



**City of Morden Residential  
Waste Composition Study 2014**

**November, 2014**

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**Abbreviations**

CAP	Capita
HDPE	High-Density Polyethylene
HH	Households
HHW	Household Special Waste
KG	Kilogram
L	Litre
MFD	Multi-Family Dwellings
MMSM	Multi-Material Stewardship Manitoba Inc.
MRF	Material Recovery Facility
OCC	Old Corrugated Cardboard
ONP	Old Newspaper
PE	Polyethylene
P&E	Promotion & Education
PET	Polyethylene Terephthalate
PP	Polypropylene
PPP	Packaging and Printed Paper
PVC	Polyvinyl Chloride
SFD	Single Family Dwelling
YR	Year

## 1.0 Introduction

Multi-Material Stewardship Manitoba (MMSM) conducted a residential waste composition study in the City of Morden which provides data on waste generation and composition, as well as a snapshot of material recovery rates of residential recyclable material.

The primary objectives of the waste composition study were to:

- Provide an estimated annual per capita waste generation rate.
- Provide the generation and composition of both the recycling and garbage streams.
- Help show the current recovery rate by material for all recyclable materials.

The secondary objectives of the study were to:

- Provide the municipality with a measure of the effectiveness of their recycling programs and other waste reduction initiatives.
- Determine the recycling set-out and participation rates in the sample areas studied.
- Compare the generation, recovery, contamination, and set out rates with previous studies.

To achieve these objectives a single-family and a multi-family residential waste audit were conducted. To achieve a representative sample of Morden's single-family housing, the material was sourced from twenty homes in five different sample areas.

Materials were also sourced from two multi-family dwellings<sup>1</sup> consisting of 6 and 24 units.

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<sup>1</sup> **Multi-family household, complex or dwelling** is defined as apartment buildings, condominiums and townhouse complexes where waste and recyclable materials are collected at a central location. Townhouses receiving door-to-door curbside collection are considered as single-family households

## 2.0 Study Methodology

### 2.1. Timeframe and Sampling

Audits for the single-family and multi-family dwellings took place in September 2014, and spanned two consecutive weeks. The waste was collected and sorted from five single family dwelling (SFD) areas consisting of twenty households in each area. Waste was also collected from two multi-family dwellings (MFDs) consisting of 24 and 6 units.

### 2.2. Description of Sample Areas

The City of Morden has a population of approximately 7,800 residents. Single-family homes are provided with a 55-litres or 90-litres blue box for recycling. The garbage and recyclables are collected on a weekly basis by Pembina Valley Containers (PVC).

Table 1 and Table 2 present a description of the single-family and multi-family dwellings that were part of this study.

**Table 1: Description of Sample Areas and Sizes**

	Number of Sample Areas	Number of Dwellings Per Sample Area	Collection Frequency	Total Number of Households
Single-family residential dwellings	5	20	Weekly	100
Multi-family residential dwellings	2	Please see table 2 below.	Weekly	30

**Table 2: Multi-Family Building Profiles**

Multi-Family Building	Number of Units
Building 1	6 units
Building 2	24 units

### 2.3. Sorting

The sorting for these audits took place at 168 Cochlan Drive, Unit 7. Materials were sorted into previously defined sort categories for each sample areas and tracked using Excel spreadsheets (please see Appendix 1 for further information on material categories). Separate data sheets were used to track the waste audits for single family dwellings and multi-family dwellings.

### 2.4. Data Analysis

Data from the Waste Audit Collection Logs were entered into Microsoft Excel spreadsheets. Sort information for each day was recorded in spreadsheets and then linked to a master file to conduct the analysis. For the purposes of developing a weighting factor, the community population was split into SFD and MFD using data collected and scaled up using household and population data from the 2011 Statistics Canada census.

### 2.5. Definition of Recyclable Materials

The list of materials that are currently accepted in the City of Morden’s recycling program is provided in Appendix 2.

**2.6. Household Distribution**

Table 3 presents the population distribution of Morden according to dwelling type, based on the 2011 Census.

**Table 3: Split of Morden Households According to Dwelling Type**

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Total Population
<b>Households split based on 2011 census</b>	87.85%	12.15%	100.00%
<b>Population distribution based on Households</b>	6,863	949	7,812

**2.7. Eligible materials under MMSM’s program**

In this report materials considered as eligible are the materials under the MMSM program, and not eligible materials are those that are not covered by the program. In contrast, materials accepted are those under the municipal program. When needed, an asterisk (\*) was used to mark materials that are not accepted by Morden.

### 3.0 Annual Waste Generation – All Waste

Table 4 provides a breakdown of the per-capita generation rates for all categories including non-eligible MMSM materials. Utilizing the per-capita generation and the total SF and MF dwellings, an estimated annual generation is provided.

**Table 4: 2014 Annual per Capita Generation Rates For Morden – All Waste**

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Generation
	(kg/cap/yr)	(kg/cap/yr)	(kg/cap/yr)	(tonnes/yr)
<b>PAPER</b>				
Newspapers and Flyers	16.66	9.71	15.82	124
Telephone books / directories	0.67	0.06	0.60	5
Magazines & catalogues	20.46	4.18	18.48	144
Mixed fine paper	7.97	3.75	7.46	58
Books	1.20	0.29	1.09	8
*Other Paper	0.48	0.26	0.45	4
<b>Total paper</b>	<b>47.44</b>	<b>18.25</b>	<b>43.89</b>	<b>343</b>
<b>PAPER PACKAGING</b>				
Corrugated cardboard	8.28	14.54	9.04	71
Kraft paper	1.36	0.97	1.31	10
Boxboard/cores	9.82	7.18	9.50	74
Molded pulp	0.53	0.91	0.57	4
*Paper cups and paper ice-cream containers	0.81	0.87	0.82	6
*Laminated paper packaging	0.50	0.22	0.47	4
Composite cans	0.37	0.29	0.36	3
Gable top cartons	1.10	1.33	1.12	9
*Aseptic containers	0.49	0.10	0.44	3
Tissue/Towelling	5.73	6.78	5.86	46
<b>Total Paper Packaging</b>	<b>28.99</b>	<b>33.19</b>	<b>29.50</b>	<b>230</b>
<b>PLASTICS</b>				
PET bottles, jugs & jars	3.22	3.57	3.26	25
PET other packaging	1.17	1.27	1.18	9
HDPE bottles, jugs & jars	2.58	2.03	2.51	20
*PVC bottles and jars	0.03	0.00	0.02	0
Other bottles, jars & jugs	3.77	2.84	3.66	29
Other plastic bottles & jugs - empty HHW & paint cans	0.00	0.00	0.00	0
*Polystyrene Packaging	1.23	0.64	1.16	9
Wide mouth tubs & lids	1.11	1.02	1.10	9
Large HDPE & PP pails and lids	0.20	0.00	0.18	1
Polyethylene PE Retail and Carry-out Bags/Sacks	1.88	1.84	1.87	15
Polyethylene PE Plastic Bags & Film - Other Packaging	1.06	0.82	1.03	8
Polyethylene Plastic Bags & Film -	2.55	2.58	2.55	20

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Generation
<b>Non-Packaging</b>				
*Laminated Pouches & Bag in Box Liners for Alcoholic Beverages	0.73	0.31	0.68	5
*Laminated/Other Plastic Film and Bags	4.37	5.66	4.53	35
*Drink Pouches (any size)	0.05	0.03	0.05	0
*Durable Plastic Products	3.57	1.86	3.36	26
<b>Total Plastics</b>	<b>27.52</b>	<b>24.47</b>	<b>27.15</b>	<b>212</b>
<b>METALS</b>				
Aluminum food & beverage cans	1.68	1.17	1.62	13
Aluminum foil and trays	0.47	0.57	0.48	4
Other aluminum containers	0.09	0.01	0.08	1
Steel food & beverage cans	2.02	1.08	1.90	15
*Steel aerosol containers (excl. paint aerosols)	0.04	0.28	0.06	1
*Steel paint cans & aerosols (empty)	0.22	0.04	0.20	2
*Other Metals	1.31	0.40	1.20	9
<b>Total Metals</b>	<b>5.82</b>	<b>3.55</b>	<b>5.55</b>	<b>43</b>
<b>GLASS</b>				
Clear glass bottles & jars	7.01	4.99	6.76	53
Coloured glass bottles & jars	4.23	1.06	3.85	30
*Other unrecognizable or broken glass	1.17	1.50	1.21	9
<b>Total Glass</b>	<b>12.41</b>	<b>7.55</b>	<b>11.82</b>	<b>92</b>
<b>*HOUSEHOLD SPECIAL WASTE</b>				
Batteries	0.13	0.10	0.13	1
Paint & Stain (still containing product)	0.00	0.00	0.00	0
Motor Oil (still containing product)	0.12	0.00	0.10	1
Other HHW liquids (still containing product)	0.00	0.00	0.00	0
Other HHW (still containing product)	0.03	0.38	0.08	1
<b>Total HHW</b>	<b>0.28</b>	<b>0.48</b>	<b>0.30</b>	<b>2</b>
<b>*ORGANICS</b>				
Food Waste	77.16	80.68	77.59	606
Pet waste	13.74	0.72	12.16	95
<b>Total Organics</b>	<b>90.90</b>	<b>81.39</b>	<b>89.75</b>	<b>701</b>
<b>*OTHER MATERIALS</b>				
Diapers and Sanitary Products	11.71	5.53	10.96	86
Textiles	7.45	3.11	6.92	54
Carpeting	0.00	0.00	0.00	0
Construction & Renovation	2.74	1.19	2.55	20



	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Generation
Computer / IT Equipment	0.00	0.05	0.01	0
Telecom Equipment	0.02	0.00	0.02	0
TV & Audio Equipment	0.02	0.00	0.02	0
Small Kitchen Appliances	0.00	0.00	0.00	0
Other Electronics	0.19	0.02	0.17	1
Tires and Other Rubber	0.03	0.00	0.03	0
Ceramics	0.42	2.86	0.72	6
Furniture	0.00	0.00	0.00	0
Mattresses	0.00	0.00	0.00	0
Other Large Bulky Items	0.41	0.00	0.36	3
Other Waste	1.22	3.56	1.50	12
<b>Total Other Materials</b>	<b>24.19</b>	<b>16.32</b>	<b>23.23</b>	<b>181</b>
<b>Grand Total</b>	<b>237.56</b>	<b>185.20</b>	<b>231.20</b>	<b>1,806</b>

Note: materials not accepted by the municipal program are marked with an asterisk (\*)

The estimated per capita generation in the City of Morden is 231 kg/cap/yr. Based on the population data from Statistics Canada the estimated annual generation of waste in Morden is 1,806 tonnes.

Table 5 provides the per-capita generation of all eligible MMSM materials generated in the garbage and recyclable stream. Materials such as durable goods including metals, plastics, glass, etc. are not eligible under MMSM's program.

**Table 5: 2014 Annual Generation Rates of Eligible MMSM Materials for Morden**

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Generation
	(kg/cap/yr)	(kg/cap/yr)	(kg/cap/yr)	(tonnes/yr)
<b>PAPER</b>				
Newspapers and Flyers	16.66	9.71	15.82	124
Telephone books / directories	0.67	0.06	0.60	5
Magazines & catalogues	20.46	4.18	18.48	144
Mixed fine paper	7.97	3.75	7.46	58
<b>Total paper</b>	<b>45.76</b>	<b>17.71</b>	<b>42.36</b>	<b>331</b>
<b>PAPER PACKAGING</b>				
Corrugated cardboard	8.28	14.54	9.04	71
Kraft paper	1.36	0.97	1.31	10
Boxboard/cores	9.82	7.18	9.50	74
Molded pulp	0.53	0.91	0.57	4
*Paper cups and paper ice-cream containers	0.81	0.87	0.82	6
*Laminated paper packaging	0.50	0.22	0.47	4
Composite cans	0.37	0.29	0.36	3
Gable top cartons	1.10	1.33	1.12	9
*Aseptic containers	0.49	0.10	0.44	3

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Generation
<b>Total Paper Packaging</b>	<b>23.26</b>	<b>26.41</b>	<b>23.64</b>	<b>184.69</b>
<b>PLASTICS</b>				
PET bottles, jugs & jars	3.22	3.57	3.26	25
PET other packaging	1.17	1.27	1.18	9
HDPE bottles, jugs & jars	2.58	2.03	2.51	20
*PVC bottles and jars	0.03	0.00	0.02	0
Other bottles, jars & jugs	3.77	2.84	3.66	29
*Polystyrene Packaging	1.23	0.64	1.16	9
Wide mouth tubs & lids	1.11	1.02	1.10	9
Large HDPE & PP pails and lids	0.20	0.00	0.18	1
Polyethylene PE Retail and Carry-out Bags/Sacks	1.88	1.84	1.87	15
Polyethylene PE Plastic Bags & Film - Other Packaging	1.06	0.82	1.03	8
*Laminated Pouches & Bag in Box Liners for Alcoholic Beverages	0.73	0.31	0.68	5
*Laminated/Other Plastic Film and Bags	4.37	5.66	4.53	35
*Drink Pouches (any size)	0.05	0.03	0.05	0
<b>Total Plastics</b>	<b>21.41</b>	<b>20.03</b>	<b>21.24</b>	<b>165.91</b>
<b>METALS</b>				
Aluminum food & beverage cans	1.68	1.17	1.62	13
Other aluminum containers	0.09	0.01	0.08	1
Steel food & beverage cans	2.02	1.08	1.90	15
*Steel aerosol containers (excl. paint aerosols)	0.04	0.28	0.06	1
<b>Total Metals</b>	<b>3.82</b>	<b>2.53</b>	<b>3.66</b>	<b>28.63</b>
<b>GLASS</b>				
Clear glass bottles & jars	7.01	4.99	6.76	53
Coloured glass bottles & jars	4.23	1.06	3.85	30
<b>Total Glass</b>	<b>11.24</b>	<b>6.05</b>	<b>10.61</b>	<b>82.87</b>
<b>Total Eligible Materials</b>	<b>105.49</b>	<b>72.73</b>	<b>101.51</b>	<b>792.99</b>

Note: materials not accepted by the municipal program are marked with an asterisk (\*)

Table 6 provides the capture rates of eligible materials for Morden found within this study. Capture rates are defined as the total eligible materials found in the recyclable stream divided by the total generated.

**Table 6: 2014 Capture Rates for MMSM Eligible Materials**

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Recovery
<b>PAPER</b>	(%)	(%)	(%)	(tonnes/yr)
<b>Newspapers and Flyers</b>	84%	79%	84%	103

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Recovery
Telephone books / directories	95%	100%	95%	4
Magazines & catalogues	99%	92%	99%	143
Mixed fine paper	66%	53%	65%	38
<b>Total paper</b>	<b>88%</b>	<b>77%</b>	<b>87%</b>	<b>289</b>
<b>PAPER PACKAGING</b>				
Corrugated cardboard	96%	82%	93%	66
Kraft paper	40%	21%	38%	4
Boxboard/cores	80%	61%	78%	58
Molded pulp	56%	38%	52%	2
*Paper cups and paper ice-cream containers	43%	40%	42%	3
*Laminated paper packaging	29%	3%	28%	1
Composite cans	71%	9%	64%	2
Gable top cartons	85%	58%	81%	7
*Aseptic containers	65%	56%	65%	2
<b>Total Paper Packaging</b>	<b>80%</b>	<b>69%</b>	<b>78%</b>	<b>145</b>
<b>PLASTICS</b>				
PET bottles, jugs & jars	79%	66%	77%	20
PET other packaging	60%	75%	62%	6
HDPE bottles, jugs & jars	83%	57%	81%	16
*PVC bottles and jars	76%	0%	76%	0
Other bottles, jars & jugs	41%	50%	42%	12
*Polystyrene Packaging	30%	29%	30%	3
Wide mouth tubs & lids	60%	64%	60%	5
Large HDPE & PP pails and lids	0%	0%	0%	0
Polyethylene PE Retail and Carry-out Bags/Sacks	13%	8%	12%	2
Polyethylene PE Plastic Bags & Film - Other Packaging	27%	21%	27%	2
*Laminated Pouches & Bag in Box Liners for Alcoholic Beverages	2%	100%	8%	0
*Laminated/Other Plastic Film and Bags	13%	15%	13%	5
*Drink Pouches (any size)	56%	0%	51%	0
<b>Total Plastics</b>	<b>43%</b>	<b>41%</b>	<b>43%</b>	<b>71</b>
<b>METALS</b>				
Aluminum food & beverage cans	76%	41%	73%	9
Other aluminum containers	76%	100%	77%	0
Steel food & beverage cans	80%	53%	79%	12
*Steel aerosol containers (excl. paint aerosols)	35%	100%	69%	0
<b>Total Metals</b>	<b>70%</b>	<b>43%</b>	<b>67%</b>	<b>22</b>

	<b>Single-Family Dwellings (SFD)</b>	<b>Multi-Family Dwellings (MFD)</b>	<b>Weighted Average</b>	<b>Estimated Annual Recovery</b>
<b>GLASS</b>				
<b>Clear glass bottles &amp; jars</b>	84%	54%	81%	43
<b>Coloured glass bottles &amp; jars</b>	92%	19%	89%	27
<b>Total Glass</b>	<b>87%</b>	<b>48%</b>	<b>84%</b>	<b>70</b>
<b>Total Eligible Materials</b>	<b>76%</b>	<b>60%</b>	<b>75%</b>	<b>596</b>

Note: materials not accepted by the municipal program are marked with an asterisk (\*)

Similar to other jurisdictions, capture rates are higher in SFD areas when compared to MFD areas. This could be a direct result of the limited space within MFDs to store and separate recyclables from other waste.

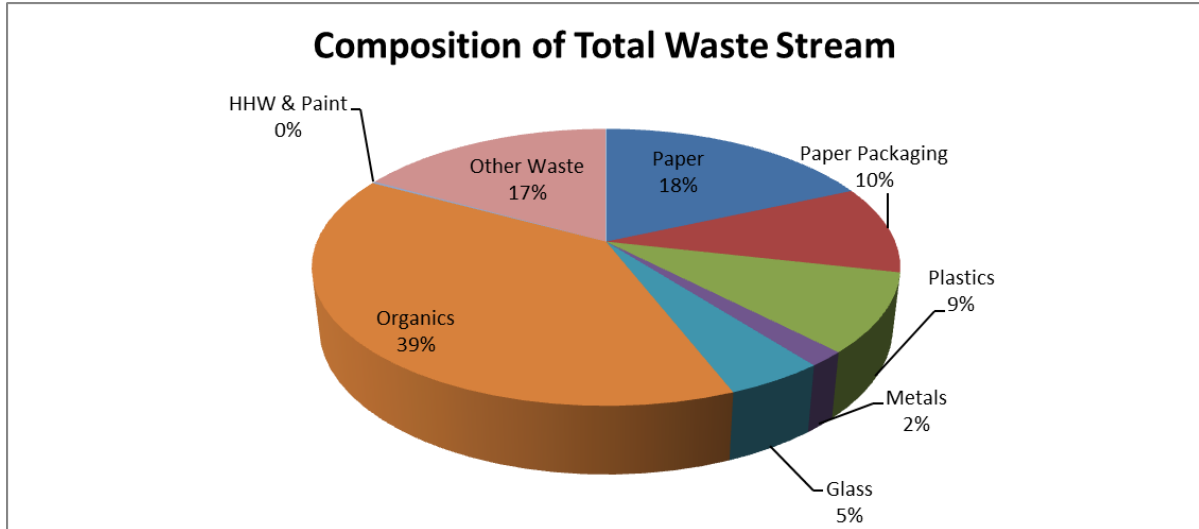
For both household types, paper has the highest capture rates (87%) while plastics have the lowest capture rates (43%). The City of Morden recovers an estimated 596 tonnes of MMSM eligible materials which is 75% of the total MMSM eligible materials generated in Morden.

## 4.0 Waste Composition Analysis

### 4.1. Overall Waste Composition

A graphical breakdown of the main categories of material included in the study is found in Figure 1.

**Figure 1: Overall Waste Composition**

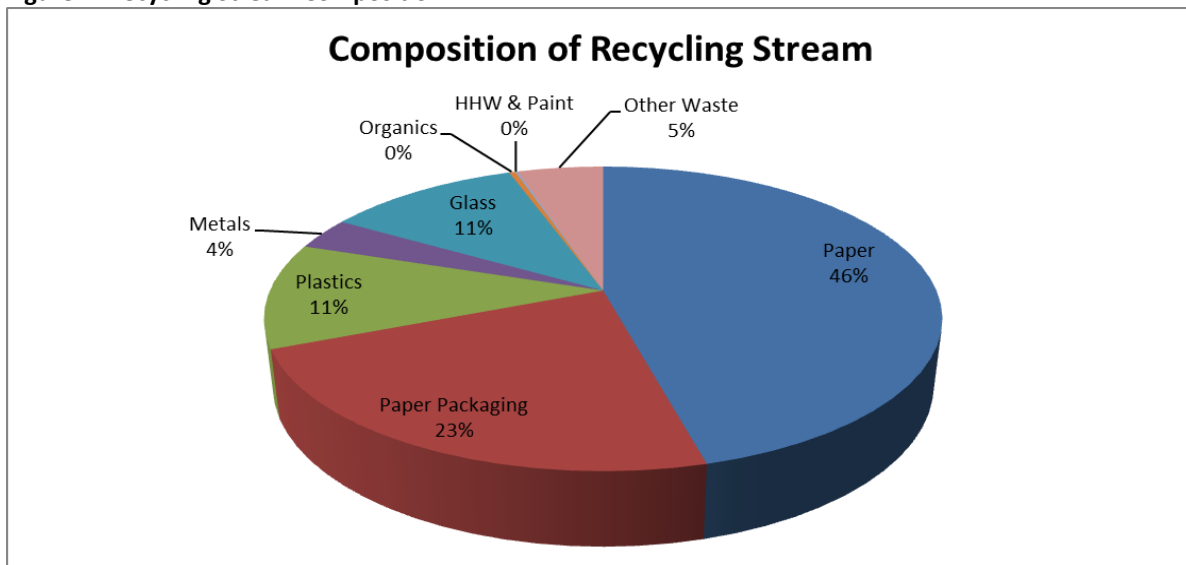


The two largest categories of waste being generated are organic waste (39%), and paper (18%). Other waste (17%) is the third category generated in Morden. Eligible materials, including Paper, make-up 44% of waste generated in Morden.

### 4.2. Recycling Stream Composition

Figure 2 provides the composition of materials found in the recycling stream.

**Figure 2: Recycling Stream Composition**



Paper (46%) and paper packaging (23%) together represent 69% of the total materials found within the recycling stream. Organics, HHW and Other waste are considered together as contamination (5%).

#### 4.3. Plastic Bags

The audit study involved recording the use of plastic bags found in the waste stream, i.e. whether they were being reused as a waste receptacle for kitchen or pet waste. The results are presented in Table 7 below.

**Table 7: Bag Counts for Polyethylene Retail and Carry-Out Bags**

	Single-Family Dwellings (SFD) (units/cap/yr)	Multi-Family Dwellings (MFD) (units/cap/yr)	Per Capita Weighted Average (units/cap/yr)	Percent age
Reused as a waste receptacle	61	68	62	47%
Empty	72	43	69	53%
<b>Total Bag Count for PE Retail and Carry Out Bags</b>	<b>133</b>	<b>111</b>	<b>131</b>	

#### 4.4. Organic Waste Category

Organic waste is currently one of the largest types of waste being generated by residents in the City of Morden. Table 8 provides information on food and pet waste generated by resident.

**Table 8: Organic Waste Generation**

	Single-Family Dwellings (SFD) (kg/cap/yr)	Multi-Family Dwellings (MFD) (kg/cap/yr)	Weighted Average (kg/cap/yr)	Estimated Annual Generation (tonnes/yr)
Food Waste	77.16	80.68	77.59	606
Pet waste	13.74	0.72	12.16	95

#### 4.5. Household Special Waste Generation

Household Special Waste (HHW) is not an eligible category to be recycled in the Blue Box. However, several of these items still end up in municipal garbage or recycling streams. Table 9 provides a summary of these items generated in Morden.

**Table 9: Generation of HHW**

	Single-Family Dwellings (SFD) (kg/cap/yr)	Multi-Family Dwellings (MFD) (kg/cap/yr)	Weighted Average (kg/cap/yr)	Estimated Annual Generation (tonnes/yr)
Other plastic bottles & jugs - empty HHW & paint cans	0.00	0.00	0.00	0
Steel paint cans & aerosols (empty)	0.22	0.04	0.20	2
Batteries	0.13	0.10	0.13	1
Paint & Stain (still containing product)	0.00	0.00	0.00	0
Motor Oil (still containing product)	0.12	0.00	0.10	1
Other HHW liquids (still containing product)	0.00	0.00	0.00	0
Other HHW (still containing	0.03	0.38	0.08	1

	Single-Family Dwellings (SFD)	Multi-Family Dwellings (MFD)	Weighted Average	Estimated Annual Generation
product)				
<b>Total HHW</b>	<b>0.50</b>	<b>0.52</b>	<b>0.50</b>	<b>4</b>

**4.6. Recycling Container Set-Out and Participation Rates**

A record was kept of the number of single-family households in each sample area that set out their recycling containers for collection. The recycling participation rate is the percentage of households that participated in the recycling program at least once during the two-week study period. The recycling set-out rate is an estimation of the percentage of households that set out recyclables on a given collection day. The results are presented in Table 10 below.

**Table 10: Blue Box Participation and Set-Out Rates in Single-Family Samples Areas**

	Participation Rates (%)	Set-Out Rates (%)
<b>Single Family Households</b>	<b>84%</b>	<b>71%</b>

The overall participation rate was 84% and the average set-out rate was 71%.

**4.7. Contamination Rates**

During the sample period, any materials collected in recycling receptacles from single-family and multi-family households that were not eligible under the MMSM program were recorded as contaminants. Examples of contaminants are non-recyclable materials such as food waste. Table 11 shows the contamination rate for the City of Morden.

**Table 11: Observed Contamination Rates**

	Contamination Rate
<b>Single-Family Sample Area</b>	<b>5%</b>
<b>Multi-Family Sample Area</b>	<b>9%</b>
<b>Overall</b>	<b>5%</b>

At 5%, the contamination rate for Morden’s recycling program is low compared to other programs.

## 5.0 Appendices

### Appendix 1: Waste Audit Sort Categories

NB – Ineligible materials are marked with an asterisk (\*)

Material Category	Description / Examples
<b>PAPER</b>	
Newspaper – Dailies and Weeklies	Daily and weekly newspapers published by the Canadian Newspaper Association (CNA) and the Manitoba Community Newspapers Association (MCNA); Winnipeg Free Press, Morden Sun, Winnipeg Sun, Globe and Mail, National Post, community newspapers. No inserts, flyers and magazines from newspapers.
Newspaper - Other	Non MCNA/CNA publications (e.g. TV guides, Auto Trader, Real Estate News) plus inserts and flyers from MCNA/CNA newspapers. Includes glossy flyers and advertising distributed with newspapers.
Telephone Books / Directories	Telephone books and other directories such as the Yellow Pages
Magazines & Catalogues	Glossy magazines, catalogues, calendars, annual reports (must be bound, i.e. stapled or glued).
Mixed Fine Paper	Fine household papers, writing paper, office paper, copy paper, bills and statements, ad mail, etc. Includes glossy flyers and advertising that are not distributed with newspapers.
Books	Hard and soft covered books
*Other Paper	Gift wrap, construction paper, photographs, etc. This is a default paper category and as such should not contain a large amount of material.
<b>PAPER PACKAGING</b>	
Corrugated wine bag-in-box	Corrugated box from bag in box wine containers. No plastic liners.
Corrugated cardboard	Includes micro-flute corrugated containers, pizza boxes, waxed corrugated containers, etc.
Kraft paper	Kraft paper bags and wrap, grocery or retail bags, potato bags, some pet food bags, etc. Includes brown, white, and coloured kraft paper and bags. No bags with bonded plastic or foil liners/layers/coatings. Includes bags with a light grease coating.
Boxboard/cores	Boxboard, paperboard, cereal box, shoe box, frozen food box, cores from toilet paper/ toweling/gift wrap, etc. Includes wet-strength boxboard, fast food cartons such as fry/onion ring boxes and paper plates
Molded pulp	Egg cartons, drink trays, other trays, molded pulp flower pots/trays, etc.
*Paper cups and paper ice-cream containers	Includes paper based cups with a plastic lining/layer such as coffee cups, soup cups, french-fry cups. Does not include containers that are plastic or plastic based.



<b>Material Category</b>	<b>Description / Examples</b>
*Laminated paper packaging	Paper based packaging (at least 85% paper) with foil or plastic liners/layers/coatings, pouches, cookie bags, microwave popcorn bags, fast food sandwich wraps, gift bags, paper based trays, etc.
Composite cans	Spiral wound cans with paper walls and plastic or metal tops or bottoms; frozen juice, Pringles, raisins, etc.
Gable top cartons	Polycoat containers with a gable shaped; juice, milk, etc.
*Aseptic containers	Tetra pak type polycoat packaging for juice, milk substitutes (soy, almond, etc.), dairy, etc.
Tissue/Towelling	Tissues, napkins, paper towels (includes wet/damp items)
<b>PLASTICS</b>	
PET bottles, jugs & jars	#1 clear and coloured bottles, jugs, & jars for food and beverages; alcohol, water, pop, juice, ketchup, etc.
PET other packaging	#1, bakery, clamshells, trays, oven safe/microwaveable trays, egg cartons. No bottles and jars
HDPE bottles, jugs & jars	#2 beverage bottles and jugs 0 - 500mL, juice, milk, laundry soap, shampoo, windshield washer fluid, etc.
*PVC bottles and jars	#3 bottles and jars only, lotions, soaps, bug repellants, shampoos, etc. (PVC blister/bubble packs go into "Other Rigid Plastic Packaging")
Other plastic bottles & containers	#4 LDPE, #5 PP, & #7 mixed resin, juice, milk, mustard, ketchup, some juices excl. HHW, blister packaging, etc.
Other plastic bottles & jugs - empty HHW & paint cans	Empty plastic packaging with flammable, combustible, or toxic warning signs; Turpentine, automotive anti-freeze, motor oil, pesticides, paint, etc.
*Polystyrene Packaging	#6 PS, trays, clamshells, cups & lids, pill and vitamin bottles, seedling trays, PS used to protect boxed product, "peanuts", etc. Non-packaging PS (e.g. plastic cutlery) goes into the "Durable Plastic Products" category
Wide mouth tubs & lids	# 2 HDPE, #4 LDPE & #5 PP tubs and lids, dairy products, etc.
Large HDPE & PP pails and lids	>4litres and < 25 litres HDPE & PP pails, food, kitty litter, etc. excludes items with corrosive, danger or flammable warning signs
Polyethylene PE Retail and Carry-out Bags/Sacks	HDPE & LDPE retail and carry-out bags/sacks
Polyethylene PE Plastic Bags & Film - Other Packaging	HDPE & LDPE dry cleaning bags, bread bags, frozen food bags, milk bags, toilet paper and toweling, over-wrap, lawn seed, soil, peat moss, etc.
*Polyethylene Plastic Bags & Film - Non-Packaging	HDPE & LDPE garbage bags, kitchen catchers, blue or clear bags for recyclables, sandwich and freezer bags, etc.
*Laminated Pouches & Bag in Box Liners for Alcoholic Beverages	Laminated plastic pouches and plastic bag-in-box liners for wine and other alcoholic beverages.

<b>Material Category</b>	<b>Description / Examples</b>
*Laminated/Other Plastic Film and Bags	Plastic film and bags that are at least 85% (by weight) plastic with up to 15% (by weight) other closely bonded or impregnated materials. This includes meat, poultry and fish wrap; vacuum sealed bacon bag; luncheon meat and cheese wrap; cereal liners; chip bags and other snack food bags; candy wraps; pasta bags; boil in a bag; plastic based food pouches; bubble wrap; cling wrap; some cookie bags, etc. No alcohol pouches / bag in box liners.
*Drink Pouches (any size)	Squeeze pouches for certain juice and water products
*Durable Plastic Products	Non-packaging such as VCR tapes, CDs, toys, games, Tupperware, etc. Include multi-material items that are mainly plastic – e.g. a plastic toy truck with metal axles. Plastic shoes, gloves, clothing go in Textiles.
<b>METALS</b>	
Aluminum food and beverage cans	Aluminum alcoholic beverages, pop, tuna and cat food cans, etc.
Aluminum foil and trays	Aluminum foil wrap, pie plates, baking trays, etc.
Other aluminum containers	Aluminum aerosol containers, hair products, tubes, etc.
Steel food and beverage cans	Steel alcoholic beverages, apple juice, soups, pastas sauces, etc.
*Steel aerosol containers (excl. paint aerosols)	Steel cans for cooking oil, whipped cream, etc. excluding spray paint aerosols (paint aerosols should be included under steel paint cans & aerosols)
*Steel paint cans & aerosols (empty)	Empty paint cans and aerosols
*Other Metals	Scrap metal, copper pipe, hardware, etc. Includes multi-material items that are mainly metal. Includes empty propane tanks.
<b>GLASS</b>	
Clear bottles and jars	Clear bottles including alcohol, pop, carbonated water, jams, etc.
Coloured bottles and jars	Coloured bottles including alcohol, pop, carbonated water, jams, etc.
*Other unrecognizable or broken glass	Window glass, plates and glasses, light bulbs, broken glass shards, etc.
<b>*HOUSEHOLD SPECIAL WASTE</b>	
Batteries	All types
Paint & Stain (still containing product)	Cans / tubs still containing product, oil and latex paint, wood stain, varnish, etc.
Motor Oil (still containing product)	Oil filters and jugs or cans still containing oil
Other HHW liquids (still containing product)	Solvents, antifreeze, acids, pool chemicals, weed killer, gasoline, brake fluid, glues, adhesives, cleaners, nail polish remover, etc. Look for signal words such as "Poison", "Danger", "Warning", "Caution", and "Precautionary Statements".
Other HHW (still containing product)	Sharps, drug products, medicine, medical waste, fluorescent tubes, ionized smoke detectors, etc. Look for signal words such as "Poison", "Danger", "Warning", "Caution", and "Precautionary Statements".

Material Category	Description / Examples
<b>*ORGANICS</b>	
Food Waste	Vegetable and fruit peelings, meats, fish, fats, oils, bones, etc
Yard Waste	Brush, branches, wood chips, grass, leaves, soil, plant material, ashes
Pet waste	Animal feces, bedding, kitty litter
<b>*OTHER MATERIALS</b>	
Diapers and Sanitary Products	Diapers, sanitary napkins, hygiene products, etc.
Textiles	Clothing, shoes, mats, drapes, sheets, etc. Plastic rice sacks go in Other Rigid Plastic Packaging
Carpeting	Carpeting, underlay, mats
Construction & Renovation	Lumber, wood cut off, drywall, ceramic tiles, plaster, etc.
Computer / IT Equipment	PCs, notebooks, CRT and LCD monitors, scanners, printers, mouse, cables
Telecom Equipment	Phones, pagers, Blackberry, mobile phones, etc.
TV & Audio Equipment	Televisions, DVD, radio, VCR, etc
Small Kitchen Appliances	Blenders, coffee machine, etc.
Other Electronics	Electronic games, clocks, gadgets, anything with a plug or battery
Tires and Other Rubber	Rubber tires and tubes, other rubber items such as hoses
Ceramics	Ceramic plates, cups, plant pots, etc.
Furniture	Chairs, cabinets, tables, garden furniture
Mattresses	Mattresses and box springs, futons, foam mattresses
Other Large Bulky Items	Other large items not classified elsewhere
Other Waste	Materials not classified elsewhere, wooden fruit basket, vacuum bags, wax candles, furnace filters, etc.

**Appendix 2: Materials Accepted in the City of Morden's Recycling Program**

- Paper: newsprint/flyers; phone directories, magazines/catalogues; office paper
- Cardboard: boxboard (such as cereal boxes); corrugated (such as shipping boxes)
- Containers: gable-top (such as milk cartons)
- Containers: steel and aluminum cans; glass bottles/jars
- Containers: plastic #1 (such as. pop bottles); plastic #2 (such. milk jugs); plastic #4,5, & 7 (such as. yogurt/ margarine tubs, squeezable; food product bottles).