SAN Ontario Tire Stewardship Publication

Executive Director's Message

Spring is here, and whether it's the warmer weather or the awakening of the gardens and trees, the month is synonymous with "spring cleaning."

I certainly have caught the "cleaning bug"; raking the lawn, tidying up the house, and ridding my closet of old clothes. I get a significant sense of satisfaction from cleaning what has been accumulated over the winter months, and starting fresh.

I know that all across Ontario people are doing the same. The piles of materials and goods being toted to the recycling centers attests to this. Curiously I still see tires deposited at the ends of driveways, or abandoned at building sites, and I know we can do better.

So, I propose a challenge to you all. When you see tires being deposited where they shouldn't, do something about it! Talk to your neighbour about how they can take them to one of the over 6,400 registered Collectors sites, and if you see a tire left somewhere in our neighbourhood pick it up and take it to a Collector so it can be recycled.

By being a leader in your community you can help motivate others to act for the benefit of all.

- Andrew Horsman





New Players and New Markets for OTS

When discussing tire stewardship in Ontario it's impossible to over-estimate the amount of change taking place in the market. Many of these changes began before the program launched in September of 2009, when anticipation of the program drove the revaluation of the province's scrap tires.

The "players' line-up" has also changed dramatically. Collector registrations, slow in the early months, have continued to grow steadily. There are more Haulers than ever servicing the Ontario market, ensuring that all areas of the province are well-serviced. Several new Processors have set-up shop in Ontario, both consolidating existing operations and establishing new facilities. Coupled with the addition of capacity by existing Processors, this has moved the program towards the goal of having processing capacity of 100% of Ontario's tires.

Recycled Product Manufacturers have been extremely active and 2011 will see the launch of two new manufacturing operations to the Ontario market. These organizations will bring significant experience from their operations in other jurisdictions, and will create new green manufacturing jobs in the province.

In addition, OTS is actively involved in developing new markets for Ontariomade recycled rubber. Working closely with road and transportation stakeholders, OTS is supporting the use of rubberized asphalt in the province. This use of recycled tire



rubber, already widely seen in New Jersey, California and Alaska, offers the promise of longer lasting, safer roads. Working with experts in the field, OTS is supporting the technology and knowledge transfer necessary for Ontario's road and transportation stakeholders to adopt this application in the province.

Through our R&D Program, OTS is looking to support work that will lead to the commercialization of even more uses for tire rubber. The blending of rubber and plastics to produce new materials is an area of considerable interest, as is the devulcanization of recycled tire rubber. By supporting the work being undertaken by the industry in these and other areas, OTS is helping to develop new high-value markets for recycled tire rubber.

OTS remains committed to delivering a program that is efficient, effective and continues to meet the diversion objectives and benefits the industry has committed to. In so doing we support the growth of the dynamic and innovative green manufacturing industry in Ontario.

This Month's Headlines

The OTS Team: Meet Susanne

Susanne Robins heads up OTS education and promotions

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Emterra keeps on growing

Recycler and Hauler keeps growing green in Ontario

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An innovative process gives tires new life

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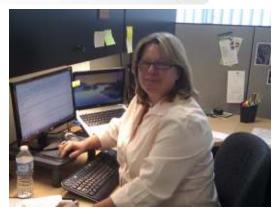
Cryogenic Process- | ASTM Standards

International standards help maintain the quality of recycled rubber

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Inside Track





Introducing Susanne Robins, OTS **Director of Promotion and Education**

With over 20 years of experience providing strategic, analytical and tactical marketing support to business-to-consumer and business-to-business companies in Canada and the U.S., I am eager to use my knowledge to enhance the awareness of the programs that OTS offers. This new position will allow me to continue to pursue my passion for environmental marketing and the development of sustainable products. Prior to joining OTS, I was involved in the Building Materials / Home Improvement industry, developing and launching green products, and helping consumers and businesses realize the high-performance benefits, comfort and convenience these products can offer.

For me, this is an especially exciting time to be joining OTS and I look forward to working with all our stakeholders.

What new opportunities do you see for OTS to engage the consumer market?

More than ever, women are making not only the household product, but also auto purchase decisions. Consider that women make 65% of and influence 80% of all car purchases. (www.wheels.ca/ TADA/article/250660)

Whether you are a steward supplying new tires to the consumer or auto industry, a recycled product manufacturer or a collector, the importance of marketing your products and services to women hopefully is not being overlooked.

What is OTS doing to help reach this market?

We recently had the chance to interact with consumers first hand at the National Home Show held at the Direct Energy Centre. The OTS home show team was in full force explaining the Used Tires program and promoting tire derived products such as rubber mulch, pavers and shingles. To complement this inperson engagement, a new consumer website is in development which will feature entertaining but informative animated tire-life videos, a virtual house and social sharing options – all of which are designed to help Ontarians become more involved in tire recycling and aware of the benefits of choosing tire derived products.



Rural tire stockpiles, courtesy: Emterra

Zero-to-Sixty @



- ☐ May 31, 2011: Closing date for Stewards to submit April 2011 TSF Remittance Reports and payment
- ☐ May 31, 2011: Closing date for Haulers to submit Claims for the February 2011 period
- ☐ May 31, 2011: Closing date for Processors to submit Claims for the February 2011 period
- ☐ May 31, 2011: Closing date for RPMs to submit Claims for the February 2011 period

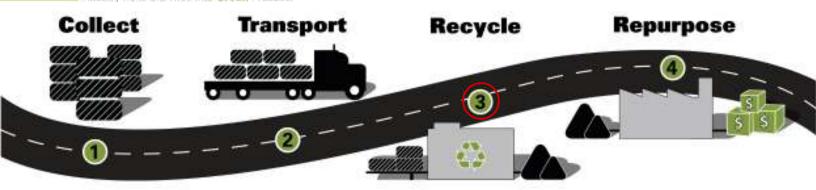
Did You Know?



A team from OTS participated in the CN Tower Corporate Climb on Thursday April 14 in support of WWF, reaching the top in 31 minutes and 1 second. The team raised awareness of tire recycling while at the same time raising over \$2000 for charity.

Some Facts about Female Consumers (Source: Ipsos Reid)

- ☐ Web sites (70%) have now surpassed traditional forms of word-of-mouth (58%) as their preferred method for getting the word about products and services.
- ☐ Less than a third (28%) of women decide what products or services to buy without looking for some kind of help.
- ☐ When it comes to sharing information or opinions about products and services, women (92%) still prefer face-to-face communications with family and friends over online methods such Twitter.



Stewardship in Action IIII

Emterra's Eco-Efficiency

John Cassell runs Emterra's tire recycling division with a level of efficiency that comes from many years experience with one of Canada's leading recycling and waste diversion specialists.

By Susanne Robins

When I arrive at Emterra's office in Brampton, John Cassell quickly finalizes some logistic plans with the office staff before turning to greet me. He is efficiency in motion and, as I soon learn, fleet of trucks that proefficiency in recycling too.

John, in his role as General Manager of Emterra Tire Recycling (www.emterratire.ca), is clearly proud of north as Midland - by the strides that the company has taken to support Ontario's efforts to divert 100% of used tires from incineration. landfills and tire stockpiles. Emterra Tire Recycling originally opened its doors in Burlington, but moved to its current plant location in Brampton in 2006, with the first tires being processed in November of that year. Since then, the company has made numerous upgrades to its plant and equipment, and expanded its tire hauling services.

Emterra's crumb rubber plant focuses its efforts on product quality, consistency and ensuring on-time delivery. Last summer saw the installation of two new granulators at the facility, while their current upgrade project includes the addition of more equipment (a Super Chopper) that will facilitate processing of MTs, Industrial, Agricultural and OTR tires. Not only does this capital investment improve Emterra's capacity and production efficiency, but according to John, the new equipment uses 15% less electrical power.

To ensure a consistent supply of used tires to feed its processing plant,

Emterra established a hauling division in 2005. Today the company operates an OTS registered vides used tire pickup at collection sites from Kingston to Sarnia and as far their estimate about 80 percent of Southern Ontario. Emterra's sophisti-

cated fleet tracking system helps optimize routing, reduce gas and mileage, and alerts them to any delays. The com- they have found the OTS team responpany has also been a trend setter in providing customers with completely enclosed, secure storage containers that help reduce the risk of fire and prevent theft of the collector's tires.

John believes that the OTS program has been very successful in eliminating illegal dumping in Ontario. "You some parkland area anymore," he noted. He also gives OTS credit for creating the stimulus behind the growth of a very healthy and growing manufacturing base in Ontario that utilizes crumb rubber made from used tires as its raw material. "Before OTS many of these tires were exported to the US and Quebec to be burned", he said. "Now they are being recycled in Ontario and creating all kinds of jobs which benefits everyone." Emterra has been a consistent presence on the OTS Technical Com-



mittee, providing input and keeping up with industry developments. Always, sive and willing to listen.

What Emterra CEO, Emmie Leung saw as an opportunity to provide a service to an underdeveloped sector of the Ontario recycling market back in 2005, has grown into a multi-million dollar business today. Emterra Tire Recycling continues to run lean and efficient. don't see 400-500 tires being dumped in They may not be the largest tire processor in Ontario, but they are strategically managing their growth to meet market needs, fine tuning their business model to maximize success. What does the future hold for Emterra Tire Recycling? "It's a competitive marketplace," says John with a smile, "so I can't comment on specific plans." Given Emterra's leadership in this and other areas of waste diversion, I am sure the future is green.

Market Watch ▲▼

Cryogenics: Giving Old Tires a New Life

Dr. Alan Barton is the CEO of Lehigh Technologies and a proud pioneer in the world of recycled materials. In a phone interview, Dr. Barton explained the cryogenics process that makes Lehigh unique.

Lehigh takes 1/4 inch chips of rubber from tire recyclers and pass them through several steps to create an innovative product called Micronized Rubber edge, Lehigh Technologies has built a Powder. The cryogenic process uses liquid nitrogen to freeze the rubber chips before passing them through a turbo mill to create Micronized Rubber Powders. This gives the rubber a very fine particle size, therefore allowing it to be used in a wide range of applications that has been very pleased with its customare not otherwise possible.

New applications achievable through the cryogenic process include, but are not limited to sealers for driveways and parking lots, coatings, as well as roofing, plastics, and asphalt, which is still in development.

Alan Barton remains positive about the growth of recycling and resource recovery. "With the rising prices of virgin products we are likely to see an increase in recycled products, increasing the financial incentive of technologies offered by companies like Lehigh." Furthermore, Dr. Barton suggests that consumers are better educated and are demanding a greener product line. In response, companies are looking to differentiate themselves with novel performance characteristics and to separate themselves from the competition.

To maintain their competitive facility capable of producing over 100 million pounds of Micronized Rubber Powder annually. Production on this scale has allowed them to ship their product to customers around the globe. Lehigh also has projects in Canada and ers in the North. Dr. Barton explains, "their requests are a reflection of green interests and cost savings", a definite sign the recycled tire industry will continue to flourish here in Canada and the United States.

ASTM Standards: What are they?

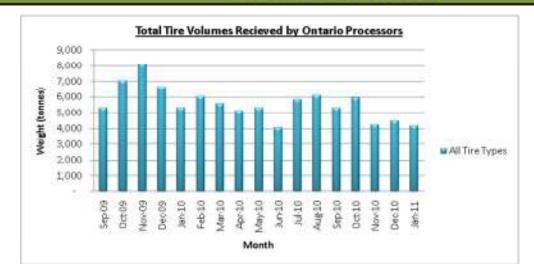
The American Society for Testing and Materials (ASTM) standards exist to ensure that the right type of rubber is used for the right applications.

Nick Thakore of National Rubber Technology explains: "Say a car company wants to manufacture a rubber oring to be placed around the fuel tank opening. We must test to make sure the type of rubber we use won't absorb gasoline, erode and thus cause a leak." ASTM sets these safety standards and regulations; to ensure that rubber products being produced are appropriate and safe to use in their particular function.

ASTM standards also provides the sizing guidelines to determine the particle mesh size of the crumb rubber and matches its usage in recycled rubber products accordingly. The removal of steel and other fibre components from inside the tire is another issue covered by ASTM.

Ultimately, strong industry standards like ASTM help ensure optimal component quality for consumers and manufacturers.

• The OTS Report •



Tires Diverted (Tonnes)

On Road: **147,177**

Off the Road: **29,813**

Tires Supplied into Market (Tonnes)

On Road: **181,692**

Off the Road: **21,108**

Registered Stewards

627

Registered Collectors

6414

Registered Haulers

172

Registered Processors

28

Recycled Product Manufacturers

8

TSF Remitted

\$104,986,250.50