

Executive Director's Message

Now that we're past the time of year where "visions of scrap tires" danced in people's heads (that may not be you) and the seasonal rush ended as consumers turned to shopping for what will go under their tree as opposed to under their vehicles, the OTS office is busy planning for 2011.

As you have seen through the monthly statistics reported in this Newsletter, OTS has been maturing into quite the success story. Our diversion statistics have continually exceeded our goals and we expect this to continue into 2011.

2010 also saw significant change in the scrap tire recycling market. Existing players have invested in their businesses and new companies have set-up shop in Ontario, adding capacity and green jobs here at home. We have truly been a catalyst for economic growth in the province, and for that we would like to thank you all.

From the OTS team to all of you on whom we depend, we wish you the very best in the New Year!



- Andrew Horsman

★ New Incentives for Recycled Tire R&D

Throughout this first program year, the OTS community has continuously improved the efficiency and effectiveness of program operations. All the while, we have also been working on launching strategic program elements, one of which is the OTS Research & Development (R&D) Grant program.

Announced at the Ontario Recyclers Workshop held in Toronto on September 28th, the OTS R&D Grant Program supports innovative applied R&D related to products or technologies that are near-commercial, and are likely to facilitate the development of new high-value products that use crumb rubber form. OTS will provide financial support up to 50% of eligible costs for approved projects, to a maximum of \$250,000 per project.

The program is open to a wide range of organizations including government institutions, universities and colleges, private or publically-traded companies and not-for-profit organizations. Qualifying projects must take place in Ontario and ultimately result in full commercialization within Ontario. An independent panel of experts is busy assessing applications that have already come through to ensure they meet the program criteria.



Photo Credit: Green Architecture and Building Report

The potential here is enormous. Pick up a trade publication or search "tire recycling" online to see how much innovation is taking place in this area. In this issue, we feature one such commercial innovation story that demonstrates a truly new and intriguing use for recycled tire rubber.

For questions regarding the OTS R&D Grant Program please contact:
research@ontariots.ca.

◦ This Month's Headlines ◦

[Keeping OTS Finances On Track](#)

Saba Bajwa handles the financial side of OTS.

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[New Kid on the Block](#)

Liberty Tire's new scrap tire recycling facility opens in Brantford.

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[A Sleek Look for Recycled Tires](#)

Minark's RUBBiSH sink wins Architect Magazines 2010 R&D Award.

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[Designing Products with Recycled Tires](#)

The advantages and challenges of working with recycled tire rubber.

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Inside Track



Introducing Saba Bajwa

My role as Finance Analyst involves handling the day to day accounting activities at OTS, which include TSF processing, reconciliation of revenue and expenses, and preparing financial reports for budgeting and forecasting. Part of my job includes presenting the information provided by program participants in a comprehensive format that allows us to track the flow of tires from one participant to the next. This enables us to compensate the participants on time, and keep our revenue and expenses updated.

We are always looking for ways to make the program more efficient for both the participants and our internal staff. Collaborating with the technical team, the accounting department helps devise solutions to enhance existing business processes that enable participants to submit claims in an easy and timely manner, and also helps us minimize delays in issuing payments. The OTS team is a dedicated group, devoted to making this program even more successful in the future and building lasting relationships with our participants.

Tips & Suggestions

- ❑ Stay informed. The OTS website contains an abundance of useful information about programs and policies that is useful for every participant. Explore the website and revisit periodically to track upcoming events, training sessions, or program updates. Visit us at www.ontarioTS.ca.
- ❑ Communicate and ask questions. Answers to most questions can be found on the OTS website, however if there are specific concerns or suggestions that you would like to make, the website also contains information on the appropriate point of contact for your enquiries. Communicating with right personnel can result in a quicker resolution to your concerns. Furthermore, the Call Centre staff is also available to assist you at 1-888-687-2202.
- ❑ Review and double check any forms sent to OTS. Details such as spelling errors, dollar amount differences, and missing required information has a great impact on a claim submission or a TSF remittance. This can result in holds on claims, delays in payments and time consuming correspondence with OTS call centre staff.
- ❑ Be knowledgeable about due dates and deadlines. Submit claims and TSF remittances on time in order to ensure payments, and prevent any penalties or interest.

Finally, keep us informed. If there are any changes to your address, business name, or location be sure to inform us so we can update our records, preventing any payment issues in the future.



Photo Credit: Rubbersidewalks Inc.

Zero-to-Sixty ●

January 12, 2011: Hauler Transportation Incentive Rates Consultation Session

January 26, 2011: Technical Committee Meeting

January 31, 2011: Closing day for Stewards to submit December 2010 TSF Remittance Reports and payment

January 31, 2011: Closing day for Collectors to submit approved claims adjustments for Sept– Dec 2009, Jan– Mar 2010, Apr–Jun 2010, and Jul-Sep 2010 periods

January 31, 2011: Closing day for Haulers to submit Claims for the October 2010 period

January 31, 2011: Closing day for Processors to submit Claims for the October 2010 period

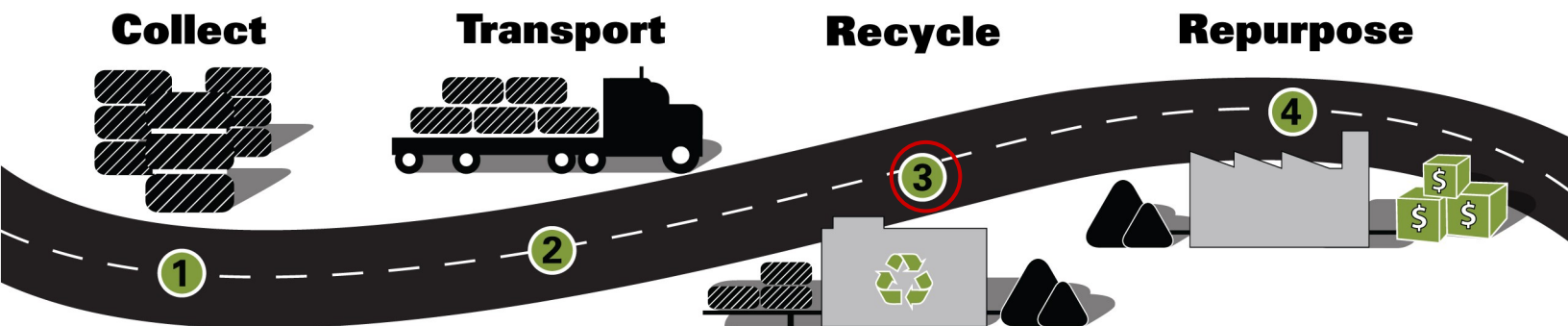
January 31 2011: Closing day for RPMs to submit Claims for the October 2010 period

February 28, 2011: Closing date for Stewards to submit January 2011 TSF Remittance Reports and payment

February 28, 2011: Closing date for Haulers, Processors, and RPMs to submit Claims for the November 2010 period

March 1, 2011: Effective date for 2011 Transportation Incentive Rates

March 1, 2011: Effective date for 2011 Out of Province Processing process and rates



Stewardship in Action

Liberty Scrap Tire in Ontario

Liberty Tire Recycling, the largest tire recycler in the USA, has recently moved to Ontario and is applying their vast experience with scrap tire management to help Ontario divert tire waste and create valuable products made from recycled rubber. Liberty's newly opened scrap tire processing facility in Brantford, Ontario will start processing tires in January 2011.

The new plant will process car and truck tires as well as some types of off road tires. The plant will produce all sizes of crumb rubber which will be used to manufacture industrial and consumer products such as coloured mulch for gardening and landscaping applica-

tions. The shredding, grinding and packaging processes result in practically zero waste as any residual products like steel are collected and resold. Most of the markets for Liberty's crumb and mulch are in Ontario, with some being shipped to the USA.

Liberty has consolidated their hauling operation and their administrative and finance staff at the Brantford location to operate as an integrated unit. In addition to achieving improved planning and customer focus through this structure, Liberty expects to achieve further efficiencies over time in handling peak workloads. As Liberty carried out the consolidation of hauling, processing and administrative groups, there were no layoffs for those who wished to stay. In fact, Liberty expects to eventually



increase their total employment by an additional 60 people.

What does this all mean for Ontario? The "why waste waste" attitude of the Liberty team is part of a steady trend that will result in increased employment, fewer tires leaving the province, and a healthy boost to Ontario's green economy.

Market Watch

Minarc's Innovative RUBBiSH Rubber Sink

Most recycled rubber finds new homes under our feet, where applications such as flooring underlayment, playground and athletic field surfaces, and landscaping mulch dominate. One company that is adding to this diversity of uses is Minarc, an architecture and interior design studio based in Santa Monica, California.

Minarc has produced an innovative design for a flexible sheet of recycled rubber that can be used as a lightweight, waterproof surface for shallow sinks. Their RUBBiSH Bathroom Sink is made out of inexpensive recycled rub-

ber coming from scrap tires. The process is straight forward. Manufacturers crumb tires, melt down the rubber and remove all debris. The rubber becomes a moldable product that can be used in a variety of projects. The metal fibers from recycled tires are then flattened to create a sheet that can be stretched over wood, metal or a material base frame.

The basin of the RUBBiSH sink is created by supporting the edges of the rubber sheet, clamping the middle with the drain basket, and letting the natural topology of the rubber sheet define the slope of the bowl. The 1/8" thick, easy to clean sheets can be stretched over any base to give them shape, resulting in a super lightweight, stylish and eco-friendly sink. The minimal use of materials reduces waste and the sink can be recycled at the end of its useful life.

Amazingly, less than one pound of recycled rubber is needed for creating this sink.

Minarc's novel and elegant design has already captured some well-deserved attention, including the 2010 Architect Magazine R&D Award. The sink is now available in two sizes: a single sink measuring 36 inches wide and a double basin that is 60 inches wide.



Image: Amanda Smith / Interiordesign.net

Viewpoints

Designing Products with Recycled Tires

Crumb rubber can be used to extend the life of scrap tires through an impressive range of products. Crumb rubber is a wire-free fine rubber particle made by reducing the size of scrap tires. Various size reduction techniques can be used to achieve particle sizes down to 600 microns or less. As a raw material, whole and shredded tires and crumb rubber have beneficial attributes. However, while the benefits of recycling and conserving landfill space are widely known, recycling is not cost-effective unless the materials collected can be put to good use.

The versatility of crumb rubber several major advantages. Compared to the applications of whole tires, crumb rubber has larger and broader potential markets. It has been incorporated into rubber and plastic materials such as floor mats, vehicle mud guards, carpet padding and adhesives. Crumb rubber

can be used in many building and design applications as well, including flooring and foot paths, roofing, insulation, waterproofing and flexible foam, in addition to flower pots, wall hangers and animal bedding. Using crumb rubber as a filler also can reduce costs.

Designers and manufacturers are just scratching the surface when it comes to harnessing the potential of crumb rubber through creative design, processing and marketing. The net benefit is a vibrant economic sector that continues to bring innovative products to market while creating new opportunities for recycling and minimizing waste.

For those interested in designing products with recycled tires, Chris Hammer of BNIM Architects and Terry A. Gray of T. A. G. Resource Recovery produced the fantastic 2004 report, *"Designing Building Products Made With Recycled Tires"* for the California Integrated Waste Management Board. This report provides information on the physical and technical characteristics of

the raw materials designers may be working with. It also alerts designers to application specific challenges they will face in working with the unique properties of tires, tire shreds, and crumb rubber.

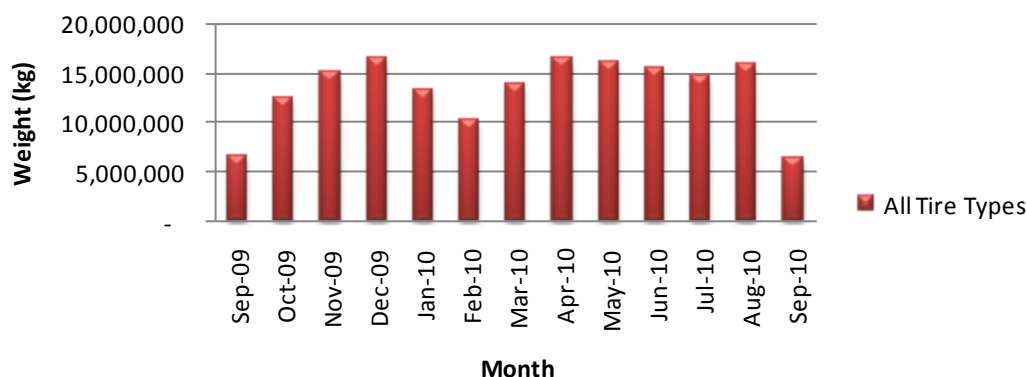
The Report is available for download at: <http://www.calrecycle.ca.gov/Publications/default.asp?pubid=1076>



Photo Credit: Cnn.com

• The OTS Report •

Total Tire Volumes Delivered by Ontario Haulers



Tires Diverted (Tonnes)

On Road: **98,701**

Off the Road: **18,643**

Tires Supplied into Market (Tonnes)

On Road: **135,889**

Off the Road: **16,043**

Registered Stewards

608

Registered Collectors

6175

Registered Haulers

150

Registered Processors

31

Recycled Product Manufacturers

7

TSF Remitted

\$73,523,414.70