

**Council Minutes - June 19, 1996**

---

**Report of the Committee on Works and Operations, dated June 4, 1996**

**Waste Minimization Strategy for  
Winnipeg**

**File WT-1.3 (Vol. 18)**

---

**795 -**           2.       On July 11, 1990, Council approved the Waste Minimization and Recycling Action Plan which is directed largely towards composting and the creation of recycling depots.

On November 2, 1993, the Committee on Works and Operations concurred with the Ad Hoc Committee on Waste Reduction that it be charged with the responsibility of developing a comprehensive, integrated plan for waste reduction that will incorporate initiatives underway as well as new initiatives in order to formulate a comprehensive plan.

On April 28 and 29, 1994, the Waste Minimization Advisory Committee held a planning session attended by Ad Hoc Committee members and the Administration Staff, which established a key issue as the "need to revisit the current Waste Minimization and Recycling Action Plan", requiring the development of an Integrated Waste Reduction Plan that might include the consideration of business plan, targets, goals, objectives, flexibility, accountability, responsiveness to change, etc.

At its June 23, 1994 meeting, the Waste Minimization Advisory Committee established the "need" to revisit the Waste Minimization and Recycling Action Plan and "how" this could be achieved, with the Ad Hoc Committee on Waste Reduction and senior Works and Operations staff. The following information was presented and discussed in regards to "need":

1.     Lack of clearly stated goals and objectives in the Plan
2.     No targets that the Plan can be monitored against
3.     No action statement within the Plan regarding public consultation and education
4.     The plan does not contemplate where funding is going to come from and how it might be generated
5.     There is no plan for the market development of recyclables
6.     There is no plan for the monitoring of progress and lines of accountability for lack of progress
7.     The plan does not take us forward towards integrated decision making
8.     Waste is not recognized within the plan as a natural resource
9.     Public's desire for an environmentally sound city is not recognized

The following information was presented and discussed in regards to "how":

1.     WMAC to Draft Terms of Reference for approval of the Committee on Works and Operations

## Council Minutes - June 19, 1996

---

### Report of the Committee on Works and Operations, dated June 4, 1996

2. WMAC to work in conjunction with the consultant, monitoring and reporting progress to the Ad Hoc Committee on Waste Reduction
3. WMAC to develop a framework for public consultation for plan development and completion of final draft plan
4. WMAC will continue to research what other groups are doing to identify further options
5. The time line for the project would be September 30, 1994 to July 31, 1995
6. The proposed budget for the planning exercise is \$100,000.00; \$25,000.00 to be provided from the WMAC budget

Meeting participants unanimously agreed that the Waste Minimization and Recycling Action Plan should be revisited. It was recommended that the WMAC develop a Draft Terms of Reference and formally request funding from the Committee on Works and Operations.

At its July 21, 1994 meeting, the WMAC agreed to a Draft Terms of Reference that will include the following responsibilities over two phases:

#### Phase 1

The development of a decision-making model that is at a minimum iterative, forward looking, responds to changing issues and temporal scales, identifies players and their roles, outlines monitoring and reporting procedures with public involvement in the development of the model.

#### Phase 2

Subject to the satisfactory completion of Phase 1, and budgetary approval, Phase 2 will involve the implementation of the decision making model in the development of the first action plan. At a minimum this phase should outline the historical background to waste management in the City, facilitate public consultation to identify gaps in the current waste management system and options to fill them, establish goals and objectives for the first plan to be measured against, etc.

Council on September 21, 1994 adopted the recommendation as contained in Clause 4 of the Report of the Committee on Works and Operations dated September 2, 1994 that a consultant be retained to develop a Waste Reduction Action Plan to be completed over the period 1994/95, at an estimated cost not to exceed \$100,000.00.

Subsequently, the Commissioner of Works and Operations approved assignment of the project to REIC Ltd. and InterGroup Consultants Ltd.

On June 4, 1996, the Chairperson of the Waste Minimization Advisory Committee presented the Waste Minimization Strategy for Winnipeg dated June 1996 to the Committee on Works and Operations and recommended approval thereof.

**Report of the Committee on Works and Operations, dated June 4, 1996**

The Committee on Works and Operations therefore recommends:

- I. That the Waste Minimization Strategy for Winnipeg dated June 1996, designated as Appendix A, be adopted, thereby replacing the Waste Minimization and Recycling Action Plan.
- II. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Appendix A referred to in the above clause is on file in the office of the City Clerk.

For the information of Council, the Committee on Works and Operations has requested that the Administration bring forward a specific action plan from this document including financial implications and implementation strategy.

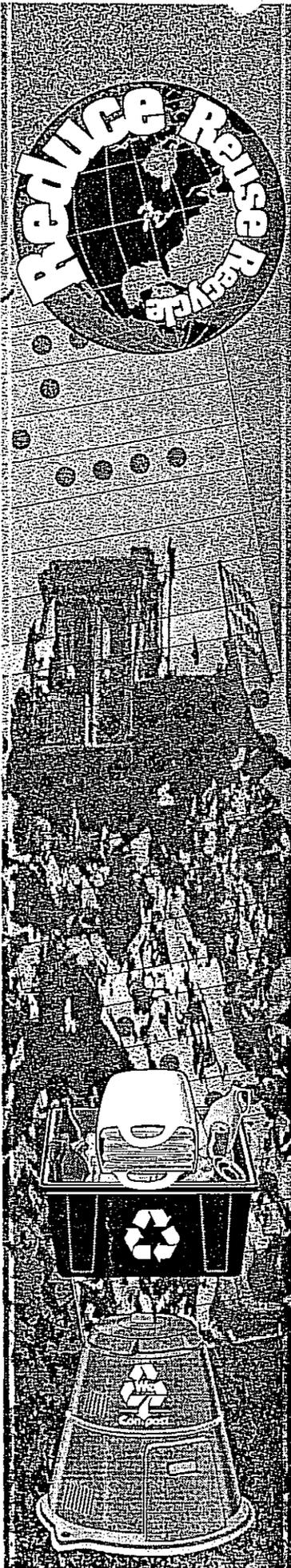
Adopted by consent.

# A WASTE MINIMIZATION STRATEGY FOR WINNIPEG

PREPARED FOR  
WASTE MINIMIZATION  
ADVISORY COMMITTEE

JUNE 1996

 **INTERGROUP**  
CONSULTANTS LTD.



# Executive Summary

## Background

The City of Winnipeg began to look seriously at the issue of waste minimization in the early 1990's, and established a multi-stakeholder Technical Advisory Committee (TAC) in 1991 to provide guidance in this regard to the Committee on Works and Operations. In 1993, TAC was reconstituted as the Waste Minimization Advisory Committee (WMAC), with a mandate to foster communication on waste minimization issues and provide guidance and advice to the Committee on Works and Operations.

In October of 1994, WMAC issued a Request for Proposal for *Consulting Services for Development and Implementation of a Solid Waste Minimization and Resource Utilization Planning Process for the City of Winnipeg*. REIC Ltd., in partnership with InterGroup Consultants Ltd., submitted the successful proposal, and this document is the result.

This was a two phase study, with the first phase focusing on developing a planning process. The second phase then used that planning process to establish a waste minimization system for the City.

WMAC stressed from the outset that this was not to be another consultant's report that sat on a shelf. Rather, it was essential that this be a WMAC report, with the consultant playing a facilitation role. Other key principles of the process included:

- focusing on the concepts of resource utilization and waste minimization, rather than simply waste diversion
- making this a "living document", with mechanisms for continuous review and revision
- being responsive to the Winnipeg realities of ample landfill capacity, low tipping fees and financial restraints

## Process

Phase 1, which ran from November of 1994 to January of 1995, came up with a generic planning process that could be used to respond to individual issues that arise from time to time. As well, that planning process became the basis for Phase 2, which involved the actual development of a waste minimization strategy for Winnipeg. The process, as outlined in the Phase 1 Report, involves a systematic and iterative approach, moving from outreach to synthesis to review/guidance to publishing results. Involvement of stakeholders was identified as a key component, as was the need to continuously monitor, review and revise decisions arising from this process.

Phase 1 also identified a detailed strategy development process that included three tasks:

- Vision/Criteria Identification
- Components Identification
- Strategy Development

and a series of activities associated with each task.

Public consultation was a crucial component of the process. For this strategy to be truly a Winnipeg strategy, it was essential that meaningful public consultation was built in as an integral part of the process. An innovative combination of workshops, focus groups sessions, surveys, newsletters and community outreach sessions were conducted in Phase 2. Considerable effort was concentrated on the community outreach sessions, which were sub-contracted out to the Recycling Council of Manitoba, and involved individuals making presentations to a variety of community groups, and then getting the participants to fill out a survey.

As mentioned earlier, another essential component of this strategy is ongoing monitoring, review and recommendation. The strategy has been designed to be reviewed and revised periodically, as is the case with Plan Winnipeg. As importantly, the strategy can be used as a reference document against which any new initiatives or issues can be tested in terms of how they meet with the overall vision and direction of the strategy. If issues arise that are not dealt with in the report, they should be addressed by following the process identified in Phase 1, and the results incorporated into this document.

The 3-ring binder format was chosen specifically to allow for easy and continuous updating. This was also the reason for including the date and a section/page number on each page.

## Vision

An important part of the planning process was the development of a Vision Statement to guide the strategy and assist in evaluating new and emerging issues. Based on considerable discussion and input, WMAC agreed on the following Vision Statement:

### **Vision Statement**

The City of Winnipeg's waste minimization strategy envisions a community whose citizens collectively assume responsibility for the waste they generate, share the goal of eliminating waste wherever possible through systems that adhere to the 3R's hierarchy (Reduction, Reuse, Recycling), and manage residual waste through efficient, cost effective systems.

## Strategy

The waste minimization strategy that evolved out of the Phase 2 process is not particularly radical or "high-tech". Rather, it reflects an integrated, source-separation approach that involves the householder as much as possible. Other options, such as two and three stream collection/processing technologies were ruled out based on the high capital cost, particularly given Winnipeg's low tipping fees and ample landfill capacity.

As outlined in the diagram below, the proposed system includes expanded recycling, an extensive door-to-door backyard composting distribution program, city-wide curbside collection of leaf and yard waste, a range of reduction and reuse initiatives, and an extensive promotion and education program. As these components are implemented, appropriate material bans, lift limits and bag tag garbage programs would be phased in. It is likely that once these components are in place, the City would also be able to consider a bi-weekly garbage program for at least 8 months of year.

## A Draft Minimization System for Winnipeg

	Component	Tonnage	Description	Percentage
<b>Diversion Components</b>	 Recycling	55,000	<ul style="list-style-type: none"> <li>Expand the current curbside system to include all apartments</li> <li>Promotion and education to improve participation and capture rates</li> </ul>	<b>52 %</b> (129,000 tonnes)
	 Backyard Composting	12,000	<ul style="list-style-type: none"> <li>Set up a compost team to offer subsidized or free composters door-to-door</li> <li>Provide follow-up and support to residents</li> </ul>	
	 Leaf & Yard Waste Collection	12,000	<ul style="list-style-type: none"> <li>Expand the existing "Leaf It With Us" Program to include all residents</li> <li>Promote grasscycling</li> </ul>	
	 Other 3R Initiatives	5,000	<ul style="list-style-type: none"> <li>Extensive promotion and education program</li> <li>Promote community yard sales, reuse centres, landfill salvage etc.</li> </ul>	
	 Material Bans/Lift Limits	45,000	<ul style="list-style-type: none"> <li>Phase-in a ban of recyclables, leaf and yard waste and other materials from garbage once diversion alternatives are in place</li> <li>Consider lift limits and/or a bag tag system</li> <li>Consider bi-weekly garbage collection</li> </ul>	
	 Garbage/Disposal	120,000	<ul style="list-style-type: none"> <li>Maintain mix of curbside and auto bin for remaining waste</li> </ul>	<b>48 %</b> (120,000 tonnes)

Once this waste diversion system is fully mature, it is estimated that it could divert at least 50% of the City's residential waste. However it should be noted that there is little accurate data on Winnipeg's current waste composition, or on the potential impact of autobin programs on waste diversion programs. Hence, these estimates are only "best guesses".

The strategy focuses primarily on residential waste, since the City does not have any control over waste from the business sector. However, given that industrial, commercial and institutional (IC&I) waste make up over half of what is currently being landfilled in Winnipeg, it is essential that the City not ignore this component of the waste stream. Some suggestions of what the City can do to encourage IC&I waste diversion are included in Section 8.

## Why This Strategy Works

Given Winnipeg's low tipping fees, it may initially seem unlikely to expect a waste minimization system such as this to be financially viable in today's lean economic times. There are a number of factors, however, that make this system particularly appropriate for Winnipeg, and potentially more economically and environmentally accountable than the existing disposal-based system, including:

- ◇ It builds on existing recycling and composting components
- ◇ It addresses demonstrated public support for waste diversion
- ◇ It harnesses "free" labour from householders
- ◇ It will generate substantial savings in disposal costs, once fully mature
- ◇ It creates local jobs
- ◇ It gives residents a waste management system to be proud of
- ◇ It supports stewardship and sustainability principles
- ◇ It meets provincial and national waste diversion targets
- ◇ It addresses the world-wide trend to diversion-based waste management systems

Although it appears that the savings in disposal related costs may be more than enough to offset increased diversion program costs, the reality is that these disposal costs saving will not be realized until the diversion components are fully in place, including regulatory initiatives. This means that the City will likely have to face some program cost increases in the short term in order to realize a more cost-effective overall waste management system in 1999, when the new garbage contracts are negotiated.

The funding of this system is further complicated by the fact that currently diversion programs are funded out of tipping fee revenues, creating a situation where the more successful the diversion programs are, the less money they get. The potential loss of tipping fee revenues to the Rosser landfill is another issue that will further complicate program funding.

To be successful, a waste minimization strategy must be supported and embraced by the public. The fact that this strategy was championed by WMAC, a citizens-based committee, and that extensive public consultation was incorporated into the development of the strategy should help ensure this support. Obtaining support and commitment from City Council and administration for the implementation aspects of the strategy is the next vital step on the road to achieving an innovative and effective waste minimization system for Winnipeg

## A User Guide

This report is divided into ten sections, laid out in chronological order, with the first section being the Phase 1 Report, and the remaining nine sections making up the Phase 2 report. Although each section is freestanding, they should be considered as part of one integrated process.

The following list outlines the content of each section:

## Report Outline

◇ **Section 1 — Phase 1 Report**

*How a waste minimization planning process was developed, including a plan of activities for Phase 2.*

◇ **Section 2 — Vision Workshop Report**

*The first workshop in Phase 2, which focused on coming up with a waste minimization vision for Winnipeg*

◇ **Section 3 — First Newsletter**

*The input received from the first newsletter, issued in November, 1995, which dealt with the vision and evaluation criteria, including a copy of the newsletter.*

◇ **Section 4 — Focus Group Report**

*The content and input of two focus group sessions held in November, 1995.*

◇ **Section 5 — Community Outreach Session Report**

*How the community outreach sessions were conducted, including summaries of the feedback received and responses to the surveys distributed at that end of presentations.*

◇ **Section 6 — 3Rs Initiatives Profiles**

*Thirty-seven possible waste minimization initiatives that the City might consider, with contact names at municipalities that have implemented similar programs.*

◇ **Section 7 — System Identification Workshop Report**

*The draft prioritization of system components carried out by the study's consultants, using input from administration and WMAC to come up with a draft waste minimization system.*

◇ **Section 8 — Action Plan**

*Groups system components identified in the previous section into 8 categories, and provides critical information on cost, diversion and specific actions to be taken.*

◇ **Section 9 — Second Newsletter**

*A context for the second newsletter, issued in February, 1996, which focused on the draft waste minimization system, and includes a copy of the newsletter.*

◇ **Section 10 — System Refinement Workshop Report**

*How the draft waste minimization system outlined in sections 8 and 9 was tested and refined at meetings with administration and WMAC, and at a public workshop.*

There are a number of important linkages between these various sections. For example, the waste minimization vision, as described in Section 2, formed the basis for the subsequent sections, which basically address the question of how best to achieve the vision. Sections 3, 4, 5, 7, 9 and 10 each deal, at least in part, with an aspect of the Phase 2 public consultation program, which was developed as comprehensive program but delivered in discreet sections. The various elements of the consultation program continuously tested any products developed in previous sections and provided initial feedback for input into subsequent sections. Section 7, in particular, required a detailed examination of input from consultation activities in order to ensure that the draft waste minimization system being brought forward was in fact the most appropriate one for Winnipeg.

These reports will be continuously updated as new issues come up in order to keep this an active and current document. Please make sure WMAC has your current address so they can send you any new or amended sections, and let them know of any changes or additions you think should be made.

Contact John Sinclair, Chair, WMAC  
Natural Resources Institute, University of Manitoba, Winnipeg, R3T 2N2  
phone (204) 474-8374, fax (204) 261-0038

# Table Of Contents

## EXECUTIVE SUMMARY

## TABLE OF CONTENTS

### SECTION 1 — PHASE 1 REPORT: DESIGNING A PROCESS

1.0 Background .....	1-1
2.0 Phase 1 Activities .....	1-1
3.0 A Generic Planning Process .....	1-5
4.0 Proposed Phase 2 Activities .....	1-7
5.0 Phase 2 Schematic .....	1-14
Appendix 1 — Key Person Interview List	
Appendix 2 — December 1, 1994 Workshop Summary	

### SECTION 2 — VISION WORKSHOP REPORT

1.0 Introduction .....	2-1
2.0 Content .....	2-1
3.0 Key Concepts .....	2-1
4.0 Targets .....	2-2
5.0 Attendance .....	2-2
6.0 WMAC's Vision .....	2-3

### SECTION 3 — FIRST NEWSLETTER

1.0 Background .....	3-1
2.0 Comments on the Draft Vision .....	3-1
3.0 Comments on the Draft Evaluation Criteria .....	3-1
Appendix 1: Copy of Newsletter	

### SECTION 4 — FOCUS GROUP REPORT

1.0 Background .....	4-1
2.0 Vision Statement .....	4-1
3.0 Evaluation Criteria .....	4-2
4.0 Treatment of Organic Waste .....	4-2
Table 1: Meeting 1 General Comments .....	4-4
Table 2: Meeting 2 General Comments .....	4-5
Table 3 & 4: Evaluation Criteria Assessment .....	4-6

### SECTION 5 — COMMUNITY OUTREACH SESSION REPORT

1.0 Intent and Description .....	5-1
2.0 Community Contact Summary .....	5-2
3.0 Speaker Report Summary .....	5-2
4.0 Survey Comments Summary .....	5-4
Winnipeg Waste Minimization Survey Results .....	5-6
Appendices	

## Table Of Contents (cont'd)

### SECTION 6 — 3RS INITIATIVES PROFILES

I:	Introduction .....	6-1
II:	Waste Reduction .....	6-3
	• Waste Audits - Residential	
	• Waste Audits - IC&I	
	• Community Grants Program	
	• IC&I Waste Reduction Poster Campaign	
	• Store Labeling	
	• Politician-Sponsored Environment Days	
	• Specific Waste Reduction Campaign	
	• Integrated Promotion and Education Program	
III:	Reuse .....	6-11
	• Reuse Guide	
	• Community Yard Sale	
	• Community Swap Meet / Trunk Sale	
	• Landfill Salvage Depot	
	• Reuse Centre - Construction/Demolition	
	• Reuse Centre - Retail Non-Profit	
	• Reuse Centre - Retail For-Profit	
	• Waste Exchanges (IC&I Sector)	
	• HHW Reuse Programs	
IV:	Recycling .....	6-20
	• Expanded Curbside Recycling	
	• Special Material Depots	
V:	Organics .....	6-22
	• Backyard Composting (partially subsidized)	
	• Backyard Composting (free)	
	• On-Site Multi-Residential Composting	
	• Leaf and Yard Waste Collection	
	• Curbside Residential Organic Collection	
	• IC&I / Multi-Residential Organic Collection	
	• Drop-Off Depots	
	• Windrow Leaf and Yard Waste Composting	
	• Windrow Food Waste Composting	
	• Enclosed Composting	
	• Bio-Conversion	
	• Multi-Residential Balcony Composting	
	• Multi-Residential Vermi-Composting	
	• Large Scale Vermi-Composting	
VI:	Regulations.....	6-36
	• Material Bans (collection)	
	• Material Bans (at the landfill)	
	• Lift Limits	
	• Bag Tag Garbage Programs	

## Table Of Contents (cont'd)

### SECTION 7 — SYSTEM IDENTIFICATION WORKSHOP REPORT

1.0 Introduction .....	7-1
2.0 Consultant Process .....	7-1
3.0 Meeting With Administration and WMAC Executive .....	7-4
4.0 WMAC Meeting .....	7-6
5.0 Conclusion .....	7-7

### SECTION 8 — ACTION PLAN

1.0 Introduction .....	8-1
2.0 Recycling .....	8-3
3.0 Backyard Composting .....	8-5
4.0 Leaf and Yard Waste .....	8-7
5.0 Other 3R Initiatives .....	8-9
6.0 Material Bans/Lift Limits .....	8-11
7.0 Garbage .....	8-13
8.0 IC&I (Industrial Commercial and Institutional) .....	8-15
9.0 System Monitoring/Review .....	8-17

### SECTION 9 — SECOND NEWSLETTER

Context .....	9-1
---------------	-----

### SECTION 10 — SYSTEM REFINEMENT WORKSHOP REPORT

1.0 Introduction .....	10-1
2.0 Meeting With Administration and WMAC Executive .....	10-1
3.0 WMAC Meeting .....	10-2
4.0 Information Display .....	10-3
5.0 Workshop .....	10-4

# Section 1

## Phase 1 Report — Designing a Process

### 1.0 Background

In October of 1994, the Waste Minimization Advisory Committee (WMAC) issued a Request For Proposal for Consulting Services for Development and Implementation of a Solid Waste Minimization and Resource Utilization Planning Process for the City of Winnipeg. REIC Ltd., in partnership with InterGroup Consultants Ltd., submitted the successful proposal and proceeded with Phase 1 of the study on November 17th.

Phase 1, which focused on designing a planning process, addressed several key issues identified in the Request For Proposal and through Phase 1 activities:

- a concentration on process as a necessary framework for good planning and decision-making;
- a focus on waste minimization, rather than simply diversion;
- a recognition that the issue of waste minimization in Winnipeg is more a question of appropriate utilization of resources than of solving a landfill crisis;
- a need for innovative, creative and locally appropriate solutions;
- a clear distinction between *Phase 1 — Designing a Process* and *Phase 2 — Strategy Development*; and
- a recognition of the need for the planning process to carry over into *Phase 3 — System Implementation* and *Phase 4 — On-Going Review and Revision*

To respond to these issues, Winnipeg's waste minimization planning process should:

- incorporate a clear vision statement, evaluation criteria, a recommended system of integrated waste minimization components, and mechanisms for on-going review and revision of the system; and
- ensure that the resulting waste minimization strategy and system is technically sound, and acceptable to and supported by all relevant parties.

### 2.0 Phase 1 Activities

Phase 1 commenced at the November 17th, 1994 WMAC meeting, where the approach identified in the REIC/InterGroup proposal was modified to reflect timing considerations. It was agreed that there would be two main activities in Phase 1:

- carrying out an extensive list of Key Person Interviews; and
- holding a Process Workshop.

The information gathered from these two activities, together with the consultants' expertise in successful planning and consultation processes, were used to design the Planning Process outlined in this report.

## 2.1 Key Person Interviews

Between November 21 and December 31, 1994, 39 Key Person Interviews were conducted. Interviews prior to the December 1 workshop focused on:

- perspectives on successful (and unsuccessful) planning processes;
- process considerations unique to solid waste minimization in Winnipeg; and
- key waste minimization issues to be addressed in Phase 2.

After the workshop, interviews focused more on how best to approach and involve each of the key players (WMAC, municipal staff, politicians, environmental groups, the waste industry, the Industrial, Commercial and Institutional (IC&I) sector and the general public) in developing a waste minimization strategy. A list of interview respondents is provided in Appendix 1-1, and a brief summary of the salient points that emerged from the interviews is presented below.

### 2.1.1 Successful Planning Processes

- Workshops with break-out groups and facilitators were largely supported, as were focus groups.
- Open-houses and panel settings were not considered effective tools for generating public input and involvement on this topic.
- Some form of high profile media event for a "kick-off" was suggested, perhaps involving one or more City Councillors.
- A combination of personal letters of invitation to stakeholders and previous participants as well as general advertisements in the newspaper were recommended to get successful attendance at workshops.

### 2.1.2 Planning Process Issues

- **Open Process:** Participants need to feel they can be involved from start to finish, and that there are no hidden or pre-set agendas. However, in some cases, participants will need to be provided with some issues or options to react to.
- **Meaningful:** Participants need to know that they are being listened to, and that their contributions influence the process.
- **Demonstrate Impact:** The general public will need tangible questions or scenarios to react to, and will have to be convinced that this is an important issue that concerns them directly.
- **Goals:** It is essential that goals and directions are clearly defined and stated at the start of the process.
- **Commitment:** Stakeholders/Interest Groups are becoming tired and disillusioned. They have been consulted; now they want action. There needs to be a commitment on the part of decision-makers to follow through with the implementation of the strategy.
- **Information:** The process should provide the public and stakeholders with the information they need to make informed choices and provide meaningful input. The information must be presented in understandable language, not technical jargon.

- **Integration:** Initiatives at all levels of government need to be coordinated and integrated. For example, City of Winnipeg waste minimization initiatives need to take into account provincial waste minimization initiatives, the report on sustainable development for Manitobans, the Manitoba Round Table report, the Capital Region Strategy, and Plan Winnipeg.
- **Public Role:** The general public can play an important role in generating and testing ideas and providing values and visions. They tend to be weaker at identifying workable solutions.
- **Responsibility and Understanding:** The process should ensure that key players understand the waste minimization vision, and therefore support the resulting system and take responsibility for it.
- **Interaction:** It is important that groups with diverse interests hear what others have to say, and work together to develop a system that best responds to the needs of all players. All key stakeholders must be involved.

### 2.1.3 Waste Minimization Issues

- The public is misinformed about many waste minimization issues.
- More information is needed to get the public to embrace a more holistic approach to waste diversion, focusing on reduction, not recycling.
- The media, particularly the print media, tends to exacerbate the misinformation problem.
- The public and the media tend to listen to and be more influenced by opinion leaders such as Recycling Council of Manitoba and the Manitoba EcoNetwork than City leaders. Likewise, industry tends to follow leaders in the corporate sector.
- Each target group needs to be sold on why they should participate in the system.
- The cost of the programs is a key consideration.
- Direct short term and long term returns (financial and non-financial) for minimizing waste need to be made explicit.
- Access to markets for recyclable material must be considered.
- Convenience is a key consideration: if the system isn't convenient, only a minority of people are likely to participate in it.
- The issue of public versus private sector roles in any waste minimization system has to be addressed.
- The issue of some form of user pay system for garbage must be examined carefully in light of local concerns and attitudes.
- Concern was raised over the potential impact of switching to auto-carts for garbage collection before a waste minimization system is developed.
- The different time frames for this study and the Manitoba Product Stewardship Program is an issue.
- The extent to which the city should or can deal with the non-residential portion of the waste stream was raised.
- There is a lack of goal or direction in existing waste minimization initiatives.

## 2.2 Workshop Summary

A Process Workshop was held December 1, 1994 to obtain input from key players on how best to involve the target groups in developing the waste minimization strategy. Participants were also asked to prioritize the target groups from the standpoint of where to focus efforts.

Attendants included representatives from WMAC, City of Winnipeg municipal staff, Manitoba Environment, the recycling industry, as well as residents with an active interest in waste issues. A list of participants is included in Appendix 1-2.

Participants were first presented with an outline of workshop goals, principles for effective consultation, key process and waste minimization issues identified in the key person interviews, and a municipal decision-making flowchart. They were then split into three break-out groups, and tasked answer two questions:

- How best can we involve the following target groups — politicians, general public, municipal staff, industry and other interested and affected parties?
- Prioritize the target groups from the standpoint of where to focus efforts.

Each group completed a worksheet recording their conclusions. A plenary session followed, with break-out group summaries, followed by a discussion on effective involvement techniques.

A detailed review of the break-out session results and the plenary session discussion is presented in Appendix 1-2. The following is a brief summary of each.

### 2.2.1 Break-out Sessions

- **Politicians:** All groups agreed that politicians should be involved in the process and provided with feedback. The need for effective communication was stressed, including communication between municipal and provincial players. Politicians were noted as the ultimate decision makers.
- **General Public:** Public education, input and feedback were seen as important. Groups supported going to where the public was already meeting rather than asking individuals to attend specific project events. It was felt that the public needs practical, hands-on, tangible options to react to and support. Community leaders were noted as a resource for gauging public attitudes. Distinctions were made between the general public and specific groups (e.g. environmental groups) that are directly affected or interested in waste issues.
- **Municipal Staff:** The input and support of municipal staff was seen as important to the success of the process and ultimate strategy. This support must be at all levels, from the staff who will actually implement the programs to the senior staff who will take responsibility for the system components.
- **Industry:** Both the waste industry and the IC&I waste producers were seen as important participants in the process. Segmenting industry, identifying major players, and accessing industry through associations were suggested. Industry perception of conflict between environmental initiatives and economic returns was noted.
- **General Comments:** It was noted that the process and the resulting strategy will have to address the question "What's in it for us?" for each target group.
- **Prioritize Key Players:** Groups varied on prioritization of key players. One group felt that all players were equally important; another felt that politicians and municipal staff were first priority, and the general public and industry were second priority; the third group prioritized the general public, politicians, industry, and municipal staff in descending order.

### 2.2.2 Plenary Session

The discussion in the plenary session focused on identifying effective techniques to involve the various target groups in developing the waste minimization strategy. In some cases, comments referred more to the implementation stage than to the planning stage, but as much as possible, discussion concentrated on planning considerations. Suggestions included:

- **General Public:** focus groups; community outreach programs; influencing parents through children; initiating a competition; shopping mall displays; surveys; utilizing existing private sector recyclers.
- **Politicians:** encourage the public to talk to their councillors; make politicians part of planning team; make the strategy publicly acceptable and financially reasonable; access politicians through their Executive Assistants; include Board of Commissioners in process.
- **Municipal Staff:** there is currently a good level of participation and involvement from municipal staff.

## 3.0 A Generic Planning Process

The goal of this project is to provide WMAC and the City with not only a waste minimization strategy, but also with a planning process that could be used to respond to any waste issues that might arise from time to time.

Accordingly, Phase 1 of this study first concentrated on developing a generic planning process, and then looked at how that process could be used to develop a waste minimization strategy. Phase 2, the implementation of the process, will therefore act as the first application of the process. Feedback from Phase 2 will be used to make revisions to the planning process.

At the end of Phase 2, the City will end up with a tested generic planning process **and** an effective waste minimization strategy. City staff and WMAC will also have participated in the implementation of the model, and will therefore be able to apply it themselves to issues that may arise in the future.

### 3.1 Effective Involvement Principles

Key person interviews and the consultant's experience with other successful planning processes helped to identify guiding principles for effective planning that were integrated into a generic planning model. A dominant theme that emerged was the need for effective involvement and consultation at the design, planning, decision-making, implementation, monitoring and revision stages of a project.

Effective involvement and consultation is essential, both to ensure that the most appropriate ideas are integrated into the plan, and to ensure that all parties support and buy into the eventual system arising out of the planning process. It should also involve all affected parties, not just "the public". Ten general principles to guide effective involvement programs are listed on the next page.

## Ten Public Involvement Principles

- 1 **Involve participants from start to finish.** Plan for participation from design of the process through to evaluation and on-going operational input.
- 2 **State the objectives of the exercise.** Clearly state consultation goals and expected deliverables up-front.
- 3 **Show respect.** Don't just go through the exercise — truly listen and incorporate participants' comments.
- 4 **Make information accessible.** Provide briefing materials in plain language; make all technical information available on request.
- 5 **Provide feedback.** Show participants how you used their input, or why you weren't able to incorporate their suggestion.
- 6 **Ensure appropriate representation.** Make sure the process is open to all interested and affected parties, while striving to keep some balance.
- 7 **Don't rush the process.** Allow the group to revisit previous steps as necessary, but set clear time limits to keep the process moving.
- 8 **Focus on critical issues.** Don't avoid the hard questions; make sure the scope of the exercise is broad enough to be meaningful.
- 9 **Use innovative techniques.** To obtain meaningful input, plan the consultation to be stimulating, relevant, motivational and fun for participants.
- 10 **Bring issues to resolution.** Clearly communicate and restate resolutions/decisions made along the way.

### 3.2 The Process

In addition to the involvement stream, the planning process must also provide for the technical and political streams (see Figure 1). The technical stream involves staff and/or consultants in continuous research and analysis to ensure that the best ideas are brought forward and properly evaluated. This technical stream is also where reports and other products arising out of the process are developed.

The political (or decision-making) stream is equally important. With municipal decisions taking place at the City Council level, it is essential that some councillors are involved as much as possible throughout the planning process so that they take ownership of and defend the recommendations when the actual decision is being made.

Ideally, there should be one group or committee to take responsibility for the process, and that group should meet the 3M Test: namely that the group has the means, motivation and mandate to implement the plan. This usually means a group with balanced representation from the technical, involvement and political streams. If it is not possible to set up such a committee, every attempt should be made to ensure continuous dialogue and interaction between these three streams.

This planning process is consistent with the Model For Improvement program that the City of Winnipeg has adopted. Based on W. Edwards Deming's Plan-Do-Study-Act cycle, it provides a conceptual base for planning processes.

### 3.3 Using the Process

The progress of activities outlined in Figure 1 apply to each task within a given planning process. In general, activities associated with each task progress from research/analysis and outreach activities to synthesis, review and reporting. Each task would follow this cycle before moving on to the next task, which keeps the process iterative and moving forward. The result will be a recommendation that goes forward to the City of Winnipeg's formal decision-making process (the Ad-Hoc Committee, the Committee of Works and Operations, and City Council).

This planning process could be triggered by a strategic planning exercise (such as a waste minimization) or by any isolated waste issue (such as the Manitoba Product Stewardship Program). As an issue is identified, it would be forwarded to WMAC, as the body responsible for coordinating the process. WMAC, working with City staff, would make any required modifications to the process to account for time or budget constraints, and then initiate the technical, involvement and political streams outlined in Figure 1. By running an issue through this process, decision-makers will be assured that the resulting recommendations are the result of an approved, integrated planning process.

The planning process is also intended to be used in an iterative manner to periodically revisit existing strategies or waste management components. It may be useful to specify an appropriate review period for each recommendation resulting from the application of this process (in much the same way the Plan Winnipeg is required to undertake periodic reviews). If possible, on-going monitoring requirements should be specified in the initial recommendations in order to ensure that there will be adequate data with which to evaluate the program.

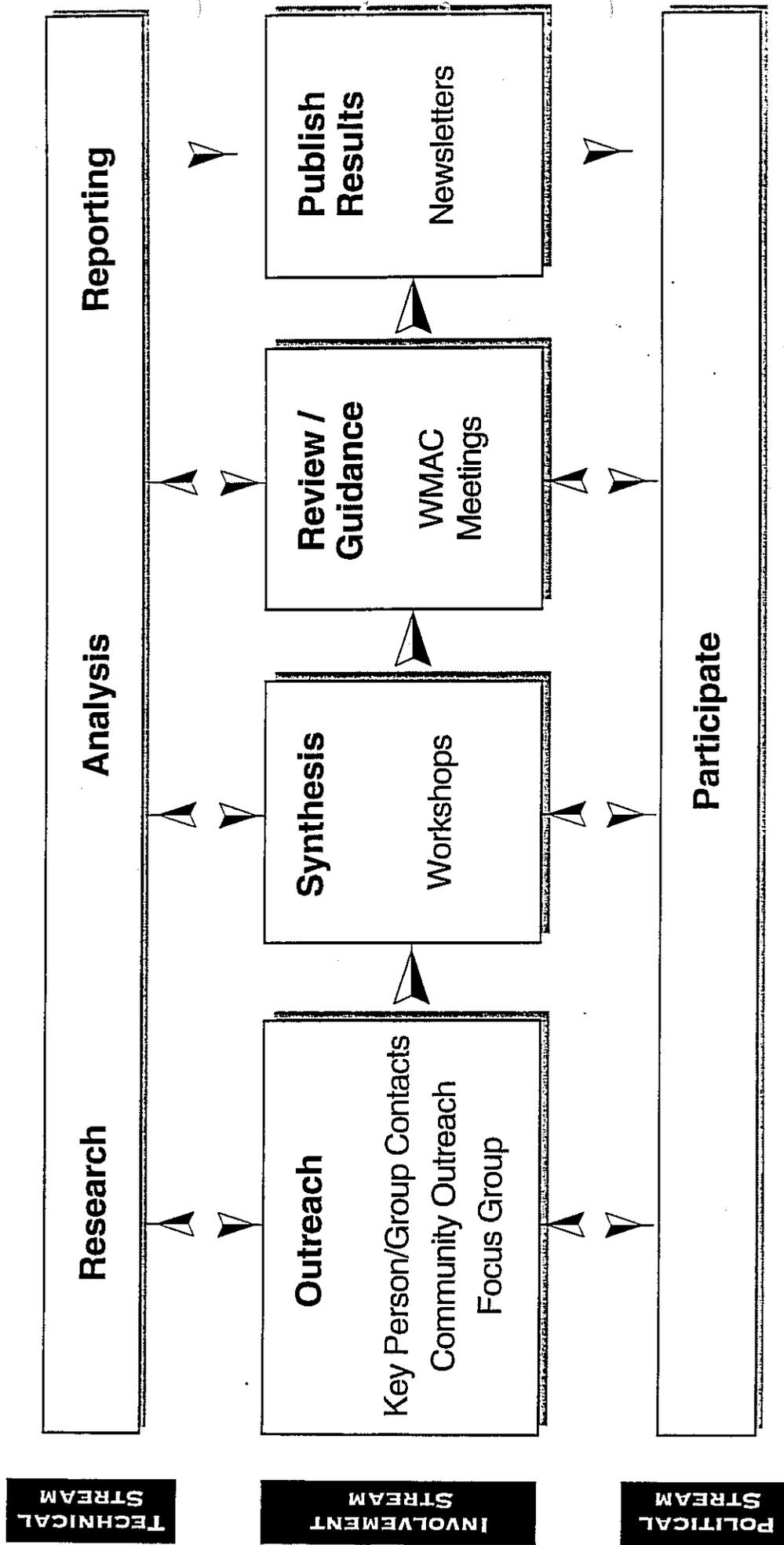
The next Chapter deals with how this generic planning process will be used to develop a waste minimization strategy for the City. However, it should be noted that there is a waste issue currently facing the City which is subject to more restrictive time constraints than the waste minimization strategy. This issue is the pressure that the Manitoba Product Stewardship Program (MPSP) is putting on the City to develop a curbside recycling program. Although ideally, the development of a recycling system should only happen after the waste minimization strategy has been adopted, political realities are forcing the City to deal with this issue immediately. However, it may be useful to subject the MPSP recycling system considerations to at least a modified version of the planning process.

## 4.0 Proposed Phase 2 Activities

The next step is to determine how to apply the generic model to address the primary objective of the study — to come up with a Waste Minimization Strategy for Winnipeg.

Feedback from the Key Person Interviews and the Process Workshop made it clear that the Phase 2 process needs to involve all of the key players: WMAC, municipal staff, politicians, environmental groups, the waste industry, the Industrial, Commercial and Institutional (IC&I) sector and the general public. Creative involvement of these players ensures that the best ideas are brought forward, and that decision-makers, implementors and waste producers all take ownership of and responsibility for the resulting waste minimization system.

**FIGURE 1**  
**GENERIC PLANNING PROCESS**



In addition, it became clear that there is a real desire and need to ensure that there is effective communication between all levels of government, and that the waste minimization strategy be integrated with provincial (and to a lesser extent federal) initiatives.

Involvement of key players alone is not-sufficient, however. There must also be the technical expertise to identify and analyze potential components, and integrate the preferred components into an effective system. The proposed process incorporates continuous interaction between the technical and involvement streams.

Basically, five products will result from Phase 2:

- 1 An overall vision statement of where Winnipeg wants to be in terms of waste minimization;
- 2 A series of evaluation criteria to guide the decision-making process;
- 3 An analysis of potential waste minimization components
- 4 An action plan that identifies immediate, mid-term and long-term waste minimization initiatives to be implemented by the City; and
- 5 Mechanisms for on-going review and revision of the action plan.

It is worth noting three distinctive characteristics of this process that set it apart from mainstream waste diversion studies:

- up-front consultative approach to designing the process;
- proposed network of community outreach sessions to solicit meaningful feedback from members of the general public; and
- development of mechanisms to ensure on-going review and revisions to the proposed waste minimization system.

The following three sections examine the study tasks, the types of activities proposed, and approaches used to obtain meaningful involvement from the different key players. This information is depicted graphically on the schematic at the back of this report.

#### 4.1 Project Tasks

There are three key questions that this strategic planning exercise should answer:

- ◇ Where are we?
- ◇ Where do we want to be?
- ◇ How can we best get there?

In order to answer these questions, the planning process has been divided into three Tasks, as discussed below and illustrated in the attached schematic. Each of these tasks will include a variety of technical research and analysis functions as well as a range of involvement activities, with a continuous exchange of information between the technical and involvement streams.

- **Task 1 Develop a Vision and Evaluation Criteria**

Task 1 will complete the background research started in Phase 1 in order to answer the question "Where are we?". The development of a waste minimization vision addresses the question "Where do we want to be?". This task will also identify evaluation criteria that help guide the answer to the question "How can we best get there?".

- **Task 2 Identifying Potential System Components**  
This task will identify a wide range of waste minimization system components. Some of these will come through the involvement program, while others will be brought forward by the consultants, based on their extensive experience with successful minimization programs throughout North America. These components will be evaluated using the criteria developed in Task 1.
- **Task 3 Developing a Waste Minimization Strategy**  
Once the most efficient, effective and appropriate components have been determined, they will be examined from a systems standpoint. Key considerations will include how different components interact and build on each others, and how to phase them in. The criteria developed in Task 1 will be used to evaluate systems. Task 3 will also develop mechanisms for on-going review and revisions to the proposed system to ensure that the system continuously evolves to meet changing waste minimization needs and technologies.

## 4.2 Involvement Activities

Each of the Tasks described above includes a number of activities designed to solicit meaningful input from all players, and get them involved in the development of a preferred system. It is important that the process remain as open as possible, while still focusing on key issues in order not to waste participants' time. Where appropriate, scoping exercises will be used to identify areas of agreement and disagreement early on. Support material will be prepared as required to give participants something to react to.

The proposed process emphasizes obtaining meaningful feedback from the "general public". These are the people who will form the backbone of any waste minimization system, and will make or break the program. However, it is difficult to get this group involved early in the process. Traditional consultation tools, such as public meetings, open houses and surveys, all have serious limitations in their ability to solicit meaningful input from residents who are not already committed to or involved in some way with waste issues. Accordingly, a network of community outreach sessions as well as two focus group sessions are proposed as the most effective ways of involving the general public in a meaningful way in this complicated and somewhat abstract process.

A discussion of the main involvement activities follows. It may be useful to refer to the accompanying schematic when reviewing this section.

### 4.2.1 Community Outreach Sessions

Interested members of groups such as WMAC, the Recycling Council of Manitoba and the Manitoba EcoNetwork will be approached to facilitate short community outreach sessions with a wide variety of community groups. These sessions will focus on the issues that will guide the strategy development process: the waste minimization vision and the associated evaluation criteria.

The main advantage of this approach is that by getting time on the agenda of an existing meeting, you ensure a captive audience. As an added benefit, you can reach a range of influential community leaders that would otherwise not have the time to participate in the process

The consultants will develop a presentation format and follow-up survey, prepare high-quality visual aids, and train interested volunteers. If possible, a local community resource person would be hired to assist in developing this material and to coordinate the contacting and booking of potential community groups. Honouraria and travel expenses will be provided to the volunteers

It is anticipated that presentations would be 20 to 30 minutes in length, with the first half providing the context and the second half focusing on discussion and completion of the surveys. The types of community groups that would be approached include community clubs, service clubs, church groups, and Y Neighbours.

If timing and budget permit, some of the later community outreach sessions will focus on particular components or systems, rather than strictly vision and criteria. Consideration will also be given to using one of the volunteers to make presentations to trade associations, staff meetings and other IC&I based groups as a means of soliciting input on business and institutional perspectives on waste minimization.

#### **4.2.2 Key Person/Group Contacts**

For many individuals and groups, one-on-one conversations and/or group meetings will be the most effective way to get their input on waste minimization issues and opportunities. This process was started in Phase 1 with the identification of 73 key persons (see Appendix A). Other individuals and groups will be added to the list as necessary. In particular, a number of key industries, businesses and trade associations will be identified and approached for input on how the system should address the waste minimization needs of the IC&I sector. Some individuals or groups will be contacted more than once to get their input on such issues as vision, criteria, components, systems and review/revision mechanisms as the study progresses.

#### **4.2.3 Focus Group Sessions**

Two focus groups will be conducted in February to gather information on a waste minimization vision and evaluation criteria. The focus groups will be used to test the ideas which have been developed to that point, and identify issues and perceptions associated with those ideas. This provides the opportunity for fine-tuning and identification of unanticipated issues, barriers, or opportunities. Essentially, focus groups will act as a preview to general public attitude toward the resulting waste minimization system.

#### **4.2.4 Workshops**

Three workshops are proposed, and will be crucial focal points for each task. They are the forum where the consultants will present the results of technical research and outreach activities, and where the stakeholders will synthesize this information and integrate the various aspects of the planning process. The theme of the workshops will relate to the three Tasks identified earlier (Vision/Criteria, Components and Strategy).

Each workshop will involve one or two break-out sessions to address the relevant issues. As with the Phase 1 workshop, key constituent groups will be identified, and participation will be solicited from leaders of these groups. A balanced mix of 20 to 30 key players will be sought, and where possible, participants will commit to attending all three workshops in order to ensure continuity.

#### **4.2.5 WMAC Meetings**

The consultant will provide progress reports to WMAC at their regular monthly meetings. At these meetings, activities to date will be reviewed, upcoming activities profiled, and if needed, modifications to the process will be negotiated. Where possible, workshops will be scheduled shortly before WMAC meetings so that WMAC can provide timely guidance on how to proceed based on the results of previous involvement activities.

#### **4.2.6 Newsletters**

To keep all players informed on the progress of the study, three separate newsletters will be prepared and circulated. The newsletters will come out at the end of each task, and will, in effect, serve as an Executive Summary of that task. The newsletters will be short (hopefully one page double-sided), and will use bullet points, graphics and interesting layout techniques to make them as readable as possible. Information on how to get involved in the process will also be included.

Approximately 1,000 copies of each newsletter will be printed. They will be made available at a range of locations such as community centres, city hall, recreation facilities and other public buildings, and will also be sent out to any key persons who have expressed an interest in receiving more information on the progress of the study. The information and graphics from the newsletter will also be offered to the print and electronic media as a way of getting the information out into greater circulation. Print media will include relevant municipal, employee, community, environmental, or trade association newsletters as well as the print and electronic media

### **4.3 Involving The Players**

The key person interviews and the process workshop in Phase 1 both raised the point that all key players had to be involved in the development of the strategy, and that each group of key players needed to be brought into the process using a specific approach and set of involvement tools. The following points highlight the approach that will be adopted to involve the key players in a meaningful way. (Refer to the matrix on the attached schematic for a detailed breakdown key player involvement by activity.)

#### **4.3.1 WMAC**

WMAC, as the client, will clearly be very involved in the process. There will be progress reports at its monthly meetings, with opportunity for the members to reflect on activities to date and provide guidance on upcoming activities. Potential changes to the process as outlined in this report will also be negotiated at WMAC meetings. As WMAC members are also opinion leaders of many of the key player groups, it is anticipated that they will also be actively involved in key person interviews and workshops.

#### **4.3.2 General Public**

As mentioned previously, the general public tends not to get involved in planning processes unless the issue in question is something that directly affects them. Accordingly, the approach to involving this group will focus on using community outreach sessions to contact the public where they are already meeting. Focus groups will also be held to gauge public attitudes in a more structured manner. In order to give the public something to react to, concise newsletters will be prepared

at the end of each task and made available to residents. These newsletters will let residents know what is happening, why it affects them, and how they can get involved.

#### **4.3.3 Politicians**

The politicians will be the eventual decision-makers on whatever system evolves out of this process, and it is therefore essential that they are involved early on. The proposed Phase 2 Strategy Development process will involve councillors through key person interviews (with them and/or their Executive Assistants) and circulation of newsletters at the end of each of the three tasks. They will also be informed in advance of community outreach sessions occurring in their district, and encouraged to attend one or more of these sessions.

Particular emphasis will be paid to involving members of the Ad-Hoc Committee, discussions early in Phase 2 will confirm how best to involve them. Ideally, a small working group with participation from City staff, the WMAC Executive and the Ad-Hoc Committee would be set up. The Board of Commissioners are other critical members of the decision-making process that will be involved in the process.

It is worth noting that councillors, as elected representatives, will have valuable information to contribute on public attitudes towards specific issues. Both they and their staff deal with the public on an on-going basis, which is all the more reason to ensure that they are informed and involved in this process.

#### **4.3.4 Municipal Staff**

Municipal staff have been quite involved in the process to date, and the proposed process ensures that this level of communication and involvement is maintained. Municipal staff from all levels will be involved in key person interviews and workshops, and will receive the three newsletters. Employee unions and associations will also be a valuable resource to draw upon. The internal newsletter that goes to civic employees as well as CUPE newsletters may also be used as a vehicle for providing information and soliciting input.

#### **4.3.5 Other Key Groups**

Appropriate environmental groups, other levels of government, the waste industry, and representative industrial, commercial and institutional establishments will be identified and approached for their input. Because each of these groups has specific concerns and perspectives, they will be approached through meetings with small representative groups (e.g. trade associations) or one-on-one using key person interviews. Representatives of these groups will be invited to participate in the workshops and copies of the three newsletters will be made available to all interested groups. Consideration will also be given to having one of the community outreach facilitators focus on these specific groups, rather than on the general public.

## 5.0 Phase 2 Schematic

The attached schematic illustrates the three tasks of Phase 2, timelines for the various involvement and technical activities occurring in each task, and the involvement of key players in different activities. It also provides a simple flow chart on the various project phases.

It should be noted that the May 31, 1995 deadline for completion of the study imposes tight time frames on the study, and will require some overlap of activities and speedy review of draft material. However, this deadline was felt to be necessary in order to give City Council the time needed to act on recommendations of the report prior to the 1995 municipal election.

By following the process outlined on this schematic, the City of Winnipeg should end up with an effective, integrated waste minimization strategy that is supported by all affected parties. Implementing the strategy will have the potential to put Winnipeg in a waste minimization leadership role among major cities in Canada. Winnipeg will also be able to use the process to review and revise the resulting waste minimization system to ensure that it responds effectively to changing conditions.

### *Note*

*This is the report as it was released in January 1995. It should be noted that a number of activities took place which significantly altered the timing, and to a lesser extent, the process, as depicted in the accompanying schematic. The two main activities that created approximately 9 months of delays were the Manitoba Product Stewardship Program consultation and the subsequent City of Winnipeg Recycling Program Request For Proposal process. It was decided that it would be inappropriate to proceed with Phase 2 while these two issues were absorbing the attention and time of staff, council, WMAC members and other stakeholders (including the public).*

*By the time Phase 2 started up in fall, the City was in the midst of a municipal election, which resulted in less involvement from the political stream than was originally anticipated. Some fine-tuning of the strategy was also required, including a deletion of the workshop and newsletter in Task 2, and the time frame became September 1995 to June 1996, instead of January to June 1995. However, the study still followed the three Tasks and various activities outlined in the schematic.*

## APPENDIX 1-1 KEY PERSON INTERVIEW LIST

*Attempts were made to reach and interview most of the following key persons. Some individuals either did not return calls, or were deferred until Phase 2 due to time constraints*

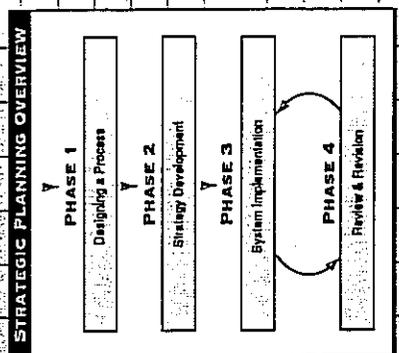
<b>Name</b>	<b>Representing</b>	<b>Date Interviewed</b>
Glen Murray	Councillor, Fort Rouge	
Terry Duguid	Councillor, North Kildonan, Ad-Hoc Committee	
Rick Boychuk	Councillor, Transcona, Ad-Hoc Committee	
John Angus	Councillor, St. Norbert, Ad-Hoc Committee	
Steve Yoshino	City, Director, Waterworks, Waste & Disposal	
Tony Kuluk	City, Solid Waste Disposal, WW&D	on-going
Kel Stewart	City, Director, Operations	Nov 25
Dave Ross	City, Staff Engineer, Operations	Nov 25
Bruce McPhail	City, Regional Engineer, Operations	
Pat Feschuk	City, Manager, Equipment, Operations	Nov 25
Bob Kalika	City, Supervisor, Refuse Collection & Disposal	Nov 25
Dwight Gibson	City, Assistant District Engineer	
Ken Rosin	City, City of Winnipeg, Street & Transportation	Nov 23
Bruce Brown	City, Works and Ops, SW District	
Jeff Fielding	City, Planning Dept	Nov 25
John Sinclair	WMAC, Natural Resource Institute, U of M	on-going
Alexandra Morrison	WMAC, RCM, On-Site	Nov 25
Wayne Simle	WMAC, Laidlaw	Nov 24
Gary Zielke	WMAC, Manitoba Hydro	Nov 29
Dennis Coley	WMAC, Canadian Waste Disposal, MEIA, exec	Nov 25
Karen McIvor	WMAC, Burns Fry, MEIA	Nov 25
Marion McKay	WMAC, Nursing, U of M	Nov 25
Mary Elias	WMAC, Consumers Association of Canada	Nov 29
Charlie McCaw	WMAC, East Kildonan-Transcona	Nov 25
Paul Moist	WMAC, CUPE	Nov 29
Don Sullivan	WMAC, City Centre, CUPE	
Saul Witman	WMAC, Lord Selkirk-West Kildonan	
Andrew Hay	WMAC, Coalition for Land & Water Stewardship	
Janice Westlund	WMAC, Assiniboia, Manitoba Eco-Network	Nov 25
Kim Sigurdson	BFI	
John Smith	J.A. Smith Co. Ltd.	
to be confirmed	Haul-Rite Environmental	
Jeff Golfman	Plan-It Recycling	Nov 24
Francis Kungu (Mr)	Green Box Recycling	
James Zonneveld	Red Box Recycling	Nov 24
Jim Fogg	Manitoba Soft Drink Recycling	Nov 24
Jim Moore	Versatech Industries	Nov 25
Thomas Henley	NRI, U of M	Nov 28
Bob Fenton	Economics, U of W	
Peter Miller	Philosophy, U of W	Dec 9

# A WASTE MINIMIZATION STRATEGY FOR WINNIPEG

## PHASE 2 - STRATEGY DEVELOPMENT

		January	February	March	April	May	June
<b>Task 1 - Vision/Criteria</b>	Activities						
	Key Person/Group Contacts		▲				
	Focus Group Session		▲				
	Workshop						
<b>Task 2 - Components</b>	WMAC Meetings		▲				
	WMAC Research and Analysis						
	Vision/Criteria Statement						
	Newsletter						
<b>Task 3 - Strategy</b>	Community Outreach Sessions						
	Key Person/Group Contacts (cont'd)			▲			
	Workshop			▲			
	WMAC Meeting						
<b>Task 3 - Strategy</b>	Technical Research and Analysis						
	Components Summary						
	Newsletter						
	Community Outreach Sessions (cont'd)						
<b>Task 3 - Strategy</b>	Key Person/Group Contacts (cont'd)						
	Workshop						
	WMAC Meetings						
	Review of Draft Strategy						
<b>Task 3 - Strategy</b>	Technical Research and Analysis						
	Waste Minimization Strategy						
	Newsletter						
	Community Outreach Sessions (cont'd)						

● Essential  
 ⊕ Invited, but not essential  
 ▲ Meetings  
 ■ Reports  
 □ Draft report



**INTERGROUP  
CONSULTANTS LTD.**

Name	Representing	Date Interviewed
Rudy Shilling	Engineering, U of M	Dec 7
Daryl McCartney	Civil Engineering, U of M	Dec 7
Paul Thomas	Politics, U of M	Dec 7
Glen Koroluk	RCM	Nov 28
Daryl Keating	RCM	
Rick Penner	Man-West Environmental Group	
Rick Cooke	Man-West Environmental Group	
Karen Rees	Marr Consulting	
Steven Rauh	Manitoba Eco-Network	
Toby Maloney	Manitoba Eco-Network	Dec 7
Anne Lindsey	Manitoba Eco-Network (Exec. Dir)	Dec 9
Jack Dubois	Man & Nature	Nov 25
Jenny Hillard	Collard Consulting Network	Nov 25
Nick Carter	U of M, Manitoba Eco-Network	
Wayne Neily	(ex Director) Environmental Council	
Alun Richards	Manitoba Hazardous Waste Management Group	Nov 23
Barb Connel	AECL	
Marilyn Sequire	Chair, St. Vital Sch Div & Env Act Com	
Jerry Speigel	Manitoba Environment, WRAP	Nov 28
Ron Michalishyn	Manitoba Hydro	Dec 7
Bill Barto	Sustainable Devopment Coord. Unit	Dec 9
Sheldon McLeod	CCME	Dec 9
Frank Cosway	Int'l Instit for Sustainable Development	
Annette Giroux	Parent Coord, School Recycling Program	
Rick Morrell	SWRC, Can Env Network Waste Caucus	
Barbara Wallace	Citizens Clearinghouse	Dec 29
John Jackson	Ont Env Network, Waste Caucus	
George Priddle	U of Waterloo, Env. Studies	
Michael Van Wellingham	Past Pres., MEIA, VP of CETAC	
Bob Pile	VP, MEIA, ID Engineering	Dec 7
Bill Armstrong	Energy Pathways	Dec 6
Clifford Maynes	Ontario Environment Network	Dec 29
Mary Rowe	MWR Associates	Jan 2

## APPENDIX 1-2

### DECEMBER 1, 1994 WORKSHOP SUMMARY

#### INTRODUCTION

A workshop was held in the evening of December 1, 1994 in meeting facilities at City Hall. The goals of the workshop were to:

- work towards an evolving planning process and waste minimization system;
- determine how best to involve target groups in the planning process;
- involve key people early in the planning process; and,
- encourage interaction and exchange of information and ideas.

Attempts were made to achieve a balanced mix of participants, including politicians; municipal, provincial, and federal staff; members of the Waste Minimization Advisory Committee; haulers, recyclers, and processors; interested parties such as the Recycling Council of Manitoba and Manitoba Eco-Network; and individuals who had demonstrated an interest and/or knowledge in environmental concerns or process methods. A list of workshop participants is provided in Figure 1.

Workshop participants were briefed on the agenda, the workshop goals, principles of effective consultation, issues which arose from the Key Person Interviews conducted prior to the workshop, and municipal decision-making processes. They were then split into three balanced break-out groups to complete a work sheet. After re-convening to the large group, each break-out group provided a verbal summary on their break-out session. A plenary session was then held on consultation tools and techniques.

#### BREAK-OUT SESSIONS

Participants at the break-out sessions were asked to respond to two questions:

1. How best to involve key target groups (Politicians, General Public, Municipal Staff, Industry, Other Interested and Affected Parties)?
2. Prioritize the target groups from the standpoint of where to focus efforts.

A summary of the break-out session discussions is provided in Table 1.

#### PLENARY SESSION

The discussion in the plenary session focused on what tools and techniques could be used to involve the target groups in developing and buying into the solid waste minimization strategy. A brief summary is provided below.

##### General Public:

- get at parents through kids
- ask politicians what tools work
- provide a challenge (e.g., initiate a competition) to motivate groups to create ideas and/or capture objectives

- shopping mall displays for information
- "Participation" model
- use private sector recyclers - they are already acting as an eco-hotline for the public
- use focus groups for generating ideas and soliciting reaction to issues
- get input, reaction from kids in Phase 2 - use demonstrative techniques (e.g., garbage bag dump)
- surveys for reaction
- community outreach programs - go out to the public through existing networks, e.g., "Y Neighbours":
  - this approach worked well for some participants in the past
  - would be comparable to focus groups for the purposes of the study, but with additional benefits
  - it is essential that questions are carefully worded
- the approach is very important - think through representations being made to the public

#### **Politicians:**

- can access politicians through the general public - encourage the public to talk to their councillors
- politicians need to be part of the planning team
- need to be able to sell the program to the politicians on the grounds that it is publicly acceptable and financially reasonable
- meet with politician's Executive Assistants
- include the Board of Commissioners in the process
- involve provincial politicians, not just City Councillors

#### **Municipal Staff:**

- have to bring the right level of bureaucracy along with the process - it is important to have municipal staff involved to make the transition from planning to implementation

FIGURE 1

LIST OF PARTICIPANTS AT DECEMBER 1, 1994 WORKSHOP

<u>Name</u>	<u>Representing</u>
Steve Yoshino	City of Winnipeg, Waterworks, Waste & Disposal
Tony Kuluk	City of Winnipeg, Waterworks, Waste & Disposal
Dave Ross	City of Winnipeg, Operations
Kel Stewart	City of Winnipeg, Operations
Bob Kalika	City of Winnipeg, Operations
Bill Woroby	City of Winnipeg, Operations
Jeff Fielding	City of Winnipeg, Planning
Jerry Spiegel	Manitoba Environment
Alexandra Morrison	WMAC, Recycling Council of Manitoba
Gary Zielke	WMAC, Manitoba Hydro, Riel Community Committee
Dennis Coley	WMAC, MEIA
Marion McKay	WMAC
Paul Moist	WMAC, CUPE
Janice Westlund	WMAC, Manitoba Eco-Network
John Sinclair	WMAC, University of Manitoba
Jenny Hillard	Independent
Nick Carter	Independent
Karen Rees	Independent
Glen Koroluk	Recycling Council of Manitoba
James Zonneveld	Red Box Recycling, National Containers
Alfred Von Mirbach	Study Team
Dennis DePape	Study Team
Dawna Wallace	Study Team

**TABLE 1  
BREAK-OUT SESSION GROUP SUMMARIES**

	Group #1	Group #2	Group #3
<i>1. How can we best involve the following target groups?</i>			
<b>Politicians</b>	<ul style="list-style-type: none"> <li>• face-to-face communication</li> <li>• votes (public support)</li> <li>• information on payback - what is in it for them? Need to sell it to them</li> <li>• harness sense of urgency created by MPSP</li> <li>• do not forget MLAs</li> </ul>	<ul style="list-style-type: none"> <li>• are ultimate decision makers - key group</li> <li>• give politicians input to the process and feedback</li> <li>• Ad Hoc first - then to Works and Operations - then to 15 politicians</li> <li>• provincial and public pressure</li> <li>• status reports/presentation to Ad Hoc with other councillors invited</li> <li>• use politicians as spokesperson - get them to buy in this way</li> </ul>	<ul style="list-style-type: none"> <li>• should be part of the process</li> <li>• regular feedback should be provided to the politicians - they do not like surprises</li> <li>• politicians like to get feedback from their constituency, and like the opportunity to voice their own views, as well</li> <li>• there must be communication between municipal and provincial players - The Capital Region Committee is good</li> </ul>
<b>General Public</b>	<ul style="list-style-type: none"> <li>• go to the public rather than have public come to you</li> <li>• direct to businesses</li> <li>• public relations campaign</li> <li>• identify and use community leaders</li> <li>• make distinction between the aware and the unaware</li> <li>• use existing community networks to get info out and input back</li> <li>• consider hockey games, service clubs, residents' associations, malls</li> <li>• focus groups can be useful</li> <li>• WRAC conference had over 1,000 participants</li> <li>• scope sessions to keep consultation focused</li> </ul>	<ul style="list-style-type: none"> <li>• go to where people are instead of getting them to come to you</li> <li>• representation from community level - train individuals and send them out to community to make presentations and get input</li> <li>• public has been over consulted - maybe start a few steps down the road</li> <li>• publish discussion document of understanding, concept/vision, then get reaction</li> <li>• alternative is to go through issue identification step</li> </ul>	<ul style="list-style-type: none"> <li>• this target group needs to be subdivided, e.g., by age, socio-economic status, or geographic region (i.e., core/suburban)</li> <li>• education is important</li> <li>• the general public needs practical, hands-on, direct/tangible instruments to understand and support</li> <li>• feedback and input required early in the process</li> <li>• the timing of information campaigns to the public is very sensitive (should not be too early - information must be well developed and accurate)</li> </ul>
<b>Municipal Staff</b>	<ul style="list-style-type: none"> <li>• get staff to buy into process by enlisting their help, etc.</li> <li>• not a big problem</li> <li>• has been disjointed, but current re-organization will improve that</li> </ul>	<ul style="list-style-type: none"> <li>• not covered, but rated as very important in making effective transition from planning to implementation - could scuttle proposals if they are not workable</li> </ul>	

Table 1 - 2

	Group #1	Group #2	Group #3
Industry	<ul style="list-style-type: none"> <li>• CMA, Chamber of Commerce</li> <li>• parent industry groups</li> <li>• will have to be careful because green initiatives are often seen as incompatible with profit</li> <li>• follow the ISO 9000 model?</li> </ul>	<p><b>Solid Waste Industry:</b></p> <ul style="list-style-type: none"> <li>• access through association - major players may require other also</li> <li>• collection, processing, manufacturing must be covered</li> <li>• check if there is a feedback mechanism through associations</li> </ul> <p><b>User/ICI:</b></p> <ul style="list-style-type: none"> <li>• are really part of public</li> <li>• access through associations</li> <li>• general public processes</li> <li>• should be part of the consultation process</li> </ul>	<ul style="list-style-type: none"> <li>• "Industry" should distinguish between the waste industry (i.e., processors, etc.) and the waste producers (ICI should have their own category)</li> <li>• the timing of information campaigns to the general public is critical to the impact on the waste industry (the process should be careful to consider the impact on the waste industry)</li> <li>• ICI target groups should be subdivided - different approaches will be required for different types of waste producers</li> </ul>
Others			<ul style="list-style-type: none"> <li>• environmentalists and ICI as separate target groups</li> </ul>
Comments			<ul style="list-style-type: none"> <li>• when determining the process, answer this question from the perspective of each group: "What is in it for me?" - develop a process that provides incentive, motivation for each target group to support and participate in the strategy.</li> </ul>
<b>2. Priorize the target groups - Where should efforts be focused?</b>			
	<ol style="list-style-type: none"> <li>1. General Public</li> <li>2. Politicians</li> <li>3. Industry</li> <li>4. Municipal Staff</li> </ol>	<ol style="list-style-type: none"> <li>1. Politicians (and related to politicians are Municipal Staff, because staff can rework a document/strategy repeatedly so they can work with it)</li> <li>2. General Public and Industry</li> </ol>	<ul style="list-style-type: none"> <li>• all target groups are equally important in the process.</li> </ul>

## Section 2

# Vision Workshops Report

### 1.0 Introduction

The primary goal of these workshops was to help WMAC come up with key concepts to be integrated into a vision statement that will provide consistent direction for the waste minimization system development process. To allow as many people as possible to attend, two workshops were held, one in the evening and another one the following morning. Approximately 70 key people from the municipal, provincial, academic, private and non-profit sectors were invited. A total of 22 people attended one or the other of the workshops (see 5.0 for details).

### 2.0 Content

The workshops began with a brief introduction on the process and the key players, and a round of self-introductions. This was followed by some context for visioning, including comments on what a vision statement should be and how it would be used, as well as examples of vision statements from other processes.

This was followed by a "postcard exercise", where participants were asked to write down what they thought were the key concepts that would guide Winnipeg to the sort of waste minimization system they thought should be in place by the year 2010. Participants were divided into two breakout sessions to discuss the issues they had come up with individually.

The workshop then reconvened as one group, and the concepts that were raised by both groups, or were seen essential to either group, were brought forward and discussed in detail. Attempts were made to cluster common or related themes, and then find the concept or terminology that best reflected the group of related themes. Many of the concepts raised in both workshops overlapped, although each workshop had a slightly different focus. 3.0 lists the key concepts.

The last activity was a simple targeting exercise, where participants were asked to put different coloured dots on a scale from 0% to 100%. These dots showed the diversion target the City of Winnipeg should realistically be able to reach by the year 2000 and 2010. Some context was provided by showing where Winnipeg currently is and what targets have been adopted in other regions. 4.0 provides details on this exercise.

### 3.0 Key Concepts

- stewardship
- sustainability (environmentally sound and economically viable)
- waste as a resource
- resource utilization (waste as a resource)
- integrated into a way of life
- involving all stakeholders
- maximizing environmental, economic and cultural benefits
- equipping people/stakeholders to make appropriate choices

- pride
- participation
- embraced by the community
- evolving (continuously improving)
- leading to a healthy community (improving quality of life)
- minimizing waste
- supporting the 3R hierarchy
- responsibility/accountability
- innovation
- flexibility
- balance
- include Plan Winnipeg and its environmental stewardship theme as a context

It should be noted that there was a lack of consensus in both workshops on the use of terminology such as stewardship, sustainability and resource utilization. Many participants felt that these terms were not sufficiently understood by the general population, or were open to many interpretations. Also participants seemed to have different senses of the basic objectives for the strategy; some felt it was resource utilization, others waste minimization.

## 4.0 Targets

The waste diversion targets for the year 2000 ranged from 30% to 59%, with an average of 43%. The year 2010 targets ranged from 37% to 90%, with an average of 68%. Targets in the first workshop were considerably higher, on average, than in the second workshop.

## 5.0 Attendance

September 27th, 1995: 7:00 to 9:30 pm

Dennis Coley, MEIA \*  
 Glen Koroluk, RCM  
 Tony Kuluk, City of Winnipeg \*  
 Greg Libbrecht, Health Sciences Centre  
 Daryl McCartney, U of M  
 Ron Michalishyn, Manitoba Hydro  
 Paul Moist, CUPE \*  
 David Ross, City of Winnipeg  
 John Sinclair, NRI \*  
 Jerry Speigel, Manitoba Environment  
 Janice Westlund, Manitoba EcoNet \*

September 28th, 1995: 9:00 to 11:30 am

Ken Buhr, D.S. Lea Associates \*  
 Nick Carter, Manitoba Eco-Network  
 Pat Feschuk, City of Winnipeg  
 Helen Jones, BFI  
 Tony Kuluk, City of Winnipeg \*  
 Chris Leach, Urban Affairs  
 Anne Lindsay, Manitoba Eco-Network  
 Mike Lysyk, St. Boniface General Hospital  
 Rod McCormick, Manitoba Environment  
 Jennifer Peters, RCM  
 Cliff Tuttle, City of Winnipeg  
 James Zonneveld, Red Box Recycling

\* WMAC members

**Facilitators:** Alfred Von Mirbach • Denis De Pape • John Osler

## 6.0 WMAC's Vision

Using the input from this workshop, a draft vision statement was developed and further input solicited in the first newsletter. Comments received back from the first newsletters, as well as comments at WMAC meetings were then integrated into the following revised vision statement, which WMAC agreed upon at their meeting of April 17th, 1996.

### **Vision Statement**

The City of Winnipeg's waste minimization strategy envisions a community whose citizens collectively assume responsibility for the waste they generate, share the goal of eliminating waste wherever possible through systems that adhere to the 3R's hierarchy (Reduction, Reuse, Recycling), and manage residual waste through efficient, cost effective systems.

## Section 3

### Newsletter 1: Draft Vision and Evaluation Criteria

#### 1.0 Background

As part of the public consultation process developed in Phase I, a series of newsletters were to be produced to inform the broader public and interested groups on progress with the waste minimization strategy plan.

The first newsletter was produced following the Vision Workshop to provide the public with information about WMAC's activities and seek comments on the draft vision that had been developed out of the Vision Workshop in September. In addition to this, WMAC sought comments on a sample of evaluation criteria that could be considered in assessing various program options.

The newsletter was mailed directly to each participant in the Workshop, City councillors, key City staff and relevant stakeholders from the public and private sector that had been identified in Phase I. The newsletter was also circulated at the community outreach sessions and to participants in the focus group sessions

In total, approximately 500 newsletters were circulated. From that circulation, WMAC received written comments from 30 persons who had received the newsletter. A copy of the newsletter is attached.

#### 2.0 Comments on the Draft Vision

Of the 30 respondents, 6 provided comments on the draft vision. Three respondents suggested complete rewordings of the vision statement while others suggested replacements of specific words or phrases to help clarify specific statements.

Both these comments and the comments from WMAC will be incorporated into a continuously changing document.

#### 3.0 Comments on the Draft Evaluation Criteria

Of the 30 respondents, 28 provided comments on the draft evaluation criteria. A summary of these comments is provided in the table below.

In addition to the criteria provided by WMAC, some respondents suggested that additional criteria should be considered. The most frequently suggested additional criteria was that any initiative should provide an educational component as one of its objectives. This corresponds positively to the comments from the focus groups sessions, who also suggested that the educational value of a initiative should be an important aspect in assessing any initiative.

Some respondents specifically stated that use of proven technology should not be included in the evaluation of waste initiatives and another felt that ease of implementation should not be considered in any evaluation of initiatives.

<b>Evaluation Criteria</b>	<b>Frequency</b>
Stimulates local economic development	8
Promotes reduction at source	7
Uses proven technology	1
Is easy to implement	6
Meets or exceeds waste diversion targets	4
Is adaptable	3
Encourages active participation	4
Produce products for which markets exist	4
Is financially viable	8
Encourages the 3Rs hierarchy	4
Polluter pays vs taxpayer burden	2
Enhances education about subject	3
Complementary to other components	1

# Minimizing Waste in Winnipeg

November  
1995

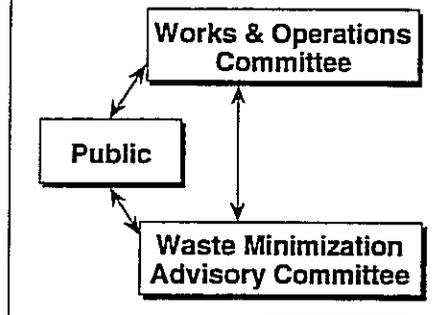


## Why Minimize Waste?

There are many reasons to minimize the amount of waste we create, but they really all come down to conserving resources. It just doesn't make sense to bury material if we have a way to reuse or recycle it, nor does it make sense to have wasteful products or packaging.

*"We must shift from our present focus on waste management to a focus on the conservation and appropriate use of resources. As long as we think primarily of how to deal with waste, even if our objective is to minimize waste, we will ignore the fundamental use of resources."* (Jackson and Wallace, 1993)

## WMAC'S ROLE

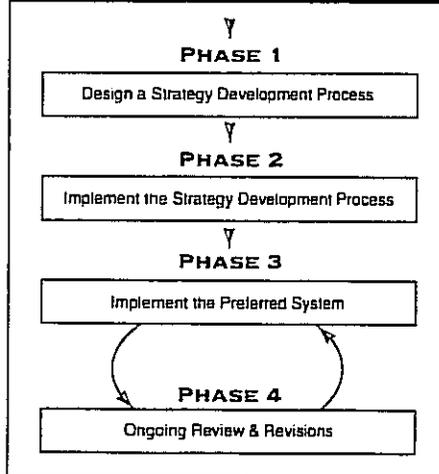


## Who is WMAC?

WMAC (the Waste Minimization Advisory Committee) is a citizens' committee that fosters communication on waste issues, and provides guidance and advice to the City's Committee on Works and Operations.

To help Winnipeg use resources wisely, WMAC is undertaking a Waste Minimization Strategic Planning Process with funding provided by the City of Winnipeg.

## STRATEGIC PLANNING OVERVIEW



## A Waste Minimization Strategy for Winnipeg

The development of a waste diversion strategy will provide guidance and direction for an effective Waste Minimization System. That system must include much more than just a recycling program. It must include components which address the entire waste stream.

The Waste Minimization Strategy is now well underway, with help from the REIC/InterGroup consulting team. Phase One, which was completed in January of this year, established a strategic planning process that includes extensive public consultation. This process will be used on an on-going basis to ensure that the strategy and resulting system continues to grow and evolve.

## PHASE 2 NEXT STEPS

- identify potential system components
- combine components into systems
- compare alternative systems
- recommend a preferred system

Phase 2 began with two visioning workshops. The project team is now looking at possible system components, using the planning process from Phase 1. By the end of this year, WMAC is hoping to have the draft waste minimization strategy ready for approval and implementation.



**We Need  
Your input!**



### The Vision Workshops

At the Visioning Workshops in late September participants were asked to help develop a vision for where they thought waste minimization should be in 20 years.

The concepts put forward at this workshop have been distilled into a draft vision statement.



*Please edit this vision to make it better reflect what you think Winnipeg's Vision for waste management should be.*

### DRAFT VISION

*The City of Winnipeg's waste minimization strategy is based around a vision of a community:*

- that treats waste as a resource that enhances the environmental, economic and social life of the city;*
- whose residents and businesses integrate responsibility for the waste/resource stream into their way of life;*
- with a waste/resource system that is effective, efficient, flexible and sustainable.*

*Please fax your comments to 943-3922 or mail to (include additional comments on a separate page, if needed).*

### CRITERIA

There are many different ways to minimize waste – from new technology to public education. These components, or waste minimization systems, are now being identified and will be grouped into alternative integrated waste minimization systems. In order to recommend the best system, we will need to compare the alternatives using consistent criteria.

Some possible criteria are listed below. Cross out any criteria you think are not important, add criteria you think we missed, and put a  $\checkmark$  in the box next to the three criteria you think are most important.

- *Stimulates local economic development.*
- *Promotes reduction at source.*
- *Uses proven technology.*
- *Is easy to implement.*
- *Meets or exceeds waste diversion targets (e.g. 50%).*
- *Is adaptable.*
- *Encourages active participation.*
- *Produce products for which markets exist.*
- *Is financially viable.*
- *Encourages the 3Rs hierarchy. (Reduce, Reuse & Recycle)*
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Most important

<input type="checkbox"/>

### Community Outreach Sessions

Community Outreach Sessions are currently underway. These involve trained facilitators going out to a wide range of community groups in the City and making short presentations on waste minimization. Participants are then asked to fill out a short questionnaire.

If you would like someone to come out and talk to your community group or would like a copy of the questionnaire, please call: Glen Koroluk, Recycling Council of Manitoba at 925-3777

**Do you have questions or need more information? Call or write:**

John Osler  
InterGroup Consultants  
604-283 Portage Avenue  
Winnipeg, R3B 2B5  
(204) 942-0654

**or**

John Sinclair  
Chair, WMAC  
Natural Resources Institute  
University of Manitoba  
Winnipeg, R3T 2N2  
(204) 474-8374

# Section 4

## Focus Group Report

### 1.0 Introduction

As part of Phase II of the WMAC Winnipeg Waste Minimization Strategy, two focus group sessions were held following the Vision Workshop and development of the draft vision statement.

The purpose of the focus group sessions was to test the vision statement developed at the Vision Workshop, examine the potential evaluation criteria for the various program components and confirm that the direction WMAC and stakeholders are adopting is reasonable and acceptable. These sessions allowed WMAC the opportunity to identify and address unanticipated issues.

The two focus group sessions were held at a downtown hotel in Winnipeg in early November, 1995. Participants were selected by random telephone number and qualified to ensure a representative sample was present at each session. A total of 18 people participated in both sessions. Participants were financially compensated for the approximate 2 1/2 hours spent in the sessions.

In addition to presenting the draft vision statement and evaluation criteria, participants were asked to comment on how they might address the issue of organic waste. This provided an opportunity to see how a particular component would be treated by residents in Winnipeg and to determine how the evaluation criteria might be applied. Organic waste was selected as a sample component because it is easily identifiable with the general public and is a component that will require residential support to be successful.

The following sections highlight general comments from each focus group session.

### 2.0 Vision Statement

Focus group participants were asked to examine each of the three points that make up the draft vision statement. They were asked for their level of understanding of the statements and for their interpretation of each statement. Participants were then asked what they considered to be important elements in a successful waste minimization strategy. Tables 1 and 2 contain the notes from each of sessions.

Generally, participants had difficulty understanding the vision statement. Some participants felt it was too long while others stated that it had to be long to clearly state the objectives of waste minimization. After each of the points were explained to participants, both groups felt the draft vision statement was appropriate and reasonable. On each of the points, participants had the following comments:

#### **Waste is a resource**

- Waste should be considered a resource.
- Awareness of waste issues has increased over the last five years and will continue to increase in importance in the future.
- Education is the key to changing persons' perceptions about waste.
- Considering waste as a resource depends on an individuals' economic background.

### **Integration of responsibility**

- Educating people is key to encouraging them to assume responsibility. One group felt that legislated change would be required to make things actually work.
- Participation is an important requirement to developing responsibility.
- Concern was raised that industry wasn't doing its part in minimizing waste.
- Assuming responsibility for the waste stream will be difficult in multifamily dwellings and in lower income areas where waste management is a shared responsibility or not a priority.
- Both groups suggested limiting the number of bags picked up per week or implementing a charge for bag collection to encourage responsibility amongst residents.

### **Waste/resource system**

- Market forces should be the prime focus; initiatives should all have market applications.
- Market forces should be the main driver for waste minimization.
- Government should provide support only when and where necessary.

## **3.0 Evaluation Criteria**

Each of the draft component evaluation criteria were described and presented on cards to the participants and then displayed in random order. Participants were then directed to place cards into clusters they considered to have similar characteristics. From each cluster, participants selected what they considered to be the most important criteria. The results of this exercise for each session are included in Tables 3 and 4.

In general, both groups felt that the ability to educate participants on waste minimization was one criteria that was missing. Both groups identified the need to have criteria that assess economic viability, although one group interpreted this as a need to focus primarily on financial viability, the other groups interpretation was that it produce products for which markets exist.

Both groups felt that assessing initiatives that consider proven technology was too limiting.

## **4.0 Treatment of Organic Waste**

The purpose of this exercise was to test the application of the vision statement and evaluation criteria to a possible component of the waste minimization strategy. Organic waste was selected because it was easily identifiable by residents and it is an actual issue that will be addressed in the waste minimization strategy.

Participants were presented with the issue of treatment of organic waste and two alternatives for addressing the issue. The first alternative was the collection and central composting of organic waste and the second alternative was individual composting by residents. Participants were asked to comment on each alternative, identify the benefits and costs of each and indicate which they would prefer.

Most participants considered residential composting a good opportunity to demonstrate responsibility for their waste. Some participants felt that treatment of waste should remain the responsibility of the City.

Comments against residential composting centred around the lack of time available to compost, and the perception that composters smell, they are unsightly, or they take up too much space. Both groups identified a difficulty in encouraging participation in multi-family dwellings because of the shared responsibility issue. Both groups also felt strongly that there is a lack of adequate education on how to use a composter.

Most participants stated that they would prefer a residential composting alternative to central collection if they were told how to properly use it and received some financial support with purchase.

Table 1  
Meeting 1 General Comments

1. Draft Vision

**General Comments**

- Agree that waste should be treated as a resource but people can't appreciate it as a resource unless they are educated about it.
- Time is a more important resource in a person's life than waste.

**Point One: Waste a Resource**

- Different parts of the city have different priorities (e.g., inner city vs.. suburbs).
- Most people don't care about where the garbage ends up.
- Waste and environmental issues have increased in importance over the last three years and will continue to be increasingly important in the future.
- More difficult for apartment residents to take responsibility for waste than those living in single family dwellings.
- Limit the number of bags allowed for collection.
- Penalize people who don't recycle like you would for somebody who litters
- Pay for recyclables like they do in Alberta.

**Point Two: Responsibility**

- Different parts of the city have different priorities (e.g., inner city vs.. suburbs).
- Most people don't care about where the garbage ends up.
- Waste and environmental issues have increased in importance over the last three years and will continue to be increasingly important in the future.
- More difficult for apartment residents to take responsibility for waste than those living in single family dwellings.
- Limit the number of bags allowed for collection.
- Penalize people who don't recycle like you would for somebody who litters
- Pay for recyclables like they do in Alberta.

**Point Three: System**

- Education is key to any system's success.
- What are we going to do with household hazardous waste?
- Private sector market has to be the driver for the system.
- Governments should help only where the private sector absolutely can't.

2. Evaluation Criteria

- "Promotes education on the issue" is missing as a criteria.
- "Encourage reduction at source" is important.
- Thought that "promotion of economic development" and "produces products for markets" were the same thing worded differently.

*Table 3 summarizes the grouping of evaluation criteria by the participants.*

3. Treatment of Organic Waste

- City has an obligation to collect.
- Personal time is more valuable than composting.
- Education is needed (composters smell, unsightly, take up too much space).
- How will apartment dwellers participate?
- Agricultural industry could use central compost for spread material on fields.
- Little incentive unless there's a way of reducing taxes homeowners can identify.
- Would compost if provided for free and educated about use.

Table 2  
Meeting 2 General Comments

1. Draft Vision

**Point One: Waste a Resource**

- Agree waste should be treated as a resource.
- Feel economic viability is the key.
- Low participation.

**Point Two: Responsibility**

- City has the responsibility to collect.
- Limit the number of bags.
- Provide incentives to encourage participation.
- Government must monitor responsibility.
- How many people participated in private recycling programs.
- Industry should demonstrate responsibility.

**Point Three: System**

- More important issue than 5 years ago and will continue and will be sustainable.
- Winnipeg & Manitoba is still "behind" other parts of the country.
- Distance from markets for recyclables is a problem.
- Need education (schools programs have a great impact - garbageless lunches).
- Industry is using this whole thing as a PR exercise.

2. Evaluation Criteria

- Financial viability important.
- Has to be market driven.
- Include government only where private sector cannot or viability not present.
- Adaptable assumes some foresight.
- Adaptable - have to deal with the future now.
- Missing evaluation that "Provides an Education Component".
- Local economic development not absolutely required.
- Meets or exceeds target: depends on situation, difficult to quantify, agreed a target is important.
- Targets: Total target for waste reduction vs individual program target.

*Table 4 summarizes the grouping of evaluation criteria by the participants.*

3. Treatment of Organic Waste

- Easier for apartments/multi-family dwellings.
- Think the full cost will be higher if using collection instead of backyard composting.
- Composters are unsightly.
- City has obligation to collect.
- There might be some cost recovery if marketed compost at Brady landfill site.
- Lack of education on how to compost.
- Lack of time available to compost.
- Like the idea that residential composting encourages responsibility.
- Generate more compost than require.
- Health regulation (attracts vermin).
- Easier to compost than to bag.
  - Prefer the option to compost than limits on bags.

Table 3  
Meeting 1 Evaluation Criteria Assessment

1. Considered Essential
  - Encourages Active Participation
  - Produces Products for Markets
  - Is Adaptable
  - Easy to Implement
2. Considered Important
  - Promotes reduction at source
  - Encourages 3Rs hierarchy
  - Stimulates local economic development
  - Is financially viable
3. Considered Limiting
  - Uses proven technology
  - Meets or exceeds waste diversion targets

Table 4  
Meeting 2 Evaluation Criteria Assessment

1. Considered Essential
  - Easy to Implement
  - Is financially viable
  - Meets or exceeds waste diversion targets
2. Considered Important
  - Encourages active participation
  - Promotes reduction at source
  - Encourages 3Rs hierarchy
  - Stimulates local economic development
  - Is adaptable
  - Produces products for which markets exist
3. Considered Limiting
  - Uses proven technology

# Section 5

## Community Outreach Sessions

*(prepared by the Recycling Council of Manitoba)*

### 1.0 Intent and Description

The framework of these community outreach sessions was identified in 4.2.1 of the Phase 1 Report (see Section 1 or summary included as Appendix 5-1 of this Section). The community outreach presentations were structured to provide background information to the public on the overall waste minimization planning process and the issues pertinent to the development of the waste minimization strategy. The sessions also provided a context for the completion of surveys (see pages 5-6A and 5-6B) which were distributed during each session. As well, the sessions measured community perceptions and attempted to identify other issues or trends previously unidentified.

The sessions ranged from 10 minutes to one hour in duration dependent on the interest of the group and consisted of the following format:

- 1 Introduction
- 2 Background
- 3 Discussion period
- 4 Survey introduction
- 5 Survey completion
- 6 Thank you

After each session the presenter completed a speaker's report noting the key questions that were asked and providing an interpretation of the overall mood of the group. An analysis of the surveys and speakers' reports will follow later in this report.

REIC/InterGroup developed the background visual material in the form of foam core panels (Appendix 5-2), trained the presenters, and developed the questionnaire with input from the Recycling Council of Manitoba (RCM) and the Waste Minimization Advisory Committee (WMAC). It was anticipated that the Recycling Council of Manitoba would present to 40 to 45 groups over the duration of the project and complete a minimum of 200 surveys.

The groups identified to be contacted were as follows:

- Resident Advisory Groups (RAGs)
- Resident Associations
- Environmental Groups
- Business Improvement Zones
- Community Re-vitalization Program Committees
- Tenant Associations
- Other community organizations to be identified

## 2.0 Community Contact Summary

The Recycling Council of Manitoba completed 38 outreach sessions to resident associations, resident advisory groups, environmental groups, industry associations, business improvement zones and community revitalization programs in the City of Winnipeg during the months of September, October and November of 1995. In total, 487 participants attended these sessions and 345 surveys were received (Appendix 5-3). A further breakdown of the groups contacted indicates that roughly 1/3 of these organizations can be regarded as environmental groups, 1/3 can be regarded as business/industry groups and 1/3 as community/resident organizations (Appendix 5-4).

The vast majority of presentations made were to the boards of the various organizations. The presentations and the ensuing question and answer periods ranged from ten minutes to one hour in duration dependent on the expressed interest. On occasion when interested organizations were not meeting and presentations could not be arranged, the RCM distributed the surveys and the *Minimizing Waste in Winnipeg* newsletter to these groups.

## 3.0 Speaker Report Summary

In general, numerous questions were raised with respect to the development, structure, and mandate of the City's Waste Minimization Advisory Committee (WMAC). Participants requested detailed information regarding how WMAC was formed and how it is funded. Participants wanted to know if it was a City of Winnipeg committee or an independent committee that decided to undertake the development of a Waste Minimization Strategy for Winnipeg and the associated public participation process. It was also asked if WMAC representatives were appointed to the WMAC committee and, if so, by who. Inquiries about the names of WMAC representatives and their associated organizations were also made. The *Minimizing Waste in Winnipeg* newsletter offered to participants later in the sessions, states that WMAC is a "citizens' committee", but participants asked for more detail regarding the make-up of WMAC.

There seemed to be general interest and appreciation for the public participation process established by WMAC, but also significant skepticism was evident regarding the likelihood of the City of Winnipeg accepting and implementing the final recommendations made by the planning process. Participants also questioned the validity and the timing of the public's participation in identifying criteria for a City of Winnipeg Waste Minimization Strategy by referring to the current RM of Rosser landfill development and the recent introduction of the City of Winnipeg's Curbside Residential Recycling Program.

During some presentations, residents also referred to the introduction of autobins in their communities and the inadequate consultation process. Many participants stated their opposition to the auto-bin system and commented that the auto-bins in their communities would make it difficult to implement some of the survey initiatives. Despite some skepticism of the municipal decision-making process, participants were overwhelmingly willing to complete the surveys.

As the surveys were filled out, the speakers fielded numerous questions from the floor.

There was significant discussion and criticism to Part One: The Priorities section of the survey, where a good number of people expressed that it was not possible to prioritize the listed environmental issues because all of the issues were viewed as interconnected and equally important.

In Part Two, the wording and the presentation of some of the concepts were criticized by some participants. Participants expressed confusion over the question in the Reduction/Reuse section of Part Two, asking if the City of Winnipeg should "adopt aggressive procurement policies". The first four questions of the IC&I category in Part Two also prompted questions from participants. Many people were unfamiliar with the term "waste audit" and had questions regarding the purpose and process of this type of an audit. Participants also requested information about the concept and the system of a "waste exchange" and stated interest in this initiative. The third and fourth questions of this section, the "free drop-off of separated IC&I recyclables and organics" were unclear to most participants and prompted frustration by some people who stated that the survey was too complex.

Questions were asked with respect to the treatment and disposal of household hazardous waste in Winnipeg. Numerous resident associations required additional information on governmental or private initiatives related to household hazardous waste programs.

Discussion and questions were raised relating to the practice and promotion of backyard composting in Winnipeg. Composting inquiries ranged from detailed questions by homeowners on the decomposition process of organic waste and effective composting, to the composition of the residential waste stream, to the City of Winnipeg's plans for promoting composting. Participants generally mentioned that Winnipeg residents could be encouraged to practice backyard composting if free or low-cost composters were made available to the public and if more public education and support for residents existed within the City.

A number of participants stated that although many people are increasingly recycling the recyclable portion of residential and office wastes, there exists a need for citizens to be more aware of their consumer habits and purchasing choices. Participants also indicated that information related to the waste minimization successes (initiatives and practices) in other North American cities similar in size to Winnipeg would be useful for Winnipeg residents. It was suggested that public education related to local waste minimization developments could be communicated in City of Winnipeg utility mailouts.

Discussion occurred at almost every session with respect to the development and introduction of the City of Winnipeg's Curbside Residential Recycling Program. There was expressed dissatisfaction to the lack of residential recycling services for apartment dwellers. Participants were, however, consistently interested in knowing how much waste would be diverted locally as a result of the Curbside Residential Recycling Program.

Generally, participants (with the exception of environmental group members) had little knowledge of the provincial Manitoba Product Stewardship Program (MPSP) and its structure for funding residential curbside recycling programs. Dissatisfaction was expressed on numerous occasions towards the process of awarding the Curbside Recycling Program contract. Participants expressed their concern that existing smaller recycling companies should have been favored. Participants also

relayed this same concern to the future of the small, private recycling companies if the City decides to become more involved in providing recycling services in the IC&I sector.

The outreach sessions were generally well received and of interest to the participants. With the introduction of the one-page *Minimizing Waste in Winnipeg* newsletter, participants became more appreciative as it provided them with additional information on the structure and mandate of WMAC.

## 4.0 Survey Comments Summary

A copy of the survey and a summary of responses follows. The summary shows that support for most initiatives ranges from agree to strongly agree (for example, 77% agree or strongly agree that free or low cost composters should be made available). In addition to these "checkmark" responses, Part 3 of the survey asked for open-ended comments. Approximately 40% or 143 respondents took the time to outline other concerns with respect to waste minimization.

By generally categorizing the open-ended responses it was discovered that the most frequently presented issue was the demand by participants for product stewardship at the source. Over one quarter of the 143 respondents stated in some fashion that waste reduction should occur within the industrial process, and that industry should be environmentally and economically responsible for implementing waste reduction systems. The need for the reduction of packaging materials was specifically identified and a small number of these participants stated that businesses should not be subsidized for waste reduction initiatives. As well, self financing incentives for recycling and waste management were promoted by a small number of participants.

The need for public education with respect to wise resource use and waste management (with the focus on waste minimization) was the second most commonly presented issue. Ten percent of the 143 respondents stated that public education should be stressed, and half of this group suggested that the public school system should be targeted. Specific requests for public education were made with respect to backyard composting as well as for information on the process of conducting a home waste audit.

Approximately 10 percent of the respondents identified the need for facilitating and promoting the re-use of materials in the construction and demolition sector, as well as the re-use of household furniture.

The topic of household hazardous wastes was stressed with approximately 7.5 % of the respondents stating that additional services are required for the collection and treatment of this waste in Winnipeg. Respondents most frequently identified the need for the safe disposal of used oil, batteries, and refrigerators.

Interest and support for increased composting in Winnipeg was expressed by 7 percent of respondents. Of this 7 percent, 5 percent identified backyard and community composting initiatives as a priority while 2 percent promoted large-scale, municipal composting. The need for a more convenient system for the City's collection of leaves in the autumn was expressed by a small number of these respondents.

Consumer responsibility was also raised as an issue. Approximately five percent of the respondents indicated that consumers have a responsibility to be aware of the impact of resources used in industrial production, as well as a responsibility to

support business waste reduction activities. The 2 cent levy on beverage containers was discussed. A number of people supported the levy, expressing that it is a fair levy for consumers to pay.

On the topic of recycling services, 4.5 percent of respondents expressed the need and demand for City recycling services for apartment buildings. Support was expressed by a small number of participants for local recycling businesses as well as for business involvement in the implementation of waste management systems.

Pay-per-bag garbage collection systems generated comments by a small number of respondents. Approximately 4 percent of respondents expressed concern that this type of system would encourage people to dump their garbage in unsuitable places resulting in increased collection costs and sanitation problems. The autobin system was also raised as an issue, with 4 percent of respondents stating opposition to the introduction of autobins on the grounds they encourage indiscriminate disposal of garbage.

# Winnipeg Waste Minimization Survey

The City of Winnipeg, through the Waste Minimization Advisory Committee (WMAC), is currently working on Phase 2 of a Waste Minimization Strategy. The goal is to develop a strategic planning process which includes: a clear vision statement; evaluation criteria; a recommended system of integrated waste minimization components; and mechanisms for on-going review and revision.

We need your input to develop this strategy so that it best reflects what Winnipeggers want and need. Please take a few minutes to fill out the front and back of this survey.

## PART ONE: PRINCIPLES AND PRIORITIES

Statement	Agree Strongly	Agree	Disagree	Disagree Strongly	Need More Information
Programs should be designed to minimize municipal costs, even if that does not maximize diversion or encourage waste minimization.					
The full cost of waste disposal should be paid by the user rather than through municipal taxes.					
Producers should be made more responsible for the waste they create.					
Householders should be prepared to take an active role in diverting waste.					
Priority should be given to initiatives that result in the City not having to handle material in the first place.					
Programs should emphasize:					
• public education					
• financial incentives					
• regulations					

Solid waste minimization is only one of many environmental issues facing Winnipeggers today. Rank the following environmental issues in order of importance, with the most important ranked 1 and the least important ranked 5.

Issue	Water Supply/Quality	Air Quality/Pollution	Solid Waste Management	Sewage Treatment	Green Space
Priority	[ ]	[ ]	[ ]	[ ]	[ ]

## PART TWO: WHAT SHOULD WINNIPEG DO? (Please turn over )

### PART THREE: COMMENTS

Are there any other waste minimization issues that you feel should be a part of Winnipeg's system?

---



---



---

Any other comments? \_\_\_\_\_

---



---

**FOR MORE INFORMATION:** call John Sinclair, Chair, Waste Minimization Advisory Committee (WMAC), at 474-8374; or John Osler, InterGroup Consultants Ltd., 604 - 283 Portage Ave., Winnipeg, Manitoba R3B 2B5, Tel. 942-0654, Fax 943-3922

## PART TWO: WHAT SHOULD WINNIPEG DO?

Waste Reduction Categories	Initiative	Agree Strongly	Disagree	Disagree Strongly	Need More Information
Reduction/Reuse	Initiate a major education campaign on waste reduction				
	Develop/support local reuse centres				
	Promote reuse alternatives (e.g. refillable containers, cloth diapers)				
	Work with local retailers and manufacturers on voluntary codes of practice				
	Adopt aggressive procurement policies that support reduction and reuse				
Recycling	Expand the curbside recycling program to include more materials				
	Provide depots for the recycling of special materials (e.g. scrap metals, textiles)				
	Ban recyclables from landfill				
	Establish a permanent hazardous waste depot				
Household Hazardous Waste	Develop point-of-purchase return systems for hazardous waste				
	Educate the public on avoiding hazardous waste				
Composting	Make free or low cost backyard composters available				
	Initiate curbside collection of organics				
	Ban leaves and grass from landfill				
Industrial, Commercial and Institutional (IC&I) 3Rs	Provide subsidized waste audits				
	Support/expand a waste exchange				
	Offer free drop-off of separated IC&I recyclables				
	Offer free drop-off of separated IC&I organics				
	Offer free curbside recycling services to schools and small businesses				
	Offer free curbside organic collection to schools and small businesses				
	Develop an IC&I 3Rs campaign (e.g. conferences, awards, newsletters)				
	Limit the number of bags				
Garbage Pick-up	Implement a pay per bag system				
	Reduce collection frequency to bi-weekly (October to April)				
	Expand the auto-bin program				

Please turn over for PART THREE

# Winnipeg Waste Minimization Survey Results

## Part One: Principles and Priorities

1.1 *Programs should be designed to minimize municipal costs, even if that does not maximize diversion or encourage waste minimization.*

Agree Strongly	6 %
Agree	22 %
Disagree	38 %
Disagree Strongly	18 %
More Information	13 %
No answer	3 %

1.2 *The full cost of waste disposal should be paid by the user rather than through municipal taxes.*

Agree Strongly	10 %
Agree	29 %
Disagree	38 %
Disagree Strongly	11 %
More Information	11 %
No answer	1 %

1.3 *Producers should be made more responsible for the waste they create.*

Agree Strongly	63 %
Agree	33 %
Disagree	2 %
Disagree Strongly	0 %
More Information	1 %
No answer	1 %

1.4 *Householders should be prepared to take an active role in diverting waste.*

Agree Strongly	47 %
Agree	47 %
Disagree	2 %
Disagree Strongly	1 %
More Information	2 %
No answer	1 %

1.5 *Give priority to initiatives that get the City out of handling material (e.g., backyard composting).*

Agree Strongly	23 %
Agree	41 %
Disagree	16 %
Disagree Strongly	4 %
More Information	12 %
No answer	4 %

1.6 *Programs should emphasize public education.*

Agree Strongly	56 %
Agree	39 %
Disagree	1 %
Disagree Strongly	0 %
More Information	1 %
No answer	3 %

1.7 *Programs should emphasize financial incentives.*

Agree Strongly	32 %
Agree	48 %
Disagree	10 %
Disagree Strongly	1 %
More Information	5 %
No answer	4 %

1.8 *Programs should emphasize regulations.*

Agree Strongly	28 %
Agree	48 %
Disagree	14 %
Disagree Strongly	2 %
More Information	5 %
No answer	3 %

1.9 *Ranking of environmental issues (out of 5).*

Water Supply/Quality	1.8
Air Quality/Pollution	2.8
Solid Waste Management	2.9
Sewage Treatment	2.9
Green Space	3.7

Part Two: What Should Winnipeg Do?

Reduction/Reuse

2.1 *Initiate a major education campaign on waste reduction*

Agree Strongly	44 %
Agree	48 %
Disagree	3 %
Disagree Strongly	0 %
More Information	1 %
No answer	4 %

2.2 *Develop/support local reuse centres*

Agree Strongly	37 %
Agree	54 %
Disagree	2 %
Disagree Strongly	0 %
More Information	3 %
No answer	4 %

2.3 *Promote reuse alternatives (e.g. refillable containers, cloth diapers)*

Agree Strongly	42 %
Agree	49 %
Disagree	3 %
Disagree Strongly	1 %
More Information	2 %
No answer	3 %

2.4 *Work with local retailers and manufacturers on voluntary codes of practice*

Agree Strongly	36 %
Agree	49 %
Disagree	5 %
Disagree Strongly	1 %
More Information	5 %
No answer	4 %

2.5 *Adopt aggressive procurement policies that support reduction and reuse*

Agree Strongly	40
Agree	45
Disagree	4
Disagree Strongly	1
More Information	6
No answer	4

Recycling

3.1 *Expand the curbside recycling program to include more materials*

Agree Strongly	45 %
Agree	41 %
Disagree	5 %
Disagree Strongly	1 %
More Information	5 %
No answer	3 %

3.2 *Provide depots for the recycling of special materials (e.g., scrap metals, textiles)*

Agree Strongly	44 %
Agree	49 %
Disagree	3 %
Disagree Strongly	0 %
More Information	2 %
No answer	3 %

### 3.3 Ban recyclables from landfill

Agree Strongly	29 %
Agree	34 %
Disagree	20 %
Disagree Strongly	3 %
More Information	10 %
No answer	4 %

## Household Hazardous Waste

### 4.1 Establish a permanent hazardous waste depot

Agree Strongly	48 %
Agree	40 %
Disagree	3 %
Disagree Strongly	0 %
More Information	5 %
No answer	4 %

### 4.2 Develop point-of-purchase return systems for hazardous waste

Agree Strongly	35 %
Agree	43 %
Disagree	8 %
Disagree Strongly	1 %
More Information	10 %
No answer	3 %

### 4.3 Educate the public on avoiding hazardous waste

Agree Strongly	47 %
Agree	44 %
Disagree	3 %
Disagree Strongly	0 %
More Information	3 %
No answer	3 %

## Composting

### 5.1 Make free or low cost backyard composters available

Agree Strongly	30 %
Agree	47 %
Disagree	13 %
Disagree Strongly	3 %
More Information	5 %
No answer	2 %

5.2 *Initiate curbside collection of organics*

Agree Strongly	21 %
Agree	37 %
Disagree	20 %
Disagree Strongly	3 %
More Information	15 %
No answer	4 %

5.3 *Ban leaves and grass from landfill*

Agree Strongly	25 %
Agree	32 %
Disagree	25 %
Disagree Strongly	3 %
More Information	12 %
No answer	3 %

Industrial, Commercial and Institutional (IC&I) 3Rs

6.1 *Provide subsidized waste audits*

Agree Strongly	12 %
Agree	35 %
Disagree	22 %
Disagree Strongly	3 %
More Information	21 %
No answer	7 %

6.2 *Support/expand a waste exchange*

Agree Strongly	15 %
Agree	48 %
Disagree	3 %
Disagree Strongly	1 %
More Information	25 %
No answer	8 %

6.3 *Offer free drop-off of separated IC&I recyclables*

Agree Strongly	19 %
Agree	43 %
Disagree	12 %
Disagree Strongly	2 %
More Information	17 %
No answer	7 %

6.4 *Offer free drop-off of separated IC&I organics*

Agree Strongly	17 %
Agree	41 %
Disagree	14 %
Disagree Strongly	2 %
More Information	18 %
No answer	8 %

6.5 Offer free curbside recycling services to small businesses

Agree Strongly	24 %
Agree	44 %
Disagree	13 %
Disagree Strongly	3 %
More Information	10 %
No answer	6 %

6.6 Offer free curbside organic collection to small businesses

Agree Strongly	19 %
Agree	38 %
Disagree	19 %
Disagree Strongly	3 %
More Information	14 %
No answer	7 %

6.7 Develop and IC&I 3Rs campaign (e.g., conferences, awards, newsletters)

Agree Strongly	18 %
Agree	48 %
Disagree	8 %
Disagree Strongly	2 %
More Information	17 %
No answer	7 %

Garbage Pick-up

7.1 Limit the number of bags

Agree Strongly	20 %
Agree	27 %
Disagree	32 %
Disagree Strongly	10 %
More Information	9 %
No answer	2 %

7.2 Implement a pay per bag system

Agree Strongly	15 %
Agree	22 %
Disagree	36 %
Disagree Strongly	12 %
More Information	12 %
No answer	3 %

7.3 Reduce collection frequency to bi-weekly (October to April)

Agree Strongly	8 %
Agree	31 %
Disagree	32 %
Disagree Strongly	17 %
More Information	10 %
No answer	2 %

7.4 *Expand the auto-bin program*

Agree Strongly	16 %
Agree	27 %
Disagree	18 %
Disagree Strongly	11 %
More Information	24 %
No answer	4 %

Part Three: Other Comments

8.1 *Are there any other waste minimization issues that you feel should be part of Winnipeg's system?*

Yes	39 %
No	61 %

# Minimizing Waste

# in Winnipeg

February  
1996



## Countdown to Implementation of Approved System

- Waste Minimization Advisory Committee established
- Began work on Waste Minimization Planning Process
- Manitoba Product Stewardship Program began collecting levies
- Generic Planning Process Approved
- Curbside Recycling Program comes on-stream
- Waste Minimization Visioning Workshops held
- First Newsletter released
- Potential Waste Minimization Components reviewed
- Draft Waste Minimization System presented and revised
- Second newsletter
- Development of an action plan for Preferred System
- Workshop and Information Display on Preferred System
- Presentation to Works and Operations Committee
- Implementation
- Ongoing monitoring and evolution of system



Past

Present

Future

## Introduction

This is the second newsletter from the Waste Minimization Advisory Committee (WMAC), a citizen's committee that fosters communication on waste issues, and provides guidance and advice to the City's Committee on Works and Operations.

After much hard work over the past couple of years, WMAC has come up with a draft waste minimization system, based on extensive research, analysis and public consultation. This newsletter outlines a preferred system, and invites you to come out to a workshop and information display to let us know what you think.

The previous newsletter asked for comments on a draft vision statement. Here is a second cut at a vision statement based on input received.

## DRAFT VISION

*The City of Winnipeg's waste minimization strategy envisions a community:*

- whose residents and businesses take responsibility for the waste/resource stream;
- that treats residual waste as a resource that enhances the environmental, economic and social life of the city;
- with a waste/resource system that is efficient, flexible and sustainable.

This vision statement is subject to further review and revision, and your input would be appreciated.

## Get Involved!

*Do you want to know more about the preferred system? We want your input.*

**Tuesday March 19th**

**Workshop 7:00 pm to 8:30 pm**  
**Kinsman Room,**  
**Manitoba Childrens' Museum,**  
**45 Forks Market Road**

*Come see the information display from 4:30 pm to 7 pm*

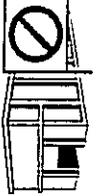
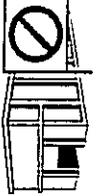
**For more information, contact**



**John Sinclair Chair, WMAC**  
**Natural Resources Institute**  
**University of Manitoba**  
**Winnipeg, R3T 2N2**  
**Phone (204) 474-8374**

**John Osler,**  
**InterGroup Consultants,**  
**604-283 Portage Avenue,**  
**Winnipeg, R3B 2B5**  
**(204) 942-0654**

# A Draft Waste Minimization System for Winnipeg

Component		Tonnage	Description	Percentage
<b>Diversion Components</b>      	 <b>Recycling</b>	55,000	<ul style="list-style-type: none"> <li>Expand the current curbside system to include all apartments</li> <li>Promotion and education to improve participation and capture rates</li> </ul>	52 % (129,000 tonnes)
	 <b>Backyard Composting</b>	12,000	<ul style="list-style-type: none"> <li>Set up a compost team to offer subsidized or free composters door-to-door</li> <li>Provide follow-up and support to residents</li> </ul>	
	 <b>Leaf &amp; Yard Waste Collection</b>	12,000	<ul style="list-style-type: none"> <li>Expand the existing "Leaf It With Us" Program to include all residents</li> <li>Promote grasscycling</li> </ul>	
	 <b>Other 3R Initiatives</b>	5,000	<ul style="list-style-type: none"> <li>Extensive promotion and education program</li> <li>Promote community yard sales, reuse centres, landfill salvage etc.</li> </ul>	
	 <b>Material Bans/Lift Limits</b>	45,000	<ul style="list-style-type: none"> <li>Phase-in a ban of recyclables, leaf and yard waste and other materials from garbage once diversion alternatives are in place</li> <li>Consider lift limits and/or a bag tag system</li> <li>Consider bi-weekly garbage collection</li> </ul>	
	 <b>Garbage/Disposal</b>	120,000	<ul style="list-style-type: none"> <li>Maintain mix of curbside and auto bin for remaining waste</li> </ul>	
				

**IC&I Waste** (Industrial, Commercial and Institutional)

This action plan focuses on residential waste, since the City does not have control over waste from the business sector. However, given that IC&I waste makes up approximately half of what is currently being landfilled in Winnipeg, it is essential that initiatives and facilities that are developed for the residential sector are made available (perhaps on a cost recovery basis) to the IC&I sector.

*Is this the waste minimization system you want for Winnipeg? Come out to the workshop and information display on March 19th to learn more, and tell us what you think our system should have.*

# I: INTRODUCTION

This section identifies 3Rs initiatives that could be implemented as part of a Waste Minimization Action Plan for the City of Winnipeg. These profiles provide the basis for determining what initiatives should make up the preferred waste minimization system, and include useful background for the persons or groups responsible for implementing the system components. The profiles also list other municipalities and contact people throughout Canada that have successfully implemented similar initiatives. Individuals responsible for implementation can use these references to avoid "re-inventing the wheel".

It is not the intention of these profiles to provide detailed implementation plans or accurate cost or diversion estimates, nor are the 38 profiles included in this section a comprehensive list of every initiative that could be considered for Winnipeg. Rather, the profiles focus on the most effective, appropriate and successful initiatives for the City of Winnipeg.

Initiatives are separated into five main sections:

- Waste Reduction
- Reuse
- Recycling
- Organics
- Regulations

Profiles have deliberately been kept concise so as not to overwhelm the reader, and limited to one page in length. Each initiative is described in terms of the following headings

- Concept
- Municipal Role
- Pros
- Cons
- Cost
- Diversion
- References

In some cases, figures for costs and diversion have been necessarily left somewhat vague. This is in part due to uncertainty regarding how a particular initiative might be implemented in the Winnipeg context, and in part because the level of effort for this phase did not provide for the level of detailed implementation studies that would be required to come up with accurate estimates. Another contributing factor to this vagueness is that the various components interact and reinforce each other, making it difficult to estimate potential diversion until all components have been determined. In some cases, terms such as "minimal" have been used because the anticipated cost and diversion are so small relative to initiatives such as recycling or backyard composting.

Rather than provide absolute cost estimates, attempts have been made to provide appropriate unit costs, as these will be more useful when it comes to preparing implementation plans at a pilot project or city-wide scale.

## I: INTRODUCTION

Although this section discusses waste minimization initiatives as a series of independent components, a successful waste minimization strategy relies on all the individual components working together as a part of an integrated whole. When waste minimization is approached as a series of add-on components to an existing disposal-oriented system, the resulting system is usually expensive and inefficient. It is essential, therefore, that the decision on which components are appropriate takes into account how various components interact with and reinforce each other.

In some cases, the City of Winnipeg has already implemented programs similar to some of the initiatives outlined in this section. These instances have been noted, either in the "Context" section or in the "For More Information" section. These initiatives have been included either because they could be expanded considerably (based on the experience of other communities) or because it might be useful for the City to evaluate their existing program in light of other programs. This evaluation should be consistent with the iterative planning process identified in Phase 1 of this study as well as the City's continuous improvement process.

There are a number of other recent studies that have been carried out in other jurisdictions that describe a broad range of waste minimization options, both in general terms and through specific case studies. The reader may wish to review appropriate sections of these reports for more information on waste minimization options.

- Municipal 3Rs Infrastructure: A Reference Guide — International Case Studies, March 1994, Ontario Ministry of Environment and Energy (PIBS 2858)
- Options for Integrated Municipal Solid Waste Diversion, Environment Canada, 1995
- Comprehensive Waste Management Strategy, GVRD Solid Waste Management Plan — Stage 2, April 1994, Greater Vancouver Regional District
- Waste Prevention, Recycling and Composting Options: Lessons from 30 Communities. United States Environmental Protection Agency, February 1994 (EPA530-R-92-015)
- National Survey of Composting Operations in Canada — Second Edition, The Composting Council of Canada, May 1995.
- AVR Recycling Programme Survey No 1, Association of Cities for Recycling, 1994 (Tel Int 32 2 775 77 01, Fax Int 32 2 775 76 11)

## II: WASTE REDUCTION

### **Waste Audits - Residential**

- Concept:** Residents receive a home inspection by a person trained to look out for ways to reduce waste, energy and water use. These people could be seasonal workers hired under an employment program, and trained for the purpose through a "green community" program. Local utilities could be co-sponsors.
- Municipal Role:** The municipality's role could vary from co-sponsor to promoter.
- Pros:** Advice given to householder is one-on-one, and these programs are often tied in with special offers on backyard composters, information about "smart shopping" and HHW alternatives. Questions about waste reduction can be dealt with immediately.
- Cons:** Home visit initiatives, if not covered by an employment program, are expensive, and require some supervision/administration.
- Cost:** Costs will be considerable unless piggy-backed with another project or sponsor.
- Diversion:** • potentially very high for each household served

#### For More Information

The Green Communities Initiative has designated more than 20 Ontario towns and cities as Green Communities and has committed funds and resources to assist these programs promote the reduction of waste and water and energy use. Contact: Ontario Ministry of Environment and Energy, (416) 327-1490.

Three of the green community projects in Ontario are:

- London Green Horizons, (519) 645-2845
- Oshawa Green Cap, (905) 436-5000
- Be Green Barrie, (705) 727-4000

Manitoba's Urban Green Team program may be a potential partner for an initiative such as this.

## II: WASTE REDUCTION

### **Waste Audits - IC&I**

- Concept:** Businesses are offered the advice of an expert in waste diversion techniques, who tours the plant and makes suggestions about ways to reduce, reuse or recycle the waste generated.
- Municipal Role:** In larger communities the service is offered by the municipality. The municipality can also offer literature on how to do a waste audit or refer businesses to those who offer the service.
- Pros:** This is very effective as businesses usually end up saving money as a result of implementing suggested changes.
- Cons:** Audits are time consuming for municipal staff, and they could be seen as competing with the private sector.
- Cost:** If the municipality is merely promoting the service offered by others or providing a guide, then costs are minimal. If audits are conducted by municipal staff, the program can be costly, depending on how many are done, and how many staff are hired. It may be possible to do audits on a partial or full cost-recovery basis.
- Diversion:** • potentially high

#### For More Information

Waterloo Region IC&I Waste Reduction Section, (519) 883-5150

GVRD (Vancouver) IC&I Waste Reduction Department, (604) 436-6801

The Association of Municipal Recycling Coordinators has produced a "Waste Audit and Reduction Operations Training Project Manual" and "Waste Diversion Fact Sheets" for various business sectors. Contact: AMRC, Guelph, Ontario, (519) 823-1990.

Minnesota Technical Assistance program, (612) 627-4646.

The Recycling Council of Manitoba, (204) 925-3777.

Manitoba Environmental Industries Association, Shirley Seidel, (204) 775-6157 for a listing of consultants performing waste audit services

Human Resources Canada, ONSITE Job Placement Program, Alex Morrison (204) 943-6900.

Section 6  
3Rs Initiatives Profiles

Winnipeg Chamber of Commerce/Small Business Task F Winnipeg Construction Association  
Jim Thibedeau  
500 - 167 Lombard Ave.  
Winnipeg, MB R3B 0T6  
988-2848  
Presentation: yes

Gervin Greasiy  
290 Burnell St.  
Winnipeg, MB R3G 2A7  
775-8664  
Presentation: yes

Wolseley Residents Association  
Collin Muir  
870 Portage Ave.  
Winnipeg, MB R3G 0P1  
784-4090  
Presentation: yes

Young United Church  
Minister Peter Williams  
222 Furby Street  
Winnipeg, MB R3C 2A7  
783-0128  
Presentation: no

Take Pride Winnipeg  
Deanna Waters  
2nd Floor 375 York Ave.  
Winnipeg, MB R3C 3J3  
956-7590  
Presentation: yes

Tourism Winnipeg  
Sandra Malcolmson  
320-25 Forks Market Road  
Winnipeg, MB R3C 4S8  
943-1970  
Presentation: no

Transcona BIZ  
Bruce Rosner  
212 Regent Ave.  
Winnipeg, MB R2C 1R2  
224-2254  
Presentation: no

Unitarian Church Social Responsibilities Group  
Jenny Jerbasi  
790 Banning Street  
Winnipeg, MB R3E 2H9  
786-6797  
Presentation: no

U of M - Recycling & Environment Group  
Steve McBride  
Box 42 University Centre, U. of M.  
Winnipeg, MB R3T 2N2  
474-9118  
Presentation: no

U of Wpg Institute of Urban Studies  
Tom Carter  
346 Portage Ave.  
Winnipeg, MB R3C 0C3  
982-1140  
Presentation: no

U of Wpg - Students Acting for the Environment  
Aura Thompson  
University of Wpg. 515 Portage Ave.  
Winnipeg, MB R3B 2E9  
786-9025  
Presentation: yes

U of Wpg - Students Association  
Arlan Gates  
University of Wpg. 515 Portage Ave.  
Winnipeg, MB R3B 2E9  
786-9792  
Presentation: yes

Waste Minimization Advisory Committee  
John Sinclair  
c/o NRI, University of Manitoba  
Winnipeg, MB R3T 2N2  
474-8374  
Presentation: yes

West Broadway /South Sherbrook BIZ  
Larry Leroux  
618 Broadway Ave.  
Winnipeg, MB R3C 0W8  
783-0150  
Presentation: yes

West End BIZ  
John Unger  
501 Sargent Ave.  
Winnipeg, MB R3B 1V9  
775-8631  
Presentation: yes

Westminster Housing Co-op  
Delores Menge  
145 Maryland St.  
Winnipeg, MB R3G 1K9  
775-3843  
Presentation: yes

ON-SITE  
Alex Morrison  
740 - 167 Lombard Ave.  
Winnipeg, MB R3B 0V3  
943-6900  
Presentation: yes

Osborne South BIZ  
Barb Geary  
688 Osborne St. South  
Winnipeg, MB R3C 2B9  
284-2671  
Presentation: yes

Osborne Village BIZ  
Al Shepperd  
452 River Ave.  
Winnipeg, MB R3L 0C2  
474-1008  
Presentation: yes

Point Douglas Residents Association  
Barry Hammond  
Apt 1 - 116 Grove St.  
Winnipeg, MB R2W 3K8  
943-5200  
Presentation: yes

Recycling Council of Manitoba  
Glen Koroluk  
501-428 Portage Ave.  
Winnipeg, MB R3C 1N6  
925-3777  
Presentation: yes

Riel Community Resident's Advisory Group  
Glen Hewitt  
1010 - 88 Eric Street  
Winnipeg, MB R2M 4A7  
257-1796  
Presentation: yes

Scotia Street Residents' Association  
Carol and Bill Deitzel  
307 Scotia Street  
Winnipeg, MB V2V 1W3  
mail only  
Presentation: no

Selkirk Avenue BIZ  
Stephen Mical  
508 Selkirk Ave.  
Winnipeg, MB R2W 2M7  
586-3445  
Presentation: no

Sierra Club of Canada - Prairie Chapter  
Jean Louis Hiebert  
Box 23036 RPO McGillivray  
Winnipeg, MB R3T 5S3  
444-2750  
Presentation: yes

Sunflower Community Market Co-op  
Gille Dumont  
664 Corydon Ave.  
Winnipeg, MB R3M 0X7  
475-1459  
Presentation: no

St. Boniface Business Association  
Roger Dupas  
158 Provencher Blvd  
Winnipeg, MB R2H 0G3  
237-5467  
Presentation: no

St. John's Residents Association  
Victor Sawelo  
439 Parr Street  
Winnipeg, MB R2W 5G2  
589-7717  
Presentation: yes

L'association des Residents de Vieux St-Boniface  
Monique Mulaire  
378 place Gaboury  
Winnipeg, MB R2H 0L4  
237-1803  
Presentation: yes

Lord Selkirk Park Tenant Association  
Rose Spence  
Winnipeg, MB  
582-2262  
Presentation: no

Lutheran Church Group  
Howard Engel  
#2 Bayshore Cove  
Winnipeg, MB R2J 3G3  
253-0419  
Presentation: no

Manitoba Eco-Network  
Anne Lindsay  
P.O. Box 26007  
Winnipeg, MB R3C 4K9  
772-7542  
Presentation: yes

Manitoba Environmental Industries Association Inc.  
Shirley Seidel  
501 Weston, P.O. Box 192 Station L  
Winnipeg, MB R3H 0Z5  
775-6157  
Presentation: no

Manitoba Environment  
Karen Warren  
Bldg 2 139 Tuxedo Avenue  
Winnipeg, MB R3N 0H6  
945-3554  
Presentation: no

Manitoba Naturalists Society (MNS)  
Herta Gudauskas  
401 - 63 Albert St.  
Winnipeg, MB R3B 1G4  
943-9029  
Presentation: yes

MNS Indoor Program  
Herta Gudauskas  
401 - 63 Albert St.  
Winnipeg, MB R3B 1G4  
943-9029  
Presentation: yes

Maples Tenant Association  
Cindy Schmuland  
1417 Fife Street  
Winnipeg, MB R2P 0E6  
632-0910  
Presentation: no

McDermot-Sherbrook Residents' Association  
Catherine Collins  
Winnipeg, MB  
956-0084  
Presentation: no

North Main Business Association  
Tom Donahue  
895 Main Street  
Winnipeg, MB R2W 3P2  
942-7891  
Presentation: no

Norwood Grove BIZ  
John Braconnier  
256 St. Mary's Ave.  
Winnipeg, MB R2h 1J6  
781-3833  
Presentation: yes

Ellice/Sargent Avenue BIZ  
John Unger  
501 Sargent Ave.  
Winnipeg, MB R3B 1W6  
775-8631  
Presentation: yes

Elmwood MWCRP  
Rus McCauley  
208 - 505 Chalmers Ave.  
Winnipeg, MB R2L 0G4  
986-6749  
Presentation: yes

Exchange District BIZ  
Ron Hambly  
205 - 63 Albert St.  
Winnipeg, MB R3B 1G4  
942-6716  
Presentation: yes

Forks/North Portage Partnership  
David Stones  
201-1 Forks Market Road  
Winnipeg, MB R3C 4L9  
943-7752  
Presentation: no

Fort Rouge MWCRP  
Martin Sanders  
2 nd Floor 524 Osborne St.  
Winnipeg, MB R3L 2B1  
986-3770  
Presentation: yes

Fort Whyte Centre  
Rosie Turenne  
Box 124, 1961 McCreary Road  
Winnipeg, MB R3Y 1G5  
989-8350  
Presentation: no

Gilbert Park Tenant Association  
Mr. Aime Chartrand  
B-1-45 Gilbert Ave.  
Winnipeg, MB R2X 0T4  
982-4420  
Presentation: no

Glenwood MWCRP  
Debbie Werboweski  
604 St. Mary's Ave.  
Winnipeg, MB R2M 3L5  
986-4737  
Presentation: yes

Habitat Re-Store  
Dave McNicholl  
75 Archibald Street  
Winnipeg, MB R2J 0V7  
233-5160  
Presentation: no

Harvest Collective Inc.  
Bruce Lemieux  
877 Westminster Ave.  
Winnipeg, MB R3G 1P1  
772-4359  
Presentation: no

International Coalition  
Andrew Hay  
101-120 Fort Street  
Winnipeg, MB R3C 1C7  
982-7552  
Presentation: no

International Institute for Sustainable Development  
Janice Gair  
6 th Floor 161 Portage Ave.  
Winnipeg, MB R3B 0Y4  
958-7700  
Presentation: yes

## Appendix 5-4: Organizations Contacted

Armstrong Point Residents Association  
Doug Arrell  
66 Westgate  
Winnipeg, MB R3C 2E1  
774-0453  
Presentation: yes

Canadian Council of Ministers of the Environment  
Delores Velie  
400 - 326 Broadway Ave.  
Winnipeg, MB R3C 0S5  
948-2090  
Presentation: yes

Canadian Parks and Wilderness Society  
Kim Monson  
Box 344  
Winnipeg, MB R3C 2H5  
786-9485  
Presentation: no

Chinatown Development Corporation  
Angela Yeung  
2nd Floor-180 King Street  
Winnipeg, MB R3B 3G8  
943-2627  
Presentation: no

City Centre Residents' Advisory Group  
Gerry Humphreys  
215 Clare Ave.  
Winnipeg, MB R3L 1R8  
941-1554  
Presentation: no

Coalition to Save the Elms  
Judy Werier  
2799 Roblin Blvd.  
Winnipeg, MB R3R 0B8  
832-7188  
Presentation: yes

Consumers Association of Canada  
Alexa Campbell  
21 - 222 Osborne St. S.  
Winnipeg, MB R3L 1Z3  
452-2572  
Presentation: yes

Corydon Avenue BIZ  
Jerry Parent  
103 - 698 Corydon Ave  
Winnipeg, MB R3M 0X9  
475-8420  
Presentation: yes

Corydon Village Residents Association  
Marie Lark  
693 Jessie Ave.  
Winnipeg, MB R3M 0Z4  
475-3046  
Presentation: yes

Downtown BIZ  
Harry Finnigan  
1814 - 330 Portage Ave.  
Winnipeg, MB R3C 0C4  
943-5706  
Presentation: yes

East Kildonan/Transcona RAG  
John Kubi  
55 Menno Bay  
Winnipeg, MB R2K 3P2  
661-2762  
Presentation: yes

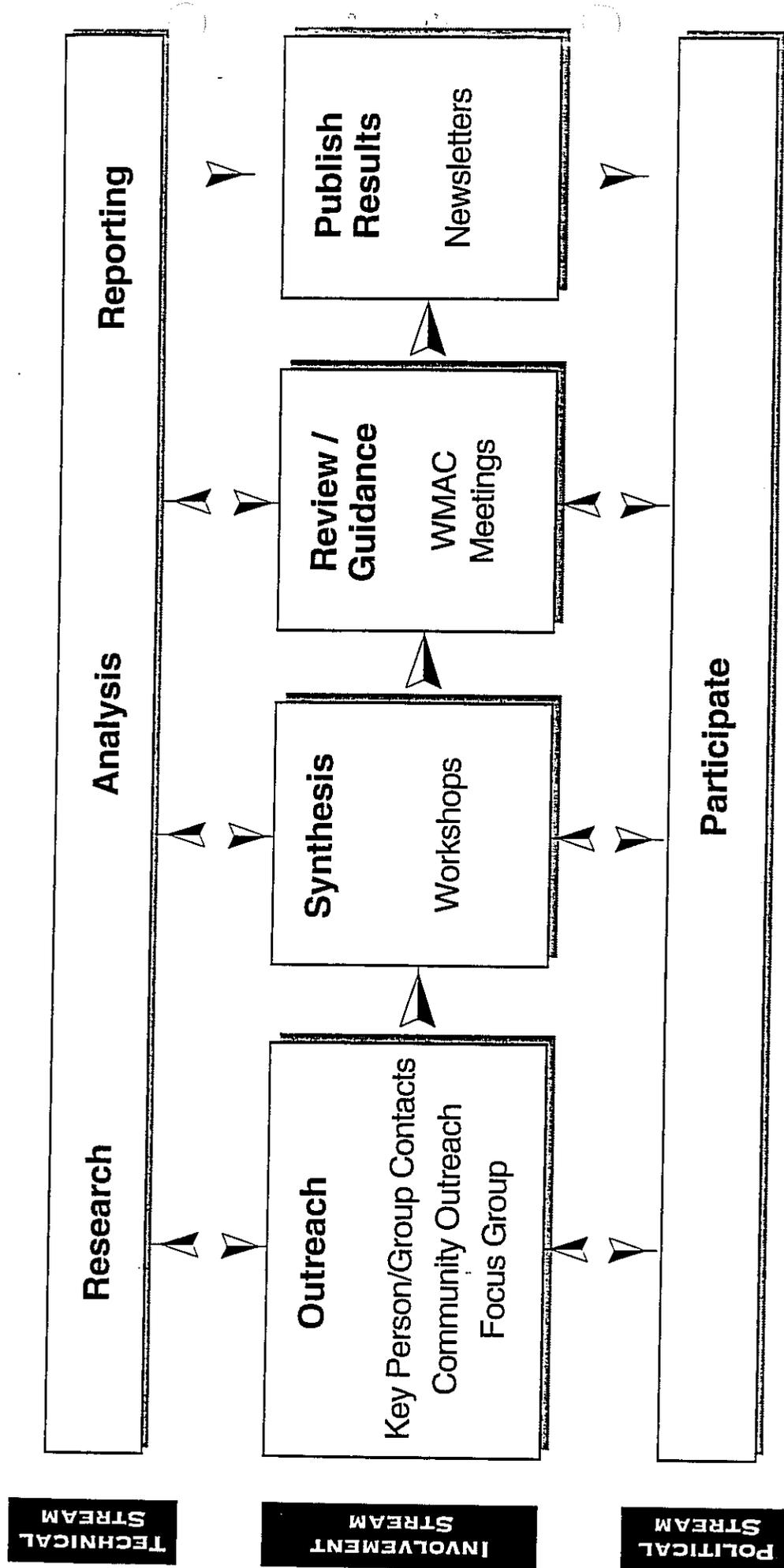
East Norwood MWCRP  
Debbie Werboweski  
604 St Mary's Road  
Winnipeg, MB R2M 3L5  
986-4737  
Presentation: yes

## Appendix 5-3: Outreach Sessions

## Outreach Sessions - Dec 95

Organization	Participants	Surveys
Armstrong Point Residents Association	9	5
Canadian Council of Ministers of the Environment	16 M	
Coalition to Save the Elms	7	3
Consumers Association of Canada	9	9
Corydon Avenue BIZ	10	8
Corydon Village Residents Association	9	7
Downtown BIZ	10	9
East Kildonan/Transcona RAG	5 M	
East Norwood MWCRP	15	10
Ellice/Sargent Avenue BIZ	9 M	
Elmwood MWCRP	8	8
Exchange District BIZ	1	1
Fort Rouge MWCRP	15	14
Glenwood MWCRP	12	10
International Institute for Sustainable Development	22	20
L'association des Residents de Vieux St-Boniface	7	7
Manitoba Eco-Network	6	5
Manitoba Naturalists Society (MNS)	21	13
MNS Indoor Program	56	54
Norwood Grove BIZ	3	3
ON-SITE	23	19
Osborne South BIZ	9	6
Osborne Village BIZ	9	8
Point Douglas Residents Association	9	9
Recycling Council of Manitoba	11	11
Riel Community Resident's Advisory Group	8	8
Sierra Club of Canada - Prairie Chapter	7	7
St. John's Residents Association	20 M	
Take Pride Winnipeg	8	8
U of Wpg - Students Acting for the Environment	8	8
U of Wpg - Students Association	13	12
Waste Minimization Advisory Committee	12 M	
West Broadway /South Sherbrook BIZ	12	12
West End BIZ	9 M	
Westminster Housing Co-op	36	14
Winnipeg Chamber of Commerce/Small Business T	20	5
Winnipeg Construction Association	7 M	
Wolseley Residents Association	16	12
<b>COUNT OF Organization:</b>		38
<b>TOTAL Participants:</b>		487
<b>TOTAL Surveys:</b>		325

**FIGURE 1**  
**GENERIC PLANNING PROCESS**



Appendix 5-2: Display Panels

# STRATEGIC PLANNING OVERVIEW



## PHASE 1

Design a Strategy Development Process



## PHASE 2

Implement the Strategy Development Process



## PHASE 3

Implement the Preferred System



## PHASE 4

Ongoing Review & Revisions

## Appendix 5-1

### Framework For Outreach Sessions

Interested members of groups such as WMAC, the Recycling Council of Manitoba and the Manitoba Eco-Network will be approached to facilitate short community outreach sessions with a wide variety of community groups. These sessions will focus on the issues that will guide the strategy development process; namely the waste minimization vision and the associated evaluation criteria.

The main advantage of this approach is that by getting time on the agenda of an existing meeting, you ensure a captive audience. As an added benefit, you can reach a range of influential community leaders that would otherwise not have the time to participate in the process.

The consultants will develop a presentation format and follow up survey, prepare high-quality visual aids, and train interested volunteers. If possible, a local community resource person would be hired to assist in developing this material and to coordinate the contacting and booking of potential community groups. Honouraria and travel expenses will be provided to volunteers.

It is anticipated that presentations would be 20 to 30 minutes in length, with the first half of the presentation providing the context and the second half focusing on discussion and completion of the surveys. The types of community groups that would be approached include community clubs, service clubs, church groups, and Y Neighbors.

If timing and budget permit, some of the later community outreach sessions will focus on particular components or systems, rather than strictly vision and criteria. Consideration will also be given to using one of the volunteers to make presentations to trade associations, staff meetings and other IC&I based groups as a means of soliciting input on business and institutional perspectives on waste minimization.

## ii: WASTE REDUCTION

### **Community Grants Program**

- Concept:** Local community groups are encouraged to come up with waste reduction ideas and apply for special grants made available by the city. For example, a Ukrainian Heritage Society might suggest writing a How-to-Compost brochure in Ukrainian and the City would finance the production cost.
- Municipal Role:** • evaluating proposals and funding the initiative(s)
- Pros:** It makes maximum use of volunteer time and involves the community directly.
- Cons:** There could be problems with knowing who represents the organization. This can be avoided by having only incorporated groups apply. There is a possibility of negative press if those whose ideas are turned down complain.
- Cost:** • varies, could be up to \$5,000 per initiative
- Diversion:** • difficult to quantify but an excellent awareness tool

#### For More Information

Metro Toronto Works Department. Contact: Rene Dello, (416) 397-5806.

Canada Trust, Friends of the Environment. Contact your local Canada Trust Branch

Manitoba Hydro, Environmental Partners Fund. Contact Brendan Carruthers (204) 474-4934.

City of Winnipeg, Community Committees. Contact your local councillor.

Province of Manitoba, Sustainable Development Innovation Fund. Contact Anne Didur (204) 945-1010

Government of Canada, Action 21 Community Funding Program. Contact Rick Slasor (204) 983-7048

Investors Group, Investors in the Community Fund. Contact Richard Irish (204) 956-8514

## II: WASTE REDUCTION

### IC&I Waste Reduction Poster Campaign

- Concept:** Posters advocating various waste reduction and other 3Rs activities are distributed on a regular basis to local businesses. Ideas for the posters can be taken from contests held at the businesses themselves.
- Municipal Role:**
- work with business contacts to build a "bank" of poster ideas
  - design, print and distribute posters
  - promote through press releases and announcements in newsletters
- Pros:** It encourages involvement of shop floor workers and other employees who are likely best placed to come up with ideas for reduction. It also encourages communication among the IC&I sector.
- Cons:** The contest may not produce enough ideas for posters. *Solution: get the ideas elsewhere — consult provincial recycling councils, provincial governments or industry associations. The Association of Municipal Recycling Coordinators has several examples on file (see below).*
- Cost:** Costs include staff time to set up contests and coordinate printing and distribution. Much of the costs can be shared with the businesses. Local printers may wish to co-sponsor the campaign in return for the publicity.
- Diversion:** Impact is difficult to quantify. This is more of an awareness builder as part of a larger 3Rs educational effort.

#### For More Information

The County of Simcoe now has jurisdiction for the Town of Collingwood where a poster campaign was launched in 1991. Contact: Russ Nicholson, (705) 726-9300.

The Association of Municipal Recycling Coordinators has a small collection of posters used for IC&I promotion in Ontario and in California. Contact: AMRC, (519) 823-1990.

Alternatives — The Landfill Starts Here, a poster and waste audit package for schools. Contact John Sinclair (204) 474-8374

## II: WASTE REDUCTION

### Store Labeling

- Concept:** Residents are informed at point of purchase about the nature of the packaging they are buying. This is done through signs or indicators of some kind attached to the store shelf.
- Municipal Role:**
- find store owner(s) who will cooperate
  - design and or work with other agency (local ENGO) to produce standards and identifying labels, signs etc.
  - promote the program through newsletters, press releases, advertisements etc.
- Pros:** The program features low cost and community involvement. It allows people to make the choice, thus empowering them. Cost is low if a partner is involved.
- Cons:** It might be difficult to find cooperative stores; corporate policy may not be helpful. Smaller, locally-owned stores are more likely partners.
- Cost:** Low, some promotion and printing, as well as on-going updating.
- Diversion:** This is more an awareness exercise than a quantifiable diversion program.

### For More Information

The City of Peterborough began a shelf-labeling project involving two supermarkets in 1994. Contact: Virginia Swinson, City of Peterborough, (705) 748-8890.

Samples: Your Independent Grocer, in Belleville, Ontario, has had a successful EcoTag shelf labeling program in place for four years, initiated by a local environmental group. Contact: Scott Semple, (613) 966-8999.

## II: WASTE REDUCTION

### ***Politician-Sponsored Environment Days***

- Concept:** Certain days are set aside for community environmental initiatives in the wards of local politicians. These can be swap events, HHW days, special recycling (i.e. a material not normally collected but accepted at a depot), large item collection, composter sales/giveaways, tire recycling days, etc. Local politicians show up and gain "greenie points".
- Municipal Role:** • promote, advertise
- Pros:** Politicians are supportive because they are seen as active in environmental issues. Politicians can promote the event in addition to regular promotion. Adding the political aspect does not add to cost of event. There may even be dollars on councillors' budgets (as opposed to waste management budget) to defray cost of event.
- Cons:** Involvement of politicians may lead to a desire by them to "customize" the event, which could increase the workload of the coordinator. There are possible scheduling difficulties if all politicians want their event on the same day.
- Cost:** There is no extra cost to tie already-planned events into politicians' schedule.
- Diversion:** Diversion depends on the event. Adding the local politicians' name to the event might increase participation, thus increasing diversion.

#### For More Information

Metro Toronto has held Environment Days for several years. Contact: Carolyn McSkimming-Pereira, Metro Toronto Works Department, (416) 397-5807.

Councillor John Angus, City of Winnipeg, has organized a successful Household Hazardous Waste Day in the St. Norbert area of the City (204) 986-6824.

## II: WASTE REDUCTION

### **Specific Waste Reduction Campaign**

- Concept:** Take one aspect of the residential waste stream (e.g., junk mail, disposable diapers, disposable partyware etc.), and launch an awareness campaign targeted solely on that aspect.
- Municipal Role:**
- promote the campaign if the "leg work" is undertaken by another group (such as an ENGO)
  - some staff time and advertising costs if the municipality itself is to take on the campaign
- Pros:** By emphasizing the reduction option, residents begin to consider other opportunities to reduce waste. The municipality is seen to be proactive.
- Cons:** Some issues are very political, and high profile, and there may be other issues associated with the environmental question (such as local companies producing the targeted product) which could make local politicians feel uncomfortable.
- Cost:**
- low
- Diversion:**
- difficult to quantify.

### For More Information

#### Junk Mail:

- In Waterloo, an active community-based campaign was promoted by municipal staff. Contact: Vivian de Giovanni, City of Waterloo, (519) 747-8612.
- The Recycling Council of Ontario has taken on the "junk mail" issue as a priority campaign. Contact John Hanson, Recycling Council of Ontario (RCO), (416) 960-1025.
- The Recycling Council of Manitoba has a junk mail sign-on initiative. Contact: Glen Koroluk (204) 925-3777. This is supplemented by Manitoba Eco-Net's "No Junk Mail" sticker campaign.

#### Disposable Diapers:

- In Centre and South Hastings, a campaign about alternatives to disposable diapers had to consider the presence of a Procter and Gamble factory. Contact: Jill Dunkley, Centre and South Hastings Recycling Board, (613) 392-6266.

## II: WASTE REDUCTION

### ***Integrated Promotion and Education Program***

- Concept:** Many of the individual initiatives in these profiles mention or stress the need for an effective and promotion and education campaign. However, to be most effective, it is essential that all promotion and education related to the waste minimization system is designed, produced and delivered in an integrated manner. This is also one of the few ways to stimulate residents awareness of and participation in reduction and reuse initiatives. Activities could include pamphlets, brochures, calendars, reminder cards, advertisements (news, radio and television), displays, presentations, newsletters, banners and special events.
- Municipal Role:**
- provide a staff person to coordinate various promotion and education activities
  - undertake occasional surveys to determine what promotional vehicles work best, and what messages need to be reinforced
- Pros:** An integrated promotion and education program not only generates efficiencies of scale, but also ensures that the public get a consistent message and sees an entire system rather than just a collection of individual components.
- Cons:** Because results are difficult to quantify, it can be hard to convince councils to allocate appropriate funds to this activity.
- Cost:**
- approximately \$1 per capita per year for a comprehensive program
- Diversion:**
- difficult to quantify, but can stimulate participation in reduction and reuse initiatives significantly, and increase capture rate of recyclables and compostables by as much as 5%

#### For More Information

The Centre & South Hastings Recycling Board has a comprehensive and successful promotion and education programs. Contact: Marvin Tucker, (613) 394-6266.

The Regional Municipality of Ottawa-Carleton also has a extensive promotion and education campaign, including involvement of celebrities such as Charlie Farquarson (Don Harron). Contact: Suzanne Valliquette (613) 560-6053.

### III: REUSE

#### Reuse Guide

- Concept:** A guide is produced and distributed to residents to inform them where they can take or sell unwanted items rather than dispose of them, as well as where they can purchase used items or rent occasional use items.
- Municipal Role:**
- research, produce, promote and distribute guide
  - promote guide if other agency produces the guide
- Pros:** Gives residents the opportunity to participate in the reuse economy. Other 3Rs programs can be promoted in the guide. This is a good project to subcontract to a local environmental group.
- Cons:** Significant staff time is required to research and produce the guide, although some of these costs can be offset by employment programs and by charging for the guide.
- Cost:** Cost varies on size and form of guide, and whether there are any revenues from sales.
- Diversion:** Difficult to quantify. This is more of an awareness exercise.

#### For More Information

Vancouver produced "101 Uses for Your Old Shoes 'N' Other Stuff", and sold the guide for \$5 each. Contact: Pamela Nel, (604) 436-6808.

The Mississauga Clean Campaign produced "Second Chances", a local reuse guide. Contact: Maureen Ricker, (905) 274-6222.

The Manitoba Eco-Net has produced a "Green Guide to Winnipeg" booklet.

The City of Kamloops promotes reuse activities offered by local community groups through their "Guide to Flea Markets" and other publications. Contact: (604) 828-3461.

### III: REUSE

#### **Community Yard Sale**

- Concept:** Through partnership with a local service club, the municipality encourages residents to bring their unwanted items to a community site for a giant yard sale, with proceeds going to the service club for community work.
- Municipal Role:** The municipality provides promotion, a facility and, ideally, agrees to take responsibility for disposal of leftover items, while the service club provides labour.
- Pros:** It uses community involvement and requires very little staff time in the beginning, and, once set up, even less. It benefits the community directly, as opposed to the municipal coffers (often more appealing for residents). The program can offset any fallout if an existing large item pick-up is discontinued. There is an opportunity for other 3Rs initiatives at yard sale, such as sale of composters, promotion of other programs etc.
- Cons:** Unless properly promoted, residents could bring garbage (e.g. broken, unreparable toys and other unsalable items) to the site. This can be minimized by proper promotion.
- Cost:** Costs include advertising and possibly a facility superintendent for duration of sale. This could be done by the service club if good liaison exists. Other costs could also be incurred with disposal of residual.
- Diversion:** Diversion potential is quite high, particularly if it becomes an annual event.

#### For More Information

The County of Simcoe and the Collingwood Optimist Club are involved with the Mother of All Yard sales which has been going about five years and raises more than \$10,000 for community projects each year. It is combined with a truck sale Back Yard Composter event held by the county. Contact:

- Collingwood Optimist Club. Contact: Norm Sandberg, (705) 445-3451.
- County of Simcoe. Contact: Caroline Kirkpatrick, (705) 444-6650.

Options Unlimited, a group that works with developmentally challenged individuals in Belleville, Ontario, works together with the Centre & South Hastings Recycling Board to hold giant spring and fall community-wide rummage sales. Contact Judy O'Brien (613) 966-6677

### III: REUSE

#### **Community Swap Meet / Trunk Sale**

- Concept:** Residents pay a small fee to the organizers (municipality or service club) to either set up a table or bring their cars to a site and sell their unwanted items from the table or directly from the trunk of their car. This is very popular in the UK.
- Municipal Role:** • provision of site  
• promotion
- Pros:** This encourages community involvement for a "good" cause and requires little staff time. There is an opportunity to promote other initiatives at the same time.
- Cons:** Participation could be difficult to gauge as residents have more "work" to do (unlike the community yard sale where all they have to do is drop off the unwanted items).
- Cost:** Costs include advertisements and possibly a facility superintendent for a day.
- Diversion:** • difficult to quantify

#### For More Information

The Region of Waterloo Waste Management Section held a Community Swap meet in 1992. Contact: (519) 883-5150.

The Association of Municipal Recycling Coordinators in Guelph, Ontario has produced a Guidebook, "Making the Most of Reuse Opportunities". Contact: AMRC, (519) 823-1990.

Clean Nova Scotia has produced a "Swap Saturday" Organizational Guide. Contact: Clean Nova Scotia, (902) 420-3474.

### III: REUSE

#### **Landfill Salvage Depot**

- Concept:** Either scavenging is allowed at the landfill itself, or a facility of some kind is set up at the entrance to the site where unwanted household items can be left or taken for reuse.
- Municipal Role:**
- promotion, provision and maintenance of storage structure, or liaison with other agency if partnership with Goodwill etc.
  - monitoring will be required if located within landfill site boundary
  - may require changes to bylaws or certificate of approvals
- Pros:** This diverts waste before it reaches the tipping area. There is an opportunity to promote other messages, sell composters, set up recycling depot (if staff available) and an opportunity for a partnership with other agency.
- Cons:** Scavenging at the face itself is not feasible at most sites for safety reasons. If the facility is unsupervised, there is a tendency for some people to leave garbage instead of usable items.
- Cost:** Costs are very low if there is a partnership with another agency. They are higher if the facility is staffed by paid personnel. Staff could be volunteers (e.g. a service club).
- Diversion:** Difficult to estimate — depends partly on the extent of drive-in car and small truck traffic

#### For More Information

The Region of Halton has a staffed, Amity Goodwill drop-off trailer at the landfill, and Goodwill accepts reusable items for resale at their various thrift stores. Contact: John Smith, Region of Halton, (905) 825-6000, ext. 7687.

### III: REUSE

#### **Reuse Centre - Construction/Demolition**

- Concept:** Commercial reuse centres are established on a for-profit basis usually to handle construction and demolition and used building materials. The operator often has contracts to clear buildings before they are demolished and salvages reusable material - anything from toilets to light fixtures to roof beams.
- Municipal Role:**
- promotion in newsletters
  - other encouragement and support as required
- Pros:** There is no cost to municipality and it has the potential to divert a lot of large item waste from landfill. Encourages the construction and demolition trade to separate their waste.
- Cons:** Some items do not meet modern building codes. The operator may look to the municipality to "assist" in disposal of unsalable items.
- Cost:**
- minimal
- Diversion**
- potentially quite significant, particularly in areas where large-scale redevelopment is taking place

#### For More Information

Scarborough Reuze Centre. Contact: Bob Sawatsky, (416) 750-4000.

The Restore Store, Brantford, Ontario. Contact: Karen Loomis, (519) 751-0922.

The Association of Municipal Recycling Coordinators has published the "Used Building Materials Store: Business Plan Outline", written by Rick Penner. Contact: AMRC (519) 823-1990.

Habitat ReStore, Winnipeg, Manitoba. Contact: Dave McNicoll, (204) 230-5160.

Happy Harry's Used Building Materials (204) 233-4313

Used Building Materials Association of North America (204) 947-0848

### III: REUSE

#### **Reuse Centre: Retail Non-Profit**

- Concept:** A non-profit agency such as the Salvation Army runs a used household goods store to raise money and to provide low-cost merchandise for the needy.
- Municipal Role:**
- promotion through newsletter, 3Rs guides
  - more involvement if a partnership exists for an associated depot at the local landfill
  - may be able to take textiles from recycling programs
- Pros:** There is little or no cost to the municipality. Some stores also retail used white goods. Reuse centres provide social benefit to the community.
- Cons:** If white goods are sold there could be complications if there are any local or provincial CFC regulations.
- Cost:**
- minimal
- Diversion:**
- low

#### For More Information

WasteWise has established a network of Reuse Centres, and provides assistance (on a fee for service basis) to groups wishing to set up a reuse centre. Contact: Diane Van De Valk (905) 873-8122.

### III: REUSE

#### **Reuse Centre: Retail For-Profit**

**Concept:** • An individual entrepreneur or a company runs a reuse store or consignment shop as a business.

Until recently, private outlets were mainly small stores selling low-end used furniture and household items. Now there are several types of reuse operations. One new venture in the marketplace partners with non-profit agencies. The agency picks up the material and is paid by the pound. The private company merchandises it in large, bright frontline stores in major malls. A second type is the vintage clothing trade and a third variant is the consignment clothing shop.

**Municipal Role:** • promotion through newsletter, 3Rs guides  
• assistance in set-up through a local agency responsible for small business development

**Pros:** There is little or no cost to the municipality. Some used furniture stores also retail used white goods. Used goods outlets promote reuse as a lifestyle option.

**Cons:** If white goods are sold there could be complications if there are any local or provincial CFC regulations.

**Cost:** • minimal

**Diversion:** • low

#### **For More Information**

WasteWise has established a network of Reuse Centres, and provides assistance (on a fee for service basis) to groups or individuals wishing to set up a reuse centre. Contact: Diane Van De Valk (905) 873-8122.

### III: REUSE

#### **Waste Exchanges (for IC&I sector)**

- Concept:** A database is maintained of firms with surplus items, and firms looking for items. Connecting the relevant parties can be done via a regular newsletter, a quarterly update, a bulletin board service, or through a dedicated agency.
- Municipal Role:**
- promotion and referral if the waste exchange is operated by another agency (like one of the provincial waste exchanges)
  - active participation if the municipality itself provides the referral service
- Pros:** There is potential to divert large quantities and an opportunity to inform the IC&I sector of other initiatives.
- Cons:** Some materials are difficult to "match". The exchange requires regular updating.
- Cost:**
- staff time if municipally operated; if not, low
- Diversion:**
- varies.

#### For More Information

The Canadian Waste Materials Exchange operates a Canada-wide network through CANMEN. Contact: (905) 822-4111.

The Region of Durham operates a region-wide exchange and has Internet connections as well as ties with other waste exchanges. Contact: Elaine Collis, Region of Durham, (905) 668-7721.

The Association of Municipal Recycling Coordinators has published "A Municipal Guide to Establishing a Waste Exchange program for the IC&I Sector". Contact: AMRC, (519) 823-1990.

The Recycling Council of Manitoba maintains a Manitoba Waste Exchange, which is tied into to the Canadian Waste Materials Exchange. Contact (204) 925-3777

### III: REUSE

#### HHW Reuse Programs

- Concept:** Rather than process partially-full containers of paint, solvents etc., through disposal channels at HHW days/depots, these items are stored and offered for reuse to the public or contractors.
- Municipal Role:**
- promotion
  - provision of storage facilities (could be a little as a few shelves)
- Pros:** It saves disposal/handling cost and is more environmentally sound. There is potential for community involvement (operation could be looked after by service club).
- Cons:** There is a possible conflict with authorities (provincial regulations, fire departments etc.), which is avoidable with proper planning. Liability is an issue; most communities have people fill out a waiver. This is not seen as a serious impediment.
- Cost:**
- ranges from minimal to \$50,000 (if no existing depot facilities are available)
  - some promotion and education expenses
- Diversion:**
- has potential to divert most of paint and much of other material brought to HHW sites

#### For More Information

Guelph Ontario set up an HHW reuse program two years ago and reports ever-increasing savings versus minimal costs. Contact: Jutta Siebel, City of Guelph, (519) 837-5604.

The City of Nanaimo has a paint exchange program. Contact: (604) 758-7777.

Contact John Sinclair, Natural Resources Institute, Winnipeg for more information on HHW program (204) 474-8374

The Centre & South Hastings Recycling Board has been operating a very successful HHW reuse program for several years. Contact Jeanne Vilneff (613) 394-6266.

The Association of Municipal Recycling Coordinators has published a HHW Operations Manual (519) 823-1990

British Columbia Paint Care Association (604) 482-8686

National HHW Task Force. Contact Judy Temple, Chair (905) 274-1218

Miller Environmental (formerly the Manitoba Hazardous Waste Corp.) operates a HHW depot in the City. Call 925-9600

## IV: RECYCLING

### Expanded Curbside Recycling

**Concept :** Recycling programs often expand to pick up new materials as markets for those materials emerge. Winnipeg is currently picking up almost all materials for which there is currently a viable market, but it may be possible to expand the curbside program at some time in the future to include such materials as all household plastic containers (e.g. dairy tubs), textiles, scrap steel, aseptic packaging (e.g. tetrapaks), empty aerosol and paint containers, other household plastic, disposable diapers, or any other materials for which a market develops. Addition of new materials should be negotiated with the Manitoba Product Stewardship Corporation.

**Municipal Role:**

- negotiate with collection contractor regarding cost implications
- implement a public education and promotion campaign for the new materials

**Pros:** Expanding materials increases diversion, conserves resources, and potentially makes the program more efficient (on a per tonne basis). Program expansions also tend to improve capture rates of existing materials by raising consciousness about recycling

**Cons:** Markets for some of these materials are unreliable, and the distance to market may be considerable. Some of these materials will also complicate the collection and processing operations, and add to the overall cost of the program.

**Cost:** Costs for incremental materials is likely to be higher than for current materials, and offsetting revenues are likely to be much lower. Net costs in the \$50 to \$150 per tonne range could be anticipated.

**Diversion:** Available in the waste stream:

- tubs ~ 3 kg/hh/yr
- textiles ~ 10 kg/hh/yr
- scrap steel ~ 5 kg/hh/yr
- aseptics ~ 1.5 kg/hh/yr
- aerosol/paint cans ~ 1.5 kg/hh/yr
- other plastic ~ 5 kg/hh/yr
- diapers ~ 35 kg/hh/yr.

Actual capture rates for such marginal materials is traditionally very low (20% to 40%)

#### For More Information

Centre & South Hastings Recycling Board operates a very comprehensive recycling program. Contact: Jill Dunkley, Recycling Coordinator, (613) 394-6266.

Edmonton Recycling Society operates a comprehensive recycling program. Contact Cornelius Guenter, Director (403) 471-0071.

## IV: RECYCLING

### Special Material Depots

**Concept:** Collect materials not picked up through curbside programs using special material depots. For Winnipeg, it might mean expanding or re-designing the existing recycling depots to accept materials such as other plastic containers (e.g. dairy tubs), textiles, scrap steel, aseptic packaging (e.g. tetrapaks), empty aerosol and paint containers, other household plastic or disposable diapers. Since most households only collect small volumes of these materials, a depot program may make sense. Addition of new materials should be negotiated with the Manitoba Product Stewardship Corporation.

**Municipal Role:**

- design and implement depots
- secure a market for the materials

**Pros:** Special material depots provide an additional diversion outlet for residents, and may generate revenues. For some materials, it may be easier and less expensive to set up depots than to add the materials to the curbside program, particularly as Winnipeg already has an existing (if somewhat limited) depot program.

**Cons:** Depot programs traditionally have half or less the capture rate of curbside programs, and as most of these materials make up only a very small part of the waste stream, the effort and expense to capture them may not be warranted. Many of these materials currently have only unreliable and/or distant markets.

**Cost:** Cost may be relatively low if the City can piggyback onto or retrofit the existing depots.

**Diversion:** Available in the waste stream:

- tubs ~ 3 kg/hh/yr
- textiles ~ 10 kg/hh/yr
- scrap steel ~ 5 kg/hh/yr
- aseptics ~ 1.5 kg/hh/yr
- aerosol/paint cans ~ 1.5 kg/hh/yr
- other plastic ~ 5 kg/hh/yr
- diapers ~ 35 kg/hh/yr.

Actual capture rates for such marginal materials through a depot program is likely to be very low (5% to 20%).

#### For More Information

Orillia diaper depot program. Contact: Keith Marshall (705) 326-1502

Calgary depot program. Contact: Wyn Van Der Schee (403) 230-6631

## V: ORGANICS

### **Backyard Composting (partially subsidized)**

**Concept:** Municipal residents are offered backyard composters at a reduced price, typically at least half of the regular retail price. Composters are usually offered to the public through one or two day sale events. Increasingly, these events are being organized and sponsored by compost unit manufacturers. Based on the results of similar programs offered in North America, the saturation level of backyard composters is about 30% of all single family households. Higher take-up rates, in the order of 60% have been experienced in communities where composters are sold door-to-door.

**Municipal Role:**

- purchase and store bulk quantities of compost units
- design and coordinate distribution of compost units
- design and implement distribution and educational programs
- promote the event
- provide follow-up services

**Pros:** Backyard composting is recognized as the most cost-effective way to divert food and yard waste from landfill. It offers citizens an opportunity to compost at a reduced price, and reduces the amount of waste which needs to be collected and disposed of.

**Cons:** Citizens are still required to pay to divert their wastes, while regular garbage collection is perceived to be "free". Large quantities of leaf and yard waste are not easily handled by backyard units.

**Cost:** Compost units are generally offered to the public for one-third their regular retail price, which tends to be about \$35-45 per unit. Either the municipal or provincial government is therefore required to assume the difference. Additional costs would include program administration and a promotional and educational program (~ 5 days staff time per sales event). Some form of ongoing support services (e.g. hot line, master composter program) should also be provided.

**Diversion:** Diversion rates are estimated to range between 75 and 250 kg for every composter in use. This wide variation seems to be influenced primarily by promotion and education support programs, and regulatory measures.

#### For More Information

County of Simcoe, Ontario has carried out a number of successful composter sales days.  
Contact: Roseanne Fritzsche, Recycling Coordinator, (705) 435-4188.

City of Vancouver. Contact: Paul Henderson, Solid Waste Management, Engineering Department, (604) 873-7323.

The Region of Waterloo, Ontario ran giveaways of free composters through depots.  
Contact: Steve Gombos, Promotion and Education Coordinator, (519) 883-5100.

Vere Scott is a local compost expert (204) 452-3877

## V: ORGANICS

### **Backyard Composting (free)**

- Concept:** Single family households and other types of residences with adequate yard space are provided backyard compost units free of charge. In some cases, the units are delivered and assembled for residents, and instructions about how to use the units are provided at the same time. In other instances, composters are offered to householders through a depot arrangement on a first come, first served basis. However, through the depot method, only citizens who have access to a car are able to participate, and the opportunity to ensure that the composting unit is properly assembled and used is not available. Take-up and usage rate range from 50% to 80% of single family households.
- Municipal Role:**
- purchase compost units and arrange for temporary storage
  - hire, train and oversee distribution crews
  - develop promotional material and advertise program
  - monitor results
  - requires one full time person with support from students
- Pros:** A large percentage of municipal organic wastes can be managed on-site, reducing the cost to collect and process wastes. Also, with door-to-door follow-up visits, the municipality has an opportunity to directly reinforce other diversion activities.
- Cons:** It requires substantial up front commitment on the part of the municipality to ensure that the program is implemented effectively.
- Cost:** Including the cost of the compost unit, promotion, administration and excluding any potential grants, the program cost per tonne diverted to deliver and assemble composters and to offer a promotional and educational program is approximately \$60 (assuming initial capital costs are amortized over 10 years).
- Diversion:** Based on follow-up residential waste audits, the Port Colborne Earth-Works program determined that approximately 112 kg per household per year (or 150 kg per composter distributed) is diverted through backyard composting.

#### For More Information

The Port Colborne Earth-Works program has successfully placed backyard composters with over 80% of all single-family households. For more details see the Earth-Works Second Interim Report, October 1995. Contact: Lydia Torbicki, Resource Management Coordinator, City of Port Colborne, Ontario, (905) 835-2900.

Centre & South Hastings YIMBY (Yes In My Back Yard) program has operated a very successful free backyard composter giveaway program. Contact Marvin Tucker, Composting Coordinator (613) 394-6266.

### **On-Site Multi-Residential Composting**

- Concept:** Provision of large on-site compost units, generally in the 3 cubic yard range, in areas of multi-family housing. This system is also appropriate for schools, seniors homes and small businesses.
- Municipal Role:**
- purchase, store and deliver and assemble compost units
  - develop educational program, and provide training to residents and building/facility management
- Pros:** Offers an opportunity to compost for households that either do not generate substantial amounts of organics or that do not have adequate green space to support their own composting unit.
- Cons:** Responsibility for properly maintaining the compost unit (because the unit is shared by a number of households, ongoing maintenance must be scheduled and monitored).
- Cost:** The capital cost of a non-mechanized, multi-family composting unit (e.g. a 125 cubic foot 3-bin unit) averages around \$200 and \$400. One week of staff time is required per unit placed.
- Diversion:** Slightly less than the diversion achieved by a single family household through backyard composting, due mainly to the lower amount of yard waste composted — between 75 and 150 kg/hh/year.

#### **For More Information**

Metro Toronto has installed 50 large units and is planning to include another 100. Contact: Carolyn McSkimming Pereira, Metro Toronto Composting Coordinator, (416) 392-5807.

Recycling Council of Manitoba Compost Demonstration Site (at Westminster & Maryland) has 10 units set up at the community garden, and plans to expand this summer. Contact Jen Peters (204) 925-3777.

## V: ORGANICS

### Leaf and Yard Waste Collection

- Concept:** During periods when large volumes of leaf and yard wastes are generated, typically spring and fall, this material is collected separately and delivered to a central facility for composting. Leaf and yard wastes are typically collected using regular garbage packers, although some municipalities use vacuum trucks for leaf collection. Yard waste varies over the course of the year, from brush and trimmings in spring to grass clippings and weeds in summer and leaves and plants in fall. The type of container used by residents to store leaf and yard wastes significantly affects the overall efficiency of the program. Although the cost to residents for plastic bags is seen to be less than paper bags or rigid containers, the cost to remove plastic bags at the compost facility makes their use more expensive
- Municipal Role:**
- tender out or arrange for municipal collection
  - advertise program
  - change garbage bylaws
  - oversee collection program and deal with questions and concerns
  - estimated to be a half-time position during periods of collection
- Pros:** It offers residents and businesses an opportunity to divert excess leaf and yard wastes that are not easily manageable through backyard composting. Curbside collection and composting tends to be more cost-effective than garbage collection and landfilling.
- Cons:** If leaf and yard waste collection is too frequent, it may take away from the diversion potential of backyard composting. If brush waste is included, material will have to be processed with a tubgrinder.
- Cost:** Assuming that leaf and yard waste is collected in either rigid containers or paper bags, cost per tonne for collection is typically between \$25 and \$40 per tonne. Collection efficiency is almost cut in half if leaves are in plastic bags and de-bagged at the curb. Processing (composting) costs are dealt with on pages 29 to 32.
- Diversion:** Depending on what other waste diversion initiatives are in place for leaf and yard waste materials (e.g. grasscycling, yard waste bans, backyard composting programs) and depending on the frequency of collection service that is available to the public, between 5% and 15% of residential solid waste can be diverted through leaf and yard waste composting.

#### For More Information

The City of Barrie, Ontario has a 12 month a year yard waste collection program, and has discontinued the use of plastic bags for collection containers. Contact: Dawn McAlpine, Composting Coordinator, City of Barrie, (705) 726-4242.

Winnipeg already offers a "Leaf It To Us" program that provides curbside leaf collection service to approximately 1/3 of residents, but may wish to expand the program.

## V: ORGANICS

### Curbside Residential Organic Collection

- Concept:** A wide range of collection trials have been conducted over the past 5 years, using different types of containers, collection vehicles and different mixes of potential compostable materials. Some of these include:
- degradable and non-degradable plastic bags,
  - paper bags,
  - rigid containers,
  - 2 stream versus 3 stream material mixes, and
  - weekly versus bi-weekly collection.
- To date, only those pilots that utilize rigid containers have been expanded municipality wide, mainly because there is no known de-bagging technology. Communities presently collecting residential organics curbside include: St. Thomas, Ontario; Lunenburg, Nova Scotia; East Prince, Prince Edward Island. The Guelph, Ontario Wet/Dry program commenced in November 1995.
- Municipal Role:** This initiative would require an entire re-organization of the municipality's current waste management practices. Adjustments would be required for all sectors, and an extensive promotional and educational campaign would need to be put into place to inform all sectors of the required changes. The City of Guelph is gradually phasing in different sectors over the next year as the results of various pilots are coming in. The estimated staff time would be 3 or 4 full time staff people for a minimum period of 6 months.
- Pros:** There is high diversion potential. Some types of low-grade paper can be included with the organic stream.
- Cons:** Curbside collection of organics would take away from usage of backyard composters. It may possibly impact the community's awareness of the need to reduce waste as opposed to separate it for collection. Some valuable fibres may be lost to the organic stream.
- Cost:** Ongoing operating cost information is not presently available from any of the municipal-wide collection programs. Capital cost for rigid containers is substantial - approximately \$70 per container. Some municipalities are leasing the containers from the manufacturers. Processing (composting) costs are dealt with on pages 29 to 32.
- Diverslon:**
- virtually all residential organics - up to 500 kg per household per year

#### For More Information

District of Lunenburg, Nova Scotia. Contact: Fred Wendt, (902) 543-8184.

City of Guelph, Ontario. Contact: Dr. Janet Laird, (519) 837-5604.

Region of Peel, Ontario. Contact: Rob Rivers, (905) 791-7800.

## V: ORGANICS

### **IC&I Multi-Residential Organic Collection**

- Concept:** Typically, weekly collection of source-separated organics is made available to generators of substantial volumes of organic wastes. Examples of those establishments generating large amounts of organics include grocery stores, florists, secondary schools, restaurants and bakeries. Businesses store organics in wheeled carts and place carts at the curb for collection. This service could also be applied to multi-family residential units.
- Municipal Role:** Depending on present IC&I service arrangements, the municipality may be required to contract out this service, re-structure existing collection contracts, and provide education and training to individual businesses about what and how to separate their organics.
- Pros:** It offers businesses that are not able to compost organics on-site or divert to other potential end-users such as farmers, a way to divert at least a portion of their organic waste stream.
- Cons:** Because the wheeled collection container must be washed or exchanged for a clean one, collection costs are generally higher than regular waste disposal costs. Unless regulations are in place requiring businesses to separate out their organics, most perceive it as extra work and an extra cost.
- Cost:** Costs to collect source separated organics in wheeled bins and to exchange the bin at the time of collection for a clean one is between \$5 - \$10 per bin, regardless of the amount of material in the bin. Because it is exchanged at time of collection, the establishment is not required to purchase their own bin(s). Processing (composting) costs are dealt with on pages 29 to 32.
- Diversion:** A collection program provided to restaurants in the Kingston, Ontario area claims an overall 30% diversion in the amount of organics going to landfill. Similar diversion results have been obtained through follow-up waste audits conducted by the City of Port Colborne, Ontario.

#### For More Information

Port Colborne, Ontario offers weekly curbside collection of IC&I organics from small and medium sized waste generators. Contact: Lydia Torbicki, Resource Management Coordinator, (905) 835-2900.

## V: ORGANICS

### Drop-off Depots

**Concept:** For those residents and businesses that are unable to manage their leaf and yard wastes on-site. Drop off depots usually consist of a roll-off box ramped for rear dumping. These depots may also be used as transfer stations for trucks collecting leaf and yard waste in areas where travel time to and from a centralized facility is too great. Drop off depots are typically located at existing waste disposal facilities or municipal works yards.

Temporary drop off depots are often used for the collection of Christmas trees.

**Municipal Role:**

- identify location and construct drop off depot
- provide signage and some supervision to prevent contamination
- arrange contract for collection and transport of yard waste to central composting facility
- advertise availability of depot(s) to the public

**Pros:** The depots can help make a curbside program more efficient by acting as a transfer site. The depots also offer an outlet to citizens who are unwilling to grasscycle, in the event that a ban is imposed.

**Cons:** Material can become anaerobic if left in the depots too long, creating odour problems and making composting at the centralized facility more difficult. Depots also have to be at least partially staffed in order to minimize contamination.

**Cost:**

- dependent on location and staffing level, but much less expensive than a curbside program

**Diversion:** Depot programs traditionally have a much lower capture rate than curbside program

#### For More Information

The City of Brantford has established drop off bins for grass and brush over the summer months at its landfill. Contact Nicole Mundy, City of Brantford (519) 759-1350

Tottenham, a small municipality located in the southern end of the County offers a temporary drop off bin for leaves in the fall. Contact Roseanne Fritzsche, Simcoe County (705) 435-4188

## V: ORGANICS

### **Windrow Leaf and Yard Waste Composting**

- Concept:** Source separated leaf and yard wastes are collected and delivered to a composting pad where they are formed into windrows. Depending on the composition of the incoming material, it may need to be ground prior to formation. Windrows are mechanically turned with a front end loader or a specialized turning device, moisture is added when required, and once composted, material may be screened to remove large wood pieces and some contamination. A finished stable compost is usually available in 4 to 5 months.
- Municipal Role:** This operation may be carried out in-house or contracted out. If the site is operated using municipal staff, some training in composting procedures will be required. A site receiving 5,000 tonnes annually will require 1 and 1/2 days of staff time per week.
- Pros:** A leaf and yard waste site can provide an entry level for the development of expanded composting activities. For example, screenings from grain processors can be added relatively easily to a standard leaf and yard waste windrow, and can provide added nitrogen. Depending on permitting requirements, a leaf and yard waste windrow composting operation is quick and easy to start up especially if some form of leaf and/or yard waste collection already exists. Some revenue can also be generated from the sale of finished compost.
- Cons:** The availability of central leaf and yard waste sites may take away from home composting or grasscycling activities.
- Cost:**
- ranges between \$25 and \$50 per tonne including capital, but not land costs
- Diversion:**
- depends on amount collected (covered on pages 25 to 27)

#### For More Information

Compost Management is the largest operator of central compost facilities in Canada.  
Contact: Paul Taylor, President, Compost Management, Elora, Ontario, (519) 846-8317.

Victoria, British Columbia operates a centralized leaf and yard waste windrow composting facility handling about 12,000 tonnes per year. Contact: Lorenzo Mele, Composting Coordinator, Victoria, (604) 360-3060.

City of Winnipeg: *Leaf It To Us* program.

City of Brandon, Glen Newton (204) 729-2285

## V: ORGANICS

### **Windrow Food Waste Composting**

- Concept:** Source-separated clean food waste is blended with wood chips or another source of carbon and formed into windrows. Depending on the make-up of the incoming material, windrows may be turned as frequently as twice a day using a loader or a specialized turning device. Moisture is added when required, and once composted, material may be screened to remove large wood pieces and some contamination. A finished stable compost is usually available in 3 to 4 months.
- Municipal Role:** Food waste composting is sufficiently complex and problematic that municipalities should be hesitant about taking on operations directly. The consequences of operating any food waste composting facility poorly are huge in terms of loss of public support, and can be difficult to remediate. The municipality needs to ensure that incoming material is free of contaminants, and that waste generators are educated about what is compostable.
- Pros:** Windrow food waste composting is less expensive than enclosed, in-vessel composting alternatives and is flexible in terms of size, equipment and time requirements.
- Cons:** A relatively high degree of management is required. It can take away from the diversion potential of on-site composting activities or diversion to animal feed.
- Cost:**
- between \$40 and \$70 per tonne, including capital, but not land costs
- Diversion:**
- depends on the amount collected (covered on pages 25 to 27)

#### For More Information

Compost Management is the largest operator of central compost facilities in Canada.  
Contact: Paul Taylor, President, Compost Management, Elora, Ontario, (519) 846-8317.

## Enclosed Composting

- Concept:** Enclosed composting operations are based on proprietary technologies. Source separated food waste is delivered to the facility and blended with wood chips or another source of carbon. The primary composting phase takes place in an enclosed facility. Later, material is taken outside and formed into windrows for final curing. Generally, some kind of specialized machinery is used to mechanically mix and aerate the material. Other common features of enclosed facilities include an air injection system to increase oxygenation of the material and an air collection system that captures potentially odourous air in the building and directs it to a biofilter for treatment.
- Municipal Role:** Food waste composting is sufficiently complex and problematic that municipalities should be hesitant about taking on operations directly. The consequences of operating any food waste composting facility poorly are huge in terms of loss of public support, and can be difficult to remediate. The municipality needs to ensure that incoming material is free of contaminants, and that waste generators are educated about what is compostable.
- Pros:** Enclosed composting takes place at a faster rate than windrows, and, depending on the selected technology and operation, can be odour free.
- Cons:** Over 50 types of enclosed composting technologies exist, therefore evaluation of the various competing technologies can be complex. Capital costs are high. In one or two stream systems, there can be difficulties with household hazardous waste contamination.
- Cost:** An enclosed, in-vessel system being constructed in Truro, Nova Scotia is estimated to cost \$35 per capita in capital costs, and between \$45 and \$50 a tonne in operating costs. The Truro facility is designed to compost 2,000 tonnes of organic material a year. (Note: The Town of Caledon, Ontario, currently operates in in-vessel system that has a capitalization cost of \$250 per capita and operating costs of \$130 per tonne.)
- Diversion:**
- depends on amount collected (covered on pages 25 to 27)

### For More Information

The following are either operating or in the process of installing an enclosed composting system:

- Truro, Nova Scotia. Contact: Mike McGill, Town Engineer, (902) 892-4243
- District of Lunenburg, Nova Scotia, (902) 543-8184
- Green Lane Environmental Ltd., Lambeth, Ontario, (519) 652-3500

## V: ORGANICS

### **Bio-Conversion**

- Concept:** Organic wastes consisting of primarily food wastes and sludges are processed and heated to ensure pathogen reduction and, depending on the feedstock, are converted into animal feed or fertilizers. Thermo Tech, a privately owned company with 5 bio-conversion plants either in operation or under construction in Canada, mixes incoming material with water to make a slurry. The slurry is then moved through a series of holding tanks, where it is heated to temperatures where thermophilic bacteria thrive. Once pathogen reduction has been achieved, the material is then dried out and compressed into pellets. The entire process takes as little as 24 hours. Thermo Tech's Brampton plant is able to receive 200 tonnes of incoming material each day, from which 20 tonnes of finished product is produced.
- Municipal Role:** • inform generators of organic wastes about this alternative
- Pros:** It offers a way to handle hard-to-compost materials such as grease, fats and sludges.
- Cons:** This process is new and is without an extensive track record.
- Cost:** The process to construct a Thermo Tech plant is approximately \$8 million. Thermo-Tech's Brampton plant charges a \$45/tonne tipping fee for all incoming material.
- Diversion:** • Could divert 200 tonnes per day (normally of IC&I waste)

#### For More Information

Thermo Tech Technologies Inc., Brampton, Ontario. Contact: Ed Krockner, Senior Vice-President, (905) 450-8866.

## V: ORGANICS

### **Multi-Residential Balcony Composting**

- Concept:** Small home composters, usually modified to prevent any leakage, are made available to apartment dwellers to allow them to compost at least a portion of their organic wastes.
- Municipal Role:**
- possible subsidization of the compost unit
  - obtain approval from building owners/management
  - promote program to building tenants, education seminars for interested tenants.
  - assume 3 days time per building
- Pros:** Offers apartment dweller an opportunity to compost.
- Cons:** Because the balcony compost units are usually smaller than regular composters, they tend not to have sufficient volume to ensure optimal composting activities. Bins typically have only 5-7 cubic foot capacity. Residents are often hesitant to give up some of their valuable balcony space for a compost unit.
- Cost:**
- \$45 retail per unit
- Diversion:** On average, units handle 80 kg of food waste per year.

#### For More Information

The City of Barrie, Ontario has been implementing various apartment composting programs for the past 4 years. Contact: Dawn McAlpine, Composting Coordinator, (705) 726-4242.

## V: ORGANICS

### **Multi-Residential Vermi-Composting**

- Concept:** Household sized vermi-composting units are made available to apartment dwellers to allow them to compost at least a portion of their organic wastes.
- Municipal Role:**
- possible subsidization of the compost unit
  - obtain approval from building owners/management
  - promote program to building tenants, education seminars for interested tenants.
  - assume 3 days time per building
- Pros:** Offers citizens without access to a yard an opportunity to compost at least some of their food wastes.
- Cons:** Worms must be maintained at a temperature less than 35°C to ensure that they are not killed through overheating. This requires some maintenance on the part of the apartment dweller. People can be wary of having worms in their living space.
- Cost:** The retail price of a vermi-composting bin system ranges between \$50 and \$100 per unit.
- Diversion:** A small residential unit can manage approximately 80 kg of food wastes per year.

#### For More Information

The Greater Vancouver Regional District and the Region of Peel in Ontario have implemented successful multi-residential vermi-composting programs.

Greater Vancouver Regional District . Contact: Bev Webber, Compost Program Operator, (604) 436-6818

Region of Peel, Ontario. Contact: Nigel Chubb, Composting Coordinator, (905) 791-7800.

Vermi-composting Products, Lydia Giles (204) 772-1200

## V: ORGANICS

### **Large Scale Vermi-Composting**

- Concept:** Worms are used to consume organic waste and to turn it into a soil conditioner. Large, insulated vermi-composting bins are constructed and, depending on the feedstock, can be equipped with a grinder to reduce the size of the organic waste. Food waste is mixed with an amending material and added to the bin. Castings are removed on a regular basis and can be applied to lawns or gardens.
- Municipal Role:** • make establishments aware of-composting, to offer promotional support
- Pros:** It can take place indoors or out and requires little space.
- Cons:** There is no pathogen reduction because organics are not allowed to pass through thermophilic temperature ranges. There is some reticence by some people over the concept of using worms as a processing agent.
- Cost:** The capital cost for a system designed to handle 200 pounds a day of food waste is between \$12,000 and \$15,000. A smaller system, suitable for a cafeteria or lunch room would cost approximately \$1,000.
- Diversion:** • depends on number established

#### For More Information

Original Vermitech Systems Ltd., Toronto, Ontario is designing a large-scale indoor system for Metro Hall. Contact: Al Eggen, (416) 693-1027.

Charles Mitchell, vermi-composting consultant (P.O. Box 5044, Townsend Ontario, N0A 1F0) specializes in the design of vermi-composting systems in the 600 to 1000 kg/year range.

## VI: REGULATIONS

### Material Bans (collection)

- Concept :** A readily-identifiable part of the waste stream is banned from municipal collection programs to encourage source reduction and alternative measures on the part of resident. Bans could relate to recyclables, leaf and yard waste, grass clippings or any other material for which a diversion alternative exists.
- One of the most effective bans is a grass clipping ban. Normally, the ban would be accompanied by a grasscycling and backyard composting campaign, and a depot would be set up for residents who still feel a need to bag their clippings. In some cases a limited collection is offered.
- It is essential that alternatives are put in place for the banned material before the ban is implemented. This allows the promotion and education campaign associated with the ban to focus on the alternatives rather than the ban.
- Municipal Role:**
- develop/promote alternatives (e.g. grasscycling, backyard composting)
  - set up drop-off depot(s), if needed
  - institute seasonal collection if applicable
  - change garbage bylaw (if necessary)
  - advise contractor
  - advertise the change widely
  - arrange for enforcement of the ban by a bylaw officer
- Pros:** It has high potential to divert residential waste. In the case of leaf and yard waste bans, it encourages composter sales which could lead to other organic materials being diverted.
- Cons:** This approach can be unpopular with residents and requires a careful promotion campaign and briefing of politicians. It may require renegotiation of the garbage contract.
- Cost:** Costs are required for advertising, operation of diversion programs, staff time to handle complaints/inquiries, and enforcement. However, costs are minimal in the context of the diversion potential.
- Diversion:**
- depends on the material banned. Up to 15 per cent(or more) if grass clippings or yard waste are banned.

#### For More Information

The City of Waterloo brought in a grass clippings ban after promoting grasscycling. Contact: Vivian di Giovanni, City of Waterloo, (519) 747-8612.

The City of Guelph understands the political problems a ban can cause and addressed these problems with seasonal collections. Contact Dennis Bower or Jutta Siebel at the City of Guelph, (519) 837-5604.

Recycling Council of Manitoba has a *Don't Bag It* pamphlet and technical manual.

## VI: REGULATIONS

### **Material Bans (at the landfill)**

- Concept:** Certain materials are banned at the landfill and alternative handling measures encouraged. In the case of old corrugated cardboard (OCC), loads with more than a certain percentage are turned away at the site, or are levied at a higher rate (usually double the tipping fee). This percentage can be decreased over time. Most bans take effect several months after the necessary bylaws are put in place, to allow for the education campaign. In the meantime OCC recycling is offered curbside, at a depot, at the landfill or those offering the service are promoted.
- Municipal Role:**
- change the relevant bylaws
  - advertise and promote the changes widely
  - set up or facilitate the convenient recycling of OCC
  - promote reduction/reuse opportunities
- Pros:** Potential for very high diversion from landfill, depending on material. OCC can make up half of IC&I waste in smaller areas. Most large generators are likely already separating their OCC through commercial services.
- Cons:** May be unpopular with IC&I sector if no convenient recycling program is in place. Haulers may object because they are the ones who have to force their clients to separate the appropriate materials.
- Cost:** Costs are low - mainly advertisements and staff time to meet with IC&I sector and handle inquiries. Facility costs, if offered, could be offset by reduced tipping fee or revenues, or both.
- Diversion:**
- potentially high, depending on material.

#### For More Information

St. John's Newfoundland recently brought in an OCC ban. Contact: Geraldine King, City of St. John's, (709) 576-8613.

Both Metro Toronto and North Simcoe County have had several material bans in place for some time:

- Metro Toronto Works Department. Contact: Tom Richard, (416) 397-0202
- North Simcoe County Waste Management Site. Contact: Sandy Agnew, Manager (705) 526-6900.

British Columbia has imposed restrictions on drywall waste at landfills.

## VI: REGULATIONS

### Lift Limits

- Concept:** A limit is placed on the number of garbage bags or equivalents which are allowed for municipal collection. Other waste management options are promoted.
- Municipal Role:**
- amend garbage bylaw, if necessary
  - consult with garbage contractor
  - prepare for increase in recyclables collected
  - promote changes through advertising and other vehicles such as newsletters, press releases etc.
- Pros:** Potential to reduce residential garbage significantly. It encourages backyard composting and grasscycling and increases recycling, particularly large items such as OCC, boxboard and plastic bottles.
- Cons:** It can be unpopular with some residents, generating similar complaints to the user pay concept, e.g., that it is unfair to large families etc. Special consideration must be given to the multi-residential sector as well as areas with autobin garbage service. If bags are left behind this could increase illegal dumping.
- Cost:**
- low, mainly advertising
- Diversion:** Depending on number of bags allowed, diversion is potentially quite significant. Three bags or more likely will make little difference; two or one will.

#### For More Information

Peterborough brought in a two-bag limit this spring. Contact: Susan Sauve, City of Peterborough, (705) 748-8890.

Portage la Prairie. Contact Lynn Bereza (204) 239-8352.

Town of Stonewall. Contact Robert Potter (204) 467-5561.

## VI: REGULATIONS

### **Bag Tag Garbage Programs**

**Concept:** One of the most effective ways of stimulating diversion programs is to implement a bag tag program for garbage. This provides financial incentive to the resident to minimize waste, and reduces the municipal waste management tax burden. The keys to a successful bag tag program are having adequate diversion alternatives in place for recyclables and organics and implementing an effective public information/consultation program that allows taxpayers to see how their tax bill is impacted by the program.

Other forms of user pay garbage programs (e.g. volume and weight based programs) have also been tried (e.g. Seattle), but these tend to be more complicated and costly to implement.

**Municipal Role:**

- implement a public education/consultation program
- administer the bag tag program
- negotiate changes to existing collection contracts

**Pros:** Increases recycling and backyard composting capture rates and stimulates reduction and reuse activities, and greatly reduces municipal tax burden. User pay programs have been implemented with almost universal success in over 1,500 municipalities in North America.

**Cons:** Some concerns will be raised on issues such as illegal dumping, double taxation and unfairness, although experience has shown that these are short-lived perceptual issues, rather than substantive ones. Implementation of a bag tag program in auto-bin and multi-family areas will be more difficult and/or less effective.

**Cost:** Ongoing program costs are nominal (~\$0.05 per household).

**Diversion:** Diversion ranges from 20% to over 50% depending on the design of the bag tag program and the diversion options available.

#### For More Information

The Sidney Township Blue Box 2000 Demonstration project includes one of the most successful and thoroughly monitored bag tag programs in Canada. Contact: Robert Argue, (905) 841-5551.

Nanaimo, British Columbia. Contact: Carrie McIvor (604) 390-4111.

The Association of Municipal Recycling Coordinators has a very comprehensive User Pay Kit for municipalities. Contact Ben Bennett (519) 823-1990.

# Section 7

## System Identification Workshop Report

### 1.0 Introduction

This action plan involved the following three main tasks:

- Task 1 Developing a Vision
- Task 2 Identifying Potential System Components
- Task 3 Determining a Preferred System

This section discusses the first part of the process used to get from the 40 or so potential system components identified in the previous section to a draft preferred system.

The first part of this process involved the consultants ranking the various potential system components based on diversion potential and cost effectiveness, and then assigning a priority to each. This was seen as a starting point — something that could prompt further discussion by key players.

This consultant ranking was then presented and discussed at an informal workshop with City Administration staff and members of the WMAC executive. The following day, the consultant ranking together with the administration and WMAC executive input was presented to WMAC, and input solicited.

The input from these activities, together with the data from the profiles, became the basis for the subsequent draft action plan

### 2.0 Consultant Process

Because of the technical nature of many of the components, it was decided that the consultants would take a first cut at prioritizing potential waste minimization activities, keeping in mind Winnipeg's unique circumstances (e.g. low garbage collection and tipping fees, cold and windy climate, and fiscal capabilities).

REIC consultants listed 37 initiatives in the 5 main groupings used in the profiles (Reduction, Reuse, Recycling, Organics and Promotion/Regulations). Each of these initiatives was ranked based on diversion potential, cost efficiency and overall priority. A simple three star rating system, was used, with one star meaning low and three star meaning high. The prioritization was largely dependent on the diversion and cost efficiency rating, but also took into account other considerations, such as the impact on householder attitudes and the ability to move beyond waste diversion to waste avoidance.

Although this ranking was done in a somewhat detached manner (e.g. by an outside body, based on experiences with similar programs elsewhere), consideration was given throughout this process to specific conditions in Winnipeg that might affect the diversion rate or cost-effectiveness. However, it was recognized that this ranking would just be a starting point, and local input would be an essential component of the system refinement process.

The consultant ranking follows (Figure 1).

## System Component Matrix

Waste Reduction Initiative	Diversion	T/\$	Priority
<b>I Waste Reduction</b>			
A Waste Audits — Residential	*	*	*
B Waste Audits — IC&I	*	*	*
C Community Grants Program	*	**	*
D IC&I Waste Reduction Posters	*	*	—
E Store Labelling	*	*	—
F Environment Days	*	*	*
G Specific Waste Reduction Campaigns	*	*	*
H Other			
<b>II Reuse</b>			
A Reuse Guide	*	*	*
B Community Yard Sale	*	*	**
C Community Swap Meet	*	**	—
D Landfill Salvage Depot	*	**	**
E Reuse Centre — Commercial	*	**	**
F Reuse Centre — Non-Profit	*	**	*
G Reuse Centre — For-Profit	*	**	*
H Waste Exchanges (IC&I)	*	**	**
I HHW Reuse Programs	*	*	**
J Other			
<b>III Recycling</b>			
A Expanded Curbside Recycling	*	**	**
B Special Material Depots	*	*	*
C Other			

T/\$ indicates cost efficiency    \* indicates low    \*\* indicates medium    \*\*\* indicates high

## System Component Matrix (continued)

Waste Reduction Initiative	Diversion	T/\$	Priority
<b>IV Organics</b>			
A BYC (subsidized)	**	***	***
B BYC (free)	***	***	—
C Community Composting	**	**	**
D LYW Collection	***	***	***
E Curbside Residential Organic Collection	***	*	—
F IC&I/MFU Organic Collection	**	*	—
G Windrow LYW Composting	***	***	***
H Windrow Food Waste Composting	***	***	*
I Enclosed Composting	***	**	—
J Bio-Conversion	***	**	—
K MFU Balcony Composting	*	*	*
L MFU Vermi-Composting	*	*	*
M Large Scale Vermi-Composting	*	*	—
N Drop Off Depots	*	*	—
O Other			
<b>V Promotion/Regulations</b>			
A Promotion/Education Program	**	**	***
B Material Bans — Curbside Collection	***	***	***
C Material Bans — Landfill	***	***	***
D Lift Limits	**	***	***
E Bag Tag Garbage Programs	***	***	***
F Other			

T/\$ indicates cost efficiency    \* indicates low    \*\* indicates medium    \*\*\* indicates high

### 3.0 Meeting With Administration & WMAC Executive

The consultant prioritization was presented to an informal joint meeting of City staff and the WMAC executive on Tuesday, January 16th, 1996. The following people were in attendance:

#### **City staff**

- Tony Kuluk
- Dwight Gibson
- Dave Ross
- Cliff Tuttle
- Bob Kalika
- Randy Parks
- John Friesen

#### **WMAC**

- John Sinclair
- Janice Westlund
- Denis Coley

#### **Consultants**

- Alfred Von Mirbach, REIC
- John Osler, InterGroup

The consultants explained that although they had taken an initial cut at prioritization, their role was intended to be that of facilitator, and it was therefore essential that staff and WMAC provide as much input as possible. The consultants then discussed how their prioritization fitted in with input from the Focus Groups, the survey and the Community Outreach Sessions. In general, it was found that the public largely supported a more aggressive waste minimization system, and were prepared to do more to reduce waste provided they were given appropriate tools (Refer to Sections 4 and 5 for more details on these public consultation initiatives).

Considerable discussion followed, not only with regards to prioritization of initiatives, but also on other topics such as how to sell whatever preferred system, the implications of the BFI landfill, and other fiscal considerations.

The following are the main comments or concerns raised by participants:

#### **Prioritization**

- MPSC funding makes recycling initiatives particularly attractive
- there has been support for backyard composting at the Works and Operations Committee level
- both backyard composters options (free and subsidized) should be considered at this time
- salvage operations at the landfills should be expanded
- promotion and education is essential to the success of any waste minimization effort
- a monitoring and evaluation program is essential

## **Selling the System**

- Council tends to have a three year vision, and the system should reflect that (e.g. timing the implementation of a user pay system immediately before an election may not be realistic)
- is there a way of demonstrating a ground swell of public support for these initiatives?

## **Other Comments**

- political input is to come only through the formal Works and Operations Committee structure
- the BFI landfill issue is making landfill even less of an issue for the City, and as a result, the tendency of Council is to rest even more on the laurels of the recycling program
- the BFI landfill could lead to a landfill tipping fee price war, which could jeopardize minimization initiatives
- a formal response to the User Pay issue raised a couple of years ago is still outstanding
- there is a need for Council to adopt a waste reduction target so that there is a quantifiable goal to guide the decision-making process
- much discussion was given to considering how regulatory issues such as material bans and bag tag garbage systems could be effectively implemented in areas of the City that now are using auto-bins

In light of this last point, it was realized that there should be monitoring to determine how autobins are currently affecting diversion and disposal rates, and that more thought must go into the potential impact that expanding the autobin program might have on regulatory initiatives that could become essential components of a successful minimization system.

The conclusion of this group was that the key preferred waste minimization system components should include:

- backyard composting (subsidized or free)
- full leaf and yard waste collection
- expanded promotion and education programs
- multi-family curbside recycling
- a coordinator to implement reduction & reuse initiatives
- phased-in materials bans and (possibly) a lift limit and/or bag tag system
- on-going waste composition, set-out and participation studies to assist in program evaluation, review and revision.

The group also emphasized the need for a "marketing plan" in order to get Council to buy into the proposed system. Some of the issues to be stressed include:

- potential for job creation (because more is being done with material than in a disposal-oriented system)
- relationship to the City's commitment to the principle of stewardship (e.g. Plan 2000)
- demonstrated public demand and support for increased diversion opportunities
- the need to build on the momentum of the existing diversion initiatives.

- tapping into the “free” labour from the public
- once the integrated waste minimization system has matured, there are potential savings from:
  - reduced waste disposal and collection costs
  - implementing a bag-tag system for garbage
  - bi-weekly garbage collection system (e.g. Edmonton)

Another issue that was raised related to the details of financing minimization programs in the current climate of fiscal restraint. It was realized that the current system of funding minimization programs based on landfill reserve funds was counter-productive, in that the more successful the diversion programs are, the less money is available to run them. It was also noted that the potential of a BFI landfill taking away much of the IC&I waste would have a further negative impact on the funding available for diversion programs.

#### 4.0 WMAC Meeting

The consultant prioritization (outlined in Figure 1) was distributed and discussed with WMAC members. The consultants then reviewed the discussion of the Administration and WMAC Executive meeting, and provided an overview of how the prioritization and subsequent input fitted in with public input obtained through feedback from the first newsletter (Section 3), the Focus Group Sessions (Section 4) and the Community Outreach Sessions (Section 5).

WMAC members were in general agreement with the system as presented by the consultant and modified at the meeting of administration and the WMAC executive. WMAC also supported the proposed “next steps”, which involved preparing a detailed action plan, and presenting the action plan to four groups in mid-March: a joint meeting of administration and the WMAC executive, WMAC, a public Open House and a public workshop. It was also agreed that a second newsletter should go out as soon as possible to let people know about the preferred system and encourage them to come out to the proposed open house and workshop.

Comments from WMAC members included:

- promotion and education activities appear to be absent from the chart
- there is no mention of multi-family units in the chart
- should backyard digestors not be included as part of the system
- are there opportunities for partnerships with commercial renderers
- a food waste pilot project should be moved to high priority
- xeriscaping should specifically be mentioned
- construction and demolition waste should be mentioned
- the City needs to adopt a waste minimization target to provide a focus for the process

The consultants addressed some of these concerns directly, and agreed to take others into account when outlining a preferred system. Some suggestions were also made regarding the vision statement, and these were discussed, and where consensus reached, it was agreed that changes would be made to the draft vision statement presented in the first newsletter.

## 5.0 Conclusion

Based on the comments and discussion described above, a draft waste minimization system was identified and described (Section 8). This draft system was then run through a version of the iterative planning process identified in Phase 1 of this study, including the following steps:

- consultant preparation of a report describing a draft system
- development of a newsletter which describes the preferred system (end of February)
- presentation of the draft system to administration and the WMAC executive (March 18)
- presentation of the draft system to WMAC (March 19)
- soliciting public input at an information display at the Forks Market (March 19)
- soliciting public input at a workshop (March 19)

Input received through these activities will be compiled and used to prepare a revised draft waste minimization system action plan.

# Section 8

## Action Plan

### 1.0 Introduction

This section provides a detailed description of the key building blocks of the preferred waste minimization system. It focuses on specific steps that will have to be taken in order to effectively implement the system. An action plan timeline at the end of this section summarizes these key steps.

This action plan is a first iteration, and will be subject to review and revision over time, using the process developed in Phase 1. The key building blocks that make up the draft waste minimization system described in this section are:

- recycling
- backyard composting
- leaf and yard waste
- other 3R initiatives
- material bans/lift limits
- garbage
- IC&I (Industrial, Commercial and Institutional) Waste
- system monitoring/review

This preferred system was distilled from the 3Rs Initiative Profiles outlined in Section 6, using the process identified in Section 7. Particular emphasis was paid to the results of the Focus Group Sessions, the Community Outreach Sessions, the associated survey, and feedback from the first newsletter, all of which provided valuable feedback on initiatives for which there was substantial public support.

Any person or group responsible for implementing one or more components of the preferred system should refer not only to the discussion in this section, but also to the individual initiative profiles, which include references of other municipalities that have undertaken similar initiatives.

It is important to note that for a minimization-based system to be effective, it must be designed and implemented in an integrated manner, and not a series of individual add-ons to an existing disposal-oriented system. The interrelated approach:

- generates efficiencies of scale
- ensures that system components build on each other
- gets residents to see “waste” as a resource to be used as effectively as possible, with only true garbage going to disposal

The cumulative impact of these diversion initiative will be significant enough to provide substantial cost savings in the disposal components (collection/landfilling) of the system.

In order to implement the system, it is recommended that a “carrot/stick” approach is used. Residents are first provided with the “carrots” — tools with which to divert or avoid waste. Once those tools are in place, the City can bring in “sticks” (e.g. material bans and/or lift limits) that give the message that all residents are expected to use these tools that have been provided. These regulatory initiatives are an

essential part of an effective waste minimization system, as they improve participation and capture rates of individual system components significantly. This "carrot/stick" approach has been shown to be very effective in getting a wide range of municipalities to reach or exceed 50% diversion targets.

The preferred system described in this section focuses on those initiatives where the City of Winnipeg (referring here to the municipal level of government) should take an active role in implementation, either directly or by actively encouraging the public or private sector to take on a given initiative. Other activities that are more appropriately the responsibility of the provincial or federal governments or the non-profit or private sector are not discussed here, although may contribute to the effectiveness of the overall system.

This draft system concentrates on those components that could or should realistically be implemented in the short or medium term (the next three to five years). It also responds to the waste management realities in Winnipeg, such as low tipping fees, ample landfill capacity, increasing fiscal pressures and cold winters. It represents a balanced mix of proven and cost-effective waste diversion tools whose success depends on a systems approach, an aggressive integrated promotion and education campaign, and a backdrop regulatory environment that strongly encourages diversion. As important to the system's success is a need for City staff and decision-makers to take ownership of the system and make implementation a priority. Without this, the system will flounder, or at best slowly evolve in an inefficient and piece-meal manner.

This sort of "low-tech" system works because it gets residents to do much of the work and minimizes the amount of material that the municipality has to pick up and deal. It also respects the principle of resource utilization, an essential aspect of this planning exercise.

It is intended that this document will be subject to continuous review and revision, based on a program of on-going monitoring and evaluation of program effectiveness. Such longer term initiatives will hopefully come out in subsequent versions of this document.

## 2.0 Recycling

### 2.1 Description

The City of Winnipeg already has a comprehensive multi-material recycling program in place, collecting a broad range of materials from single family residences. However, there are a number of actions that can be taken now to extend the program to all residents, and to improve participation and capture rates, particularly in the areas of promotion and education. These activities can substantially increase diversion from landfill at a reasonably modest cost.

It is important that the City nurture innovative local end use markets for recyclable materials, including any potentially source-separated materials which are not currently collected. Any such end markets should take into account economic, environmental and resource management considerations.

### 2.2 Key Elements

- expand program to include all multi-family units (MFU)
- launch an aggressive promotion/education (P/E) campaign

### 2.3 Cost

- costs for MFU collection likely to be similar or cheaper on a per tonne basis than the current curbside contract (with efficiencies of picking up several 90 gallon roll-out carts at each stop offsetting the extra sorting/contamination costs and the cost of the roll-out carts)
- an aggressive P/E recycling program is likely to cost ~ \$0.50 per capita
- these costs should be eligible for 80% subsidy from the Manitoba Product Stewardship Corporation

### 2.4 Diversion

- 47,000 Tonnes from single family homes (for a mature program with aggressive P/E)
- 8,000 Tonnes from MFUs (for a mature program with aggressive P/E)
- diversion should increase further as regulatory measures (bans, lift limits, bag tag systems) are implemented

### 2.5 Action Plan

- set up meeting with City staff, Manitoba Product Stewardship Corporation (MPSC), WMAC's Promotion and Education ad hoc committee, Laidlaw and any other relevant parties to discuss funding, responsibilities, goals and products
- develop a business plan for extending recycling services to MFUs
- prepare a tender for collection of recyclables from MFUs
- develop and distribute relevant P/E materials
- launch the MFU program (likely in a phased manner)
- continue to monitor program and adjust P/E program accordingly



## 3.0 Backyard Composting

### 3.1 Description

The City of Winnipeg has already taken an active role in encouraging residents to practice backyard composting through their backyard composter rebate program, but has a limited number of rebates to issue each year. A compost survey, carried out by Prairie Research Associates Inc. (PRA) in 1993 indicated that 38,500 households in Winnipeg were already composting (16% of single family homes), three quarters of which were using a compost pile or a homemade composter. Although this a good start, there is clearly considerable room for improvement. Aggressive backyard composting projects in Ontario (Port Colborne, Centre & South Hastings, Markham and Waterloo) have proven that it is possible to get up to 80% of single family homes composting.

In order to push significantly past the current 16% take-up rate, the City must promote composting more aggressively by going door-to-door offering backyard composters either for free or at a greatly reduced price. The City also needs to ensure that there is an effective support network that:

- develops promotional and education support material
- answers hot-line questions
- visits all homes that accept a composter about two months afterwards to see if they are having any problems and provide any required assistance.

Much of this can build on the efforts of the Recycling Council of Manitoba's backyard and community composting efforts. As much as possible, support programs should be integrated with other diversion programs in a consistent "one-window" approach.

The issue of free versus subsidized composters will need to be resolved. Clearly, the take-up rate will be higher if the composters are free, but at a higher program costs. The PRA study and the focus group sessions carried out in November as part of this study both indicate that cost is not as critical as the need for information and support. If the City commits to a bag tag program for garbage, it can likely reach aggressive take-up rates without offering composters for free.

### 3.2 Key Elements

- door-to-door distribution of free or subsidized (~ \$20 cost to resident) backyard composters
- support network, including Master Composter program, hot-lines, promotion and education (P/E) materials etc.
- follow up visits to households that accept a composter about two months after they accept the composter
- set up pilot on-site composting projects at apartment buildings and IC&I establishments, using low-tech three bin compost units, with a target of 100 units in the first 3 years

### 3.3 Cost

- a door-to-door backyard compost distribution program of this scale would likely cost \$45 per unit, with \$30 for the unit and \$15 for distribution
- \$50,000 for a composting coordinator staff and office

### 3.3 Cost (cont'd)

- a first year \$0.25 per capita for development, production and distribution costs for P/E materials, plus an additional \$0.10 per capita per year in subsequent years
- \$5 per distributed composter for follow-up visits to households accepting composters
- if composters were sold for \$20, approximately 50,000 additional composters would be distributed (50% take-up rate)
- if composters were made available for free, approximately 75,000 additional composters would be distributed (65% take-up rate)
- to minimize costs in any given year, it may be necessary to phase-in the compost distribution over a number of year
- cost for large three bin compost units for apartments are in the \$200 to \$400 range

### 3.4 Diversion

- 150 kg per composter per year (adjusted downward to account for Winnipeg's cold climate)
- diversion rate will increase as regulatory measures (e.g. leaf and yard waste ban, lift limits, user pay) are put in place

### 3.5 Action Plan

- meet with Recycling Council of Manitoba (RCM) to discuss existing and future roles with respect to promoting backyard composting
- identify appropriate staff people to (using existing, reassigned or new staff) to develop a detailed plan of action
- The detailed action plan should cover the following:
  - tendering for supply of composters
  - arranging or tendering for distribution of backyard composters
  - training and support for a team to provide follow-up visits and on-going support (e.g. Master Composters, Compost Doctors or Block Leaders)
  - development, production and distribution of required promotional/educational material
  - monitoring take-up, problems calls and changes in garbage set-outs and tonnage to determine success of the program
  - other logistical and timing considerations (e.g. phase-in, timing of launch, provision of larger composters or kitchen buckets, etc.)
- implement the program (perhaps using a phased-in approach)
- initiate pilot projects for composting at multi-family units
- monitor program effectiveness, and adjust program accordingly

## 4.0 Leaf and Yard Waste

### 4.1 Description

The City's *Leaf It With Us* program has been in place for a number of years. This program includes curbside collection from 66,900 households, a series of 10 depots for receiving leaves from other households, and a windrow composting site at the Brady landfill. The curbside program currently diverts approximately 1,430 tonnes per year, with the depot program diverting another 516 tonnes.

Clearly, capture rates from curbside areas are much higher than from depot areas. Accordingly it is suggested that the City expand curbside collection to the entire City, and include some level of spring and summer yard waste pickup as well as fall leaf pickup. Once this program is in place, the City can ban leaf and yard waste from the garbage stream, which should result in further reductions in garbage tonnages.

### 4.2 Key Elements

- curbside collection of yard waste to the entire city
- 2 yard waste pickups in spring
- 2 yard waste pickups in summer
- 3 leaf pickups in fall
- ban on grass clippings
- ban on leaf and yard waste (from regular garbage collection)
- expanding the existing composting site to deal with increased tonnage
- pilot projects to compost IC&I food waste at the leaf and yard waste composting site
- setting up of transfer sites to minimize haul costs
- promotion and education campaign to promote the program and alternatives

### 4.3 Cost

- collection costs are typically \$30 to \$45 per tonne
- processing costs are typically \$30 to \$40 per tonne
- there is potential for some revenue from the finished product (\$0 to \$10 per tonne)

### 4.4 Diversion

- yard waste is estimated to make up approximately 20% of the City's residential waste, or some 48,000 tonnes
- a full leaf and yard waste program, combined with the backyard composting program and bans should result in approximately 80% reduction/diversion of this waste, or 38,000 tonnes

#### 4.4 Diversion (cont'd)

- this 38,000 tonnes of leaf and yard waste breaks down as follows:
  - 4,000 tonnes diverted through backyard composters (50 kg/composter, 80,000 hh)
  - 7,000 tonnes diverted through leaf and yard waste collection program (40 kg/hh, 170,000 hh)
  - 27,000 tonnes diverted through grasscycling and homemade compost piles

#### 4.5 Action Plan

- City to develop a detailed implementation plan:
  - determine whether collection and/or processing should be run by the public or private sector
  - determine how compost is to be used (screened and sold, used by parks staff, made available to residents)
  - determine collection details:
    - collection frequency
    - acceptable materials
    - how material is to be set out (containers or paper bags are recommended)
  - obtain necessary approvals from Committee/Council
- arrange for expansion/improvement of existing compost site to handle additional tonnage
- arrange for transfer stations
- arrange for expanded collection program
- develop promotional/educational materials
- launch expanded program
- if required, provide depots to service residents between collections
- impose appropriate phased-in material bans (grasscycling first, then leaf and yard waste once alternatives are fully in place)
- investigate possibility of handling IC&I organic waste at compost site on a tipping fee basis

## 5.0 Other 3R Initiatives

### 5.1 Description

There are a wide range of other 3R initiatives, in particular ones focusing on reduction and reuse, that should be implemented or actively promoted by the City in order to provide as many minimization and diversion opportunities to residents as possible. In order to accomplish this, it is recommended the City have a full time person to coordinate and/or implement a variety of reduction and reuse activities ranging from encouraging reuse centres and landfill salvage operations, to preparing household guides on reduction and reuse, to holding community-wide reuse events.

The Reduction/Reuse coordinator should evaluate a range of possible reduction and reuse programs (including those reduction and reuse initiatives listed in Section 6), develop a prioritized list of the most appropriate ones, and determine how best to implement the initiatives. In many case, it may be cost-effective and appropriate to partner with another program, group or business.

### 5.2 Key Elements

- identify appropriate staff (one full time position) to work specifically on reduction and reuse initiatives
- provide a budget for recommend initiatives
- key activities would likely include:
  - reviewing the range of other options and selecting the most appropriate and feasible ones for the City to implement themselves or in partnership with another group
  - coordinating an integrated promotion and education (P/E) campaign with staff responsible for other waste management initiatives
  - developing a booklet and/or calendar that promotes reduction, reuse, recycling and composting opportunities in the City
  - stimulating the development of reuse centres and landfill salvage activities
  - setting up City-sponsored reuse days (e.g. curbside salvage, community yard sales )
  - aggressively promoting waste exchanges and household hazardous waste reuse programs

### 5.3 Cost

- one full time staff person (possibly reassigned from another area)
- ~ \$40,000 in other operating costs to fund individual initiatives
- an additional \$0.25 per capita per year for P/E (Note: P/E budgets have been separated out in this analysis, but implementation should be done in an integrated manner by pooling the recycling, composting and reduction/reuse P/E budgets)
- possibly some seed money to assist other groups in developing complementary diversion programs

#### 5.4 Diversion

- a reasonable target for reduction/reuse activities would be 1% of residential waste stream
- promotion and education activities could increase capture rate of recycling and composting programs by as much as 5%

#### 5.5 Action Plan

- City to create a Reduction/Reuse Coordinator position
- coordinator implements appropriate initiatives as time and budget permit, or works with other groups to facilitate programs or activities
- continuous monitoring and evaluation of programs

## 6.0 Material Bans/Lift Limits

### 6.1 Description

Once waste diversion opportunities have been provided to residents and a promotion and education program is in place to let them know about the alternatives, the City should consider implementing regulatory measures to support these initiatives. These regulatory initiatives make it clear that the City expects all residents to actively participate in this new minimization-based system.

A range of regulatory initiatives can be considered, including material bans, lift limits and bag tag programs. These are normally implemented in a phased-in manner, accompanied by an extensive promotion and education campaign to let residents know what the regulatory measure is and why it is being implemented. Although there is often some initial opposition to such measures, experience elsewhere has shown that opposition to be limited and short-lived, at least in cases where alternatives were in place and the regulation was properly explained.

It should be noted that the City conducted an extensive public consultation program on User Pay two years ago, and received mixed results. One of the main concerns was that the City had not provided residents with alternatives. Once alternatives have been made available, it would be appropriate to re-open these discussions.

### 6.2 Key Elements

- material bans on recyclables, grass clippings, leaf and yard waste, wood waste and or drywall off-cuts
- decreasing lift limits on number of lifts (containers or bags) that can be set out for garbage collection. *Note: in autocart areas, lift limits could involve reducing the size of containers, reducing the frequency of collection or increasing the number of homes sharing a container.*
- bag tag programs, where residents purchase tags (perhaps with a certain number provided free), and only tagged bags are picked up. *Note: in autocart areas, garbage vehicle operators or other staff would scan the autocarts (perhaps on a spot check basis) to make sure that all bags in the container are tagged.*
- an ongoing promotion and education campaign to explain the program and let residents know how their waste minimization efforts are helping to reduce costs
- as autocarts complicate lift limits, bans and bag tag systems, it is essential that the City conduct a thorough analysis of the implications of autocart systems on such measures before expanding the system

### 6.3 Cost

- an additional half-time position in bylaw enforcement (unless it is felt the additional workload can be handled by existing or re-deployed staff)
- nominal administration costs
- cost of bag tags and associated administration and promotion is ~\$0.05 per tag
- in the case of bag tag programs, there is potential for substantial reductions to the municipal tax burden, as all waste management costs could be covered by the bag tag revenues

## 6.4 Diversion

- diversion from recycling bans is normally nominal
- diversion from grass clipping and leaf and yard waste bans can be substantial (up to 10% of the waste stream), as many residents find that they can easily divert much of this waste through grasscycling (leaving clippings on the lawn) and composting piles for leaves
- wood waste and drywall bans (assuming alternatives are in place) could also divert several thousand tonnes of waste annually
- typically, waste to landfill is reduced 33% to 50% after a bag tag program is implemented, depending on the type of bag tag system implemented and nature of alternatives available to residents

## 6.5 Action Plan

- **Material Bans**
  - ensure alternatives are in place
  - meet with collection contractors
  - revise landfill operations (if necessary)
  - prepare appropriate revisions to the bylaw
  - develop appropriate promotion and education materials
  - enforce bans
- **Lift Limits**
  - decide on appropriate starting point (e.g. 3 bags per week) and decrease the limit in subsequent years (Note: anything more than 2 bags will have little effect, but may act as the "foot in the door" for subsequent lower lift limits)
  - meet with collection contractors
  - prepare appropriate revisions to the bylaw
- **User Pay (Bag Tag)**
  - review various user pay options
  - hold public meetings
  - meet with collection contractors
  - design program
  - develop promotion and education materials
  - launch programs

## 7.0 Garbage

### 7.1 Description

The various diversion activities outlined previously have the potential to divert or reduce in excess of 50% of the residential waste stream. However, there is still a significant amount of garbage to be collected and disposed of.

To support the proposed minimization-based system, it is essential that thought be given to how waste is collected and disposed of. Some of these issues have been covered in the previous section, Material Bans/Lift Limits, but other considerations, such as structure of garbage contracts and payment units, frequency of collection, and the implications of autocarts on the system as a whole should be reviewed, and revisions made to ensure that the garbage collection and disposal components compliment the rest of the waste management system. This should be carried out prior to any expansions of the autocart system.

### 7.2 Key Elements

- ensure that new garbage collection contracts reflect savings from tonnage reductions and encourage further diversion (i.e. savings are realized as the amount collected decreases)
- investigate potential cost savings in landfill operation from reduced tonnage and different composition of waste
- examine possible savings from bi-weekly garbage collection (at least for September through to June) once diversion programs are in place and garbage set-outs are reduced
- review the impact of autocarts on diversion rates and regulatory measures (lift limits, bans and bag tag systems) prior to any further expansions of the autocart system
- investigate potential for processing of residual material at the landfill site to generate further diversion

### 7.3 Cost

- varies considerably, depending on the level of service (autocart vs curbside) and whether the private or public sector is providing the service.
- collection costs in the recent tenders were much lower than in previous years, likely because contractors took into account the impact of the impending curbside recycling program
- with expanded diversion programs, future contracts should see further reductions (perhaps 5% to 10%)
- a switch at some point in the future to bi-weekly garbage collection should generate substantial additional savings (perhaps 10% to 25%)
- some reduction of landfill operation costs should also be realized

### 7.4 Diversion

- moving to a bi-weekly waste collection service would likely increase diversion rates slightly

## 7.5 Action Plan

- implement a detailed monitoring programs to evaluate garbage habits of autocart and curbside areas
- review autocart program based on monitoring studies
- meet with existing garbage contractors to review any cost reduction opportunities between now and the end of the contracts based on the increasing diversion rates
- write future garbage collection tenders such that costs decrease as tonnage collected decreases
- build in a bi-weekly collection option (perhaps for nine months of the year) in the next round of garbage collection tenders so that council can evaluate the potential savings
- review potential for landfill operations cost reductions from significantly decreased tonnages
- investigate emerging residual processing technologies, such as incineration or windrow composting of garbage to reclaim organic material and reduce moisture content (Note: given Winnipeg's low landfill tipping fee and excess capacity, this is unlikely to be financially viable in the near future)

## 8.0 IC&I (Industrial, Commercial and Institutional) Waste

### 8.1 Description

This report focuses on waste from the residential sector because this is the only waste over which the City has flow control. However, given that IC&I waste makes up approximately half of the waste currently being landfilled in Winnipeg, it is essential that any waste minimization plan at least examine what the City could do to facilitate waste minimization in this sector.

There are a number of areas identified below where the City might take an active role in encouraging IC&I waste minimization, as other municipalities in British Columbia and Ontario have done. Some or all of these services could be offered on a cost-recover basis.

### 8.2 Key Elements

- an IC&I coordinator to set up a local waste exchange (linked to the Manitoba Waste Exchange) or provide funding to the Manitoba Waste Exchange to take a more aggressive role in matching generators and users of specific "waste" products within Winnipeg
- provide waste audits to local businesses, or, at a minimum, let local businesses know who provides this service
- provide on-going support to the IC&I sector (e.g. hot-line, P/E programs, etc.)
- ensure that residential diversion or minimization programs are made available to the IC&I sector (where appropriate)
- encourage and/or support new businesses that service the IC&I sector (e.g. construction and demolition salvage businesses)
- landfill bans will play a major role

### 8.3 Cost

- one staff person with a support budget of ~\$20,000
- some services could be provided on a cost recovery basis

### 8.4 Diversion

- support from the City could help the IC&I sector to reduce their waste by 50% or more

### 8.5 Action Plan

- hire staff to launch programs as appropriate
- determine which services could be provided on a cost-recovery basis
- evaluate feasibility of extending residential services, such as curbside recycling and backyard composters, to the IC&I sector



## 9.0 System Monitoring/Review

### 9.1 Description

An essential component of this waste minimization planning process is to come up with a "living" document to guide a continuously evolving and improving system. This means that the document, and the waste management system itself, needs to be continuously monitored to determine what is actually happening to waste, what parts of the system are working well and which are not performing up to expectations, using the process developed in Phase 1 of this study. This enables the City to refine or revise the system so that it moves towards the waste minimization vision and achieves waste minimization targets.

### 9.2 Key Elements

- obtain staff and funding to carry out on on-going monitoring programs
- carry out waste composition studies, bag count studies and bag weight studies on an ongoing basis in different parts of the City (downtown core, suburbs, single family area, apartments, autocart area, and curbside areas)
- studies should be carried out both in spring and fall for at least three consecutive years, starting as soon as possible in order to have before and after data
- set up a mechanism for reviewing and revising the waste minimization action plan in light of the data from the monitoring program (preferably annually) and any new ideas that have arisen

### 9.3 Cost

- 3 part time staff people
- \$30,000 for start-up costs (developing a protocol, tracking system, training etc.)
- \$10,000 annually for operating costs

### 9.4 Diversion

- by helping to target P/E efforts and system revisions and expansions, system monitoring helps to improve diversion rates

### 9.5 Action Plan

- allocate resources
- establish monitoring protocol
- train staff
- initiate spring and fall studies
- review waste minimization plan annually

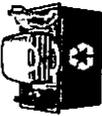
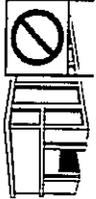


## 10.0 An Integrated System

The schematic on the following page depicts the proposed waste minimization system, including highlights of the key components identified in Chapters 2.0 to 9.0. Estimates of the diversion potential for the various components are included, although these estimates must be qualified by the fact that there is no accurate waste composition data for Manitoba, and the impact of autobins on regulatory initiatives is unclear.

Assuming all components are implemented as an integrated systems, including the regulatory initiatives such as material bans and a user pay garbage system, the City of Winnipeg should be able to reach or exceed a 50% waste diversion target for residential waste. The diversion rate for IC&I waste will depend largely on local and national industry initiatives.

# A Draft Waste Minimization System for Winnipeg

Component		Tonnage	Description	Percentage
<b>Diversion Components</b>      	<b>Recycling</b> <ul style="list-style-type: none"> <li>• Expand the current curbside system to include all apartments</li> <li>• Promotion and education to improve participation and capture rates</li> </ul>	55,000	<ul style="list-style-type: none"> <li>• Set up a compost team to offer subsidized or free composters door-to-door</li> <li>• Provide follow-up and support to residents</li> <li>• Expand the existing "Leaf It With Us" Program to include all residents</li> <li>• Promote grasscycling</li> <li>• Extensive promotion and education program</li> <li>• Promote community yard sales, reuse centres, landfill salvage etc.</li> <li>• Phase-in a ban of recyclables, leaf and yard waste and other materials from garbage once diversion alternatives are in place</li> <li>• Consider lift limits and/or a bag tag system</li> <li>• Consider bi-weekly garbage collection</li> </ul>	<b>52 %</b> (129,000 tonnes)
	<b>Backyard Composting</b>	12,000		
	<b>Leaf &amp; Yard Waste Collection</b>	12,000		
	<b>Other 3R Initiatives</b>	5,000		
	<b>Material Bans/Lift Limits</b>	45,000		
	<b>Garbage/Disposal</b>	120,000		
			<ul style="list-style-type: none"> <li>• Maintain mix of curbside and auto bin for remaining waste</li> </ul>	<b>48 %</b> (120,000 tonnes)

## Section 9

### Newsletter 2: Draft System Plan

As part of the public consultation process developed in Phase I, a series of newsletters were to be produced to inform the broader public and interested groups on progress with the waste minimization strategy plan.

The first newsletter was produced following the Vision Workshop in September of 1995 to provide the public with information about WMAC's activities and seek comments on the draft vision that had been developed out of the Vision Workshop. In addition to this, WMAC sought comments on a sample of evaluation criteria that could be considered in assessing various program options.

The second newsletter was produced following the development of a draft system plan based on the selected waste minimization components, and focused on giving the public a graphic representation of the various components of the draft waste minimization strategy. The newsletter described the process to date for implementing the waste minimization system and invited readers to visit an information display at the Forks Market and participate in a workshop at the Manitoba Children's Museum, both on March 19th, 1996. A copy of the second newsletter follows.

The newsletter was mailed directly to each participant in the previous Workshops, key City staff and relevant stakeholders from the public and private sector that had been identified in Phase I. A separate newsletter was sent to civic councillors explaining the planning process and presenting the draft system plan.

In total, more than 300 newsletters were either mailed directly to stakeholders or circulated through to public groups.

# Section 10

## System Refinement Workshop Report

### 1.0 Introduction

The draft waste minimization system developed in January and February was reviewed and revised using an iterative process, as developed in Phase 1 of this study. There were four main "workshops", starting with a meeting with City administration and WMAC executive on March 18th. The following day, March 19th, the draft system was discussed at the WMAC meeting, and a public information display and workshop were held at the Forks. Each of these activities is discussed below.

### 2.0 Meeting With Administration & WMAC Executive

The draft waste minimization strategy was presented to an informal joint meeting of City staff and the WMAC executive on Monday, March 18th, 1996. The following people were in attendance:

#### **City staff**

- Tony Kuluk
- Dwight Gibson
- Cliff Tuttle
- Barry McBride
- Bob Kalika
- Dave Ross
- John Friesen

#### **WMAC**

- John Sinclair
- Denis Coley

#### **Consultants**

- Alfred Von Mirbach, REIC

There was general support for the draft system, with a few suggested modifications. The area where most discussion and concern took place centered around the financial implications of the system, particularly in light of the potential loss of considerable landfill tipping fee revenues as a result of the opening of the BFI landfill. Other general comments were also raised. Key concerns and comments are noted below.

#### **Financial Implications**

- Currently, diversion programs are funded through tipping fee revenues. This is counter-productive, since the more successful the City is at diversion, the less money they have to fund diversion programs. There is a real need to separate diversion program funding from tipping fee revenue if there is to be any hope of proceeding with the proposed minimization system. Various options, from setting up a waste utility system to having all waste costs come out of general revenue, need to be evaluated.

### **Financial Implications (cont'd)**

- It is certainly possible that the overall waste management system (including garbage collection and disposal) could be cheaper once the draft waste minimization system matures. However, many of the savings (e.g. reduced garbage collection and disposal costs) are not likely to be realized until all of the other system components are in place, some form of bag tag program implemented, and the current garbage contracts re-tendered (1999). In the short term, there may be increases in system costs that are needed to realize savings in 1999.
- It was agreed that the next step would be to proceed with making assumptions on possible phase-in of components, costs and financing options for each of the next 5 years. This will be developed on a spreadsheet so that "what if" scenarios can be run.

### **Draft System Components**

- It may be wise to delete the specific reference to hiring a reduction/reuse coordinator in the 3Rs section, and rather try to work with reallocation or contracting. New staff is not well received by Council these days.
- In the Material Bans section, add "consider bi-weekly garbage" and "once alternatives are in place".

### **Other Comments**

- It was agreed that it was important to bring schools into the curbside program in September, if for no other reason than the promotion and education value.
- A handout on System Marketing Considerations was well received. It will be revised based on comments received, and likely included with any package coming forward to Works and Operations.
- The issue of autobins was raised again. We can assume that material bans, lift limits and bag tag systems would be less effective in autobin areas. The potential savings from material bans, lift limits and bag tags is likely to be in the millions of dollars annually. However, there is no accurate way to estimate how much less successful these programs would be with an expanded autobin program, and what the associated forgone savings might be. Without such data it is hard to put forward a convincing argument for not proceeding with autobin expansion in order to achieve immediate savings.
- The role of the City in promoting IC&I waste diversion was discussed, and examples were raised of other municipalities hiring IC&I waste reduction coordinators. The general consensus was that the private sector was already providing such services, and it would be hard to justify hiring additional staff to deal with material that was not the City's responsibility.
- The group felt that the preferred system in some ways closes the loop on the user pay consultation program of a few years ago, by addressing the key concern of providing alternatives before contemplating a user pay program.

## **3.0 WMAC Meeting**

REIC staff presented the draft system to WMAC members and asked for input on the system, as well as the process now underway. Comments from WMAC members focused on three key areas, as outlined on the next page:

### **Vision Statement**

- should be made more succinct, and not deal with "methodology"
- the phrase "treats residual waste as a resource" was objected to
- why was the term "stewardship" not included
- should mention avoidance/reduction as the first priority
- John Sinclair asked that WMAC to come to closure on the vision statement at their April meeting

### **Draft System**

- strong support for a dedicated reduction/reuse coordinator
- it appeared that as a result of an oversight by the consultants, councillors and WMAC member appear not to have been sent the newsletter, and therefore an invitation to the workshop
- the issue of a "draft" versus "final" report was raised, and it was decided to refer to the binder the consultant prints in April as a "Working Document" to emphasize the living nature of the report

### **Autobins**

- City staff indicated that they are expanding the program over the next five years to all back lane areas because it saves money
- members questioned if the 45,000 T of diversion under material bans and lift limits would be reached if City expands the auto-bin program significantly
- City staff agreed to put stickers on inside of autobins saying what materials should not go in the bin (e.g. recyclables, hazardous waste)

## **4.0 Information Display**

It was recognized when planning public consultation exercises for this study that traditional open houses would be of limited value, as only a select and interested group comes out, and it was more important to gather input from the "general" public. Hence, the consultation program relied on a combination of community outreach sessions, focus group sessions and workshops. However, it was decided to hold an information display at the Forks Market in the afternoon immediately before the second public workshop to see what interest could be solicited from passing pedestrian traffic.

The display consisted of a table with large panels describing the draft system and WMAC's role and draft vision statement, as well as information on City waste diversion programs. A survey was also developed to solicit feedback from interested individuals. A combination of City employees, WMAC members and the consulting team staffed the display from 11:00 am to 6:30 pm on March 19th.

The result was disappointing, with only a few people stopping to ask questions, and only one survey filled out. It was assumed that this poor response was due a combination of it being a slow time of the week for pass-through traffic at the Forks, and shortcomings in the display.

## 5.0 Workshop

The workshop was held on Tuesday, March 19 at the Children's Museum in the Forks, from 7:00 pm to 9:00 pm. The primary goal of the workshop was to obtain feedback from interested individuals and organizations on the draft waste minimization strategy.

John Sinclair, WMAC Chairperson, provided background about the context of and work done to date with the strategy. He emphasized that although the recycling program was a key step in achieving the strategy, many other components were needed to deal with other components of the waste stream, and to address the larger issue of minimization, rather than simply diversion.

The strategy was outlined briefly by Alfred Von Mirbach, from REIC Ltd., who emphasized that it was essential to adopt an integrated systems approach, where the whole is more than the sum of its parts. In particular, the linkages between diversion components, promotion and education activities and a new regulatory environment were stressed.

The following individuals attended the workshop.

### Attendance

Bill Dowie	independent
Todd Lohvinenko	Recycling Council of Manitoba
David Schoor	University of Manitoba
Andrew Wallace	University of Manitoba
Bob Fenton	WMAC, University of Winnipeg
Peter Miller	University of Winnipeg
Carolyn Garlich	WMAC
Wendy Loly	Fort Whyte Centre
Janice Westlund	WMAC, Recycling Council of Manitoba
Ron Michalishyn	Manitoba Hydro, Recycling Council of Manitoba
Tony Kuluk	City of Winnipeg
Rick Penner	Recycling Council of Manitoba
Heather Platford	Natural Resource Institute
Bruce Baird	Natural Resource Institute
Diane Bell	Oak Hammock Marsh Conservation Centre
David Bynski	Winnipeg Construction Association
David McNicholl	Habitat for Humanity
Les Scott	Habitat for Humanity
John Sinclair	WMAC, Natural Resource Institute
Alfred Von Mirbach	consultant, facilitator
Denis DePape	consultant, facilitator

*\* two other individuals also attended, but their names were not legible*

Two break out groups were created, one chaired by John Sinclair and another by Janice Westlund, both of WMAC. Each used a question and answer format to clarify the proposed strategy and identify concerns with the strategy. The following are the key comments that came out of the two sessions.

### **Breakout 1**

- required considerable clarification regarding what was included in the various initiatives, but quite supportive once clarification was provided
- need for a team approach to promotion and education activities
- won't get additional staff in today's climate
- need to tackle grass clippings head-on
- why are household hazardous waste programs not included?
- provide unit (e.g. balcony composters and/or vermicomposters) and building (e.g. large three-bin units) options for apartment dwellers
- leaves are in demand in some areas for municipal septic fields
- will BFI landfill jeopardize diversion initiatives?
- is it possible to charge per person, not per household?

### **Breakout 2**

- waste minimization strategy must recognize Winnipeg realities — no landfill crisis, severe financial constraints on local government
- role of household hazardous wastes
- focus on what is in the remaining 129,000 T — maybe autobins can be creatively used to divert some of this waste
- IC&I sector needs to be provided with more support and encouragement
- review bylaws in order to require reduction at new building sites
- levy on waste to landfill might help
- need to look at local economic development options
- landfill salvage programs are important
- need to generate buy-in
  - possible workshop with councillors
  - "state-of-the-art" sales pitch

### **Other general comments**

- it is not a question of how much waste is being diverted, rather how much of a given resource is being wasted or recovered
- give the waste stream a resource "face" (e.g. not paper but trees)
- need a focus on avoidance of waste
- need to quantify what is currently happening
- need to specify the waste composition graphically
- critical to show cost of components of the strategy

It was generally agreed by the group that the proposed strategy did not have any serious flaws necessitating a basic reworking. The proposed components and implementation sequence were appropriate and should be maintained in the final version of the strategy. Fine tuning could be done to incorporate some of the comments received.

# Waste Minimization System Survey

March 19, 1996

The Waste Minimization Advisory Committee has come up with a draft Waste Minimization System for Winnipeg, as illustrated below. Please review the system description, and answer the questions that follow. Your input will help us to refine the system to make it one we can all be proud of.

Component		Tonnage	Description	Percentage
Diversion Components	 Recycling	55,000	<ul style="list-style-type: none"> <li>Expand the current curbside system to include all apartments</li> <li>Promotion and education to improve participation and capture rates</li> </ul>	52 % (129,000 tonnes)
	 Backyard Composting	12,000	<ul style="list-style-type: none"> <li>Set up a compost team to offer subsidized or free composters door-to-door</li> <li>Provide follow-up and support to residents</li> </ul>	
	 Leaf & Yard Waste Collection	12,000	<ul style="list-style-type: none"> <li>Expand the existing "Leaf It With Us" Program to include all residents</li> <li>Promote grasscycling</li> </ul>	
	 Other 3R Initiatives	5,000	<ul style="list-style-type: none"> <li>Extensive promotion and education program</li> <li>Hire a reduction/reuse coordinator</li> <li>Promote community yard sales, reuse centres, landfill salvage etc.</li> </ul>	
	 Material Bans/Lift Limits	45,000	<ul style="list-style-type: none"> <li>Phase-in a ban of recyclables, leaf and yard waste and other materials from garbage once diversion alternatives are in place</li> <li>Consider lift limits and/or a bag tag system</li> </ul>	
 Garbage/Disposal	120,000	<ul style="list-style-type: none"> <li>Maintain mix of curbside and auto bin for remaining waste</li> </ul>	48 % (120,000 tonnes)	

1. Should the City of Winnipeg pursue a waste minimization system as outlined above?
- Yes       No

2. If yes, which of the following components would you be willing to participate in immediately?

- Apartment recycling
- Backyard composting
- Expanded leaf and yard waste collection
- Grasscycling
- Reduction initiatives
- Reuse initiatives
- Materials bans
- Lift limits
- Bag tags
- Other (specify) \_\_\_\_\_



3. What changes would you like to see made to the system?

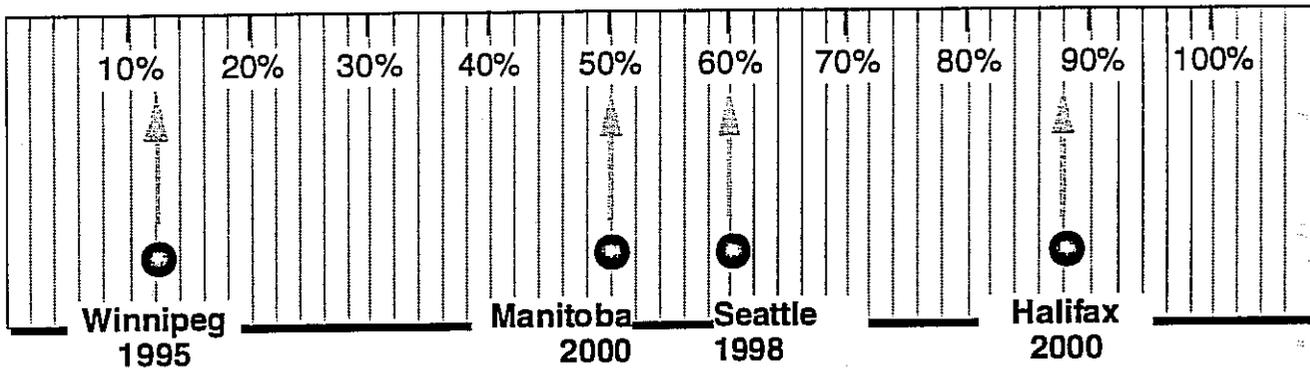
---

---

---

---

4. What should the City of Winnipeg set as a realistic waste diversion target for the short and medium term? *Indicate a short term target (year 2000) with an "A" and a medium term target (year 2010) with a "B".*



5. Other Comments:

---

---

---

---

---

---

---

---

Please return completed questionnaire to:  
**John Osler, InterGroup Consultants Ltd.**  
604 - 283 Portage Avenue  
Winnipeg, Manitoba R3B 2B5  
Fax (204) 943-3992