

Section 4:

Improving Air Quality in Peel

A number of key actions are being taken by the Region of Peel, the Cities of Mississauga and Brampton and the Town of Caledon to address air quality and climate change. The list provided below identifies some of the most significant of these initiatives, which were presented as commitments for 2002-2003 at the Toronto Smog Summit in June 2002¹¹².

Following this list, on the inside back cover of the report is a checklist of actions that everyone may take to improve air quality in Peel and beyond. The majority of these are practical measures that can be implemented in our day to day lives, with little or no cost. Please take the opportunity to review these, and consider how you can make a difference.

ACTIONS TO IMPROVE AIR QUALITY 2002

CITY OF BRAMPTON

Transportation

1. *Marketing Plan For Public Transit*

To increase ridership, a marketing plan for public transit is being developed. The possibility of fare incentives on smog alert days is under review by Transit staff.

2. *Anti-Idling By-law*

There is an anti-idling program in place for City vehicles at the present time. The current City by-law is being reviewed to determine if idling restrictions should be City-wide. The current by-law has location specific restrictions such as at the Hospital entrance.

Energy

3. *Pilot Project For The Use of Bio-diesel Fuel*

A pilot project has begun to test the use of Bio-diesel fuel in 16 Works Department vehicles. It is claimed that reductions in emissions of up to 27% can be achieved using B20 fuel (20% soy oil and 80% petroleum fuel) with no alterations required in the engine. If the pilot is successful, the use of this fuel would be expanded to the remainder of Brampton's diesel fleet.

4. *Natural Gas Vehicles*

The City of Brampton will be investigating the use of compressed natural gas as an alternate fuel. Four pickup trucks are being purchased to test the system.

5. *Building Temperature Control*

Public buildings are presently electronically temperature controlled to maintain a set differential between inside and outside temperature. On smog alert days, there is no need to raise indoor temperatures as this occurs automatically.

6. *Small Engine Purchases*

A review of Brampton's small equipment purchases is underway to determine if Brampton can obtain more fuel-efficient engines.

Business, Industry and Government

7. *Energy Efficient Buildings*

A program is underway to improve the energy efficiency of the City's buildings.

8. *Casual Business Dress Policy*

A casual business dress policy is already a corporate policy. There are some restrictions on the types of clothing which are acceptable.

Education and Outreach

9. *Smog Alert Response Plan*

A committee has been established to formulate a Smog Alert Response Plan for the City.

ACTIONS TO IMPROVE AIR QUALITY 2002 TOWN OF CALEDON

Transportation

1. *Investigate the use of soy-diesel*

The Town of Caledon will investigate the use of soy-diesel in its diesel fleet.

Energy

2. *Energy Efficiency*

The Town of Caledon will retrofit existing facilities to improve energy efficiency.

Business, Industry and Government

3. *Investigate joining Partners for Climate Protection*

The Town of Caledon is investigating joining the Federation of Canadian Municipalities' "Partners for Climate Protection" program, which assists Canadian municipalities in preparing and implementing local climate change action plans. Caledon is currently a member of the International Council for Local Environmental Initiatives (ICLEI).

Natural and Built Environment

4. *Implementation of a Native Tree Seedling Distribution Program*
This program will provide residents with greater access to a variety of native plant materials at a reasonable cost to help maintain and possibly increase the percent of forest cover in the Town of Caledon.
5. *Responsible Pesticide Management Objectives*
The Town of Caledon is developing an educational program to encourage residents to reduce the non-essential use of pesticides.

Education and Outreach

6. *Air Quality Partnerships*
The Town of Caledon will continue to work with local community partners such as the Caledon Environmental Advisory Committee, Healthy Lawns-Healthy People and the Caledon Countryside Alliance on air quality initiatives and an ecological footprint assessment.

ACTIONS TO IMPROVE AIR QUALITY 2002 CITY OF MISSISSAUGA

Transportation

1. *Enhanced Service of Mississauga Transit*
The shuttle bus pilot to the Cooksville GO train station was approved as a regular transit service in 2002. A shuttle bus will be piloted at the Meadowvale GO train station, in addition to service improvements associated with new and replacement buses.
2. *Multiple Use Recreational Trail Network*
Organizing the 2002 Community Bike Ride and Swim in eight areas of the City and a City-wide inventory of bike racks.

Energy

3. *Local Action Plan to Reduce Greenhouse Gas Emissions*
Completing the development and reviewing implementation requirements of the City's Local Action Plan to reduce greenhouse gas emissions.
4. *The Energenious Challenge*
Implementing the Energenious Challenge: Be an Energy Efficient Employee, a corporate staff energy conservation and awareness program.
5. *Energy Management Improvements*
Conducting energy audits, implementing energy efficiency improvements in eight facilities and providing a new computerized building automation system in South Common Community Centre.

Business, Industry and Government

6. *Anti-Idling and Fuel Reduction in Vehicle Fleets and Equipment*
Conducting fleet research as part of the City's Anti-Idling Campaign and investigating retrofitting equipment to reduce fuel and decrease exhaust emissions.

Natural and Built Environment

7. *Natural Areas Survey*
Updating the data in Wards 5 and 6 of the Natural Areas Survey.
8. *Riverwood Garden Park and Environmental Centre*
Undertaking Phase 1 to develop this unique 60 hectare (150 acre) site, two thirds of which will remain as natural heritage.

Education and Outreach

9. *Mississauga Anti-Idling Public Awareness Campaign*
Implementing a public awareness and education anti-idling campaign to encourage the reduction of unnecessary engine idling when parked.

ACTIONS TO IMPROVE AIR QUALITY 2002 REGION OF PEEL

Transportation

1. *Long-term Transportation Planning Exercise*
Developing a proposed comprehensive long-term transportation planning exercise, with involvement by the area municipalities.

Energy

2. *Energy Efficiency Retrofits*
Initiating energy efficiency retrofits for additional Region of Peel buildings.

Business, Industry and Government

3. *Landfill Gas Utilization*
Finalizing a landfill gas utilization project and exploring the opportunities to purchase this "green power" for Regional facilities.
4. *Greenhouse Gas Emissions Inventory*
Implementing recommendations of the Region of Peel's inventory of corporate emissions and initiating an inventory of community emissions of greenhouse gases.

Natural and Built Environment

5. Tree Planting

Coordinating tree planting as part of the Peel Children's Water Festival at the Heart Lake Conservation Area.

Education and Outreach

6. Air Quality Partnerships

Continuing to work with community partners who are active on environmental issues related to air quality.

7. Public Education on Pesticides

Implementing public education on reducing the non-essential use of pesticides.

OTHER AIR QUALITY INITIATIVES CURRENTLY UNDERWAY

Many other actions are being taken to address air quality issues in Peel by the Region of Peel, the Cities of Mississauga and Brampton, the Town of Caledon, and in the private sector. What is provided in this report is but a small sample of Regional and municipal initiatives. Among other initiatives, Peel municipalities are also contributing to the national program Partners for Climate Protection aimed at cutting greenhouse gas emissions. The City of Mississauga and the Region of Peel have joined other municipalities (a total of 96 at the time of production of this Report) in committing to prepare and implement local climate action plans. The Region of Peel - Regional Air Quality Working Group is exploring other ways to reduce greenhouse gas emissions, and providing recommendations for retrofitting, automating and replacing municipal fleets and buildings.

Conclusion

AN AIR OF CHANGE?

In general, atmosphere and air quality-related issues are showing little improvement in Peel Region and surrounding areas. Higher incidences of moderate or poor air quality, Smog Days, and abnormal weather are indicative of atmospheric changes which have been influenced by human activity.

Ground-level ozone is the most significant cause of Moderate and Poor air quality in Peel; over 90 per cent of the incidences of Moderate and Poor air quality are the result of ozone. Ozone is not emitted directly into the atmosphere, and is formed through photochemical reactions with Nitrogen Oxides and Volatile Organic Compounds. Unfortunately specific sources of these pollutants are difficult to pinpoint. As air pollution is not constrained by Regional boundaries, sources may be both inside and outside of the Region. Transboundary pollution from the United States represents a significant source of pollutants produced outside of the Region. Major sources in Peel include transportation, utilities and industry.

This report illustrates that the frequency of heightened ozone levels is generally on the rise in Peel. A report recently completed by the Ontario Medical Association (OMA) states that this trend is occurring across Ontario¹¹³. Increasing ozone concentrations become even more alarming in light of recent studies conducted by the OMA which have found that ozone concentrations at any level may be potentially harmful to human health¹¹⁴. Given the increasing prevalence of ozone in our air, the potential health impacts are of great concern to Peel.

In addition to outdoor air quality, climate change, stratospheric ozone depletion, increasing noise pollution and poor indoor air quality are all increasingly having an effect on our lives.

Without a concerted effort to change many of our day to day practices, these issues will increasingly affect our health, and that of the environments which support us. Atmospheric and weather anomalies like those we have seen in recent years, including more smog alert days, erratic precipitation and unseasonable temperatures, may become more frequent.

Our actions to improve atmospheric quality can make a difference. Simple actions such as recycling our glass bottles, aluminum cans and newspapers at home can reduce carbon dioxide emissions by more than 385.5 kg, or 850 pounds, a year. Reusing these items before we recycle them can boost this number even further.

The at the end of this section illustrates a small number of the things that each of us can do to improve atmospheric quality in the Region of Peel and beyond. The quality of our atmosphere and our environment depend heavily on

each one of us. The actions we take locally benefit not only ourselves, but those around us. However insignificant they may seem, collectively, they are the foundations for change.

State of the Environment reports are produced in the Region through a collaborative process involving Regional Health, Housing, Planning, Public Works, and Social Services Departments. Peel Police and the Region's Communications Services play a supportive role in this process. The State of the Environment program is co-ordinated by a steering committee with members from the above departments.

We have modified the structure and content to make the information contained in this SOE report to be both more comprehensive and easier to interpret than the last report. Please contact us with any comments or suggestions you may have on making these reports as useful as possible to you. We update them routinely.

Thank you for your interest in the Peel's State of the Environment program. It is through you, the reader, that this important information can be transformed into concrete actions to improve air quality in our communities. For more detailed information on the state of the atmosphere in Peel, we would invite you to review the full version of this report which provides additional information on these topics. Copies of the full State of the Environment Atmosphere Report 2002 can be downloaded at no cost from the Region of Peel's website at www.region.peel.on.ca/planning/soe/index.htm.

For further information on other State of the Environment reports, or the reporting program please use the web link listed above, or contact the Steering Committee Chair at (905) 791-7800 x 4749.

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