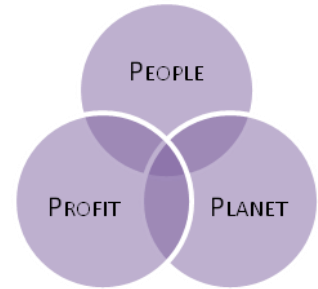


SUSTAINABILITY COMMITTEE NEWSLETTER

WASTE MANAGEMENT
MAY 2011



OVERVIEW

The 2009 public service strike in Toronto highlighted the importance of waste management in Ontario. The space available to dispose of our wastes is becoming more limited and citizens are becoming much more resistive towards landfills sited nearby.

In fact, only recently the City of Toronto stopped shipping their waste to Michigan. The new landfill location expects to reach capacity as soon as 2025. Waste disposal costs will continue to increase along with the shipping costs associated with fuel and the distance travelled for disposal.

To help increase landfill life and utilize resources more efficiently the Government of Ontario had initially set a waste diversion goal of 60% by 2008. However, the province has struggled to meet this goal with only 22% of waste currently diverted from landfill and only 12% from the Industrial, Commercial and Institutional sector.

ENVIRONMENTAL FARM PLAN

There are several Environmental Farm Plan upcoming workshops scheduled. Please contact your local representative for more information:

Niagara

May 17 & 24th, 2011 10am-3pm
Tom Tancock- 905-685-4367
niagara@ontariosoilcrop.org

Essex

Ernie Konrad, 519-825-4588
essex@ontariosoilcrop.org

Prince Edward County

Rick Terpstra, 613-476-8250
princeedward@ontariosoilcrop.org

Toronto/York

Jonathan Watchurst, 519-942-1181
york@ontariosoilcrop.org

YOU CAN'T MANAGE WHAT YOU DON'T MEASURE

Waste audits play a critical role in the waste management sector. Ontario Regulation [102/94](#) and [103/94](#) outline the requirements for waste audits and waste reduction work plans.

Waste audits are designed to determine the composition and quantity of wastes generated by a facility. Information from these audits may allow your company to reduce their environmental footprint while reducing your operating costs by;

- reducing waste collection frequency
- improving the waste management system
- finding uses in the facility for certain waste materials
- tracking the efficiency of your waste management system
- finding a market for other materials in the waste stream

Several member wineries have taken advantage of the opportunity to have a waste audit conducted on their facility by students at Niagara College. If you wish to become involved in next year's waste audit program please contact us at the [Wine Council of Ontario](#).

WASTE DIVERSION ONTARIO

Certain materials may be more problematic due to either the quantity generated or their hazardous nature. The Ministry of the Environment addresses these material types with specific waste diversion programs, according to the Waste Diversion Act. Waste Diversion Ontario works with industry stewards to develop and implement these waste diversion plans through Industry Funded Organizations (IFO). Industry stewards include brand owners of the material type (if they reside within Ontario) and first importers of the material for sale.



WHAT'S YOUR STORY?

Help Ontario's wine industry become more 'Green'. Share a story on how your company has benefited from applying the principles of sustainability in your facility. We are also interested in what specific topics you would like to see addressed in these newsletters.

Please contact Regina Foisey with your stories or requests at:
regina.foisey@winesofontario.org

Materials types the Ministry of the Environment have designated include:

- blue box waste
- used tires
- used oil material
- municipal hazardous or solid waste
- waste electronic and electrical equipment

Stewardship Ontario (for non-alcoholic blue box waste) and *Bag it Back: The Ontario Deposit Return Program* are operated through these forms of organizations.

WASTE MANAGEMENT HIERARCHY

SOURCE REDUCTION

Packaging materials contribute to a large portion of the waste stream. In order to address these concerns many governments have explored 'Extended Producer Responsibility' laws. The *Ontario Deposit Return Program* and the *Waste Electronic and Electrical Equipment Regulation* is a first step in this process. As a result many industries will become more responsible for the products which their wastes produce.

The best way to reduce these wastes is by not producing them in the first place. Consequently, waste management should be considered when designing your wine packaging.

One step in this process is the lightweight glass program. Many wineries can further reduce waste by removing any extra cardboard packaging or suggest reusable bags when they sell wines in their stores.



ALTERNATIVE USE FOR FRUIT POMACE

In 2004, researchers from two different Turkish universities found that the extracts of grape pomace can inhibit the bacterial growth, which spoil food or cause food borne illness. The research found that the extracts have high phenolic concentrations, which have anti-oxidant properties. These properties may allow its use as a food preservative or for dental hygiene. Some examples of grape seed extract products that are already on the market which include: [MegaNatural BP Grape Seed Extract](#) and [Herbasway Laboratories Red Wine Alternative](#)

A winery's choice of closure type may also significantly influence the amount of waste generated. One member winery noticed that there was significantly more packaging waste produced when screw caps were applied to their bottles. Arguments can be made for using [cork](#) or [screw-caps](#) as a closure type. Wineries must use their best judgment to make an informed decision about closure type based on their unique business needs and company values.

Simple behavioural changes can also result in a significant reduction in the amount of waste produced. Activities such as '[Waste-Free Lunches](#)', [paper use reduction](#) measures and [reduce or eliminate bottled water use](#) are a few notable examples of reducing waste by behavioural change.

REUSE

It is impossible to completely reduce the amount of waste generated by a process to zero. Reusing these materials is preferable to disposing of or recycling and reprocessing these wastes. A broad industry wide program for wine use is very difficult to achieve due to the variety of wine bottle types and labels. One



WINE BOTTLE REUSE RESEARCH

The Ever Green Environmental Corporation is involved with the Government of Newfoundland and Labrador and the Government of Canada in research into the recovery and reuse of wine bottles in Newfoundland.

The pilot project involves using a small machine used to clean the bottles. It is currently being operated in a bottle return depot but may be operated in wineries as well. At present, they are calibrating the machine to facilitate a larger production scale.

The program was started due to the potential environmental benefits of wine bottle reuse, the isolated nature of Newfoundland and the high shipping costs associated with new bottles.

More information may be obtained from Mike Wadden at mike.wadden@greencan.ca

company in Arizona, Kind Vines, has implemented their own bottle re-use program, known as [Zero Waste Wine](#), to enhance the sustainability of their wines.

Often, a winery can find uses within their winery to use some of its waste. For instance, many wineries convert old oak barrels to wood chips to add flavor to its wines. These oaks barrels may also be reused and sold in [furniture](#) or for [gardening](#).

Many companies have engaged in 'Waste Exchanges' ([Ontario Waste Material Exchange](#)) where waste from one facility is sold as a resource for another, mimicking the closed loop nature of natural systems. The most prominent example of these industrial systems is the industrial ecology employed in [Kalundborg, Denmark](#) and the [City of Greater Sudbury Eco-Industrial Network Strategy](#).

RECYCLE

Recycling is the most well known and broadly utilized of the waste reduction initiatives. Due to the large amount of energy used in reprocessing materials, it is far less efficient than the source reduction and reuse.

Recycling facilities must also find a target market for the recycled materials. Purchasing materials (such as glass or paper) with a high composition of post consumer recycled content will help make the recycling industry more economically viable.

Since market demand is so low, many companies must pay others to remove their mixed glass supplies. In some provinces and states they landfill these materials since the market cannot sustain the



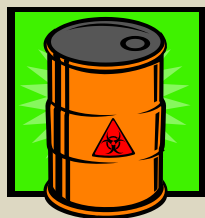
CANVAS BAGS EMPLOYED FOR WATER TREATMENT

Often solid waste management involves creative approaches to current operations. Cave Spring Cellars uses burlap sacks for filtration of their wastewater. The burlap sacks are inexpensive and biodegradable. Their use reduces the environmental footprint of Cave Spring Cellars by avoiding the capital, operational and raw material costs associated with conventional sedimentation tanks.

recycling of these materials.

Of course, source separation programs also play a key role in waste management. Areas such as offices (for fine paper) and receiving (for corrugated cardboard) are easy locations to implement source separation programs.

Additionally, clearly labeled and easily accessible recycling bins are integral to a successful recycling program at your facility. If recycling is not made easy, then employee involvement will be more difficult.



HAZARDOUS WASTE

The disposal of hazardous wastes and material can have severe environmental impacts. Heavy metals contained in batteries, fluorescent lights, and electronic products as well as many of the chemicals used in the laboratory can leach from landfills and toxify our water supplies.

Consequently, all hazardous wastes must be disposed of properly. Click [here](#) for a list of companies who can dispose of these wastes

If you generate more than 5 kg of any hazardous waste, you must register it with the ministry of the environment. Follow the [‘Registration Guidance Manual for Generators of Liquid Industrial and Hazardous Waste’](#)

TREATMENT

Even when diversion initiatives are employed, there will always be some form of residual waste. It is important to review and understand your current disposal contract to reduce your waste management costs.

Generally, waste management firms issue rolling contracts, similar to those of cellular phone providers, and wineries cannot adjust their service until the end of their contract. Conducting a waste audit will provide information on the quantity of waste generated and determine if your winery can save money by adjusting the pick-up schedule when the contract is up.

Some facilities may benefit by installing compactors on their waste disposal bins. Compaction ratios can range from 3:1 to 5:1 and reduce the number of waste pick-ups required. The reduced cost of waste pick-up may offset the cost of purchasing a compactor. The waste audit will help

determine if this investment is suitable.

Companies that may be able to help with these waste management services include:

ENVIRONMENTAL SERVICES COMPANIES

Company	Industry	Phone	Contact Information
EM Terra	Waste Collection and Management	(905)336-9084 (Burlington-Head Office)	
Waste Management	Waste Collection and Management	1-800-665-1898	swo@wm.com
Modern Corporation	Waste Collection and Management	1-800-561-4409	http://www.moderncorporation.com
Efficient Waste Management Services Inc.	Waste Collection and Management	(905)844-8888	service@efficientwaste.com
BFI Canada Incorporated	Waste Collection and Management	(905)532-7510	Windsor@bficanada.com Kingston@bficanada.com Toronto@bficanada.com
Steward Edge	Waste Management and Extended Producer Responsibility	1-888-277-2762	info@stewardedge.com
AET Consultants Group Inc.	Environmental Consulting (Waste Audits)	(519)576-9723	info@aet-group.com
Conestoga-Rovers & Associates	Environmental Consulting	(613)389-9812 (Kingston) (905)382-0510 (Niagara) (905)966-9886 (Windsor) (416)360-1600 (Toronto)	http://www.craworld.com/
Marathon Equipment	Compactor Equipment	1-800-269-7237	marketing@marathonequipment.com
The Compactor Guy Inc	Compactor Equipment	1-800-467-7146	info@thecompactorguy.com

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NEWSLETTER ON LAND CONSERVATION**