









"We hope that you find something useful to take from Elements and something to give back"

This issue





**Engineering Services** 





#### **Providing Energy to Growing Hospitals**



As we become accustomed to the presence of the Grace Donnelly Women's Health Pavilion, the major in-fill work begins and the hospital will be acquiring more energy to heat, cool and provide power to the building in preparation for opening day. As LHSC's energy demand increases as a result of the new construction, so does the demand from St. Joseph's Health Care, London as they proceed with the construction of a new Regional Mental Healthcare facility.

Due to the magnitude of the combined energy demand, the hospitals are undertaking a major power plant expansion project at Victoria Hospital over the next two years that will accommodate the needs of both organizations. New transformers will be installed to support the additional electricity however, the plant will also be designed to provide more steam. Typically, steam is produced by water boilers that are fed from natural gas, a nonrenewable resource. This is both a cost and environmentally preferred method over an oilfired boiler however, there may be an opportunity to provide steam to the hospital using a renewable energy resource, like wood for instance. This type of system is referred to as a biomass system and is not to be confused with an energy from waste system.

The biomass system, a century old technology, uses a gasification process to derive fuel and not an incineration process like an energy from waste system. During the gasification process, wood chips or wood pellets would enter the reactor to be heated in a low oxygen or 'reducing' environment (contrary to incinerating in a high oxygen or 'oxidizing' environment) to produce a wood gas that would be used the same way as conventional natural gas.



The result of using a gasification system over incineration is a cleaner and environmentally preferred process without the complex pollution output to control. Not to mention, using a renewable resource helps to minimize our draw down on the planet's non-renewable resources. More investigation is needed however, the potential economic advantage of supplying energy to our hospitals via biomass would amount to a savings of approximately one million dollars per year.



# WASTE

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## New Recycling Centres in the Emergency Department



The Emergency Departments at both UH and VH are greener these days with the installation of new recycling centres in their waiting rooms. Staff and visitors are now able to easily separate their cans, glass, plastic and garbage with these new recyclers. Recycling has also been improved in the lounges and office areas of both Emergency Departments where the staff is committed to putting waste in the right place.

VH Emergency Department (from left) Kim Banks, Barb Woods, Ryan Woods, Peggy Frew, Sharon Haffner and Sara Scratch.

### **Recycling and Donating**



Aluminum pop cans are generating money and are being recycled at the same time. After they finish their workday, Clintar employees Bill Cavanagh (left) and Scott MacInnes separate bags of aluminum pop cans from other recyclables collected from outdoor recycling stations at LHSC. Once they have a truck load, they take the cans to a scrap metal recycler and then donate the money they receive to the Children's Health Foundation. Mike Malleck, Owner Clintar, says these employees are not only donating the proceeds, they are donating their time to do this work.

## Plastic Uniform Bags Eliminated

Last Year, the staff in the Engineering services department at LHSC came up with the suggestion that we ask our vendor to stop using plastic bags on uniforms when they come back from the laundry. The result of this idea is: 24,000 plastic bags per year have been eliminated and saved from going to landfill.





# PROCUREMENT

### Wiping Away the Winter Sniffles



It seems everyone has got a touch of the cold this year...with record amounts of snowfall and below seasonal temperatures, everyone is reaching for a tissue to wipe away the winter sniffles!

Sales of facial tissue reflect this trend as they generally increase over the winter months while consumers are suffering from colds, allergies or the flu. As you are buying your box of facial tissues this season, it may be a good opportunity to reflect on what you are buying.

The Greenpeace Shopper's Guide, "Ancient Forest Friendly Tissue Products", states that the production of some types of disposable tissue products such as toilet paper, paper towels, facial tissue and napkins is a serious factor in the destruction of Canada's ancient forests.

Over 700,000 tonnes of disposable tissue products are used each year in Canada, much of which is produced from ancient forests. The average Canadian uses about 22kg of these products every year including approximately 100 rolls of toilet paper. If you were to roll out this amount of toilet paper it would extend to about 5 kilometers. Multiply this amount by several million people and you can better understand the impact the production of disposable tissue products has on an ancient forest like the Boreal forest in Canada.

In this guide Greenpeace continues this discussion, which is followed by guidance and direction on symbols and name brands to look for when shopping for your box of tissue paper. Email <u>chester@lhsc.on.ca</u> to receive your very own copy of the *Ancient Forest Friendly Tissue Products Shopper's Guide* and be sure to use it the next time you reach for a box facial tissues to wipe away the winter sniffles.



