Final Report

CIF #358

Multi-residential Recycling: Implementing Best Practices
City of North Bay

NORTH BAY
ONTARIO-CANADA
Just North Enough to be PERFECT

August 2012

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Acknowledgement:

This Project has been delivered with the assistance of Waste Diversion Ontario's Continuous Improvement Fund, a fund financed by Ontario municipalities and stewards of blue box waste in Ontario. Notwithstanding this support, the views expressed are the views of the author(s), and Waste Diversion Ontario and Stewardship Ontario accept no responsibility for these views.

1. Executive Summary

The City of North Bay's multi-residential best practice program took place from May 2011 through to August 2012. The project's goal was to increase recycling rates by implementing best practices with the municipal multi-residential recycling program. With the technical and financial assistance of Waste Diversion Ontario (WDO) and the Continuous Improvement Fund (CIF) we were able to increase multi-residential building participation to 83% of all buildings and 97% of all units from 2011 to 2012 (see table 1.1 for results).

Table 1.1: Comparison of baseline and post-implementation results.

	Baseline (2011)	Post-Implementation (2012)
Total Buildings	175	175
Buildings Recycling	124	145
% of Buildings Recycling	71%	83%
Total Units	5729	5729
Units Recycling	5157	5553
% of Units Recycling	90%	97%
Estimated capture kg/unit/year	42	72
Tonnes per year = units recycling x capture (approx. & estimated)	220	400

The City of North Bay provides Blue Box recycling to 18,910 households not including 124 participating multi-residential buildings. By the end of August 2012 the participation of multi-residential recycling increased an extra 21 buildings (representing 396 units). Based on visual audits completed during site visit to the buildings the estimated capture increased from 42 kg per unit per year to 72 kg per unit per year. As a result of the combined effect of more units recycling and the best practices implemented during this project it can

be estimated that the total tonnes captured increased from approximately 200 to 400 per year.

It is important to note that these are only estimates and are useful in the absence of actual weigh scale data.

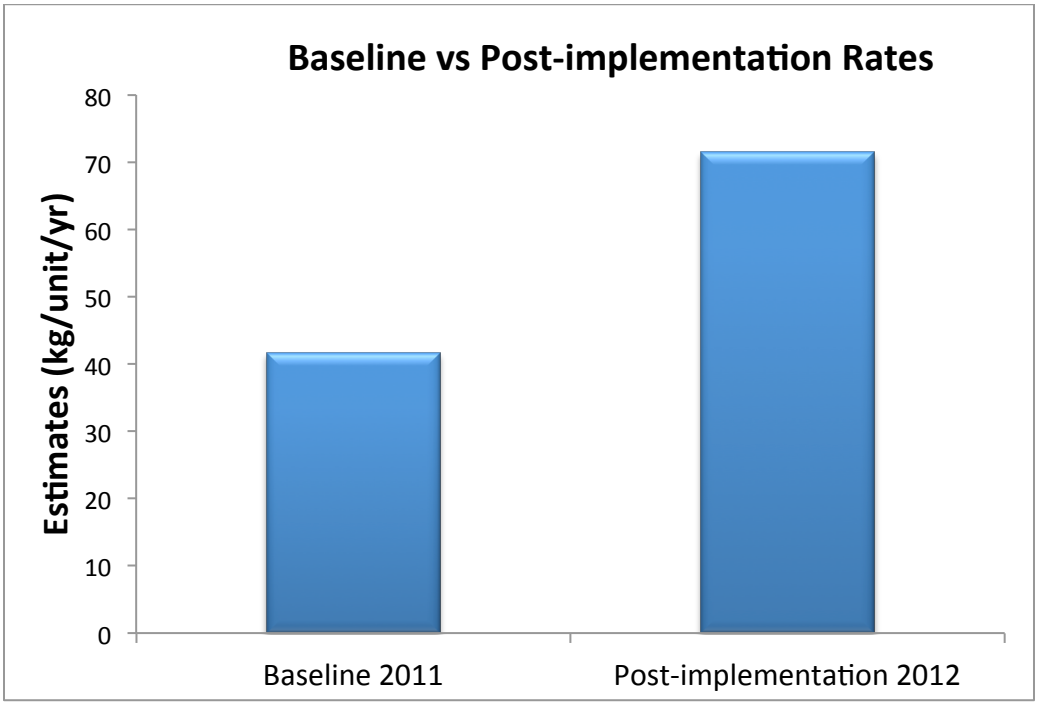

Figure 1.2: Comparison of the average baseline and post-1implementation recycling rate estimates (kg/unit/yr).

Additional work incorporated in this project was the implementation of tenant and superintendent handbooks, recycling cart classification stickers, and the initial drafts of a bi-annual newsletter. The cost to complete the project budget was $15,740. The City of North Bay was approved up to $17,316 of funding from the Continuous Improvement Fund.

For further information regarding the multi-residential recycling program contact Al Tomek, Waste Management Co-ordinator at 705-474-0400 ext. 2331 or email Al.Tomek@cityofnorthbay.ca.

2. Introduction

The City of North Bay undertook, through the Continuous Improvement Fund, Application #358, a project entitled "Multi-residential Best Practices Implementation".

The City of North Bay provides blue box collection to approximately 18,910 households not including multi-residential buildings. Multi-residential households represent 23% of the City's residential population that require cart style recycling system. The City of North Bay is providing 95-gallon capacity rollout carts to these buildings and has subsidized the cost of the bins along with aid from the CIF to 50% to all the participating buildings.

The City of North Bay uses a curb sort recycling program. This project provided us with the opportunity to visit all the buildings, update our database and provide new P&E about our curb sort program and multi-residential recycling.

Our Goal for the multi-residential best practice implementation:

Through our on-site multi-residential assessments a low participation rate for residential recycling was observed. With the opportunity provided through CIF subsidy, our goal is to raise awareness of our multi-residential recycling program and in turn increase participation rates of property managers and residents.

Figure 2.1: Increase recycling capacity 470 Wickstead Ave.

3. Background: Multi-Residential Recycling Program Overview

The City of North Bay has implemented both new materials recycling (plastics 1-7) along with the addition of the multi-residential recycling program. Two hundred and fifty 95-gallon carts were purchased at a 50% subsidized cost through CIF. The City of North Bay's multi-residential recycling program overview can be described as follows:

- Multi-residential recycling is provided to buildings with 10 or more units.
- Approximately 23% of all households are in multi-residential buildings (see table 3.1 for details).
- Recycling program details:
    - Bi-weekly collection is done on a curb sort system since 1995.
    - Residents sort their recyclables in 95-gallon carts based on 5 different classifications.
    - Prior to the program implementation, carts were available to be purchased for approximately $100 each.
    - North Bay provides front-end cardboard pick up for larger multi-residential buildings either in a four-yard or six yard bin. These are collected whenever the respected bin is full. The superintendent must call to have to bin collected.
    - North Bay provided front-end bulk bin garbage collection for multi-residential buildings following a different collection schedule. Multi-residential buildings that need more than one collection per week must pay an extra tipping fee.

Table 3.1: Number of households in municipality (July, 2011).

	Households	Percent
Curbside	18,910	77%
Multi-res	5,729	23%
Total	24,639	100%

4. The Project Scope

The project scope included four main phases:

Phase 1: Database development and baseline visits

Phase 2: Benchmarking recycling performance

Phase 3: Increase recycling container capacity

Phase 4: Provide promotional & educational materials

4.1 Phase 1: Database Development and Baseline Site Visits

Creating and maintaining a database of all multi-residential properties is an important step towards implementing best practices. Benchmarking data was initially collected for comparative performance progress both before and after the implementation of the best practice multi-residential program.

4.1.1 Sources & Collection Methodology

Two staff were responsible for making on-site assessments of 175 multi-residential buildings. Superintendent/property managers were contacted by phone prior to the visit. The contact person was educated on the purpose and process of the multi-residential program, and appointments were arranged for the site visits. A site evaluation form (see appendix i) was used for each building and the data was stored in a Microsoft Excel database for further analysis.

The following information for each building was collected and entered into the database:

- Building's address, name, and number of units
- Number of floors
- Superintendents/ owners name; contact information
- Collection day
- Number of recycling carts
- Recycling location; indoors or outdoors

- Condition of labels
- Measurement of cart fullness
- Barrier identification
- Contamination or stream mixing issues
- Site visit date

Challenges were encountered during the on-site assessments. On-site cooperation of the building staff became an issue at times. Some property managers/superintendents were uninterested in participating in any aspect of the programs implementation, while other older buildings simply are not equipped with the space for a recycling area. The issue of safety (e.g. not blocking fire exits) and vandalism were both listed as two of the main reasons why recycling zones were poorly designed or completely absent.

4.1.2 Database Maintenance and Completeness

The database created is managed on a regular basis ensuring information is accurate and that the initial investment is not lost. The Waste Management division at the City of North Bay is responsible for keeping the database up to date following the final stages of the project. 175 buildings were visited and of those buildings 124 were recorded to have some form of recycling program implemented. Multi-residential buildings with less than 9 units receive curbside service and therefore do not require the cart service. Other buildings that are just barely over the 9 unit threshold tend to also manage their recycling privately utilizing the recycling center depot service. Space for recycling carts presented as a major barrier for many buildings, and buildings that are small to begin with do not find cart service feasible.

In the past the City and tenants from non-participating building would contact the local MOE office but not effective.

4.2 Phase 2: Benchmarking Recycling Performance

Creating a benchmark performance for each building is a key step required in order to tangibly measure future recycling targets. Benchmarking also provides a method to quantify program improvements and establish performances moving towards desired goals.

Evaluating performance is a quantitative assessment that measures;

1) How much each building is recycling (kg/unit), and

2) How much is being recycled by all buildings total.

Performance indicators such as container fullness and contamination were monitored during the site visits. Performance data completed during site visits describes an estimate for feasibility purposes. Research suggests if these estimates are recorded in a consistent manner the accuracy is found to be within 10% of the actual weight.

4.2.1 Recycling rate estimates

During the on-site visits, the cart's fullness was estimated using bin capacity observations (e.g. ¼ full, ½ full, ¾ full, or 1 means completely full). Data was entered and manipulated using MS Excel in order to estimate a benchmarking weight in Kg/unit/yr for each building (see figure 4.2.1).

Figure 4.2.1a): City staff performing on-site recycling rate estimates.

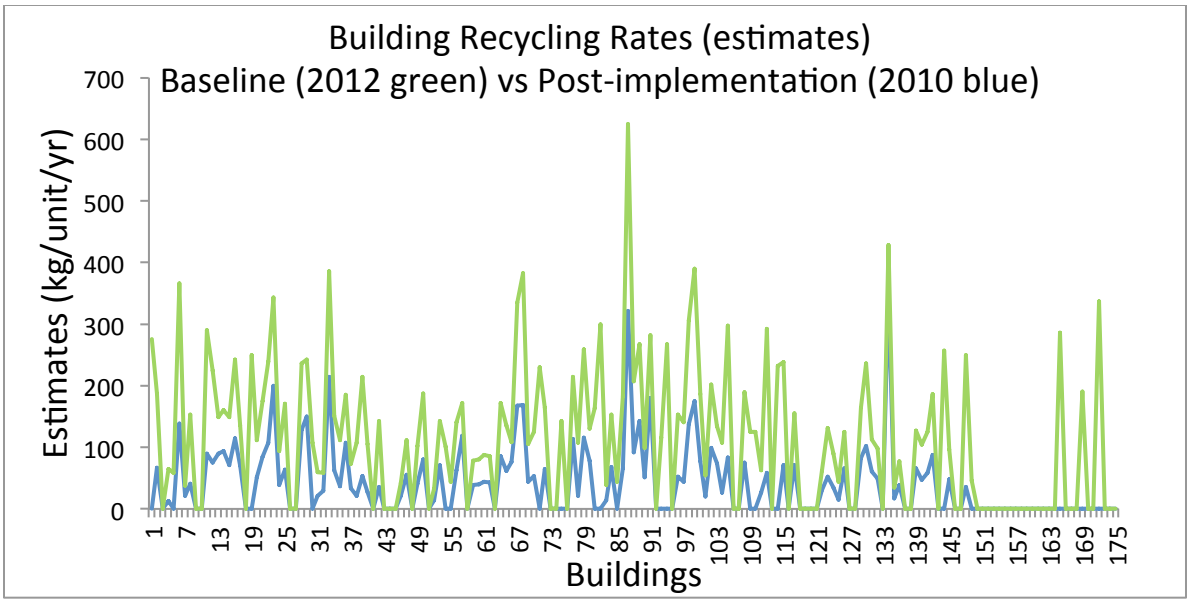

Figure 4.2.1b): A comparison of baseline (blue) and post-implementation (green) multi-residential building participation based on recycling rate estimates (kg/unit/yr).

As mentioned previously there was has been a significant increase in building participation from the baseline benchmarking data to the post-implementation data. Table 4.2.1 also summarizes the increase in recycling rates as it can be observed that there are 28 fewer buildings in the "low" estimate category and an increase of 13% or 22 buildings in the "high" estimate category during post-implementation estimates.

Table 4.2.1: Distribution of buildings by recycling rates.

Recycling rate		Baseline		Post-implementation	
Low	< 60	110	76%	82	57%
Mid	60 to 120	24	17%	38	26%
High	>120	11	7%	25	17%
Total		145	100%	145	100%

4.2.2 Barriers to Recycling

This section reviews the barriers to recycling that were noted during the initial site visits. Summary information is presented in Table 4.9.

The objective of assessing recycling barriers is to identify those buildings that require further attention and to reduce those barriers that may limit how much the building recycles. The exercise also identifies buildings that had to implement 'better' and 'best practices' in the barrier categories and were examples of 'how to' remove the barriers to recycling. It was expected that most buildings would fall between these two extremes. Buildings were ranked in categories of 'barriers' on a scale of 1 to 3. A score of '1' was a low score and was interpreted as an 'action item' for municipal staff and a high score of '3' was reserved for buildings that had taken actions to remove the barrier and had to implemented 'best practices' in the category. A rating of '2' indicated the building was doing 'OK' and required no further action at that time.

Some of the barriers that we came across during site visits were that the cardboard and plastic bins would be overflowing. Also there seemed to be a lack of educational material present for the tenants, so there would be some stream mixing and contamination. For buildings that need assistance in making their recycling area more efficient and with fewer barriers the suggestion is to enforce tenants to flatten their cardboard and to increase the amount of recycling carts in the area to undertake the amount of plastic being recycled. There were a few buildings that were highly ranked because there was usually a person assigned or dedicated to recycling and would constantly look over the recycling area to make it neat and tidy.

During site visits, staff reviewed the following barriers:

1. OCC (Old Corrugated Cardboard) – How well is the OCC managed
2. Contamination – Level of non-recyclables in carts
3. Stream Mixing – How well are materials separated into 5 streams

4. Accessibility – How accessible is the recycling area to the buildings residents
5. Loose Materials – Are there loose recyclables or garbage in the recycling area
6. Overflowing Carts – Indicates that there are not enough carts
7. Area Clean – How clean and tidy is the recycling area
8. Area Well Lit – How well lit is the recycling area
9. Labels and Signage – Condition and accuracy of the labels on recycling containers and signage in recycling area Table 4.9: There were very few buildings that stood out when it came to exceeding the barriers of recycling. The reasons for buildings not standing out is the fact that many of the recycling areas are located outside and thus factors like the weather and people walking may cause for some of these buildings to have a lower score.

Table 4.2.2: Barriers to recycling noted at site visits of 175 buildings.

Barrier to increased recycling	Require corrective action	Total	Set high standard 'model building'	Total
OCC managed well	7	4%	10	6%
Contamination	15	9%	7	4%
Access to recycling	2	1%	49	28%
Loose materials noted	8	5%	13	7%
Containers overflowing	5	3%	13	7%
Cleanliness of area	6	3%	37	21%
Area well lighted	23	13%	41	23%
Well labelled & signed	10	6%	5	3%
Total	76	43%	175	100%

4.2.3 Featured Building

One building that deserves to be highlighted from this project is the building at 155 Timmins Street. This building stood out above and beyond all the other site assessments that were conducted during this project. This building before implementation is recycling at 78%. When we visited this building it was fully equipped with proper size garbage and recycling room. The room was well lit and was outfitted with all the proper signs and labels that made recycling easy to follow. One reason for having an outstanding recycling program is the property manager. She is a lady who cares about recycling and making a difference and she is monitoring the program all the time as well as being on top of her tenants to follow the proper recycling guidelines that have been set out by the City of North Bay. Another factor that makes this building standout compared to the rest of the building is that all the tenants are on board with recycling and making a difference. The majority of the building participates in recycling. This is definitely a building that can be used to highlight how a multi-residential building can be effective at recycling in our information packages.

Figure 4.2.3: 155 Timmins has an excellent recycling room on their main floor of the building.

4.3 Phase 3: Increase Recycling Container Capacity

The initial recycling data collected was used to identify and assess shortcomings of each recycling facility at each property. Some buildings lacked any sort of recycling facility, while others required additional carts due to a shortage of carrying capacity observed by overflowing carts.

95 gallon recycling carts was the capacity container chosen for this project. The carts were available for $35 per cart through the City of North Bay with the support of the Continuous Improvement Fund.

A 7:1 ratio of units to carts was used as a guideline to establish a recycling facility carrying capacity assessment trend. In other words, for every 7 units one 95 gallon recycling cart was suggested along with additional characteristics unique to each building.

Some buildings had more recorded tenant participation in the recycling programs. In these cases the 7:1 ratio was exceeded as more bins were being filled and therefore more capacity was required.

4.3.1 How Much Recycling Capacity is being Provided?

Based on the 70% recycling provincial target, it is recommended that each residential unit be provided with a minimum of 50 litres of storage capacity. This is equivalent in size to a standard 14 gallon blue box. In terms of multi-residential containers, the following guidelines are recommended by CIF and are considered best practices:

- 360 litre carts – one cart for every 7 residential units
- Bulk bins - one cubic meter for every 15 residential units (e.g. a 4-yard bin for 60 units)

Continuous Improvement Funding is provided on the basis that municipalities implement these best practice ratios. These guidelines represent the average capacity requirements with the assumption that there will be demographic capacity ranges (see table 4.3.1).

Table 4.3.1: Capacity range based on estimated weight of recyclables both before (baseline) and post-implementation of multi-residential program.

Capacity range	Baseline		Post-implementation	
	Number of Buildings	Kg/unit	Number of Buildings	Kg/unit
Best practice range: 45 to 55 litres/unit	16	52	18	69
Low: less than 45 litres/unit	107	9	99	18
High: more than 55 litres/unit	52	94	58	125

Table 4.3.2: Number of units, carts, and litres/unit.

	Baseline	Post-implementation
Number of units with recycling	5157	5553
Number of 95-gallon carts (360 litre carts)	623	853
Total capacity – litres = number of carts x 360	224,280	307,080
Litres/unit	43	52

The City was able to increase the number of buildings participating in the multi-residential recycling program and increase the number of carts to the 52 litres per unit which is above the best practise goal of 50 litres per unit. This is for all the buildings surveyed in this report. If the survey were to include all multi-residential buildings with 6 units

or more within the City, this figure is well above the best practise recommendation. North Bay offers bi-weekly collection of recyclables and as a result the effective cart capacity that is available to residents for recycling storage is reduced by half.

4.3.2 Recycling Cart Proposal Letters

In an effort to mitigate this capacity shortage a proposal letter was developed for superintendents/property managers explaining the results of our assessment. The letter provided an explanation for recommended changes, and also outlined reasons why a recycling program should be implemented where one was absent.

The proposal letter also provided an opportunity for buildings to take advantage of all the programs benefits, and to educate superintendents/property managers on the services that are being provided.

4.4 Phase 4: Provide Promotional & Educational Materials

4.4.1 Print materials

One of our project goals was to distribute new print materials to promote recycling and educate building residents and staff on recycling 'Best Practices'. Using templates provided by the Continuous Improvement Fund as a guideline, these materials were customized and distributed.

The *CIF Best Practice Guidelines* recommends strategies for distribution of print materials which include that municipalities take responsibility for:

- Distributing print materials directly to residents
- Distributing and displaying posters at multi-residential properties
- Applying labels to recycling containers.

It has been recommended that materials should not be left with building staff for distribution, as low success rates have been observed in the past. As a result City staff was equipped with educational material while making post-implementation site visits. Recycling carts around the city were stickered, and the distribution of additional educational was conducted.

See Appendices ii, iii, iv, v for examples of some the Promotional material developed for this project.

4.4.2 Outreach Activities and Promotional Materials

The City of North Bay offers superintendent workshops to encourage and promote proper recycling practices in multi-residential buildings. These workshops are intended to equip superintendents with all the tools to effectively implement 'Best Practices' and to communicate this information to their tenants.

Superintendents are encouraged to meet with their tenants and contact the municipality if there are any problems that arise beyond the scope of the workshop.

4.4.3 Timing of Promotion & Education Campaign

Since May 2, 2011 the promotion and education campaign for more effective recycling in multi-residential buildings has been in effect. The awareness has been raised during this time by effectively using site assessments to educate and promote what products are and are not recyclable in the City of North Bay.

We began the program by contacting and informing all the building managers and superintendents of the program. The information that was gathered in the site assessments were then used to complete a database of information. From this information proposal letters were generated and mailed to all property managers/ owners detailing improvements that could be made to their programs so that they could become more efficient.

Educational pamphlets and handbooks were created for both superintendents and tenants, while lobby displays were implemented where feasibly desired. These materials were distributed by municipal staff during post-implementation site assessments and while fulfilling cart orders.

5. Project Budget and Schedule

Table 5.1 Project budget, planned and actual

Description	Unit	Quantity (est.)	Unit Cost (est.)	CIF Approved (upset limit 50% of cost)	Quantity (actual)	Unit Cost	Cost (50%)
Staff support	Building	175	$35	$6125	175	$35	$6125
Increase capacity	360 litre carts	284	$60	$8520	250	$60.92	$7615
Final report	Report	1	$4,000	$2,000	1	$2,000	$2,000
Customize Superintendent Handbook	Specify		800	$400	Completed in-house		
Total				**$17045**			**$15740**

Note: total amount of grant funding approved was $17,316 including applicable taxes.

6. Concluding comments

Through the process of data collection, site-assessments, and one on one contact with tenants, superintendents, and property managers we gained a multitude of knowledge. Multi-residential recycling best practices are inherited provided the proper infrastructure and education is established. We saw an exceptional increase in recycling participation with the increase of education and recycling capacity. Although barriers such as older buildings with poor recycling capacity and lack of resident willingness will always exist, but through our continuous efforts when can attempt to mitigate these issues to the best of our abilities.

7. Appendices

Appendix i: Section 4.1.1: Site Assessment Form

Municipality X - Multi-Residential Recycling Information Collection Form - Date

Address (full mailing) :_____

Units:_____ Floors:_____ Site Visit Date & Day of Week:_____

Condo / Rental / Senior / Student / Co-op / Public

Recycling Collection Day(s) _____

Garbage: Municipal / Private

Recycling: Municipal / Private Yes/No

Garbage Collection Day(s):_____

Contact Information

Property Manager: Same as owner ☐

Company:_____

On-Site Contact: Super / Building Manager / Owner / NA

Name:_____

Name:_____

Phone #:_____

Phone #:_____

Cell #:_____

Cell #:_____

E-Mail:_____

E-Mail:_____

Address:_____

Address:_____

Performance Evaluation – review at the end of collection cycle, when containers at fullest

Recycling Containers: # of 65 gal =_____ # of 95 gal = _____ # bins x size = _____

Stream 1: Plastic Tubs & Lids	# Cont	_____		_____
Stream 2: Plastic Bottles	# Cont	_____		_____
Stream 3: Aluminum	# Cont	_____	Record the number of full and part full containers (at right) for each stream.	_____
Stream 4: Glass Bottles & Jar	# Cont	_____		_____
Stream 5:Newspaper & Paper	# Cont	_____	Express to nearest ¼	_____

_____ container.

Stream 6: Cardboard & Other # Cont _____ Eg 4 ¾ full

Barrier Evaluation: Rate on a scale of 1 to 3: 1 = Bad and requires attention, reserve at rate of 3 for Excellent

OCC	_____	Contamination	_____	Stream mixing	_____	Cart accessibility	_____
Loose materials	_____	Overflowing carts	_____	Area clean	_____	Area well light	_____

Labels & Signage _____

Recycling & Garbage Area Description – check all that apply

Garbage: # bins x size _____ Or curbside ☐ Garbage Chutes ☐ Weekly Pickup ☐ Twice/wk ☐

Recycling Area: Outdoor ☐ Outdoor Under cover ☐ Inside room ☐ Main Fl ☐ Under ground ☐ Collect from each floor ☐

Number of Recycling Depots _____ Twinned with garbage ☐ Recycling containers shared with other buildings ☐

Addresses that share _____

Room to add extra recycling containers ☐ Where _____

Appendix ii: Section 4.4.1: Tenant Handbook (scanned copy)

Recycling Guide Wasteline 705.474.0400 ext. 2333

ITEM	ACCEPTED	NOT ACCEPTED
Plastic food & beverage containers 	We accept all plastic containers # ⚠①⚠②⚠③⚠④⚠⑤⚠⑥⚠⑦, this includes plastic egg cartons, plastic muffin containers, tubs and lids, all small mouth plastic containers. All containers must be less than 5L in size.	**Styrofoam™** **Plastic bags and film** Bubble wrap Plastic planting trays Plastic toys Lawn furniture Motor oil containers and gas cans Plastic cutlery Coat hangers Binders Lawn edging
Aluminum 	Only clean items are accepted. Place loosely in the Blue Box. Empty aerosol cans and empty dry paint cans are now recyclable. Paint can lids must be placed in the Blue Box separately from the can. Aerosol can lids are not recyclable.	DO NOT INCLUDE paper-backed foil (lids from take-out food) and foil laminates (potato chip bags).
Glass bottles and jars 	All food and beverage glass bottles and jars are accepted, including coloured glass. It is not necessary to remove labels. Place loosely in the Blue Box. Remove and recycle metal lids —discard plastic lids.	DO NOT INCLUDE medication bottles, light bulbs, window glass, mirror glass, drinking glasses or ceramics (plates, mugs, etc.).
Food and beverage containers 	All aluminum and steel cans are accepted. All Polycoat cartons (e.g. milk, juice) and Tetra Paks (e.g. drink boxes). Remove and discard straws.	DO NOT INCLUDE full cans or cans containing hazardous materials. These items should be taken to the HHW depot at 112 Patton Street (see March).
Newspaper and mixed paper 	Place these items either inside or beside the Blue Box. Newspaper: Including all inserts and flyers. Remove and discard plastic bags. Mixed Paper: Phone books, junk mail, magazines, catalogues, office paper & envelopes (window & regular), paper bags and other items that are paper. Staples need not be removed.	DO NOT INCLUDE waxed or foil-coated paper, potato chip bags, coffee cups, styrofoam or paper that is soiled with food or grease.
Boxboard and corrugated cardboard 	Corrugated cardboard: Flatten and tie in bundles measuring no larger than 75 cm x 75 cm x 20 cm (30" x 30" x 8"). Place bundle(s) beside Blue Box. Use string or twine to tie bundles, not wire. Boxboard: Cereal, pasta, laundry and shoe boxes, etc. Remove liners/windows and flatten boxes. Do not mix with newspaper and mixed paper. Bundle with corrugated cardboard.	DO NOT INCLUDE frozen food boxes that have a wax coating or boxes that are heavily soiled with food or grease.

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Do not place these items in your blue box

Dishes & Cookware
- Dishes
- Pots & pans
- Cutlery (metal or plastic)

Lawn & Garden
- Garden hoses
- Patio furniture
- Planters • Pails
- Lawn Edging

Home Healthcare
- Diapers
- Needles & syringes
- Pill bottles

Take-out Packaging
- Styrofoam™
- Soft drink cups
- Plastic straws
- Creamer containers

Plastic Bags & Wrap
- Chip bags
- Ziploc bags
- Kool-aid Jammers & juice pouches
- Bubble wrap
- Cling & stretch wrap

Houseware
- Shower curtains
- Rubbermaid products
- Toys
- Coat hangers (metal or plastic
- Brooms • Binders
- Window glass

Blue Box Tips

1. Rinse out all containers before sorting all recyclables
2. Flatten all cardboard boxes to maximize bin capacity
3. Follow bin labels while sorting recyclables
4. Ensure colour and clear glass are separated
5. Plastic bags are not recyclables, ensure they are not included in bins
6. Hazardous waste and electronics are not Blue Box recyclable
7. Cans and plastics do not have to be separate
8. Empty metal paint cans can be placed with other cans and plastics (ensure the lid is removed)

Questions?

Contact the Wasteline at 705-474-0400 ext 2333
Or visit www.cityofnorthbay.ca

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Appendix iii: Section 4.4.1: Superintendent Handbook

RECYCLING HANDBOOK

FOR SUPERINTENDENTS AND PROPERTY MANAGERS

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Introduction

The population of North Bay is just over 55,000 people, living in approximately 19,000 households. Of that number 30% of North Bay residents live in multi-residential facilities including condos, townhouses, and apartments.

North Bay has a new and aggressive goal to divert 70% of waste from the landfill. If we're going to reach our waste diversion goal, we need to make sure that residents living in multi-residential homes have the necessary tools and information to participate in our diversion programs. This handbook is one step in our program to reach these goals.

Under the City of North Bay's waste management program it is the responsibility of every resident and all property managers to ensure that materials designated as recyclable are kept separate from garbage and are properly placed out for collection.

North Bay's Waste Management Department has developed this guide to help you set up and maintain a successful waste diversion program in your building. Your efforts will help control waste management costs.

We are here to help. If you have any questions, please contact:

Al Tomek, Waste Management Co-ordinator: (705) 474-0400 ext 2331

Thank you for your assistance and participation.

What to Recycle

Recycle	Do not Recycle
Plastics, Aluminum & Tin Plastics labeled # 1 – 7 Food and beverage containers (bottles, cans, jugs, tubs and lids) Fruit Containers, Plastic egg cartons, Plastic muffin trays, Berry containers, Tubs less than 5L, Empty aerosol cans, Empty dry cans, Paint cans and lids (Lids must be place in separately), Pie plates, All steel food and beverage containers	Tubs with metal handles, No petroleum containers, No screw top lids, No plastic bags, Paper backed foil (take out food), Foil laminates (chip bags), Aluminum foil, No full cans, **No Styrofoam or Plastic Bags**
Glass Bottles and Jars Only food and beverage glass jars and bottles are accepted Remove and discard all plastics	Medication bottles, light bulbs, Mirror glass and Window glass, Ceramics, any glass that isn't food or beverage is not accepted.
Newspaper and Mixed Paper Newspaper all inserts and flyers, Telephone books, Junk mail, Envelopes, Magazines and Catalogues, Soft covered books	Waxed or foiled coated paper, Coffee cups, Styrofoam of any kind, Hard covered books
Cardboard and Box Board Cereal, Pasta and Shoe Boxes, Flatten all cardboard boxes, Bundle and tie any cardboard that will not fit in bins, All polycoat cartons (milk, juice, etc), Drink boxes	Frozen food boxes with wax coating

How to Set Up a Recycling Program

The key to a successful recycling program is ongoing promotion. You are responsible for notifying residents about what is collected for recycling, how it should be prepared and the specific collection procedures used in the building. The City of North Bay has informational literature available such as "The tenant handbook", recycling labels, a guide to recycling, and large signs displaying what is and is not recyclable. Hang these posters in garbage and recycling drop locations, elevator, lobby, mail room, laundry room, and common rooms. For additional copies or information contact the waste management representative or look on the City of North Bay's website www.cityofnorthbay.ca .

In addition to the City's published literature about the recycling program, you need to instruct residents about your buildings-specific procedures for collecting and storing recyclables. Post instructional signs in the garbage and recycling areas of your building.

Particularly in cases where there is frequent turnover of units, it is important that promotional efforts be sustained. We strongly suggest that you provide information about your recycling program as part of your rental agreement package for new residents to make sure that they understand that recycling matters in North Bay and how easily it can be done.

Once the program is underway, residents should be informed of their accomplishments. Congratulate them on their contribution, so that they will be motivated to remain involved.

Recycling Bags

Recyclable grocery bags are a great way to help promote recycling within your building. The recyclable grocery bag is ideal for use in multi-residential buildings as it fits conveniently in small places, is light weight and durable and can be easily rinsed clean. Residents can use recycling bags to carry their recyclables to the recycling areas in the building.

Maintain the Program

Ensure that posters and labels remain posted and are legible. Please make new residents aware of the program. Use the methods listed under "troubleshooting" to solve any problems or contact your Waste Management Representative (see page 1 for phone number)

Designate a Recycling Area

In an area that is convenient, safe and well lit. Some buildings keep collection containers in a room in the basement or on the ground floor or even outdoors. Some collect materials in smaller containers in chute rooms and transfer the materials to larger containers on an appropriate schedule. The larger containers are then placed out for collection. It is up to the discretion of the Superintendent to designate an area for recycling.

Set-Out Point

The set-out point is the place where the containers are to be left on collection day. The containers must be set out, unlocked and facing the appropriate direction to facilitate collection by 7:00 a.m. on the designated collection day. Access to the containers must not be blocked by parked cars or ice and snow.

Collection Days for Multi-Residential Buildings

The City of North Bay provides multi-residential buildings with basic levels of service consisting of a weekly garbage collection and a bi-weekly recycling collection. If additional garbage collection is required, it is the responsibility of the superintendents or property managers to make the appropriate accommodations. Expenses for extra collections will not be incurred by the City of North Bay.

Owner's Responsibilities

It is up to you, the Owner, to ensure the success of any recycling program. Both the City and the residents of your complex look to you to ensure that the basic "infrastructure" needs of the complex are met. Garbage disposal and recycling are among the most fundamental services you provide.

Large building owners or managers are responsible for providing a convenient and practical system for the collection and storage of recyclable materials. Listed below are the suggested steps that will lead to a successful program.

1. Provide to the Waste Management Department the name, address, phone and fax number/ email address of current property manager and/ or superintendent and notify the Department of any changes to this information.
2. Distribute the "Apartment Recycling Guide" handout to new owners and tenants.
3. Post and maintain signs, labels, and containers as described in the section called "How to Set up a Recycling Program".
4. Ensure the bins are checked each day and contaminating items (garbage, plastic bags, etc) are removed daily.
5. Ensure containers are washed regularly
6. Ensure corrugated cardboard is flattened before it is placed in the recycling bin(s)
7. Request assistance from the Waste Management Representative to solve problems that you are unable to resolve. See page # for contact.

Large Metal Appliances

The City of North Bay will not collect large metal appliances such as fridges, stoves. This is the responsibility of the owner/ manager. The appliance must be taken up to Merrick Landfill where there will be a tipping fee for dropping off the appliance. All appliance doors must be removed and can be set beside the appliances.

Bulky Items

Bulky items such as couches, chairs and mattresses must be brought up to Merrick Landfill. The City of North Bay will not be responsible for picking up any of these items that are left out and around the garbage and recycling collection area. A tipping fee will be charged upon dropping off the items at the landfill.

Household Hazardous Waste

Residents of North Bay may deliver their household hazardous waste to the Household Hazardous Waste depot located at 112 Patton Street. Please ensure that hazardous materials are not placed in the building's garbage or recycling bins.

Hours of operation are Wednesday to Saturday 8 am to 6 pm all year round.

Common HHW items include:

- Gasoline, oil, and oil filters
- Aerosol cans
- Batteries (all types)
- Propane tanks and cylinders (big and small)
- Paints, varnishes and stains
- Pesticides
- Pool Chemicals
- Cleaning Supplies
- Cosmetics
- Pharmaceuticals/ Medication

NOT Accepted:

- PCB's
- Explosives
- Radioactive waste
- Refrigerants (refrigerators, freezers, air conditioners, dehumidifiers)

The Household Hazardous Waste depot located at 112 Patton St.

Troubleshooting

What if …

Recyclable materials are placed in garbage bins

- review the section in this booklet on introducing and maintaining the program
- Arrange a lobby display through your Waste Management Representative to educate residents about the recycling program.
- Make recycling as convenient as possible. Place a recycling container beside all garbage bins throughout the building.

Garbage is placed in the recycling bins

- Put the garbage containers closer to the recycling containers or place a small garbage can next to the recycling containers. This way residents have somewhere to put materials they realize are not recyclable
- If using the large metal bins, make sure they are modified so that the lids can be locked shut to prevent large items from being deposited. The residents can slide their recyclables through the slot if an item doesn't fit, it probably doesn't belong.

Residents want to dispose of electronics

- Direct residents to the Household Hazardous Waste depot located at 112 Patton Street.
- The hours of operation are Wednesday to Saturday 8 a.m. to 6 a.m. year round.
- Materials accepted include: Televisions, Stereos, DVD Players, Game systems, Record players, Computer equipment, Computers, Printers, Telephones and Cell phones, VCR recorders, Speakers, etc.

Wrong materials are included in recycling bins

The following items should not be included in the recycling bins:

- Used clothes/textiles – donate to charitable organizations
- Plastic bags – are not accepted in recycling bins in North Bay. If you seen a plastic bag fill with recyclables please open bag and remove the contents and dispose of plastic bag.
- Styrofoam – No form of Styrofoam is accepted in the recycling bins

There is a high turnover of residents in the complex

- Give every new resident recycling literature with their new lease.
- Show new residents the recycling and garbage locations and review procedures.

New maintenance or property management staff

- Pass this recycling handbook on to new staff.
- Explain procedures and responsibilities to new staff.

It takes to much time to sort the material in the recycling bins

- Monitoring the bins should take only a few minutes once or twice per day, this will save money in the long run.
- Maintain that all bin labels are all clearly visible and easy to read so that tenants do not mix up bins.

The recycling bins are blocked by parked cars or moving delivery trucks

- Post “NO PARKING” signs around the collection point
- Put chains or orange cones around the collection area on days of collection

(Note: chains and cones must be removed for the recycling truck access)

The recycling bins smell and attract insects

- Distribute and post notices to the residents reminding them that before depositing their cans and bottles in the recycling bins, they should be completely empty, and, if necessary, rinsed to remove food residue.
- Any items deposited in the bins with food in them should be treated as contaminating items, and removed during daily maintenance inspections.
- When placed out correctly, the recycling materials should not give an odour and should not attract insects.

Recycling participation is declining

- Reward recycling efforts to encourage better participation in your program. Your residents can be recognized and rewarded by:
- Presenting certificates of appreciation or writing a personal letter.
- Telling residents, staff and volunteers how many kilograms of recyclables have been collected or the % of decreased in garbage generation in the building.
- Rewarding residents who recycle with recycled products such as stationary, paper towels, ceramic mugs etc.
- Giving rent rebates to dedicated recycling volunteers.
- Have a waste management representative visit your residents by arranging a waste reduction presentation.