



Will you win the \$3,000.? Could you?

REMINDER

WALKER EMPLOYEES!!!

Win \$3,000 by Getting the Static Out

— Get the —
Static Out!
Stuck on Reduction



We have asked you to take the challenge!

We are challenging employees to reduce their home electricity consumption. Prizes will be awarded to the individual(s) that demonstrate the greatest percentage of energy reduction from a base year of their choice starting April 2000. (e.g. compare your consumption from April 2002 to 2003 to your consumption from April 2007-2008)



We are hoping to motivate and inspire employees to make a change at home; to think of ways to reduce their energy use and help support the environment. If supporting the environment and saving money on your energy bill isn't enough incentive, we are also rewarding the 1st place winner \$3,000, 2nd place \$2,000, 3rd place \$1,000 and the \$500 for the individual that shows unique Innovation / Initiative.

If you would like to start supporting the environment and reducing your energy consumption, visit EARTH1st.ca. There you will find information about the contest, incentives and rebates, which help you to start saving energy.

Here are some quick tips to reduce your electricity use:

- Use energy efficient bulbs
- Program your thermostat
- Let your clothes dry on a clothesline
- Wash only full loads of dishes in the dishwasher
- Open the door when they are done to let the dishes air dry
- Wrap your hot water tank in a thermal blanket to reduce heat loss
- Insulate the hot water pipes as much as possible to minimize radiation heat loss
- Conduct an energy audit of your home

Get the Static Out!

Have you started collecting your bills and getting ready to make your submission for the Get the Static Out contest?????

Entry deadline is now June 2nd!

We have changed the deadline date for application submission to **MONDAY, JUNE 2**, at 5pm to allow time to receive your April 2008 bill. Application forms will be available April 1, 2008.

Looking forward to hearing your "Get the Static Out" stories!



What have we done so far?

We have provided employees with a list of resources they can take advantage of. Resources such as incentives and rebates, government and private rebates, ecoENERGY retrofit delivery agencies and also some quick tips on how to reduce energy consumption.

During the month of August, the Environmental Performance Department visited each site to promote the contest. We delivered information on the contest and shared ideas on how to reduce energy, not to mention, handing out approximately 3,000 cobs of corn. The corn represents a renewable energy source (biofuel) and who doesn't like corn in the middle of summer?



Spreading the EARTH1st Word

Walker Industries' EARTH1st Program is gaining popularity.

Many subcontractors have asked about the program at Georgian Construction work-sites after seeing the green EARTH1st stickers on Walker Industries' hard-hats and vehicles. Due to the attention the stickers have raised, EARTH 1st packages are planned to be handed out to many more subcontractors so they are informed of EARTH 1st and can apply the principles to their own work practices.



"How much more can I do?" asks Diane Danku

How much more can I do? How much more can I do?

These words have been coming to mind over and over and over again. My first recollection of "Get the Static Out" contest was of sitting in the lunchroom casually speaking in a group with Shawn and Leslie and saying out loud. I already do everything to save energy and the environment.

- I only use cold water to wash my clothes (I do full loads only)
- I keep my thermostat at 68 in the winter and 78 in the summer (together with only fans)
- I only have lights on in the room I am in and I always replace furnace filters every 90 days.
- I have replaced all my high wattage bulbs, what more could I do?

Living in the house that I had built in 1972, I was very happy each new season thinking that my 35 year old furnace and AC were still doing their job. Saving me expense of having to replace them for another year. Then low and behold on the start of the warmest two weeks of the summer my A/C failed.



I called a repairman and for \$100 he verified my luck had run out. My 30 year plus unit was now officially dead. He gave me a quote for a new unit and advised me I should change my furnace at the same time for an additional cost and energy savings. (After getting 3 estimates I decided to go with Direct Energy).

I was told I would have to book an Eco Energy audit to qualify for the rebates offered by the federal and provincial governments, as well as the gas company. I paid \$400 upfront and I would get \$150 back when I finished with the updates. The inspector from Amerispec was very thorough; after 3 hours of testing he gave me a computer copy of my energy efficient evaluation report. He gave me numerous tips and recommendations on how I could upgrade my house to save energy. Houses are rated on a scale of 100% energy efficient. The average 35 year old house was 64%. I was absolutely mortified at my score of 34% energy efficient. He explained it wasn't as bad as it seemed and assured me that once I changed over to a new furnace and A/C that figure would double and I would be at the average rating. All these years I thought I was saving money not having to replace my old reliable furnace; not realizing that my money was actually going up the chimney.

So now it all begins, I have had a new 92% energy efficient furnace and A/C installed as well as a new hot water tank and a programmable thermostat (to lower heat when I'm at work + asleep). I have had roof repairs completed and I have installed gas kits and plugs in all my switches and receptacles.

Now the fun part begins. I have purchased drywall and insulation to upgrade my basement's insulation. Thirty five years ago R2.5 was the acceptable grade. Now a minimum of R10 is recommended. Basically we will be ripping off all the original paneling, adding R9 to the existing foam insulation and putting up drywall panels. We are going to use that old vapour barrier to insulate over the ceiling lights in the attic. The original base panels will be recycled to insulate the garage.

After all of this is completed, I will go onto my final stages of the retrofit. • Wrapping all hot water pipes • Insulating cover for hot water tank • Replacing my 2 toilets with 6L flush models • Plugging chimney for unused wood fireplace • Insulating attic door • Caulking and weather stripping around all doors, windows and water pipes • Foam spray around all air leakage areas (as shown in the environmental report) • Putting in a new front door (Energy Star).

We have up to 18 months to complete all of the above and then the inspector will come back and re-evaluate my home and give me my new energy score. He will then submit my application for any rebates.

After all is said and done, I will not only have saved myself money in heating and cooling expenses, but I will have made a positive personal contribution to the environment.

So this is truly a win-win situation!

How much more can you do?



Taking the Time to Plan Can Reduce Your Impacts

When Taking the Time to Plan and looking at different ways to Reduce your Impacts you really can make a difference in supporting the environment.

A great example of this is Shelly Vance!

Shelly and her family are currently rebuilding a 30 year old cedar fence and deck in their backyard. They have been de-nailing the old wood and re-using it up north. They have already used the old cedar to line their outhouse pit. They are re-staining the wood and hope to get 30 more years out of it. Their projects for summer of 2008 - an outdoor shower and lean-tos for storing cords of wood.

Partners Saving Paper

A joint effort between partners saves paper. IGRS, iDM, Comcor and Niagara Biosolids are now digitally signing invoices to eliminate paper being faxed back and forth. This system has been set up by IT. The PDF digital signature requires a password and also adds a date stamp to the invoice. This is a great example of how team work can Reduce our Impacts and make us Efficiently Operate!

Where can you apply electronic signatures to save paper?



Marie Elvidge, one of Walker Aggregates employees, helps Nancy Thompson load all the recycled paper into her vehicle.

Georgian Paving and Construction Reusing Paper

For the past five years, Georgian Paving and Construction and the Duntroon Office have been giving back to the environment. Shredded paper that would normally be picked up by E3 community workers is now going to Nancy Thompson. Nancy is a local resident that uses this paper to line the kennels for her new puppies. Great example of how waste for one can be useful for another.

Reduce. Reuse. Recycle.

As part of our EARTH 1st initiatives we recently made the decision to purchase office furniture from an environmentally minded Manufacturer, Calstone Inc.

Calstone is a 100% Canadian and family owned office furniture manufacturer located in Scarborough. The company began 20 years ago making tables for mailrooms and now has an extensive line of office furniture.

The Environmental Performance Department was initially interested in this company because of their remanufacturing program. When the company's furniture is no longer needed and if it is being replaced by new Calstone furniture, Calstone will take it back at no charge and recycle it. All the components are either reused or recycled from the laminate tops to the steel legs. They guarantee that their products will never see a landfill.

After conducting a site tour we discovered Calstone has also invested in a number of other environmental initiatives. The site recirculates cooling water from spot welders, reuses packaging and buys green energy from Bullfrog Power for their offices. The company has also designed its own environmental Management System based on ISO 14001.

The best selling feature for this company, besides its environmental initiatives, is its stunning line of furniture which has found its way into Universities and government departments across the country. Some of their customers are:

- Ontario Ministry of the Environment
- Elections Canada
- Canada Customs / Revenue Agency
- Toronto Transit Commission
- The Hamilton Spectator
- University of British Columbia
- York University
- Niagara College



Their prices are also competitive with our current supplier in the Niagara region. To date, we have furnished three offices and there are two more that will be done within the next couple of months. Our goal is to purchase all future furniture from Calstone.



Taking Time for Turtles

Early last June nature spoke and The City of Niagara Falls and Norjohn Contracting listened. Norjohn was scheduled to complete some work on Crowland from Yokom to Biggar Road. June just happens to be the time of year for the local turtles to nest and lay their eggs along the edge of the road between Schisler Road and Yokom Road. The work was delayed to give nature some time.



Now that definitely is considering all our stakeholders.

Eco-Efficiency Measures – What Gets Measured Gets Done!

Eco-Efficiency Measures				
Site: WAI - Walker Brothers Quarries	Report Month: September			
Year	Monthly Usage	Monthly Cost	Annual Usage	Annual Cost
Water (CM)				
2002				
2006				
2007				
Electricity (Kwhr) - Plant - bill sent to WBO then split with Thorold site operations - split determined by accounting				
2002				
2006				
2007				
Fuel - Gas (L)				
2002				
2006				
2007				
Fuel - Diesel (L)				
2002				
2006				
2007				
Natural Gas (GJM)				
2002				
2006				
2007				
GHG Emissions (Terms of CO2 Equivalents)				
2002				
2006				
2007				

Last year, the Environmental Performance Department hired Gartner Lee to develop Eco-efficiency measures for Walker Industries. Eco-efficiency is a management strategy that links financial and environmental performance to create more value with less ecological footprint. It's about doing more with less and creating more value with less impact.

What gets measured gets done. Eco-efficiency measures will help us to track our performance, and to celebrate our successes. The goal is to improve performance of the business, have transparent and verifiable measures and to integrate eco-efficiency information into overall decision-making and communications processes.

During the Environmental Performance Review process, we ask each company to report eco-efficiency data such as water, electricity, fuel, natural gas use. We are now collecting this information with help from the Financial Department and have started reporting. These reports are now posted online for each site. The data has been entered for 2006, 2007 and our base year of 2002.

This is the first step forward in developing and implementing eco-efficiency measures.

Water Down at Walker Brothers

New water sprayers with sensors have been installed on many of the aggregate conveyors within our Walker Brothers Thorold quarry. The sensors allow for the water to turn off automatically when production is halted. This new addition allows us to conserve.

The collisions that occur between the naturally dry aggregate as it drops and moves can create a large amount of dust. This dust can lead to dusty conditions

within the quarry and possibly close by neighboring lands. By watering the aggregate on the conveyors at specific locations, the dry collisions become wet collisions and the dust is controlled.

The conservation of water and the improvement of air quality have made the new sprayers an efficient addition to our already environmentally friendly Walker Brothers quarry.

GGUI Start Up Province Purchases Renewable Energy from Walker

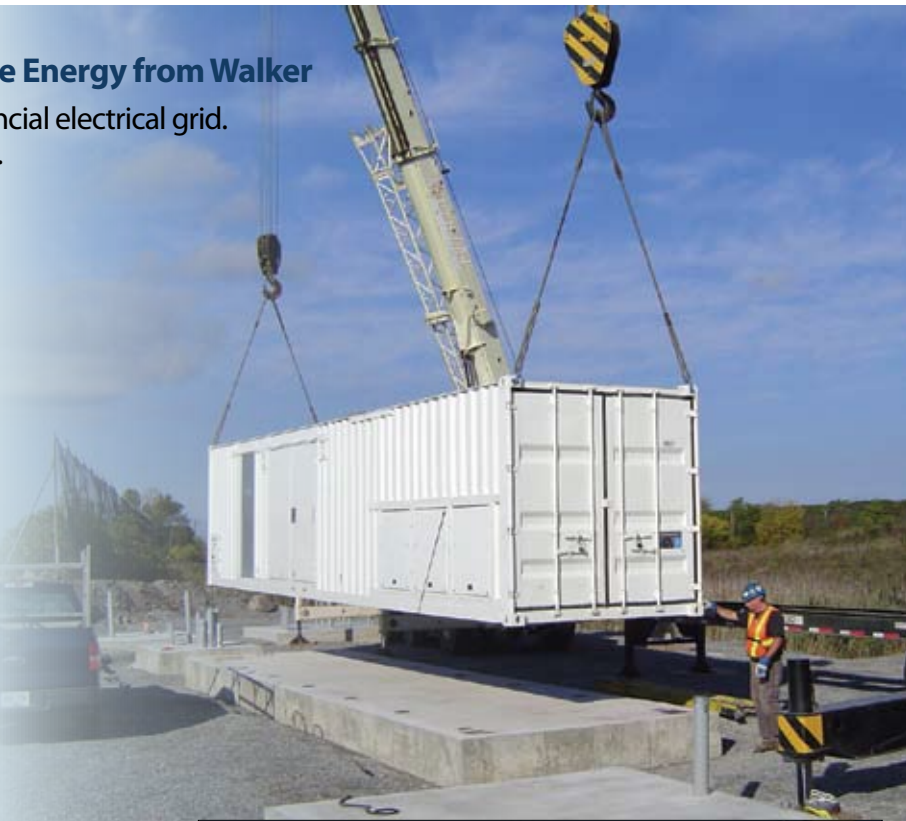
Walker is now generating green energy for the Provincial electrical grid. On December 20, 2007 the generator was turned on.

Through its partnership with St. Catharines Hydro Generation Inc., IGRS (a Walker partnership company) is working with the Ontario Power Authority to increase the amount of clean, renewable energy used to generate electricity in the Province of Ontario. The deal to sell electricity generated from landfill gas produced at the East Landfill in Thorold, ON was signed late last year and as of December 20th electricity is being generated. This project provides several direct benefits. It:

- provides renewable energy,
- reduces the potential for odours at the landfill,
- provides additional distributed electrical generation capacity in the Province, and
- reduces the amount of greenhouse gases that would have otherwise escaped to the atmosphere.

Landfill gas is a by-product from the decomposition of waste and typically contains 50% methane. Gas is collected from a series of extraction wells that are located throughout the site. Once collected, the gas is treated and then used as fuel source in a state-of-the-art engine that drives a generator to produce electricity. The 'genset' produces 1,064 kW which is enough electricity to power approximately 1,000 homes with a 'green' source of energy.

Not only does the project generate renewable energy, it also ensures that landfill gas is not able to escape to the atmosphere where it has the potential to create unwanted odours and greenhouse gas effects. This project also provides an added layer of odour control redundancy at the landfill where an existing landfill gas utilization project delivers gas to the local paper mill. Landfill gas provides approximately 30% of the paper mill's gas requirements. IGRS is currently twinning the pipeline to the mill. In February, the new pipeline will be commissioned with more direct green energy being provided to the paper mill which source of paper fiber is the newsprint from bluebox recycling programs across the continent.



Biosolids Update

Biosolids are the nutrient-rich solid organic materials produced from the residuals of the treatment of domestic wastewater. Our Niagara Biosolids Corp. (NBC) biosolids processing facility has been running now since February 2007. The facility is designed to further treat the Region of Niagara's biosolids, creating a soil amendment approved by the CFIA.

The treatment uses heat and lime to create the product. This fall we shipped our first product, targeted at the agricultural market. We can't keep up with the demand!

Since February, we have been working to fine tune our operations to create quality products with less impact. In November, we temporarily closed the plant in order to do upgrades to the biofilter and storage building. The biofilter is the primary odour control system for the process air. Since the plant started operating again we have noticed a decrease in odours in the vicinity of the plant.

In addition to the work we did on the biofilter, Niagara Biosolids has also redirected biosolids from the Stanley Avenue WWTP to a beneficial re-use facility in the US and are working with the Region to reduce odour in the biosolids by reviewing their treatment systems. We have enclosed equipment within the NBC plant to contain ammonia generated during processing, which are vented to the air treatment system and have sealed the storage and processing buildings.

There are three areas we are targeting for engineering improvements for the long term: biosolids receiving, product transfer (from processing to product storage) and product storage. Design work on these three areas is currently underway.

Push trailers are currently being designed for product shipment to the plant. Push trailers would allow for faster unloading of the biosolids into the process without the need to open the receiving doors fully. The challenge is biosolids stick well to many surfaces. The trailer manufacturer is investigating various liner materials that could be installed within the trucks that would allow the biosolids to nicely slide out of the trailer.



By focusing on process improvements, the NBC plant continues to strive towards minimizing impacts and ensuring the long term viability of the operation.



A Collaborative Environmental Effort; Integrated Municipal Services and Niagara College



In 2007, staff from Integrated Municipal Services Inc. (IMS) met with representatives from Niagara College to discuss opportunities to collaborate on applied environmental research projects in the Niagara Region. The goal of the discussion was to fashion a working relationship with Niagara College where students could gain first-hand experience in the environmental industry. Research conducted within the alliance would also be applied to the respective Walker businesses, improving products, expanding markets and advancing efficiencies.

Using the Rice Road Wetland Biofilter Treatment System as a 'spring board' project, students from the College have assisted in winterizing efforts at the site. A modeling study is underway where monitoring data will be compiled and used to develop support for the use of wetland biofilter systems and their ability to function in cold weather climates. Further efforts are underway for students to assist in the insitu monitoring of the system and collection of data. This project has received funding from the Ontario Centres of Excellence and is progressing well.

The second stage of the alliance with the College is being developed with IMS's Organics Division. The second project will focus on the various soil enhancement products IMS now produces and sells through the Land Cover Soil Depot. Along with a number of prominent local golf courses, IMS and the College will produce and test specific turf grass growth amendments, some which will be direct replacements for chemical fertilizers and pesticides. Greenhouse trials will be done through the winter followed by plot tests at participating golf course locations.

IMS and the College are looking forward to furthering a relationship where research can be applied to innovative projects and students are able to benefit from applied experience in the environmental industry.

Bag to Earth at Duntroon

Our Duntroon office has taken a step forward in compost waste collection within their office. They started using "Bag to Earth" compost bags a couple weeks before Christmas. The bags are bio-degradable, Kraft paper bags. They greatly reduce the amount of plastic used. The Duntroon office hopes that the use of the compostable bags will spread throughout all Walker Industries offices. They have recently decided that, the bio-degradable bags will be used for all other office waste as well.



What's the Buzzzzz at Vineland Quarry?

Lilley Bee Apiaries have been using a small parcel of land on our Vineland Quarry property to harvest bee honey for about 20 years. They donate some of the honey to the quarry for allowance to use the property. An increased bee population is thought to have been sparked by the environmental rehabilitation initiatives of the quarry (tree planting and tree relocation). The bees are located in a heavily wooded area on the edge of the quarry property.



Starting Early for Nature at Duntroon

The Duntroon Quarry is running out of aggregate reserves. As a result, Ken Lucyshyn and Ed Lamb have been working on an application for an expansion of the Quarry. The expansion would require that an existing woodlot adjacent to our Duntroon Quarry be removed. Even though the quarry expansion project hasn't been approved, the woodland rehabilitation has started. The application proposes a new woodlot be planted to compensate for the one that will be removed. The proposed woodlot would actually be larger than the existing one.

Planting is already taking place in the new woodlot area. This early planting reflects Walker's commitment to having as little an effect on the environment as possible. The main obstacle for this project is time. We hope to have a woodland habitat in place before the existing habitat is quarried. It is beneficial to the local wildlife and vegetation to establish a replenished habitat before quarrying the expansion.

It is important to diversify the planting in the new woodlot. We are trying to create a complete eco-system. Simple rows of trees will not suffice. The eco-system contains three types of plots: one contains



quick growing (early succession) trees, one contains slow growing (late succession) trees, and the last is shrub dominated with topographic variations to promote ponding of water. There are currently three repetitions of the three plots in the woodlot. When the woodlot matures, there should be a wide variety of taller forest trees, smaller trees, and shrubs to cover the woodland floor.

The woodland rehabilitation plan also includes initiatives to transplant Hart's tongue ferns and plant butternut trees, both species of interest.

Special thanks to Melissa Cameron from Stantec for providing much of the information for this article.

Ten Mile Creek Trail Extension

If you didn't already know, our Ten Mile Creek nature trail has been extended by approximately 700 metres. The extension continues to follow the creek easterly between Taylor Road and Beechwood Road toward the Garner Road/Mountain Road intersection.

The extension is part of Walker's long term commitment to keep our operations as transparent to the local stakeholders as we can. The trail offers an opportunity for the public to get close to active operations at the Walker Brother's Quarry and Landfill and for them to see how we manage our natural resources.

We received positive feedback about the original trail, but that wasn't the reason for the extension. It was Walker's commitment to the EARTH 1st principles, which include keeping our 'footprint' to a minimum and supporting sustainability.

The environmental impact on the ecosystem during the extension construction was minimal. The work was done adjacent to the creek,



disturbed top soil and vegetation was kept to a minimum. A siltation fence was installed whenever we encroached on the flood plain and the majority of the vegetation was spread out next to the trail, where it will quickly re-germinate and become stable in the spring.

The new extension has a better 'trail' feel to it than the original and it was built under budget. This makes the trail an early success, but we must wait to see if usage increases to truly measure success.

So why not take a walk and let us know what you think.



What's Old is New Again!

Thanks to the innovation of Norjohn Contracting and Paving Limited, the roads we drive on are a little greener. The introduction of "Green Pavement" has certainly paved the way for environmental success! The use of recycled asphalt mix, reuses materials already found on the job site. On traditional jobs the old asphalt is pulverized and hauled away. This new technology allows for the old asphalt to be reprocessed and introduced back into the new design as base asphalt – a process that is termed "Cold Recycle Asphalt".

The benefits of this technology are impressive. In addition to producing a product that is self-healing and flexible, a number of savings have been realized. The reuse of existing materials saves natural resources and the environmentally sound technology that applies this innovation reduces fossil fuel consumption and creates less pollution. On average, NJC estimates that by utilizing recycled asphalt mix an energy savings of 64% is possible. In 2006, NJC completed a project in the town of Mildmay in Bruce County. By utilizing recycled asphalt mix in their design, 5 % less aggregate was used, 45% less energy was used and the project cost 13.4% less to design! The rapidly increasing demand for Green Pavement that is being recognized on a yearly basis clearly attests to NJC's ingenuity and their commitment to environmental excellence.



A Taste of Things to Come?

Since the movie "An Inconvenient Truth", the awareness of Climate Change has grown exponentially. We all see the potential of severe and unusual weather conditions into the future but what are the implications to us and our businesses?

Walker Aggregates' Duntroon Quarry definitely got a taste of the implications a warmer climate could pose. In March of 2007, there was an early snow melt which caused an awful lot of water to flow into the quarry earlier than usual. As a result of our pumping there was an abnormally large amount of surface water flowing off the property. Duntroon had a permit to take water from the Ministry of the Environment which used historic flow levels to create maximum seasonal flow rates for water leaving the Duntroon property. The permit allowed Duntroon a higher flow rate in Spring than in the Winter. The permit to take water did not anticipate an early spring melt.

We stopped pumping off site for the remainder of the month of March, but the surface runoff from the property due to seasonal melting continued to produce flow rates beyond that permitted.

If the seasonal melt had occurred after March, when it historically occurs, the maximum flow rate permitted would have been greater and there would have been no issue with the pumping.

Duntroon has since applied to amend their Permit to Take Water to adjust the seasonal dates to conform to our ever-changing climate. This will protect us from future seasonal confusion.

There were no environmental impacts due to the excessive flows. Our quick reaction of stopping our pumping ensured that quarry operations did not intensify the existing high flows around the property.

Have you thought about how Climate Change could affect your operations and what are the implications to your permits and approvals?

Special thanks go to Melanie Logan of Jagger Hims Limited for the information used in this article.

Niagara Waste Systems Scales

Niagara Waste Systems has moved its scales. The old scales and inspection station are located in the final cell of the landfill. We anticipate building that cell in 2008. That meant that the scale and inspection station had to move. Our new scale and inspection station are located on what was Mountain Road. Thinking ahead the new scales are ideally located to serve the South Landfill once it is operational.

Following the Sustainable Road



For the past couple of years the Research and Development (R&D) Section of Norjohn Limited has been busy looking at ways to shift their product line from petroleum to a more renewable and sustainable future. In October 2007, patent applications were filed for two emulsion products. One patent is for biobased wax emulsion developed by Maria Racota. The other is for a soya/vegetable oil emulsion developed by Larry Sinnige.

For the past couple of years, Maria Racota has been focusing her attention on developing wax emulsions from renewable animal and vegetable oils. The idea is to provide a product that will provide water resistance on composite panels, paper coatings and gypsum board. The challenge for Maria was to make a renewable product that uses wax from renewable resources but provides our diverse customers with the same or better water resistance.

Larry Sinnige has been working on the oil emulsions that we supply to the fiberglass industry. Our emulsions are used as dust suppressants by the fiberglass industry. Fiberglass is made by spinning molten glass and producing fibers; similar to what happens when transforming sugar into cotton candy. A binder is then added to glue the fibers together. Our emulsions are added with the binder and remain with the fiberglass product to prevent dust being generated when the fiberglass pieces are broken or cut by the user.

Any emulsion developed for use by the fiberglass industry must be compatible with the binder, must be effective as a dust suppressant and must be stable. So the goal for Larry was to develop a product that performs the same or better than our existing products and is made from renewable resources.

With these goals in mind, both Larry and Maria spent time in the laboratory starting from what they already knew and knowing their end goal. They looked at what might work and then kept testing different formulations until they had something that does work.

Maria is able to make wood and gypsum panels in the lab. So when she has a formulation to try, it is used in the panels that are made in the lab. Assessing how the fabricated panels perform with each new formulation provides clues as to how to improve the next formulation so it meets our customers' needs.

R&D is about taking what you know and what you can learn from others then applying it to solve a problem. It is a process of trial and error to develop something that works. It's about learning from what goes wrong and improving on what goes right.

In addition to the work in the lab, once the product is developed Maria and Larry are both responsible for preparing the patent application. Not an easy task. Maria's submission was about 50 pages of technical information.

Once the patent is filed, Norjohn has 12 months to do technical assessments of the products. That means working with our customers to do trials at their operations on their manufacturing lines. So far Norjohn has 3 trials arranged in 3 different market sectors (wood, paper and insulation). Trials provide more information on the performance of the product in real manufacturing settings. R & D then takes any information and knowledge from the trials and uses it to improve on the formulation.

Successful trials will mean that Norjohn has new biobased products that will help customers move towards greening their operations.

Norjohn will now be watching the Chicago Board of Trades commodity index for agriculture products. Archie Reynolds will soon be fluent in the cost per bushel of corn and soya beans. In the last year, soya prices have risen 40% and corn prices have risen 100%. This is all due to the interest in biofuels.

The advantages of these new biobased emulsion are:

- they are made from renewable resources
- they are not dependent on the unpredictable & rising petroleum market
- the vegetable oils have a higher flashpoint (less volatile) which means they stay with the product and aren't lost to the atmosphere and there is less risk of fire
- the fiberglass product provides a unique stability when mixed with the binder which is an improvement to our existing product



So far these potential products are getting a good reception from our customers. We are looking forward to hearing about the success of the trials so Norjohn can help our customers embrace the EARTH 1st principles.



Innovating the Emulsion Way

Norjohn Limited knows that being innovative means being in touch with others who are innovating. The Southern Ontario Bioproducts Network or SOBIN is assisting Norjohn to be on the leading edge. The mission of SOBIN is to strengthen the economy of Southwestern Ontario by cultivating new bioproducts, fostering energy conservation and expanding alternative energy sources.

SOBIN is a not-for-profit organization dedicated to advancing new bioproducts and finding new uses for biobased feedstock in manufacturing (primarily in the automotive, chemical and energy industries). SOBIN provides a network for researchers, growers and industries to connect and move new ideas forward to create a more sustainable world. SOBIN provides Norjohn with the resources, research information and connections to develop new opportunities and partnerships to develop more products from renewable biobased feedstocks.

Norjohn Contracting Helping Implement LEED Program at Thorold Plaza

What is the LEED?

It stands for Leadership in Energy and Environmental Design.

LEED certification is the internationally recognized standard for measuring building sustainability. By achieving the LEED certification, one has demonstrated that their building is truly "green". The rating system, which was developed and administered by the U.S. Green Building Council, a Washington D.C. based non-profit coalition of building industry leaders, was formed to promote design and construction practices that increase profitability while reducing negative environmental impacts. The certification process includes a rigorous third party commissioning procedure. If the building or structure performs as designed and meets its goals, there are government incentives. The LEED program has four levels: Certified, Silver, Gold, and Platinum. The levels correspond to five design categories: sustainable sites, water efficiency, energy and atmosphere, materials, and resources and indoor environmental quality.

Norjohn Contracting is adhering to the LEED standards for a project in Grimsby. They are re-doing the sewer system beneath a plaza development. By using materials from local vendors, they are following the specific goals set by this LEED project. Using local materials reduces impacts from trucking, reduces the impacts on the environment: less exhaust from the trucks, less wear/tear on the roads due to the trucks, etc. The LEED program is becoming more popular and we will likely see LEED standards being applied to even more things we become involved in building.



With the help of Bryon Dingman we are greening our flooring. There are 2 IGRS offices that are being renovated in the next couple of months and the floor covering will be carpet tiles manufactured in our backyard by Kraus. This takes us one more step down the sustainable path. Kraus is Canada's number one carpet exporter and they are located in Waterloo, ON. Kraus aims to produce recyclable products with longer lifecycles, using environmentally sustainable manufacturing processes.

They have applied the EARTH 1st principles:

- in their dyeing process which conserves water and eliminates wastewater emissions
- with their revised lamination process which continually re-uses wastewater and spent ingredients.
- by recently recycling and diverting from landfill 1300 fluorescent lamps, replacing them with ultra-low energy lighting
- by manufacturing from 100% type 6 nylon polymer, chosen for its lower energy requirements and suitability for post-consumer recycling
- by developing their innovative ReNew™ postindustrial recycling program which re-uses waste polymer in various forms, sorting it according to color, purity and state: the tubes around which our yarn is wound are products of recycling.
- today they use returnable tubes made from recycled polymer, replacing disposable cardboard tubes

The advantage of carpet tile is when it wears out only those tiles that are worn need to be replaced thus wasting less and using fewer resources.

Our goal is to have any new renovations done with carpet tile.

Ammonium Sulphate Proves to be Valuable

The Niagara Biosolids Plant located on our Thorold property has been up and running since February 2007. The plant receives municipal biosolids and converts it into an agricultural soil amendment through a process known as lime stabilization. As a by-product of the air treatment system, ammonium sulphate is created and collected. During 2007, the ammonium sulphate was disposed of at a cost.

Ammonium sulphate is a common component of agricultural fertilizers, and its use is governed by the Canadian Food Inspection Agency. NBC saw an opportunity for the use of their material.

To help find a solution, NBC worked with Norjohn (Emulsions) Limited to find a suitable home for this material. It was through the efforts of Larry Sinnige, that a distributor was found that has marketed it to a fertilizer company which custom blends fertilizers for the local agricultural community. This is a great example of Walker companies working together to find an innovative solution making waste into food for another industry.



Scrubber System - Ammonium Sulphate Generation via Ammonia Removal

Finding a beneficial use for this material has been a win/win situation, lowering costs and our impact on the environment.



If there is something you, your company or your co-worker is doing that should be recognized please let us know. You could also write an article for the newsletter to share your steps towards Higher Environmental Performance!

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Contact Alison 905.680.3769, Leslie 905.680.3786 or Dessa 905.680.3757 Environmental Performance Department, with your ideas, comments, thoughts and solutions.

