Shredder Bundles (tin)	per gross ton	210.00	205.00	209.00	202.00	226.00
Crushed Auto Bodies	per gross ton	215.00	205.00	205.00	200.00	228.00
Steel Turnings	per pound	89.00	100.00	103.00	104.00	195.00
#1 Copper	per pound	2.89	2.72	3.00	2.65	3.08
#2 Copper	per pound	2.76	2.61	2.87	2.51	2.97
Aluminum Cans	per pound	.68	.60	.71	.70	.79
Auto Radiators	per pound	1.75	1.50	1.51	1.68	1.80
Aluminum Core Radiators	per pound	.55	.51	.53	.55	.60
Heater Cores	per pound	1.20	1.10	1.31	1.40	1.49
Stainless Steel	per pound	.62	.60	.65	.68	.73

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 provide credible information, there is always a chance for human error or uniforeseen 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 Recycled risicalisms 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.



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- Permit assistance available.
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METALS

ASARCO parent pays \$1.79 billion in environmental bankruptcy settlement

The Environmental Protection Agency (EPA), other federal agencies and states will receive over \$1.79 billion to address contamination at over 80 sites through resolution of the American Smelting and Refining Company (ASARCO) bankruptcy.

For EPA, which is receiving approximately \$1 billion for future cleanup of Superfund sites, it is the largest bankruptcy settlement ever. The amount represents full payment of EPA's claims, plus interest. Funds are being distributed pursuant to settlement agreements approved in 2007, 2008 and as most recently as June

The cost recovery settlement for the Omaha Lead site in Nebraska provides payment of \$130.4 million for past costs incurred by the agency, the largest amount achieved by the Superfund enforcement program for a single site.

Five settlement agreements were approved by the Bankruptcy Court in June 2009, but the Bankruptcy and District Courts had to approve ASARCO's Plan of Reorganization before funds

from all the settlement agreements could ASARCO would pursue the selection of be distributed.

ASARCO was originally organized in 1899 and has operated for over 100 years, first as a holding company for diverse smelting, refining and mining operations throughout the United States and now as a Tucson-based integrated copper mining, smelting and refining company.

ASARCO is a subsidiary of ASARCO Inc., itself a subsidiary of Americas Mining Corporation, which is owned by Grupo Mexico.

•On August 9, 2005, ASARCO filed for reorganization under Chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court for the Southern District of Texas, Corpus Christi Division.

•On August 1, 2006, the United States filed a bankruptcy proof of claim on behalf of EPA with the United States Bankruptcy Court for the Southern District of Texas, Corpus Christi Division in the ASARCO Chapter 11 bankruptcy.

•In March 2008, the Bankruptcy Court approved the process by which a plan sponsor and sale of its operating

•After a bidding process for the purchase of ASARCO's assets, Sterlite (USA), Inc. on May 30, 2008, executed a purchase and sales agreement in the amount of \$2.6 billion for ASARCO's assets. After the purchase and sales agreement was executed, copper prices began to decline, and on October 14, 2008, Sterlite representatives informed the United States Bankruptcy Court that the company could not honor the con-

•The Debtor and Sterlite, were able to execute another purchase and sales agreement in March 2009.

•On June 5, 2009, the Bankruptcy Court approved five settlement agreements which provided recovery on environmental claims at numerous Superfund sites throughout the country. See section on settlement agreements below

•On November 13, 2009, the District Court for the Southern District of Texas, Corpus Christi Division accepted the Bankruptcy Court's Recommendation to confirm the Parent Plan.

Youngstown operations acquired

Metalico, Inc. announced that it has completed the purchase of the operating assets of Youngstown Iron & Metal (YIM) and Atlas Recycling located principally in Youngstown, Ohio.

The acquisition includes all inventory and equipment and will include all real estate owned by affiliates of the sellers and used in their businesses. The purchase price was not disclosed.

YIM, over the last two years, averaged \$50 million of annual revenue and sold an annual average of 105,000 gross tons of scrap steel and approximately 15 million pounds of non-ferrous products. The YIM operations complement Metalico's Akron, Ohio scrap operations. Metalico's Pittsburgh regional scrap operations are headquartered only 70 miles east of the new facilities. YIM will draw on Metalico's extensive network of scrap suppliers and its capital resources to greatly increase operating capacity and utilization at the shredder and elsewhere in the operations.

YIM's contribution to Metalico's results is expected to be accretive to earnings immediately.

Salvaging Millions

Autosalvageconsultant.com

The bridge plan for forecasting growth – How are we going to get there?

When my partners and I bought Ford's auto recycling subsidiary, it was losing huge buckets of money. As we prepared our financial forecast on the turnaround, the asset based lender and venture capital firm that were our stakeholders wanted to understand exactly how we were going to increase sales and reduce expenses.

The stakeholders required us to produce a credible plan. For each line in our forecast, when we said we would raise sales or lower expenses, we prepared a bridge plan. How exactly would we achieve the numbers we were forecasting? What resources would be needed to meet the forecast? How would our initiatives affect each month's numbers going forward? How many months would the initiative take? Our bridge plan spelled out answers to each of these questions in

To make a good bridge plan requires recognizing that some initia- nity to lead and inspire. tives take longer to execute than others and that some initiatives bleed through the financials more than others. If we were forecasting a 10 percent increase in parts sales (or cash flow), how would it be achieved? Increased turns? Raising prices? Better close rates? Bringing in more customers for that product or service?

We had to document each tiny step - including the resources needed and the person accountable for planning, executing, and measuring of results. Though simple in principle, making a bridge plan is a daunting task in practice.

Does your plan forecast a 10 percent increase in sales? Build a bridge with each component of sales you will need to reach the goal. A good bridge plan to achieve a 10 percent increase has more than one sales component and a total forecasted bridge that delivers at least a 20 percent increase. Some components won't hit their goal, so build in some wiggle room.

Get your whole team bought in by making them a part of creating the bridge plan, knowing they will be held accountable for the results they forecast. If you're competitive and your team wants to deliver, creating bridge plans gives you an exciting opportu-

Participants in our Peer Benchmarking Review Groups (PBRGs) from all industries learn and use business building techniques like this one. Business owners from the same industry share what works, vet and sharpen one another's ideas on growing their small businesses and achieving maximum success.

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.

Steel record

■Continued from Page 1

"All new steel made in the North America contains a minimum of 28 percent steel scrap with some processes using upwards of 90 percent steel scrap to make new steel," said Bill Heenan, president of the Steel Recycling Institute (SRI). "Steel continues to be recycled at a higher volume than paper, plastic, glass, copper and aluminum combined, and the steel can still holds the distinction of being food and beverage's most recycled container."

More than 1.5 million tons of steel containers were recycled in 2008 at a rate of 65.2 percent, while more than 14.8 million tons of steel were recycled from automobiles at a rate of 106 percent. Recycling rates for automobiles are often near or over 100 percent as older vehicles being recycled are often heavier than new cars, which are more fuel efficient through use of advanced highstrength steels, which are now available to automobile manufacturers.

Appliance recycling rates remained stable at 90 percent as did structural steel at 97.5 percent, while construction reinforcement steel (i.e., rebar) increased slightly to 70 percent. These steel recycling rates accomplish much more than simply saving landfill space. For every ton of steel recycled, 2500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone are conserved.

Recycling is also key to energy savings and other sustainable benefits. The United States steel industry has been the only major industry to reduce energy demands while still increasing production. In fact, the steel industry has reduced energy consumption by 33 percent since 1990 along with a 45 percent reduction in greenhouse gases per ton since 1975.

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in full length. Process single or multi-layer ACSR cable safely and efficiently!





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Our patented design provides three models to choose from!

RES/DRM 16awg, up to 250mcm COMC

MODEL SEP5 SEPSHEAR

14awg, up to 600mcm

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ELECTRONICS

Electronics recycling facility launched in Pennsylvania

The Pennsylvania Recycling Markets Center (RMC) at Penn State Harrisburg has played a key role in the creation of a \$10 million electronics recycling facility, Kuusakoski Philadelphia, LLC.

At full production, the state-of-theart electronics recycling facility will create approximately 30 skilled, technical jobs while domestically recovering a minimum of 15,000 tons of recycled consumer electronics annually. The Kuusakoski processing technology, which is presently operated at locations in Finland, Sweden and Russia, is the first-of-its-kind introduced to the United States.

The new facility is anticipated to be fully operational by late 2010.

The RMC provided management support through all phases of the economic development project including: business planning; loan, grant, and tax credit coordination; facilitation of opportunities with the state Departments of Environmental Protection and Community and Economic Development; introduction to the Governor's Action Team; introduction to the Philadelphia Industrial Development Authority; introduction to the Center for International Regulatory Assistance; and technology and process validation.

Organized as a non-profit 501c(3) corporation, the Pennsylvania Recycling Markets Center, Inc. is a leader in developing and expanding recycling markets. The RMC is Pennsylvania's keystone portal of environmental, economic development, and manufacturing resources leading to end use of recycled commodities and products. Headquartered at Penn State Harrisburg with satellite offices near Pittsburgh, the RMC can be contacted at 717-948-6660 or info@parmc.org. The RMC is supported in part by grant funds from the Pennsylvania Department of Environmental Protection.

Events Calendar

February 23rd-25th Renewable Energy World Conference & Expo North America. Austin Convention Center, Austin, Texas. 918-831-9736 www.renewableenergyworld-events.com

March 7th-10th

The Southeast Recycling Conference & Trade Show. Hilton Sandestin Beach Golf Resort & Spa, Destin, Florida. 334-356-0200 • www.southeasterecycling.org

March 10th-12th

Waste & Recycling Expo Mexico. CIEC World Trade Center, Mexico City, Mexico. +52 (55) 5545 4488 www.wasterecyclingmexico.com

March 14th-17th

ICSW 2010: The Twenty-Fifth International Conference on Solid Waste Technology and Management. Radisson Warwick Hotel, Philadelphia, Pennsylvania. www2.widener.edu/~sxw0004/24agenda.html

March 18th-20th

Showpower 2010 Transmission/Undercar Expo. Nashville Convention Center, Nashville, Tennessee.

800-274-7890 • www.showpowerexpo.com

March 23rd NERC's Spring 2010 Workshop.

Northampton, Massachusetts. 802-254-3636 • www.nerc.org

March 28th-30th

C&D World Annual Meeting of the CMRA. Rio Hotel and Casino, Las Vegas, Nevada. 630-585-7530 • www.cdrecycling.org

April 12th-13th

Aluminum Association's 2010 Spring Meeting. The Westin Alexandria, Alexandria, Virginia. www.aluminum.org

April 26th-28th

8th Annual CARE Conference. La Posada De, Santa Fe, New Mexico. www.carpetrecovery.org

May 3rd-6th

Waste Expo 2010. Georgia World Congress Center, Atlanta, Georgia. 800-927-5007 • www.wasteexpo.com

May 4th-8th

Annual ISRI Convention and Exposition. San Diego Convention Center, San Diego, California.

919-563-5291 • www.isriconvention.org

May 16th-19th Federation of NY Solid Waste Associations Solid Waste & Recycling Conference with Trade Show. The Sagamore, Bolton Landing, New York. 631-288-2480 • www.nyfederation.org

WM Recycle America adopts electronic waste recycling program

Waste Management, Inc. announced that its subsidiary WM Recycle America is implementing the Responsible Recycling (R2) Program for electronics recyclers. The program establishes a set of accepted practices that helps protect the environment and workers' health and safety during the handling of e-waste, provides the ability for third parties to monitor activity and offers greater transparency in the fast-growing electronics recycling sector.

The Environmental Protection Agency facilitated the development of the R2 Program which is accredited by the ANSI-ASQ National Accreditation Board.

To ensure proper handling of e-waste, the R2 program requires participating companies to implement an environmental, health, and safety management system that tracks materials and minimizes emissions and worker exposure during electronics recycling operations.

Waste Management's Minneapolis eCycling facility is one of the first facilities in the industry to be certified to the R2 Program standards and the company is in the process of certifying all of its electronics recycling facilities.

INTERNATIONAL

Cereplast hikes distribution of bioplastic resin in Europe

Cereplast, Inc., a manufacturer of proprietary bio-based, sustainable plastics, announced that it has extended its distribution agreement with A. Schulman, Inc. (Schulman) to include all of Europe. Schulman is a supplier of high-performance plastic compounds and resins used as raw materials in a variety of markets.

Cereplast's variety of bioplastic resins will enable Schulman to launch a new offering composed of bio-based materials to customers interested in more environmentally-friendly solutions. Under the agreement, Schulman will distribute Cereplast Compostables® and Hybrids Resins® throughout Europe.

According to the European Bioplastic Market report by Frost & Sullivan, the bioplastics market in Europe has experienced an exponential growth and demand has outstripped supply, as converters and endusers are rushing to take advantage of this resurgent technology.

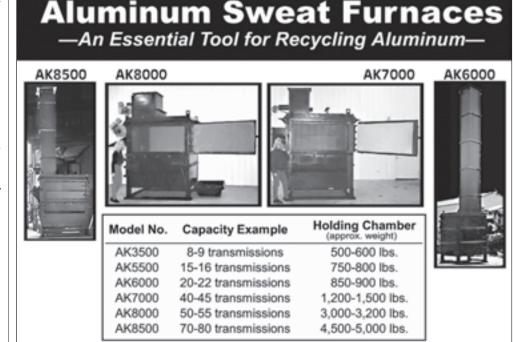
Currently, bioplastics account for less than one percent of the European plastics market. All Cereplast resins replace a significant percentage of petroleum-based additives with starches made out of corn, wheat, tapioca and potatoes, allowing bioplastics to return back to nature within 180

United States-Asia container lines to raise dry cargo rates

Cargo demand continues to rise in the United States-Asia freight market, but transpacific freight rates remain severely depressed in both directions and container lines find themselves under mounting pressure to improve revenues in order to meet customers' service requirements.

Effective February 15, member lines in the Westbound Transpacific Stabilization Agreement (WTSA) are recommending a new 2010 general rate increase (GRI) for dry cargo rates including rates for commodities exempt from tariff filing – in the amounts of US\$100 per 40 foot container (FEU) and \$80 per 20 foot container (TEU) for cargo originating at the ports of Los Angeles and Long Beach on the United States West Coast; and by \$150 per FEU and \$120 per TEU for all other dry cargo, including shipments from other West Coast ports, all-water shipments via the United States East and Gulf Coasts, and inland point intermodal moves.

WTSA lines indicated that the February adjustments are part of a larger 2010 revenue program which is to include quarterly increases throughout the year as market conditions dictate.



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Our years of experience provide the best customer support.

Page A18, February 2010 **American Recycler**

BUSINESS BRIEFS

Environmental Waste appoints new director

■ Valdis Martinsons will join the board of Environmental Waste International Inc. (EWI), subject to regulatory approval. Martinsons brings a wealth of experience in high tech businesses to EWI. He is presently chief operating officer of iTMethods, a provider of business agnostic technology infrastructure operations for the small-medium business market.

Martinsons is a professional engineer with a Master of Applied Sciences engineering degree and a Master of Business Administration degree. He was chief information officer of Virgin Mobile Canada, where he oversaw their launch as well as developing their multiyear infrastructure and foundational roadmap. Prior to that, he was chief information officer of Research in Motion, responsible for all Blackberry operations worldwide.

Tube City appoints director of outsource purchasing

■ Tube City IMS, LLC, a provider of products and services to steel mills and foundries globally, announced the appointment of Hideto Hata as director of outsource purchasing and sales for Central and South America.

Hata will be working with the Company's raw material and optimization group to generate new business.

Prior to joining Tube City, Hata worked in a variety of positions for Sojitz Corporation in Tokyo, Japan, Caracas, Venezuela and New York City. Hata is based in New York City.

VisionMonitor Software hires new senior executive

■ VisionMonitor Software has hired Max D. Jones as executive director of Business Solutions. Jones joins Vision-Monitor Software after a successful career as senior consultant at the firm Environmental Resources Management in Houston, Texas.

Jones has more than 23 years of experience in the petrochemical manufacturing, petroleum refining and exploration and production sectors with over 19 years of expertise in all aspects of environmental, health, safety and risk management. His experience includes strategic development and implementation of compliance assurance management systems (CAMS), behavior-based employee programs, process safety management and corrective action tracking systems. In addition, Jones has extensive experience in developing strategies for reducing costs associated with acquiring property/casualty insurance for manufacturing sites. Previously Jones held the position of director of EHS & Security for Texas Petrochemicals in Houston, Texas.

Oil Purification Systems named as a top innovator

■ Oil Purification Systems (OPS) announced that it has been selected as a winner of the annual New England Venture Summit Top Innovator award by youngStartup Ventures. The list of privately held companies recognizes those that play a leading role in innovation for the Technology, Life Sciences and Clean-tech sectors.

Morbark and Strongco form Canadian alliance

■ Morbark announced the signing of a dealership agreement with Strongco Limited Partnership in Western Canada. With Strongco's five locations in Alberta, Morbark customers in western Canada now have convenient access to equipment, service and sales.

Strongco Limited Partnership is one of the largest multi-line industrial equipment distribution providers in Canada.

Strongco sells, rents and services mobile industrial equipment in the construction, road building, mining, forestry, utilities and municipal sectors of the economy. It also represents several leading equipment manufacturers, such as Volvo, Dressta and Manitowoc.

Greenstar appoints Michael Simmons CEO

■ Houston-based Greenstar North America announced the appointment of Michael Simmons as its chief executive officer.

Simmons, who joined Greenstar in December 2009, brings an exceptional track record with 20 years operational leadership experience in senior positions. Most recently, Simmons came to Greenstar from Q Investments where he served as senior operating partner.

Simmons will replace Mike Wynne, who has been serving as interim CEO during Greenstar's chief executive search. Wynne will continue in his role as chairman and chief executive of NTR's International Recycling Operations. NTR, a renewable energy group, is a leading developer of renewable energy and recycling, based in Dublin, Ireland.

Glantz Iron & Metals hits 100th year anniversary

■ Glantz Iron & Metals, Inc., located in Great Neck, New York will celebrate its 100th year anniversary in 2010.

The business was started in 1910 by Harry Glantz, using a horse and buggy, to pick up scrap metal in and around New York City. At that time, they serviced strictly plumbers. When Harry's son, Hy Glantz, came into the business, they started handling scrap metal generated by breweries and shipyards. Three generations later, the company now purchases scrap metal from manufacturers, generators, dealers and processors, and markets it domestically and internationally.

Paul Glantz, president of MRC, says "Our centennial celebration is a tremendous milestone. 100 years of environmentally-sound scrap metal recycling makes us a pioneer, a trailblazer some say, in the recycling industry. We are one of the oldest recycling companies in the United States. We were recycling decades before it became popular, and years before the term 'recycling' was coined."

Why is it that when you transport something by car, it's called a shipment, but when you transport something by ship, it's called cargo?

Electronic Recyclers to partner with LS-Nikko

■ Electronic Recyclers International (ERI), located in Fresno, California, has formed a partnership with copper smelter LS-Nikko, Seoul, South Korea under which LS-Nikko will accept commodities from ERI's electronics recycling facilities for further processing. As part of the agreement, LS-Nikko will also take a minority investment position in ERI.

Partnership launches Recycling Rocks program

■ Live Nation, a live music company, and Waste Management, Inc. announced a multi-year agreement encompassing Live Nation's venues, concerts, tickets and online platform.

Under the agreement, Waste Management becomes the official waste services and recycling sponsor of 66 Live Nation venues across the country. Waste Management will be providing waste assessments to help minimize waste and promote recycling at all Live Nation venues, including concessions and backstage areas.

New dealer for Doosan Infracore named

Cowin Equipment Company of Birmingham, Alabama, now offers the full line of Doosan Infracore Portable Power products in the Atlanta market. The company offers Ingersoll Randbranded air compressors, generators, lighting systems and light compaction equipment.

ADVERTISER INDEX

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FEATURED PRODUCTS

ZEBRA SKIMMERS EXPANDS MUSCLE COALESCER LINE



Zebra Skimmers Corporation, a full-line manufacturer of oil skimmers and fluid maintenance equipment, expands its Muscle™ Coalescer line to include a new model for servicing air compressor condensate.

The Muscle Coalescer line has been solid for many years, servicing our customers' needs for separation and removal of contaminate oil from water-based fluids. Due to environmental concerns, many industries desire or are required to treat their compressor condensate before its release to the water table. This new coalescer model is a simple and cost-effective solution, preventing environmental contamination while reducing the overall compressor waste stream," stated Meg Grant, Sales & Service Manager of Zebra Skimmers Corporation.

Benefits of the Muscle Compressor Coalescer include: Robust, yet simple, design fits any budget Automatic air release valve and de-oiled water exit Reduces compressor waste stream up to 98 percent Works with almost any size compressor

Lifetime warranty

Zebra Skimmers, the leader in fluid maintenance for over a decade, invents new technology to save its customers money on fluid while reducing waste, and sells and supports its equipment worldwide. Most products are guaranteed for at least a year, and some for life.

CONTACT:

Zebra Skimmers Corporation Telephone: 888-249-4855

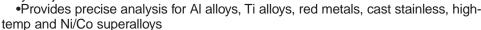
E-mail: Meq@ZebraSkimmers.com Website: www.zebraskimmers.com

INNOV-X OMEGA XPRESS FOR FAST PRECISION SORTING

Innov-X Systems, Inc. continues to extend the reach of XRF by introducing its Omega Xpress XRF metal analyzer with breakthrough silicon drift detector (SDD) technology for superior high speed material sorting and 100 percent positive material identification (PMI).

The Omega Xpress couples an ultra high resolution SDD detector with a safe, yet powerful 40 kV / 4 watt x-ray tube, delivering the fastest, most precise and sensitive analysis available today in a handheld x-ray fluorescence (XRF) analyzer for metal and alloy applications.

The Omega Xpress provides a rapid chemistry and grade match with many alloys in just one to two seconds. It also:



•Delivers accurate PMI of C and low alloy steels; FAC and other corrosion indica-

•Separates Ta, W, Hf, Re metals in specialty alloys

•Non-destructively and accurately identifies and assays precious metals

In addition to offering direct light element analysis in air, the Omega Xpress is available with optional patented vacuum technology. This unique dual air/vacuum operation is exclusive to Innov-X with a handheld XRF.



CONTACT:

Innov-X Systems, Inc. Telephone: 866-4 Innov-X E-mail: info@innovx.com

Website: www.innovx.com/products/omega

HEAVY DUTY SINGLE SHAFT PIPE SHREDDERS AVAILABLE



Available in two rotor dimensions, 39" and 56", Cumberland's new CPS Series is equipped with rotary cutters operating at low speed, for smooth and efficient size reduction. With no need to pre-cut materials up to 25' in

length – he CPS was developed for reducing the size of pipes up to 47° in diameter for materials such as UPVC, PE and PP.

The CPS Series pipe shredder reduces material to approximately 1" to 4" when combined with a Cumberland granulator, which can be stacked 2 stage or in-line with conveyors. Output material sizes can range from 1/8" to 1/2", with the granulator averaging 150 percent of its stated throughputs without using heavy power con-

A low speed rotor (43 rpm on CPS1000 and 28 rpm on CPS1500) transmits high cutting torque for processing solid, thick wall, or corrugated pipe. The low speed cutting action provides smooth operation with processing the heavy wall or solid pipe and reduces noise levels that typically occur. Dual drive motors provide even distribution of horsepower along the rotor, maximizing the transmission of torque through the heavy-duty gearbox system.

The heavy-duty self-aligning outboard mounted bearings on the CPS Series reduce the possibility of material contamination. The three stage telescoping 20 h.p. hydraulic ram pushes the pipe into the shredder, maintaining pressure to maximize throughput. The laser measurement device on the ram records the exact position of the ram at each step of the process.



CONTACT:

Rick McNeil or Jack Salvia **Cumberland Engineering Corporation**

Telephone: 508-399-6400

Website: www.cumberland-plastics.com

QUALITY SHREDDERS FROM JORDAN REDUCTION SOLUTIONS

Jordan Reduction Solutions' shredders use low speed, high torque hook shear blades manufactured of high alloy heat treated material mounted on hexagonal shafts.

Counter rotating shafts turn at slightly different speeds increasing the efficiency of the cutting action. Overloads caused by foreign material stop the forward motion of the motor and then reverse to clear the foreign matter, before forward motion is resumed. Shock loads are negated by a patented "shock absorber" drive train. JRS™ offers shredders with cutting chambers ranging in size from 17" x 14" to 60" x 40" with motors from 10 h.p. to 450 h.p.

Features and benefits include:

- •Built tough to handle the most severe applications
- •Knives constructed from high alloy heat treated steel for extra long life
- •Adjustable blades for optimum "rip-shear" action and end product size
- Overload protection with automatic reversal
- •Engineered for economical low maintenance
- Simple operation with many automatic features
- •Less space required due to a modular design, adaptive to the work area
- •Heavy-duty design and fewer parts for trouble-free operation and reliability
- •JRS Patented Cushion Drive System absorbs minor shock loads and automatically stops the shredding action in the event a non-shreddable item is introduced into the cutting chamber.



Richard Pyle, Manager: Sales and Operations

Telephone: 888-733-8248

E-mail: richard@jordanreductionsolutions.com Website: www.jordanreductionsolutions.com



Page A20, February 2010 American Recycler

BUSINESS BRIEFS

Mascoma appoints Brady as CEO and to board

■ Mascoma Corporation announced the appointment of William J. Brady as the new chief executive officer, effective immediately. Brady will also join the boards of directors of Mascoma and Frontier Renewable Resources, LLC.

With twenty-three years of experience at Cabot Corporation, a chemical industry leader, Brady is poised to lead Mascoma into full commercial operations.

Until assuming his new role at Mascoma, Brady served as executive vice president and general manager of several operating divisions at Cabot Corporation, leading business units from technical development through successful commercialization, as well as managing global capital-intensive businesses and developing strategic relationships with large global customers.

Metalico elects Sean Duffy to board of directors

■ Metalico, Inc. announced that Sean P. Duffy, a long-time recycling executive, has been elected to the Company's board of directors.

Duffy will fill a vacancy created by the retirement of Earl B. Cornette, who is stepping down from the board as of the end of the year.

Duffy is the president of FCR Recycling based in Charlotte, North Carolina and a regional vice president of its parent, Casella Waste Systems, Inc. FCR processes and resells recyclable materials originating from the municipal solid waste stream, including newsprint, cardboard, office paper, containers and bottles. Duffy co-founded FCR in 1983 and served that company in various capacities, including president, until it was acquired by Casella in 1999.

Cornette has been a director of Metalico since the Company's founding in 1997. He is a retired executive in the lead and environmental industries.

Waste Management's dividend payment raised

■ Waste Management, Inc. announced that its board of directors has approved an 8.6 percent increase in the quarterly dividend rate, from \$0.29 to \$0.315 per share. This marks the sixth consecutive year that the Company has increased its quarterly dividend. Future quarterly dividends must first be declared by its board of directors prior to payment.

"This announcement reflects our continued commitment to returning cash to our shareholders," said David P. Steiner, chief executive officer of Waste Management, Inc.

The Company noted that the board of directors will declare the first quarter 2010 dividend in February, at which time the record and payment dates for the first 2010 quarterly dividend will be announced. It is expected that the first payment of the higher dividend will occur in March of 2010.

Karl Brooks selected to lead EPA's Region 7

President Barack Obama has selected Karl Brooks to be the Environment Protection Agency's (EPA) regional administrator for EPA's Region 7. This region encompasses Iowa, Kansas, Missouri, Nebraska, and nine Tribal Nations.

Regional administrators are responsible for managing the Agency's regional activities under the direction of the EPA Administrator.

Karl Boyd Brooks has taught history and environmental studies at the University of Kansas for the past decade. Previously, Brooks was the executive director of the Idaho Conservation League and served six years in the Idaho State Senate.

Wagers joins Routeware as VP of operations

■ Routeware, Inc. announced that Dave Wagers has joined the Company as vice president of operations.

Wagers brings more than 35 years of experience in both management and operations, making him an ideal addition to Routeware's executive team.

Wagers comes to Routeware from the high technology information services and software industry. He has extensive knowledge in client services, operations, hardware engineering, general management, business development and strategic planning with both Fortune 500 companies as well as start-ups.

As vice president of operations, Wagers will manage all areas of customer support, including the development of a Business Services operation dedicated to the delivery of analytical tools for Routeware's customers.

Smurfit-Stone CEO and chairman plans retirement

■ Patrick J. Moore, Smurfit-Stone Container Corporation chairman of the board and chief executive officer, has notified the board of directors that he intends to retire within one year following the Company's emergence from Chapter 11 proceedings.

Moore will continue to serve on the board of directors. The Company has filed amendments to its Plan of Reorganization documents in United States Bankruptcy Court that provides for a non-executive chairman of the board upon emergence from Chapter 11. It is anticipated that the new board of the reorganized Company will designate a successor to Moore after the Company and its subsidiaries emerge from Chapter 11.

President and chief operating officer Steven J. Klinger, will continue to serve in his current role as well as on the Company's board of directors.

Smurfit-Stone filed its Plan of Reorganization on December 1 and plans to emerge from restructuring proceedings in both the United States and Canada either late in the first quarter or early in the second quarter of 2010.

NEW PRODUCT SHOWCASE



Atlas Copco Construction Equipment 3700 East 68th Avenue Commerce City, CO 80022 800-760-4049 www.atlascopco.us

ATLAS COPCO ADDS SBU 340 TO SOLID BODY BREAKER LINE

Atlas Copco's SBU 340 hydraulic breaker is for carriers in the 9,920 lb. to 19,840 lb. weight class. The solid body design removes the weakest parts of traditional hammers. Double retainer bars last much longer than the retainer pins used on other breakers.

The full-length floating tool bushing reduces wear on the bushing and working tool and helps prevent tool breakage, and the simple tool retainer lock mechanism allows both components to be changed in the field with simple hand tools.



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The in-track boom swing allows the operator to work in constricted conditions with confidence with a dig depth of 13' 7".

www.bobcat/com/excavators

CASE ADDS HIGH PERFORMANCE 650L TO CRAWLER DOZER LINE

The new Case 650L crawler dozer delivers a lower overall operating height and weight and superior maintenance features that boost productivity.

The 650L delivers 74 net h.p. through a Tier 3-certified, four-cylinder, 4.5-liter turbocharged Case family IV engine with electronic fuel injection for maximum fuel efficiency and easier starts in cold weather. A high-pressure common-rail injection system delivers excellent combustion. A charge air cooler reduces emissions and provides a more efficient fuel burn.

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Eriez introduces the innovative EcoTowerSort, a multi-stage, total metal recovery system ideal for auto and e-scrap processing.

EcoTowerSort can be used for the sorting of aluminum, stainless steel, copper cables and heavy fractions. It even recovers stainless steel and plastic coated wires. The compact machine is available in widths of 24" to 118" and enables total recovery of valuable metals at a lower investment.

Different modular sorting technologies are utilized within the system. Common configurations include rare earth drum separators, eddy current separators, inductive sensor sorter or combinations.



FECON, INC. ANNOUNCES THE BULL HOG HDT ROTOR SYSTEM

The Fecon® Bull Hog® is now available with the new HDT rotor system. The improved efficiency of the rotor enables more production for the same horse power while maintaining maximum durability to improve production levels. The Bull Hog HDT offers optimal cutting efficiency.

Fecon's HDT rotor system can be equipped with four different tool options including three unique carbide options and a knife tool that allows contractors to quickly configure their mulcher to diverse conditions.

Fecon, Inc. 3460 Grant Drive Lebanon, OH 45036 800-528-3113 www.fecon.com **American Recycler** February 2010, Page A21

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2001 A934 REBUILT (rubber), 51' reach, hydraulic cab, gen-set and grapple.

2001 A924 REBUILT (rubber), 40' reach, hydraulic cab, gen-set and grapple.

2001 A316 (rubber), 30' reach, hydraulic cab, gen-set and grapple.

2000 R914 REBUILT (crawler), 38' reach, 4' cab riser, gen-set and grapple. 2000 A904 REBUILT (rubber), 35' reach, 4' cab

riser, gen-set and grapple. 1999 R934EW (crawler), 50' reach, 4' cab riser, gen-set and grapple

1998 A922 REBUILT (rubber), gen-set, grapple and magnet, no riser.

1994 A932 REBUILT (rubber), hydraulic cab, gen-set and grapple.

CATERPILLAR 2005 M325C REBUILT (rubber) with 50' reach, hydraulic cab, A/C, gen-set and grapple. 2002 M318 (rubber), 35' reach, hydraulic cab, A/C, gen-set and grapple.

2003 M320 REBUILT (rubber), 39' reach, hydraulic cab, gen-set and grapple. 1997 M320 REBUILT (rubber), 39' reach,

hydraulic cab, gen-set and grapple. SENNEBOGEN

2004 821C (rubber), 36' reach, hydraulic cab, gen-set and grapple. 2004 835M (rubber), 52' reach, hydraulic cab, gen-set and grapple.

2000 830M REBUILT (rubber), 50' reach, hydraulic cab, gen-set and grapple.

2004 5260 AUTO LOGGER/BALER with 16.5' chamber, crane and grapple.

OTHERS

COLMAR

2004 SIERRA T500SL shear/baler combination. 2003 SIERRA RB5000 portable logger baler. AL-JON LC90 portable car crusher. 2003 NEW HOLLAND MH (rubber), 46' reach,

1996 KOMATSU PC240 REBUILT (crawler), 38' reach, 3' cab riser, gen-set and grapple 1995 NORTHSHORE 2100 SE REBUILT (stationary electric -75HP) MH, 27' reach, cab, À/C and grapple.

cab riser, gen-set and grapple.

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- '04 Terex 470 excavator w/LaBounty 2000R shear ('07 model), third member mount, 45' reach.

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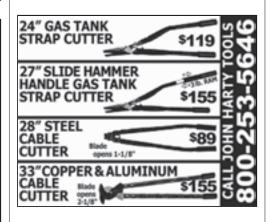
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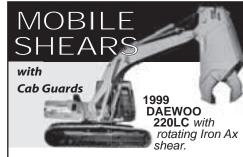


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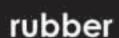




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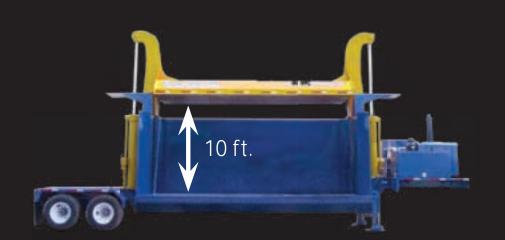
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by MIKE BRESLIN

mbreslin@americanrecycler.com

It's been a long wait for the United States Environmental Protection Agency (EPA) to weigh in on the safety of recreational products made from recycled tires. Finally, it released the results of a limited field monitoring study of artificial turf playing fields and playgrounds using recycled tire material or tire crumb. EPA plans to use the study information to help determine the next step to address questions regarding the safety of tire crumb infill in recreational fields.

In short, the EPA study found that using the material does not point to a concern for the agency at this time. This is another positive reinforcement for this sector of the recycling industry, which already knew from numerous laboratory analyses, state studies and independent field studies that the material posed little or no environmental danger or health risks.

Liberty Tire Recycling, the country's largest recycler of scrap tires processes 110 to 120 million tires per year. Company president Don Rea commented on the EPA study, "There has been somewhere between 50 to 100 studies on crumb rubber. There has been so much study done that it doesn't seem possible that someone is going to come up with another conclu-



by the EPA indicates that this artificial turf poses no significant health or environmental issues.

sion. It would have been nice if the EPA had just said this stuff is fine, forget it. If EPA was the least bit suspicious they would not have said what they said."

Over the years, shredded and crumb rubber processed from recycled tires has found its way into many useful recreational and architectural applications. These include rubberized ground

covers under playground equipment. running track material, soil additives for playing fields and sports flooring. Crumb rubber is also used in artificial turf fields between turf fibers to provide stability and resiliency.

According to the Synthetic Turf Council artificial turf has been installed in approximately 4,500 American fields, tracks and playgrounds. Synthetic turf was originally used in stadiums and on athletic fields for college and professional sports teams, but now is also used in municipal parks, golf courses, playgrounds, on cruise ships, in airports and residences for lawns. In addition, recycled tires are being processed into colorized mulches for residential and

See RUBBER SAFETY, Page 7

India to test American-made rubber rail ties

by IRWIN RAPOPORT

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A major Indian company which sells railway equipment to the various rail companies will be testing more than 500 Tire-Tie[™] rubber rail ties, manufactured by Cazenovia, New York based NP&G Innovations throughout 2010, said NP&G president and coowner Cal Nichols.

"The Indian rail system is the largest in terms of miles in the world," he said, "and they just appropriated \$3 billion for research and development of new technologies. We've shipped 20

ties so far. The company we are dealing with has serious rail capabilities and they are hoping to expand their markets."

Nichols was recently in India to meet with officials and participate in a trade show where he displayed six ties that are made from discarded tires. Should the rubber ties pass Indian standards and regulations, the market for replacement ties could be huge.

And while discarded tires are available in India to manufacture ties, Nichols said ties made in America would still be needed to meet Indian demand.

"Their disposal and collection system is not as developed as ours, and because of that we will still be processing tires in this country," he said.

India experiences extreme weather conditions, including the monsoon season which brings torrential rains and moisture, and has track that runs along coastal areas and sections of the country where it is very hot and dry for lengthy periods of time.

"They have similar situations to what we experience in the United States," said Nichols, who notes that Indian standards are similar to those found in North America and Europe.

In addition to the Indian market, there is also China, which has an extensive rail network.

"Both India and China cannot get enough wood to build standard creosote treated ties and concrete ties are too expensive," said Nichols.

"We are coming in lighter than concrete and as strong as concrete. Our big claim to fame in these countries, and in general, is meeting or nearing the structural strengths of concrete, while at the same time being 40 to 50 percent of the weight of a concrete tie.

See RAIL TIES, Page 2



A Letter from the Editor

Dear readers,

From athletic fields to shipping to more comfortable commutes, tire shred and recycled rubber is revolutionizing the way we get around. Tires have an almost poetic lifecycle - they convey us daily over asphalt, concrete and less-friendly terrain, and now, at the end of their useful lives, they can be made part of those surfaces they once traveled over.

Amazing things are being done with end of life tires. Rather than merely being a difficult-to-dispose-of item, old tires have quickly become a highly reusable, desirable material. In this issue of American Recycler, we've tried to highlight a few of the current processes that call for tire and rubber shred in order to improve otherwise ordinary products.

If you've ever driven over brand new, smooth asphalt, the lack of road noise becomes immediately noticeable – as does its inevitable return as soon as your vehicle gets to the next section of old road. However, in the cover article by Mike Breslin, we've learned that the return of the road noise does not have to be inevitable. Roads are now being constructed with asphalt that utilizes rubber in its composition that improves many of its qualities, including reduced road noise.

Roads aren't the only traveling surfaces that have seen improvements with the addition of recycled tires. Stronger, safer sidewalks that utilize rubber or plastics are being installed in select places across the country. As the process spreads, you can expect to see neighborhood sidewalks, once plagued by tree roots and weatherinduced wear, replaced with tree-andweather-proof rubber walkways.

Rubber has also come to the rescue of railroads around the world by being used in ties that are stronger than their wooden predecessors, and that potentially have better longevity than concrete ties. And the fewer ties that the railroads have to replace, the lower their cost of business, which may translate to savings on shipping costs.

And now that the Environmental Protection Agency has weighed in and found recycled rubber products to be generally safe, expect to see the number of applications for rubber grow exponentially.

I hope that you enjoy this issue of AR. As always, feel free to get in

Until next month,



Dave Fournier Focus Section Editor david@americanrecycler.com

Rail ties

■Continued from Page 1

"China and India have bridges that are posted to certain weights," he added. "If they go in with concrete ties at 900 pounds apiece and our ties weigh 400 to 500 pounds, there is an immediate weight savings and capacity increase in the types of loads that could be carried across the bridges. Our ties absorb more energy and do not experience the stresses that affect concrete ties."

The company has been manufacturing rail ties since 2003. On June 14, 2004, cross ties were installed on a spur line of the New York Susquehanna Rail Way, which includes straight track and a three degree curve section.

"The ties continue to hold up with no signs of degradation after years of steady use," said Nichols. "Our current design has never failed a rail test and we recently succeeded the electrical independence test at the Federal Railroad Administrations' Transportation Technology Center, Inc. (TTCI) in Pueblo, Colorado – we had to make sure that we were non-conductive.

"We've done all of the Rochester Institute of Technology's (RIT) Center for Integrated Manufacturing Studies' tests, TTCI tests and laboratory testing has been completed at the Vossloh Switch Systems Laboratory in France," he added. "We just did an RIT test to quantify the energy absorption of a rubber tie. Our tie is more rigid and stronger than wood and close to con-



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Should rail companies use rubber ties, it could go a long way towards using up the annual amount of tires that are discarded. Nine million rubber ties would use the equivalent of 205 million tires.

crete in terms of rigidity of structural strength. The results will compare the differences between wood, concrete, plastic and our rubber tie. The next test we have to pass is an in-track "real time" test, equivalent to 100 million tons. We are arranging it now to be done at the TTCI."

The Vossloh testing included static 3 point bending, screw pullout and lateral load cyclic fatigue testing to EN13146-N specifications. A comparison was made using a European wood standard tie. All tests on the Tire-Tie passed the EN criteria for static stiffness and durability. The testing at the RIT CIMS laboratory was done using a 2axis dynamic test machine designed by NPG Innovations. Furthermore, several variations of the Tire-Tie were tested to the AREMA and TTCI recommended test conditions, with comparative testing done on a standard red oak tie.

Each rubber rail tie uses the equivalent of 25 tires.

"We ultimately use about 50 percent of the tire, with the remainder recyclable as crumb rubber and such," said Nichols. "It all winds up being recycled."

The upcoming test at the TTCI, combined with the results of the Indian testing, said Nichols, should allow the company to start selling ties in the States this fall.

"Meeting all of the TTCI standards and having its certification is the requirement for anything used in the rail industry in the States," said Nichols.

Between 18 and 20 million rail ties are replaced annually in the United States, with 90 percent being standard creosote treated ties, 9 percent being concrete ties and the remaining 1 percent being made of steel, composites and other materials.

A standard wood tie, said Nichols, has an average lifespan of 7 to 12 years, with some lasting as few as four years along the gulf coast where they are subject to humidity, moisture and insects.

Concrete ties, said Nichols, are also having problems and this has led to lawsuits and costly replacements.

"CSX just settled a lawsuit against Rocla Concrete Tie, Inc.," he said. "It was a huge amount of money because 200,000 of their ties were failing. And now AMTRAK is in the middle of a lawsuit. The Washington, D.C. – New York City corridor has 1.3 million concrete ties and about 250,000 are suspect at this point."

A concrete tie in Europe, said Nichols, who consulted rail industry suppliers, costs around \$130 and between \$80 and \$100 domestically.

Should rail companies use rubber ties, it could go a long way towards using up the annual amount of tires that are discarded. Nine million rubber ties would use the equivalent of 205 million

"I am frequently asked the question 'what would we do if there were not enough tires,' and I reply 'I'd love to have that problem," said Nichols.

Crumb rubber may face new competition in infill market

The Motz Group has purchased the the intellectual property rights for coating and pigmenting silica sand for use as a turf infill. The newly formed company has been incorporated as USGreentech, L.L.C., and has brand-named their coated sand infill, Envirofill®.

Envirofill is positioned to challenge crumb rubber as the infill of choice in 4th generation sports and leisure synthetic turf systems. The company claims that the product addresses the growing concerns surrounding crumb rubber infill.

Envirofill is a naturally occurring, assets of U.S. Greentech, LLC, acquiring highly rounded silica sand. It is nontoxic, dustless and heavy metal free. The proprietary coating process locks out moisture, reducing microbial survival in the turf canopy. The coated grains have a low abrasion index and resists compaction and displacement mounding. In infill heat build-up studies, clear coated Envirofill tested 80 degrees cooler than black crumb rubber and has proven to lower outdoor playing surface temperatures as much as 20 percent compared to crumb rubber.

LANXESS plans new rubber facility project in Singapore

company, has brought forward its plans to build a new butyl rubber facility in Singapore. The company will hold a groundbreaking ceremony in May, 2010, and production is expected to start in the first quarter of 2013. The 100,000 tons per annum plant on Jurong Island will require an investment of up to \$575 million.

The plant will help serve the rising demand for tires that is being driven by the trend towards greater mobility, in particular among the growing middleclass in countries such as China and India. In addition, the distinct properties of butyl rubber make it an important product of choice for the pharmaceutical industry, particularly in Asia.

In June 2009, LANXESS postponed the production start of the plant until 2014 due to the effects of the global economic crisis. This led to a period of de-stocking and high volatili-

LANXESS, a synthetic rubber JTC Corporation, an authorized agent of the Singapore Ministry for Trade and Industry, to build the plant. The neighboring petrochemical refinery belonging to Shell will supply the feedstock for the key raw material isobutene to LANXESS' rubber plant as part of a long-term agreement. In addition, the company will create about 200 highlyskilled jobs for the new facility and plans to fill the majority of positions locally. At peak construction times, around 1,500 workers will be employed at the construction site.

> A complete evaluation of the existing process to manufacture butyl was carried out for the new Singapore facility and a radical redesign will be implemented. The process is expected to be best in class. As a result, the butyl plant will be more energy and resource efficient as well as environmentally friendly.



From left to right, Julian Ho of Economic Development Board, Dr. Ron Commander, global head of LANXESS' Butyl Rubber business unit and Ian Wood, managing director of LANXESS Pte. Ltd.

ty of customer ordering. However, demand has stabilized in the last six months and the global butyl rubber market is expected to grow again annually by an average of more than three percent in the coming years. LANXESS' two existing butyl rubber production facilities in Zwijndrecht, Belgium, and Sarnia, Canada, are currently running at high capacity rates.

Global tire sales are expected to return to pre-crisis levels in 2011 as the tire replacement market and new vehicle production levels gradually recover. In order to meet this growing demand, LANXESS' customers are planning capacity expansions in the BRIC markets.

LANXESS will lease about 200,000 square meters of land from the

Additionally during LANXESS will relocate the global headquarters of its Butyl Rubber business unit to Singapore from Fribourg, Switzerland, in order to better serve the rising demand in Asia. The headquarters, including all global management functions such as marketing, controlling and supply chain, will have about 35 employees initially. More than half of the company's butyl rubber sales are currently generated in the Asia region, with especially China, India and South Korea showing strong growth rates.

"We will be focusing our attention especially on Asia this year, which has already emerged strongly from the economic crisis," said LANXESS' Heitmann.

One night a police officer was staking out a particularly rowdy bar for possible DUI violations. At closing time, he saw a fellow stumble out of the bar, trip on the curb and try his keys on five different cars before he found his. The man sat in the front seat fumbling around with his keys for several minutes.

Meanwhile, all the other patrons left the bar and drove off. Finally he started his engine and began to pull away. The police officer was waiting for him. As soon as he pulled onto the street, the officer stopped him, read him his rights and administered the breathalyzer test to determine his blood-alcohol content.

The results showed a reading of 0.0.

The puzzled officer demanded to know how that could be. The driver replied, "Tonight I'm the designated decoy."

Goodyear comments on Venezuelan devaluation

On January 8, the Venezuelan government announced the devaluation of its currency (the bolivar fuerte) and the establishment of a two-tier exchange structure.

This charge relates to the remeasurement of its balance sheet, net of tax. To the extent that Goodyear imports are classified as essential, this impact could be reduced.



Goodyear expects to record a 1Q charge of \$150 million associated with Venezuelan currency devaluation.

The official exchange rate has been devalued from 2.15 bolivar fuerte to each United States dollar to 4.30, except in the case of essential goods, for which the rate is 2.60. Some of the tires and raw materials The Goodyear Tire & Rubber imports Company Venezuela have been classified as essential, while others have not. The company is evaluating the list of goods classified by the Venezuelan government as essential to determine the exchange rates applicable to its imports.

Separately, Venezuela has been designated hyper-inflationary effective January 1, 2010, and as such, all future foreign currency fluctuations will be recorded in income.

Goodyear expects to record a charge associated with the devaluation, which if calculated at the 4.30 exchange rate would be approximately \$150 million (\$.62 per share) in the first quarter of 2010.

On December 31, 2009, without giving effect to the devaluation, Goodyear had approximately \$370 million in cash denominated in bolivar fuerte in Venezuela. The devaluation will not have any impact on Goodyear's 2009 results of operations or financial position.

The future results of Goodyear's Venezuelan operations will be affected by many factors, including the company's ability to take actions to mitigate the effect of the devaluation, further actions of the Venezuelan government, economic conditions in Venezuela such as inflation and consumer spending, and the availability of raw materials, utilities and energy.

"We have a strong business in Venezuela with an outstanding and experienced leadership team that is focused on managing through the changes taking place in the Venezuelan market," said Robert J. Keegan, Goodyear's chairman and chief executive officer.



QUIPIVIEN



Derimmers/Shears

by MARY M. COX

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Tires can be one of the most problematic materials to recycle due to their extreme durability and the large number of scrap tires generated by consumers. In spite of that, once a tire is no longer fit for its original purpose, it is also one of the materials most likely to be recycled, since the resulting material is so resilient and works well for many secondary uses such as roadways, recreation surfaces,

Multitek North America, LLC

and even new tires (retreads). The United States Environmental Agency reports notes that upwards of 290 million scrap tires are generated annually, of which roughly 15 percent were used to make auto and truck retreads.

Refuse tires are typically an undesirable item at landfills. Their cumbersome shape takes up excessive space and the methane gas they emit causes them to bubble to the surface. This can damage landfill liners and pollute nearby ground and surface water.

These are likely some of the reasons for the following restrictions, described in a Rubber Manufacturers Association report in 2009: 38 states banned whole tires from landfills, 35 allowed shredded tires, 12 banned all tires from landfills and 20 allowed processed tires in mono-fills. These developments and other variables have contributed to an emergence in various recycling markets for scrap tires, and equipment such as tire derimmers and shears are used in many of those markets.

Multitek has manufactured rim crushers since 1983 and still have many of the original machines in the field today. According to Marcus Steigerwaldt, the firm's business development manager, "Our line of same time. With an easy-to-use, one lever, detented hydraulic cylinder, the operator is a safe distance from the crushing action. We offer a heavyduty, single-cylinder truck rim crusher as well. Our TRC-460 product offers a 48" opening, a 6" custom-made cylinder and a diesel engine to crush even stubborn truck rims."

Multitek's best-selling, high-volume wheel crusher is the WC-500 model. "It is designed for light truck and car rims. With a 3-ram design, the machine removes the tire and effi-

> ciently crushes 120 wheels per hour. This has been our number one rim crusher for 30 years and is popular throughout North America, Europe and Asia."

> To meet end-user requirements, all of the company's wheel crushers are offered in either

stationary electric or diesel configurations. "Our machines are built to withstand years of heavy use, and only the highest grade components are put into our products, including Multitek-manufactured cylinders, AR-400 crushing rails, Yanmar or Kubota diesel engines, and a set of wear pads to ensure no steel on steel wear," said Steigerwaldt.

A family-owned and operated Iowa-based company, Desco has been manufacturing and selling tire and wheel recycling equipment for over 25 years. "We're proud that our complete line of tire shears and derimmers are designed and built to last, and easy to operate and maintain," said Lew Smith, a co-owner.

Desco's customer base "ranges from tire shops that need to reduce cost on disposing of up to 400 tires weekly, to waste haulers. Haulers often look for ways to turn the never-



down and the tire is removed at the a lot more cut tires in a container then tires. For instance, the unique features

you can whole tires. We also serve of the "Enviro-Block" product offers those with a landfill, who cut up and many uses for discarded tires.



Eagle International LLC

use refuse tires for filtration and daily top cover, and tire recyclers use our products to cut up large semi tires before shredding them," Smith said.

He added, "Our company provides equipment to anyone who needs to cut scrap tire disposal cost. The ease of operation we've built into our machines allow the shears to cut around 80 to 100 tires an hour. Our derimmers are just as effective, derimming around 115 to 145 wheels within an hour."

Wally Welander, sales manager, said that Eagle International provides car and truck tire derimmers, and that both offer several operator safety features along with aspects such as little to no lifting required, industrial quality hydraulic components, Kohler industrial gas, and Kubota (car) and Isuzu diesel (truck), and electric engine motors.

Eagle, started in 1991, provides equipment to meet the worldwide environmental needs of the waste tire industry. One of their products, the Tru-Cut, is for car, truck and rear tractor tires. Eagle's Titan II cuts OTR and mining tires up to 48" across the tread and up to 13' in diameter. "The design and location of our cylinder mount is one example of the uniqueness of our product," Welander said

> and he added, "That design allows our product blades to cut with equal cutting pressure throughout the cut cycle. Our entire line of cutters has registered patents."

> Other products offered include debeaders, side wall cutters, balers and hoppers.

Desco, Inc. With an eye to the future of rim crushers consolidates the rim at either one or three points, depending on the model. The rims are crushed ending flow of tires in their containers into a profit center. Cutting tires also government agencies in the development of beneficial uses for waste

Regarding future of the industry, Steigerwaldt commented, "We saw a slowdown in demand for rim crushers in 2009, largely due to scrap steel fetching lower prices. Looking forward, we see an uptick in scrap prices and industrial output in Asia and North America."

Smith stated that 2009 was trying and "We've learned that now, more than ever, we have to find ways to save money every chance we can, and find new ways to grow our business. We know our products have a proven track record to meet those objectives."

Manufacturer List

Desco, Inc. Lew Smith 800-344-0814 www.desco-usa.com

Eagle International LLC Wally Welander 800-755-8473 www.eagle-equipment.com

Multitek North America, LLC Marcus Steigerwaldt 800-243-5438 www.multitekinc.com

The R.M. Johnson Co. **David VanVleet** 800-328-3613 www.ezcrusher.com

Tire Service Equipment Mfg Co. Inc. Randy Kindel 800-223-4540

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New environmental advisory council implemented by TIA

When Wayne Croswell took the presidency of the Tire Industry Association (TIA), one of goals for his term was to increase the organization's presence in tire recycling and other green issues. To achieve this goal, TIA has announced the creation of their new Environmental Advisory Council (EAC). The EAC will provide strategic information, advisory services, educational programs, and governmental assistance that promote environmental awareness throughout the tire industry.

The EAC replaces the Tire and Rubber Recycling Advisory Council (TRRAC), which for 15 years has brought together the brightest minds in the tire and rubber recycling sector. But, the EAC will go further than TRRAC by expanding this initiative to include all facets of the tire industry. For TIA members and the tire industry, this means examining every aspect of their business to be energy efficient, insure safety, reduce waste and to use methods that reduce, reuse, repair and recycle tires.

"It's clear that green issues are becoming more and more enmeshed in both our personal and professional lives, and thus, I wanted to take a broader, more holistic approach to how tire dealers and the tire industry can better understand and implement green concepts and practices into every aspect of the industry – from cutting down on paper use in the office to the utilization of environmentally-friendly technologies on the shop floor, to finding new and exciting ways to utilize scrap tires," said Croswell.

The EAC will meet on a regular basis, and plans for this year are currently being formulated. Interested persons are encouraged to check www.tireindustry.org for the latest developments.

Carbon Green Inc. acquires Greenwood Commerce Ltd.

Carbon Green Inc. has announced holder thereof to purchase one share of the completion of the acquisition of all of the shares of Greenwood Commerce Ltd. from CBp Carbon Industries, Inc. The transaction closed on January 15, 2010 pursuant to the terms of a share purchase agreement dated November 30, 2009 among Carbon Green, CBp Carbon and Greenwood.

Carbon Green acquired all of the issued and outstanding common shares of Greenwood from CBp Carbon in exchange for the issuance by Carbon Green to CBp Carbon of 33,346,262 shares of Carbon Green's common stock and 1,056,041 share purchase warrants, with 868,541 of the warrants entitling the holder thereof to purchase one share of Carbon Green common stock at an exercise price of \$2.50 per share and 187,500 of the warrants entitling the Carbon Green common stock at an exercise price of \$2.00 per share, all until January 15, 2013. In connection with the closing of

the agreement, the Company accepted the resignation of J. David Brow as president of the company, and has appointed John T. Novak as president and Ken Lee as secretary. In addition, on January 13, 2010, the Company mailed to each of its shareholders and filed with the United States Securities and Exchange Commission (SEC), an information statement with respect to the proposed appointment of John Novak, Ken Lee, Adi Muljo and Peter Jensen to the Company's board of directors and the resignation of J. David Brow as director. These resignations and appointments took effect January 23, 2010.

John Novak, newly appointed president of Carbon Green Inc. stated, "Over 10 billion tires are stockpiled around the world and this number is growing at an alarming rate. The disposal and management of these tires has become a crisis of global proportion. Through the acquisition of Greenwood and its state of the art commercial production plant, Carbon Green has acquired a technology that will dramatically change how tires are recycled and positions Carbon Green as a leader in the clean tech recycling industry."

An aged farmer and his wife were leaning against the edge of their pig-pen when the old woman wistfully recalled that the next week would mark their wedding anniversary.

"Let's have a party, Homer," she suggested. "Let's kill a pig and have a roast."

The farmer scratched his grizzled head and replied, "Gee Ethel, I don't see why the pig should take the blame for something that happened fifty years

Phoenix and GBRC team up to process TDF with microwave tech

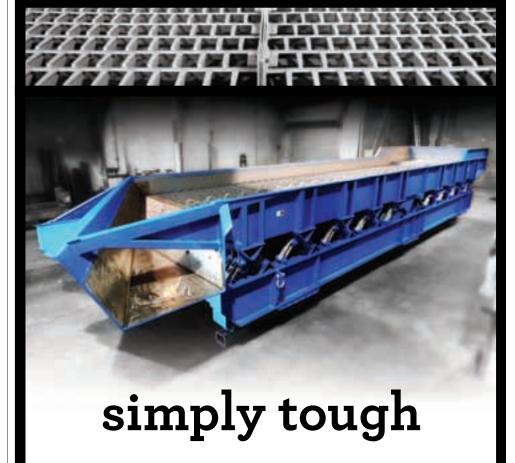
Global Resource Corp. (GBRC), a developer of patented energy-efficient microwave-based technologies for recycling tires, has announced a joint venture (JV) to develop, build, own and operate several facilities with Phoenix Renewable Energy for the processing of scrap tires. The first facility as part of the JV will be located in Jonesboro, Arkansas and is estimated to be worth \$12

The JV will be for the processing of scrap tire derived fuel (TDF) into high margin commercial hydrocarbons and carbon products utilizing GBRC's patented microwave technology. Phoenix Renewable Energy and GBRC will leverage their technical and commercial capabilities to fund, develop and operate a Patriot Facility. The facility will have a nameplate throughput capacity of 20,000 tons of TDF

with projected annual, recurring revenue of approximately \$13 million and environmentally positive outputs of electricity and carbon products.

Under the JV agreement GBRC will provide research and development, design, engineering and construction of the Patriot machine that is capable of processing 3 tons per hour.

Phoenix Renewable Energy will be responsible for all other aspects of the facility, including the design, construction, and commissioning the physical facility, all auxiliary equipment including all gas, oil, and carbon black processing outside of the GBRC reactor. The joint venture also allows an equal 50/50 split of revenue generated from each plant between GBRC and Phoenix Renewable Energy.



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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 877-777-0737.

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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.

A Closer Look

by Donna Currie

Deerpath Recyclers Mike Demski • 269-782-7232

Mike Demski didn't start out in the tire business or the recycling business. "I have an excavating company," he explained, "and we could not find aggregate." Demski's first foray into the rubber recycling business was when he bought out a small company, and he followed that purchase with another when he purchased equipment from a Canadian company that had gone out of business. That purchase expanded his rubber processing capabilities five-fold immediately.



—Mike Demski and mother Lydic

"Now I'm a full-fledged recycler," he said. While other companies process tires strictly to landfill them, Demski uses the landfill as the last resort. He explained that some over-the-road tires can't be recycled effectively, and extremely dirty tires can't be recycled because it's not cost-effective to wash them, but all of those tires still have to be chopped up before they can be landfilled.

According to Demski, Deerpath Recyclers handles whole tires "from a loader down to a bicycle" and that after they've done their work, only about 10 percent of what comes in will end up in a landfill.

Material is sold to regrind shops who according to Demski, "take it down to 180 mesh crumb rubber." One of the more interesting uses is for railroad ties that are guaranteed to last at least 60 years, compared to the 10-year lifespan of wooden ties.

Demski said that extruding companies and plastics manufacturers are also very interested in using recycled rubber. The recycled rubber chips are used as a filler material at less than half the cost of plastic filler material. The disadvantage to using tires is that it turns the finished product gray or black, which might not be as esthetically pleasing. But when the end product is something like the plastic blocks behind highway guardrails, the color isn't important.

When Demski decided to use recycled rubber in place of aggregate as septic chips, he needed to do a lot of legwork to get the rubber accepted in his home state of Michigan. It took 2 1/2 years to get approval, but the advantage of using rubber chips is that they run about 1/3 the cost of aggregate.

Like many other operations, Demski said the tire recycling business is affected by the economy. He explained that when times are bad, people don't spend money on new tires, so he doesn't get as many used tires coming in. When times are good, he employs "upward of 20 people" and at one time he was running two shifts a day. He has trailers at about 80 accounts where he picks up tires, and he also accepts tires from the public and from municipal cleanups.

With two lines running, Deerpath processes about 4,000 tires a day. "We try to do at least a million tires a year," Demski said, but 2009 saw only about 3/4 million tires processed.

Things are getting better, though, and Demski is looking at expanding his tire pickups. He recently applied for a license to pick up in Ohio, adding to his business in his home state of Michigan and neighboring states of Indiana, Illinois and Wisconsin.

It's not all about distance, though. "We just purchased a building across the street," he said, which almost doubled his space. He also plans on expanding his product line by selling rubber buffings. The market for the railroad tie manufacturers is also expanding, and Deerpath is expanding along with it. His goal is to process 2 million tires per year within two years.

On the fun side, the company is doing some R&D work alongside another company. The R&D has been going on for three years, but the payoff will be huge. "Once it's perfected," Demski said, "we will not make enough product at our plant to fill the need." At that point, Deerpath will probably bring in material from other companies to reprocess it.

Most of all, though, Demski is happy that he is able to keep so much material out of landfills, and instead is "turning it into a product that's reusable for the next generation."

Scrap tires find their way into alternative sidewalks

by IRWIN RAPOPORT

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Since 2005, Fountain Valley, California-based Rubbersidewalks, Inc. has sold more than 250,000-square-feet of sidewalks made from discarded tires and plastic recyclables via its Rubbersidewalks and Terrewalks® products. This has reduced the need to produce new concrete, which is considered to be a major producer of carbon emissions.

"In 2009 we quadrupled our sales from 2005," said Lindsay Smith, president/CEO of Rubbersidewalks, Inc., which is the only company in the United States that utilizes rubber and plastics to manufacture urban-worthy sidewalks. "We successfully introduced Terrewalks last year, and we continue to find a strong customer base for 100 percent waste tire Rubbersidewalks, especially in seniors' communities where a really safe sidewalk is desired. Programs which target tire diversion and offer 'green dollars' also help promote sales."

The company's goal is to see municipalities and builders replace traditional concrete sidewalks with alternative-material sidewalks and by doing so, use up a large portion of the nearly 300 million tires that are discarded in the United States annually.

Smith noted that state programs such as California's Tire Product Grant, which awards around \$3 million annually, has helped promote the use of alternative products made with waste tires. Public agencies can receive up to \$5 rebate for each tire diverted by their purchase of products made with waste tires.

The company has sold non-concrete sidewalks to cities, universities, state agencies, senior facilities, schools, corporate campuses, and commercial developers in over 30 states, including Virginia, Georgia, Washington Colorado, Oregon, Wisconsin and Washington, D.C. Flushing Meadows boasts the first Rubbersidewalks installed in New York City, and Staten Island installed over 3000 square feet of Terrewalks last fall.

A Rubbersidewalks paver weighs 54 pounds and consists of 4.8 tires, colorant and polyurethane resin, while Terrewalks weigh 36 pounds and diverts 1 tire and over 30 pounds of waste plastics.

Both Rubbersidewalks and Terrewalks pavers measure 2 feet by 2.5 feet and 1.875 inches in height – allowing for sidewalk widths of either 4 feet or 5 feet. Both products are manufactured in New York and California, with a third production site coming soon in Texas.

So far Terrewalks, which accounted for 40 percent of the company's 2009 sales, can be found on public streets and in plazas and corporate campuses. The interlocking paver design allows for fast and easy installation and the next-gen product comes in a variety of colors that do not fade. One style, TerreClassic, looks identical to concrete.

"We have strong markets for both products," said Smith.

Both products are designed to withstand extremes in terms of hot and cold temperature and unlike concrete, are not vulnerable to vibration and freeze/thaw damage.

"Concrete sidewalks," said Smith, "are often not cost-effective. You can get concrete materials for a relatively low price, but the actual use of concrete in cities is more expensive than people realize," she says. "A concrete sidewalk lasts less than 10 years near a growing tree or in freeze-thaw and often less than 5 years. If you have trees, or a freeze/thaw climate, concrete will crack, break and uplift, often becoming a trip hazard.

"Our products never break," she added. "They become a permanent feature and because they complement the planting of trees, allow cities to preserve and expand the urban forest that provides shade, reduces the heat effect and creates habitat for wildlife. While we love concrete as a building material, let's not use it any more than we have to. Sidewalks are one of those things that don't need to be made of concrete."

A square foot of installed Terrewalks costs \$12 (\$7 for the material and \$5 for the prep and installation), while a square foot of Rubbersidewalks costs \$16 (\$9 for the materials and \$7 for prep and installation).

"Installing Terrewalks goes quickly and does not require much traffic control," said Smith. "It eliminates running vehicles and machinery, and waiting a day to remove the forms used with concrete. Concrete is 8 percent less expensive than Terrewalks based on 100,000 square foot plus contracts for concrete and maybe 6,000 square feet of Terrewalks. Although Rubbersidewalks and Terrewalks initially cost slightly more than concrete, 'break even' is reached the first time concrete does not have to be repaired and replaced. After 18 years, our products give a 48 percent savings."

While Rubbersidewalks and Terrewalks are a proven alternative green product, Smith says that many cities still want to conduct their own pilot projects to determine the public acceptance of the product.

"We know that after enough exposure cities will make our non-concrete sidewalks part of their annual maintenance program."

This may happen even faster, considering that the United States Environmental Protection Agency is working with the company to produce a White Paper, which, when completed, should help support the use of non-concrete alternatives in pedestrian pavement.

For Smith, the idea of large urban centers and regions being able to use locally discarded tires and plastic, and close the recycling loop via local manufacturing facilities is a real possibility.

Terrewalks can use a wide of variety of unsorted and unprocessed post consumer plastics, including beverage bottles, various polyethylenes, and all types of

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Rubber Innovators brings Keith Busse into board of directors

Rubber Innovators, LLC announced that Keith Busse, chairman and chief executive officer of Steel Dynamics, Inc., has joined the Rubber Innovators' board of directors. Busse also serves on the board of directors of Tower Financial Corporation and is a member of the Boards of Trustees of the University of St. Francis and Trine University.

Busse founded Steel Dynamics, Inc. with two colleagues in 1993. From the time of its founding until May 2007, he served as president and CEO. He has been a director of the company since it went public in November 1996. Under his lead-

ership, Steel Dynamics has grown to more than \$3 billion in revenues. The corporation's impressive business results earned a citation as the "Most Admired Company in the Metals Sector" for 2008 as well as a listing in the FORTUNE 500 for 2009.

Prior to starting Steel Dynamics, Busse joined Nucor Corporation in 1972, served in various management positions, and achieved the rank of vice president and general manager. At Nucor in the late 1980s, he led the team in Crawfordsville, Indiana, that built and successfully operated the world's first mini-mill capable of producing flat-rolled steels.

Rubber safety

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commercial applications, a growing market that exposes more people each year to the material.

This rubberization of surfaces offers many benefits to help prevent injuries and reduce stress on leg muscles, ligaments, tendons and joints, and accounts for its widespread and increased use. This ability to absorb shock has taken rubberized surfacing into homes, workplaces, tennis courts, weight rooms, gyms, fitness centers and even to the equine and bovine worlds. And because it's easier to clean and cleans more thoroughly, it's more hygienic than other flooring materials such as wood or concrete.

Cow mats made from recycled tires are increasingly being used in dairy barns all over North America. Just like preventing injuries for humans in recreation and sport, cow mats prevent calves from getting hurt when they fall on concrete barn floors. The insulating properties also reduce cold and humidity on concrete floors to help protect cows against rheumatism and fatigue. Some diaries even attribute increased milk production to rubber flooring.

Abacus Sports Installations, Ltd., for instance, markets a wide variety of rubberized sports flooring made from recycled tires. Their seamless, textured equine flooring for stables is very popular because it's easier to clean and minimizes bacteria. It's even installed on stable walls and columns for added protection.

Spencer Proud, owner of Abacus said that his customers have never voiced any concern about the safety of his company's products. "We've never had any complaints or issues in over 20-years of contracting. From an architectural standpoint many of our customers are interested in earning LEED credits (Leadership in Energy and Environmental Design Green Building Rating System) It's recycled material, very durable, very sustainable. School boards and everyone else these days wants everything to be green for very good reasons. Having this recycled content brings serious contributing points."

Nevertheless, over the past several years, a number of concerns have been

raised over the use of tire crumb materials in turf fields and playgrounds.

Parents in Colorado were concerned about children carrying home small particles of tire crumbs on their clothing. High levels of lead were detected on some artificial turf fields in New Jersey. To address various public concerns, a number of cities and states engaged in sampling, testing and evaluation of products containing recycled tire rubber.

In 2007, the California Office of Environmental Health Hazard Assessment issued a report, Evaluation of Health Effects of Recycled Waste Tires in Playground and Track Products. It concluded that there appeared to be little long-term risk to human health.

In 2008, the Centers for Disease Control and Prevention issued a lowlevel public health advisory, due to some negative publicity surrounding artificial turf.

The Consumer Product Safety Commission investigated reports of lead contamination from artificial turf and, in July 2008, concluded that "young children are not at risk from exposure to lead in these fields."

A July 2009 California EPA study found no significant health risk to people who breathe the air above synthetic turf that contains crumb rubber. The study looked at the chemicals found in the air above the turf and the chemicals found in the air upwind from the fields analyzed. The conclusion: chemicals were found in similar concentrations in both samples.

A May 2009 study by the New York departments of Environmental Conservation and Health found that crumb rubber used in synthetic turf fields poses no significant environmental threat or health concerns.

Finally, in December, the national response came with the release of the results of EPA's limited "scoping study" of tire crumb. The study consisted of collecting air and wipe samples at locations near EPA laboratories in Raleigh, North Carolina, Athens, Georgia, and Cincinnati, Ohio. Sampling was also was done in Washington, D.C.

Conducted from August to October 2008, the study found that the concentrations of materials that made up tire crumb were below levels considered harmful. "The limited data EPA collected during this study, which do not point

Tire walks

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consumer plastics and waste from plastic manufacturing facilities.

"We use all the material that nobody wants," said Smith, "and convert these materials into product. Our carbon footprint is low because our feedstock doesn't need to be sorted and cleaned, which reduces energy and water consumption."

Asked what it will take to have large urban centers and cities such as New York, Los Angeles County, Chicago and Dallas to start using green alternatives on a massive scale, Smith replied, "In L.A. we did the Dorothy Chandler Music Center and we recently installed 1,400-square feet of Terrewalks in Greg Smith's district in

to a concern, represents an important addition to the information gathered by various government agencies," said Peter Grevatt, director of EPA's Office of Children's Health Protection "The study will help set the stage for a meeting this spring, where EPA will bring together officials from states and federal agencies to evaluate the existing body of science on this topic and determine what additional steps should be taken to ensure the safety of kids who play on these surfaces," he added.

As usual, EPA qualified the findings of its study: "Given the limited nature of the study (limited number of constituents monitored, sample sites, and samples taken at each site) and the wide diversity of tire crumb material, it is not possible, without additional data, to extend the results beyond the four study sites to reach more comprehensive conclusions."

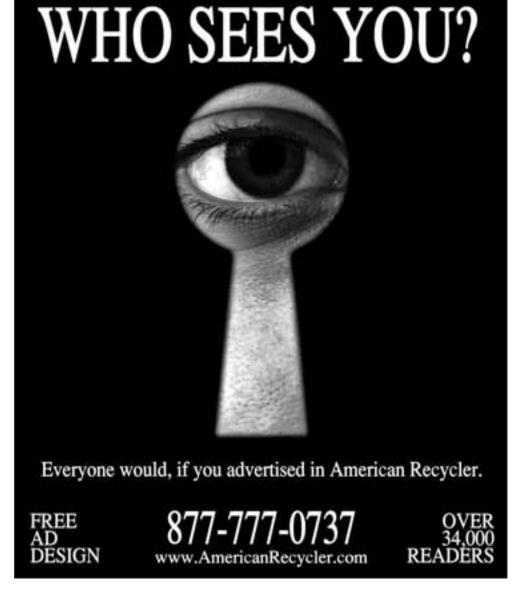
Northridge, California. We are specified in New York – where we installed 3,000-square feet in Staten Island and we already have Rubbersidewalks in Chicago. Every city has their own rules and regulations and we are taking them one at a time.

"In California non-concrete alternatives are in demand because year-round tree growth means roots are breaking concrete sidewalks all the time." she added. "With state and municipal budgets impacted by the economic downturn, finding ways to downsize and save money is imperative. What is good for California cities applies across the country. Reducing sidewalk construction and replacement costs, and helping the environment at the same time by using closed loop waste tire/plastic-to-products is a win-win situation for all."

However, the EPA study did confirm, most importantly, that most of the methods tested were accurate, reproducible and appropriate for measuring concentrations of tire crumb constituents and can be used in future studies.

EPA is aware that studies by other agencies were undertaken or completed while its survey was being conducted. EPA is planning a 2010 meeting with federal and state agencies to review all new study data and determine next steps.

The next steps will likely involve more government spending for more studies to arrive at essentially the same conclusions. Meanwhile, more products made from recycled tires will keep more old tires out of landfills and continue to find new and useful applications.



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