



PO Box 1749  
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Item No. 11.2.1

Halifax Regional Council  
February 3, 2009

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:** Julie Haincastle  
for Councillor Bill Karsten, Chairman,  
Solid Waste Resource Advisory Committee

**DATE:** January 28, 2009

**SUBJECT:** ICI Cardboard

### ORIGIN

Solid Waste Resource Advisory Committee (SWRAC) meeting of January 22, 2009.

### RECOMMENDATION

It is recommended that Regional Council approve for staff to:

1. Prepare an amendment to By-Law S-600 requiring the separation of cardboard at ICI properties, to become effective September 1, 2009, to be supported by an HRM education/communications campaign;
2. Subject to local private paper recycling companies not accepting mixed ICI paper after March 31, 2009, that staff secure a contract with MIRROR NS for the Otter Lake facility to, on a thirty-day automatic renewal contingency basis, take receipt, sort and bale ICI paper; and
3. Should it be required for the Otter Lake facility to receive, sort and bale mixed ICI fibre after May 15, 2009, that staff issue an Expression of Interest for the same service.
4. Within the 2009/10 Solid Waste operating budget include a \$70,000 increase in expenditures with a corresponding \$70,000 recovery resulting in a net zero change to the overall budget.

## **BACKGROUND**

On January 6, 2009, the December 31, 2008 staff report entitled "Otter Lake - Business Case ICI Cardboard" was presented to Regional Council. The staff report (Attachment #1) contained the following recommendations:

It is recommended that Regional Council approve the following:

1. The Otter Lake facility receive and process residential and ICI waste, and that cardboard from ICI properties continue to be managed by local private sector recycling companies; and
2. Staff continue to assist the members of the ICI sector (i.e. property owners/manager, and collectors) by providing regular updates of paper commodity market conditions, and report back to Regional Council, through the SWRAC on any plans, should the market for mixed paper not return.

At the January 6, 2009 Regional Council meeting, the above staff recommendation was moved but not voted on. At the same meeting of Regional Council, the following motion was approved:

"MOVED By Councillor Rankin, seconded Councillor Sloane that Halifax Regional Council refer this matter back to staff for a contingency case and information on what would trigger the implementation of the contingency case, and that the Solid Waste Resource Advisory Committee and members of the industry also provide comment on the staff report dated December 31, 2008. MOTION PUT AND PASSED."

## **DISCUSSION**

Pursuant to the motion approved at the January 6, 2009 Regional Council meeting, the following action has occurred:

### **1) Staff Report of December 31, 2008 - Comments from the ICI Industry**

On January 15, 2009, a second meeting was held with ICI collectors and paper recycling companies. Attachment #2 is the minutes from the first meeting with the ICI sector on December 23, 2008 and the second meeting on January 15, 2009.

Agenda Item #4 of the January 15, 2009 meeting was "Comments on Staff Report of December 31, 2008". Advance notice via email of the January 15<sup>th</sup> meeting was provided to the members of the ICI sector on January 7, 2009. Notification of the meeting referenced the December 31, 2008 staff report, and the web site coordinates where the staff report could be obtained.

At the meeting of January 15<sup>th</sup>, no comments were received respecting agenda item #4, and no comments have been received as of January 23, 2009.

## 2) Contingency Case and Triggering of Implementation of Same

At the January 22, 2009 meeting of SWRAC, during an In Camera session, staff presented the Attachment #3 "ICI Cardboard". The Solicitor advised that the determination of the presentation being of a confidential nature is the purview of the Chair. The Chair ruled, based upon the content of the presentation being of a contractual matter, that the presentation is to remain In Camera. The Solicitor ruled that information of a contract matter is to be removed from the presentation before being released to the public. On December 23, 2008, MIRROR NS advised that details relating to the labour and equipment required to receive, sort and bale up to 100 tonnes a week day, on a contingency basis, and the cost of same is for HRM information only.

The sixteen slide presentation provides the chronology and methodology of the citizen-based HRM Integrated Solid Waste/Resource management system. The presentation highlights two key principles of the strategy, being:

- Success based on Separation at Source; and
- Stewardship: Every citizen responsible/participate

### *The presentation also highlights the following:*

- the capital investment made by the HRM for the various solid waste facilities, directly or indirectly, through our partners, i.e. New Era Technologies and Miller Composting;
- the private sector management of some 43,000 tonnes/year of ICI sector paper for the past 20 years, without any involvement by the HRM;
- slides #6 and #7 detail the change in market conditions for ICI fibre, resulting from the collapse of world commodity markets, including paper;
- slide #8 depicts the progress by ICI collectors who's clients (i.e. ICI property owners/managers) are already separating cardboard from other paper;
- slide #9 depicts the potential short term and longer term contingency plan, should local markets not accept cardboard mixed with ICI cardboard after March 31, 2009;
- slides #10 through #13 details what is included (and excluded) in the proposal from MIRROR NS for the receipt, sorting, baling and transportation of ICI paper to a local warehouse at \$80/tonne, including the relatively low risk compared to the receipt, processing and disposal of between 500 to 750 tonnes of mixed waste each week day; and
- slides #15 and #16 contain the Recommendation and Contingency Plan.

3) **Slide #15 - By-Law Amendment**

In addition to recommendation #1, which is staff's original recommendation contained in the report of December 31, 2009, the SWRAC questioned the viability of amending By-Law S-600 by April 1, 2009. The Committee agreed that September 1, 2009 was more realistic, as it would ensure time for the By-Law amendment approval process and time for the ICI sector (collectors and property owners/managers) to respond accordingly.

The third recommendation details that if the local markets don't accept mixed ICI fibre after March 31, 2009, that this be the trigger for the Contingency Plan.

4) **Slide # 16 - Contingency Plan**

The Contingency Plan has two components, immediate and interim:

The immediate (on or shortly after April 1, 2009) is for the Otter Lake facility to be utilized for the sorting and baling of ICI mixed fibre. MIRROR NS has indicated that the service can be provided on short notice (i.e. in several days) on a contingency not on a long term basis.

The interim plan is the issuance of an Expression of Interest for the receipt, sorting, baling and marketing of ICI fibre by May 15, 2009, should there be a requirement for the HRM to provide this service for a continued period.

The recommendations contained in staff's presentation were approved at the January 22, 2009 SWRAC meeting, with September 1, 2009 replacing April 1, 2009 for an amendment to By-Law S-600.

**BUDGET IMPLICATIONS**

Subject to approval by Regional Council, the receipt, sorting and baling of ICI fibre by MIRROR NS at the Otter Lake facility, with transportation to a local warehouse or paper recycling company, at \$80/tonne, will incur an expense for the HRM. Payment to MIRROR NS for this service will be subsequently recovered from commercial collectors via a disposal fee charged at the Otter Lake facility.

Once approved by Council, Solid Waste's 2009/10 operating budget account R329 will be adjusted to incorporate the \$70,000 expenditure (equivalent to 100 tonnes/week day of ICI paper for a period of two months) to MIRROR NS as well as the corresponding equivalent recovery resulting in no net change to the overall budget.

**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 recommended.

**ATTACHMENTS**

1. December 31, 2008 staff report
2. Agenda and Minutes from December 23, 2008 and January 15, 2009 meeting with members of the ICI sector
3. Staff's presentation at the January 22, 2009 SWRAC meeting, with information redacted from slide #10.

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

Report Approved by:



Mike Labrecque, Director, TPW, 490-4855

Financial Approval by:

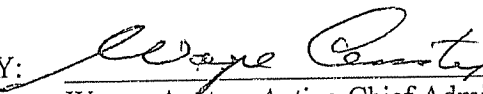
Catherine Sanderson, Senior Manager, Financial Services, 490-1562



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**Halifax Regional Council**  
**January 6, 2009**

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:   
Wayne Ansley, Acting Chief Administrative Officer

DATE: December 31, 2008

SUBJECT: Otter Lake - Business Case ICI Cardboard

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**ORIGIN**

Severe downturn in commodities markets.  
Solid Waste Resource Advisory Committee meeting December 10, 2008.  
Regional Council meeting December 16, 2008.

**RECOMMENDATION**

It is recommended that Regional Council approve the following:

1. The Otter Lake facility receive and process residential and ICI waste, and that cardboard from ICI properties continue to be managed by local private sector recycling companies; and
2. Staff continue to assist the members of the ICI sector (ie, property owners/managers, and collectors) by providing regular updates of paper commodity market conditions, and report back to Regional Council, through the Solid Waste Resource Advisory Committee on any plans, should the market for mixed paper not return.

## BACKGROUND

The severe down turn in the commodities markets has had a profound impact upon the value of paper locally and around the world. Paper mills and production facilities in Canada, USA, and overseas that until recently paid for paper, have either closed or restricted operations. Local private paper recycling companies are now charging for ICI paper (i.e., cardboard, newspaper, and bond/office paper) as compared to just three months ago when they purchased paper from private collectors serving ICI properties. The fee currently charged by private paper recycling companies ranges from \$0/tonne for baled cardboard, \$50/tonne for loose cardboard, and \$150/tonne to \$165/ tonne for mixed ICI paper.

As approved by Regional Council, since 1998/99, recyclables (food and beverage containers, plastic pallet wrap, office paper), organics and waste from ICI properties are accepted at HRM owned or sponsored facilities. Since 1991/92 small amounts of office paper, newspaper and cardboard from ICI properties, typically less than 4,000 tonnes a year, have been received at the HRM MRF. One of the key components of the solid waste/resource management system, approved by Regional Council in 1998, which brought equity for all businesses and institutions, is that collection at ICI properties is to be arranged by each property owner, i.e. is not a service provided by HRM.

For the past 20 years, the majority of cardboard from ICI properties, some 43,000 tonnes/year, has been received at local private paper recyclers. The commencement this past November of local private paper recyclers charging for the ICI paper has given rise to the question should HRM consider taking receipt of mixed paper (non separated cardboard, newspaper and office paper) and processing the same in preparation for markets, at the HRM Otter Lake Front End Processor.

Until the collapse of world commodities markets, local private paper recyclers accepted cardboard mixed with other ICI paper. Following the December 10, 2008, SWRAC meeting staff's intervention resulted in local private paper recyclers agreeing to once again accept cardboard mixed with other ICI paper until March 31, 2009, when the local private paper recyclers advise that there will be no market for 'hardpack paper' (ICI cardboard, office and newspapers mixed together).

At the December 10, 2008 meeting of the SWRAC staff was requested, among other requests, to provide a report for the December 16, 2008, Regional Council session outlining "that HRM accept OCC ( ie old corrugated cardboard) material at the Otter Lake facility and that a tipping fee be charged. Staff is to outline the cost associated with this option."

On December 12, 2008, staff met with MIRROR Nova Scotia staff, for the purpose of discussing, on a contingency basis, the capability and availability of the Front End Processor at Otter Lake of taking receipt of some 100 tonnes a day (26,000 tonnes/year) of mixed ICI paper ( cardboard, office, newspapers etc). MIRROR has advised that they are only interested in providing this service on a contingency basis for the HRM, not as a long term operational requirement. Staff understands that approximately 100 tonnes/day of mixed ICI paper is produced locally.

However, since that time the markets for ICI mixed paper have reopened, at least until April 1, 2009. MIRROR has advised they do not wish to be competing with the private sector recyclers.

At the December 16, 2008 meeting of Regional Council, the following motion was approved.

MOVED BY Councillor Karsten, seconded by Councillor McCluskey that Halifax Regional Council request a staff report, on or before the January 6, 2009 Regional Council session, in regard to a business case and options for the receipt of ICI cardboard at the HRM facility. Staff is to include industry stakeholders in an advisory capacity during the preparation of the report. Staff are also requested to report back to the Solid Waste Resource Advisory Committee with a business case and options within six weeks. MOTION PUT AND APPROVED

## DISCUSSION

### **1.0 Industry Stakeholders Advisory Capacity Role**

On December 18, 2008 members of the local ICI collection and paper recycling industry were invited to attend the first biweekly meeting at 10:30 am on December 23, 2008. Attachment # 1 is the agenda (minutes are not available at the time of the writing of this report) from the December 23, 2008 meeting.

As was requested by members of the ICI industry at the meeting on Dec 23<sup>rd</sup>, staff will provide updates to ICI collectors and property owners/manager of the status of paper commodity markets on the 15<sup>th</sup> of each month over the next three months, possibly longer as determined by the volatility of the market conditions.

On Dec 24<sup>th</sup> staff received notification via the NS Environment from the Waste & Resources Action Program and the Local Government Association, London, England, that markets are 'fragile but stable' and that clean and sorted material was 'moving in good volumes'. This report from England confirms the recent commodities market report provided by Miller Waste (operator of HRM's MRF) on Dec 18<sup>th</sup>.

Local ICI paper recyclers have advised that the downturn in the price of paper is a short term situation, and that the price is expected to rebound within six months, when they will once again purchase paper from ICI collectors. Attachment # 2 is the Price Sheet produced by CSR (Corporations Support Recycling), Ontario. The upper left quadrant shows the price paid for fibre (paper) since 1994. A severe downturn in the price of paper in 1997 rebounded within six months.

Over the next three to four months, staff will continue to assist the ICI sector (ie collectors and property owners/managers) by providing regular updates of paper commodity market conditions.

### **1.1 ICI Collectors**

Nine local ICI collection companies were invited to the Dec 23<sup>rd</sup> meeting. Based upon the total tonnes of ICI waste received at the Otter Lake facility, the nine ICI collection companies service



91 percent of ICI properties across the HRM. The other 9 percent of ICI waste received at Otter Lake is typically local companies and property management firms that self haul waste and /or pay cash at Otter Lake for the disposal of ICI waste.

#### **1.1.1 Major ICI Waste Collectors**

There are four major ICI waste collectors in the HRM who combined service 85 percent of all ICI properties. The four companies are; Miller Waste, Waste Management, Enviro Waste and Green Waste.

#### **1.1.2 Other (Smaller) ICI collectors**

There are twelve other smaller companies that provide collection at ICI properties throughout the HRM. Combined the twelve companies service 9 percent of ICI properties in the HRM. The remaining 6 percent of waste received at Otter Lake are self haul companies and or cash payments.

#### **1.2 Private Paper Recyclers**

Both Great Northern Recycling Ltd and Scotia Recycling advised on Dec 12<sup>th</sup> that there is no future market for hardpack paper, and that after April 1,2009, they will not be able to receive or sell mixed ICI paper. With the contraction of world commodities markets hardpack is not expected to be marketable as of April 1, 2009.

### **2.0 Business Case- Otter Lake - Receipt and Processing of ICI Fibre**

There are two questions fundamental to the completion of a Business Case for a change in the purpose and function of the Otter Lake Front End Processor ( FEP).

- i) Is there a requirement,(i.e., need) for the HRM to provide the service - short term (next 3 months) and long term, i.e., after April 1, 2009 when paper mills and processing facilities in Canada and world wide, will only accept ICI cardboard separated from other ICI paper?
- ii) Is there a viable alternative available in the HRM to deliver this service, i.e., will HRM be competing with existing private sector companies, and can the local ICI sector ( i.e property owners and collectors) meet the new market requirement of separating cardboard from other paper by April 1, 2009?

#### **2.1 Requirement /Need for the FEP to Process ICI Cardboard and Other Paper**

Of the four main companies that provide collection of cardboard and other papers (and organics and refuse) at ICI properties, Miller and Waste Management who represent 50 percent of all ICI properties serviced in the HRM, have advised that they currently, or by March 31,2009 are preparing for the separate collection of cardboard from other papers for their ICI customers.

The other two large ICI collectors Green Waste and Enviro Waste have three months to arrange to provide the separate collection of cardboard from other paper for their ICI clients; or alternately the FEP would, on a contingency basis take receipt and process the mixed ICI paper.

Possibly the largest client for ICI collectors is the Halifax Regional School Board which is responsible for 135 schools. Staff has been in contact with the HRSB regarding ICI cardboard as it relates to the collection of recyclables i.e. paper and beverage and food containers (and organics and waste) at HRSB properties. Separate containers for waste, organics, and recyclables, including paper separate from glass, plastic and metal food and beverage containers, have been in place at all HRSB properties for several years. Separating cardboard from other paper at HRM schools will require an assessment of the amount and frequency of cardboard at each school. Peak periods for cardboard are likely at the start and end of the school year when the majority of supplies are received and/or the school is prepared for the summer recess.

The acceptance of ICI cardboard with other paper by the two local private paper recyclers until March 31, 2009 provides the HRSB three months to make arrangements. Once HRSB properties are set up for the separate collection of cardboard, the majority of the ICI properties across the HRM will achieve the April 1, 2009 market requirement of keeping cardboard separate from other paper.

As envisioned by the Citizens Stakeholder Committee in 1995, and as approved by Regional Council in 1996, Source Separation is one of the basic tenants of the HRM ISW/RMS to maximize the recovery and minimize the disposal of material.

At this time, staff does not believe there is a requirement for the HRM to take receipt and process ICI cardboard mixed with other paper at the Otter Lake facility.

## **2.2 Impact on Existing ICI Private Paper Recyclers**

Great Northern Recycling has advised that should the Otter Lake facility, even on a contingency basis, receive ICI cardboard and other paper, that their ten year old company, will not survive. They have advised that as a result of a substantial reduction in ICI paper received during the week of December 15<sup>th</sup> that the majority of their staff has been released.

Scotia Recycling has advised that the receipt of ICI paper at the Otter Lake facility in the amount of 100 tonnes day ( 26,000 tonnes a year) would be a major concern as it would require the importation, at significant cost, of paper from New England for their fibre manufacturing facility in Hantsport. 26,000 tonnes a years is approximately 50 percent of all ICI paper generated in metro HRM annually. Scotia Recycling has relied upon local ICI paper for more than 20 years, and until recently paid the local ICI collector for same.

Staff believe there is sufficient private sector capacity for the management of ICI paper at this time.

## **2.3 Cost of Processing ICI Cardboard and other Paper at the Otter Lake FEP**

MIRROR Nova Scotia, who operates the Otter Lake facility, has provided direct operating costing detail for the receipt and processing of ICI cardboard and other paper at the FEP.

On December 23, 2008, MIRROR Nova Scotia provided confirmation via email that the FEP can separately process 100 tonnes of ICI mixed paper each week day, at a cost of \$80/tonne. The \$80/tonne which includes 20 percent margin for MIRROR Nova Scotia, which is consistent with the 1997 Agreement for the Operations of the Otter Lake site, does not include the transportation, storage, or marketing (i.e., sale) of the material to mills in North America and overseas.

In addition to the price provided by MIRROR, staff has developed other directly related costs for the maintenance and repair of the fixed and mobile equipment in the FEP that would be utilized to process ICI paper, plus pro-rate depreciation and replacement costs of the same equipment. 100 tonnes a day of ICI paper will place an additional demand upon the life of mobile equipment by approximately 16 percent, and fixed equipment (i.e., the baler) by over 3,000 percent, and the requirement for replacement, from the current average of 65 tonnes/month to approximately 2,150 tonnes/month. Staff has included these costs to ensure that the full and complete costs of this new service for the HRM is recovered from the ICI property owner, through their ICI collector, and that there is no net cost for the HRM taxpayer.

### **3.0 Risk Management for the HRM**

#### **3.1 Operations of the FEP**

MIRROR has advised that there is some risk for the receipt and processing of ICI fibre at the FEP; however, it is manageable. The risks relate to keeping the ICI paper separate and clean from the approximately 500 to 750 tonnes of mixed waste received in the FEP daily. The other risk for the HRM is to ensure that the evening maintenance of the fixed and mobile equipment in the FEP can be completed while the ICI paper is processed. MIRROR has advised that despite these cautions that ICI paper can be successfully received and processed at the FEP.

#### **3.2 Interim Storage**

As there is no storage capacity at Otter Lake, (or at the MRF) a warehouse would have to be secured for the interim storage of the ICI paper. Typical lease costs for a warehouse in metro HRM is \$8/ sq. ft. Each bale of paper is 1.5 m x 1.5 x 1.2 m (5 ft. x 5ft. x 4ft.) and weighs approximately 800 kgs (1,500 lbs). 100 tonnes of ICI paper /day will yield approximately 100 bales /day (2,200 bales/ month) requiring 2,500 sq. ft. month storage. Assuming 50 percent of the material is marketed monthly, a 10,000 sq. ft. building is required at a cost of \$80,000/year. Including other direct costs for security, staff, and rental of equipment to unload, stack and reload bales of paper, the cost is estimated to be approximately \$30/tonne.

#### **3.3 Transportation to Markets**

Cost of transportation of the ICI fibre to markets is well known throughout the industry. Depending upon the locale of the market, costs for transportation are expected to range from \$0/tonne through the Port of Halifax, to \$30/tonne via trailer to Quebec and Ontario. Although there is no cost through the Port of Halifax, shipments have traditionally relied upon the back haul of empty containers to factories in Asia. With the downturn in the world economy there has

been very few back haul opportunities to Asia in the past two months, which is expected to continue for 3 to 4 months, perhaps as long as 6 months.

### 3.4 Marketing of ICI Fibre

HRM staff does not have the expertise to market (i.e., broker) the sale of paper. Miller Waste, the operator of the MRF, has advised that they are not prepared to take the risk of marketing ICI fibre which they have not sorted and processed. Miller does not desire to be placed in the position of marketing ICI fibre from the FEP, that could potentially jeopardize their long established markets, i.e. mills in Canada and overseas, for the HRM Residential Recycling Program.

HRM would have to engage the services of a broker to secure markets for the ICI fibre, to schedule the pick up of the product from the warehouse and arrange the shipping of the material. At potentially 100 tonnes a day (2,200 tonnes /bales a month) at the minimum, four hours per day will be required, using a rate of \$100/hour, totals \$8,800 month, or \$2.50 tonne, plus benefits. As there is a high risk of the product not being marketable, resulting in additional costs for longer storage, movement of the product to another interim site, rejection by the market etc a 100 percent multiplier has been applied yielding a cost of \$5/tonne. Staff has not explored the availability of personnel to serve as a broker for the HRM, or in the warehouse or to operate the equipment.

### BUSINESS CASE SUMMARY

	<u>Price/ Tonne</u>	<u>Risk Factor</u>
Receipt, Processing and transportation of ICI mixed paper to local warehouse	\$80/tonne	0% cost known
Fixed and Mobile equipment maintenance and replacement	\$6/tonne	0% cost known
Interim Storage ( 2 to 3 months) in local warehouse ( 10,000 sq/ft bldg,)	\$30/tonne	15% cost estimated
Transportation to markets (Average of \$30/tonne to Quebec/Ontario, and \$ 0/tonne freight on board a container ship at Halifax port)	\$15/tonne	35% subject to confirmation per transaction
Marketing of ICI fibre	\$5/tonne	100%* Major Risk for HRM
<b>Total</b>	<b>\$136/tonne</b>	

Note: These costs are conservative and staff has never contracted for this type of service. Additionally, it would take at least six to eight weeks to put in place such a service when you consider all aspects. The \$136/tonne cost does not reflect the potential full extent of the risk to market the product or any margin, i.e. profit, for the HRM.

Although local private paper recyclers are currently charging between \$0/tonne for baled cardboard, \$50/tonne for loose cardboard, and up to \$165/tonne for cardboard mixed with other paper, they expect the price of paper to rebound within six months when once again they will be paying for paper they receive from ICI collectors.

Staff will continue to investigate the storage, transportation and marketing costs of ICI cardboard and other fibre should there be no alternative but to utilize the Otter Lake facility, on a contingency basis commencing April 1, 2009.

Staff's analysis has confirmed:

- that at this time the receipt and processing of ICI cardboard mixed with other paper at the Otter Lake facility is not necessary;
- that the restriction of ICI cardboard at the HRM MRF continues; and
- that the local private sector will continue to accept for the next three months mixed ICI paper.

#### **4.0 By Law S-600**

By Law S-600, Section 12 and 13 specifies how garbage, organics, recyclables ( i.e., metal, glass and plastic containers) and paper are to be managed separately. Section 12 and 13 do not require cardboard to be separated from other ICI paper.

Staff will, with the assistance of the ICI sector, monitor the requirement for an amendment to the By Law for cardboard to be separate from other ICI fibre. Changes in the market conditions whereby the private recyclers will once again pay for ICI cardboard may negate the need for an amendment to the By Law.

An amendment to the By Law would be subject to the normal Notice, First and Second Reading approval process. Staff expect that by January 30, 2009 it will be known if an amendment to the By Law will be required. Staff will prepare an amendment to By Law S 600 in case it is required by April 1, 2009.

#### **BUDGET IMPLICATIONS**

There are no budget implications at this time.

#### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN IMPLICATIONS**

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**

One alternative is not to approve the recommendations. This is not recommended as the recommendations encompass the preferred approach for the HRM, with the assistance of the ICI

sector, prior to April 1, 2009, to best manage the current ICI paper commodity situation. The next three months provides an opportunity for the HRM and the ICI sector to jointly monitor changes in the paper commodities markets.

A second alternative, which is not recommended, is for Council to direct staff to plan for the Otter Lake FEP to take receipt and process ICI mixed fibre. This is not the recommended alternative.

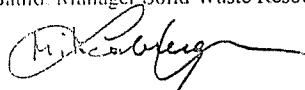
### ATTACHMENTS

- # 1 . Agenda for the December 23, 2008 meeting with the ICI sector.
- # 2 . CSR Price Sheet - 1994 to 2008.

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

Report Approved by:



Mike Labrecque, Director TPW, 490-4855

Report Approved by:

Catherine Sanderson, Sr. Manager, Financial Services, 490-1562

**Processing & Marketing Issues  
ICI Cardboard & Paper  
HRM & Stakeholders Discussion Meeting**

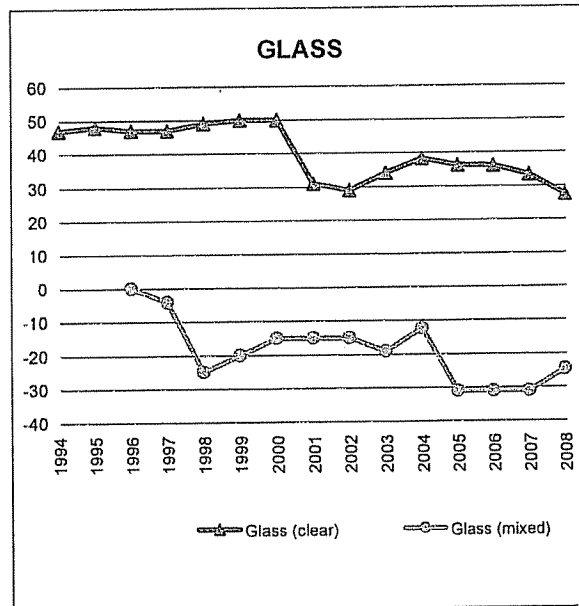
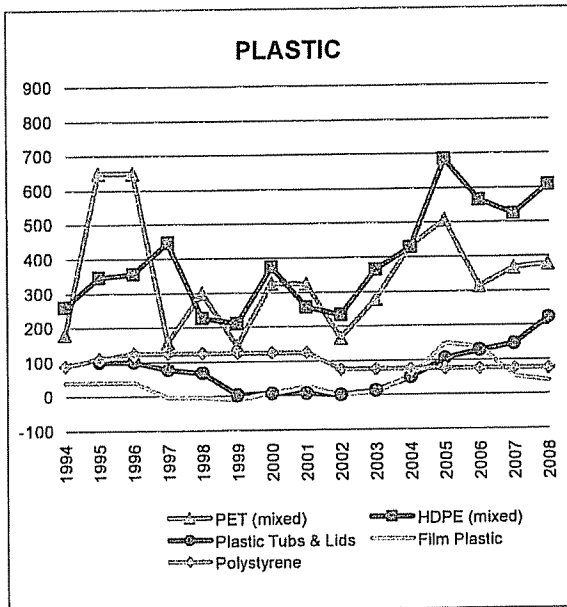
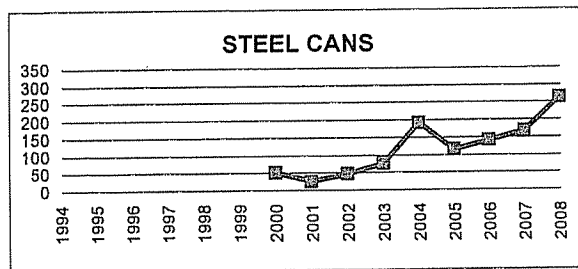
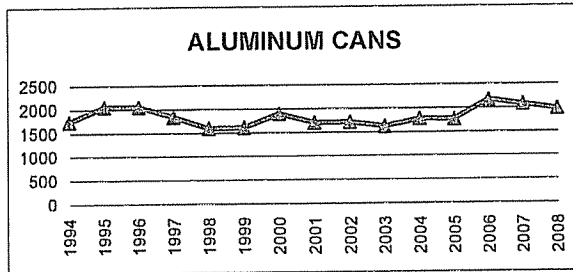
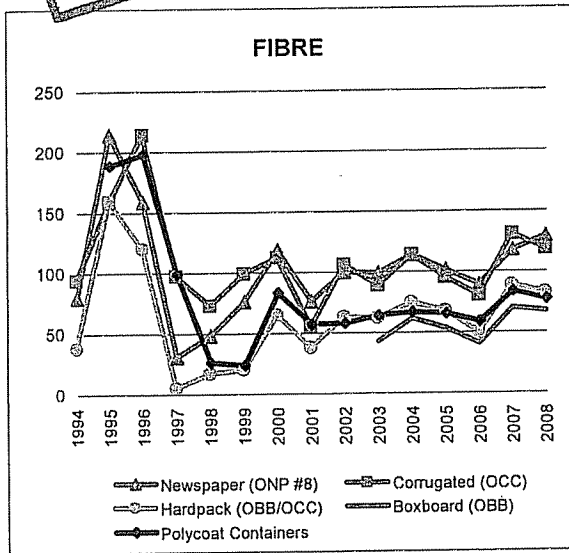
Tuesday, December 23, 2008  
10:30 a.m., Helen Creighton Room  
Alderney Gate Public Library  
60 Alderney Dr., Dartmouth, NS

1. Introduction
2. Current Situation - Facilities
3. Short Term (What are haulers currently doing with Cardboard & Paper?)
4. Long Term View (e.g. Weak Market Conditions, More Restrictive Market Conditions, Higher Quality, More Streaming of Material, etc.)
5. Other



# The Price Sheet

## Ontario Historical Yearly Averages (CDN\$/Metric Tonne)



Graphs produced from Yearly Averages Table



**Processing & Marketing Issues  
ICI Cardboard & Paper  
HRM & Stakeholders Discussion Meeting**

Tuesday, December 23, 2008  
10:30 a.m., Helen Creighton Room  
Alderney Gate Public Library  
60 Alderney Dr., Dartmouth, NS  
**Agenda (Distributed at the Meeting)**

1. Introduction
2. Current Situation - Facilities
3. Short Term (What are haulers currently doing with Cardboard & Paper?)
4. Long Term View (e.g. Weak Market Conditions, More Restrictive Market Conditions, Higher Quality, More Streaming of Material, etc.)
5. Other

**Processing & Marketing Issues  
ICI Cardboard & Paper  
HRM & Stakeholders Discussion Meeting Notes**

Tuesday, December 23, 2008  
10:30 am, Helen Creighton Room  
Alderney Gate Public Library  
60 Alderney Dr., Dartmouth, NS

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<b>Present:</b>	Paul Hann	Hatcher's Refuse Removal
	Nigel Smith	Dinka Trucking
	Brian Smith	Eastern Shore Cartage
	Stephen Beazley	Leo J. Beazley Ltd.
	Al Abraham	Green Waste
	Shawn Jordan	Waste Management
	Joe Warwick	Enviro-Waste
	Dwight Whynot	Scotia Recycling
	Terri Kaulback, Lisa Kaulback	Great Northern Recycling
	Robert Orr, Clayton Pemberton, Tina Boyd	HRM

**1. Introduction**

- Rob indicated Council requested staff meet with Industry Stakeholders regarding processing and marketing issues for Commercial Cardboard and Paper;
- Meeting began with Rob welcoming everyone and advising that we should expect to meet up until noon;
- Rob requested that each person sign in at the meeting so we will know the attendees. He advised that HRM staff will take some notes and that the meeting would be taped so there would be a record available if needed if needed for compiling meeting notes.

**2. Current Situation/Background (Rob)**

- HRM advised that Council requested staff do a business case around a contingency option of processing cardboard and paper at the Otter Lake Facilities. Staff are working on that with the facility operator and will report back to Council expected by January 6, 2009;
- The MRF is not receiving corrugated cardboard and/or corrugated cardboard mixed with paper from ICI haulers. The MRF is receiving paper and blue bags from ICI haulers. Communication related to this was sent out on December 8, 2008, although the Solid Waste Resource Advisory Committee asked us to delay it for two days so it was implemented after end of day, December 12, 2008;
- HRM understands Local Private Commercial Recyclers continue to receive OCC, paper, etc. and have a pricing structure that depends on the quality and the amount of source-separation in the loads.

### 3. Short Term

- The floor was opened to the Stakeholders to indicate what they are currently doing with respect to OCC and paper. Some comments and concerns:
  - Al: Suggested that the haulers would like to set some parameters as to what HRM wants to achieve at these meetings;
  - Stephen: Commented on the short notice of changes in materials received and felt that HRM is the leader, it needs more stability and should be helping the haulers with their customers, re-educate, etc. This was agreed upon by most at the table;
  - Terri: Stated that when her customers are directed either by flyers or some other form of communication to keep cardboard and paper separate, they do. Although when collection vehicles pick up from these businesses, the collection crews load cardboard, paper, then puts a couple of blue bags in it, it could be at the end of their stop, so instead of making another stop for blue bags, they throw that in a well. This is what we're getting. Haulers need to respect the product. She also stated that most of HRM's advertisements that she has seen on television are geared for residential, they are not for ICI. Ads are needed to change the message from combining fibre;
  - Al: HRM's ICI education said that they can mix their paper with their cardboard, they've gone into my clients and they've told them that and I said I don't agree with it, that's not how we do it. My clients have come to me saying that's what HRM is telling them to do. When it comes from HRM, it's more powerful and people understand. It's going to take a little time to get this message through that this is the state of what's going on in HRM for recycling and everybody's got to be prepared for some changes. HRM should acknowledge that the way we educate some people may no longer be the case for how you have to deal with it. Most residents work somewhere; so they know the system, they're hearing it, it's being advertised on television, but when they go to work, it's different. Promotion material may also be out of date;
  - Rob: Advised that staff indicate that cardboard and paper are to be recycled at ICI properties and up until recently, cardboard could generally be mixed with paper and delivered to private recyclers or the HRM MRF in small amounts, so the situation has recently evolved;
  - Joe: Can a program be put in place to allow haulers to educate their customers? He advised that the goal of this committee should be to educate customers, speak to market conditions, create a timeframe and all communication to be mailed to customers (generators);

### 4. Long Term View

- The floor was opened to stakeholders assuming weak fibre market, more restrictive market conditions, more streaming, less or no local processing options or at a higher price structure. Some comments and concerns:
  - Terri: Better streaming is needed. HRM shouldn't be in the ICI receiving business. She explained what further drives the price down and inquired on when it's going to come back up. She suggested it's directly linked to the economy and that will take time;

- Dwight: OCC has dropped by \$90.00 per tonne in three months. The product is moving, the problem is the price. He is concerned the prices will go down even further in the next six months and advised Scotia has always paid according to the price sheet. He noted that hard-pack (cardboard mixed with paper) markets in China may not be coming back, they hand sort it, but will they in the future? Dwight also reminded everyone that Halifax is the only larger city in Canada that actually has regulation bans in place. Rob agreed that landfill bans are unique to NS;
- Stephen: We need a set rate. If not, HRM should be the ones helping us to tell the people;
- Nigel: The message is quick changing. Why doesn't HRM subsidize private facilities?
- Brian: When can he haul into Hantsport? He has about 150 tonnes of OCC. Who oversees the price sheet? Dwight indicated it depends on the material and condition. Dwight explained it is a man named Barker from Wisconsin who he speaks with approximately once a month. Mr. Barker speaks with Facilities from each geographical area and asks what they're paying, from there, he makes his decisions;
- Al: Concerned that information on rebates (revenue for fibre) has been misinterpreted by and communicated by HRM staff that haulers are getting money on the side, gaining from rebates. Rob indicated that HRM is making the point that up until this Fall, fibre had a value and now it has less value, so the price structure reflects that;
- Joe: It is difficult for customers to understand the fluctuating market. He would like the committee to develop a structure and more consistency. Develop a program to allow haulers to educate customers. Some stakeholders suggested HRM put out an RFP to the private industry. Rob (HRM) said the market conditions and market price may not allow for bids;
- Paul: Inquired as to whether or not the bottom is out of the market, asked for an explanation on what's good and what isn't, what's hard to get rid of. Is this going to be long term? If so, let's get this on the table so we can educate our customers;
- Rob: Staff can work on a notice about the changing market conditions; work on communications for early January.

## 5. Other

- Al: Wants most inexpensive, stable structure for ICI customers, etc. Need to look at other options for mixed paper. Promotional material may be out of date. Ads, flux in markets, changes, paper & OCC streamed. Asked about the possibility of using fibre in fuel plants – a few stakeholders discussed;
- Brian: Who oversees HRM's diversion rate credit? Rob advised that there is a provincial formula related to the base year, 1989;
- Shawn: Concerned about what will be done with mixed paper long term, will it be source-separated or not. Inquired on what they will need to be doing after six months? What do the customers do? Is a commercial MRF an option? He also inquired as to what other municipalities are doing; are they sorting, are they

marketing? If market is steering source-separation of OCC & paper, then steer the ship that way;

- Dwight: Long term market for mixed fibre may not be there. Trend is to stream material. Single stream (all recyclables) MRF's are on the way out;
- Paul: Suggested we see what Toronto and the bigger cities across Canada are doing and how they're doing it. Rob advised the MRF contractor says we're moving material to market but Toronto is not;
- Stakeholders discussed that rules create product, OCC & ONP mixed together had a market, now it doesn't. Do we need to stream it now, change rules?
- Rob: Some generators and haulers have streamed material, so regulation may not be the only tool;
- HRM advised we are working on this issue. This will mean change; it may mean changes in material streams and source-separation requirements;
- HRM will draft a notice and forward to stakeholders for comments. TV as suggested is not viable in the short term (but could look at in long term).

**Processing & Marketing Issues  
ICI Cardboard & Paper  
HRM & Stakeholders Discussion Meeting**

Thursday, January 15, 2009  
1:00 p.m., Maxine Tynes Room  
Alderney Gate Public Library  
60 Alderney Dr., Dartmouth, NS  
**Agenda (Distributed at the Meeting)**

1. Introduction
2. Meeting Notes (Draft) from Stakeholders Meeting of December 23, 2008
3. Recyclable Market Conditions Update dated January 9, 2009
4. Comments on Staff Report of December 31, 2008
5. Collection of Paper from Apartment Buildings & Other ICI Properties in Plastic Bags
6. Communications to Generators/Customers
7. Updates
8. Other

**Processing & Marketing Issues  
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HRM & Stakeholders Discussion Meeting Notes**

Thursday, January 15, 2009  
1:00 p.m., Maxine Tynes Room  
Alderney Gate Public Library  
60 Alderney Dr., Dartmouth, NS

**Present:**

Al Abraham - Green Waste	Steve Skeir - Miller Waste
Paul Hann - Hatcher's Refuse Removal	Rick Pye - Miller Waste
Terri Kaulback - Great Northern Recycling	Clayton Pemberton - HRM
Joe Warwick - Enviro Waste	Robert Orr - HRM
Nigel Smith - Dinka Trucking	Darren Welner- Scotia Recycling
Stephen Beazley - Leo J. Beazley Ltd.	Dwight Whynot - Scotia Recycling
Jeff Traver - Miller Waste	Jim Bauld - HRM

**1. Meeting Notes (Draft) from Stakeholders Meeting of December 23, 2008**

- Rob distributed a meeting agenda and provided draft Meeting Notes from the last Stakeholders Meeting of December 23, 2008. He indicated to Stakeholders that if there are any comments or errors noted in the last Meeting Notes to let HRM know and we will review.

**2. Recyclable Market Conditions Update dated January 9, 2009**

- Rob indicated HRM staff had distributed a draft "Market Conditions Update" via e-mail or fax on January 7<sup>th</sup> for comment by Stakeholders. After comments were received, HRM finalized the document and distributed it to Stakeholders on January 9, 2009.

**3. Comments on Staff Report of December 31, 2008**

- Rob indicated that if there are comments on the Staff Report to Regional Council dated December 31, 2008, Stakeholders can provide comments to HRM staff. Staff had indicated the opportunity to comment and provided Stakeholders the link to the Staff Report on the HRM website via e-mail or phone conversation on January 7, 2009. Note: No comments received at this meeting and no comments received as of January 22, 2009.

**4. Collection of Paper from Apartment Buildings & Other ICI Properties in Plastic Bags**

- Rob indicated some apartment buildings and other ICI properties have been contacting HRM indicating that their ICI hauler has indicated to them that they can no longer collect paper in plastic bags. Rob indicated that that's often how residents would bring down their paper if they lived in an apartment building. If bags aren't allowed, how much paper would you get from apartments? Terri: Great Northern will take paper in clear or blue bags, etc. Some Stakeholders believed Scotia may want less plastic so maybe that's where the messaging came from.

## 5. Communications to Generators/Customers

- Rob indicated some ICI properties had contacted HRM indicating their bins were exchanged or removed from their property and their ICI hauler had not advised them of what was going on. Rob indicated the importance of communicating to customers when bins change, etc.

## 6. Updates

Al: What about a commercial communications plan?

Paul: Can we make a plan that will work? HRM should do a commercial communications plan, messages are similar for ICI recyclers.

Steve Beazley: I went to Council, they sent the report back for something (Note: Council referred this matter back to staff for a contingency case and information on what would trigger the implementation of the contingency case, and; that the Solid Waste Resource Advisory Committee and members of the industry also provide comment on the staff report dated December 31, 2008. The next meeting of the Solid Waste Resource Advisory Committee is expected to be January 22, 2009.) What about markets, is separation of OCC & paper required? HRM should be leader, spend money on education; short term contingency vs. long term communications, separation of paper & cardboard? Currently - Scotia, Great Northern, MRF, cardboard & paper separated - should there be separate bins & a communications plan?

Jeff: Maybe mixed paper has a market overseas or maybe not, currently only small value for mixed paper that Miller sold recently from the MRF. Miller generally has separate bins in their ICI properties but they don't service as many apartment buildings. Haulers with apartment buildings may have a bigger struggle, may need some consideration.

Joe: Apartments are misinterpreting Residential communications, not knowing the difference between Residential and ICI messages so may be some confusion in apartments that they are residential not ICI. Residents take to work (Residential message from TV) but now paper may need to be separate from OCC, they may ask why do we need to have two bins?

Rob: HRM's messages for the Residential sector are for the curbside collection program, not ICI haulage which is and always has been in commercial bins with signage (always different than curbside). ICI haulers need to communicate with their customers, HRM can help which is why we issued the "Market Conditions Update".

Clayton: One option would be to change the ByLaw to require separation of Carboard and Paper at ICI properties.

Al: Make clear message, education is important, get it right the first time, separate commercial and residential messages. Do we need to separate out newsprint as well? What does HRM want to do?

Jim: Difficult for HRM to predict fibre markets. HRM doesn't take any volume of ICI recyclables. Where is the future of newsprint (is it ONP separate from bond, other?, not sure)

Rob: HRM currently doesn't need newsprint separate from other mixed paper at the MRF.

Terri: Not sure where the market is going, ONP & Paper together is always less desirable.

Dwight: Regard newsprint as a contaminant and haulers will have their loads downgraded if it contains newspaper mixed with paper.

Jeff: Probably can ship out but at what cost? Paper that includes newsprint will be able to be moved, but at a lower price than high grade.



Dwight: Agree, there's a cost to sorting, there's a cost to baling, so facilities have to recoup.

Al: Haulers have costs for separate bins too, what to do? Without a by-law that prohibits commingling of paper with OCC? What do we do?

Jim: We are at the mercy of the markets, when it comes to conciseness of messaging. We have a blue bag not commingled with fibre by-law but commingling was happening as ICI recyclers were taking it.

Paul: Let's separate everything, do what the facilities want, stream it, pass along cost to customers.

Dwight: Commingled OCC with fibre market won't come back, China eventually is going to stop taking this "garbage" and high grading. China will not be taking OCC/paper together and hand sorting, breaking open bales and processing, their government won't be allowing them to take it, so what culture will take it? This is not a long term strategy.

Steve B.: Suggest special messages about bins for ICI sector, extra bins (OCC & paper in separate bins). Need to re-educate the commercial sector and change, even if we start by making a reference to the difference.

Al: Will the capacity of the MRF be addressed in the new MRF contract?

Jim: We asked for prices and received, but cannot meet the volume increases. We asked for capacity for potential growth (contingency) in Residential sector (up to 8,000 tonnes annually).

Al: Shouldn't we address capacity issues now?

Rob: The MRF is designed for Residential processing (and a small amount of ICI), it was never designed to process ICI fibre (as the private recyclers had the capacity). You would need a much larger building and more sorting equipment.

Dwight: What's the MRF mandate?

Jim: Residential.

Al: Believes blue bags will increase. MRF has always received ICI blue bags and some ICI plastic.

Rob: ICI blue bags and some ICI plastic are not a large weight in comparison to ICI fibre.

Steve B.: We need to refocus, can't put OCC with Paper.

Joe: If we make a legislated HRM change through By-Law, consistent Paper & OCC separation will achieve higher quality/pricing then we will reap benefits for quality when markets return.

Dwight agreed. Whatever we decide now should also be a benefit in the future. Good times or bad, will be consistent. General agreement by all. Commercial Recyclers (Scotia & Great Northern) brought it to a head, markets down now, need to separate.

Jeff: Speaking to consistency - HRM tip fees have been consistent but the speed at which private tip fees have had to change has been quick, this is part of the issue.

Darren: Charge systems for OCC & Paper need to respond to the new reality. People are familiar with a fuel surcharge so similar system could work for recyclables. Not sure how billing done by ICI Haulers, suggestion - perhaps whatever you did when you received money, do the same when there is a cost for fibre.

Joe: While that's an issue, the focus of this meeting should be consistent messaging. Need quality, maybe separate OCC & paper, by-law and communications for ICI sector.

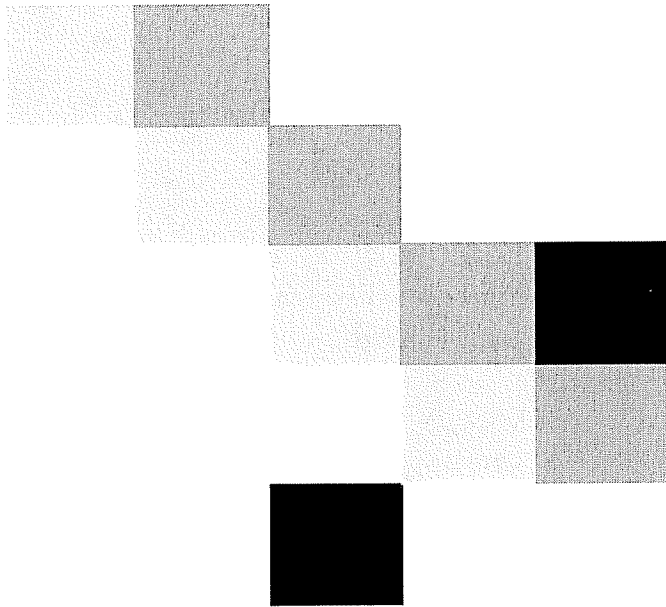
Paul: Set up models with demos of what should be done. Set up an apartment building the way you want, source-separation system, once the market returns, we (ICI haulers) get paid.

Stakeholders suggested continue to do Market Updates even if may be repetitive, should coincide with billing cycle.

# ICI Cardboard

SWRAC

January 22, 2009



# HRM SW/RM System

## Chronology & Methodology

- 1994 -Mayors Agreement ⇔ Halifax County mandate develop new SW/RMS (landfill)
- 1995 -Community Stakeholders Committee Strategy
- 1996 -HRM adopted CSC Strategy basis new SW/RMS
  - Principles:
    - ❖ **Success based on Separation at Source**
    - ❖ **Stewardship: Every citizen responsible/participate**



# **Chronology & Methodology**

- 1998 Collection Strategy & By-Law S-600
  - ❖ defined eligible properties for HRM collection services
- January 1999 All HRM owned (MRF, Otter Lake, HHW) or sponsored (New Era, Miller Composting) facilities placed

# Methodology

## ■ ICI Properties

- Refuse ⇨ Otter Lake
- Organics ⇨ 2 SSCFs
- Hzd Waste ⇨ Private Hzd waste companies

## -Recyclables

- Blue Bag ⇨ MRF
- Fibre (3,500 T/yr)⇨



(43,000 T/yr)

## Local Private Paper Recyclers

## ■ Residential Properties

(all condos, up to 6 units apt. bldg.)

- ⇨ Refuse
- ⇨ Organics
- Hzd waste ⇨ HRM depot

## Recyclables

- ⇨ Blue bag }18,000 T/yr
- ⇨ Fibre



# ICI Fibre

## Local Private Paper Recyclers

- “the market” for ICI collectors
  - set conditions
    - type and how material received
    - price/cost
    - “influenced” by ICI collectors
- (Handout # 1)

## 1999 (and before) to November ‘08

- ❖ **“No involvement by HRM”**
- ❖ cardboard banned from landfill since 1996
- ❖ not accepted at Otter Lake
- ❖ small amount at the MRF accepted

# ICI Fibre (Local Private Paper Recyclers)

Prior to November 2008

Material Type	Accepted	Revenue/ Expense
Sorted Fibre	Yes	Revenue
Mixed Fibre	Yes	Revenue
Mixed Fibre with Blue Bag Recyclables (in same container contrary to By-Law S-600 at request/pressure of ICI collectors (Handout # 2))	Yes	Revenue

# ICI Fibre (Local Markets)

Post November '08	Accepted	Revenue/ Expense
Mixed Fibre	Yes (until April 1/09)	(Expense) \$150/T to \$165/T
Sorted Fibre	Yes	(Expense) \$0/T baled to \$55/T
Mixed Fibre and Blue Bags	No	N/A

“ICI collector’s requesting HRM’s involvement”



# April 1, 2009

- Four major ICI collectors – 85% ICI Properties

		Markets				
	Miller	(1) WM	(2) Green	(3) Enviro	Local	Foreign
ICI Cardboard Separated	✓	✓	✓	✓	✓	✓
ICI Cardboard mixed		?	✓/?	✓	x	x/?



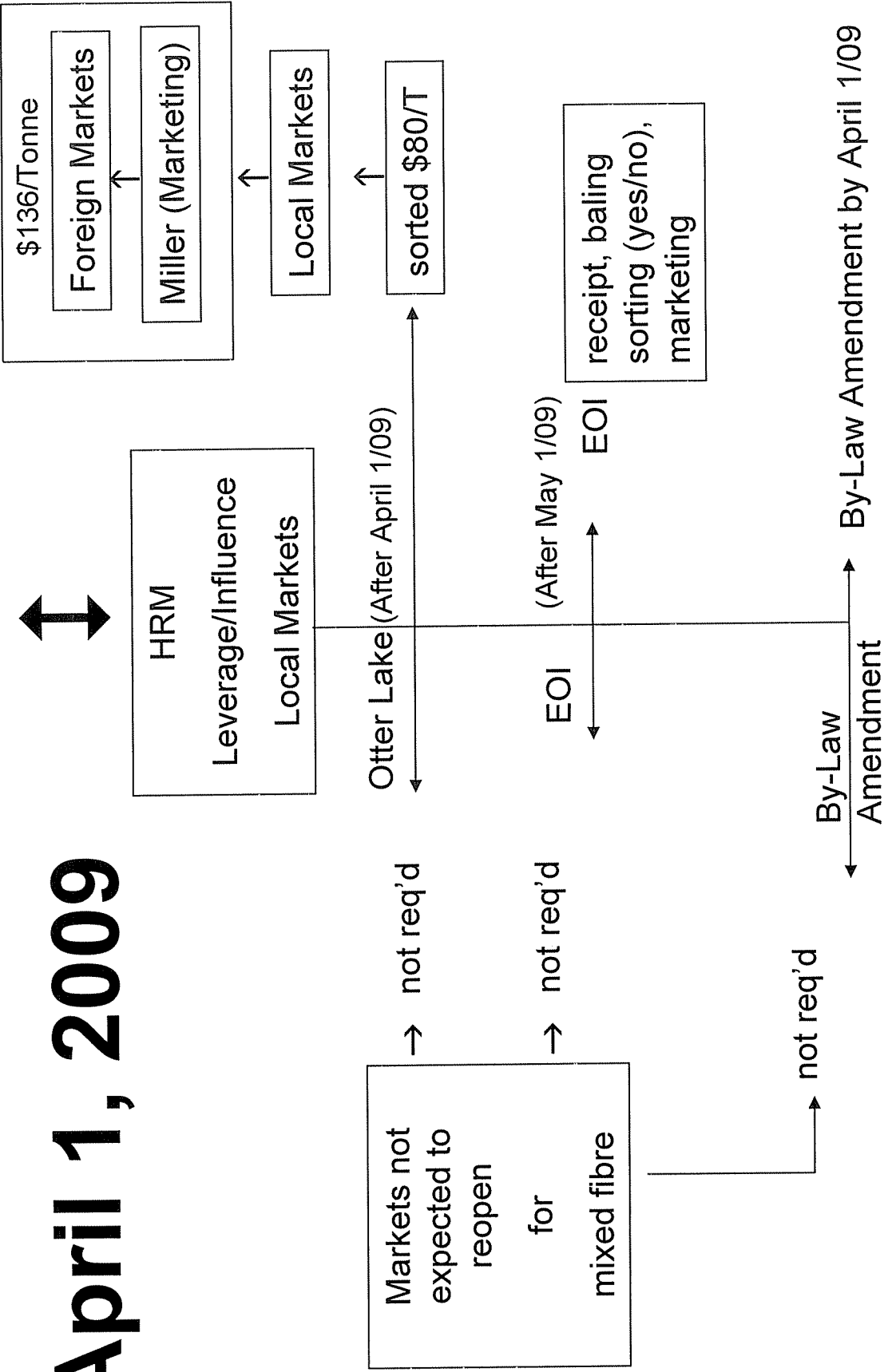
*(1) 3,000 totes for 1,000 ICI WM customers*

*(2) HRSB properties*

*(3) Limited sorting at own facility*

See next slide

# April 1, 2009



# ICI Fibre at Otter Lake (Contingency Basis)

- Receipt, sort, bale and transport ICI fibre to local warehouse/recycler
- i. Contract Proposal from MIRROR NS @ \$80/T
  - 20% Margin to MIRROR
- doesn't include the following HRM costs:
  - storage
  - transportation to markets outside HRM
  - marketing, i.e. a broker
  - equipment wear/replacement



# ICI Fibre at Otter Lake

- **1997 Agreement with MIRROR NS for operation of Otter Lake**
  - 20% margin:
    - ❖ 500 T to 750 T/day mixed waste;
    - ❖ all environmental liabilities/risk to Mirror for 25 year site operates, plus 30 years post closure;
    - ❖ HRM indemnified from environmental liability by MIRROR.

# ICI Fibre at Otter Lake

- Fibre sorting at Otter Lake
  - Low Risk:
    - ❖ only fibre (no hzd material, e.g. propane tanks, batteries, oil, etc.);
    - ❖ no odour, i.e. not organics;
    - ❖ transfer of material offsite.

# ICI Fibre at Otter Lake

- ii. **Implications for ICI Property Owners:**
  - ❖ HRM subsidizing some ICI property owners by using HRM asset paid by all taxpayers;
  - ❖ by April 1, 2009, estimated that only  $\pm$  15% ICI property owners (through their collector) will require Otter Lake for ICI fibre.
- iii. **“Unlevel Playing Field”:**
  - ❖ Miller, Waste Management & Green Waste ICI property owners/managers have paid for separate containers;
  - ❖ advantage to remaining ICI property owners, serviced by other collectors.
- iv. **HRM market intervention – required?**
  - ❖ by April 1, 2009, majority ICI properties cardboard will be sorted.




## After April 1, 2009

- Mixed ICI fibre ⇒ no local or foreign market
- Potential for remaining  $\pm 15\%$  ICI property owners, through their ICI collector, to require separation of cardboard for 30 to 45 days after April 1, 2009

# Recommendation

1. Staff's recommendation:
  - ❖ December 31, 2008 report
  - ❖ ICI cardboard to local companies (not Otter Lake)
  - ❖ Assist ICI sector and report back to Regional Council through SWRAC
2. Prepare By-Law amendment requiring separation of cardboard at ICI properties for April 1, 2009, ongoing HRM education/information campaign for ICI sector
3. If local markets don't accept mixed ICI fibre after March 31/09, enact Contingency Plan.





# **Recommendation Contingency Plan**

- 4. A) Possibly small % of ICI collectors can't separate cardboard by April 1, 2009, then:**
  - **HRM provide receipt baling, sorting ICI fibre at Otter Lake for local markets**
    - ❖ **By Mirror, 30 days automatic renewal (if necessary) until all ICI collectors have achieved separation of cardboard**
- 4. B) Issue EOI for receipt, baling, sorting and marketing of ICI fibre by May 15/09.**