

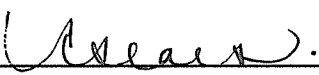
4.



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Halifax Regional Council
April 3, 2007

TO: Mayor Kelly and Members of Regional Council

SUBMITTED BY: 
for Councillor Bill Karsten, Chair
Solid Waste Resource Advisory Committee

DATE: March 29, 2007

SUBJECT: **December 4, 2006 SWRAC- Requested Updates- Various**

INFORMATION REPORT

ORIGIN

March 22, 2007 Solid Waste Resource Advisory Committee Meeting.

BACKGROUND

It was agreed at the March 22, 2007 meeting of SWRAC, that the attached staff report of January 16, 2007 be provided to all members of Regional Council. The report provides an update of a variety of solid waste/resource matters.

DISCUSSION

Solid Waste Resource Advisory Committee considered this matter at their March 22, 2007 meeting.

BUDGET IMPLICATIONS

N/A

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

N/A

ATTACHMENTS

1. Information Report dated January 16, 2007 and noted attachments.

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Christina Sears, Legislative Assistant

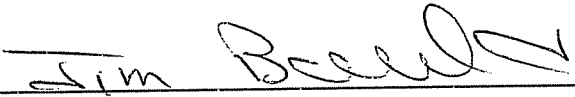


PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

4.1

Solid Waste/Resource Advisory Committee
January 25, 2007

TO: Councillor Bill Karsten, Chairman and Members of the Solid Waste/Resource Advisory Committee

SUBMITTED BY: 
Jim Bauld, Manager, Solid Waste Resources

DATE: January 16, 2007

SUBJECT: December 4, 2006 SWRAC - Requested Updates -Various

INFORMATION REPORT

ORIGIN

At the December 4, 2006 meeting of SWRAC, staff was requested to provide an update respecting the following:

- 1) The evolution of the HRM Integrated Solid Waste/Resource Management System
- 2) The cost of providing weekly summer green cart collection in all rural HRM
- 3) Illegal Dumping - tipping fees and fines
- 4) Hard plastics recycling
- 5) Battery recycling
- 6) Management of aerosol cans
- 7) Management of tires
- 8) Management of roofing shingles
- 9) Electronic (E-Waste) Recycling

BACKGROUND

As staff advised at the December 4, 2006 meeting, the items raised by Councillor Hendsbee have been either:

- previously reviewed by staff and brought to SWRAC and/or Regional Council;
- are separate from and are not a component of the HRM Integrated Solid Waste Resource Management Strategy approved by Regional Council; or
- fall within the jurisdiction of the Province and the RRFB.

Each of the matters raised at the last meeting of SWRAC are addressed in this information report, supplemented by previous staff reports to SWRAC and/or Regional Council and correspondence.

DISCUSSION

1) The Evolution of the HRM Integrated Solid Waste/Resource Management System

In 1996, Regional Council approved the Citizens Stakeholder Committee's (CSC) Integrated Solid Waste/Resource Management Strategy as the basis for the placement of a new integrated solid waste/resource management system for the HRM. Attachment 1A, the Executive Summary of the CSC's Integrated Solid Waste/Resources Management Strategy, is provided for the information of members of SWRAC.

Attachment 1B is a document dated December 19, 2006 entitled "A Ten Year Synopsis of HRM's Integrated Solid Waste/Resource Management System". This document details:

1. the history of the circumstances that lead to the creation of the CSC and the new strategy;
2. an assessment completed by O'Halloran Campbell Associates in 2004 of the progress of HRM's system and potential opportunities to improve the diversion rate;
3. the success of the 10% Challenge; and
4. specific opportunities identified at the Solid Waste Resource Round Table in November 2005 to further HRM's diversion rate.

As requested at the December 4, 2006 meeting of SWRAC, staff will be providing Regional Council at a meeting of the COW on February 13, 2007;

- an overview of the past ten years of solid waste/resource management;
- the Issue Papers which are designed to achieve the goal of a 60% diversion rate set by Regional Council in 1996 (HRM's current diversion rate is 55%); and
- information on the implications of providing municipal collection services at churches.

It is noted that the progress and achievements in solid waste/resource management by residents, HRM's contractors and partners, local industry, the Province, and the RRFB has brought world renown to the HRM. Considering it was just ten years ago when:

- the landfill in Upper Sackville had been closed for less than a month;
- a new strategy for the management of solid waste had not been adopted;
- partners had not been selected, and
- infrastructure for the management of organics and for the processing and disposal of waste did not exist within the HRM; that

the achievements in the management of solid waste /resources, which is the envy of many provinces

and states around the world, is impressive. As this report and the attachments detail, the task is not finished. There is more to be done to enhance HRM's solid waste diversion rate.

2) The Cost of Providing Weekly Summer Green Cart Collection in All Rural HRM

The provision of weekly summer green cart collection services, in relation to the alignment of the urban, suburban and rural tax designation, was discussed at the SWRAC meetings on May 25, 2006 and September 28, 2006. Attachment 2A is a staff report dated May 15, 2006, entitled "Weekly Summer Green Cart Collection - Alignment with Tax Rate".

The expansion of weekly summer green cart service to every community within the rural tax rate would cost an additional \$46,500, which is not contained in the 06/07 approved budget. At the June 8, 2006 meeting of SWRAC, the following motion was approved:

"Moved by Councillor Snow, seconded by Councillor Karsten, that the status quo be maintained for this summer and for the summer of 2007 in regard to weekly summer green cart collection, and staff explore options of aligning it with the urban tax rate for 2008, with implementation considered for 2009.

Mr. Bauld noted that this decision may have ramifications for Councillors who do not serve on this committee, and he suggested that the matter be provided to Council for consideration.

The Chair concurred and advised that staff could provide the information at a Committee of the Whole session."

The staff supplementary information report to SWRAC, dated September 19, 2006, entitled "Weekly Summer Green Cart Collection" (Attachment 2B), provides additional data respecting participation levels in rural and suburban areas of HRM during the summer of 2006. Page three of the report notes that "The alignment of the weekly summer green cart service for communities in the Urban Tax rate would be consistent with the original request for the service (i.e., majority of the residents who were experiencing nuisances live in the Urban core of HRM, having the highest density)". A decision by Regional Council regarding the alignment of weekly summer green cart service with the urban tax rate is required by the end of September 2007, in advance of the issuance of the Request for Proposals for the collection and transportation of residential organics, recyclables and refuse, commencing on July 1, 2008. Staff will be bringing this matter to Regional Council later in 2007.

3) Illegal Dumping - Tipping Fees and Fines

The practise of illegal dumping (in violation of the Nova Scotia Environment Act, Section 50.1) of material at a facility not authorized by the Nova Scotia Dept. of Environment and Labour (NSDL), has existed prior to the implementation of HRM's ISW/RMS, and the introduction of tipping fees. The issue of illegal dumping has been before Regional Council on several occasions, specifically in March 2000 when an Illegal Dumping Action Plan was recommended by SWRAC for approval by Regional Council.

Attachment 3 is a report dated March 2, 2000, from SWRAC to Regional Council (with the attached staff report of November 9, 1999, containing the Illegal Dumping Action Plan which recommended the approval of the five Action Plans) for staff to work with stakeholders to allocate costs of clean up, education and enforcement and to present recommendations for the 2000/01 operating budget.

Budget Implications (for FY 00/01) for actioning the Illegal Dumping Action Plan were \$75,000 for a part-time Coordinator and clean up of sites, plus \$156,000 for three By-Law Enforcement Officers. The Illegal Dumping Action Plan was included in the 00/01 budget deliberations, however, was not approved by Regional Council.

In the intervening years, staff continues to assist citizens, community groups and NGOs in their effort to clean up sites by providing educational/instructional information regarding how to properly separate and dispose of various types of materials, and arranging disposal of limited specific non auto/C&D/recyclables at Otter Lake. If the material is on Provincial property, staff contact the appropriate Provincial department (generally NSDT&PW) who coordinates removal and proper disposal. In recent years, local citizens and community groups have made a considerable effort and had some success in the clean up of sites; however, the practise of illegally disposing of materials - most of which is eligible for curbside collection (e.g. stoves, sofas, carpets, C&D material, etc.) continues.

The practise of illegal dumping, which is common throughout Nova Scotia, is often an intergenerational/traditional family activity. It occurs where there is no waste disposal/tipping fee, and/or where the municipality provides curbside collection of a broad range of materials. Other regions have recently had success in combatting illegal dumping by prosecuting the persons responsible, i.e. who committed the act, and not the property owner. An effective approach requires dedicated resources over the long term to achieve a behavioural change.

As denoted in the Illegal Dumping Task Group Review Findings, Section A, Legislation/Enforcement (page 1), an HRM by-law is not required as an adequate provincial legislation already exists. The Nova Scotia Department of Environment and Labour have Inspectors who administer the provisions of the Environment Act for incidents of illegal dumping.

3.1) Tipping Fees and Fines

The application of a tipping fee, i.e. a charge for the disposal of non residential waste, commenced on January 1, 1990. A fee of \$115/tonne charged at the Otter Lake facility for the disposal of mixed non residential waste, has been in effect since May 1, 2001. A fee of \$70 /tonne applies at the two HRM-sponsored compost facilities for non residential organic materials. There is no fee for the receipt of recyclables from the ICI sector at the HRM Materials Recycling facility. The regime of a higher disposal fee for mixed ICI waste is consistent with and supports four of the seven principles of the CSC strategy being:

- success is based on separating materials at source;
- citizen involvement;
- achieved diversion will be a key measure of success;
- opportunities for local employment.

As is contained in the Illegal Dumping Action Plan, Task Group Review and Findings, section A, Legislation/Enforcement (Attachment 3), the depositing of waste other than at an approved disposal site, is not permitted by the Provincial Environment Act and Solid Waste Regulations. Enforcement of these regulations is the responsibility of NSDL, although an RCMP and/or HRM Police officer can also lay charges under the provincial legislation. The maximum fine is \$5,000 for each offense.

Provincial regulations allow for an injunction to prevent further illegal dumping and can require compensation from the perpetrator for the cost of clean up and/or environmental damage. The conclusion of the Illegal Dumping Task Group in 1999, which still applies, was that an HRM by-law is not required because adequate legislation exists. Recently, fines for illegal dumping in the amount of \$500, plus \$500 for clean up, have been awarded by the Courts in Nova Scotia in the Valley Waste Region (i.e. Annapolis Valley area).

4. **Hard Plastics Recycling**

As a component of the HRM blue bag recycling program, hard/rigid plastics #1 PETE, #2 HDPE (and #4 LDPE soft plastic bags) are recycled. In 2001, an assessment by Miller Waste, the operator of the HRM Materials Recycling Facility, determined that markets for other hard plastics (including #3, #5, #6 and #7) do not exist and/or were so unsure that buyers would only commit to a very short term receipt (i.e. one month duration) of the material.

Miller also advised that a reconfiguration of the sorting line and stations in the MRF would be required if additional plastic was included. Staff also confirmed that at other municipalities where #1 through #7 plastics were accepted, that the end market would purchase the entire mixed plastic (including the high value #1 and #2 plastics) at the value of the lowest product, generally between \$50 to \$80/tonne, in comparison to HRM where #1 and #2 plastic, valued at between \$450/tonne and \$600/tonne, are marketed separately.

The addition of other hard plastics to the blue bag recycling program in 2001 would have resulted in a significant loss in revenue for HRM, in the range of \$200,000 annually, plus additional capital and operating costs for changes to the sorting line.

Staff have commenced the process of determining if long term sustainable markets for the other hard plastics exist. Contingent upon viable markets being located, staff will complete an opportunity/cost analysis of the addition of other hard plastics. Staff's assessment, which will be completed during 2007, in advance of the issuance of the RFP in early 2008 for the operation of the MRF for the next five-year contract which commences in April 2009, is the opportune time to include other rigid plastics - again subject to long term sustainable markets being secured.

To date the manufacturer/producer of hard plastic food containers are not responsible for the cost of the management of the container after the contents have been consumed, resulting in the HRM (and other municipalities) bearing the costs. In other jurisdictions, primarily outside of Canada, a non voluntary stewardship program, often referred to as Extender Producer Responsibility (EPR), exist where the manufacturer/producer/distributor is responsible for the cost of the management of the empty container.

No such EPR program exists in Nova Scotia. This matter was discussed at the April 11, 2006, Regional Council meeting when it was agreed that a letter from Mayor Kelly be provided to the Honourable Marc Parent, Minister of Environment & Labour, advising of HRM's concerns, and specifically requesting that the Minister enact a non voluntary EPR program for plastic food containers (Attachment 4 is a letter dated July 24, 2006, from Mayor Kelly to Minister of Environment and Labour and the response from Minister Mark Parent, dated September 14, 2006). Although no Provincial legislation has been adopted as a basis for EPR programs, in December 2006, the Province announced a new target of 300kg/per capita for waste disposal for NS by 2015.

The 2005 disposal rate for Nova Scotia is 520 kg/per capita. Although this is the lowest disposal rate in Canada, and significantly less than 720 kg/per capita in the late 1990's, there remains more to be achieved in the reduction of packaging. Solid Waste Resources' has one of two municipal representatives on a national committee, reporting to the Canadian Council of Ministers of the Environment, which is currently studying the implementation of EPR legislation for packaging. The recommendations of the advisory committee are scheduled to be provided to the CCME in mid 2007.

5) **Battery Recycling**

An extensive private sector program for the recycling of rechargeable batteries exists across Canada. The program is administered and promoted by the Rechargeable Battery Recycling Corporation. Their marketing campaign uses the slogan "Charge Up to Recycle". All major retailers in the HRM that sell rechargeable batteries accept used rechargeable batteries for recycling.

Although a similar return to retailer program does not exist for non rechargeable batteries, since 1996 residents can drop off non rechargeable batteries at either the Household Hazardous Waste depot at 50 Chain Lake Drive on a Saturday, or wait for a mobile HHW day in their community. An EPR program for non rechargeable batteries is one of the many opportunities to achieve the new 300 kg/per capita target set by the Province.

6) **Management of Aerosol Cans**

The Household Hazardous Waste program includes the receipt and management of old, partially full aerosol cans. The proper management is promoted through a variety of mediums, including the website www.halifax.ca/wrms/, the HRM corporate calendar center page "Householders Guide to Waste Management - What Goes Where", the Corporate Call Centre 490-4000, and at the more than forty (40) permanent depot and several mobile HHW events held annually. With respect to empty aerosol cans, residents are advised to dispose of them in their refuse. The empty cans are retrieved from the FEP processing line prior to entering the shredder, to prevent an explosion. Aerosol cans containing paint or hair spray recovered at the Otter Lake facility, are disposed at a hazardous waste facility. Those with whipping cream etc. are disposed in the landfill.

With respect to the removal of the contents from an old, partially full can for the purpose of recycling the can, a pilot program is scheduled to commence in Cumberland County in 2007. With funding from the RRFB, the program will measure the opportunity, costs and benefits of a small municipal program. The extraction of the contents of an aerosol can requires specialized equipment, including a carbon tip (to prevent explosions) to puncture each can and a chamber to collect the residue. HRM staff will review the final report of the pilot program in Cumberland County to assess

residue. HRM staff will review the final report of the pilot program in Cumberland County to assess if there is an opportunity of implementing a similar program in the future.

7) Management of Tires

The management of auto, motorcycle and small truck tires (including the retrieval of the fee at the point of sale, collection of the tires, shipment and processing) is the responsibility of the Province and the Resource Recovery Fund Board. The RRFB, who recently issued an RFP for the management of tires, is reviewing the proposals from the private sector. Although a decision is expected shortly respecting the market for used tires, the RRFB continues to arrange collection from tire retailers across the province. Used tires are accepted at all tire retailers in Nova Scotia.

8) Management of Roofing Shingles

Used roofing shingles are accepted at local privately owned construction and demolition transfer and processing facilities. Local HRM licensed private C&D facilities charge between \$65/tonne and \$75/tonne for clean loads of roofing shingles. In the past, although the gravel was often separated from the shingle, there was no market or use for the solidified asphalt component of the shingle. However, after several years of testing by the private sector, the opportunity to recycle used asphalt shingles has significantly improved.

Financed in part by the RRFB, new specialized processing equipment (that separates the major three components of a roofing shingle, i.e. gravel, fibre backing and solidified liquid asphalt), plus a reconfiguration of the processing line at a local asphalt manufacturing facility, now enables the introduction of the solidified asphalt from a roofing shingle into the production of new asphalt for paving. The solidified asphalt in the roofing shingle replaces some of the expensive liquid asphalt from oil refineries used in the production of pavement.

It is staff's understanding that the new asphalt pavement, containing the reused solidified asphalt from roofing shingles, is being reviewed by NSDT&PW's and a pilot project is being considered on a provincial road for 2007. The HRM T&PW business unit is aware of this initiative and will be monitoring the pilot project closely. If successful and if the reused solidified asphalt meets specifications, HRM staff will assess the potential for inclusion in possible tenders that will be issued in 2008.

9) Electronics (E-Waste) Recycling

In 2004, the Province committed to implementing a new stewardship program with the manufacturers/distributors/retailers of electronic products for the recovery, disassembly and recycling of electronic, or E-waste as it is often referred to. This may include, but is not limited to computers, TVs, peripherals, etc. In the fall of 2006, after two rounds of public consultation, the Province announced that new legislation would be enacted establishing a new program for the recovery/recycling of E-waste.

The introduction of such a program in Nova Scotia, has the potential to divert approximately 3% to 5% (5,000 to 8,300 tonnes) of material from the Otter Lake disposal facility annually. In other Provinces where a similar program has been introduced, the cost of the collection, disassembly and

electronics. The introduction of a new provincial E-waste recycling program is another opportunity in the direction of achieving the 300 kg/per capita goal set by the Province by 2015.

Staff have been advised that a new provincial legislation enabling an EPR program for E-waste is imminent. However, recognizing there is a pent up need in HRM, staff have proceeded to seek funding from RRFB (50% cost sharing) to conduct a one-day E-waste event in HRM in 2007/08. The cost of this one-day event (at three locations) would be borne by HRM and RRFB. The logistics of this program would have to be arranged, and a tender issued to secure a service provider to take receipt, disassemble, and recycle all materials. Similar one-day events held in other provinces have been well received, with an excellent response.

Subject to approval by Regional Council as part of the 2007/08 budget process, although proceeding in advance of the Province implementing a new program for the recovery of E-waste results in the Region incurring an expense of some \$37,000 (instead of the brand owners/consumers who would be paying costs for a provincial stewardship program), the 50% cost sharing by the RRFB for the one time event, provides an opportunity to enhance HRMs waste diversion rate.

BUDGET IMPLICATIONS

None

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

None

ATTACHMENTS

- 1A Citizens Stakeholder Committee Integrated Resource Management Strategy - Executive Summary;
- 1B A Ten-Year Synopsis of HRM's Integrated Solid Waste/Resource Management System;
- 2A Staff report dated May 15/06 to SWRAC entitled " Weekly Summer Green Cart Collection - Alignment with Tax Rate";
- 2B Supplementary staff report dated September 16, 2006 to SWRAC entitled "Weekly Summer Green Cart Collection";
- 3. Report dated March 2, 2000 from SWRAC to Regional Council entitled "Illegal Dumping Action Plan", with the attached staff report dated November 9, 1999 entitled "Illegal Dumping Action Plan" (with the Task Group Review and Findings);
- 4. Letter dated July 24, 2006, from Mayor Kelly to Minister of Environment and Labour and the response from Minister Mark Parent, dated September 14, 2006.

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

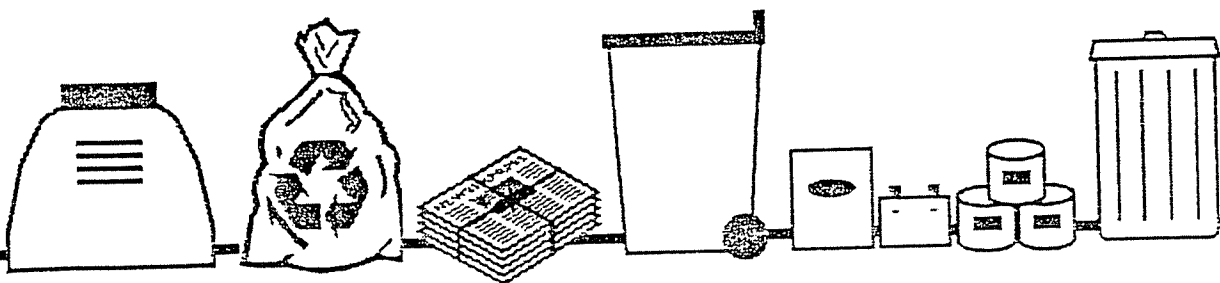
Report Prepared by: Jim Bauld, Manager Solid Waste Resources 490-660

REGIONAL SOLID WASTE MANAGEMENT PROJECT

Resource
An Integrated Waste Management Strategy
for
Halifax County/Halifax/Dartmouth/Bedford

Executive Summary

Prepared by
The Community Stakeholder Committee (CSC)
and Adopted in Principle, March 25, 1995



MISSION STATEMENT

This Integrated Waste/Resource Management Strategy (IWRMS) is designed to address the municipal solid waste stream, to achieve the maximum possible diversion of resources from disposal and to encourage citizens to adopt the necessary lifestyle changes to move from a consumer to a conserving society.

The Strategy is designed to be flexible enough to incorporate new, environmentally sustainable technologies that will move us towards our ultimate goal of "Zero Waste."

Let Us Tell You What We Have Done

Over the past five months in many meetings of the Community Stakeholder Committee (CSC), dozens of citizens from our community have met to discuss and draft a new approach to the "garbage problem." We have a solution.

We offer not a waste management system, but rather a *resource* management strategy – "Waste Not Our Future." We have prepared a vision which is an essential first step in mapping out a management system for those materials which can no longer be regarded as waste, but must be turned into *resources* to benefit both our economy and our environment. We call on everyone, citizens and politicians together, to help build a truly sustainable future.

Past efforts to manage our solid waste have failed but the past is the past. The Highway 101 Landfill in Upper Sackville has damaged the local community and the environment. Costs continue to skyrocket. We can no longer afford to make the same mistakes.

"Waste Not Our Future" is a consensus statement of the CSC. Its deliberations have been open to all citizens of the Metro-region. We have met together as equals. We have studied the problem, investigated today's waste management system, debated the components of a new system, and found agreement.

We have adopted principles and goals which can best be summed up in a single word: **stewardship**. Stewardship represents a new direction in the management of our solid wastes. It places responsibility on everybody – because we all generate material that must be managed.

We ask that this Strategy be considered as a whole. It has a coherence of vision and an integrity that requires full implementation. It is not a Strategy that can be adopted piecemeal. We do not find or suggest any other acceptable alternative strategy. If a new residuals disposal facility is to be recommended by November 1995, if the Highway 101 Landfill is to close on December 31, 1996, and if a new residuals disposal facility is to be opened on January 1, 1997, this Strategy must be reviewed and adopted

**Simply stated,
our Strategy
is based on
maximizing the
beneficial use of
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on minimizing
disposal.**

in its entirety as the new solid waste/resource management system, as soon as possible.

We believe that this Strategy presents a cost-effective solution, especially when all of the present and future costs and liabilities are included.

We also believe that this Strategy is a challenge to the people of the Metro-region, and that we can meet that challenge. The Strategy is practical and workable. It is an understandable, convenient system which rewards the conserver.

Simply stated, our Strategy is based on maximizing the beneficial use of resources and on minimizing disposal. It is also important to state that the proposed system aims for "zero waste" and places emphasis on the diversion of the recyclable, toxic and organic materials that cause problems at disposal sites. The success of our Strategy will be based on separating materials at source and by collecting and processing them separately and appropriately.

Now, What is the Strategy all About?

Composting is at the heart of this Strategy. Its success depends on composting. The municipal collection system will be based on collecting compostables in specially designed containers as part of a modified system which also includes recyclables and trash collection.

Waste reduction, household hazardous waste (HHW), backyard composting, as well as education and promotion programs, are also integral to the Strategy's objectives. Source-separated materials will go to facilities for recycling, composting and HHW processing.

Several figures summarize and illustrate the Strategy:
(see attached)

- Reducing Waste: Today & Tomorrow (Chart 3-1);
- Diversion Comparison: Achievable & Effective (Chart 6-1);
- Framework for Integrated Waste/Resource Management Strategy (Figure 4-1);
- Cost-Benefit Comparison: Affordable Stewardship (Chart 7-1); and
- Implementation Plan: Achievable Challenge (Figure 8-1).

All mixed waste will go to Front-End Processing Facilities to extract any remaining recyclables, compostables and hazardous substances. This will not only capitalize on their resource value but will also ensure that no material is sent for residuals disposal (landfill) without processing. This will avoid problems such as toxic leachate and emissions, odours, or the attraction of birds and/or vermin. No material will be disposed of without processing. Free of toxics and organics, materials sent for disposal will be available for reuse by future generations. This Strategy mandates that Front-End Processing Facilities will be operational before the opening of the new Residuals Disposal Facilities.

The Industrial, Commercial and Institutional (IC&I) sector can use the municipally-sponsored recycling, composting and screening facilities, or they can provide their own equivalent. User fees will encourage source-separation. Construction and

**Absolutely
essential to
the Strategy's
success is the
ongoing role
of citizens and
communities...**

Demolition (C&D) debris will be managed through reuse, recycling and permitted clean-fill sites. Existing IC&I collection systems should suffice with only slight modifications. Non-residential IC&I hazardous waste will continue to be managed separately from the municipal system.

Absolutely essential to the Strategy's success is the ongoing role of citizens and communities in the development, implementation and operation of all the components of this system. More than the advisory committee model, this Strategy includes very specific, permanent decision-making roles mandated for citizens and community groups. Without this protection, the public will not buy into a system sufficiently for it to work and it will not be possible to site Residuals Disposal Facilities.

The following components are marked for accelerated implementation as early as 1995 and 1996: centralized composting, disposal bans, source reduction, backyard composting, a permanent HHW depot, and C&D debris sites. Rapid success is necessary to build credibility with communities near potential sites that will be wise enough to know that only action now will convince them that the next system will actually be done right.

For more about the system please read our full report. More detail will be added as the components are put in place, so there is room for everyone to contribute. Any citizen of the Metro-region is welcome to join the Community Stakeholder Committee at any time. Please join the CSC in ensuring the rapid and successful implementation of our Integrated ~~Waste~~/Resource Management Strategy.

Background and Technical Summary

On October 7, 1994 the four Mayors of the Metro-region municipalities reached an important agreement: to transfer responsibility for Municipal Solid Waste (MSW) from the Metropolitan Authority to Halifax County Municipality. The agreement, to take full effect as of January 1, 1997, was reached after many years of inconclusive waste management planning by the Metropolitan Authority. Its timing is meant to coincide with the permanent closure of the existing Highway 101 Landfill operated by the Metropolitan Authority.

Once the Mayors' Agreement was signed, the Municipality embarked on an innovative and democratic planning process to develop a waste management strategy and to identify a candidate site(s) for a new modern residuals disposal facility. The planning process was initiated on October 26, 1994, and has continued with numerous meetings, workshops and the efforts of dozens of citizen volunteers. The Integrated Waste/Resource Management Strategy (IWRMS) has been written by these volunteers, and is presented for consideration and adoption by the four Metro-region municipalities: Halifax County Municipality, the Cities of Halifax and Dartmouth and the Town of Bedford.

The Strategy represents a framework, which, upon approval on a regional scale, will form the basis for detailed system planning and design. The Strategy framework also includes methods for identifying criteria for siting new waste/resource management facilities.

The Strategy is founded on a fundamental philosophy: that materials currently considered "wastes" should be treated as "resources", and that the reduction, reuse, recycling and composting of those resources should be encouraged through broad-ranging principles of stewardship. The Strategy presents waste diversion goals which arise from this philosophy of stewardship. In the Metro-region today, less than five percent of the total municipal solid waste (MSW) stream managed by the Metro Authority is recycled. Over 95% is landfilled.

In 1997, the new waste management system proposed in the Strategy will result in 25% of the MSW being landfilled. Once all

The Strategy presents the objectives of the waste management components necessary for achieving these goals.

aspects of the new waste/resource management system have been fully implemented and participation has reached its targets, 12% of the MSW is expected to be landfilled. Chart 6-1* illustrates the anticipated progress toward these diversion targets.

The Strategy presents the objectives of the waste management components necessary for achieving these goals. Figure 4-1* illustrates the system which has been designed by the CSC. This system comprises new methods of waste/resource collection for both the residential and IC&I sectors. The residential collection will be enhanced with a separate organics stream. IC&I waste/resource separation will be encouraged through appropriate charge mechanisms, aimed at encouraging separation at source. For example, materials which have been sorted and delivered to allow resource recovery will be accepted at far lower charges than materials which have been delivered in a "mixed" fashion.

Source separated organics will be routed to new central composting facilities. Materials which have not been sorted, and which can be termed "mixed waste", will be sent to new screening and resource recovery facilities for processing. Materials to be landfilled will be processed, and will contain an absolute minimum of organics and economically recyclable materials.

The Strategy presents programs designed to support the new waste/resource management system. Clearly, the success of the system in meeting the diversion goals will depend upon participation. Accordingly, the importance of education and communication programs is heavily stressed. Budgets for these programs, starting immediately, are proposed in the Strategy.

The CSC has identified a mechanism for continued citizen involvement in the new waste management system. This involvement is to be sustained through the Independent Stakeholders' Audit and Review Group (ISARG). Details on the membership and role of the ISARG have been considered and are detailed in the Strategy.

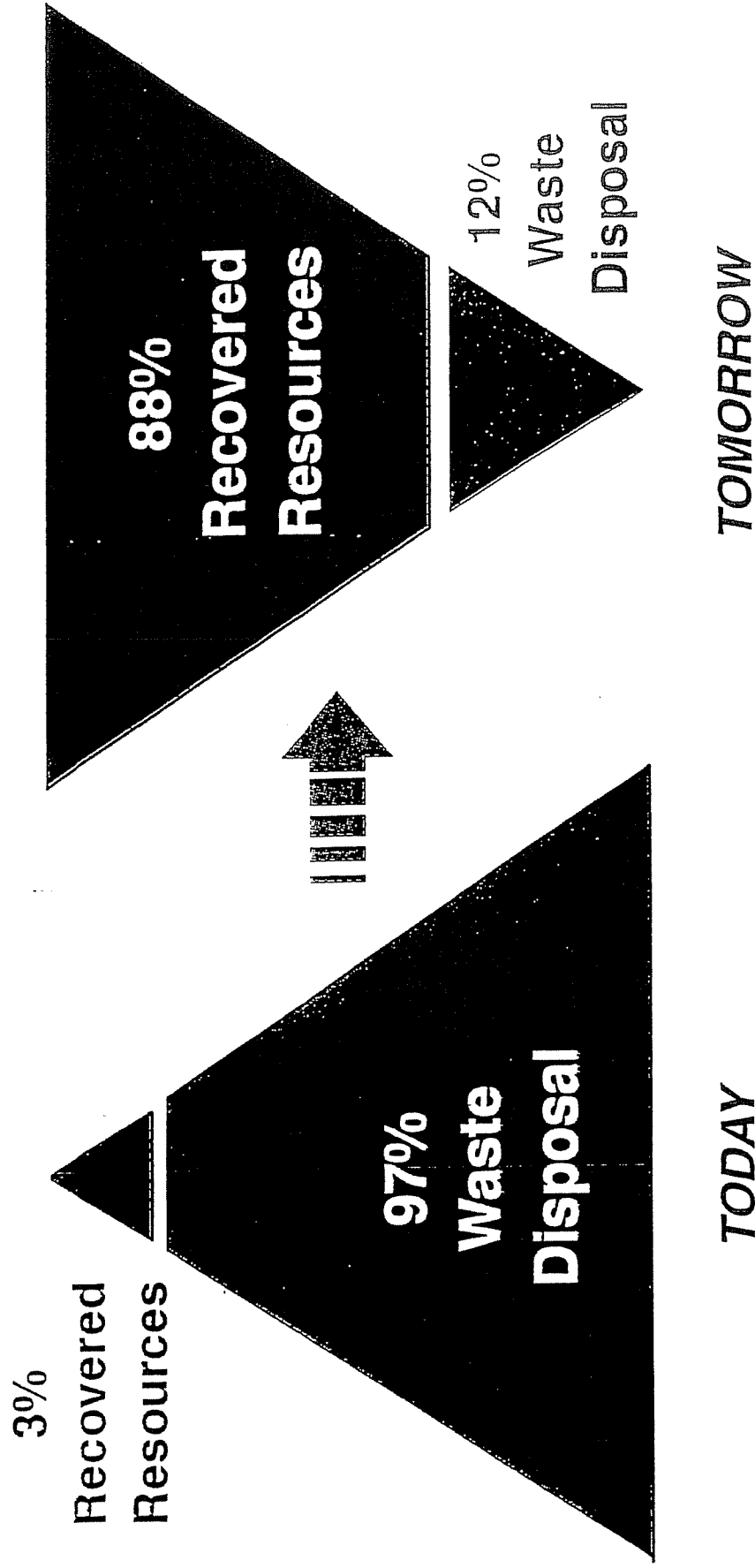
*See attached

The new waste/resource management system presented in this document will be more costly than today's waste management system, when strict dollar terms are considered. However, the new system represents the only clear option for the region to move towards responsible resource management, while at the same time facilitating waste diversion and ensuring that a new residuals disposal facility, which replaces the aging Highway 101 Landfill, is acceptable to local communities.

The cost of the new system has been estimated in 1996 dollars. Table 7-1* shows system cost estimates for the Integrated Waste/Resource Management Strategy compared to today's system costs (based on 1994/95 Metro Authority budget and 1995/96 proposed budget). For illustrative purposes, Table 7-3* compares the costs of the proposed system to the projected costs of the Metro-region system proposed in a 1992 report by Sound Resource Management as well as to the projected costs of the (now-rejected) Metropolitan Authority incinerator proposal. The proposed system is well within the costs envisioned by the 1992 Sound Resources Management study, and is far lower than the previous Metro Authority proposal. The proposed system is affordable and sustainable. The CSC strongly recommends that it be adopted in principle by the Metro-region municipalities.

CHART 3-1 "REDUCING WASTE: TODAY & TOMORROW"

METRO REGION
COMMUNITY STEWARDSHIP &
RESOURCE CONSERVATION STRATEGY



ENVIRONMENTALLY SUSTAINABLE & ECONOMICALLY ACHIEVABLE

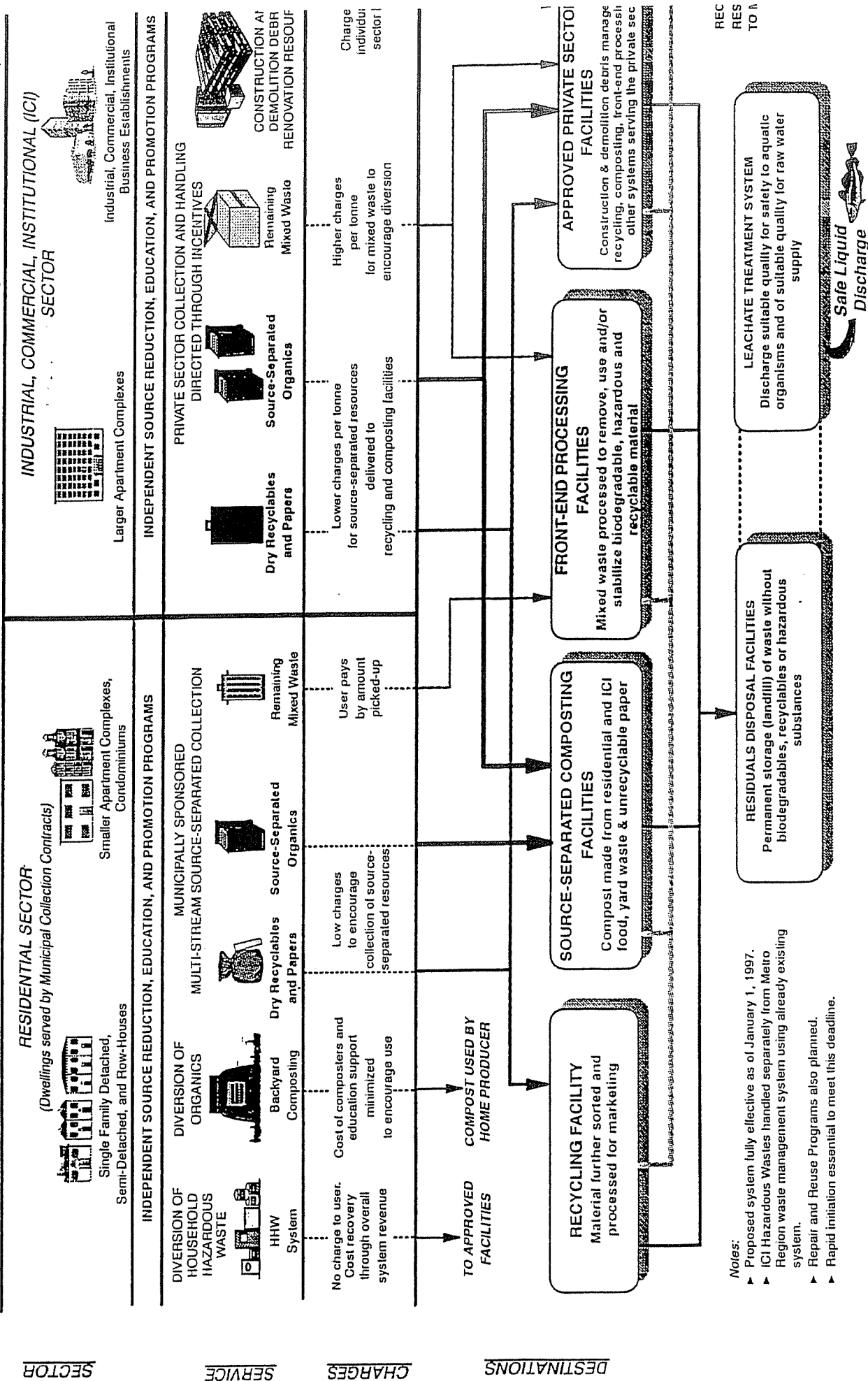
RESOURCE

FIGURE 4-1

FRAMEWORK FOR INTEGRATED WASTE MANAGEMENT STRATEGY FOR METRO REGION

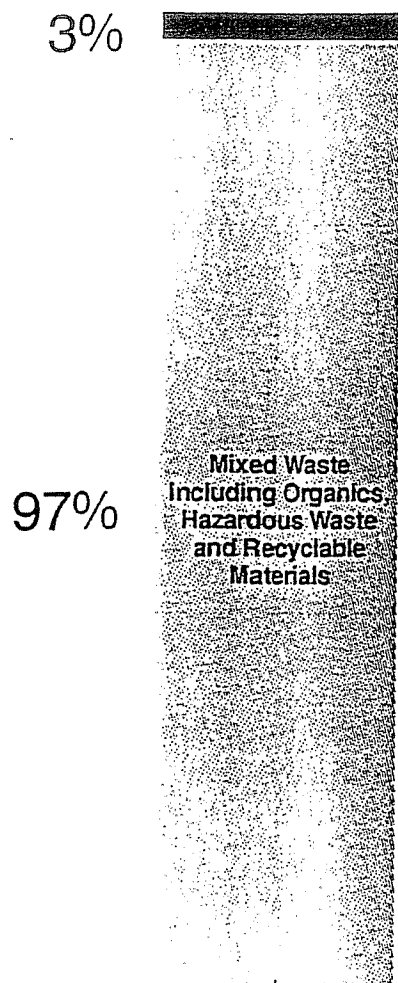
CONVENIENT AND COMPREHENSIVE

Developed by the COMMUNITY STAKEHOLDER COMMITTEE Regional Solid Waste/Resource Management Project, Halifax County/Halifax/Dartmouth/Bedford, Marct

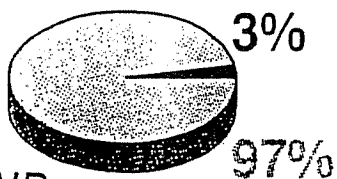


1997 diversion will be achieved through early initiation projects phased-up to full participation. The CSC strategy delivers only stable, non-harmful residuals going to final disposal, necessary for siting a new landfill.

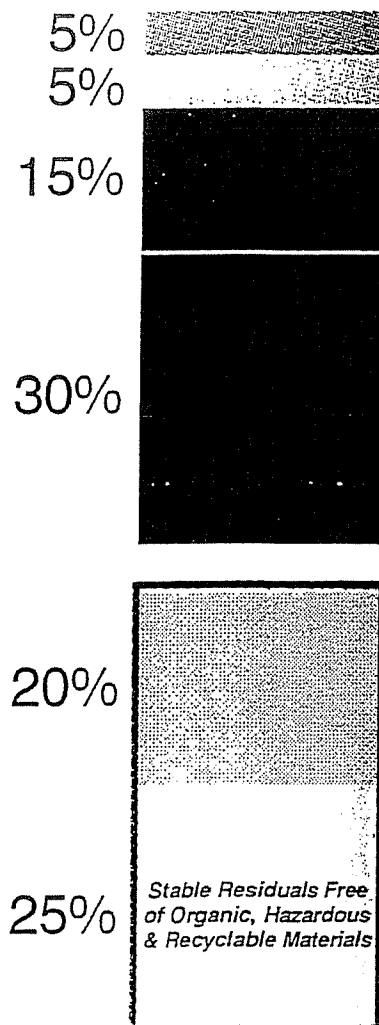
Metropolitan Authority



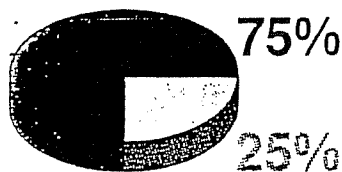
TODAY



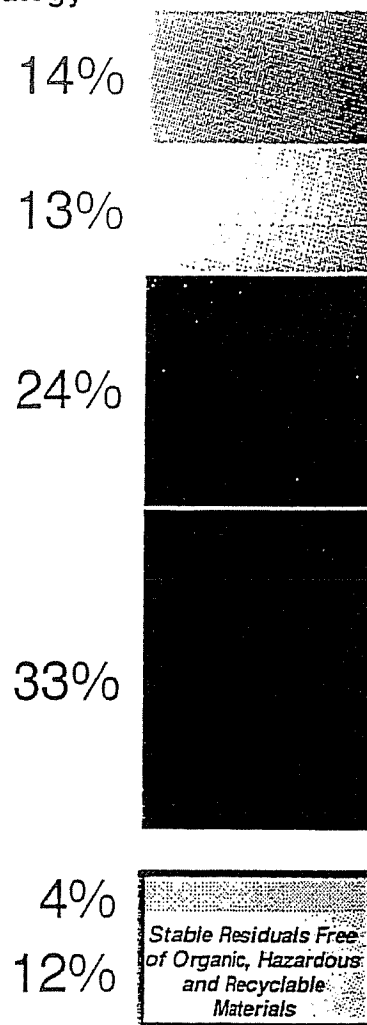
Integrated Waste/Resource Management Strategy



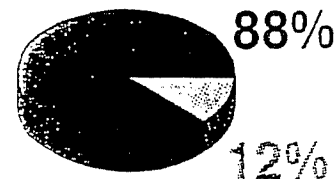
1997



Strategy



MATURE SYSTEM*



LEGEND:

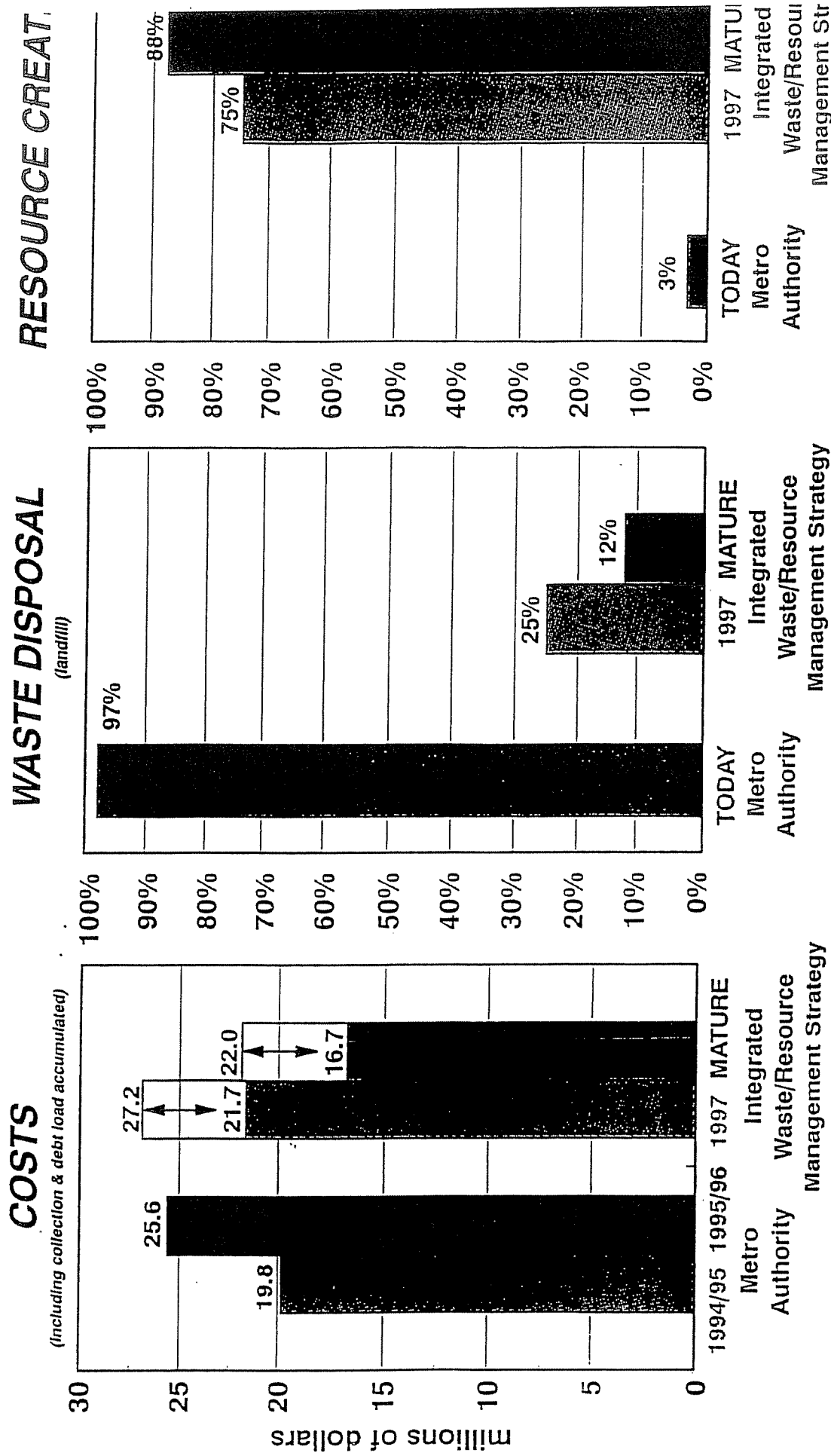
	Backyard & On-Site Composting		Central Processing of Mixed Residuals
	Inert Materials Management		Centrally-Separated Composting & Recycling
	Source-Separated Recycling		Final Disposal (Landfill or Stable Residuals)
	Source-Separated Composting		Total Diversion

*Some members of the CSC believe a good target date for the mature system is year 2000.

**Waste/Resource System Diversion Performance Rates reflect the best information and estimates of the CSC. They are adopted from waste composition data from Metropolitan Authority, Sound Resource Management (1992), Metropolitan Toronto data, and other sources and the anticipated performance of this proposed system.

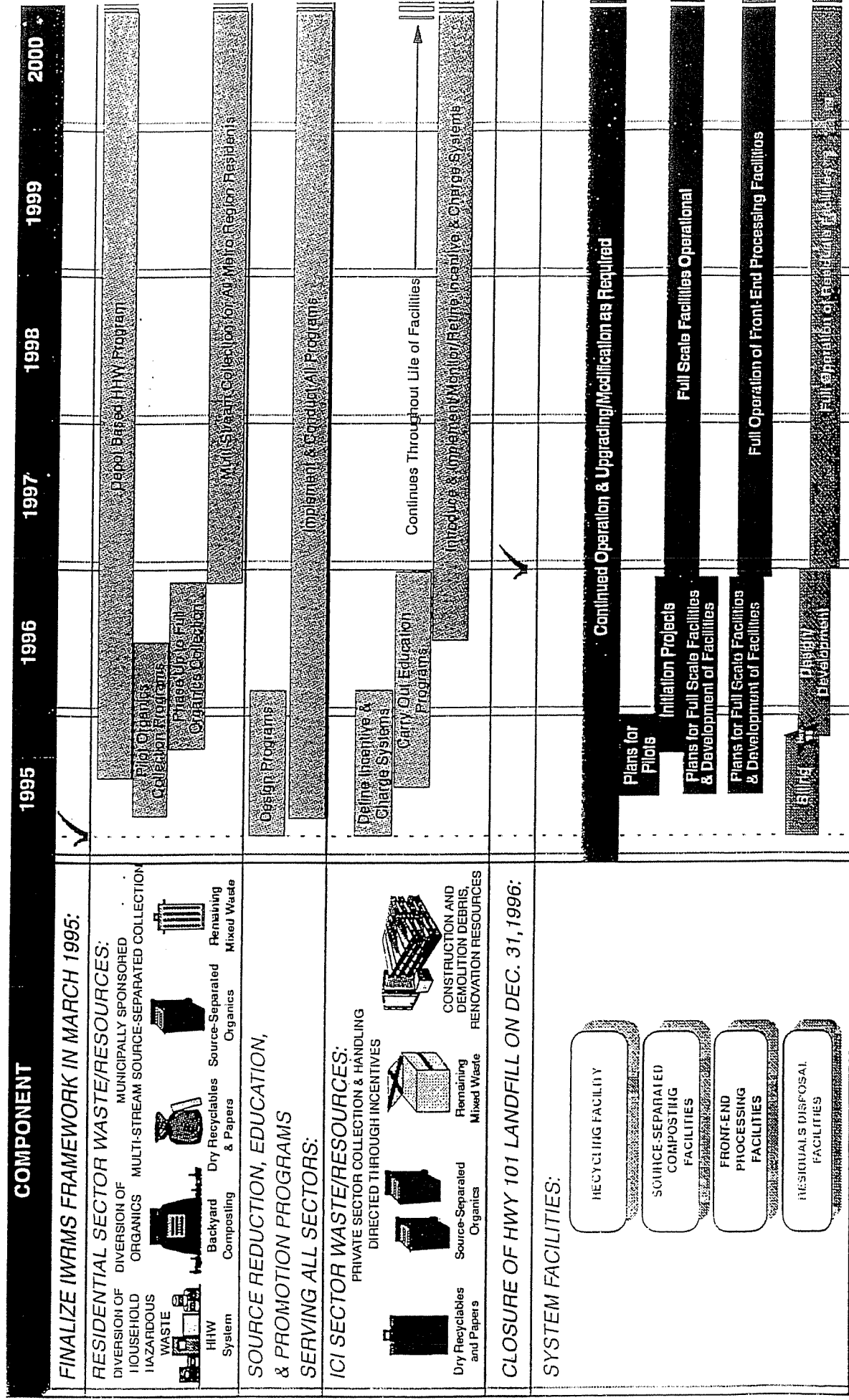
***Household Hazardous Waste Collection and other programs diverting less than 1% are not displayed here.

CHART 7-1 COST-BENEFIT COMPARISON: AFFORDABLE STEWARDSHIP



For the same range of costs we are paying now for an objectionable system, we can have a far superior system. Future costs will go down and diversion will go up.

FIGURE 8-1 IMPLEMENTATION PLAN: ACHIEVABLE CHALLENGE



Source-separated composting and front-end processing facilities will be fully operational before the residuals disposal facility is opened.

January 18, 2007.

Prepared by: Jim Bauld,
Manager, SWR

A Ten Year Synopsis of HRM's
Integrated Solid Waste/Resource Management System

1.0 Background:

By 1994, failure of the regional waste management system,(which resulted in the purchase by the Metropolitan Authority of homes within 1 km of the landfill in Upper Sackville and compensation to the community for pervasive environmental impacts), and the Province not approving incineration of waste as the new management practise, Halifax County received approval from the other three municipalities to initiative a new innovative approach for the management of waste for the region. This new approach asked the citizens to develop a new model for the management of waste, and criteria for the siting of the new regional landfill.

1.1The CSC Strategy:

Over five months, hundreds of citizens, ie the Citizens Stakeholder Committee, supported by a facilitator and consultants, developed a new strategy for the management of waste. The new strategy is based on the separation of materials at the source (ie home, work place) to maximize the recovery and reuse of various types of materials, and minimize waste disposed. The principles of the CSC strategy are :

1. An Integrated Resource Management System
2. Stewardship: We Manage the Materials We Generate
3. Success is Based on Separating Materials at Source
4. Stable or Inert Materials Only will be Disposed in the Landfill
5. The Waste/Resource Management System will Feature Citizen Involvement
6. Achieved Diversion will be a Key Measure of Success
7. Opportunities for Local Employment & Entrepreneurs

In February 1996 , the HRM thanked the County of Halifax and approved the CSC strategy as the basis for a new integrated solid waste/resource management system, and set a waste diversion target of 60%. Between 1996 and January 1999 multiple private sector service providers were engaged to place the required infrastructure, including a new regional landfill that does not accept organic and hazardous waste materials. The new Otter Lake mixed waste processing and residual disposal facility, and the two compost facilities commenced full operations in January 1999.

2.0 Five Year Review

In 2004 O'Halloran Campbell Consultants Ltd completed a five year review of HRM's ISW/RMS. Their findings are summarized as follows, with a brief status report for each;

<u>Recommendation</u>	<u>Status/Action</u>
1. <u>Goals</u> - reduce waste disposed at Otter Lake	Waste Characterization studies completed, <u>more than 50% of material in residential and ICI waste stream is recyclable paper, plastic and organics</u>
- efficient delivery of SWR programs/retain principles	new MIRROR contract \$ 3 million avoided cost, internalized C&E contract, measure with other matrix ie, population growth, the economy, building permits
2. <u>Residential</u>	
- increase C&E, promote BYC	C&E internalized - higher output /lower cost two BYC sales conducted (1,600 units sold)
- study participation rates, more education and enforcement	residential participation measured ie Weekly Summer Green Cart, stickers issued / monitored compliance, 10% Challenge launched
- harmonize receiving hours at all facilities	included in Issue Paper review
-evaluate bag limits and tags	included in Issue Paper review
- target C&E campaign for new residents	educational material developed, continued use of Welcome Wagon, C&E material issued with Occupancy permits
3. <u>ICI</u>	
Assess data from Waste Characterization study, maximize monitoring of ICI at Otter Lake	10% Challenge launched Sept 04, diversion rate increased from 53% to 56%, enhanced monitoring at FEP tip floor
Enhance C&E, enforcement, incorporate SS in HRM bldg approval process	Diversion Planning Officer established with high rate of inspections, SOTs etc, tool developed by Community Development

	2.	lobbying the Province and RRFB, SWR representation on provincial packing committee
Effect packing change		
4. <u>C&D</u>		
Increase C&D diversion		Promotion in partnership with local industry C&D diversion, 75% diversion operating license requirement
C&D as landfill cover		New MIRROR contract includes C&D as daily cover with equity from suppliers
Establish C&D disposal facility		private C&D disposal facility opened in 2004
5. <u>Compost</u>		
special collections -peak seasons		Separate collection spring, fall and Christmas tress since 2001, weekly summer green cart collection in 2003
increase compost capacity		New weekly maximum tonnage limit in new five year contract

3.0 Conclusions/Challenges/Next Steps

Although the 10% Challenge has enabled the HRM to keep pace with population growth, a strong local economy, larger residential properties, more liquidity of personal wealth by Baby Boomers, a Canadian average of a 23% increase in personal wealth and a 39% increase in personal debt in the past ten years etc, the 60% diversion target has not been attained. At the SWR Round Table session in November 2005 future opportunities for enhancing HRM's diversion were identified. The Round Table agreed that the following four issues and eight opportunities warranted further review by SWR for potential implementation :

1. Enhancing Residential Diversion through Municipal Policy by;
 - a) reducing the ten bag limit /introducing tags
 - b) requiring clear bags for refuse
2. Compliance and Enforcement by review of;
 - a) enhanced enforcement of By Law S 600 re source separation
 - b) enhanced accessibility at facilities

3. Enhancing C&D Diversion through;
 - a) source separation as a requirement of the building permit process
 - b) integrating stewardship from generators to end users
4. Enhancing Commercial Waste Diversion of Recyclables and Organics through;
 - a) clear bags , enforcement and monitoring
 - b) standardized training programs for source separation in building management

In addition the Round Table concluded a need for a continuation of a comprehensive education program as an integral component of all waste diversion activities.

The challenge facing the HRM is to effect new opportunities that enhance waste diversion in a fiscally responsible manner which is acceptable to the general public. The Issue Papers analysis will identify successful programs in other locals that have proven effective in reducing waste disposed(kg/per property serviced and kg/per capita), lower than the current 530 kg/ per capita for residential waste disposed in the HRM.

The challenge of By Law S- 602, which prohibits the exportation of specific types of waste, threatens the sustainability and principles of the HRM ISW/RMS. Should the appeal set for February 13, 2007 not be successful and the Province fails to amend the MGA, the likely outcome is the disassembly of the Provincial ISW/RMS of seven economically viable and self sufficient regions, resulting in the stranding of significant tax dollars. For the HRM the tenets of the CSC strategy would be lost as well as the ability for the governance i.e. monitoring for source separation compliance, as the material exits the Region. The HRM has to be seen to manage all materials generated within the Region- those that are acceptable as deemed by NSEL at the Otter Lake landfill.

Since the development of the CSC visionary strategy more than 10 years ago, and the full implementation of the HRM ISW/RMS in January 1999, the achievements have been impressive. Except for two system changes being,

- weekly summer green cart collection for the convenience of the public particularly those in the denser urban core , and,
- an expanded tipping floor at the FEP-the result of a strong local economy and a major increase in population,

no other changes have been required. This is remarkable considering no undertaking of this magnitude for the management of solid waste has been attempted before.

COW February 13, 2007

At the December 4/06 meeting of SWRAC it was agreed for staff to present a progress report of the HRM ISW/RMS including the achievements, and opportunities for enhancing waste diversion, at a COW meeting in early 2007.

The presentation at a COW on February 13, 2007 provides an excellent opportunity for staff to advise Regional Council how far HRM has come in solid waste/resource management in the past ten years, report on the progress relative to the seven principles of the CSC strategy , and identify new opportunities for furthering waste diversion to achieve the 60% target.

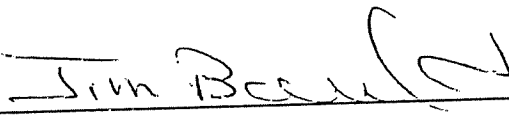


PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

**Solid Waste Resource Advisory Committee
May 25, 2006**

TO: Reg Rankin, Chairman, and Members of the Solid Waste/Resource
Advisory Committee

SUBMITTED BY:


Jim Bauld, Manager, Solid Waste Resources

DATE: May 15, 2006

SUBJECT: Weekly Summer Green Cart Collection - Alignment with Tax Rate

INFORMATION REPORT

ORIGIN

At the March 20, 2006 meeting of the Solid Waste Resource Advisory Committee, staff was requested to provide a report detailing:

- the areas where weekly summer green cart service is provided in relation to the urban, suburban and rural tax rate; and
- include any cost implications of aligning the weekly summer green cart service with those communities within the urban tax rate.

BACKGROUND

In 2004, following a two month pilot program in the summer of 2003, Regional Council approved Alternative # 3 of the April 6, 2004 staff report (Attachment # 1)- the provision of weekly summer green cart collection service in urban/suburban HRM (Halifax, Dartmouth, Bedford, Sackville, Cole Harbour, Beechville, Lakeside and Timberlea) at a cost of \$180,000 (in 2004). Subsequently, as approved by Regional Council, Cow Bay and Eastern Passage, Herring Cove to Harriestfield (the Sambro loop), Waverley, Fall River and Fletchers Lake were also to receive the service, for a total current annual expenditure of \$230,000, as contained in the proposed 06/07 operating budget. The request for weekly summer green cart service primarily originated from residents located within the urban core of HRM, where typically properties are smaller with less generous setback resulting in higher density.

DISCUSSION

In 1998, Regional Council approved the service level for solid waste/resources collection -including the establishment of eight (8) collection areas for the provision of residential collection of recyclables, organics and refuse. Residential collection services are provided through a five-year contract by the private sector. Within each area, collection is provided on each of the five (5) days of the week - Monday through Friday.

A) Provision of Weekly Summer Green Cart Collection Service and the Tax Rate:

The areas of HRM where the urban, suburban and rural tax rate is applied, does not exactly align with the eight (8) residential collection areas, or with the five (5) week days within all collection areas. The following details the alignment of the eight (8) residential collection areas and the urban, suburban and rural tax rate.

1. Urban Tax Rate:

Weekly summer green cart collection service is provided in communities located within the urban tax rate, which includes, with the collection area denoted in brackets:

- the former City of Halifax (Area 1)
- the former City of Dartmouth (Area 2)
- the former Town of Bedford (Area 3)
- Blue Mountain Estates off Kearney Lake Road (Area 3)
- Fergusons Cove (Area 4)
- Herring Cove (Area 4)
- Beechville/Lakeside/Timberlea (Area 4)
- all of Sackville up to and including Kinsac (Area 5)
- Eastern Passage (Area 6)
- Cole Harbour (Area 6)
- Westphal/Lake Major (Area 6)
- north section of Montague Gold Mines (Area 6)

2. Suburban Tax Rate

Weekly summer green cart collection service is provided in communities located within the suburban tax rate, which includes, with the collection area denoted in brackets:

- Lucasville including Timber Trails Trailer Park (Area 3)
- Waverley (Area 5)
- Lakeview (Area 5)
- Windsor Junction (Area 5)
- Fall River (Area 5)
- Fletchers Lake (Area 5)
- Cow Bay (Area 6)
- south section of Montague Gold Mines (Area 6)

3. Rural Tax Rate

Weekly summer green cart collection is provided in the following communities of HRM located within the rural tax rate:

- Upper Tantallon, north west of the 103 highway (Area 3)
- Stillwater Lake (Area 3)
- Upper Hammonds Plains (Area 3)
- Beaverbank (Area 5)
- the Sambro Loop - from Halibut Bay to Harriestfield (Area 4)

The remaining communities/areas of HRM within the rural tax rate do not receive weekly summer green cart collection services are:

- Goodwood, Terence Bay, Peggys Cove to Hubbards (Area 4)
- Wellington, Grand Lake to Carrolls Corner (Area 5)
- Lawrencetown, the Prestons to Gaetz Brook (Area 7)
- Musquodoboit Harbour, Elderbank to Loon Lake, Ecum Secum (Area 8)

B) Review of Service Area for Weekly Green Cart Collection Service:

The expansion of weekly summer green cart service to every community located within the rural tax rate would cost an additional \$46,5000. Funding for this service is not contained in the proposed 06/07 operating budget.

The removal of weekly summer green cart service from those communities currently receiving the service within the rural tax rate would potentially save HRM \$5,000 in 06/07.

As the eight (8) residential collection areas do not align with the urban, suburban and rural tax rate boundary, several communities located within the rural rate are included in the same collection area and collection vehicle week day route of communities in the urban/ suburban rate receiving weekly summer green cart collection service. As a result, the potential to reduce the number of vehicle collection days (the average cost of a collection vehicle is approximately \$900 a day) by the elimination of weekly summer green cart collection service

from those communities within the rural tax rate currently receiving the service is very limited, i.e. approximately \$5,000.

The removal of weekly summer green cart service from those communities currently receiving the service within the suburban tax rate would potentially save HRM \$30,000 in 06/07.

Combined potential savings by removing the service from communities located in the rural and suburban tax rate would be \$35,000. The alignment of the service for those communities within the urban tax rate would achieve equity of service and would be consistent with the original request for the service, i.e. in the urban core of the HRM having the highest density. For cost effectiveness, the optimum opportunity to realign the service with the urban tax rate would be at the commencement of the next five-year collection contract period starting on July 1, 2008.

C) Participation Rate Weekly Summer Green Cart Service:

As a component of the 10% Challenge, staff have been monitoring communities/subdivisions/streets where the participation rate for recycling and composting has been reported as low, or where it has been noted that the total kg per household for refuse is higher than average.

In the summer of 2005, in addition to recording the number of bags of recyclables, set out rate for green carts and the number of bags of refuse at each house, the information gathered included the participation rate each week for properties receiving weekly summer green cart collection service. The survey was completed on three successive weeks that the additional weekly summer green cart service was provided. The results of the curbside monitoring are as follows:

Streets /Community	Tax rate	Participation Rate
Eastern Passage	Urban	18 of 57 homes= 31%
Cork /Liverpool Streets	Urban	29 of 57 homes= 51%
Sambro/Williamswood/ Harriestfield	Rural	2 of 57 homes = 3%
Lower Sackville	Urban	30 of 57 homes= 52%

As the April 6, 2004 staff report noted on page three, during the eight week pilot program conducted in urban HRM during the summer of 2003, 21% of residents were away for one (or 25%) of the four extra collection weeks, while 14% of residents were away for two (or 50%) of the four extra collection weeks.

BUDGET IMPLICATIONS

Not applicable

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES


Not applicable

ATTACHMENTS

April 6, 2004 staff report.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by :


Jim Bauld, Manager, Solid Waste Resources 490-6606

Financial Review by:

Ferdinand Makani, Financial Consultant 490-6902

Waste/Resource System Mass Balance

Year to Date (YTD) 01 April 2006 - 30 April 2006

System Components	Residential YTD 2006	Residential YTD 2005	% Change	Commercial YTD 2006	Commercial YTD 2005	% Change	System Total 2006	Notes
Refuse	5,398	6,060	-10.92%	7,197	8,318	-13.48%	12,595	1
Organics	2,219	2,843	-21.93%	1,041	1,008	3.21%	3,260	1
Recycling	1,370	1,468	-6.66%	360	191	88.15%	1,730	1
Fibres Private Recycling (Est)	N/A	N/A	N/A	3,583	3,583	0.00%	3,583	
Backyard Composting (Est)	400	400	0.00%	N/A	N/A	N/A	400	
Drop-off Materials (Est)	600	600	0.00%	N/A	N/A	N/A	600	
C & D	N/A	N/A	N/A	5,045	7,786	-35.20%	5,045	
HHW (Est)	100	100	0.00%	N/A	N/A	N/A	100	
Totals	10,087	11,470		17,226	20,886		27,313	
Diversion (% of Totals)	46.48%	47.17%		58.22%	60.17%			
Overall Diversion (Res+Com)	54%							

Note 1 - April had only 20 weekdays and a holiday



Backyard Composter Sale

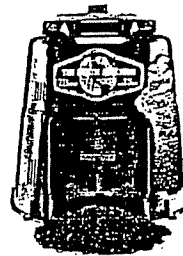
Help the environment and create valuable compost for your yard.

Every gardener knows the value of composting to enrich the soil in their backyard. Join the thousands who are already composting in HRM.

- Offer only available to residents of HRM. One bin per household.
- Bins must be ordered by June 8th. Payment must accompany order.
- Cost: \$25.00 + \$3.75 HST = **\$28.75**
- Bins must be picked up on July 8th or 15th at the location specified on the order form.
- Credit card orders can also be placed by PHONE **490-6263**.
- Refunds available only if order is cancelled by June 8th.

Print this brochure (PDF, 172 KB) and MAIL with payment to:

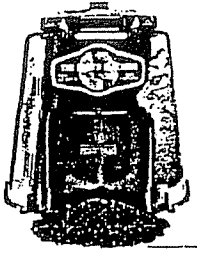
Backyard Compost Sale
Solid Waste Resources
Halifax Regional Municipality
PO Box 1749
Halifax, NS B3J 3A5



Credit Card orders may also be FAXED: 490-6690

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Last Updated: Friday, March 31, 2006 at 02:49 PM



BACKYARD COMPOSTER ORDER FORM

Orders must be received by JUNE 8th, 2006

HALIFAX
REGIONAL MUNICIPALITY



- * Offer only available to residents of HRM. One bin per household.
- * Bins must be ordered by June 8th. Payment must accompany order.
- * Cost: \$25.00 + \$3.75 HST = **\$28.75**
- * Refunds available only if order is cancelled by June 8th.
- * Bins must be picked up on the date and location specified below.
- * Credit card orders can also be placed by phone 490-6263.

Name: _____

Mailing Address: _____

Phone: _____ Postal Code: _____

Method of payment - Cost: \$25.00 + \$3.75 HST = \$28.75

☐ Cheque enclosed
payable to Halifax Regional Municipality

☐ Credit card

Card Number: _____ Expiry date: _____

Card type: Visa ☐ MasterCard ☐ American Express ☐

Bins must be picked up on July 8th or 15th between the hours of 9 am to 9 pm.
Your bin will only be available at the location you check below:

Please select your Farmer Clem's pick up location (select one location only):

☐ 352 Sackville Dr, Lower Sackville

☐ 590 Portland St, Dartmouth

☐ 389 Bedford Hwy, Bedford

☐ 3006 Hwy #2, Fall River

☐ 1216 Hammonds Plains Rd, Hammonds Plains

Please fax this form to 490-6690 or, send by mail: Backyard Composter Sale
Solid Waste Resources
Halifax Regional Municipality
PO Box 1749
Halifax, NS B3J 3A5

All orders must be received by JUNE 8th, 2006
Additional forms can be downloaded at www.halifax.ca/wrms

20 Minute HRMakeover

Get ready HRM. It's time to commit to your participation in the first 20-Minute HRMakeover. Mayor Peter Kelly and members of Council are asking everyone in HRM at work, school or at home to stop what you're doing on **Wednesday, June 7**, come outside at 11:00, and do a 20-minute clean-up blitz around your office, school or neighbourhood. Think how quickly we can clean and beautify HRM with just a small amount of time and individual effort!

Please work with your supervisor, colleagues, teacher or fellow students to help plan your participation. Don't you have 20 minutes to spare?

How to Participate:

Individuals, businesses and other groups should register by calling Clean Nova Scotia at 420-3474. The Municipality asks everyone to add their litter bags and recycling blue bags to their regular collection at work, school or at home (the limit of 10 garbage bags per household still applies).

Please register by **June 5, 2006**.

What HRM & Clean Nova Scotia provide:

The Municipality, in partnership with Clean Nova Scotia, will provide clean-up packages including a tracking form, litter and recycling bags and gloves for each registered participant. Packages will be mailed to registered individuals, businesses and groups up to the day before the event. For those wishing to sign up on the day of the event, you will need to pick up your registration kit at Clean Nova Scotia's offices in Downtown Dartmouth.

What information do I need to give when I call to register my group or organization?

- Contact name and number
- Location of clean up
- Name of group
- Number of participants

The Municipality and Clean Nova Scotia will also provide information in the packages about litter clean up safety.

Slam Dunk Your Junk, and help keep HRM a healthy, sustainable and vibrant community.



20 – MINUTE HRMAKEOVER

Our group _____

is meeting at _____

to clean up litter at _____

on Wednesday, June 7 at 11:00 a.m.



Take 20 minutes and join us for the largest clean up event ever held in HRM.

**Register by calling Clean Nova Scotia at
420-3474**

Clean Nova Scotia in partnership with HRM will provide a clean up package, including litter and recycling bags, a data card and gloves.

For more information on HRM's 2006 Litter campaign, go to
www.halifax.ca/wrms/slamdunk.html



Attachment #2B 4.2



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Solid Waste Resource Advisory Committee
September 28, 2006

TO: Councillor Reg Rankin, Chairman and Members of SWRAC

SUBMITTED BY: Jim Bauld
Jim Bauld, Manager, Solid Waste Resources

DATE: September 19, 2006

SUBJECT: Weekly Summer Green Cart Collection

SUPPLEMENTARY INFORMATION REPORT

ORIGIN

Solid Waste Resource Advisory Committee Meetings - June 8 and March 20, 2006.

BACKGROUND

At the June 8, 2006 SWRAC meeting the following motion was approved:

“Moved by Councillor Snow, seconded by Councillor Karsten that the status quo be maintained for this summer and for the summer of 2007 in regard to weekly summer green cart collection, and staff explore options of aligning it with the urban tax rate for the 2008 year, with implementation considered for 2009

Mr. Bauld noted that this decision may have ramifications for Councillor who do not serve on this committee, and he suggested that the matter be provided to Council for information.

The Chair concurred and advised that staff could provide the information at a Committee of the Whole session.”

DISCUSSION

To supplement the data gathered in July and August 2005 (as a component of the 10% Challenge campaign), staff monitored the participation levels during the four weeks of the enhanced summer collection services in the urban, suburban and rural tax rate area in July and August 2006. The following is a report on the data collected during the summer of 2006 and 2005.

	Participation (on the extra week)	
Rural Tax Rate	2006	2005
Stillwater Lake	11 out of 57 homes = 19%	N/A
Glen Arbour	20 out of 57 homes = 35%	N/A
Williamstown	8 out of 57 homes = 14%	2 out of 57 homes = 3%
Suburban Tax Rate	2006	2005
Kingswood	22 out of 57 homes = 38%	N/A
Eastern Passage	20 out of 54 homes = 37%	18 out of 57 homes = 31%
Urban Tax Rate	2006	2005
Lower Sackville	N/A	30 out of 57 homes = 52%
Halifax Peninsula	N/A	29 out of 57 homes = 51%

All of the above monitoring was conducted during the “extra” collection week cycle for the months of July and August of enhanced collection service.

As the attached staff report entitled “Weekly Summer Green Cart - Alignment with Tax Rate” dated May 15, 2006 advised, the removal of weekly summer green cart service from the five (5) communities in rural HRM that have been receiving the service, being Upper Tantallon, Stillwater Lake, Upper Hammonds Plains, Beavertown and the Sambro Loop (Halibut Bay to Harrietsfield), would realize a saving for the HRM of approximately \$5,000. The removal of the weekly service from the eight (8) communities located in the Suburban Tax Rate would realize a savings of approximately \$30,000.

September 28, 2006

The alignment of the weekly summer service for communities in the Urban Tax Rate would be consistent with the original request for the service (i.e. the majority of the residents who were experiencing nuisances live in the Urban core of the HRM having the highest density).

Should a change in collection service level be approved by Regional Council, staff advises a decision will be required by August 30, 2007, which will enable inclusion in the RFP for the next 5-year collection contract, with the changes becoming effective July 2008.

BUDGET IMPLICATIONS

As this report is for the information of SWRAC, there are no budget implications. Should the weekly summer green cart service be aligned with the Urban Tax Rate (commencing in July 2008), a savings of approximately \$35,000 would apply.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

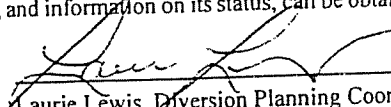
N/A

ATTACHMENTS

Staff report dated May 15, 2006 (and subsequent attached Council report dated March 29, 2004)

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:


Laurie Lewis, Diversion Planning Coordinator, 490-7176




PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

**Solid Waste Resource Advisory Committee
May 25, 2006**

TO: Reg Rankin, Chairman, and Members of the Solid Waste/Resource
Advisory Committee

SUBMITTED BY:



Jim Bauld, Manager, Solid Waste Resources

DATE: May 15, 2006

SUBJECT: Weekly Summer Green Cart Collection - Alignment with Tax Rate

INFORMATION REPORT

ORIGIN

At the March 20, 2006 meeting of the Solid Waste Resource Advisory Committee, staff was requested to provide a report detailing:

- the areas where weekly summer green cart service is provided in relation to the urban, suburban and rural tax rate; and
- include any cost implications of aligning the weekly summer green cart service with those communities within the urban tax rate.

BACKGROUND

In 2004, following a two month pilot program in the summer of 2003, Regional Council approved Alternative # 3 of the April 6, 2004 staff report (Attachment # 1)- the provision of weekly summer green cart collection service in urban/suburban HRM (Halifax, Dartmouth, Bedford, Sackville, Cole Harbour, Beechville, Lakeside and Timberlea) at a cost of \$180,000 (in 2004). Subsequently, as approved by Regional Council, Cow Bay and Eastern Passage, Herring Cove to Harriestfield (the Sambro loop), Waverley, Fall River and Fletchers Lake were also to receive the service, for a total current annual expenditure of \$230,000, as contained in the proposed 06/07 operating budget. The request for weekly summer green cart service primarily originated from residents located within the urban core of HRM, where typically properties are smaller with less generous setback resulting in higher density.

DISCUSSION

In 1998, Regional Council approved the service level for solid waste/resources collection - including the establishment of eight (8) collection areas for the provision of residential collection of recyclables, organics and refuse. Residential collection services are provided through a five-year contract by the private sector. Within each area, collection is provided on each of the five (5) days of the week - Monday through Friday.

- A) **Provision of Weekly Summer Green Cart Collection Service and the Tax Rate:**
The areas of HRM where the urban, suburban and rural tax rate is applied, does not exactly align with the eight (8) residential collection areas, or with the five (5) week days within all collection areas. The following details the alignment of the eight (8) residential collection areas and the urban, suburban and rural tax rate.

1. **Urban Tax Rate:**

Weekly summer green cart collection service is provided in communities located within the urban tax rate, which includes, with the collection area denoted in brackets:

- the former City of Halifax (Area 1)
- the former City of Dartmouth (Area 2)
- the former Town of Bedford (Area 3)
- Blue Mountain Estates off Kearney Lake Road (Area 3)
- Fergusons Cove (Area 4)
- Herring Cove (Area 4)
- Beechville/Lakeside/Timberlea (Area 4)
- all of Sackville up to and including Kinsac (Area 5)
- Eastern Passage (Area 6)
- Cole Harbour (Area 6)
- Westphal/Lake Major (Area 6)
- north section of Montague Gold Mines (Area 6)

2. Suburban Tax Rate

Weekly summer green cart collection service is provided in communities located within the suburban tax rate, which includes, with the collection area denoted in brackets:

- Lucasville including Timber Trails Trailer Park (Area 3)
- Waverley (Area 5)
- Lakeview (Area 5)
- Windsor Junction (Area 5)
- Fall River (Area 5)
- Fletchers Lake (Area 5)
- Cow Bay (Area 6)
- south section of Montague Gold Mines (Area 6)

3. Rural Tax Rate

Weekly summer green cart collection is provided in the following communities of HRM located within the rural tax rate:

- Upper Tantallon, north west of the 103 highway (Area 3)
- Stillwater Lake (Area 3)
- Upper Hammonds Plains (Area 3)
- Beaverbank (Area 5)
- the Sambro Loop - from Halibut Bay to Harriestfield (Area 4)

The remaining communities/areas of HRM within the rural tax rate do not receive weekly summer green cart collection services are:

- Goodwood, Terence Bay, Peggys Cove to Hubbards (Area 4)
- Wellington, Grand Lake to Carrolls Corner (Area 5)
- Lawrencetown, the Prestons to Gaetz Brook (Area 7)
- Musquodoboit Harbour, Elderbank to Loon Lake, Ecum Secum (Area 8)

B) Review of Service Area for Weekly Green Cart Collection Service:

The expansion of weekly summer green cart service to every community located within the rural tax rate would cost an additional \$46,5000. Funding for this service is not contained in the proposed 06/07 operating budget.

The removal of weekly summer green cart service from those communities currently receiving the service within the rural tax rate would potentially save HRM \$5,000 in 06/07.

As the eight (8) residential collection areas do not align with the urban, suburban and rural tax rate boundary, several communities located within the rural rate are included in the same collection area and collection vehicle week day route of communities in the urban/ suburban rate receiving weekly summer green cart collection service. As a result, the potential to reduce the number of vehicle collection days (the average cost of a collection vehicle is approximately \$900 a day) by the elimination of weekly summer green cart collection service

from those communities within the rural tax rate currently receiving the service is very limited, i.e. approximately \$5,000.

The removal of weekly summer green cart service from those communities currently receiving the service within the suburban tax rate would potentially save HRM \$30,000 in 06/07.

Combined potential savings by removing the service from communities located in the rural and suburban tax rate would be \$35,000. The alignment of the service for those communities within the urban tax rate would achieve equity of service and would be consistent with the original request for the service, i.e. in the urban core of the HRM having the highest density. For cost effectiveness, the optimum opportunity to realign the service with the urban tax rate would be at the commencement of the next five-year collection contract period starting on July 1, 2008.

C) Participation Rate Weekly Summer Green Cart Service:

As a component of the 10% Challenge, staff have been monitoring communities/subdivisions/streets where the participation rate for recycling and composting has been reported as low, or where it has been noted that the total kg per household for refuse is higher than average.

In the summer of 2005, in addition to recording the number of bags of recyclables, set out rate for green carts and the number of bags of refuse at each house, the information gathered included the participation rate each week for properties receiving weekly summer green cart collection service. The survey was completed on three successive weeks that the additional weekly summer green cart service was provided. The results of the curbside monitoring are as follows:

Streets /Community	Tax rate	Participation Rate
Eastern Passage	Urban	18 of 57 homes= 31%
Cork /Liverpool Streets	Urban	29 of 57 homes= 51%
Sambro/Williamswood/ Harriestfield	Rural	2 of 57 homes = 3%
Lower Sackville	Urban	30 of 57 homes= 52%

As the April 6, 2004 staff report noted on page three, during the eight week pilot program conducted in urban HRM during the summer of 2003, 21% of residents were away for one (or 25%) of the four extra collection weeks, while 14% of residents were away for two (or 50%) of the four extra collection weeks.

BUDGET IMPLICATIONS

Not applicable

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

Not applicable

ATTACHMENTS

April 6, 2004 staff report.

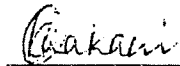
A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by :



Jim Bauld, Manager, Solid Waste Resources 490-6606

Financial Review by:



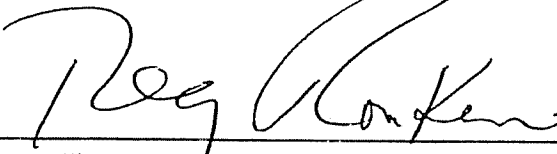
Ferdinand Makani, Financial Consultant 490-6902



Halifax Regional Council
March 7, 2000

TO: Mayor Fitzgerald and Members of Halifax Regional Council

SUBMITTED BY:


Councillor Reg Rankin, Chairman, SWRAC

DATE: March 2, 2000

SUBJECT: Illegal Dumping Action Plan

ORIGIN

Solid Waste/Resource Advisory Committee Meeting - February 24, 2000

RECOMMENDATION

The SWRAC recommends that HRM Council approve:

1. The five Action Plans included in the attached Task Group Review and Findings Report be implemented.
2. Staff work with stakeholders outside HRM to allocate costs of clean up, education and enforcement and present recommendations for the 2000/2001 operating budget.

BACKGROUND

SWRAC Meeting - February 24, 2000

DISCUSSION

SWRAC Meeting - February 24, 2000

BUDGET IMPLICATIONS

The Illegal Dumping Action Plan includes \$75,000 for a part-time Coordinator and cleanup of sites. By-Law Enforcement identified the need for three By-Law Enforcement Officers requiring an additional \$156,000/year. The SWRAC adopted this recommendation.

ATTACHMENTS

Staff report, dated November 9, 1999, presented to SWRAC Meeting on November 18, 1999 and February 24, 2000.

Additional copies of this report, and information on its status, can be obtained by contacting Barbara Moar, Assistant Municipal Clerk, at 490-6517, or Fax 490-4208.

Solid Waste/Resource Advisory Committee

~~November 18, 1999~~

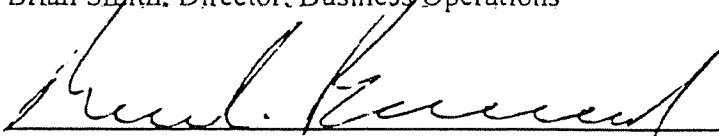
Feb. 24. 2000

TO: Reg Rankin, Chairman, and Members of the Solid Waste/Resource
Advisory Committee

SUBMITTED BY:



Brian Smith, Director, Business Operations



Mark Bernard, P.Eng., Manager, Waste Resources

DATE: November 9, 1999

SUBJECT: Illegal Dumping Action Plan

ORIGIN

Halifax Regional Council meeting May 4, 1999

Solid Waste/Resource Advisory Committee meeting May 12, 1999

RECOMMENDATION

It is recommended that :

1. The five Action Plans included in the attached Task Group Review and Findings Report be implemented.
2. Staff work with stakeholders outside HRM to allocate costs of clean up, education and enforcement and present recommendations for the 2000/2001 operating budget.

BACKGROUND

Illegal dumping is the disposal of waste in inappropriate areas¹. This includes materials dumped onto private property or public lands. Although facilities are available for proper disposal of waste materials, sometimes these facilities are not used and the materials end up along woods roads, public streets, on private property and in infrequently travelled areas. There is no single reason behind illegal dumping. The causes vary and include a desire to avoid the cost of disposal, criminal activities, evading business taxes and long standing habits of individuals. The costs of illegal dumping are high and include the direct costs of cleaning up dump sites and enforcing regulations, the loss in recreational and aesthetic value of land and the reduced access to private lands for recreational purposes. These costs are borne by the public, private landowners and the taxpayer.

There is a perception that incidents of illegal dumping have increased with the introduction of the new waste management system in the Region. Illegal dumping activity has occurred for years in the Region. In fact, the issue of illegal dumping was raised at Regional Council two years before the implementation of the present waste management system. There still remains, however, a question of whether a link exists between the new waste disposal system and an increase in illegal dumping activity. Regional Council requested staff to review the problem of illegal dumping and to develop an action plan to reduce and eliminate illegal dumping activity.

DISCUSSION

As a result of Council's request, a group of HRM staff from various divisions as well as stakeholders from other government agencies and the private sector developed a Needs Analysis containing a series of recommendations which would form the basis of such an Action Plan. The Needs Analysis was divided into five sections, each representing a task group of stakeholders which examined specific aspects of the illegal dumping issues. The five Task Groups are:

- A. Enforcement/Regulations;
- B. Education;
- C. Clean up;
- D. Waste Disposal Practices
- E. Costs.

Attached to this report are five sections to reflect the Task Groups' review. Each section examines work already underway and then suggests activity required to control the problem. There is, necessarily, some over lap among the sections because solutions to illegal dumping are interrelated.

¹ Although littering can be considered inappropriate disposal, illegal dumping in this report only refers to dumping of materials on private or public property and does not include roadside littering or individuals putting waste into private disposal bins.

The solutions to illegal dumping require a concerted effort by the waste generator, the landowner, enforcement agencies and the general public. Ultimately illegal dumping can be reduced if not eliminated if all stakeholders are involved and work toward changing behavior.

BUDGET IMPLICATIONS

Existing direct costs to the public and private landowners now exceeds \$200,000 per year, including approximately \$100,000 spent by HRM through clean up, lost tipping fee revenues and enforcement. Indirect costs of reduced property, aesthetic and recreational value could exceed that amount. The long term goal of the Illegal Dumping Action Plan is to reduce these direct and indirect costs. Subject to approval of SWRAC and Council to proceed with the Action Plan, staff will seek financial support from other stakeholders and will provide a supplementary report identifying costs to be included in the 2000/2001 operating budget. There are no implications for the 1999/2000 budget. However, immediate clean up of some of the existing dump sites and coordinating efforts among stakeholders would cost approximately \$75,000.

Y2K IMPLICATIONS

Not applicable

ALTERNATIVES

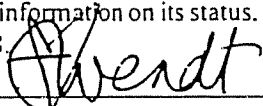
Illegal dumping can be reduced through a combination of education, enforcement and clean up. No alternatives are recommended.

ATTACHMENTS

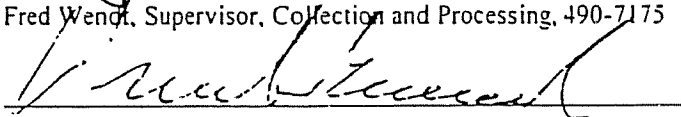
Task Group Review and Findings

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:


Fred Wendt, Supervisor, Collection and Processing, 490-7175

Report Approved by:


Mark Bernard, P.Eng., Manager of Waste Resources, 490-6716

Task Group Review and Findings

A. LEGISLATION/ENFORCEMENT:

Goal: to adopt an effective regulatory program to ensure appropriate waste management

Existing situation:

Depositing waste other than in an approved disposal site is not permitted under the Provincial Solid Waste Regulations. Enforcement of these regulations is the responsibility of DOE, although an HRM police officer is also able to lay a charge under the regulations. Littering is also controlled by these Regulations. As well, the Motor Vehicle Act prohibits dumping or throwing rubbish from a vehicle. Provincial regulations also allow for injunctions to prevent further dumping activity and can require compensation from the perpetrator for the costs of clean up or environmental damage.

Action Required:

Because several jurisdictions are involved it is important that efforts are coordinated among stakeholders. Enforcement and prosecution require significant resources. These resources can be obtained either through re-allocation of existing resources or new allocations. An HRM bylaw is not required because adequate legislation already exists.

Action Plan 1:

- **Coordinate efforts of various enforcement agencies to develop a concerted enforcement program, including allocating responsibilities, training, surveillance and prosecution.**
- **Request the public to report illegal dumping through a illegal dumping hotline or other communications methods.**
- **Investigate the benefits of a reward system similar to "Crime Stoppers".**
- **Follow up on reports of illegal dumping through investigation and prosecution.**

B. EDUCATION:

Goal: To influence and inform the public and businesses to prevent illegal dumping

Existing Situation

Several agencies are working on education programs to reduce littering and illegal dumping. These include Clean Nova Scotia, the RRFB and Nova Scotia Department of the Environment. Information about illegal dumping also forms a part of HRM's waste management education and communications strategy.

Clean Nova Scotia operates Beach Sweep, Adopt a Highway program and Nova Scotia Pick-me-up. These programs involve thousands of volunteers picking up litter along beaches, highways and other public and recreational areas across Nova Scotia. The Resource Recovery Fund ran an anti-litter and anti-dumping ad campaign on television and radio this summer. Nova Forestry Alliance (NFA), a group interested in sustainable forestry practices throughout Nova Scotia has launched an advertising campaign against illegal dumping. NFA believes access to recreational land is threatened by illegal dumping.

Members of the Youth Conservation Corps, working for NSDOE, have prepared an inventory of illegal dump sites across the region. This inventory will provide the basis of an illegal dumping prevention strategy being developed by NSDOE. The strategy is expected to be completed by next year. A discussion document is expected to be circulated for public comment.

HRM Waste Resources staff has drafted a Guide For Community Clean-ups to help groups organize cleaning illegal dump sites. Articles on illegal dumping prepared by Waste Resources staff appeared in a newspaper supplement on HRM's new waste management system and will appear in the WasteLess Exchange newsletter, which is distributed to every household in the Region. Information for householders and commercial waste generators on how the waste management system works is part of Waste Resources Division on-going education and communication program.

Action Required:

Coordination among stakeholders like CNS, RRFB, DOE and HRM already exists for various waste management communications and education programs. Such a group of stakeholders can logically coordinate education and communication initiative to address illegal dumping.

Action Plan 2

- **Publicize general information about the waste management system and alternatives to inappropriate disposal.** This is an ongoing requirement and must reflect any changes to the waste management system. Information about the harmful effects, including social costs, created by illegal dumping
- **Target information and messages directly at those responsible for or potentially responsible for illegal dumping.** These messages centre on the risk of prosecution and the cost of fines.
- **Involve community organizations and other stakeholders.** Illegal dumping is sometimes a local community issue. For example, dump sites may have long been used out of habit or a particular area may be seen as an easy place in which to dump materials. A community can be involved through neighbourhood watch programs, site monitoring and presentations by community leaders.
- **Publicize clean up and enforcement activities.** Illegal dumping costs all taxpayers of the region. By publicizing the cost of clean up the public is made aware of these costs. With awareness comes understanding about the need to reduce illegal dumping. The public, then, may be less tolerant of those who dump illegally. Similarly, enforcement and convictions need to be publicized to deter those who might consider illegal dumping as a cheaper alternative to proper disposal. Fines which reflect the true environmental and social costs must be communicated to the public.
- **Coordinate education campaigns among various stakeholders.** Several organizations are now involved in education and communications about illegal dumping and conversely, how to properly manage wastes. Among these are Clean Nova Scotia, RRFB, Nova Scotia Department of the Environment and HRM.
- **Conduct periodical inventories to monitor the education program and provide information on progress being made.** This feedback helps reinforce the overall message to the public. Work conducted by the Youth Conservation Corps during the summer of 1999 has produced base line information which provides two things: a point from which to gauge success of an illegal dumping prevention strategy; and an indication of the order of magnitude of the problem to help determine clean up efforts required, including priority of particular sites. Additional inventories are required to determine whether the illegal dumping Action Plan is successful. The inventories can provide important information which leads to a better understanding of illegal dumping and how to reduce it.

Some communications and education techniques include:

- Signs posted at illegal dump sites indicating fines in effect for illegal dumping and that the area may be under surveillance. Signage can also solicit information from the public about who might be responsible for a particular dumping incident.

Work with community leaders to influence public opinions and attitudes toward illegal dumping.

General advertising campaigns directed to the public to create awareness of the problems of illegal dumping.

Making available and broadcasting a hotline which individuals can call to report illegal dumping. Rewards for information similar to "Crime Stoppers" may prove useful.

Widely available information about waste disposal alternatives in the Region.

Regular updates to Metro Info staff on changes to the waste management system.

Displaying and/or broadcasting the names of those responsible for illegal dumping.

C. Waste Disposal Practices

Goal: TO ASSESS THE CURRENT WASTE DISPOSAL PRACTICES AND PROGRAMS TO IDENTIFY STRATEGIES TO PREVENT ILLEGAL DUMPING

Existing Situation

- It is difficult to link waste management initiatives, especially increases in tipping fees, to increases in illegal dumping activity without baseline info available for comparison. Until this summer there has been no baseline data collected with which to compare present incidents of illegal dumping. Research in other jurisdictions indicate that the *perception* that illegal dumping increases is more prevalent than actual *incidences* of illegal dumping.
- Construction and demolition (C+D) materials can be found at nearly all sites. There are two operating C+D recycling facilities in the Region although there are no local private option for *permanent disposal* of C+D material.
- Most illegal dump sites identified by the Youth Corps are within 30km of Otter Lake or less than a thirty minute drive from most of the population of HRM.

- Derelict vehicles are concentrated in an area to the east of Dartmouth, although there are at least 4 salvage yards in that area.
- Some of the material found at illegal dump sites is brush and yard waste. Individual householders, while able to put limited quantities of brush at the curb for collection have limited access to composting opportunities. Brush is accepted at C+D sites and a drop off bin is now available at Otter Lake for brush and yard waste.
- The Otter Lake Facility is actually open more hours for commercial traffic than Halifax and Dartmouth Transfer stations were. The transfer station scales were closed to commercial traffic during evening hours and on Sundays. (See Appendix A for details on hours of operation of waste management facilities)
- Construction and demolition (C+D) materials such as aggregates, used lumber and other discarded building materials need to be handled separately from other refuse for two main reasons. First, disposal of C+D material does not require as stringent control as regular refuse and therefore disposal of C+D material in a fully engineered landfill is not cost effective. Second, landfilling C+D material reduces the opportunity for recovery of materials for economic benefits.
- Some C+D materials does arrive from small volume generators such as householders or included as a small proportion of larger loads. Large volume generators are given warning notices about other opportunities available (Halifax Construction and Debris Recycling and RDM Recycling, for example).
- Householders can put out up to 10 garbage bags per refuse collection day (bi-weekly). In addition residents may place one bulky item (stove, sofa etc.) and two bundles of material (carpeting, painted wood, e.g.) per refuse collection day. On organics collection week, householders can set out up to 20 bags of leaves and yard waste and two bundles of brush. Residential material above these amounts will not be collected at the curbside. The householder can either wait for the following two-week cycle or bring the material directly to Otter Lake. In the urban and sub-urban areas, no curbside service is provided for non-residential properties.
- Disposal fees are greater than fees at diversion facilities. For example the current tipping fee at Otter Lake is \$106 per tonne while the fee for source separated organics is \$68.00 per tonne. The Materials Recovery Facility (MRF) charges no fees for recyclables. Tipping fees for separated C+D materials are lower than those at Otter Lake. There is no disposal fee for either residential or commercial wastes at the transfer stations located in Middle Musquodoboit and Sheet Harbour. There is no fee for disposal of eligible waste put out for curbside collection.

- There are three locations for the disposal of mixed refuse available in HRM: The Sheet Harbour and Middle Musquodoboit transfer stations and the Otter Lake facility. Additional disposal sites are not recommended because of questionable cost-effectiveness. (See Appendix B for details on additional disposal depots in HRM.)

Action Plan 3

- **Continue on-going monitoring of customer calls, requests for information and complaints to provide feedback on whether changes are needed to the waste management system.**
- **Review and amend appropriate Municipal Planning Strategies and Land Use Bylaws to enable siting of C+D recycling facilities.**
- **Communicate alternatives to disposal of waste materials, for example, the availability of scrap metal dealers, the opportunities to dispose of tires, the availability of the MRF to accept recyclables without a tipping fee and the opportunity for householders to place bulky items like appliances on the curb for collection.**

D. CLEANUP:

Goal: TO DEVELOP AND IMPLEMENT PROGRAM TO ELIMINATE EXISTING ILLEGAL DUMP SITES

Existing Situation

Many stakeholders are already involved in cleaning up sites including Department of Transportation and Public Works, HRM's Works and Natural Services, Streets and Roads other public agencies, private landowners and volunteer community groups.

In July and August 1999 members of the Nova Scotia Youth Conservation Corps prepared an inventory of some of the illegal dump sites in the Halifax Regional Municipality. Sites were identified by municipal councillors, HRM staff, landowners, community group members and other interested individuals. Each site was surveyed to determine the type of material deposited and other attributes of the site. Additional information was gathered to try to identify the person responsible for dumping.

In addition to the sites identified by NSYCC, there are also sites which have been cleaned up during the year by various agencies and private landowners. For example, HRM's Streets and

Roads Division responds to many incidents of illegal dumping throughout the Region and the Department of Transportation and Public Works cleaned up two major illegal dump sites.

NSYCC inventory findings include:

- About 55 sites were inventoried across the Region (although other sites do exist)
- Most sites within 30 km of Otter Lake
- Most sites contain many different materials
- Total amount dumped at these 55 sites is estimated to be about 30 dump truck loads.
- There are only 4 large sites containing up to 3 loads on material each
- 15 medium sized sites (1 load each)
- 36 small sites (less than 1 dump truck load)
- "No Dumping" signs are not a deterrent to illegal dumping. Gating and restricting access to sites also does not deter all dumping.
- Most sites contained some amount of C+D material.
- Brush and yard waste was found at many sites.
- Some sites are considered to be "Community Dumps"

Clean up of these 55 sites is estimated to be in the \$50,000 range, each site costing about \$500 to \$1,000 to clean up depending upon the access available, the type of materials at the site and the distance to disposal facilities, nature of material and disposal costs. A more accurate estimate will not be available until clean up work begins. Other illegal dump sites not part of this inventory also exist throughout the Region. Further inventory work and assessment would be required to quantify those sites.

Action Required

Strategically, it is important to clean up sites for a number of reasons. Often, illegal dump sites attract further dumping. Perpetrators can rationalize their action with the logic that they are not the first to dump at the particular site. Clean up of those sites located on private land is important to counteract the landowner's urge to bar public access for recreation uses. The costs of illegal dumping include the value of recreational use of land lost to the public and the negative images left with residents and tourists.

Clean up of these sites requires additional resources above those already applied toward clean up efforts. Other sites that were not identified in the inventory would be cleaned up according to priority and resources available.

Action Plan 4:

- **Develop a priority for cleaning up existing illegal dump sites across the Region.**
- **Identify land owners where dump sites occur on private lands. Work with the landowner to share, if possible, the cost of clean up**
- **Publicize clean up efforts as an education tool.**

- **Conduct an inventory of illegal dump sites periodically**
- **Establish a protocol to clean up new dump sites as they occur.** The protocol will include who will be responsible for clean up, investigation of the site for possible prosecution and working cooperatively with the landowner to reduce the risk of further occurrences.

Priorities

While all sites should eventually be cleaned up, priorities need to be established. These priorities suggest working first on the those sites that present the most pressing problems. Other criteria by which to determine which sites should be clean up first include practical considerations of accessibility and public profile. Priority criteria is also useful to assist in cleaning up new dump sites.

Toxic or hazardous materials located at the site.

Materials that pose a risk to the environment or the public need to be given top priority. Risks include personal injury, environmental damage, health problems and fire hazard.

Recently used or continually used sites

One main reason to clean up sites is the tendency that existing sites attract more illegal dumping. Those sites that are actively being used especially fall into that category. Long abandoned sites, although unsightly in their own right, do not contribute to further dumping activity.

Accessible sites

For practical purposes, sites need to be accessible to the appropriate equipment needed for clean up.

Sites with material that can be traced to a waste generator.

There is a potential for cost recovery if an individual can be linked to material found at the site. This serve two purposes. First it recovers costs of clean up and therefore frees funds for clean up of other sites. Second, publicizing the cost of clean up and the recovery of those costs from individual dumpers can act as a deterrent to prospective dumpers.

Identifiable and cooperative landowner.

Land owners can be identified through property information databases. The land owner, however, is not necessarily responsible for the dumping. In some cases the landowner does not live near the property and therefore cannot monitor activity leading to dumping. Being able to work directly with a landowner is important to aid the clean up of a site. The landowner can work with the Region to reduce future dumping by, for example, blocking road access, posting signs or assisting in surveillance.

Highly visible sites and sites with considerable quantities of material.

Cleaning of highly visible sites can be used as a public education tool to reduce illegal dumping. When the public sees the direct effects of illegal dumping they are more likely to condemn the practice. Highly publicized clean up activity further directs attention to the public costs of illegal dumping and that dumping is not socially acceptable.

E. COST IMPLICATIONS: TO IDENTIFY THE DIRECT AND INDIRECT FINANCIAL AND ENVIRONMENTAL COSTS OF ILLEGAL DUMPING

Existing situation

- NS Department of Transportation and Public Works spent \$20,000 cleaning up two roads in HRM this past summer.
- HRM, through Works and Natural Services and Streets and Roads, spends approximately \$50,000 per year on cleaning up reported dump sites.
- Private landowners bear the cost of clean up on their own property. For example, three large landowners spend up to \$30,000 per year to clean up illegal dump sites.
- Approximately \$75,000 is being spent collectively by stakeholders on communications and education programs in the Region, plus in-kind contributions.
- Waste Resources absorbs the tipping fees on most community clean ups. This is estimated to be at least \$25,000.
- Intangible costs and losses caused by illegal dumping are difficult to quantify. These costs nonetheless exist and include the loss in recreation use of private lands when access is restricted due to illegal dumping; loss of tourism potential and reduced property values because of unsightly properties. A federal study estimated the value of all nature related activity in Canada to be about \$11 billion. Extrapolated for the Region this figure is about \$100 million.¹ A portion of this economic benefit is at risk from illegal dumping.
- The 55 sites identified by the Youth Conservation Corps would cost about \$50,000 to clean up.

Summary of existing costs:

Clean up (both public and private)	>\$100,000/yr
Education	>\$75,000
Lost tipping fee revenue	>\$25,000

Intangibles at risk: Recreational use of land; property values; tourism potential; environmental damage from hazardous materials

¹ DuWors, E. et al.: *The Importance of Nature to Canadians: Survey Highlights*, Environment Canada, Ottawa, 1999.

Action Plan 5:

- Convene regular stakeholders meetings to coordinate efforts for cost effectiveness.
- Request each HRM department to identify additional resources required to clean up and reduce illegal dumping. These amounts would be presented in the 2000/2001 operating budget.
- Allocate at least \$50,000 for clean up of existing illegal dump sites
- Provide a part time coordinator to steer the implementation of the Illegal Dumping Action Plans (approximate cost \$25,000 per year)

Appendix A Existing operating hours of disposal and recovery facilities:

Miller Composting Plant Monday to Friday 8 am - 5 pm

New Era Farms Composting Plant Monday to Friday 8 am to 6 pm

Otter Lake disposal Facility Monday to Friday 7 am to 7 pm
Sat 10 am to 4 pm
Sun 1 pm to 5 pm (drop off area only)

Materials Recovery Facility Monday to Friday 7:30 am to 5 pm
(Saturday and evening openings currently under review)

Household Hazardous Waste Depot: 30 Saturdays per year. Open 9 am to 4 pm

Private recycling operators like Enviro Depots and scrap metal dealers are open during similar hours. For example:

Halifax Construction and Recycling, Goodwood
Mon to Fri 7 am to 6 pm (to 5 pm during winter months)
Sat 8 am to 3 pm

RDM Recycling, Harrietsfield
Mon to Sat 7 am to 5 pm (or by special arrangement)

Youth Live Enviro-Depot
Mon- Fri 9 am - 4:30 pm
Sat. 9 am - 5 pm

Appendix B Analysis of additional disposal depots in HRM

All waste in HRM not picked up at the curbside can be delivered at the generators expense to one of three sites:- Middle Musquodoboit or Sheet Harbour transfer stations or the Otter Lake Disposal Facility. Additional transfer stations could be set up in areas of the region which are far from the Otter Lake site. The purpose of these transfer station would be to provide disposal opportunities to the public. Possible locations include the Eastern Shore and in the western part of the Region.

Projected costs of a transfer station (costs based on Porter Dillon facilities evaluation report of the Halifax and Dartmouth Transfer station, March 1998):

- \$260K - \$520K capital costs plus \$460K - \$620K annual operating costs

A small depot for local community use (based on former drop off depot at Lake Charlotte- capacity of 4 tonnes per week, 200 tonnes per year)

- Site preparation - \$5,000
- Operating costs approximately \$18,000/year
- Operating costs = \pm \$85/tonne

The advantages and disadvantages of establishing additional transfer stations through out the Region are as follows:

Advantages

- Householders and businesses would be able to dispose of waste materials without having to travel to the Otter Lake Site. The return trip to Otter Lake from St. Margaret Bay is about 20 km, from Porters Lake 35 km and Musquodoboit Harbour 55 km.
- The increase in access to disposal could eliminate the argument that illegal dumping occurs because of the inconvenience of travelling to approved disposal sites.

Disadvantages

- About one third of the illegal dump sties found in the NSYCC inventory in the western end of the Region are less than 15 km from Otter Lake. A transfer station located at St. Margaret Bay would not be closer to these sites.
- The cost of operating one depot similar to the Dartmouth Transfer Station would be over \$600,000. It is unclear whether tipping fee revenues would be able to cover the operating costs. Tipping fees would deter those illegal dumpers who are trying to avoid disposal costs.
- If no tipping fee is charged at such a transfer station, revenue would be lost to HRM; a disproportionate amount of material might be disposed of there; haulers who use the Otter Lake site would be at a competitive disadvantage against those haulers who use the

Illegal Dumping Action Plan Status

A. LEGISLATION/ENFORCEMENT: TO ADOPT AN EFFECTIVE REGULATORY PROGRAM TO ENSURE APPROPRIATE WASTE MANAGEMENT

	Recommendations of Task Group	Action	Status
1	Develop illegal dumping bylaw including determination of appropriate fine levels.	Not required	N/A
2	Review and amend municipal planning policies as necessary to permit:		
2 a	more HIRM waste depots	Not recommended (see Appendix B)	N/A
2 b	provision of convenient locations of private C & D materials	Amendments to LUB required	in progress (Phase 1) ¹
2 c	establish operation and licensing requirements in conjunction with approved C & D facilities.	Licensing procedure req'd	in progress (Phase 1)
3	Review legislation to determine more effective enforcement mechanism.	Provincial Reg's adequate	complete
4	Develop enforcement policy (civil litigation vs prosecution) to assist private property owners	Coordination among enforcement agencies	Phase 1
5	Training of Federal, Provincial and Municipal enforcement officers.	" "	Phase 1
6	Hold discussions with DOE to determine areas of responsibility including the new Provincial strategy proposal.	Allocate responsibility	Phase 1
7	Examine feasibility of "target hardening" (i.e. 2 month focus on enforcement and education).	Coordinate efforts	Phase 1 & 2

¹Phase 1 Within the next 6 months, Phase 2 2000-2001 budget year

B. EDUCATION: TO INFLUENCE AND INFORM THE PUBLIC AND BUSINESSES TO PREVENT ILLEGAL DUMPING

	Recommendations of Task Group	Action	Status
8	Develop long term research and education program relative to illegal dumping including:	Coordination among existing programs	Phase 1
9	Information on disposal options, and illegal dumping strategy options.	Continue with existing WR Communications and Education programs	ongoing
10	Determine and communicate the extent of the problem.	Enhance C+E programs Coordinate with stakeholders	Phase 1 & 2
11	Identify and communicate the impact on the environment	" "	Phase 1 & 2
12	Create a personal and corporate responsibility of waste management	" "	Phase 1 & 2
13	Encourage community stewardship	" "	Phase 1 & 2

C. WASTE DISPOSAL PRACTICES: TO ASSESS THE CURRENT WASTE DISPOSAL PRACTICES AND PROGRAMS TO IDENTIFY STRATEGIES TO PREVENT ILLEGAL DUMPING

	Recommendations of Task Group	Action	Status
14	Review and implement as necessary:		
a	The operating hours at HRM composting, recycling and HHW sites.	Review operations	Complete
b	The range of acceptable materials at all HRM facilities as an interim measure until adequate private C & D facilities are established..	Monitor customer calls Communicate alternatives	ongoing
c	Provision of curbside pickup services including type, size and frequency.	" "	ongoing
d	Promotion of C & D uses and markets for reusable recyclable materials.	Explore/encourage markets for C+D materials	Phase 1 & 2
e	Fee structure which supports maximum recovery of all materials by type.	Review fee schedule	Ongoing
f	Provision of more HRM waste depots.	Not recommended (see Appendix B)	
g	Conveniently located private C & D facilities.	Review MPS and LUB	Phase 1 (in progress)

D. CLEANUP: TO DEVELOP AND IMPLEMENT PROGRAM TO ELIMINATE ILLEGAL DUMP SITES

	Recommendations of Task Group	Action	Status
15	Survey of sites where illegal dumping occurs	Conduct inventory	Completed
16	Identify and notify landowner	Conduct inventory	Completed
17	Identify resources existing and required for cleanup.	Determine costs Allocate Resources	Phase 1 & 2
18	To work cooperatively with landowner and community groups to develop strategies to cleanup and prevent illegal dump sites.	Develop priority criteria Identify groups/owners	Phase 1
19	To pursue provision of the Municipal Government Act re: property owner's responsibility as a last resort.	Work cooperatively with landowners	Phase 1

E. COST IMPLICATIONS: TO IDENTIFY THE DIRECT AND INDIRECT FINANCIAL AND ENVIRONMENTAL COSTS OF ILLEGAL DUMPING

	Recommendations of Task Group	Action	Status
20	Prepare cost/benefit analysis of implementing illegal dumping strategy by estimating:		
a	the existing costs incurred by all stakeholders	Determine existing costs	Complete
b	the value of aesthetic, tourism and recreation opportunity costs	Research other jurisdiction	Complete
c	existing and past environmental damage	Conduct research	Unable to complete
d	environmental risks	" : "	"
e	cost of implementing strategy	Coordinate with stakeholders	Phase 1 & 2

**Halifax
Regional
Municipality**



Peter J. Kelly
Mayor

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July 24, 2006

The Honourable Mark Parent
Minister of Environment and Labour
Province of Nova Scotia
P. O. Box 697
Halifax, NS B3J 2T8

Dear Minister Parent:

Re: Waste Diversion Opportunities

At the April 11, 2006, meeting, Halifax Regional Council requested that the Province prepare legislation for a policy of non voluntary stewardship agreements with industries. Council also asked that as Chair of the Canadian Council of Ministers of Environment, you address the establishment of a national standard of a consistent uniform approach for the plastic industry, particularly for food and beverage packaging.

The implementation of a non voluntary extended producer responsibility policy will shift the cost of the management of the package to the producer, and not the Halifax Regional Municipality, once the contents have been consumed. The requirement for industry to be financially responsible for their package will motivate industry to design containers for the most cost effective outcome, compared with today's situation where industry has no responsibility, or associated costs, for the management of their packaging.

The lapse of the national packaging protocol in the 1990's, has resulted in no consistency by manufacturers for each type of plastic food containers produced, or even a common designation of lettering and symbols designating the type of plastic. A national standard for size, lettering and symbols on plastic food containers would enable Halifax Regional Municipality's solid waste education program to clearly communicate to citizens what is recyclable.



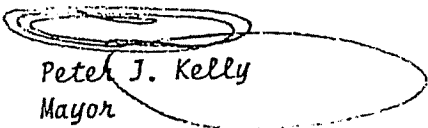
The introduction of the PLA food container which is marked recyclable and compostable (which is not accurate on both counts), is a concern as it sends the incorrect message to residents of our Region, and all Nova Scotians, that the package can be recycled and/or composted. If a PLA package is placed in the organics stream, it would contaminate the compost, resulting in the additional operating costs to separate PLA pieces and risking the marketability of good quality compost. Similarly, if PLA packaging is placed in the recycling stream, it must be removed and disposed, again resulting in additional operating costs.

As Minister, your authority includes the prohibition of a package in Nova Scotia that is incompatible with the Provincial Solid Waste-Resource Management Strategy. In the early 1990's, a former Minister of Environment prohibited the sale of a bimetal beverage container - a pop can that had different metal in the top and bottom from the sides, as it could not be recycled.

In the interest of ensuring continued success of the HRM waste diversion programs (and those of the other 55 municipalities), it is requested that the sale of PLA food containers be reviewed and that a review be conducted by your department, through the NS Resource Management Regional Chairs Committee, before a new type of food and beverage container is introduced in the province.

We look forward to working with you to improve our accomplishments in waste diversion and addressing issues of potential major implications for the continued success of the Halifax Regional Municipality's waste resource management system.

Respectfully, I remain



Peter J. Kelly
Mayor

c: Halifax Regional Council
Dan English, CAO
Richie Cotton, Regional Chairs

MUNICIPAL CLERK'S OFFICE

Distributed to: *Wayne G. Gault*
John O'Brien
 Mayor, Councillors, CAO, *Brad*
 Solicitor *Jim Bauld*



Environment and Labour
 Office of the Minister

September 21/06

DATE

Box 697, Halifax, Nova Scotia, Canada B3J 2T8

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His Worship Mayor Peter Kelly
 Halifax Regional Municipality
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Dear Mayor Kelly:

Thank you for your letter of July 24, 2006, regarding the management and stewardship of packaging materials.

I appreciate the challenges municipalities are faced with in managing packaging wastes and communicating appropriate source separation of these materials to the public, particularly for new packaging forms such as compostable plastics.

The Province has raised concerns over packaging at the national level, and will continue to do so through participation in the Canadian Council of Ministers of the Environment's (CCME's) Extended Producer Responsibility (EPR) Task Group. The Department of Environment and Labour would support the development of national standards for packaging, as we believe the issue can be most effectively addressed at the national level with our federal colleagues' support.

With respect to provincial initiatives, staff are currently working on an Electronic Product Stewardship Program which we hope to bring forward for Government's consideration later this fall. Packaging may be an item targeted for future stewardship efforts. However, a regulated stewardship approach to packaging could pose a significant challenge for the Province due to the diversity of packaging forms and applications and the complexity of product supply chains throughout Canada.


The Department will continue to monitor packaging issues and bring municipal concerns into discussions with our provincial and federal counterparts, as well as industry officials.



His Worship Mayor Peter Kelly
Page 2

Thank you again for bringing this issue to my attention. I would also like to extend my thanks to HRM Solid Waste Staff for their ongoing commitment to sustainable waste management.

Sincerely,

A handwritten signature in black ink that reads "Mark Parent". The signature is written in a cursive, flowing style.

Mark Parent
Minister