



DEVELOPMENT AND INFRASTRUCTURE DIVISION  
Environment

**TO:** Chair and Members of the Community Development Committee

**SUBJECT:** Environmental Management Plan 2002 Update

**Report Number:** DI-2/03                      **Report Date:** January 24, 2003  
**Author(s):** Lynn Robichaud                      **Date to Committee:** February 10, 2003  
**Telephone:** 905-335-7600    **Ext.** 7931                      **Date to Council:** February 24, 2003  
**Ward(s) Affected:** 1 2 3 4 5 6 All    **File Number(s):**

**APPROVALS:** \_\_\_\_\_  
   Department Head                      General Manager                      City Manager

To be completed by the Clerks Department

Committee Disposition & Comments


01- Approved 02 - Not Approved 03 - As Amended 04 - Referred 05 - Deferred 06 - Received & Filed 07 - Withdrawn

Council Disposition & Comments


01- Approved 02 - Not Approved 03 - As Amended 04 - Referred 05 - Deferred 06 - Received & Filed 07 - Withdrawn

**1.0 RECOMMENDATION:**

For information purposes only.

**EXECUTIVE SUMMARY:** N/A

**2.0 PURPOSE:**

The purpose of this report is to provide an update of the Corporation's Environmental Management Plan (EMP). The EMP is a comprehensive review of City operations and services to identify past, present, or potential (future) environmental impacts that might result from the City's activities, and establish actions to improve environmental performance.

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The opportunity has also been taken to report on the various activities and projects that the Environmental Management Team has been involved in over the past year.

### 3.0 BACKGROUND:

There is a history of commitment to environmental improvement and performance in the City of Burlington. Future Focus – the Millenium edition of the City’s Strategic Plan included the following short-term goal: *“A corporate ‘Environmental Management Plan’ will be in place.”*

The next Strategic Plan, Future Focus V, strengthened the commitment with a number of goals under Environmental Leadership, specifically Environmental Management:

Long Term (25 years)

1. *The City is environmentally responsible when providing services and facilities.*

Short Term (3 years)

1. *There is a top of mind awareness of environmental management considerations in the daily operations of the City.*

Strategies

- 1.1 a) *Update the Environmental Management Plan annually and implement priority projects.*
- 1.1 b) *Include a summary of environmental considerations of corporate actions in reports to Council.*
- 1.1 c) *Implement the “Guidelines for Sustainable Community Decision Making.”*
- 1.1 d) *Identify annually, specific actions to make the City’s operations and service delivery more environmentally friendly.*

In 2000, Council approved the following Environmental Mission Statement:

*The Corporation of the City of Burlington will be a leader in making a high level of environmental performance one of the primary goals for its policies, programs and operations through protecting and enhancing the natural environment so as to achieve the highest quality of life for its citizens of today and tomorrow.*

In early 2001, a report (CD-09-01) was submitted to Council with an update on the outcome of pilot workshops held with staff to test the process. Council approved the following resolution:

*THAT the process for the development of the Environmental Management Plan (EMP) as outlined in DI-5/2000 as modified by adjustments as identified in the Pilot program be approved and implemented.*

In July 2001, a regular full-time Senior Environmental Co-ordinator was hired by the City. However, recognizing the workload and expectations for a number of environmental initiatives to be undertaken, approval was subsequently given to hire an Environmental Project Support Technician to assist the Co-ordinator. This position was filled in July 2002.

The Environmental Management Team (EMT) has been in existence since 1999 with staff membership representing different City departments, including the Burlington Economic

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Development Corporation and representation from the Sustainable Development Committee. Members of the EMT provide support for Environmental Management Plan workshops and other City environmental initiatives being planned or undertaken by the various environmental teams (see Appendix A for a list of Teams and members).

### **4.0 DISCUSSION:**

#### **4.1 Environmental Management Plan**

From 2000 to 2002, a total of 18 workshops were held with staff representing different City departments. Eight more have been planned with Roads and Parks Maintenance staff during the first quarter of 2003 (see Appendix B for list of workshops). It is anticipated that an additional 10 workshops are required to ensure that all departmental operations and services have been reviewed under the Environmental Management Plan.

The process involves inviting staff, who have firsthand knowledge about the activity being focussed on, to a one-day workshop. Participants represent a mix of all levels of staff. Workshops are generally held at City Hall, although some have been held off-site at satellite city facilities. In advance of the workshop, staff are provided a copy of the Background Information Kit that outlines the process used to identify significant environmental aspects related to the activities in which they are involved.

The workshops begin with an introduction that includes an overview of the process and the importance of completing the EMP for the City. Participants are asked to talk about their work responsibilities providing EMP members with an understanding of operational issues so those aspects that may be environmentally significant can be identified.

Specific information is inputted into the EMP computer database as well as manually recorded for back-up. Aspects are ranked by their environmental significance. Those deemed most significant during the workshop are further reviewed to determine whether best practices are being followed or further action is required to determine what improvements can be made. This may require a subsequent half day workshop to follow-up with staff. Additional research by staff responsible for the activity or by members of the EMT may be necessary. A timeline is established for those items requiring follow-up.

A summary of key aspects identified during workshops held from 2000 to 2002 is provided in Appendix C. The summary is intended to highlight the areas where City staff have been very successful at implementing best practices as well as those situations that require some research and possibly additional resources to implement.

Overall, EMT members have been impressed by the environmental awareness of staff participants with respect to their responsibilities, as well as their co-operation in sharing information during the workshops. Environmentally responsible activities appear to be routine across City departments, including:

- Re-use of Materials - a recurring theme occurred during workshops where staff often advised the EMT of how they re-use materials where possible. Their efforts not only save the Corporation money but divert unnecessary waste from the landfill.

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- Meeting legislative requirements, including emission testing, and proper disposal of hazardous waste under the Ministry of the Environment's Hazardous Waste Information Network (HWIN); and,
- Continuous education on best practices as an ongoing process.

Specific examples include:

- Print shop staff – for their commitment for researching alternative best practices such as implementing a trial use of vegetable based inks and reducing the use of chemicals in their operations.
- Parks & Recreation, Special Events Coordinator – following the EMP workshop, staff prepared an 'Environmental Considerations' section for the City's Special Events Guideline to ensure user groups are aware of their responsibilities to minimize impacts on the environment.
- Energy Savings - ITS staff have recently incorporated information provided to new staff advising them to power down computers at night. In 2001 stickers were distributed to all departments for display on computers to remind staff to turn their computers off at the end of the day.

City staff are also aware of the importance of minimizing risk by ensuring equipment and facilities are maintained properly. Necessary improvements are identified through the current and capital budget processes.

The EMT notes that additional commitment is required within the Corporation to improve the energy efficiency of its facilities. It is recommended that this issue receive strong consideration during the preparation of the next edition of the City's Strategic Plan, *Future Focus*.

### ***Next Steps 2003:***

*Ongoing EMP workshops with a focus on Roads and Parks Maintenance activities for the first part of the year. It is anticipated that an additional 10 workshops are required to complete a review of all Corporate activities which have the potential to impact the environment.*

*The EMT will work with facilities staff to prepare a proposal to complete an energy audit of City facilities to identify areas for improvement and submit an application to the Federation of Canadian Municipalities for funding.*

## **4.2 Environmental Management Team**

Beyond supporting the City's Environmental Management Plan, members of the Environmental Management Team have been extensively involved in other activities to improve and protect the local and regional environment.

### ***Healthy Green Spaces***

The consideration of options to reduce the non-essential use of pesticides in the community was a challenging responsibility for the Healthy Green Spaces Committee but members were pleased when the year culminated with the approval of the *Healthy Green Spaces Strategy for Public Lands*. The strategy strengthens the City's commitment to its direction to essentially eliminate the use of pesticides on public property, but just as importantly, it sets the stage for a number of naturalization initiatives over the next three years. A Naturalization Sub-committee was formed with

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representation from staff, local organizations, and lawn care businesses to implement the action items identified in the strategy. Staff continue to work closely with the Region's Inter-municipal Pesticide Review Committee on a public education program to reduce the use of pesticides.

### ***Next Steps 2003:***

*Ongoing implementation of the Healthy Green Spaces Strategy for Public Lands and the Public Outreach and Education Program to reduce the use of pesticides on private property, in conjunction with Halton Region.*

*Further investigation of a regulatory option requiring that the pest control industry be accredited in Integrated Pest Management with a report to Council.*

*Communication with the local pest control industry to reduce the use of pesticides on Smog Alert Days.*

*Work with partners to organize the 2003 Green Gardening Forum at the Royal Botanical Gardens in February.*

### ***Air Quality Initiatives***

Air quality problems continue in Southwestern Ontario. In 2002 Burlington experienced 9 smog events totalling 18 days and in 2001 there were 7 events totalling 23 days.

Environment staff continue to work closely with key departments to ensure the Halton Smog Response Plan is implemented during the smog season. There was some confusion during the 2002 season over the perceived difference between Smog Alerts and Smog Advisories. The confusion stems from the fact that the Ministry of the Environment chooses to use the term *Smog Advisory* while Halton Partners for Clean Air adopted the term *Smog Alert*. Environment staff are working to address this confusion and will continue to educate staff on the importance of meeting the City's commitments under the Smog Response Plan.

In addition to participation on Halton Partners for Clean Air, staff continue to attend meetings of the GTA Clean Air Council (GTA-CAC), whose membership includes representation from all levels of government. Councillor Loughheed represented the City at the Toronto 2002 Smog Summit in June hosted by the GTA-CAC, signing the Declaration for Cleaner Air that commits the GTA-CAC members to reducing negative impacts on air quality.

During the last week of June, 48 employees participated in Pollution Probe's Clean Air Commute, requiring them to refrain from commuting to work in single occupancy vehicles. The Clean Air Commute is intended to raise awareness of how we can reduce our impact on air quality by choosing an environmentally responsible way to commute to work, such as taking transit or cycling.

### ***Next Steps 2003:***

*Implement a staff 'anti-idling' education program and launch a public awareness campaign in June.*

*City will participate in "Repair Our Air" Fleet Challenge to reduce idling.*

*Continue implementation of the Smog Response Plan.*

*Participate in "Go for Green's" Commuter Challenge during the national Environment Week to encourage staff to reduce their use of single occupancy vehicles for commuting.*

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### ***Climate Change***

In 2002, Council approved a recommendation that the City of Burlington join Partners for Climate Protection and endorse the federal government's ratification of the Kyoto Protocol. Partners for Climate Protection is a joint initiative by the Federation of Canadian Municipalities and the International Council for Local Environmental Initiatives (ICLEI) to support the reduction of greenhouse gas emissions by municipalities.

During 2002, community interest in green energy projects grew, partially due to the concern of increasing greenhouse gas emissions and poor air quality. Staff have been following this issue, investigating potential areas where the City can support local initiatives.

*Next Step 2003: Complete Milestone One of Partners for Climate Protection by undertaking an inventory of greenhouse gas emissions resulting from City operations.  
Continue to research and participate in the green energy issue.*

### ***Burlington Sustainable Development Committee***

Environment staff worked closely with the Sustainable Development Committee (BSDC) by responding to 72 recommendations in the 1998 State of the Environment Report. The BSDC received a Conservation Halton Award based on a nomination submitted by the EMT. The Committee was recognized for their efforts in diverting toxic waste from the landfill through the Battery Recycling Program as well as their work in highlighting environmental issues in Burlington through their State of the Environment Report. Staff also supported and attended the BSDC's and Burlington Community Foundation's Environmental Roundtable held at the Royal Botanical Gardens in May 2002 and attended by several local environmental organizations and agencies.

*Next Steps 2003: Continue to support and assist the BSDC in their environmental initiatives, such as the next edition of the State of the Environment Report.*

### ***Hamilton Harbour Remedial Action Plan***

Environment staff assisted the Planning Department by reviewing and providing a response to the Hamilton Harbour Remedial Action Plan (RAP) 2002 Update for a report to council in the fall 2002. Staff participation continues on the Watershed Planning Network, whose membership includes staff from the RAP office, Halton Conservation, the Hamilton Conservation Authority, the Cities of Hamilton and Burlington, and Halton Region.

*Next Steps 2003: Continue to participate and support the Watershed Planning Network.*

### ***Guidelines for Sustainable Community Decision Making***

The Guidelines were developed by the Sustainable Development Committee and have been endorsed by Council. The guidelines are intended to be used by staff in assessing policies, programs, and projects prior to their being recommended to Council. Comments provided by the Chair of the EMT are currently under review by the Sustainable Development Committee. The Guidelines will also be reviewed by the staff Corporate Infrastructure Committee to determine their applicability to capital projects.

*Next Steps 2003: Work with the Sustainable Development Committee to finalize the Guidelines.*

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### ***Environmental Performance Measures and Indicators***

The Team responsible for this issue has been researching various environmental measures and indicators that have been adopted by other communities and organizations. The consensus is that they must be relevant and measurable (information must be accessible). Performance measures are generally those items over which the organization has direct control. With respect to indicators, the organization may not have control over these items, but can assist organizations in understanding where they are and to where they need to go. They can show a trend before a problem becomes worse. For instance, indicators that are under consideration include Number of Smog Alert Events and Days issued by the Ministry of the Environment based on its air quality index. Although the City is not directly responsible for improving air quality, we certainly can be part of the solution.

*Next Steps 2003: Report to Council on recommended Environmental Performance Measures and Indicators Spring 2003.*

### ***Communications***

During the past year, articles appeared in the *Burlington Post* and *Hamilton Spectator* related to the City's work on options to reduce the use of pesticides as well as the development and approval of the *Healthy Green Spaces Strategy for Public Lands*. Coverage was also provided on the Green Gardening Forum, the City and Region's participation in the Toronto 2002 Smog Summit, and the International Walk to School Day held on October 2<sup>nd</sup>, 2002 promoted by the school boards and Halton Partners for Clean Air.

Articles were posted in City Talk (February 2002) regarding pesticides and also in Focus regarding the EMP and other environmental issues facing the City. Ads were placed in the Spring/Summer Rec & Leisure Guide, including one on "Tips for a Healthy Lawn" and one related to Smog Alerts.

During the first half of the year, environmental tips for the public were published in the "Environmental Corner" in the City Update section the first Friday of every month.

Environment staff have been working closely with Corporate Communications on updating the information on the City's intranet and internet sites to reflect the work of the Environmental Management Team as well as the various environmental initiatives underway. It is anticipated that the City's web page will continue to evolve as a key tool in public outreach and awareness raising programs.

*Next Steps 2003: Periodically publish the "Environmental Corner" in the City Update Section of the Burlington Post.*

*Continue to maintain and update the City's intranet and internet Environment web pages.*

*Continue to take advantage of City publications to raise public awareness of environmental initiatives and education programs.*

### ***Internal Education & Awareness***

It is important to members of the Environmental Management Team to continue to increase their knowledge of key environmental issues and various local and regional initiatives. This has been achieved in part by inviting guest speakers to make presentations to the team on various environmental issues. In the past year, we have heard three different speakers from Halton Region: Jennifer MacDonald spoke on the Region's Environmental Land Use Database; Mimi Lau provided

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an update on the Region's Waste Management Strategy; and Cassandra Bach provided a presentation on the Region's Water Conservation program.

At its annual EMT workshop, staff also toured the Skyway Wastewater Treatment Plant and heard presentations from John Hall, Hamilton Harbour RAP Coordinator, and Don McLean on the topic of 'Reducing Your Ecological Footprint.'

EMT members in conjunction with the Healthy Green Spaces Committee toured the Mountain Equipment Co-op Store in Toronto to view and learn about the benefits of its 10,000 square foot green roof (reduces stormwater run-off and acts as additional insulation). Staff also learned about its commitment to using recycled materials in the construction of new stores across Canada as well as utilizing energy efficiency measures and testing alternative sources of power, such as solar panels. Staff also visited 401 Richmond Street, a converted warehouse with office/retail and daycare uses, and Toronto City Hall to view different types of "green roofs". A separate trip arranged by the Naturalization Sub-Committee involved a tour of various naturalization initiatives undertaken by the City of Mississauga.

Environment staff attended two conferences during the year, including the Upwind/Downwind Air Quality Conference hosted in partnership by the City of Hamilton and Clean Air Hamilton. Several speakers spoke on the impacts of negative air quality and special focus was given to sustainable development and increasing focus of "green buildings" in the architectural/planning communities to reduce urban impacts on air quality.

Recently, staff attended a workshop on Climate Change in Mississauga hosted by the Canadian Climate Impact and Adaptation Research Network. Several speakers provided presentations on the impacts of climate change already being felt by many Canadian communities and how they have been adapting to the change.

*Next Steps 2003: Continue to invite guest speakers to EMT meetings as well as tour appropriate sites to facilitate continuous education of members on local and regional environmental initiatives.*

*Sr. Environmental Co-ordinator to attend the Canadian Pollution Prevention Roundtable in Calgary to make a presentation on the City's Environmental Management Plan.*

### **5.0 FINANCIAL MATTERS:**

Improvements in the City's environmental performance represents a service level increase and will impact on future operating and capital budgets. In anticipation of future initiatives, the multi-year current budget simulation includes provisions in 2004, 2005, and 2006.

An amount of \$90,000 is included in the City's Capital Budget for an 'Energy Efficiency Feasibility Study.' The intention is to match the funds with a grant from the Federation of Canadian Municipalities (FCM), dependent on a successful application. An earlier application submitted by staff was denied by the FCM, but a subsequent application with greater detail regarding a work plan will be re-submitted.

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It is also noted that the amount of \$18,600 has been included in the 2003 Operating Budget requested by Roads and Parks Maintenance as a decision unit to support the purchase of bio-diesel fuel as a pilot project for RPM vehicles.

### **6.0 ENVIRONMENTAL MATTERS:**

See Section 4 – Discussion.

### **7.0 COMMUNICATION MATTERS:**

Environment staff will continue to work with the Corporate Communications Section to develop and implement environmental awareness raising and educational programs.

### **8.0 CONCLUSION:**

The EMP is not meant to be a static process. Reviews will be ongoing with staff, specifically on those items identified as environmentally significant. We have seen the benefits of what staff can accomplish by amending operations and adopting best practices. It is imperative that we continue to work together on this program, to consider how our actions impact the environment and what can be done to minimize these impacts.

In conclusion, it is recognized that many of the environmental initiatives are not only dependent on the commitment of staff. Our success is also due to the extensive network of resources and support that staff have developed with local agencies and organizations, as well as with individual members of our community. We look forward to continuing the development of these important relationships as we strive to improve our local environment for the benefit of all.

Respectfully submitted on behalf of the EMT,

Lynn Robichaud,  
Sr. Environmental Co-ordinator

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**Appendices:**

A. List of Environment Teams B. List of EMP Workshops C. Summary of Results – EMP Workshops 2000-2002
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**Staff / Others Consulted:**

Name	Telephone
Management Committee Environmental Management Team Burlington Sustainable Development Committee	

**Notifications:**

Name	Mailing or E-mail Address

**Special Instructions:**

Consent Agenda
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## APPENDIX A

### ENVIRONMENTAL MANAGEMENT TEAM & WORK TEAMS

<b>EMT Team Members</b>	
Mike Hall (Chair)	Planning – Director
Roz Minaji (Vice-Chair)	Planning – Planner (currently on secondment to BEDC)
Ken Charles	Purchasing – Supervisor
Teresa Giangregorio	Engineering – Tech, Develop & SWM
Nancy Shea-Nicol	Legal – Assistanct City Solicitor
Scott Gillner	T & T – Project Leader
Jennifer Knight	Clerk’s – Secretary to City Clerk
Rick Lipsitt	RPM – City Forester
Charlotte O’Hara-Griffin	P & R – Parks Development Planner
Marilyn Ortwein	BSDC
Jennifer Patterson	BEDC – Business Development Mgr.
Dorothy Pocock	BSDC (retired from BSDC Dec. 2002)
Lynn Robichaud	D & I – Environmental Coordinator
David Rokosh	BSDC
Fleur Storage-Hogan	D&I - Environmental Project Support Technician
Rudy Huisman	Finance – Manager, Financial Planning Services & Deputy Treasurer

<b>EMT Communications Team</b>	
Lynn Robichaud	D & I – Environmental Coordinator
Helen Walihura	Clerks - Communications Advisor
Roz Minaji	Planning – Planner (Secondment to BEDC)
Mike Hall	Planning – Director
Jennifer Knight	Clerks – Secretary to City Clerk

<b>Anti-Idling Steering Committee</b>	
John Duncan	RPM – Mgr of Fleet
Mickey Frost	T & T – Transit Manager
Lynn Robichaud	D & I – Environmental Coordinator
Gail Pashley	BSDC
Fleur Storage-Hogan	D&I - Environmental Project Support Technician
Peter Willmott	Halton Region – Health Dept.
Robin MacDouell	Fire – Deputy Fire Chief

<b>Healthy Green Spaces Committee Members</b>	
Tim Commisso (Chair)	GM, Community Services Division
Brian Adriaans	RPM – Horticulture Technician
Aline Tso	BSDC
Teresa Giangregorio	Engineering – Tech, Develop & SWM
Gavin Kellogg	P & R – Supervisor of Maintenance, Tyandaga Golf
Lynn Robichaud	D & I – Environmental Coordinator
Rick Lipsitt	RPM – City Forester
Rob Peachey	P&R – Mgr, Parks & Open Space
Fleur Storage-Hogan	D&I - Environmental Project Support Technician
Helen Walihura	Clerks – Communications Advisor
Nancy Shea-Nicol	Legal – Assistant City Solicitor
Alan White	Represents local lawn care industry

<b>Naturalization Sub-Committee</b>	
Brian Adriaans	RPM – Horticulture Technician
Harold Dickert	BSDC
Teresa Giangregorio	Engineering – Tech, Develop & SWM
Gavin Kellogg	P & R – Supervisor of Maintenance, Tyandaga Golf
Lynn Robichaud	D & I – Environmental Coordinator
Rick Lipsitt (Co-chair)	RPM – City Forester
Rob Peachey (Co-chair)	P&R – Mgr, Parks & Open Space
Fleur Storage-Hogan	D&I - Environmental Project Support Technician
Ingrid Vanderbrug	P&R – Landscape Architect
** There will also be representatives from the local lawn care industry, the Royal Botanical Gardens, Halton Conservation, the Field & Stream Rescue Team, and a local cemetery.	

<b>Sustainable Community Decision Guidelines –Team</b>	
Mike Hall	Planning – Director
Lynn Robichaud	D & I – Environmental Coordinator
Roz Minaji	Planning (on secondment to BEDC)

<b>Environmental Performance Measures – Team</b>	
Mike Hall	Planning – Director
Lynn Robichaud	D & I – Environmental Coordinator
Charlotte O’Hara-Griffin	P & R – Parks Development Planner
Jennifer Patterson	BEDC – Business Development Mgr.
David Rokosh	BSDC
Rudy Huisman	Finance – Manager, Financial Planning Services & Deputy Treasures

<b>Air Quality Initiatives Committee</b>	
Mark Arnett	Fire Dept – Special Projects Manager
Doug Dalgarno	Engineering – Mgr, Design & Construction
Vito Tolone	T & T – Project Leader
Doug Hogan	RPM – Tech, Program Development
Doug Richardson	HR – Health & Safety Coordinator
Lynn Robichaud	D & I – Environmental Coordinator
Liz Seaby	Finance – Accts Payable Clerk
Fleur Storace-Hogan	D&I - Environmental Project Support Officer
Gavin Kellogg	P&R – Supervisor of Maintenance, Tyandaga Golf
Helen Walihura	Clerks – Communications Advisor
Grant Zilliotto	Building – B/L Enforcement Officer
Sandra Ross	Building –Customer Service Rep

## APPENDIX B

## List of Completed &amp; Future EMP Workshops

January 6<sup>th</sup>, 2002

	<b>Date</b>	<b>Department</b>	<b>Workshop</b>
	<b>2000</b>		
1.	September 28, 2000	T&T	Signals (pilot)
2.	November 3, 2000	Fire	Training Tower (pilot)
3.	November 22, 2000	P&R	Pools (pilot)
	<b>2001</b>		
4.	March 2, 2001	RPM	Animal Control
5.	April 11, 2001	RPM	Mechanics
6.	April 25, 2001	T&T	Transit
7.	May 16, 2001	ITS	Mgmt of IT Infrastructure
8.	November 6, 2001	Clerks	Printing
9.	November 27, 2001	Clerks	Administration
	<b>2002</b>		
10.	January 21, 2002	P&R	Tyandaga Golf Course
11.	February 15, 2002	P&R	Programming/Special Events
12.	March 5, 2002	RPM	Operations Centre
13.	April 19, 2002	P&R	Food Services
14.	May 21, 2002	P&R	Arenas
15.	July 16, 2002	P&R	Buildings/Facilities
16.	October 18, 2002	RPM	Winter Control
17.	November 1, 2002	RPM	Signs, Markings
18.	November 27, 2002	RPM	Bikeway, Walkway, Sidewalk Maintenance
	<b>2003</b>		
19.	January 9, 2003	RPM	Bed, Field, Turf Maintenance
20.	January 9, 2003	RPM	Waterfront Parks
21.	January 13, 2003	RPM	Playground Structure Maintenance
22.	January 14, 2003	RPM	Leaf & Debris Pick-up
23.	January 21, 2003	RPM	Cemetery Operations/Maintenance
24.	February 25, 2003	RPM	Urban Forest Maintenance
25.	March 4, 2003	RPM	Culverts, Ditches, Creeks, Bridge, Maintenance
26.	March 21, 2003	RPM	Roadway Maintenance

## APPENDIX C

### Environmental Management Plan 2000-2002 WORKSHOPS - HIGHLIGHTS

**DEPARTMENT: ITS**

**WORKSHOP: Management of IT Infrastructure**

May 16<sup>th</sup>, 2001

***Hazardous Waste Diversion:** Obsolete computer equipment is diverted from the landfill through the City's program of selling computers to employees.*

***Power Conservation:** Following the EMP workshop, power saving features are now standard for computers. As of November 2002, the ITS "Welcome Memo" to new staff includes information on powering down computers at night. In 2001, stickers were distributed to all departments for display on computers reminding staff to turn them off at the end of the day.*

***Decreased Use of Personal Vehicles:** Computer software problems can often be solved remotely. Trips are also minimized by grouping problems at remote sites and ITS staff are encouraged to deal with remote issues on their way to or from work.*

**DEPARTMENT: Roads & Parks Maintenance**

**WORKSHOP: Animal Control**

March 2<sup>nd</sup>, 2001

***Incinerator:** The facility operates under a Certificate of Approval issued by the Ministry of the Environment under the Environmental Protection Act. It is used only for the needs of the Animal Control Centre. It is estimated by staff that the incinerator will be decommissioned within five years.*

***CO<sub>2</sub> Emissions Decreased:** CO<sub>2</sub> is used on limited basis usually for feral cats that pose a risk to staff. Euthanasia is now conducted by needle.*

***Disposal of Medical Waste:** Needles are collected by a local firm for proper disposal. Expired medication is rare. Medication is only ordered as needed and is sent with pets when adopted.*

**WORKSHOP: Equipment/Vehicles Maintenance & Operations**

April 11<sup>th</sup>, 2001

***Oil:** Recycled oil is used. Waste oil is recycled.*

***Used Varsol:** The use of varsol for cleaning parts has been minimized. A machine with a filtration system to wash parts has been purchased. Solvent replacement cycles are now 1.5 to 2 years instead of every 6 months. Used solvent is sent for recycling.*

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**Emissions:** Premium, low sulphur fuels are being purchased. Two hybrid vehicles have been added to the fleet. Staff are investigating the use of bio-diesel fuel. City fleet is subject to 'Drive Clean' regulations. Staff re-fuel early in the morning or late evening to minimize emissions.

**Used Tires:** Recycled by waste contractor.

**Dirty Oil Filters:** Are picked up for recycling (metal components).

**Plastic Jugs-Bottles** (for oil & antifreeze): Oil is now purchased in bulk quantities reducing waste of small plastic jugs.

**Used Rubber Gloves:** Heavier, more durable gloves are now being purchased reducing volumes by approximately 30%.

### **WORKSHOP: Cumberland Works Yard & Facility**

March 5<sup>th</sup>, 2002

**Plastic Bottles & Jugs:** Volumes are low as many products are purchased in bulk or are used off site.

**Fuel Spills:** Legislative requirements – employees must remain with vehicle while refuelling to minimize spills (Gasoline Handling Code – Section 8). Signs have been posted at fueling areas to remind staff of regulatory requirements.

**Run-off – Stormwater Management:** Detention pond approved by MOE to retain stormwater run-off. City Engineering staff have advised that pond is operating efficiently to proper standards.

**Cardboard:** All cardboard is being recycled by waste contractor.

### **WORKSHOP: Multi-use Pathways**

November 27<sup>th</sup>, 2002

**Waste Asphalt & Concrete:** The best practice is to recycle. Most private contractors appear to recycle but City guidelines (service contracts) do not include this specification. Additional review of other municipal practices by EMT required.

**Dust** (resulting from concrete removal): Improve communication with work crews to respect smog alerts. EMT will review Smog alert broadcasts.

**Wastewater** (from concrete repairs/installation): Although minimal quantities, staff are researching best practices.

**WORKSHOP: Sign Shop & Pavement Markings**

November 1<sup>st</sup>, 2002

***Vapours:** Ventilation system was installed in 1995. Employees wear masks and filters are changed regularly. RPM staff conducting research to confirm health & safety standards are being met.*

***Waste Materials:** The computer lays out images efficiently on materials to reduce wastage. Old signs are re-used where possible.*

**DEPARTMENT: Fire**

**WORKSHOP: Fire Training**

November 3<sup>rd</sup>, 2000

***Fire Tower – Management of Wastewater & Emissions:** Funds have been included in the 2005 & 2006 capital budgets to rehabilitate the tower, including the installation of propane burners to reduce emissions as well as minimize waste in water run-off.*

***Exhaust:** Vehicles are emission tested. Low sulphur fuel used.*

***Waste Batteries, Oil & Coolants:** Picked up for recycling.*

**DEPARTMENT: Parks & Recreation**

**WORKSHOP: Pools**

November 22<sup>nd</sup>, 2000

***Filter Backwash:** Backwashes are kept to minimum. Pre-swim showers are difficult to enforce. Tansley Woods has installed 'sight glasses' in filter tanks to ensure minimal backwashing. Outdoor pools have added challenge of keeping grass clippings, etc. out of water. Proposal to utilize artificial turf for LaSalle outdoor pool compound in 2004. Reducing backwashes also reduces operating costs.*

***Outdoor Pool Drainage:** End of season, water is left for approximately two weeks with no chlorine treatments. Water quality is tested prior to drainage to storm sewer. Drainage occurs over a 3 week period to reduce flow impact. Future consideration of re-piping drainage to sanitary sewers during capital budget deliberations.*

***Waste:** Waste reduction ongoing. Recycling receptacles to be purchased for 2003 season (outdoor pools). Tansley Woods recycles plastics, paper, & cardboard.*

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### **WORKSHOP: Tyandaga Golf Course (Outside Maintenance)**

January 21<sup>st</sup>, 2002

**Residual Chemicals in Soil:** *Alternatives to chemical pesticide products continue to be researched. Staff continuously attend seminars and remain involved in on-going education. New procedures will be introduced as methods evolve.*

**Surface Water Irrigation:** *Staff attend courses on best practices. Funds are being accumulated for a computerized irrigation system & weather station to be installed in fall of 2004. Staff have introduced more effective monitoring of degree days and record keeping. A new pumping system has been installed to increase efficiency.*

**Noise:** *Staff attempt to cut and maintain central areas of the golf course avoiding sensitive residential areas during early time periods and ensure equipment is maintained properly. Noise reduction is a criteria when staff research new equipment. Staff are investigating use of electric turf gator utility vehicle.*

### **WORKSHOP: Programming/Special Events**

February 15<sup>th</sup>, 2002

**Waste** *(Wastewater including grey water, glass/cans, waste paper, portable toilet waste): Following the workshop, staff prepared an 'Environmental Considerations' section for the Special Events Guideline for user groups. Environmental issues are discussed directly with event organizers at meetings with the City's Special Event Team which reviews the planning of the event and sets terms and conditions for the operation. Environmental considerations include among others:*

- *Ensure recycling containers are available at special events.*
- *Event organizers are required to clean-up following events.*

**Waste glass/cans:** *Staff are planning to request that parents send litterless lunches for summer 2003 programs to minimize waste*

**Human Health Effects** *(from heat/smog): A 'Heat Procedure' has been implemented which includes training recreation staff on smog alerts issued by the Ministry of the Environment and impacts of smog.*

**Exhaust:** *Event organizers have been made aware of and encouraged to manage their event activities with respect to environmental considerations as noted in the Special Events Guideline. The 2002 Rotary Ribfest utilized a shuttle bus service from Mapleview Centre for the first time which was deemed successful. Burlington Transit operates a free transit service for Canada Day throughout the City and shuttle services are utilized for the Winter Carnival, Lowville Winter Games, as well as the New Year's Eve event at Central Park.*

### **WORKSHOP: Food Services**

April 19<sup>th</sup>, 2002

**Waste:** *Waste control is ongoing. Guidelines for waste management are included in food service contracts. Recycling program to be expanded to cover all facilities. Using re-usable*

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*items where possible. Most garbage is produced by concession stands as products are wrapped in plastic/paper. Provide more containers to ensure proper recycling by public (arenas purchased additional recycling containers in 2002).*

### **WORKSHOP: Arenas**

May 21<sup>st</sup>, 2002

**Exhaust:** *Exhaust fans must be used to maintain proper air quality conditions. The installation of relays is being considered to ensure that exhaust fans are used when lights are switched on. Exhaust levels are monitored once per week (on ice cutting day). Exhaust can exceed health regulation standards if venting does not occur while equipment is operating. A combination of heavy duty refrigeration plant and exhaust fans to re-circulate the air quickly without melting the ice is required. Schedule for condenser upgrades includes: Kiwanis – 2004; Central 2006; Mainway 2007. Mountainside & Skyway will be submitted for consideration during the 2004 capital budget process.*

*All resurfacers are scheduled to be natural gas by 2009 through normal life cycle replacements.*

**Management of Waste** (year end maintenance): *Staff continue to consider factors such as life cycle and re-use potential for products. Central, Kiwanis and Mountainside arenas scheduled for replacement of wood/plastic boards with steel/plastic boards (Central – 2003; Kiwanis & Mountainside – 2007).*

**Management of Waste** (public use of facilities): *Special containers have been installed in first aid rooms and women's washrooms for bandages & other bio-medical waste. Recycling containers have been purchased for all arenas. Implementation of recycling awareness program in January 2003.*

**Wastewater** (drainage from Zamboni pits): *Minimize risk of hydraulic fluid leak into storm sewer. Zambonis are maintained regularly to minimize equipment failure. Remaining drainage facility (Nelson Arena) is scheduled for retrofit in 2007.*

**Paint** (removal of ice – end of season): *Ice is removed at end of season with paint & disposed outside. Paint is non-hazardous, non-toxic. Most line markings are made of fabric/paper product.*

**Brine/glycol:** *Brine and glycol is used extensively in cooling systems. Leaks can be quickly detected. Best practice is to contain leaks. Since EMP workshop, staff have increased frequency of header inspections. Kiwanis & Nelson headers have been replaced and extensive repairs have occurred at Central. Remaining drains to be sealed to ensure containment for ice refrigeration plants in 2003.*

**Freon:** *A Chlorofluorocarbon (CFC). Used at Skyway arena only. Maintenance procedures follow legislated requirements. Emergency procedures document for mechanical rooms has been revised and updated to reflect legislated requirements. Staff training/education of best practices to continue.*

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***Ammonia:** Potential for leaks from compressor. Legislated requirements for reporting are followed by staff. Entry procedures for Mechanical Rooms have been revised. Increased awareness by staff of environmental impacts of leaks since EMP workshop.*

### **WORKSHOP: Buildings/Facilities**

July 16<sup>th</sup>, 2002

***Energy Usage:** An energy audit was identified during the EMP workshop to define the scope and extent of problem. Staff have investigated some areas to a limited extent. Suggested improvements include implementing a central control system for the heating cooling systems of all facilities to reduce energy waste, especially with remote sites with no staff. Staff to work on application for funding from the Federation of Canadian Municipalities to retain a consultant to complete a detailed energy audit. City should consider adding targets/objectives related to increasing energy efficiency of city infrastructure to the next edition of the City's strategic plan (Future Focus).*

***Water Usage:** Energy audit should include water usage.*

*If FCM funds are not received, staff will follow-up with recommendation to Council that the Corporation select one location and do a complete energy audit (eg. Insulation, windows, etc.).*

### **DEPARTMENT: Transit & Traffic**

#### **WORKSHOP: Traffic Management**

September 28<sup>th</sup>, 2000

***Decision/Planning Traffic Lights:** Staff consider environmental impact of vehicular emissions when planning for new traffic signals.*

***Improved Traffic Flow:** Implementation of 'Traffic Responsive Operation' began in 2001 to improve traffic flow. T&T staff to review in 2003.*

***Traffic Lights:** Staff continue to purchase energy efficient LED's for ongoing replacement of traffic lights.*

***Waste Disposal by Construction Contractors:** Materials are re-used or disposed by contractors. Although the City does not have guidelines, contractors appear to be re-using and recycling more due to economic benefits.*

### **WORKSHOP: Transit**

April 25<sup>th</sup>, 2001

***Use of Equipment (ensure efficiency):** Changes were implemented in September 2002 as a result of the 2002-2006 Burlington Transit Business Plan and are expected to result in a more effective use of resources. Additional service changes are planned for 2003.*

*In 2002, a study was undertaken of the Handi-van Service and a staff report with recommendations will be considered in early 2003. The 2003 Current Budget includes*

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*additional funding for implementation, resulting in a more effective and efficient delivery of the Handi-van Service.*

**Fluid Leaks:** *Transit Maintenance staff contain minor leaks/spills with assistance from RPM for larger leaks/spills or accidents. The Region's Spills Response Team is the first responder after hours and for major incidents.*

**Exhaust:** *Low sulfur fuel is purchased for the diesel powered vehicles. Ten new low floor buses have been introduced which burn the low sulphur fuel more efficiently than the older vehicles being replaced, resulting in reduced emissions. Buses are subject to drive clean regulations. Replacement plans will take into consideration power plants that use the most energy efficient and cleanest technology available, subject to effectiveness and economics.*

### **DEPARTMENT: Clerks**

#### **WORKSHOP: Printing/Communications**

November 6<sup>th</sup>, 2001

**Stop Bath/Activator Chemicals:** *Chemicals are picked-up and disposed of by an environmental company. Staff are researching the future purchase of printing plate maker that does not require use of chemicals.*

**Polyester Waste (printing plates):** *Investigating recycling potential. Being stored until solution found. Future plans to purchase new plate maker that will be environmentally friendly.*

**Blanket Wash, Rejuvenator, Ink Blotter:** *Ongoing research and testing of environmentally friendly products, such as water soluble blanket wash & rejuvenator & soya based inks.*

**Machine Parts:** *Are sent to RPM for recycling pick-up or taken away by service technician for re-use.*

**Vapours:** *Vapour emissions have been lessened due to use of more environmentally friendly blanket wash and inks.*

**Paper:** *Print staff implement efficient processes such as double sided test sheets. All paper is recycled.*

**Plastic & Metal Containers:** *Picked up for recycling.*

### **WORKSHOP: Administration**

November 27<sup>th</sup>, 2001

**Paper – Council:** *Council Information Packages – many are distributed electronically. Annually update circulation lists for standing committees and council agenda packages. Information available on-line. Letters to groups – advises people that information is on the web site. Print Shop is now tracking print jobs by department to recover costs, which has increased efficiency of scheduling and printing jobs.*

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***Paper – Elections:*** *There is some paper saving in electronic tabulation. Metal frames for election signs for voting locations can be re-used. Materials that don't have to be retained are shredded immediately and recycled. Other material is retained for 3 months and then shredded and recycled. Candidate information at time of election – remind candidates to be environmentally responsible.*

***Paper – Records:*** *The Clerks Department is still participating in a pilot project for document imaging/scanning. Corporate Policy Manual and other documents are now available on-line for reference to reduce printing.*