EARTH 1st Newsletter

Fall 2008 ■ Volume 6 ■ Issue 2
Walker Industries Holdings Limited

Head Office and WEG - Get the Static Out

An energy saving "shadow program" and energy efficient lighting are making Head Office and the WEG Building energy savers.

The shadow program is controlled by Bryon Dingman. It's an automated program that optimizes conditions within the buildings according to the outdoor temperature. It predicts the amount of heating or cooling needed in the buildings by keeping a continuous three day record of the previous day's weather. Therefore, the building temperatures shadow the data collected from the previous three days. A VFD (variable frequency drive) allows Brian to control fan speeds in the buildings to soften the intensity of the flowing air which makes it more comfortable for everyone.

It all started with an energy audit of the buildings. Head Office has been fully upgraded with energy efficient lighting. The WEG building efficiency will be further improved when it is renovated.

Savings to date in 2008 for Head Office and WEG Building are about 100,000 kw of electricity each. These changes show Walker Industries' commitment to higher environmental performance.

Tim McVicar, Steve Bisson, Mike Deprez, Mike Watt

Get the Static Out! Stuck on Reduction

The Get the Static Out contest was created to encourage our employees take the EARTH 1st principles home with them. In August, all the participants were invited to a corn roast in the vineyard at Vineland Quarry to celebrate their successes.

Ecstatic for our "Get the Static Out" winners!

INNOVATION AWARD - DOUG LOCKHART
Walker Aggregates Inc., Duntroon Quarry

3RD PRIZE - SCOTT KOZUB
Walker Aggregates Inc., South

2ND PRIZE - DIANE DANKU
Walker Industries Holdings Limited

1ST PRIZE - DAVID MARTIN
Walker Aggregates Inc., Vineland Quarry

Walker Receives Certificate of Recognition from Ontario's Chief Energy Conservation Officer

As a result of our Get the Static Out Contest, Walker Industries has been honoured with a Certificate of Recognition from the Conservation Bureau at the Ontario Power Authority. The certificate congratulates us for conducting "Get the Static Out", "a contest encouraging employees to conserve energy at home, contributing to building a culture of conservation in Ontario." The certificate recognizes the leadership taken by organizations that have made long-term commitments to conserve electricity in Ontario.

Steve Norrie, Ontario Power Authority

We are ecstatic for our "Get the Static Out" winners!

In April 2007, we announced our Get the Static Out Contest to create another way of having our employees take the EARTH 1st principles home with them.

When we challenged everyone last year with Get the Static Out we had no idea what you were capable of doing. Our top 3 winners all achieved over 50% reduction in electricity use from their base year and they did it with simple steps that we can all take. We are so proud of the changes that all those that submitted applications made and the enthusiasm in which they made them. Each of our participants received a bottle of wine from Stratus Winery to celebrate their reductions with their families. We celebrated with a corn roast in the vineyard at Vineland Quarry.

Get the Static Out! Stuck on Reduction

EARTH 1st

Doug Lockhart and his wife Janet

Scott Kozub and his fiancé Julie Seo

INNOVATION AWARD – DOUG LOCKHART

Doug works at our Duntroon Quarry. Some of the reduction initiatives taken by Doug and his family were:

1. using a clothesline rather than a dryer
2. installing energy efficient light bulbs
3. purchasing energy efficient appliances
4. got rid of an old freezer
5. only turning lights on in rooms they are in

Doug is receiving the innovation award for the communication and planning he does with his family.

To quote from his application,

- "We are constantly asking ourselves if there are more efficient and energy friendly ways to conduct our daily lives."
- "We often sit down with our bills and plan out ways in order to be more efficient in order to reduce our impact."
- "My wife and I have instilled the EARTH 1st principles in our children who have taken them in their lives as they have left to live at school. They are now influencing their friends and roommates to do the same."

Sitting down with our bills and planning ways to further reduce our impacts is a simple thing that we could all do and sometime innovation comes from simply planning.

Doug was awarded $500 for the innovation prize.

THIRD PRIZE – SCOTT KOZUB

Our 3rd place winner with a reduction of 50.46% was Scott Kozub. Scott works at Walker Aggregates and it is worth noting that his reduction was made in one year, so it is really quite outstanding. This could also be called the self-sacrifice award as Scott kept the temperature of his house at 15°C over the winter, only heating the bedroom and living room.

In addition Scott:

1. removed baseboard heaters
2. installed a high efficiency gas furnace
3. replaced an electric hot water tank with a Baxi Niagara tankless water heater
4. sealed his house better
5. installed a programmable thermostat and
6. re-insulated the rear of his house and upgraded the vapour barriers

Scott received $1,000 for his effort in getting the static out.

Ed Lamb *Mark Frawley, NEC*

Evan Bartfai

Wes Foebel and Brad Cassidy enjoying the BBQ. and preparing the corn.

Diane Danku and Bob Buckley

David Martin

SECOND PRIZE – DIANE DANKU

Our second prize winner was Diane Danku who achieved 55.67% reduction. The great thing about Diane is as our receptionist she is the first person that you meet as you enter our head office and she enthusiastically shared with everyone the steps she was taking to become an energy saver.

1. replaced 30 year old appliances, water heater, E/C and furnace
2. added a timer to her lawn sprinkler
3. only uses the dishwasher and washing machine with full loads
4. line dries where possible
5. washes in cold water
6. uses energy efficient bulbs
7. installed a programmable thermostat
8. capped a chimney that was not being used
9. wrapped her hot water tank and pipes
10. insulated her attic
11. placed vapour barriers over all outlets & cutouts in the attic floor
12. upgraded her insulation
13. installed sensor lights outside
14. foam spray around all the air leakages

So all her hard work has paid off and she won $2,000 for the energy reductions she has made.

FIRST PRIZE – DAVID MARTIN

David Martin is our first prize winner of $3,000 achieving the highest percent reduction in energy use. David also works at our Vineland Quarry. The Martin family:

1. replaced all their light bulbs with energy efficient bulbs
2. replaced appliances with energy efficient models
3. replaced an electric hot water tank
4. replaced an old furnace with high efficiency furnace
5. rarely use their dryer as they line dry their laundry
6. hand wash their dishes, so rarely use the dishwasher
7. turn off everything electric when it is not required and
8. use fans instead of air conditioners when possible

With these steps they achieved an amazing 57.86% reduction in their energy use.

What I have learned from all our applicants is how easy it is to get stuck on reduction. Simple steps make enormous differences. When you see any of our winners give them a pat on the back and maybe ask for some advice about how you can Get the Static Out!

Re-use to the MAX at Ridgemount

Mike Lee

It only takes a moment. Stepping onto Ridgemount Quarry property it becomes immediately evident that the facility's small workforce of dedicated visionaries has taken innovative thinking and resourcefulness to new levels. Capitalizing on natural talents and available equipment, Ridgemount employees have given exhausted materials brought to site from other Walker operations a fresh look and renewed purpose.

A functional Battery Storage was created using an old service box removed from a welding truck at the Duntroon Quarry. This metal box was salvaged from the Ridgemount storage yard, given a thorough sand blasting treatment, fitted with shelves and proper venting. It was then given a bright shot of Walker yellow, labelled and is now being used for battery storage.

What was once the box of an aging service truck for Georgian Paving & Contracting, has been put to good use. The old service box, was brought to the site following a face lift to the existing GAC service truck in 2007. It was cleaned, reengineered, painted and now serves as an enclosed storage area for oils.


empty drum storage

Proper storage of empty oil drums is a challenge faced by many in industry. Again, the team at Ridgemount has redesigned materials found onsite, effectively solving issues associated with proper storage of empty drums. An outdated containment enclosure previously used for secondary containment of a 500 gallon single walled fuel tank has been given the Ridgmount treatment. It was fitted with a racking system and roof (made from left over metal and tin from the siding of the facility's paint booth) and is now a great empty drum storage system.


oil storage

A special mention should go to Ridgemount's Bluebird enthusiast, Wayne Eggleton. Upon noticing the Ridgemount property's unique habitat characteristics, Wayne used old wooden pallets found around the site to manufacture 3 Bluebird houses. All the houses were installed around the Ridgemount property. The sensitive Bluebird has taken up residence in them.


Wayne Eggleton with a Bluebird house.

IMS Compost Constructing to More Efficiently Operate

If you have been driving along Townline Road you may have noticed the construction taking place on the Compost Site. IMS is in the middle of constructing a GORE Composting Pad. GORE is a covered windrow system using the GORE-Tex fabric to more efficiently process organics. The system involved the indoor receipt and initial processing of organic waste and computer monitored controls for optimum decomposition and odour prevention.

To learn more about the GORE technology and to see more construction photos check out our website at www.walkerind.com

Farming Niagara Waste Systems

University of Guelph continues its agricultural research at our east landfill. The study is looking at the viability of taking the landfill back to an agricultural end use. It is also looking at the effects that biogas emissions, exothermic behaviour and soil reconstruction has on the ability of grassland and arable crops to grow on top of the landfill cap.

The study started in 2006 and is scheduled to end in 2009. There are currently three plots being used. The first is found on top of Cell 8. Switchgrass corn and soy bean crops are planted here. This plot is located in an area of the landfill with active gas extraction.

The second plot is found on Cell 12. It is 2-tiered on an area of the landfill that doesn't have gas extraction. One tier sits on top of a bentonite clay geotextile, and one does not. This plot also is home to the same crops of switchgrass, corn and soy bean.

The "control" plot is in an adjacent farmer's field on Taylor Road. It is planted with the same crops as the landfill plots.

The data is collected from the two landfill plots and compared to the control plot to see if there is any variation to the success and quality of the crops. Once the study is completed and the results are shared, we should have a better understanding of the long term viability of productive crop establishment.


David Braniff

Gardening the Walker Way

Green is growing in the Walker Brothers Quarry.

This summer employees cultivated a small patch of garden immediately in front of the Quarry shop. The WBQ garden project, started in early June 2008. It has yielded an unexpected bounty consisting of three varieties of tomatoes, two varieties of cherry tomatoes, red & white onions, cucumbers, yellow & green beans and assorted peppers. The vegetables were harvested and enjoyed by employees, families and friends. Lumber and other materials used to support the garden came from quarry operations, while clay and trees replanted around the garden were salvaged from the stripping of overburden in the southeast quarry. A special thanks to IMS for providing the soil and compost employed in the project.

Not to be outdone, employees of the Niagara Biosolids built a garden behind the plant. Their crops of choice were pumpkins and sunflowers.

Fresh Air at Niagara Biosolids Plant

Over the last year or so our biosolids plant has made some significant improvements to its air quality and odour control systems:

1. Sealing Building: The processing building was sealed with spray foam insulation to help contain odours within the plant.

2. Mixer Containment: A separate room was constructed within the plant around the tail end of the mixer and a hood was installed over the dryer feed conveyor. These containment structures help capture ammonia and odours and direct them to the dryer and air treatment system. The mixer is where lime (cement kiln dust) is added to the process, which increases the pH and drives out ammonia from the biosolids. The room and hood helps capture odours at the generation point.

3. Doghouses: The "dog-houses" are a set of hoods constructed over the bio-solids receiving bins. Ventilation ductwork has been installed over these structures to help draw air from this area and channel it to the dryer and air treat-ment system. This construction has made significant improvements as we have been able to target and remove odours associated with unloading trucks. This was completed August 2008.

4. Link Building: A link building has been designed and is currently awaiting NEC approval. The proposed building will be constructed between the processing and storage building. Final product is moved daily and this structure will help reduce the odours associated with this transfer.

5. Storage Building Ventilation: A design concept has been developed to ventilate the product storage building by tying into the existing air treatment system at NBLP. The construction will include connecting ventilation ductwork from the storage building to the scrubber and biofilter systems. Engineering details have been finalized and we are currently doing the modeling required for MOE approval.

As you can see Greg Robles and the rest of the team at the biosolids plant are working very hard to reduce the biosolids odours.These improvements are "Reducing our Impacts" as the EARTH 1st principles reminds us to do every day.

Keep up the great work guys!

Doing More with Less at Woodington

Four new aluminum trailers have joined Woodington's fleet. These 53 foot aluminum trailers are larger and lighter than our previous steel transfer trailers. The trailers are used to transport waste from our Norjohn Transfer Station to Niagara Waste landfill.

So what does this mean?

Well, the trailers can carry approximately 5 tonnes extra per load which means about 450 less trips per year from Norjohn Transfer. That is about 35,000 to 40,000L less fuel used by Woodington. This saves resources, produces fewer emissions and also saves time and money.

IMS Creates New Diversion Opportunities

IMS is now partnered with Vinyl Council of Canada (VCC) and Simplas Inc. in a plastic pipe recycling pilot. This pilot enables companies to recycle PVC and ABS waste construction pipe. The pipe is 100% recyclable but is a non-renewable resource so closing the loop on it is good for the environment.

By separating the pipe (PVC & ABS) into the appropriate bin at the IMS drop-off the small scale generators can do their part. Just another great example how small changes can have a big effect!

Another pilot program has been launched at IMS Drop-off to assist diversion of household batteries from landfill. Batteries have metals like lead, nickel, mercury, zinc, lithium and copper which are valuable and recoverable. When residents drop off their batteries, IMS sends them for recycling.

Woodington Goes Organic

Woodington is now using Bio-Circle L parts cleaner. Why is this important? Bio-Circle is a water based, non hazardous detergent which has Canada's Environmental choice designation. It uses surfactants that breakdown quickly in the environment to non-polluting compounds.

Bio-Circle L is a pH neutral cleaner which removes oil and grease from parts. Its self cleaning action is a form of natural bio-remediation. It's non-flammable and eliminates health risks. The parts cleaner decomposes into water and CO2. This cleaner is also used at our Vineland and Ridgemount Quarries.

It's just another example of Acknowledging our Part.

"Make a Clean Getaway!" Another green opportunity for Walker.

Make the Choice to Efficiently Operate!

On Earth Day and World Environment Day Walker employees were provided the opportunity to "Make a Clean Getaway" by testing driving fuel efficient and alternative fuel vehicles. The goal was to educate our employees of comfortable green vehicle options and to encourage them to make a choice for the environment with their next vehicle purchase.



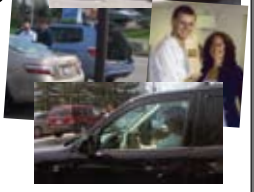










Make a Clean Getaway ...it's key!

Commit ■ Create ■ Participate

www.EARTH1st.ca

Make a Clean Getaway - Drive Clean!

On Earth Day and World Environment Day, Walker employees were provided the opportunity to "Make a Clean Getaway" by test driving fuel efficient and alternative fuel vehicles. The goal was to educate our employees of comfortable green vehicle options and to encourage them to make a choice for the environment with their next vehicle purchase.

Brian Fell, FCE Services makes a clean getaway everyday.

Norjohn Contracting's Barrel of Green Thumbs

Terry Schneider

Thanks to the efforts of Norjohn Contracting's (NJC) GREEN thinkers, the company's Brown Rd. facility now has a work glove reuse program. Gloves, dirtied beyond functional use are diverted from landfill and given a second (or third) chance to protect workers hands against the strain of daily operations. Soiled gloves from all company operations are collected and deposited in a large barrel located in the NJC shop. Hundreds of soiled work gloves in a variety of sizes and styles find their way to the "Glove Barrel" every week for washing and reuse.

The glove washing service is provided by G&K Services. During their weekly rounds to collect and clean uniforms, G&K evaluates the volume of dirty gloves accumulated in the barrel. If the barrel is close to full, G&K will remove the dirty gloves and take them to be washed at the company's Hamilton facility. Norjohn Contracting has made an eco-friendly and responsible choice in pairing themselves with G&K. G&K recently implemented a Water Reuse System, reducing environmental impacts associated with their wash process. This system uses 50% less water and 30% fewer chemicals. G&K does their part to reduce their impacts.

Building on an already exemplary framework of Environmental Performance, NJC continues to demonstrate their innovation and leadership abilities. Using outside the box thinking, they implement green ideas and save money, too!

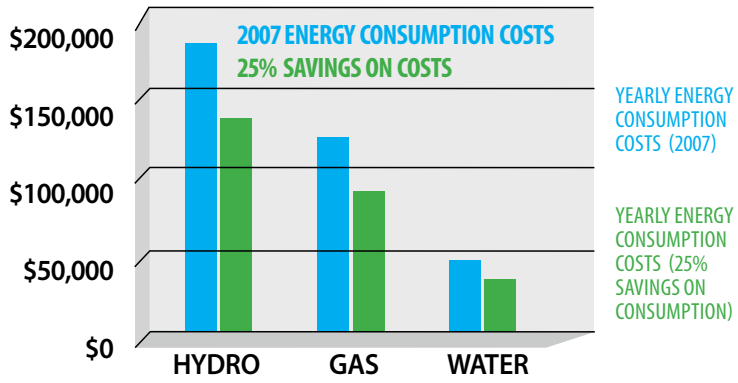
Energizing Energy Savings at Norjohn Limited

The trend towards higher energy prices has given rise to the idea of energy efficiency (EE). Norjohn Limited (NJL) has taken the next step towards profiting from EE.

Rather than making small changes to small things NJL has begun the process of looking at the big picture. They are entertaining proposals submitted by engineering and progressive solution consulting companies to redesign to reduce energy consumption.

When implemented, solutions and technologies retrofitted into NJL's Burlington emulsions facility will yield a proposed 25% savings on energy consumption. Consumption savings of this magnitude translate into projected monthly savings of $7,125.00 and annual savings of $35, 500. A breakdown of cost savings for each utility is provided in the figure below.

Norjohn Ltd. Energy Consumption



Improving over all energy efficiency of the Burlington Emulsions facility provides another way for NJL to maintain a competitive advantage. By utilizing proven technologies with low risk, companies like NJL have found that EE offers tremendous gain, with minimal pain. Businesses from all sectors across Canada have found it relatively easy to implement EE measures.

Simply defined, EE constitutes a sustained decrease in energy consumption for relatively the same amount of production. Observing current trends in today's energy market, it is projected that NJL's 2007 total energy cost for applicable utilities of $342,000 will increase to $513,000 for the same production yield by 2010 if energy saving measures are not implemented.

"A 20% savings in energy consumption – easily achieved by many businesses – can have the same positive effect as a 5% increase in sales" Action Energy, 2004.

It makes sense to reduce! We will keep you informed of their progress.

Dave Braniff, Brandon Anger and Val Wiebe conserved energy this summer by commuting on motorcycle.

Environmental Performance Department

During this past year, there have been many changes in the Environmental Performance Department to serve you better.

Wes Foebel joined us as the Environmental Specialist. Wes's primary responsibility is to provide environmental performance support to the Aggregates and Construction Group as well as Norjohn Emulsions. Wes is a graduate of Wilfrid Laurier University with a degree in Physical Geography and Geomatics. He joined us from Golder Associates where he worked as a Hydrologist and an Environmental Professional. Wes's water background and experience with water monitoring is an asset to our group. In his spare time Wes enjoys wakeboarding, skiing, surfing, climbing, scuba diving, travelling, playing hockey, and flying.

Brad Cassidy joined us from the Walker Aggregates. Brad is a graduated from Queen's University in Civil Engineering with an environmental focus. As Environmental Coordinator, Brad is responsible for the west, east and south landfills, IGRS and Niagara Biosolids. Brad is focused now on coordinating the development of operating procedures for the new South Landfill. Brad enjoys golfing, baseball, hockey, playing and watching sports.

Leslie Pietrobon's role changed this year to Communications Coordinator for the Environmental Performance Department. Leslie is responsible for IMS (drop-off, compost and grinder), Norjohn Transfer Station, Woodington Systems and Maitland. She will also be responsible for public outreach around EARTH 1st and public response regarding the Niagara Falls Thorold facilities. When she is not working Leslie enjoys spending time with her daughter, hiking, spinning, rock climbing.

Jamie Mereweather is our Administrative Assistant. Jamie is a co-op student who provided our department administrative support over the summer. Jamie will be working part time during her school term, returning for another co-op term in January 2009. To relax Jamie swims, walks, reads and goes to spinning classes.

Kymberley Ing, has joined us for 6 months to develop the foundation of the Walker Strategic Communication Plan. Kymberley will be gathering stories that demonstrate the values upon which our businesses are based. The stories that are gathered will be available as building blocks for re-vitalizing our corporate website, creating focused communications tailored to the needs and interests of our stakeholders. Kymberley enjoys horse back riding, hiking, reading and dancing with her children.

Walker Goes Tankless

Taking from the lead of our 3rd place Get the Static Out winner, Walker has installed a tankless water heater. The advantage of a tankless water heater is that it only heats water as it is needed. Saving on energy by not heating a tank of water that nobody needs to use.

Blue and Yellow Make Green at Woodington

Woodington Systems is moving forward on being a green clean fleet. This year they have purchased two new Mack trucks with MP8 engines that now meet new EPA and European Union emissions standards. The engine has the highest horsepower with the lowest emission that has ever been offered by Mack. The Engine does this by super heating the exhaust and using a filter to capture particulate. Improvements have been made to the injection and air management systems which in turn gives better fuel economy. The fuel economy increases by 3% on highway and 6% in city. Just another small step towards becoming greener!

If you have any comments, questions or concern please do not hesitate to contact anyone in the Environmental Performance Department. 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!

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

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