

July 2011

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Members receive weekly detailed updates about upcoming volunteer opportunities, events and project developments

Join us!

We rely on our supporters to continue to do the work we do. See back for full details

Sewage Sludge – A Messy Problem

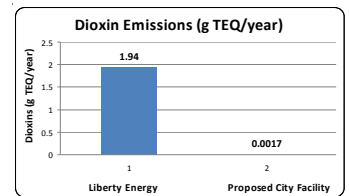
Hamilton continues to grapple with what to do with the 40,000 tonnes of wet sewage sludge produced each year at the Woodward Avenue Sewage Treatment Plant (STP).

Sludge is generated by everyone who flushes a local toilet. Add the discharges from many local industries and you end up with a big, messy problem with no easy solutions.

The sludge can be laced with everything from pharmaceuticals and pathogens to heavy metals and toxic contaminants discharged from local

industry. This creates problems for final disposal of the sludge. Whether you spread it on farm fields or burn it in an incinerator, contaminants can get out into the environment.

The Ontario Ministry of the Environment regulates the land application of sludge through requirements in the *Environmental Protection Act* and the *Nutrient Management Act*. Levels of heavy metals in the sludge, such as mercury, lead and cadmium, drive regulatory decisions on how much and how frequently a given city's sludge can be spread



on farm fields.

Visit www.ene.gov.on.ca/environment/en/subject/biosolids/ for more info on the regulatory framework.

In the case of incineration and other thermal destruction technologies, Ontario's *Green Energy Act* includes sewage sludge in the definition of 'biomass', which is categorized as

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EH exposes airport contamination

Environment Hamilton continues to push for cleanup of a huge source of chemical contamination at Hamilton's airport. EH director Joe Minor conducted sediment testing in early April, shortly after fish consumption warnings were issued for the Binbrook Conservation Area

and the Welland River because of contamination by Perfluorooctanesulfonic acid (PFOS), an internationally banned toxic chemical used in aircraft fire fighting foam.

The provincial Ministry of the Environment concluded in mid-June that the con-

tamination source is at the airport – something EH told them eight weeks earlier when our tests revealed high levels of PFOS sediment contamination at the airport fence line, immediately downstream of a fire suppression training pad

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Will You Cycle for the Planet?

September 24 is the "Moving Planet" global day of action on climate change. In Hamilton, there will be a rally downtown, a march to the Federal Building, ... See page 8



Youth group creates green (and orange) videos



At one of its first meetings, the members of the Environment Hamilton Youth group were all looking forward to making a difference in the city.

Their purpose was to reach out to schoolmates and peers to encourage them to make greener choices. So the idea of creating videos was born - a series of four short 'commercials' with the catchphrase, "Every-

thing's changing, what about you?"

They're intended to get across the idea of the ever growing green trend, focusing on the environmental movement in Hamilton.

The first in the series is already complete. The co-op students at Bizclip volunteered to help edit the video, and it premiered at the Sir John A. Macdonald Environmental Film Night, where the focus was on "Eating Local". Making use of EH's Climate Carrot costumes, the video illustrates the nutritious value of local carrots versus the 'exhausted' nutrition-depleted imported carrots

Two students adorned the

costumes and competed against each other in jumping rope, pull-ups, push ups and a final race; all of which the California carrot was comically unsuccessful at. It concludes with clips of teenagers buying food from the Hamilton's Farmer's Market and working with urban farmer

Russ Orht digging a garden on the front lawn of a city house.

For the youth, making the video was as entertaining as the finished product. Next on their agenda are videos focused on clean transportation, "Refuse, Reuse, Remake", and energy



Carrot Championship. Local Carrot in the lead.

EH exposes airport contamination - continued

from page one
built in the early 1980s.

Over those eight weeks, Dr Minor sent five letters to



The toxic PFOS sediment sample was taken at this fence on Airport Road just west of the airport. The PFOS source, the fire training pad with a rusty fake fuselage, is visible about 500 metres south.

city council pushing for immediate action to stop the on-going flow of PFOS into the Welland River tributary and Lake Niapenco in the conservation area which now has the most PFOS-contaminated carp in the world.

Media is reporting that there is a "voluntary short term clean up plan" that was submitted to the MOE by Tradeport. While the MOE has "signed off" on this plan, the plan is apparently a secret and has only been seen by the MOE and Tradeport.

While we know that very high levels of PFOS in Lake Niapenco turtles were discovered in 2009, full information has not been

released on when the MOE concluded there was a problem, or when Tradeport was informed (and apparently failed to tell city officials).

Dr Minor has calculated that an inch of rainfall will generate close to half a million litres of PFOS contaminated runoff into the Welland River watershed. If this runoff is not collected and properly stored and disposed of, it will continue to contaminate the environment. This is why, in the long term, the areas most contaminated with PFOS need to be either removed (preferably) or capped (if it can be demonstrated that the clay layer is not allowing access to groundwater).

Information that has been released shows that contamination levels at the airport are more than 6700 times background levels. In his most recent letter to city council, Dr Minor illustrated this in the following way: "Picture a toddler holding a lollipop at the base of the CN Tower. The height of the lollipop represents background levels of PFOS contamination (7.3 parts per trillion), the height of the toddler represents the levels of PFOS contamination in Lake Niapenco (53 ppt about 14 km downstream of the airport), while the height of the CN Tower represents the levels of PFOS contamination present at the airport today (49,000 ppt)."

Why all the fuss about waste management?

Hamilton currently has a comprehensive waste management infrastructure.

Our recycled fibres and containers are collected in separate blue boxes, sorted at the Materials Recycling Facility and sold in the marketplace.

Our leaf and yard waste is also collected and converted to compost at the Glanbrook Landfill site.

Our household organics are collected in green carts and converted to compost at the Central Composting Facility.

Our three Community Recycling Centres collect household hazardous waste for proper disposal. Garbage goes to the City-owned Glanbrook Landfill.

Collectively as a city, we are diverting almost 50% of our waste from landfill. Ten years ago when the Solid Waste Management Master Plan was first developed our collective diversion rate was only 20%.

Quotable

“Grass-cycling” is as simple as leaving the grass clippings to decompose on the lawn. If grass is cut regularly, the clippings are barely noticeable

Many residents across the city are now diverting more than 90% of their waste.

Recently a heated debate took place at City Council over “grass-cycling” and bi-weekly garbage pickup. Why all the fuss?

The city’s waste management staff had proposed that grass clippings be banned from green carts to ensure the Central Composting Facility (CCF) on Burlington Street had enough capacity to handle the kitchen waste generated in Hamilton households. Staff also want to ensure that the CCF continues to have capacity available to handle the current revenue-generating contracts for Halton and Peel kitchen waste.

In the end, Council decided that banning grass clippings from the green carts was not acceptable. City staff was directed to find other ways to make capacity available at the CCF.

For many people across the city – especially gardeners – “grass-cycling” and backyard composters are two of the ways they are reducing, reusing and recycling in their gardens. “Grass-cycling” is as simple as leaving the grass clippings to decompose on the lawn. If grass is cut regularly, the clippings left on the lawn are barely noticeable. Grass clippings can also be combined with shredded leaves to make effective mulch.

Avid gardeners know that quality soil is essential for growing flowers and vegetables. As the Compost Council of Canada’s website says (www.compost.org): “Quality soil is based on a simple equation: what you take out you must put back in.” There is no better way to replenish your soil than

to compost you own kitchen and garden waste.

The green cart is still an effective way to ensure that tissue paper, paper towels, disposable coffee cups, pizza boxes and other items listed on the city’s website stay out of the landfill.

The current collection contracts for garbage and recyclables will expire in 2013. Waste management staff began the process to seek bids for these contracts earlier this year. In an effort to reduce costs, staff sought approval to ask collection companies to to price bi-weekly pickup.

An analysis provided by the Waste Reduction Task Force (WRTF) – a volunteer committee of citizens from across Hamilton – indicated that single-family households are on target to collectively achieve 65% by the end of this year.

It made a strong case that current weekly garbage pickup service for these residents is no longer needed, and that the reduction in greenhouse gas emissions from less truck traffic would help the city achieve its climate change commitments.

The WRTF strongly supported staff’s request to seek bids for bi-weekly garbage collection, but after much debate at the Public Works Committee and City Council, it was decided bi-weekly garbage collection was unacceptable.

The majority were not prepared to contemplate a “service reduction”. A final

decision has been deferred to a one-day council workshop on waste management in July.

Both the “grass-cycling” and bi-weekly garbage collection issues require changes to current behaviours and practices. Change is never easy. But change is necessary if we are to continue to increase our diversion, reduce greenhouse gases and manage costs.

Quotable

We must focus our energies on reducing and eliminating the generation of waste rather than on more ways to handle it.

Service levels must be based on a balance of need, environmental impact and costs, not historical practice. Careful and considered analysis of data needs to be weighted in decisions rather than subjective opinions and perceptions.

We must focus our energies on reducing and eliminating the generation of waste rather than developing more ways to handle it.

Curing a disease is always more desirable and effective than treating its symptoms. The current annual operating budget of Hamilton’s waste management infrastructure is about \$35 million. The capital cost of the infrastructure is at least \$100 million. If our behaviours don’t change, there is no reason to expect the costs or the greenhouse gases will ever decrease.

Volunteer Davey Hamada - Be Your Own Hero

Davey is a nursing student in his third year at McMaster University. He joined Environment Hamilton as a member and volunteer in December 2010 but has already become indispensable. His interest in social justice and environmentalism stems from his studies in health care. He's also now a summer intern at Environment Hamilton.

"It made sense to me to go to the real roots of the issues rather than the band aid solutions," Davey explains. "At first I considered becoming a vegetarian out of concern for animal welfare, but now I think it is even more important - environmentally."

Not only does Davey volunteer with many of our projects and advocacy work

Quotable

"Be your own hero," Davey says. "Everyone can do something. If you want to see change what better way than to do it yourself? And hopefully you can act as a role model for others."

(OMB working group), including the EH youth group and the 350 Committee on climate change, but he also lends his skills to others such as OPIRG McMaster running regular clothing swaps as a part of a working group called Thread Work.

He is a member of the Hamilton Cycling Committee and the first person to volunteer for our newly formed "Watchdog" group, with an eye on transportation/cycling issues at the City of Hamilton.

And he works at the university for MACgreen.

"It's important to recognize your responsibilities not only as an everyday citizen, but as a human being"

Think about your actions, what you do each day and how those actions impact other things that aren't visible- that you can't see."

He gives an example about how the stuff you buy gets to you. It becomes a social justice issue. The poorer nations bear the brunt of how we in the West live out our lives.



"Everything is connected but our culture acts as a barrier to us recognizing that."

Davey admits that he feels like he is the "odd one out." in his activism.

"My peers might be interested but at a superficial level. They are pretty apathetic but as one person you can still do a lot."

We ask Davey what will it take to get them moving towards stewardship? He

responds, "a culture shift." Tips?

"Talk to people; Make connections. Interact with others. Get involved."

More info: MACgreen website: <https://www.msumcmaster.ca/servicesandbusiness/macgreen/generalInfo/main.htm> The Starfish (A McMaster-based student environmental blog) <http://www.thestarfish2010.com/>

Weaving waste into purses

Diane Paquette is a highly skilled artisan and textile artist. She comes from a line of weavers originating in Quebec.

At a recent Environment Hamilton event people of all ages gathered together to learn the skill of weaving with plastic bags.

Diane talked about how she got started weaving plastics and gave us an overview about the different types of plastic bags.

Diane provided the participants with cardboard looms she had made and we learned how to make a change purse out of a

wonder bread plastic bags.

They are very simple to make! As well as that it's a wonderful way of keeping plastic out of our seas and animals. We talked and laughed and had a wonderful time!

Photo shows the results!



Dundas EcoMotion Committee focuses on 'Complete Streets'

Last summer, Environment Hamilton initiated yet another walkability project, but this time in Dundas. Through the hard work of summer intern Alessandra Gage, the Dundas EcoMotion project was launched and gained some traction in the community. The project was helped along further from February to April of this year by University of Waterloo coop student Adam Pallett, who guided community participants through additional consultation and organizing which culminated in the formation of the 14+ member working committee.

The committee has now met three times and has opted to focus its energy on pushing for improvements to the intersection of Governors Road and Ogilvie Street. This busy intersec-



tion presents a host of challenges for walkers (many of them seniors), cyclists, public transit users and motorists too. The group is now going through a visioning process that includes identifying problems and proposing both short and long-term solutions. The committee's ultimate plan is to share this vision with Ward Councillor Russ Powers and residents of Dundas as well as to influence higher level policy frameworks in the municipality. Group discussion has focused on the concern that the city currently plans for walkability, cycling and

public transportation in separate silos. Further, they are concerned that facilitating traffic flow seems to trump everything. In order to start to address the lack of integration, the group has decided that its efforts will be guided by a 'Complete Streets' framework. At its most basic, a complete street is one that enables anyone, no matter how they are moving around, to feel safe doing so. For more information on Complete Streets and the growing Complete Streets movement, visit www.completestreets.org. If you are interested in getting involved with the Dundas EcoMotion Committee, contact Lynda at the Environment Hamilton office at 905-549-0900 or via email at contactus@environmenthamilton.org.

Preserve farmland

City council has decided to push for a massive urban boundary expansion near the intersection of Upper Centennial Parkway and Rymal Road.

The identification of the Elfrida area farmland for future residential area was stricken from the city's new official plan by provincial officials, but a majority of councillors voted to join more than a dozen development companies in appealing the change to the Ontario Municipal Board. The 16 appeals relating to Elfrida are part of 70 challenges to the new OP.

Environment Hamilton disagrees with the proposed 2800 acre boundary expansion and will intervene in the OMB hearing on the side of provincial officials.

We agree with their argument that earmarking farmland for future urbanization puts agriculture in this areas on a death watch, encouraging farmers to stop investing in food production.

In addition, the much lower than forecast population growth in Hamilton makes it increasingly doubtful that council will be able to justify any boundary expansion for residential purposes.

Instead, it should make increased intensification efforts to make better use of existing urban lands, support transit and reduce automobile dependence.

E-Waste Centre in the North End

Now there's a safe and useful place to take your old computer, printer, TV, or cellphone - with some added benefits.

The non-profit group Golden Horseshoe Green

Tech (GHGT) is now at the Eva Rothwell Centre on Wentworth St North. Currently run by volunteers with teaching and computing background, it offers both an e-waste collection site and a training program that enables at-risk and disadvantaged youth and young adults in the area to learn new skills. Basic Health and Safety Training as well as WHIMIS training are also provided.

Some organizations collect and send e-waste overseas, where the heavy metal components are dismantled by hand – a hazard to the

children often engaged in this work. GHGT is different.

It gathers e-waste and sends it to a centre in Cambridge where the components are safely disseminated.

GHGT also provides a large e-waste collection container for events as well as a free pick-up service from homes, organizations or businesses.

The Eva Rothwell Centres is at 460 Wentworth St N in Hamilton. For more info and a full list of items recycled, visit www.ghgt.ca

Green Tip

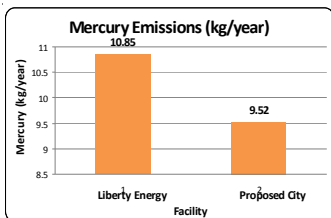
Don't ever flush expired pharmaceutical drugs down the toilet. Return expired pills to your local pharmacy or to one of the city's municipal recycling centres where they will be accepted at no cost for proper disposal.

Sewage Sludge - continued

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renewable, green fuel. This has led to a fast-tracking of the approvals for energy-from-waste facilities using sewage sludge fuel.

However sewage sludge is simply not a good source of energy as it exhibits a very low BTU value (BTU or 'British Thermal Unit' is the measurement of heat from burning any material).



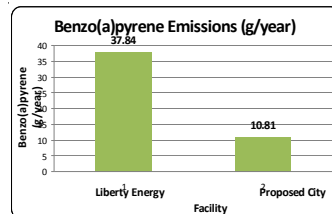
Even with the best technologies, thermal treatment of sludge results in the emission of contaminants including heavy metals and cancer-causing dioxins.

City councillors are divided over how to manage Hamilton's sludge over the long term. The majority support incineration as the long-term management solution. Yet to be determined is whether the city should build its own incinerator or whether a partnership should be struck with Liberty Energy, the US-based company that has approval to build a large (500,000 tonnes per year) gasification plant on Strathearne Avenue in our industrial core.

Other councillors believe that Hamilton's current practice of land-applying our sludge should continue as this is the most cost-effective option. Further, they argue, the quality of our sludge continues to

improve through municipal efforts to eliminate contaminants, making Hamilton eligible to spread more sludge more frequently on the fields of willing farmers.

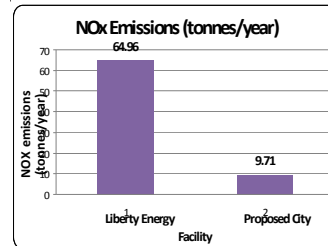
Environment Hamilton opposed the plans for Liberty Energy's sludge gasification plant. We are concerned about the size of the Liberty facility and the fact that it is to be built in an already compromised airshed. Hamilton's industrial core can't tolerate another source of air contaminants, even if that facility demonstrates that it will be in compliance with provincial air regulations.



Ontario regulates air emissions on a facility-by-facility basis, without taking into consideration the cumulative effects of exposure to air contaminants. While this might work well in a one-industry town, it's not an adequate approach in an industrialized city like Hamilton.

The air quality monitoring done as part of the approvals for the Liberty plant confirm that the facility will contribute substantially higher levels of pollutants than the smaller sludge incinerator being proposed by the city (see bar graphs). Further, the company plans to import sludge from municipalities as far as 70 km away, generating increased truck traffic bring-

ing sludge to a facility that will discharge more contaminants into our compromised airshed.



It's worth noting that, at this point, the company has not yet succeeded in securing even one contract with another municipality, so the viability of the enterprise is very open to question.

But EH is also concerned about the implications of spreading sewage sludge on farm fields. While the province has rules in place to regulate this practice, the reality is that land application of sludge does result in contaminants getting into the environment and, some argue, into the crops grown on those fields.

We continue to push for the municipality to take measures to improve the quality of the industrial discharges making their way to the Woodward Avenue STP.

On a positive note, our Public Works Department has reported that the quality of Woodward sludge has improved over the past 3 years, with testing confirming that levels of heavy metals in the sludge are decreasing. This is the result of a ramped up effort by the city to enforce its sewer use by-law.

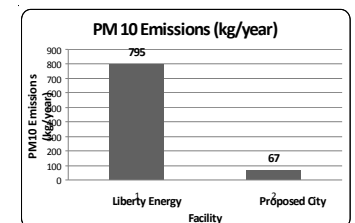
We applaud the city's progress to date and encourage Public Works to

continue with this effort.

We also believe the city could be doing other things with sewage sludge after proper conditioning. Other municipalities are exploring a broader range of beneficial uses for their biosolids.

This can include using biosolids to condition soil used to landscape brownfield sites, as a fertilizer in the forestry industry, or in other land reclamation activities.

Utilizing the nutrients available in sewage sludge would seem to be a far more prudent practice than attempting to extract limited energy through thermal destruction of sludge via incineration or gasification.



The soundness of this approach will become more obvious as we approach 'peak phosphorus'. The planet's phosphorus reserves are running out, with estimates we will reach peak in the 30 to 40 years.

At that point, we will be searching for sources of phosphorus to fertilize our agriculture. It would seem prudent to determine now how to clean up our sewage sludge so that the nutrients can be used safely.

Some day we will be calling our cleaned-up, conditioned sewage sludge 'black gold'.

Greening Sacred Spaces Awards 2011

It was a day to celebrate. After years of working hard to green their places of worship and their practices, two community faith collaborations received the coveted Greening Sacred Spaces Awards for 2011.

Started in 2006-2007 in Ottawa, the awards recognize faith communities who have made great efforts to reduce their environmental impact on the earth. The winners are selected by the facilitators of the Greening Sacred Spaces program, a practical program of the interfaith network Faith and the Common Good.

Greening Sacred Spaces works with faith communities, helping them make their buildings more energy-efficient, and their members more environmentally aware. Found all over Ontario, here the program is delivered by EH.

The Eco Churches of West Hamilton (Eco-WHAM) and The Hill Street Garden Churches were winners.

In order to win the GSS Award, there are 3 stringent criteria that must be met:

1. Practical actions such as completing an energy retrofit, microfit or community garden;
2. Engagement in numerous local sustainability and energy conservation educational events
3. Involvement in outreach programs in the community at large; educating and engaging other faith communities to take actions in their communities and households at large.



Eco-Churches of West Hamilton receiving the award from Chief Conservation Officer Brian Smith of Horizon Utilities as well as Councillor McHattie

There are ten awards a year in areas where GSS is active (Hamilton, Waterloo Region, Wellington County, Toronto, Ottawa and Eastern Ontario, Peterborough). This year, for the first time, there were Hamilton winners and councillor Brian McHattie brought greetings from the City.

Horizon Utilities partnered in the awards presentation, and were represented by chief conservation officer, Brian Smith.

The Eco Churches of West Hamilton include Westdale United in Hamilton, and

Knox Presbyterian Church, Christian Life Assembly, St. Augustine's Roman Catholic Church, St. James Anglican Church, and St. Paul's United Church in Dundas.

Their mission statement is "to practice and advance ecological sustainability in keeping with Christian principles of stewardship."

The team meets regularly to learn, exchange ideas, plan public events, distribute newsletters, support local environmental events, and provide encouragement to like-minded community groups. The congregations



Hill Street Garden churches receiving their GSS Award.

do energy audits, install compact low-energy lighting, weather-proof, and offer eco-film screenings. They also do climate change actions, eco-walks, water and energy conservation workshops, and use rain barrels, programmable thermostats, green and blue carts, green cleaning products and more.

Since July 2008 they have produced newsletters for EcoWHAM - available online at <http://www.knoxdundas.com/newsletters.html>

The Hill Street Garden Churches include First Hamilton Christian Reformed, New City, St. John the Evangelist Anglican, Central Presbyterian and First Unitarian.

Their garden hosts well over 40 households. They built raised beds in mid April 2010 with over 100 volunteers, including nearly all the gardeners, friends and family, and volunteers from the partnering churches.

These faith groups are also doing energy upgrades, canning workshops, xeriscaping, getting to worship without vehicles, and hosting meetings for the Green West Hamilton Group. They promote fair trade products, host many green community events, put up solar panels and retrofit their buildings.

With leadership, hard work and perseverance, the award winners are making a difference in our communities. We will be watching as these faith groups continue to inspire and lead.

Climate change action - Pedal the Planet - continued

from page one

plus numerous advance public actions organized by the Hamilton 350 Committee including the summer-long educational campaigns on "What to Do About Gas Prices" and "How Secure Is Our Food".

The great bike ride against tar sands, coal and fossil fuels is called Pedal the Planet (not those who are

peddling the planet).

It begins on Friday, September 23 with a 75 km ride to Nanticoke – home of North America's largest coal-fired power plant and the single largest point source of greenhouse gas emissions on the continent.

Politicians are promising to close the OPG facility, but keep delaying. The riders will try to speed things up, and then spend the night at a campground before returning to downtown Hamilton the next day – Saturday, September 24 – to join the climate action rally.

It is 75 km from Hamilton city hall to the coal-fired plant, for a route that is 1/3 rail trails and 2/3rds back country roads (no highways) that is basically flat. For a regular cyclist, it's a 4-5 hour ride. You can also sign on to join the cyclists for

part of the route. In preparation for the ride, the committee will be hosting shorter practice rides this summer that tour major environmental threats such as the aerotropolis and parts of the proposed mid-

peninsula highway.

If you think you can do it, contact the EH office ASAP. Email Jim Quinn quinn@mcmaster.ca to register your interest and support or talk to EH staff at (905) 549-0900.

Rural Routes back again

Join us for bus trips to local farms.

Sat July 9 - Murphy's Country Produce (for strawberry and peas picking)

Sat Aug. 6 - Shearlea Acres Farm Market (for Corn Fest!)

Sat Sept. 10 - Boar and Chick Farm (for family fun and casual hike through their natural area)

October trip TBA

Tickets are at Bread and Roses Cafe, 27 King William St., just off James St. North. The cost is \$7 for adults and

\$5 for children and seniors.

Please note: departure location is at the Go Station at 36 Hunter Street, platform 17. Boarding time 10am Return by 1:30pm

Please wear appropriate gear and bring re-usable bags for your purchases. Washroom facilities are limited.

For more info contact EH at (905) 549-0900. We hope to see you there!

Thank you to Smart Commute Hamilton and Hamilton Street Railway.

Green Tip

Ensure your household cleaners and personal care products are eco-friendly

Anything you flush down the toilet or drain out of a sink or bathtub ends up at the sewage treatment plant. Using eco-friendly household cleaners, shampoos and soaps ensures that you are not contributing to the sludge contamination problem.



Phone:

905-549-0900

Email:

contactus@environmenthamilton.org



JOIN US!

Environment Hamilton is a not-for-profit, community organization that helps Hamiltonians develop the knowledge and skills they need to protect and enhance the environment. We were founded in 2001 after a small group of citizens from East Hamilton successfully laid charges against the city to ensure the old Rennie Street landfill was properly cleaned up.

Our goals are:

- ✿ To raise community awareness about local and global environmental issues.
- ✿ To provide resources and support that enable residents to take effective environmental action in their own neighbourhoods.
- ✿ To advocate for an ecologically resilient city.

We rely on grants and donations to fund our work. By becoming a member, you are helping us to continue to ensure our environment is healthy and safe. Our annual membership ranges from \$5 to \$25 per year.

www.environmenthamilton.org

