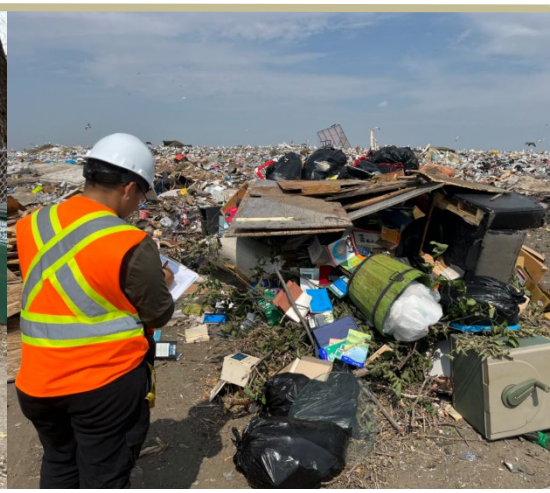
City of Saskatoon
2023 to 2025 City-Wide Waste Characterization Study
2024 Annual Report





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EXECUTIVE SUMMARY

Tetra Tech Canada Inc. (Tetra Tech) was retained by the City of Saskatoon (City) to conduct a multi-season City-Wide Waste Characterization Study from 2023 to 2025. The purpose of this study is to identify trends and changes in the City's waste profile and identify benchmarks that can be used as new programs are introduced. The study consists of nine seasonal waste sorting events over a three-year period.

This report summarizes the results from Summer 2024, Fall 2024, and Winter 2025 sampling events. The waste streams characterized include garbage, recycling, and organics from the single family (SF) residential sector, and garbage from the multi-unit (MU) and residential drop off (DO) sectors.

Section 1.0 identifies the scope of work, project limitations, and an overview of waste collection services in the City.

Section 2.0 identifies the methodology that was undertaken for the study, including waste collection, sorting, and data analysis. A detailed description of material categories is included in Appendix C.

Section 3.0 includes an overview of set out rates, types, and amounts of materials collected, and an estimate of cart fullness. Waste composition results for garbage, recycling, and organics for the SF sector are also presented in Section 3.0 along with diversion potential, contamination rates, and capture rates. Waste composition results for garbage from the MU and DO sectors are included in Section 3.0. Recycling and organics streams for the MU and DO sectors were not included in this scope of work. A detailed breakdown of waste composition results by stream is included in Appendix D.

- The average percentage of carts set out for bi-weekly collection was 87%, 79%, and 60% for garbage, recycling, and organics, respectively.
- On average, the total amount of materials disposed on a bi-weekly basis was approximately 17 kg/household, 5 kg/household, and 14 kg/household for garbage, recycling, and organics, respectively.
- On average, carts that were set out were 68%, 67%, and 47% full for garbage, recycling, and organics, respectively.
- The SF garbage stream was primarily composed of food waste (28%), plastics (14%), household hygiene (14%), and paper (9%).
- Organic materials accounted for 35% to 45% of the SF garbage stream.
- The diversion potential for the SF garbage stream based on existing programs and services ranged from 56% to 66%.
- The recycling stream was primarily composed of paper packaging, including corrugated cardboard and boxboard (48%), paper (18%), and plastic (16%).
- The contamination in the recycling stream ranged from 12% to 20%.
- The organics stream was primarily composed of yard waste (55%), food waste (36%), and paper 5%).
- The contamination in the organics stream ranged from 1% to 4%.
- The MU garbage was primarily composed of food waste (24%), plastic (11%), household hygiene (10%), other materials (9%), paper (9%), and construction and demolition wastes (8%).

- Divertible material in the MU garbage stream included compostable material (26% to 39%), items that can be dropped off at a depot (11% to 31%), recyclable material (12% to 19%), and no program material (10% to 11%).
- The DO garbage was primarily composed of construction and demolition waste (56%), yard waste (15%), and bulky waste (13%).
- Most of the material in the DO garbage stream was material that has no corresponding program or service currently being offered for diversion (67% to 71%), this included construction and demolition waste and bulky items.

Section 4.0 summarizes the interesting finds in the three seasons and Appendix B includes selected photographs for reference.

Section 5.0 includes initial comments and preliminary recommendations based on the findings from the three sampling events:

- The bi-weekly collection frequency appears to be effective for residents' needs. The monthly collection frequency appears to be a higher level of service than what is required during the Winter sampling period.
- The variable cart sizes for garbage and the 360 L cart size for recycling and organics worked well for most households. Approximately 2% to 8% of carts were overfilled and approximately 21% to 34% of carts were only filled to half capacity or below.
- Additional education and communication on the new green cart program may be beneficial to:
  - Reduce the amount of food and yard waste in the garbage stream. Organic materials (food, yard waste, and paper) made up 35% to 45% of the garbage stream.
  - Increase resident participation or set-out rates. On average, only 60% of residents set-out their green cart for the study.
  - Increase the capture rate of organic material in the organics stream. The capture rate of organic materials was between 40% to 76%.
- Additional education and communication on the recycling program may be beneficial to reduce the amount of contamination in the recycling stream.
- Additional diversion programs are recommended for materials that can be diverted from landfill, including construction and demolition waste (e.g., mixed metals, treated lumber). Approximately 3% to 15% of material in the SF garbage stream and 5% to 10% of material in the MU garbage stream in the study was construction and demolition waste.
- Additional education and communication on existing MU diversion programs my be beneficial as materials that can be recycled made up 12% to 19% of the MU garbage stream, and materials that could be dropped off at a depot made up 11% to 31% of the MU garbage stream.

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ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviations	Definition
BPI	Biodegradable Products Institute
City	City of Saskatoon
HASP	Health and Safety Plan
HDPE	High-density Polyethylene
Landfill	Saskatoon Regional Waste Management Centre
LDPE	Low-density Polyethylene
SF	Single Family
Tetra Tech	Tetra Tech Canada Inc.
WEEE	Waste Electrical and Electronic Equipment

LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of City of Saskatoon and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than City of Saskatoon, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

NOTE TO THE READER

The samples collected and characterized for this study are “snapshots” in time, meaning the reported quantities are estimates and only represent the conditions for the period in which they were collected. Annual variability, weather, and other factors can affect the amount and composition of waste and recyclables generated by the various sectors at any given time. Even with combined educational, regulatory, and financial initiatives, the reader should not assume that it is necessarily easy, practical, or economical to recover a substantial portion of a disposed material from a mixed waste stream or at its source.

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by the City of Saskatoon (City) to conduct a multi-season City-Wide Waste Characterization Study from 2023 to 2025. The purpose of this study is to identify trends and changes in the City's waste profile and identify benchmarks that can be used as new programs are introduced. It is also understood that results from the study are intended to improve understanding of program use, identify changes over time, identify areas for program improvement, and to inform public communication campaigns.

The City has implemented new solid waste programs. The following summarizes those programs:

- In 2023, the City launched a mandatory curbside organics (green cart) collection program for the single family (SF) sector and mandated organics diversion programming for the industrial, commercial, and institutional (ICI) sector.
- In the Spring of 2024, the City implemented a variable rate fee structure for curbside garbage (black cart) collection services. Households with smaller carts were charged less. As new garbage carts were rolled out, households can request a smaller cart size (i.e., 120 L or 240 L). The Summer 2024 sorting event represents the first waste characterization event where variable cart sizes were noted in the field.

The scope of the study consists of nine seasonal waste sorting events over a three-year period. The first six waste sorts were conducted in October 2023 (Fall 2023), December 2023 (Winter 2023), April 2024 (Spring 2024), August 2024 (Summer 2024), October 2024 (Fall 2024), and February 2025 (Winter 2025).

This report summarizes the results from the Summer 2024, Fall 2024, and Winter 2025 sampling events. The waste streams characterized include garbage, recycling, and organics from the SF residential sector, and garbage from the multi-unit (MU) residential sector and residential drop off (DO) sectors. Table 1-1 summarizes the dates when the sorting events occurred.

Table 1-1: Timeframe of Sorting Events

#	Season	Dates
1	Summer 2024	August 12 to 24, 2024
2	Fall 2024	October 21 to November 1, 2024
3	Winter 2025	February 3 to 28, 2025

1.1 Scope of Work

The scope of work involves characterizing the composition of the garbage, recycling, and organics streams from curbside collected SF households, and garbage from the MU residential sector and DO sector. The fieldwork involves the following:

- Collect garbage, recycling, and organics samples from select SF households.
- Document waste stream set outs and cart fullness as the SF carts are collected.
- Transport collected SF household samples to a designated sorting area.
- Collect MU garbage samples from MU waste collection trucks as it enters the landfill.

- Work with landfill staff to unload and spread out DO garbage at the designated assessment area where the garbage from the DO sector can be visually assessed (only conducted in the summer and fall.
- Sort and weigh the collected waste samples (with the exception of DO garbage).

The objectives of this study include the following:

- Document the amount and types of materials discarded in the recycling, organics, and garbage waste streams to establish a baseline for the SF residential sector.
- Document the amount and types of materials discarded in the garbage waste stream to establish a baseline for the MU and DO residential sector.
- Determine the amount of contamination found in the recycling and organic streams, and the amount of divertible materials in the SF, MU, and DO garbage streams.
- Estimate SF waste generation rates for the three waste streams.
- Determine the capture rates for SF recyclables and organics relative to the SF waste generation rate.
- Document the SF cart fullness prior to collection.
- Estimate diversion potential for other waste streams (such as those that have diversion programs) that could be diverted through depots such as household hazardous waste, construction waste, and textiles.
- Assess service level suitability (i.e., collection frequency and cart size) for SF residents.

A sampling plan was prepared in conjunction with City staff. A total of 100 households were selected from ten neighbourhoods and those households were the same for the Summer 2024, Fall 2024, and Winter 2025 sorting events. Table 1-2 summarizes the selected neighbourhoods, collection route number and code, number of households selected, cart set out location and description.

Table 1-2: Single Family Households Characterized

Neighbourhood	Collection Route	Route Code	Number of Homes	Set Out Location	Description
Nutana	1	NUT	10	Back Lane	10 homes in a row
Nutana Park	2	NPA	10	Back Lane	10 homes in a row
Eastview	3	EAS	10	Back Lane	10 homes in a row
Rosewood	4	ROS	10	Front Street	10 homes in a row
Willowgrove	5	WIL	10	Front Street	10 homes in a row
City Park	6	CIT	10	Back Lane	10 homes in a row, one home with two sets of carts
Silverwood Heights	7	SIL	10	Front Street	10 homes in a row
Mount Royal	8	MOU	10	Front Street	10 homes in a row
Dundonald	9	DUN	10	Front Street	10 homes in a row
Parkridge	10	PAR	10	Front Street	10 homes in a row
		Total	**100**		

1.2 Project Limitations

The findings of this study may be limited by the following factors:

- **Sampling Methodology:** Results from this sampling methodology are directly correlated to the 10 households that were selected for collection in each neighbourhood. It was assumed that these households would be representative of the entire neighbourhood.
- **Residential Behaviour:** Samples were collected from the same households for all three seasons. Residents may have recognized the collection team, and that may have affected resident's behaviour patterns with respect to waste disposal practices due to their awareness of the waste characterization study.
- **Diversion Potential:** The diversion potential is calculated based on an ideal scenario where residents are correctly utilizing all waste diversion options that were available at the time of the study. Diversion potential is considered a theoretical maximum and represents the upper boundary of what could be possible given the current waste composition and waste diversion programs.
- **Set-Out Rates:** The noted set-out rates for carts in back lane collection locations could potentially be skewed higher. Carts at these locations are not always returned to the resident's yard or property and are all placed on one side of the alley, increasing the potential of an extra collected cart if they were not labelled correctly.
- **Waste Produced Per Household Estimation:** The amount of waste produced every two weeks per household is calculated by dividing the total weight collected by the total number of possible households. It does not take into account the set-out rate.

1.3 Overview of Solid Waste Services in the City

1.3.1 Single Family Residential Garbage, Recycling, and Organics

The City's provides curbside collection services for garbage, recycling, and organics for SF households.

Garbage (black cart) is collected on a bi-weekly basis year-round. The default cart size is 360 L; however, households have the option to request a smaller cart (i.e. 240 L or 120 L). Collection operations are conducted by the City. In 2024, the City implemented a variable utility fee for garbage collection which is depends on cart size.

Recycling (blue cart) is collected on a bi-weekly basis year-round. The default cart size is 360 L. Collection operations are conducted under contract with a third-party service provider. Recycling collection is funded through a recycling utility fee and residents have the option to pay for an additional cart, if desired.

Organics (green cart) is collected on a bi-weekly basis for spring, summer and fall and on a monthly basis for winter. Organics includes yard and food waste. The default cart size is 360 L and collection operations are conducted by the City. Prior to 2023, the green cart program was a voluntary, subscription-based program; however, in the spring of 2023, the green cart program became a mandatory city-wide program for all SF households receiving curbside collection. Organics collection was funded through property taxes in 2023; however, as of 2024, the City has implemented a utility fee for organics collection.

All three waste streams are collected on different days of the week (e.g., no more than one cart is placed out for collection on any given day). Set out locations for carts vary depending on the location in the City but include both front street and back lane. Front street collections occur on both sides of the street; however, back lane collections occur on only one side of the lane. Materials that were placed outside of the carts are not collected.

1.3.2 Multi-Unit Residential Garbage

MU residential apartments and condominiums receive weekly garbage collection service from communal metal garbage bins. Collection operations are conducted by the City but buildings may choose to contract garbage collection through private service providers. Garbage collection costs are funded through property taxes.

1.3.3 Residential Garbage Drop Off

Residents can drop off garbage materials at the Saskatoon Regional Waste Management Centre (Landfill) for a fee. The waste material is deposited into large roll-off bins and aggregated together. Waste materials in these roll-off bins are materials that are not typically collected from the curbside collection program or from residents that do not have curbside collection service.

2.0 METHODOLOGY

The following section describes the methodology that was undertaken to conduct this study. Appendix B includes photos that highlight some of the activities.

2.1 Health and Safety

A Health and Safety Plan (HASP) was developed for this project to identify potential hazards in advance of the waste composition study. The HASP was reviewed and updated to account for seasonal changes (e.g., potential for warmer weather or winter-like conditions in the fall) as well as inputs and lessons learned from past sorting events. Tetra Tech staff conducting field work for this study were required to have up-to-date safety certifications and training for waste sorting activities. Personal protective equipment, including face masks, safety goggles, gloves, steel toe boots, coveralls, and hi-vis vests, was worn by all field staff according to Tetra Tech's HASP.

As the waste sorting was conducted at the Landfill, all Tetra Tech staff completed a landfill safety orientation required by the City to understand site-specific hazards, controls, and expectations. A safe working location was selected and clearly demarcated. Safety meetings were conducted by Tetra Tech at the beginning of each day to review and identify key concerns and hazard mitigation strategies, including how to handle material hazards such as sharps or hazardous materials, safe lifting of heavy material, and working around and driving vehicles.

2.2 Sampling Plan

Tetra Tech worked with City staff to select households for the study. For the three sorting events, a total of 100 households were selected from ten neighbourhoods with different collection routes in the City. Each season, four MU collection routes were selected. Tetra Tech sorted two samples from each MU route for a total of eight samples. Each load included multiple MU complexes from one area of Saskatoon. DO garbage was characterized in the Summer 2024 and Fall 2024 events.

Table 2-1: Number of Samples Planned for Each Sector and Season

Season	SF Garbage	SF Recycling	SF Organics	MU Garbage	DO Garbage	Total
Summer 2024	10	10	10	8	8	46
Fall 2024	10	10	10	8	8	46
Winter 2025	10	10	10	8	0	38
Total	30	30	30	24	16	130

2.3 Sample Collection Methodology

2.3.1 Single Family Curbside Collection

Each day, Tetra Tech arrived at the first collection location no earlier than 8:00 a.m. (note that carts are required to be placed out at the curb for collection by 7:00 a.m. as per the City's Waste Bylaw). Prior to material collection, Tetra Tech field staff recorded the number of garbage, organics, or recycling carts that were set out from the selected households and estimated the percent cart fullness. Cart fullness was estimated by visually comparing the height of materials to the height of the cart. If there was a low number of carts set out (e.g., less than 70%), staff recorded this and returned later that morning to collect materials from any additional carts set out. During collection, staff also recorded general observations and resident encounters. Recorded observations would include any additional materials placed outside of the garbage cart or if there was a large amount of contamination (e.g., building materials) in or around the cart. During the sampling events, cart sizes (e.g., 360 L, 240 L, or 120 L) were noted for the garbage stream.

Tetra Tech field staff collected all contents from each household's carts. Only materials that were placed inside the carts were collected and characterized. Materials collected from carts in a neighbourhood were mixed and represented a single sample. Tetra Tech labelled material while collecting to make sure samples were not mixed or co-mingled. All home addresses were confidential and were only provided to the field supervisor for coordination purposes. Measures were taken to ensure all data collected remained anonymous, and results were aggregated.

Once the samples were collected, Tetra Tech staff transported the materials to the designated sorting area at the Landfill. Samples were then unloaded, and the sorting team organized the materials to make sure samples were not mixed or co-mingled.

2.3.2 Multi-Unit Residential Collection

Tetra Tech's field lead worked closely with City staff to identify loads for sampling that were considered representative of the MU residential sector. The City coordinated, collected, and delivered selected loads to the landfill face, and Tetra Tech's field lead worked closely with City staff and facility operators to confirm the load was emptied at the designated area for sampling. Two samples were taken from each collection truck. Tetra Tech documented the load details (photographs) and sample selection methodology was followed. All MU samples were hand sorted. The samples from the MU residential sector included only the garbage stream.

2.3.3 Residential Drop Off Collection

Tetra Tech's field lead worked closely with City staff to identify loads for sampling that were considered representative of the DO sector. The City coordinated, collected, and delivered selected loads from the bins at the public drop off area to the landfill face. Tetra Tech's field lead worked closely with City staff and facility operators to confirm the load was emptied at the designated area for sampling. As loads of DO material were received at the landfill face, Tetra Tech documented the load details (photographs) and sample selection methodology was followed. All DO samples were visually audited.

2.4 Waste Characterization Approach

SF loads were collected and transported by Tetra Tech staff. As selected MU and DO loads for sampling arrived at the Landfill, Tetra Tech's field lead would communicate with the City staff to confirm that the load was brought to the designated collection area for sample collection.

2.4.1 Hand Sort

All SF and MU loads were hand sorted. For the garbage stream, the field team took a subsample that was approximately 100 kg for hand sorting, collecting material from each SF collection bag to minimize potential bias. For the recycling and organics streams, the entire samples were sorted. Each sample was then hand sorted into its respective material categories.

All samples were sorted as per the categories agreed upon with the City. Each categorized item was placed into respective bins. The contents of each bin were then weighed and recorded to determine the weight for each secondary category. Details of the sorting categories are included in Appendix C, along with their description, and preferred diversion/disposal method.

The waste streams were characterized into 13 primary categories which were then further divided into 67 secondary categories. Primary categories include the following:

- Paper
- Metals
- Food waste
- Yard waste
- Bulky waste
- Paper packaging
- Glass
- Construction and demolition waste
- Household hygiene
- Plastics
- Household hazardous waste
- Waste electrical and electronic equipment
- Other materials

Note that the term “household hazardous waste” is an industry term that refers to household products that may be flammable, corrosive, or toxic under certain conditions, but are generally safe to handle under normal conditions. The “household hygiene” category includes materials such as diapers, sanitary products, and pet waste. The “other materials” primary category includes materials such as textiles, tires and other rubber, other waste, and wooden utensils.

2.4.2 Visual Estimates

Visual estimates were conducted for all DO loads, after confirming that bagged garbage made up less than 30% of each load. The samples were visually estimated and characterized by having two staff members walk around the load to visually estimate composition by volume, first by primary categories, then by secondary categories. Individual results were recorded by staff and an average was taken and recorded electronically.

2.5 Data Analysis

Data analysis was performed using Tetra Tech’s spreadsheet analysis tool. Data was compiled into primary and secondary categories by weight. The composition for each stream was calculated as weighted averages.

The types of data analysis undertaken by Tetra Tech include the following:

- Set out rates, fullness, and cart size of curbside carts.
- Bi-weekly generation rates.
- Composition of materials by material type and weight.
- Diversion potential or contamination rate of materials.
- Capture rates of recyclable and organic materials.
- Counts of plastic film bags (non-packaging) and compostable/biodegradable bags.
- Notable items.

3.0 RESULTS

3.1 Single Family Garbage

The following summarizes the waste composition results for the SF garbage stream over the three sampling events (Summer 2024, Fall 2024, Winter 2025).

3.1.1 Set-Out Rates

Table 3-1 summarizes the set-out rates for each season for SF residential garbage carts. The average set-out rate was 87% for all three seasons, and the average set-out rates in Summer 2024, Fall 2024, and Winter 2025 was 90%, 91%, and 81%, respectively. The range of average set-out rates based on the routes was between 72% and 97%.

Table 3-1: Garbage Cart Set-Out Rates

Route	Set Out Location	Summer 2024 (%)	Fall 2024 (%)	Winter 2025 (%)	Average (%)
Nutana	Back Lane	No sample	90%	80%	**85%**
Nutana Park	Back Lane	100%	100%	70%	**90%**
Eastview	Back Lane	80%	90%	90%	**87%**
Rosewood	Front Street	100%	90%	100%	**97%**
Willowgrove	Front Street	90%	90%	90%	**90%**
City Park	Back Lane	70%	90%	55%	**72%**
Silverwood Heights	Front Street	90%	100%	80%	**90%**
Mount Royal	Front Street	90%	90%	70%	**83%**
Dundonald	Front Street	100%	90%	90%	**93%**
Parkridge	Front Street	90%	80%	90%	**87%**
	Average	**90%**	**91%**	**81%**	**87%**

3.1.2 Garbage Collected Per Household

Table 3-2 summarizes the amount of material collected per household for each season for SF residential garbage carts. The average amount of garbage per household was 17 kg/household for all three seasons, and the average amount of garbage per household in Summer 2024, Fall 2024, and Winter 2025 was 17 kg/household, 18 kg/household, and 15 kg/household, respectively. The average disposal rate for all three seasons ranged between 12 kg/household and 27 kg/household over a two-week period.

Table 3-2: Amount of Garbage Material Disposed per Household per Two Week Period

Route	Set Out Location	Summer 2024 (kg/household)	Fall 2024 (kg/household)	Winter 2025 (kg/household)	Average (kg/household)
Nutana	Back Lane	No sample	17.03	7.27	**12.15**
Nutana Park	Back Lane	15.19	14.79	10.31	**13.43**
Eastview	Back Lane	12.48	14.45	11.71	**12.88**
Rosewood	Front Street	26.22	26.52	28.83	**27.19**
Willowgrove	Front Street	10.79	11.13	13.61	**11.84**
City Park	Back Lane	19.67	18.49	15.21	**17.79**
Silverwood Heights	Front Street	11.39	19.57	12.88	**14.61**
Mount Royal	Front Street	21.33	17.81	15.99	**18.38**
Dundonald	Front Street	21.09	18.79	16.41	**18.76**
Parkridge	Front Street	18.42	19.15	17.84	**18.47**
	Average	**17.40**	**17.77**	**15.00**	**16.72**

3.1.3 Cart Fullness

Table 3-3 summarizes the average cart fullness for each season for SF residential garbage carts. The average level of cart fullness was 68% for all three seasons, and the average level of cart fullness in Summer 2024, Fall 2024, and Winter 2025 was 65%, 68%, and 70%, respectively. The range of cart fullness for all three events by route was between 57% and 76%.

Table 3-3: Garbage Cart Fullness

Route	Set Out Location	Summer 2024 (%)	Fall 2024 (%)	Winter 2025 (%)	Average (%)
Nutana	Back Lane	No sample	71%	62%	**66%**
Nutana Park	Back Lane	69%	64%	57%	**63%**
Eastview	Back Lane	53%	60%	62%	**58%**
Rosewood	Front Street	67%	73%	83%	**74%**
Willowgrove	Front Street	66%	59%	75%	**67%**
City Park	Back Lane	81%	67%	80%	**76%**
Silverwood Heights	Front Street	41%	66%	63%	**57%**
Mount Royal	Front Street	76%	64%	74%	**71%**
Dundonald	Front Street	69%	84%	74%	**76%**
Parkridge	Front Street	62%	75%	66%	**67%**
	Average	**65%**	**68%**	**70%**	**68%**

3.1.4 SF Garbage Waste Composition Results

Figure 3-1 illustrates the average garbage waste composition across the three sorting events from Summer 2024 to Winter 2025. The largest primary categories were food waste (28%), followed by household hygiene (14%), plastics (14%), Paper (9%) and Construction and Demolition waste (8%).

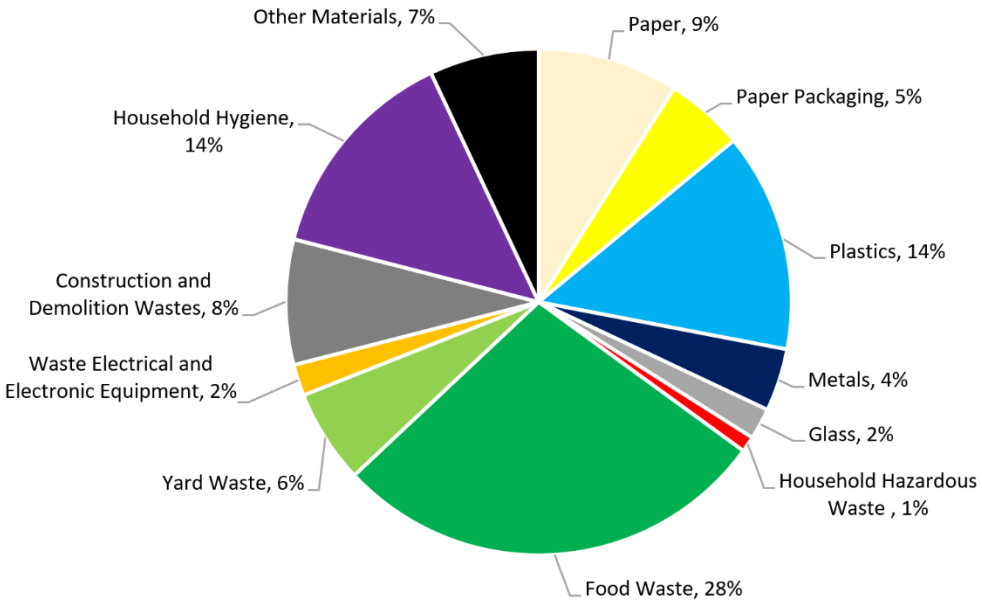


Figure 3-1: SF Garbage Average Composition

Figure 3-2 compares the garbage waste composition across the three sorting events. The largest primary category was food waste (Summer: 21%, Fall: 30%, Winter: 34%). The next largest primary category was household hygiene (Summer: 12%, Fall: 13%, Winter: 17%), followed by plastics (Summer: 15%, Fall: 13%, Winter: 13%), paper (Summer: 9%, Fall: 9%, Winter: 9%), and construction and demolition wastes (Summer: 15%, Fall: 7%, Winter: 3%). These five categories (food waste, household hygiene, plastics, paper, construction and demolition wastes) made up between 72% to 76% of the garbage stream each season.

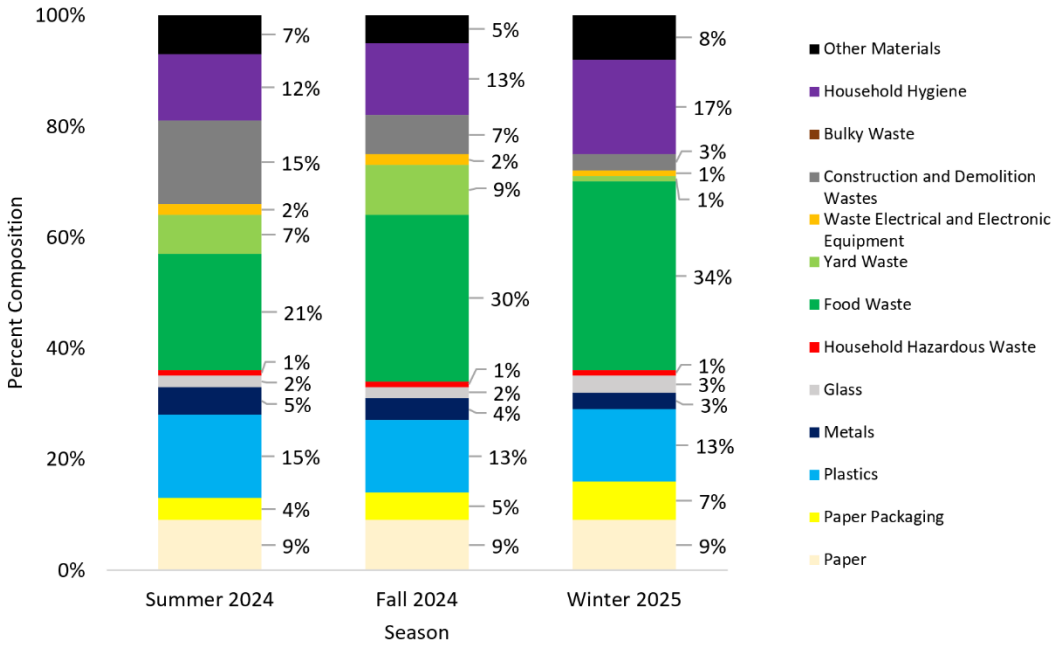


Figure 3-2: Three-Season SF Garbage Composition

3.1.5 Diversion Potential

Figure 3-3 summarizes the diversion potential of the SF garbage stream. The diversion potential represents the percentage of materials that could be diverted from the garbage stream through the City's organics, recycling, and depot programs. The 'No Program' category represents the theoretical diversion potential of materials from the garbage stream, but no corresponding program or service is currently offered (such as construction and demolition waste and bulky waste). The total diversion potential for the SF garbage stream ranged from 69% to 71%. The diversion potential for the SF garbage stream based on existing programs and services ranged from 56% to 66%. Most of the divertible materials were compostable (35% to 45%), followed by recyclable (10% to 13%), items that can be dropped off at a depot (9% to 11%), and no program (3% to 15%).

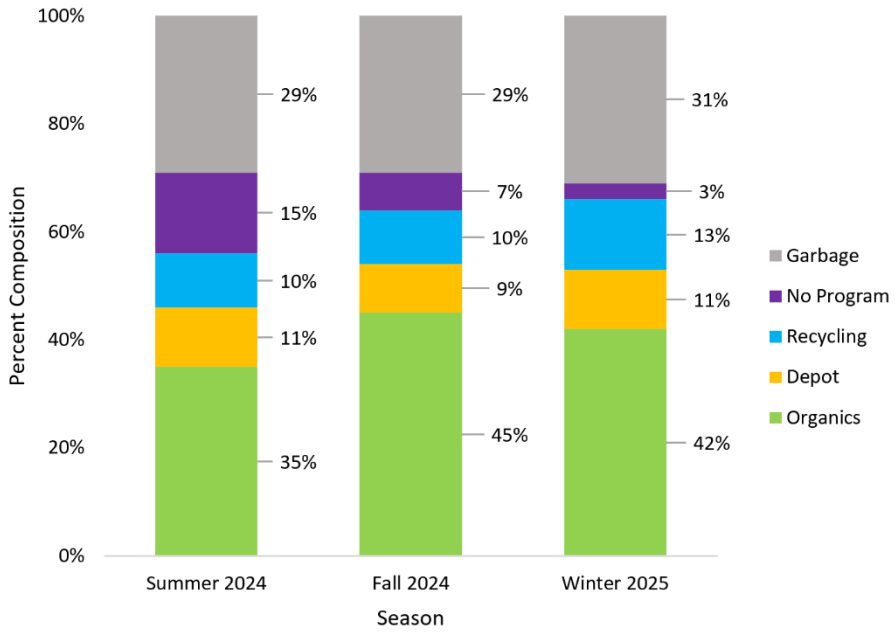


Figure 3-3: Three-Season SF Garbage Diversion Potential

3.2 Single Family Recycling

The following summarizes the composition results for the SF recycling stream over three sorting events (Summer 2024, Fall 2024, Winter 2025).

3.2.1 Set-Out Rates

Table 3-4 summarizes the set-out rates for each season for SF residential recycling carts. The average recycling cart set-out was 79% for all three seasons and the average recycling set-out rates in Summer 2024, Fall 2024, and Winter 2025 was 80%, 80%, and 76%, respectively. The average recycling cart set-out rate by routes was between 45% and 93%.

Table 3-4: Recycling Cart Set-Out Rates

Route	Set Out Location	Summer 2024 (%)	Fall 2024 (%)	Winter 2025 (%)	Average (%)
Nutana	Back Lane	No sample	90%	90%	**90%**
Nutana Park	Back Lane	No sample	70%	60%	**65%**
Eastview	Back Lane	80%	90%	90%	**87%**
Rosewood	Front Street	100%	90%	90%	**93%**
Willowgrove	Front Street	70%	90%	90%	**83%**
City Park	Back Lane	60%	90%	64%	**71%**
Silverwood Heights	Front Street	100%	100%	70%	**90%**
Mount Royal	Front Street	No sample	40%	50%	**45%**
Dundonald	Front Street	90%	80%	100%	**90%**
Parkridge	Front Street	60%	60%	60%	**60%**
	Average	**80%**	**80%**	**76%**	**79%**

3.2.2 Recycling Collected Per Household

Table 3-5 summarizes the amount of recycling cart materials collected per household for each season for SF residential recycling carts. The average amount of recycling cart materials per household was 5 kg/household for all three seasons, and the average amount of recycling cart materials per household in Summer 2024, Fall 2024, and Winter 2025 was 4 kg/household, 5 kg/household, and 5 kg/household, respectively. The average recycling collection rate by route ranged between 3 kg/household and 6 kg/household over a two-week period.

Table 3-5: Amount of Recycling Material Disposed per Household per Two Week Period

Route	Set Out Location	Summer 2024 (kg/household)	Fall 2024 (kg/household)	Winter 2025 (kg/household)	Average (kg/household)
Nutana	Back Lane	No sample	4.48	5.20	**4.84**
Nutana Park	Back Lane	No sample	3.89	3.04	**3.47**
Eastview	Back Lane	4.37	6.98	6.68	**6.01**
Rosewood	Front Street	6.88	7.28	5.28	**6.48**
Willowgrove	Front Street	3.64	4.92	4.36	**4.31**
City Park	Back Lane	3.01	5.33	3.37	**3.90**
Silverwood Heights	Front Street	5.75	5.09	5.32	**5.38**
Mount Royal	Front Street	No sample	1.26	6.54	**3.90**
Dundonald	Front Street	5.24	4.17	8.98	**6.13**
Parkridge	Front Street	2.57	3.34	2.50	**2.80**
	Average	**4.49**	**4.67**	**5.13**	**4.76**

3.2.3 Cart Fullness

Table 3-6 summarizes the average cart fullness for each season for SF residential recycling carts. The average level of fullness for recycling carts was 67% for all three seasons, and the average level of fullness for recycling carts in Summer 2024, Fall 2024, and Winter 2025 was 68%, 58%, and 74%, respectively. The range of cart fullness by route was between 54%, and 80%.

Table 3-6: Recycling Cart Fullness

Route	Set Out Location	Summer 2024 (%)	Fall 2024 (%)	Winter 2025 (%)	Average (%)
Nutana	Back Lane	No sample	44%	73%	**59%**
Nutana Park	Back Lane	No sample	55%	60%	**58%**
Eastview	Back Lane	63%	65%	83%	**71%**
Rosewood	Front Street	80%	74%	88%	**80%**
Willowgrove	Front Street	71%	64%	66%	**67%**
City Park	Back Lane	68%	68%	72%	**69%**
Silverwood Heights	Front Street	58%	69%	75%	**67%**
Mount Royal	Front Street	No sample	19%	89%	**54%**
Dundonald	Front Street	67%	61%	68%	**65%**
Parkridge	Front Street	69%	61%	63%	**64%**
	Average	**68%**	**58%**	**74%**	**67%**

3.2.4 SF Recycling Waste Composition Results

Figure 3-4 represents the average recycling waste composition across the three sorting events. The largest primary categories were paper packaging (48%), paper (18%) plastics (16%), glass (9%) and metal (5%).

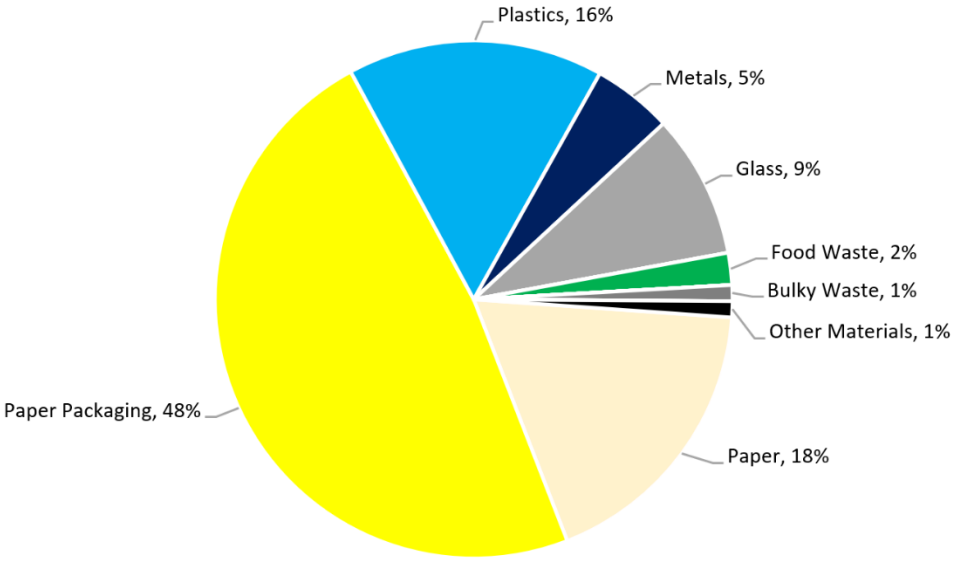


Figure 3-4: SF Recycling Average Composition

Figure 3-5 compares the recycling cart material composition across the three sorting events. The largest primary category was paper packaging (Summer: 49%, Fall: 47%, Winter: 47%). The next largest primary category was paper (Summer: 17%, Fall: 21%, Winter: 16%), followed by plastics (Summer: 18%, Fall: 14%, Winter: 15%). These three categories (paper packaging, paper, plastics) made up between 78% to 84% of the recycling stream each season.

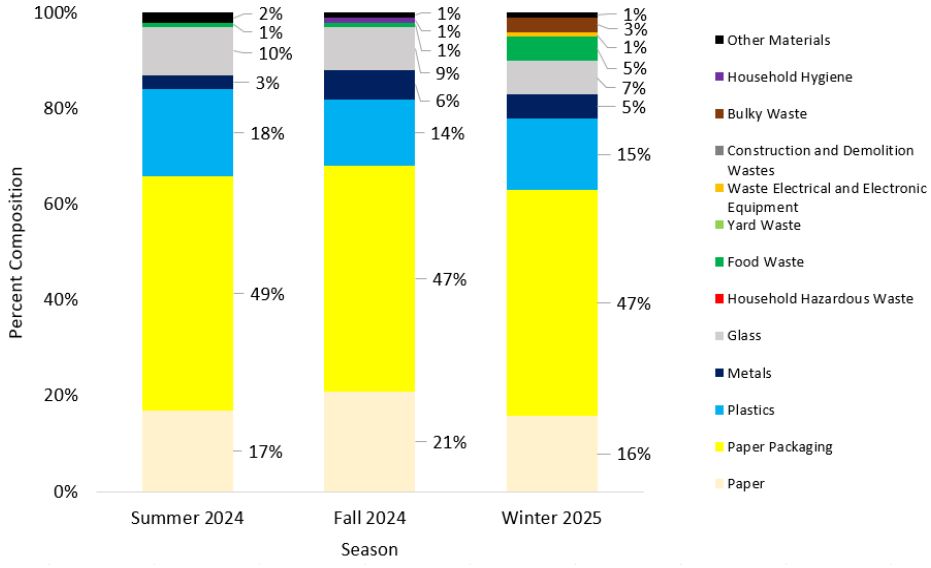


Figure 3-5: Three-Season SF Recycling Composition

3.2.5 Contamination Rate

Figure 3-6 summarizes the contamination level in the SF recycling stream. The percent contamination represents the percentage of materials that are considered garbage, organic, or depot materials. The total percent contamination for the SF recycling stream ranged between 12% and 20%. Most of the contamination materials were garbage (8% to 10%), organics (1% to 6%), depot materials (1% to 3%), and no program materials (0% to 3%).

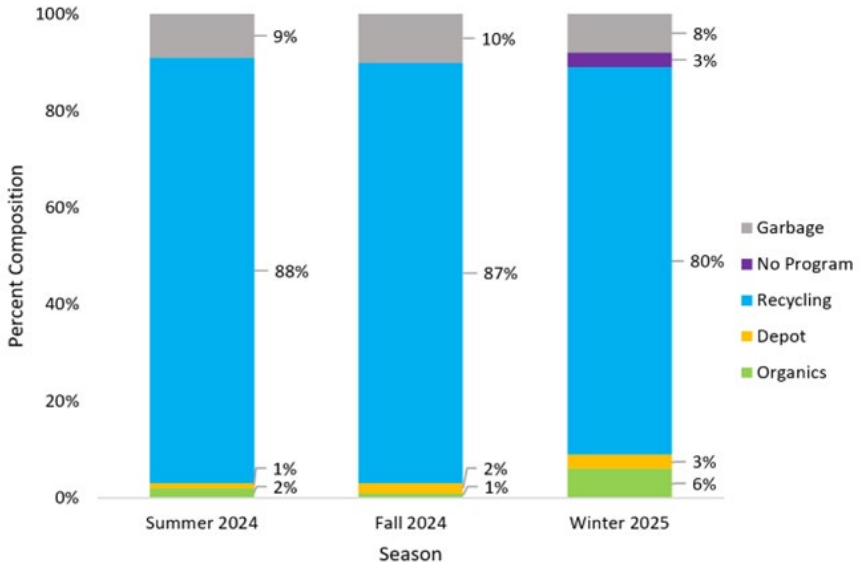


Figure 3-6: Three-Season SF Recycling Contamination Rate

3.2.6 Recyclable Material Capture Rate

Table 3-7 summarizes the capture rate of the recycling stream. The capture rate for recyclables in the recycling stream was determined to be 70%, 70%, and 69% for Summer 2024, Fall 2024, and Winter 2025, respectively.

Table 3-7: Recyclable Material Capture Rate

	Summer 2024	Fall 2024	Winter 2025
Total Recyclables in Garbage, Recycling, and Organics Streams	56.76 kg	58.44 kg	60.81
Total Recyclables Captured in the Recycling Stream	39.43 kg	40.96 kg	41.07
Capture Rate	**69.5%**	**70.1%**	**67.5%**

3.3 Single Family Organics

The following summarizes the composition results for the SF organics stream over the first three sorting events (Summer 2024, Fall 2024, Winter 2025).

3.3.1 Set-Out Rates

Table 3-8 summarizes the set-out rates for each season for SF organics carts. The average organics cart set-out was 60% for all three seasons, and the average set-out rates in Summer 2024, Fall 2024, and Winter 2025 was 74%, 78%, and 29%, respectively. The range of set-out rates by route was between 36% and 100%.

Table 3-8: Organics Cart Set-Out Rates

Route	Set Out Location	Summer 2024 (%)	Fall 2024 (%)	Winter 2025 (%)	Average (%)
Nutana	Back Lane	80%	100%	60%	**80%**
Nutana Park	Back Lane	70%	80%	No sample	**75%**
Eastview	Back Lane	90%	100%	40%	**77%**
Rosewood	Front Street	90%	60%	50%	**67%**
Willowgrove	Front Street	70%	80%	20%	**57%**
City Park	Back Lane	30%	70%	9%	**36%**
Silverwood Heights	Front Street	70%	70%	30%	**57%**
Mount Royal	Front Street	60%	50%	0%	**37%**
Dundonald	Front Street	100%	100%	No sample	**100%**
Parkridge	Front Street	80%	70%	20%	**57%**
	Average	**74%**	**78%**	**29%**	**60%**

3.3.2 Organics Collected Per Household

Table 3-9 summarizes the amount of organics material collected per household for each season for SF organics carts. The average amount of organic materials per household (over two weeks) was 14 kg/household for all three seasons, and the average amount of organic materials per household in Summer 2024, Fall 2024, and Winter 2025 was 20 kg/household, 19 kg/household, and 2 kg/household, respectively. The average organics collection rate (for all three seasons) by route ranged between 7 kg/household and 28 kg/household over a two-week period.

Table 3-9: Amount of Organics Material Disposed per Household per Two Week Period

Route	Set Out Location	Summer 2024 (kg/household)	Fall 2024 (kg/household)	Winter 2025 (kg/household)**	Average (kg/household)
Nutana	Back Lane	9.94	15.22	3.87	**9.68**
Nutana Park	Back Lane	15.93	15.03	No sample	**15.48**
Eastview	Back Lane	29.89	38.34	3.25	**23.82**
Rosewood	Front Street	24.43	14.09	4.26	**14.26**
Willowgrove	Front Street	11.99	17.12	0.71	**9.94**
City Park	Back Lane	7.03	14.19	0.66	**7.29**
Silverwood Heights	Front Street	16.47	11.67	4.48	**10.87**
Mount Royal	Front Street	10.99	11.51	0.00	**7.50**
Dundonald	Front Street	22.17	34.73	No sample	**28.45**
Parkridge	Front Street	55.72	14.03	1.22	**23.66**
	Average	**20.46**	**18.59**	**2.31**	**13.78**

* Organics samples in Winter 2025 were collected over a four week period but have been adjusted.

3.3.3 Cart Fullness

Table 3-10 summarizes the average cart fullness for each season for SF residential organics carts. The average level of cart fullness was 47% for all three seasons and the average level of cart fullness in Summer 2024, Fall 2024, and Winter 2025 was 51%, 63%, and 26%, respectively. The level of cart fullness by route ranged between 32% and 68%.

Table 3-10: Organics Cart Fullness

Route	Set Out Location	Summer 2024 (%)	Fall 2024 (%)	Winter 2025 (%)	Average (%)
Nutana	Back Lane	34%	44%	18%	**32%**
Nutana Park	Back Lane	50%	66%	No sample	**58%**
Eastview	Back Lane	48%	81%	46%	**58%**
Rosewood	Front Street	40%	34%	39%	**38%**
Willowgrove	Front Street	49%	57%	10%	**38%**
City Park	Back Lane	70%	71%	10%	**50%**
Silverwood Heights	Front Street	39%	48%	30%	**39%**
Mount Royal	Front Street	45%	91%	No sample	**68%**
Dundonald	Front Street	59%	74%	No sample	**67%**
Parkridge	Front Street	78%	65%	30%	**58%**
	Average	**51%**	**63%**	**26%**	**47%**

3.3.4 SF Organics Waste Composition Results

Figure 3-7 represents the average organics composition across the three sorting events. The largest primary categories were yard waste (55%) and food waste (36%).

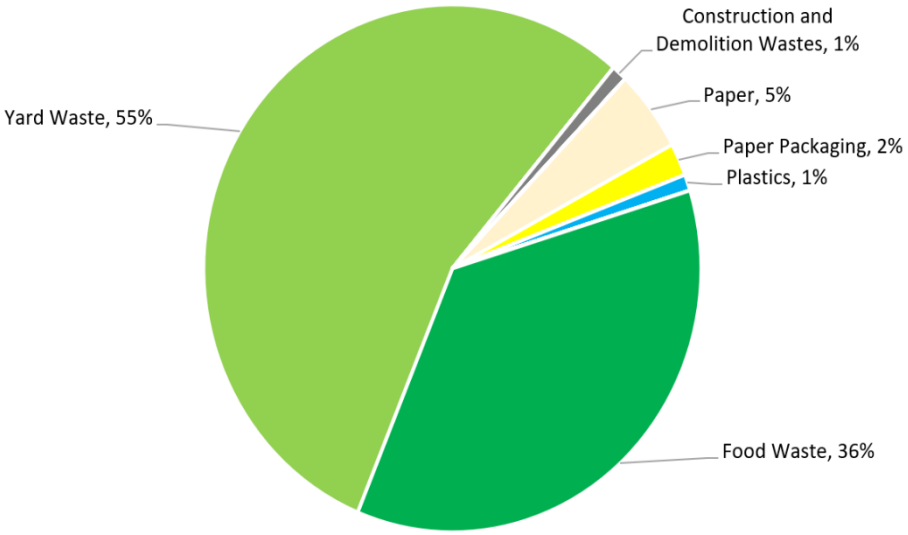


Figure 3-7: SF Organics Average Composition

Figure 3-8 compares the organics composition across the three sorting events. The largest primary category was yard waste (Summer 84%, Fall: 77%, Winter: 6%). The next largest primary category was food waste (Summer 12%, Fall: 18%, Winter: 79%). These two categories (yard waste and food waste) made up between 85% to 96% of the organics stream each season.

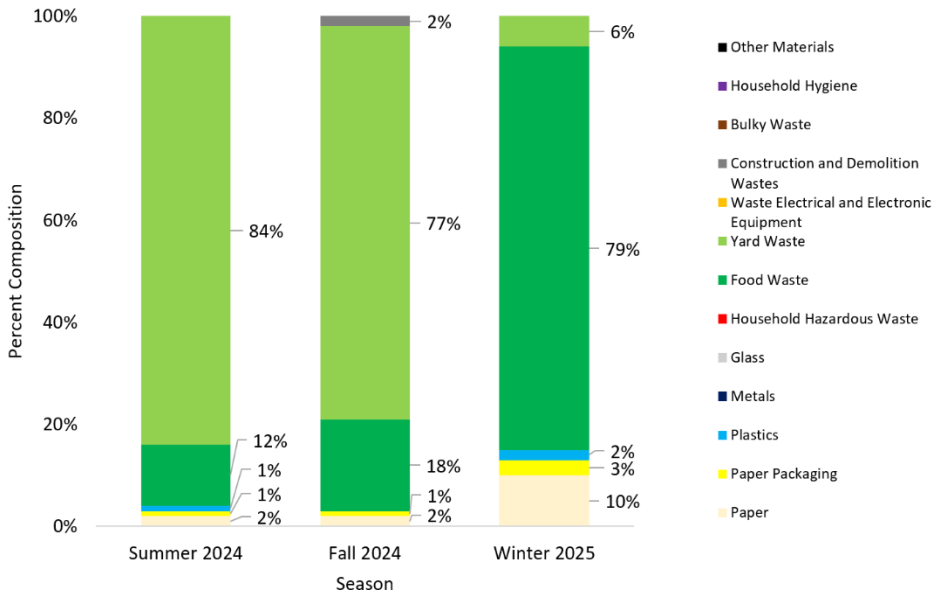


Figure 3-8: Three-Season SF Organics Composition

3.3.5 Contamination Rate

Figure 3-9 summarizes the contamination level in the SF organics stream. The contamination level represents the percentage of materials that are considered garbage, recycling, or depot materials. The contamination level for the SF organics stream ranged from 1% to 4%. Most of the contamination materials were garbage (1% to 4%), followed by no program materials (0% to 2%).

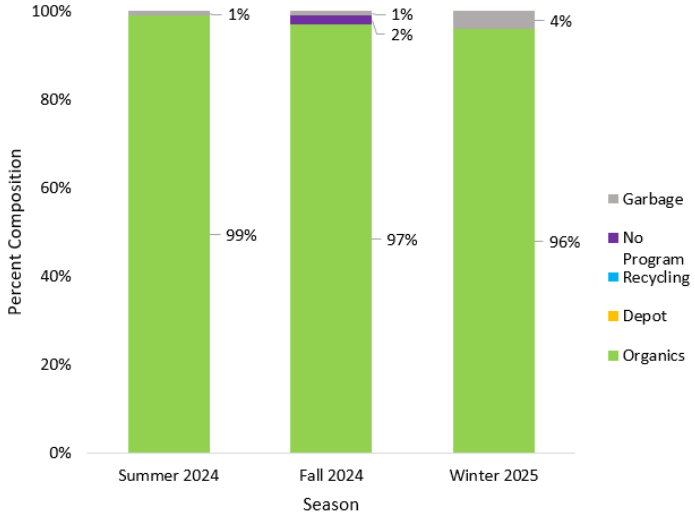


Figure 3-9: Three-Season SF Recycling Contamination Rate

3.3.6 Capture Rate

Table 3-11 summarizes the capture rate of the organics stream. The capture rate for organic material in the organics stream was determined to be 76%, 69%, and 40% for Summer 2024, Fall 2024, and Winter 2025, respectively.

Table 3-11: Organic Material Capture Rate

	Summer 2024	Fall 2024	Winter 2025
Total Organics in Garbage, Recycling, and Organics Streams	263.93 kg	265.07 kg	111.64
Total Organic Material Captured in the Organics Stream	201.64 kg	182.77 kg	44.57
Capture Rate	**76.4%**	**69.0%**	**39.9%**

3.3.7 Bag Count

The City requested a count of compostable bags in the organics samples. Table 3-12 summarize the number of compostable bags found in the SF organics stream. The average number of biodegradable/compostable bags per kg of organics was 17 bags/100 kg for all three seasons, and the average number of biodegradable/compostable bags per 100 kg of organics in Summer 2024, Fall 2024, and Winter 2025 was 8 bags/100 kg, 9 bags/100 kg, and 49 bags/100 kg, respectively. The average number of biodegradable/compostable bags by route ranged between 3 bags/100 kg and 43 bags/100 kg.

Table 3-12: Biodegradable/Compostable Bag Count

Route	Set Out Location	Summer 2024 (bags/100 kg)	Fall 2024 (bags/100 kg)	Winter 2025 (bags/100 kg)	Average (bags/100 kg)
Nutana	Back Lane	18	27	48	**31**
Nutana Park	Back Lane	6	3	No sample	**3**
Eastview	Back Lane	5	4	37	**15**
Rosewood	Front Street	2	13	34	**16**
Willowgrove	Front Street	18	13	99	**43**
City Park	Back Lane	7	2	0	**3**
Silverwood Heights	Front Street	7	6	32	**15**
Mount Royal	Front Street	9	12	No sample	**7**
Dundonald	Front Street	4	5	No sample	**3**
Parkridge	Front Street	1	9	95	**35**
	Average	**8**	**9**	**49**	**17**

The City requested a count of plastic non-packaging in the organics samples. Table 3-13 summarize the number of Low-density Polyethylene/High-density Polyethylene (LDPE/HDPE) non-packaging bags found in the SF organics stream. The average number of LDPE/HDPE non-packaging bags per 100 kg of organics was 1 bag/100kg for all three seasons, and the average number in Summer 2024, Fall 2024, and Winter 2025 was <1 bags100/kg, 1 bags/100kg, and 3 bags/100kg, respectively. The range of LDPE/HDPE non-packaging bags by route was between 0 bags/100kg and 3 bags/100kg.

Table 3-13: LDPE/HDPE Non-Packaging (bags/100 kg)

Route	Set Out Location	Summer 2024 (bags/100 kg)	Fall 2024 (bags/100 kg)	Winter 2025 (bags/100 kg)	Average (bags/100 kg)
Nutana	Back Lane	0	0	0	**0**
Nutana Park	Back Lane	2	0	No Sample	**1**
Eastview	Back Lane	0	1	0	**0**
Rosewood	Front Street	0	1	8	**3**
Willowgrove	Front Street	0	0	0	**0**
City Park	Back Lane	0	2	0	**1**
Silverwood Heights	Front Street	0	3	6	**3**
Mount Royal	Front Street	0	1	No Sample	**0**
Dundonald	Front Street	0	1	No Sample	**0**
Parkridge	Front Street	<1	1	4	**2**
	Average	**<1**	**1**	**3**	**1**

3.4 Multi-Unit Garbage

The following summarizes the waste composition results for the MU garbage stream over the three sampling events (Summer 2024, Fall 2024, Winter 2025).

3.4.1 MU Garbage Waste Composition Results

Figure 3-10 represents the average garbage waste composition across the three sorting events. The largest primary categories were food waste (24%), plastics (11%), household hygiene (10%), paper (9%) and other materials (9%).

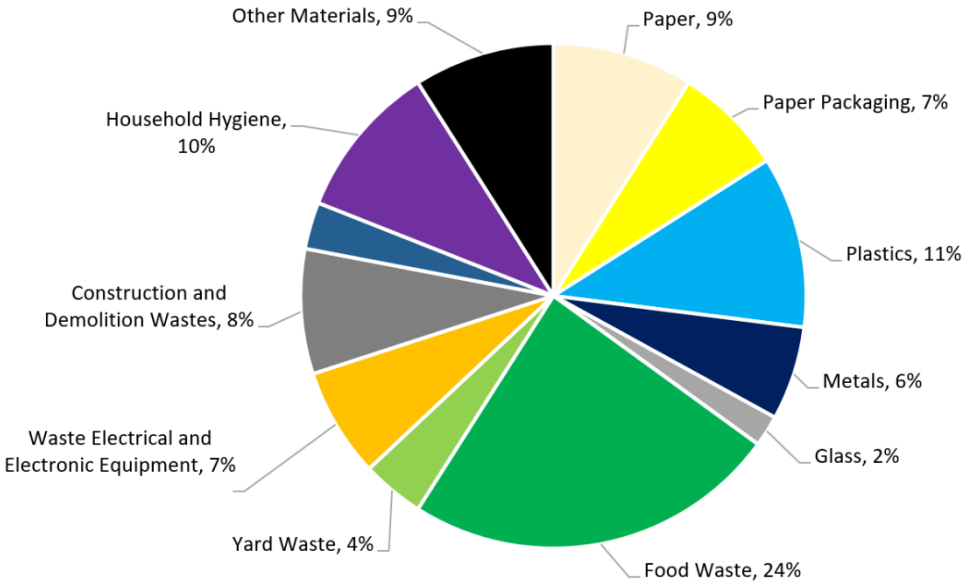


Figure 3-10: MU Garbage Average Composition

Figure 3-11 compares the garbage waste composition across the three sorting events. The largest primary category was food waste (Summer: 18%, Fall: 22%, Winter: 31%). The next largest primary category was plastics (Summer: 10%, Fall: 12%, Winter: 12%), followed by household hygiene (Summer: 9%, Fall: 10%, Winter: 12%), paper (Summer: 9%, Fall: 8%, Winter: 9%), and other materials (Summer: 13%, Fall: 9%, Winter: 6%). These five categories (food waste, plastics, household hygiene, paper, other materials) made up between 59% to 70% of the garbage stream each season.

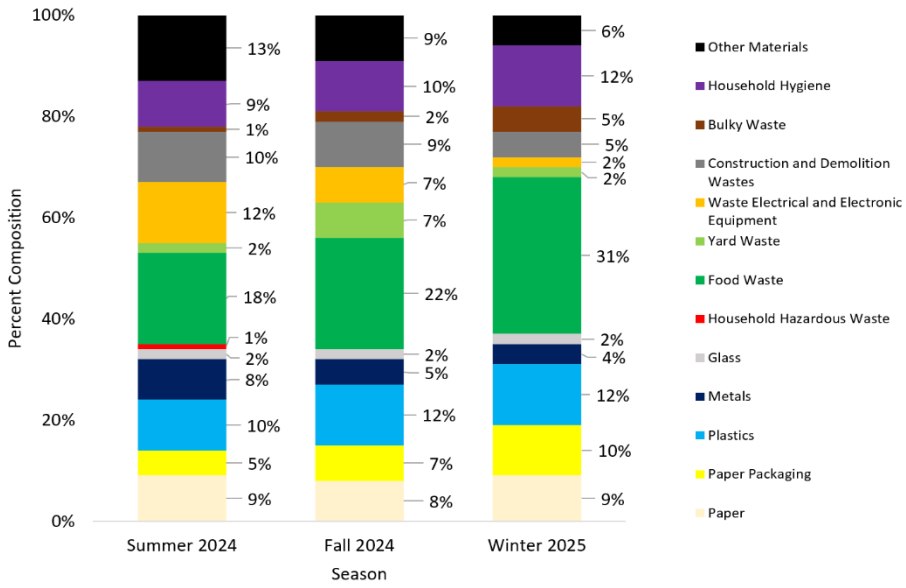


Figure 3-11: Three-Season MU Garbage Composition

3.4.2 Diversion Potential

Figure 3-12 summarizes the diversion potential of the MU garbage stream. The diversion potential represents the percentage of materials that could be diverted from the garbage stream through the City's organics, recycling, and depot programs. The 'No Program' category represents the theoretical diversion potential of materials from the garbage stream, but no corresponding program or service is currently offered (such as construction and demolition waste and bulky waste). The total diversion potential for the MU garbage stream ranged from 75% to 80%. The diversion potential for the MU garbage stream based on existing programs and services ranged from 64% to 69%. Most of the divertible materials were compostable (26% to 39%), items that can be dropped off at a depot (11% to 31%), followed by recyclable (12% to 19%), and no program (10% to 11%).

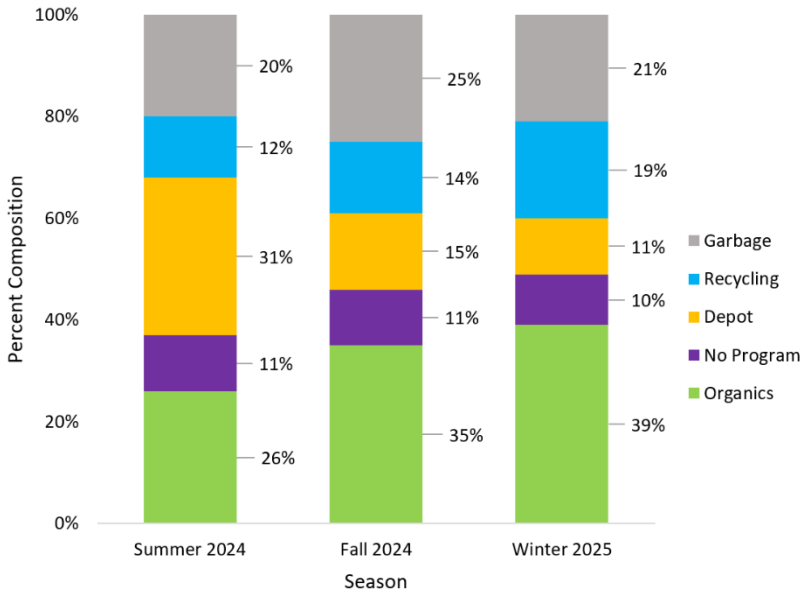


Figure 3-12: Three-Season MU Garbage Diversion Potential

3.5 Residential Drop Off Garbage

The following summarizes the waste composition results and diversion potential for residential DO garbage at the Landfill.

3.5.1 DO Garbage Waste Composition Results

Figure 3-13 represents the average garbage waste composition across the two sorting events, Summer 2024 and Fall 2024. The largest category was construction and demolition waste (56%), followed by yard waste (15%), and bulky waste (13%).

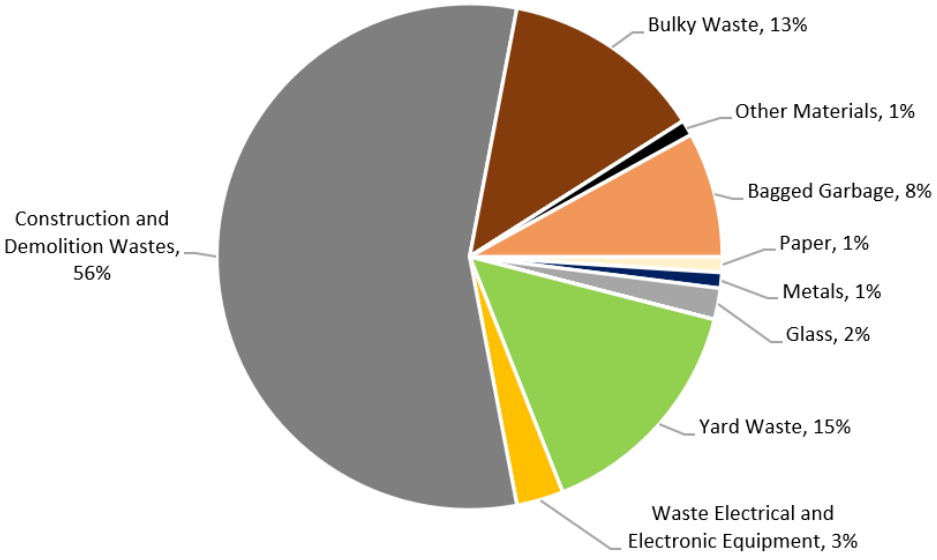


Figure 3-13: Average DO Garbage Composition

Figure 3-14 compares the garbage waste composition across the two sorting events, Summer 2024 and Fall 2024.

The largest primary category was construction and demolition waste (Summer: 28%, Fall: 31%). The next largest primary category was yard waste (Summer: 14%, Fall: 18%), followed by bulky waste (Summer: 13%, Fall: 12%). These three categories (construction and demolition waste, yard waste, bulky waste) made up between 83% to 86% of the garbage stream each season.

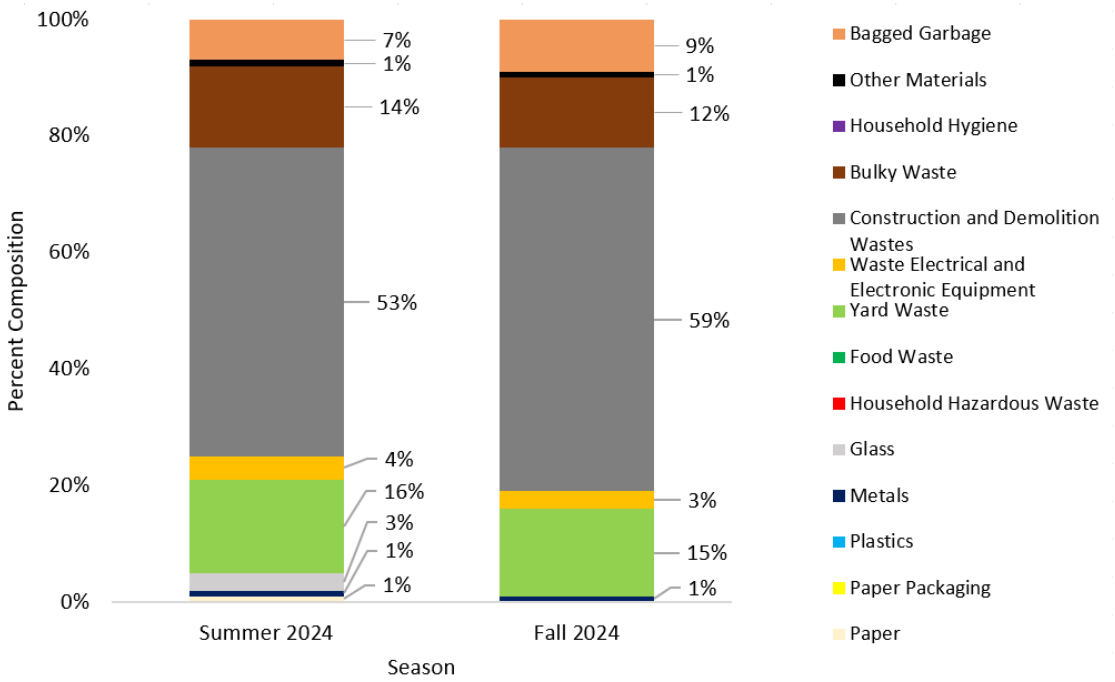


Figure 3-14: Two-Season DO Garbage Composition

3.5.2 DO Diversion Potential

Figure 3-15 summarizes the diversion potential of the DO garbage stream. The diversion potential represents the percentage of materials that could be diverted from the garbage stream through the City's organics, recycling, and depot programs. The 'No Program' category represents the theoretical diversion potential of materials from the garbage stream, but no corresponding program or service is currently offered (such as construction and demolition waste and bulky waste). The total diversion potential for the DO garbage stream ranged from 63% to 72%. The diversion potential for the DO garbage stream based on existing programs and services ranged from 56% to 63%. Most of the divertible materials were compostable (38% to 46%), followed by recyclable (10% to 12%), no program (7% to 9%), and items that can be dropped off at a depot (6% to 7%).

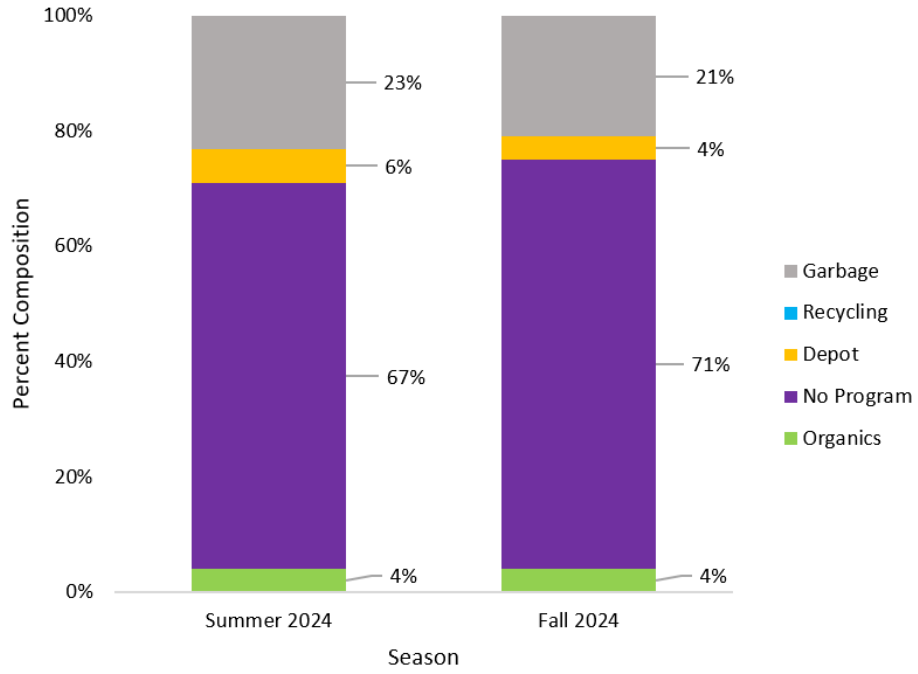


Figure 3-15: Two-Season DO Garbage Diversion Potential

4.0 INTERESTING FINDS

Table 4-1 lists some of the notable, unexpected, or unusual materials found during the waste composition studies. These materials will not necessarily skew the results, as it is not atypical to have these types of materials present in the waste stream.

Table 4-1: Notable Materials

Waste Stream	Season	Sample ID	Description	Photo
SF Garbage	Summer 2024	SU24-NPA-O	Treated Wood	
MU Garbage	Summer 2024	SU24-MU-05	Air Conditioning Unit	
MU Garbage	Summer 2024	SU24-MU-03	Television	
SF Garbage	Fall 2024	FA24-DUN-G	Laptop	

Waste Stream	Season	Sample ID	Description	Photo
SF Recycling	Fall 2024	FA24-PAR-R	Pet Waste	
SF Organics	Fall 2024	FA24-ROS-O	Cinder Block	
SF Recycling	Winter 2025	WI25-DUN-R	Desk	
SF Recycling	Winter 2025	WI25-MOU-R	Food Waste	
SF Garbage	Winter 2025	WI25-DUN-G	Cell Phones	

5.0 RECOMMENDATIONS

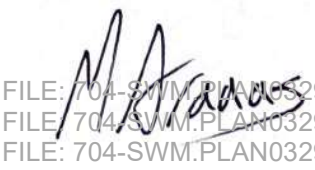
The following are some initial comments and recommendations based on the results from the study:

- The once every two weeks collection frequency appears to be appropriate for garbage and recycling. On average, garbage and recycling carts were 68% and 67% full, respectively.
- The once every two weeks collection frequency and cart size appears to be sufficient for the amount of organics encountered during the Summer and Fall sampling period. In the Summer, on average, organics carts were 74% full with a 51% set out rate, and in the Fall, on average, organics carts were 78% full with a 63% set out rate.
- The once a month collection frequency and/or large cart size appears to be a higher level of service than what is required for the organics stream during the Winter sampling period. On average, organics carts were only 26% full with a 29% set out rate.
- The cart sizes worked well for most households, however:
  - There were 7, 19, and 25 carts out of 302 total possible carts (approximately 2% to 8% of carts) that were overfilled (e.g., the lid did not fully close) for all three streams in the Summer, Fall, and Winter, respectively.
  - There were 95, 102, and 64 carts out of 306 total possible carts (approximately 21% to 34% of carts) for all three streams that were filled to half capacity or below in the Summer, Fall, and Winter, respectively.
- Additional education and communication on the new green cart program may be beneficial to:
  - Reduce the amount of food and yard waste in the garbage stream. Organic materials (food, yard waste, and paper) made up 35% to 45% of the garbage stream.
  - Increase resident participation or set-out rates. On average, only 60% of residents set-out their green cart for the study. Some residents may intentionally choose to not set their carts out when only a minimal amount of material is in the cart.
  - Increase the capture rate of organic material in the organics stream. The capture rate of organic materials was between 40% to 76%.
- Additional education and communication on the recycling program may be beneficial to:
  - Reduce the amount of contamination in the recycling stream. Approximately 12% to 20% of material in the recycling carts was contamination.
  - Increase the capture rate of recyclable material in the recycling stream. The capture rate of recyclable materials was between 69% to 70%.
- Additional diversion programs are recommended for materials that can be diverted from landfill, including construction and demolition waste (e.g., mixed metals, treated lumber). Approximately 3% to 15% of material in the SF garbage stream and 5% to 10% of material in the MU garbage stream in the study was construction and demolition waste.
- Additional education and communication on existing MU diversion programs my be beneficial as materials that can be recycled made up 12% to 19% of the MU garbage stream, and materials that could be dropped off at a depot made up 11% to 31% of the MU garbage stream.

6.0 CLOSURE

We trust this document meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.



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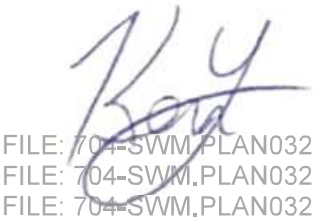

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APPENDIX A

TETRA TECH'S LIMITATIONS ON THE USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOENVIRONMENTAL

1.1 USE OF DOCUMENT AND OWNERSHIP

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APPENDIX B

SELECTED PHOTOGRAPHS

Photo 1: Field Staff Collecting Materials

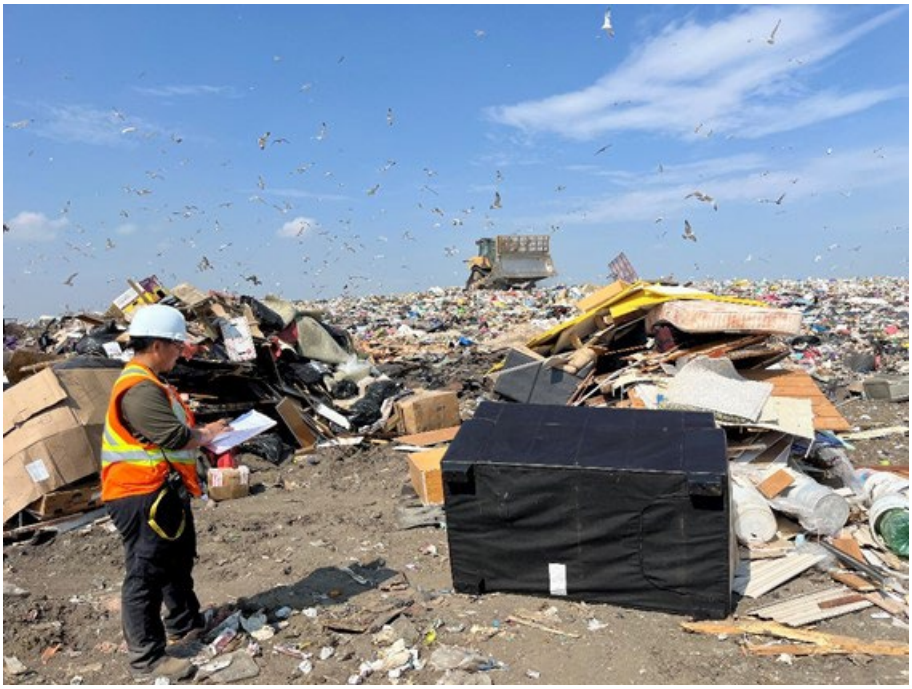

Photo 2: Field Staff Visually Assessing a Residential Drop Off Sample

Photo 3: Field Staff Sorting a Sample

Photo 4: Example of a 100 kg Single Family Garbage Sample

Photo 5: Example of a Single Family Organics Sample

Photo 6: Example of a Single Family Recycling Sample

Photo 7: Example of a Multi-Unit Garbage Load

Photo 8: Example of a Residential Drop Off Sample

Photo 9: Example of the Mixed Paper Category

Photo 10: Example of the Boxboard/Cores Category

Photo 11: Example of the Tissue/Toweling Category

Photo 12: Example of the Other Paper – Non-Obligated Category

Photo 13: Example of the Corrugated Cardboard Category

Photo 14: Example of the Polycoat Beverage Cups Category

Photo 15: Example of the #1 #1 Polyethylene Terephthalate Beverage Category

Photo 16: Example of the #1 Polyethylene Terephthalate Thermoform Category

Photo 17: Example of the #2 High-Density Polyethylene Non-Beverage Category

Photo 18: Example of the #5 Polypropylene Category

Photo 19: Example of the #6 Polystyrene – Expanded Category

Photo 20: Example of the Plastic Film Category

Photo 21: Example of the Plastic Laminates and Other Film Packaging Category

Photo 22: Example of the Aluminum Beverage Cans Category

Photo 23: Example of the Aluminum Non-Beverage Category

Photo 24: Example of the Steel Food Cans Category

Photo 25: Example of the Other Metal Category

Photo 26: Example of the Glass Beverage Containers Category

Photo 27: Example of the Avoidable Food Waste Category

Photo 28: Example of the Unavoidable Food Waste Category

Photo 29: Example of the Yard and Garden Debris Category

Photo 30: Example of the Brush and Branches Category

Photo 31: Example of the Diapers Category

Photo 32: Example of the Pet Waste Category

Photo 33: Example of the Textiles Category

APPENDIX C

MATERIAL CATEGORIES

Table C-1: Material Category Descriptions – Garbage and Recycling Stream

	Category	Description and/or Examples	Diversion Potential
01	**Paper**		
1	Mixed 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. Includes gift wrap, construction paper, puzzle books, e.g., sudoko or colouring books ▪ Glossy magazines, catalogues, calendars, annual reports (must be bound, i.e., stapled or glued) ▪ Telephone books and other directories such as the Yellow Pages ▪ Non Newspapers (e.g., television guides, Auto Trader, Real Estate News) plus inserts and flyers from newspapers made of newsprint ▪ Daily and weekly newspapers	Recycling
2	Tissue/Toweling	▪ Paper napkins, towel, tissues	Organics
3	Food Soiled Paper	▪ Plates, cups, muffin wrappers, coffee filters, teabags, bags, food packaging	Organics
4	Shredded Paper	▪ Paper that has been shredded mechanically into thin strips	Recycling
5	Other Paper – Non-Obligated	▪ Soft or hard covered literary books, academic journals, textbooks, photographs	Garbage
02	**Paper Packaging**		
6	Corrugated Cardboard	▪ Includes micro-flute corrugated containers, pizza boxes, waxed corrugated containers, electronic product boxes such as television and computer boxes, boxes used to direct mail for residential consumers	Recycling
7	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	Recycling
8	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	Recycling
9	Molded Pulp	▪ Egg cartons, drink trays, other trays, molded pulp flower pots/trays, etc.	Recycling
10	Polycoat Beverage Cups	▪ Hot beverage/food containers, with polycoat on inside only, including coffee cups, soup cups/bowls, chili cups, etc. Cold beverage/food containers with polycoat on both sides including fountain drinks, take-out ice cream cups	Garbage
11	Ice Cream Containers and Other Bleached Long Polycoat Fibre	▪ Polycoated paper ice cream containers, typically with a lid, excluding boxboard folded ice cream boxes. Food containers with white fibre and a rolled or folded rim, includes Michelina's frozen food, KFC tubs	Garbage
12	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.	Garbage
13	Spiral Wound Containers	▪ Spiral wound cans with paper walls and plastic or metal tops or bottoms; frozen juice, Pringles, raisins, etc.	Garbage

	Category	Description and/or Examples	Diversion Potential
14	Gable Top Containers – Beverage	▪ Polycoat containers with a gable shaped top, milk and milk substitutes like soy, almond, and rice milk, and juices	Recycling
15	Gable-Top Containers – Non-Beverage	▪ Polycoat containers with a gable shaped top that previously contained some foods or other products, e.g., sugar, molasses, etc.	Recycling
16	Aseptic Containers – Beverage	▪ Polycoat fibre and foil containers (e.g., Tetra Pak) for beverage, e.g., soy, almond, and rice milk, juice boxes	Recycling
17	Aseptic Containers – Non-Beverage	▪ Polycoat fibre and foil containers (e.g., Tetra Pak) for soup, sauces, etc.	Recycling
03	**Plastics**		
18	#1 Polyethylene Terephthalate Bottles – Beverage	▪ Soft drink/water bottles	Recycling
19	#1 Polyethylene Terephthalate Bottles, Jugs and Jars – Non-Beverage	▪ Salad dressing bottles, peanut butter jars	Recycling
20	#1 Polyethylene Terephthalate Thermoform	▪ #1 clamshells, #1 egg cartons, #1 trays, #1 blister packaging, #1 drink cups, etc.	Recycling
21	#2 High-Density Polyethylene Beverage	▪ Milk jugs, juice containers and drinkable yogurt bottles	Recycling
22	#2 High-Density Polyethylene Non-Beverage	▪ Laundry detergent, bleach, vinegar, personal care products such as shampoos, conditioners, and body wash, windshield washing fluid containers, cleaning supplies. Other #2 containers such as margarine and yogurt containers and lids made from high-density polyethylene	Recycling
23	#3 Polyvinyl Chloride	▪ Tubs, condiment containers	Recycling
24	#5 Polypropylene	▪ #5 bottles and containers. plastic bottles includes nutritional supplement drinks, shampoos, etc. ▪ #5 containers such as margarine and yogurt containers and other containers made from polypropylene, including tubs and lids with resin codes #5 polypropylene	Recycling
25	#6 Polystyrene – Expanded	▪ Foam take-out containers such as drink cups, large, white packaging foam, meat trays, coloured foam insulation	Depot
26	#6 Polystyrene – Non-Expanded	▪ Polystyrene clear clamshell containers such as berry and muffin containers, rigid polystyrene cups, plates, and bottles	Recycling
27	#7 Biodegradable/Compostable Plastics	▪ Might not have #7 label; include Biodegradable Products Institute (BPI) certification	Garbage
28	Plastic Film	▪ High-density polyethylene and low-density polyethylene film, dry cleaning bags, bread bags, milk bags, toilet paper and paper towel over-wrap, lawn seed bags	Depot
29	Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Recyclable)	▪ Non-packaging low-density polyethylene and high-density polyethylene film (e.g., kitchen catchers, squeeze tubes, 6-pack rings, paper lined plastic, etc.)	Garbage
30	Plastic Laminates and Other Film Packaging	▪ Laminated plastic film and bags that are at least 85% plastic (by weight). Includes chip bags, vacuum sealed bags, cereal liners, candy wraps, pasta bags, boil in a bag, plastic based food pouches, etc.	Depot

	Category	Description and/or Examples	Diversion Potential
31	Other Rigid Plastic Packaging	▪ Other rigid containers (#4 and #7), non-polyethylene terephthalate blister packaging, unmarked/coded packaging, plant pots and trays, pails, etc.	Garbage
32	Durable Plastic Products	▪ Non-packaging such as videocassette recorder tapes, compact discs, toys, games, Tupperware, etc. Include multi-material items that are mainly plastic – e.g., a plastic toy truck with metal axles	Garbage
04	**Metals**		
33	Aluminum Beverage Cans	▪ Aluminum soft drinks, soda, juice, alcoholic beverages, beer cans	Recycling
34	Aluminum Non-Beverage	▪ Food containers, aluminum foil wrap, pie plates, baking trays, etc.	Recycling
35	Aerosol Containers	▪ Mousse spray cans, air freshener spray cans, deodorant spray cans, hairspray cans, food spray cans for cheese or whipped cream, empty spray cans, cooking oil, etc.	Garbage
36	Other Aluminum	▪ Aluminum siding, baking trays, etc.	Garbage
37	Steel Beverage Cans	▪ Steel apple juice, alcoholic beverages, beer cans, Sapporo, etc.	Recycling
38	Steel Food Cans	▪ Soup, beans, peaches, etc. ▪ No alcohol containers	Recycling
39	Other Metal	▪ Wire, hardware, copper	Depot
05	**Glass**		
40	Glass Beverage Containers	▪ Juice, beer, and wine bottles	Recycling
41	Glass Non-Beverage	▪ Food containers	Recycling
42	Other Glass	▪ Window glass, plates, and glasses, light bulbs (fluorescent tubes and compact fluorescents go in Household Hazardous Waste)	Garbage
06	**Household Hazardous Waste**		
43	Household Hazardous Waste	▪ Labelled CAUTION, WARNING, CORROSIVE, EXPLOSIVE, FLAMMABLE, POISONOUS or TOXIC ▪ Acid, adhesives, automotive, batteries, cleaners, cylinders, corrosives, fuels, light bulbs, mercury, oxidizing chemicals, paint, pesticides and fertilizers, pharmaceuticals, solvents	Depot
07	**Food Waste**		
44	Avoidable Food Waste	▪ Whole fruits and vegetables, meat, bread, prepared meals, fruits and vegetables trimmings	Organics
45	Unavoidable Food Waste	▪ Inedible food, such as peelings, bones, solidified fats, cooking oils, and food grease	Organics
08	**Yard Waste**		
46	Yard and Garden Debris	▪ Grass clippings, leaves, weeds, plant parts, pumpkins, topsoil, and sod	Organics
47	Brush and Branches	▪ Small twigs and tree trimmings that are no more than 60 cm in length and 2 cm in diameter, conifer cones and needles, wood chips and bark mulch	Organics

	Category	Description and/or Examples	Diversion Potential
09	**Waste Electrical and Electronic Equipment**		
48	Electronics	▪ Laptop computers, notebooks, tablet PCs, TVs and computer monitors, printers, fax machines, photocopiers and scanners, personal, portable, or home DVD, Blu Ray, CD, MP3, record players; film or digital cameras/video recorders; digital picture frames; audio and video baby monitors; cable/satellite TV receivers; amps, receivers; speakers, headphones, microphones, coaxial, telephone, speaker wires, coffee makers, mixers, bread makers, toaster ovens, waffle, makers, crock pots, saw, drill, etc.	Depot
10	**Construction And Demolition Wastes**		
49	Dimensional Lumber – Untreated	▪ Unpainted or unstained lumber and pallets	No program
50	Dimensional Lumber – Treated	▪ Painted, stained, or treated lumber	No program
51	Composite Wood	▪ Plywood, oriented strand board, medium-density fibreboard, particle board	No program
52	Gysum Wallboard	▪ Drywall	No program
53	Asphalt Roofing Shingles	▪ Asphalt shingles and tarpaper	No program
54	Mixed Metals	▪ Ferrous, non-ferrous, aluminum	No program
55	Concrete, Bricks	▪ Concrete, paving stones, cement bricks	No program
56	Ceramics, Porcelain	▪ Tiles, toilets, sinks	No program
57	Carpeting	▪ Carpeting, underlay, mats	No program
58	Other Construction and Demolition Wastes	▪ Vinyl siding, misc. conduits, ceiling tiles, plumbing pipes, insulation	No program
11	**Bulky Waste**		
59	Furniture or Fixtures	▪ Chairs, sofas, cabinets, tables, garden furniture, etc.	No program
60	Other Large Bulky Items	▪ Other large items not classified elsewhere	No program
12	**Household Hygiene**		
61	Diapers	▪ Diapers	Garbage
62	Sanitary Products	▪ Sanitary napkins, hygiene products, etc.	Garbage
63	Pet Waste	▪ Animal feces, bedding, kitty litter	Garbage
13	**Other Materials**		
64	Textiles	▪ Clothing, shoes, mats, drapes, sheets, etc. Plastic rice sacks go in Other Rigid Plastic Packaging	Depot
65	Tires and Other Rubber	▪ Rubber tires and tubes, other rubber items such as hoses	Garbage
66	Other Waste	▪ Materials not classified elsewhere, wooden fruit basket, vacuum bags, wax candles, furnace filters, etc.	Garbage
67	Wood Utensils	▪ Chopsticks, wooden forks, toothpicks, etc.	Organics

Table C-2: Material Category Descriptions – Organics Stream

	Category	Description and/or Examples	Diversion Potential
01	**Paper**		
1	Mixed 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. Includes gift wrap, construction paper, puzzle books, e.g., sudoko or colouring books ▪ Glossy magazines, catalogues, calendars, annual reports (must be bound, i.e., stapled or glued) ▪ Telephone books and other directories such as the Yellow Pages ▪ Non Newspapers (e.g., television guides, Auto Trader, Real Estate News) plus inserts and flyers from newspapers made of newsprint ▪ Daily and weekly newspapers	Organics
2	Tissue/Toweling	▪ Paper napkins, towel, tissues	Organics
3	Food Soiled Paper	▪ Plates, cups, muffin wrappers, coffee filters, teabags, bags, food packaging	Organics
4	Shredded Paper	▪ Paper that has been shredded mechanically into thin strips	Recycling
5	Other Paper – Non-Obligated	▪ Soft or hard covered literary books, academic journals, textbooks, photographs	Garbage
02	**Paper Packaging**		
6	Corrugated Cardboard	▪ Includes micro-flute corrugated containers, pizza boxes, waxed corrugated containers, electronic product boxes such as television and computer boxes, boxes used to direct mail for residential consumers	Organics
7	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	Recycling
8	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	Organics
9	Molded Pulp	▪ Egg cartons, drink trays, other trays, molded pulp flower pots/trays, etc.	Organics
10	Polycoat Beverage Cups	▪ Hot beverage/food containers, with polycoat on inside only, including coffee cups, soup cups/bowls, chili cups, etc. Cold beverage/food containers with polycoat on both sides including fountain drinks, take-out ice cream cups	Garbage
11	Ice Cream Containers and Other Bleached Long Polycoat Fibre	▪ Polycoated paper ice cream containers, typically with a lid, excluding boxboard folded ice cream boxes. Food containers with white fibre and a rolled or folded rim, includes Michelina's frozen food, KFC tubs	Garbage
12	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.	Garbage
13	Spiral Wound Containers	▪ Spiral wound cans with paper walls and plastic or metal tops or bottoms; frozen juice, Pringles, raisins, etc.	Garbage

	Category	Description and/or Examples	Diversion Potential
14	Gable Top Containers – Beverage	▪ Polycoat containers with a gable shaped top, milk and milk substitutes like soy, almond, and rice milk, and juices	Recycling
15	Gable-Top Containers – Non-Beverage	▪ Polycoat containers with a gable shaped top that previously contained some foods or other products, e.g., sugar, molasses, etc.	Recycling
16	Aseptic Containers – Beverage	▪ Polycoat fibre and foil containers (e.g., Tetra Pak) for beverage e.g., soy, almond, and rice milk, juice boxes	Recycling
17	Aseptic Containers – Non-Beverage	▪ Polycoat fibre and foil containers (e.g., Tetra Pak) for soup, sauces, etc.	Recycling
03	**Plastics**		
18	#1 Polyethylene Terephthalate Bottles – Beverage	▪ Soft drink/water bottles	Recycling
19	#1 Polyethylene Terephthalate Bottles, Jugs and Jars – Non-Beverage	▪ Salad dressing bottles, peanut butter jars	Recycling
20	#1 Polyethylene Terephthalate Thermoform	▪ #1 clamshells, #1 egg cartons, #1 trays, #1 blister packaging, #1 drink cups, etc.	Recycling
21	#2 High-Density Polyethylene Beverage	▪ Milk jugs, juice containers and drinkable yogurt bottles	Recycling
22	#2 High-Density Polyethylene Non-Beverage	▪ Laundry detergent, bleach, vinegar, personal care products such as shampoos, conditioners, and body wash, windshield washing fluid containers, cleaning supplies. Other #2 containers such as margarine and yogurt containers and lids made from high-density polyethylene	Recycling
23	#3 Polyvinyl Chloride	▪ Tubs, condiment containers	Recycling
24	#5 Polypropylene	▪ #5 bottles and containers. plastic bottles includes nutritional supplement drinks, shampoos, etc. ▪ #5 containers such as margarine and yogurt containers and other containers made from polypropylene, including tubs and lids with resin codes #5 polypropylene	Recycling
25	#6 Polystyrene – Expanded	▪ Foam take-out containers such as drink cups, large, white packaging foam, meat trays, coloured foam insulation	Depot
26	#6 Polystyrene – Non-Expanded	▪ Polystyrene clear clamshell containers such as berry and muffin containers, rigid polystyrene cups, plates, and bottles	Recycling
27	#7 Biodegradable/Compostable Plastics	▪ Might not have #7 label; include Biodegradable Products Institute (BPI) certification	Garbage
28	Plastic Film	▪ High-density polyethylene and low-density polyethylene film, dry cleaning bags, bread bags, milk bags, toilet paper and paper towel over-wrap, lawn seed bags	Depot
29	Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Recyclable)	▪ Non-packaging low-density polyethylene and high-density polyethylene film (e.g., kitchen catchers, squeeze tubes, 6-pack rings, paper lined plastic, etc.)	Garbage
30	Plastic Laminates and Other Film Packaging	▪ Laminated plastic film and bags that are at least 85% plastic (by weight). Includes chip bags, vacuum sealed bags, cereal liners, candy wraps, pasta bags, boil in a bag, plastic based food pouches, etc.	Depot

	Category	Description and/or Examples	Diversion Potential
31	Other Rigid Plastic Packaging	▪ Other rigid containers (#4 and #7), non-polyethylene terephthalate blister packaging, unmarked/coded packaging, plant pots and trays, pails, etc.	Garbage
32	Durable Plastic Products	▪ Non-packaging such as videocassette recorder tapes, compact discs, toys, games, Tupperware, etc. Include multi-material items that are mainly plastic – e.g., a plastic toy truck with metal axles	Garbage
04	**Metals**		
33	Aluminum Beverage Cans	▪ Aluminum soft drinks, soda, juice, alcoholic beverages, beer cans	Recycling
34	Aluminum Non-Beverage	▪ Food containers, aluminum foil wrap, pie plates, baking trays, etc.	Recycling
35	Aerosol Containers	▪ Mousse spray cans, air freshener spray cans, deodorant spray cans, hairspray cans, food spray cans for cheese or whipped cream, empty spray cans, cooking oil, etc.	Garbage
36	Other Aluminum	▪ Aluminum siding, baking trays, etc.	Garbage
37	Steel Beverage Cans	▪ Steel apple juice, alcoholic beverages, beer cans, Sapporo, etc.	Recycling
38	Steel Food Cans	▪ Soup, beans, peaches, etc. ▪ No alcohol containers	Recycling
39	Other Metal	▪ Wire, hardware, copper	Depot
05	**Glass**		
40	Glass Beverage Containers	▪ Juice, beer, and wine bottles	Recycling
41	Glass Non-Beverage	▪ Food containers	Recycling
42	Other Glass	▪ Window glass, plates, and glasses, light bulbs (fluorescent tubes and compact fluorescents go in Household Hazardous Waste)	Garbage
06	**Household Hazardous Waste**		
43	Household Hazardous Waste	▪ Labelled CAUTION, WARNING, CORROSIVE, EXPLOSIVE, FLAMMABLE, POISONOUS or TOXIC ▪ Acid, adhesives, automotive, batteries, cleaners, cylinders, corrosives, fuels, light bulbs, mercury, oxidizing chemicals, paint, pesticides and fertilizers, pharmaceuticals, solvents	Depot
07	**Food Waste**		
44	Avoidable Food Waste	▪ Whole fruits and vegetables, meat, bread, prepared meals, fruits and vegetables trimmings	Organics
45	Unavoidable Food Waste	▪ Inedible food, such as peelings, bones, solidified fats, cooking oils, and food grease	Organics
08	**Yard Waste**		
46	Yard and Garden Debris	▪ Grass clippings, leaves, weeds, plant parts, pumpkins, topsoil, and sod	Organics
47	Brush and Branches	▪ Small twigs and tree trimmings that are no more than 60 cm in length and 2 cm in diameter, conifer cones and needles, wood chips and bark mulch	Organics

	Category	Description and/or Examples	Diversion Potential
09	**Waste Electrical and Electronic Equipment**		
48	Electronics	▪ Laptop computers, notebooks, tablet PCs, TVs and computer monitors, printers, fax machines, photocopiers and scanners, personal, portable, or home DVD, Blu Ray, CD, MP3, record players; film or digital cameras/video recorders; digital picture frames; audio and video baby monitors; cable/satellite TV receivers; amps, receivers; speakers, headphones, microphones, coaxial, telephone, speaker wires, coffee makers, mixers, bread makers, toaster ovens, waffle, makers, crock pots, saw, drill, etc.	Depot
10	**Construction And Demolition Wastes**		
49	Dimensional Lumber – Untreated	▪ Unpainted or unstained lumber and pallets	No program
50	Dimensional Lumber – Treated	▪ Painted, stained, or treated lumber	No program
51	Composite Wood	▪ Plywood, oriented strand board, medium-density fibreboard, particle board	No program
52	Gysum Wallboard	▪ Drywall	No program
53	Asphalt Roofing Shingles	▪ Asphalt shingles and tarpaper	No program
54	Mixed Metals	▪ Ferrous, non-ferrous, aluminum	No program
55	Concrete, Bricks	▪ Concrete, paving stones, cement bricks	No program
56	Ceramics, Porcelain	▪ Tiles, toilets, sinks	No program
57	Carpeting	▪ Carpeting, underlay, mats	No program
58	Other Construction and Demolition Wastes	▪ Vinyl siding, misc. conduits, ceiling tiles, plumbing pipes, insulation	No program
11	**Bulky Waste**		
59	Furniture or Fixtures	▪ Chairs, sofas, cabinets, tables, garden furniture, etc.	No program
60	Other Large Bulky Items	▪ Other large items not classified elsewhere	No program
12	**Household Hygiene**		
61	Diapers	▪ Diapers	Garbage
62	Sanitary Products	▪ Sanitary napkins, hygiene products, etc.	Garbage
63	Pet Waste	▪ Animal feces, bedding, kitty litter	Garbage
13	**Other Materials**		
64	Textiles	▪ Clothing, shoes, mats, drapes, sheets, etc. Plastic rice sacks go in Other Rigid Plastic Packaging	Depot
65	Tires and Other Rubber	▪ Rubber tires and tubes, other rubber items such as hoses	Garbage
66	Other Waste	▪ Materials not classified elsewhere, wooden fruit basket, vacuum bags, wax candles, furnace filters, etc.	Garbage
67	Wood Utensils	▪ Chopsticks, wooden forks, toothpicks, etc.	Organics

APPENDIX D

WASTE COMPOSITION RESULTS

Table D-1: Annual Waste Composition Results – Single Family Garbage

	Summer 2024	Fall 2024	Winter 2025
01 Paper	**8.4%**	**8.3%**	**8.8%**
01. Mixed Paper	1.3%	1.4%	1.7%
02. Tissue/Toweling	6.0%	6.3%	6.3%
03. Food Soiled Paper	1.0%	0.4%	0.5%
04. Shredded Paper	0.1%	<0.1%	0.0%
05. Other Paper – Non-Obligated	<0.1%	0.3%	0.3%
02 Paper Packaging	**4.2%**	**5.3%**	**6.8%**
06. Corrugated Cardboard	0.7%	0.8%	1.0%
07. Boxboard / Cores	1.5%	1.5%	2.0%
08. Kraft Paper	0.6%	0.6%	0.7%
09. Molded Pulp	0.1%	0.2%	0.1%
10. Polycoat Beverage Cups	0.5%	0.6%	0.6%
11. Ice Cream Containers and Other Bleached Long Polycoat Fiber	0.1%	0.1%	0.2%
12. Laminated Paper Packaging	0.6%	1.3%	1.9%
13. Spiral Wound Containers	0.1%	0.1%	0.1%
14. Gable Top Containers – Beverage	<0.1%	<0.1%	0.0%
15. Gable-top Containers – Non-Beverage	<0.1%	<0.1%	0.0%
16. Aseptic Containers – Beverage	<0.1%	0.1%	0.1%
17. Aseptic Containers – Non-Beverage	<0.1%	<0.1%	0.0%
03 Plastics	**14.4%**	**13.2%**	**12.5%**
18. #1 Polyethylene Terephthalate Bottles – Beverage	0.1%	<0.1%	0.1%
19. #1 Polyethylene Terephthalate Bottles, Jugs, and Jars – Non-Beverage	0.6%	0.5%	0.7%
20. #1 Polyethylene Terephthalate Thermoform	0.5%	0.5%	0.9%
21. #2 High-Density Polyethylene Beverage	0.1%	0.1%	0.1%
22. #2 High-Density Polyethylene Non-Beverage	0.8%	0.5%	0.5%
23. #3 Polyvinyl Chloride	<0.1%	0.1%	0.0%
24. #5 Polypropylene	1.3%	1.2%	1.3%
25. #6 Polystyrene – Expanded	0.2%	0.5%	0.2%
26. #6 Polystyrene – Non-Expanded	0.1%	0.1%	0.2%
27. #7 Biodegradable/Compostable Plastics	<0.1%	<0.1%	0.1%
28. Plastic Film	1.8%	1.5%	1.5%
29. Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Packaging/Non-Recyclable)	1.5%	1.7%	1.2%
30. Plastic Laminates and Other Film Packaging	2.7%	2.7%	3.0%
31. Other Rigid Plastic Packaging	0.7%	1.0%	0.8%
32. Durable Plastic Products	4.0%	2.8%	2.1%
04 Metals	**4.8%**	**3.5%**	**2.6%**
33. Aluminum Beverage Cans	<0.1%	<0.1%	0.1%
34. Aluminum Non-Beverage	0.6%	0.6%	1.1%
35. Aerosol Containers	0.1%	0.2%	0.2%

	Summer 2024	Fall 2024	Winter 2025
36. Other Aluminum	0.1%	0.4%	0.1%
37. Steel Beverage Cans	0.0%	0.0%	0.0%
38. Steel Food Cans	0.2%	0.3%	0.3%
39. Other Metal	3.8%	2.1%	0.8%
05 Glass	**2.4%**	**2.1%**	**3.1%**
40. Glass Beverage Containers	0.2%	0.0%	0.1%
41. Glass Non-Beverage	1.0%	1.1%	1.4%
42. Other Glass	1.2%	1.0%	1.6%
06 Household Hazardous Waste	**0.5%**	**1.3%**	**0.8%**
43. Household Hazardous Waste	0.5%	1.3%	0.8%
07 Food Waste	**21.2%**	**30.2%**	**34.4%**
44. Avoidable Food Waste	14.4%	22.3%	25.1%
45. Unavoidable Food Waste	6.8%	7.9%	9.4%
08 Yard Waste	**7.0%**	**8.4%**	**0.9%**
46. Yard and Garden Debris	6.6%	8.3%	0.9%
47. Brush and Branches	0.4%	0.1%	0.0%
09 Waste Electrical and Electronic Equipment	**2.4%**	**2.2%**	**1.3%**
48. Electronics	2.4%	2.2%	1.3%
10 Construction and Demolition Wastes	**15.2%**	**7.0%**	**3.2%**
49. Dimensional Lumber – Untreated	<0.1%	0.6%	0.2%
50. Dimensional Lumber – Treated	7.5%	2.1%	0.2%
51. Composite Wood	3.6%	1.2%	1.1%
52. Gypsum Wallboard	0.6%	0.9%	0.1%
53. Asphalt Roofing Shingles	<0.1%	<0.1%	0.0%
54. Mixed Metals	0.1%	<0.1%	0.0%
55. Concrete, Bricks	<0.1%	0.4%	0.0%
56. Ceramics, Porcelain	0.0%	0.0%	0.1%
57. Carpeting	2.1%	0.1%	0.4%
58. Other Construction and Demolition Wastes	1.3%	1.7%	1.2%
11 Bulky Waste	**0.0%**	**0.0%**	**0.1%**
59. Furniture or Fixtures	0.0%	0.0%	0.1%
60. Other Large Bulky Items	0.0%	0.0%	0.0%
12 Household Hygiene	**12.2%**	**13.2%**	**17.0%**
61. Diapers	6.3%	4.8%	7.7%
62. Sanitary Products	1.7%	1.0%	1.7%
63. Pet Waste	4.2%	7.4%	7.5%
13 Other Materials	**7.3%**	**5.3%**	**8.5%**
64. Textiles	4.4%	3.2%	6.3%
65. Tires and Other Rubber	0.8%	0.3%	0.2%
66. Other Waste	1.9%	1.6%	1.9%
67. Wood Utensils	0.2%	0.2%	0.1%
	100.0%	**100.0%**	**100.0%**

Table D-2: Annual Waste Composition Results – Single Family Recycling

	Summer 2024	Fall 2024	Winter 2025
01 Paper	**17.4%**	**21.1%**	**15.9%**
01. Mixed Paper	14.9%	17.8%	13.2%
02. Tissue/Toweling	0.3%	0.2%	0.5%
03. Food Soiled Paper	0.5%	0.1%	0.1%
04. Shredded Paper	0.4%	1.1%	1.1%
05. Other Paper – Non-Obligated	1.3%	1.9%	1.0%
02 Paper Packaging	**48.8%**	**46.9%**	**46.3%**
06. Corrugated Cardboard	28.1%	25.4%	23.7%
07. Boxboard / Cores	16.0%	16.0%	15.7%
08. Kraft Paper	2.1%	1.2%	2.1%
09. Molded Pulp	1.1%	1.3%	1.7%
10. Polycoat Beverage Cups	0.3%	0.3%	0.2%
11. Ice Cream Containers and Other Bleached Long Polycoat Fiber	<0.1%	0.1%	0.1%
12. Laminated Paper Packaging	0.3%	1.4%	1.4%
13. Spiral Wound Containers	0.2%	0.3%	0.2%
14. Gable Top Containers – Beverage	0.4%	0.4%	0.3%
15. Gable-top Containers – Non-Beverage	<0.1%	<0.1%	0.1%
16. Aseptic Containers – Beverage	0.2%	0.3%	0.3%
17. Aseptic Containers – Non-Beverage	0.1%	0.2%	0.5%
03 Plastics	**17.7%**	**14.5%**	**14.8%**
18. #1 Polyethylene Terephthalate Bottles – Beverage	1.2%	0.4%	0.7%
19. #1 Polyethylene Terephthalate Bottles, Jugs, and Jars – Non-Beverage	1.3%	1.3%	1.8%
20. #1 Polyethylene Terephthalate Thermoform	3.1%	2.7%	3.0%
21. #2 High-Density Polyethylene Beverage	0.5%	0.6%	0.4%
22. #2 High-Density Polyethylene Non-Beverage	3.3%	3.1%	2.1%
23. #3 Polyvinyl Chloride	0.0%	<0.1%	0.0%
24. #5 Polypropylene	2.2%	2.2%	2.3%
25. #6 Polystyrene – Expanded	0.3%	0.1%	0.1%
26. #6 Polystyrene – Non-Expanded	0.3%	0.2%	0.2%
27. #7 Biodegradable/Compostable Plastics	0.0%	0.0%	0.0%
28. Plastic Film	1.1%	0.6%	0.6%
29. Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Packaging/Non-Recyclable)	0.5%	0.2%	0.4%
30. Plastic Laminates and Other Film Packaging	0.6%	0.5%	0.8%
31. Other Rigid Plastic Packaging	0.7%	1.0%	0.9%
32. Durable Plastic Products	2.6%	1.5%	1.4%
04 Metals	**3.3%**	**5.7%**	**4.4%**
33. Aluminum Beverage Cans	0.8%	0.3%	0.4%
34. Aluminum Non-Beverage	1.4%	2.4%	1.9%
35. Aerosol Containers	0.1%	0.1%	0.1%
36. Other Aluminum	<0.1%	0.2%	0.0%

	Summer 2024	Fall 2024	Winter 2025
37. Steel Beverage Cans	0.1%	0.0%	0.0%
38. Steel Food Cans	0.6%	1.4%	1.9%
39. Other Metal	0.2%	1.2%	0.1%
05 Glass	**10.1%**	**8.9%**	**7.2%**
40. Glass Beverage Containers	6.2%	5.6%	2.1%
41. Glass Non-Beverage	3.4%	2.7%	4.5%
42. Other Glass	0.5%	0.6%	0.5%
06 Household Hazardous Waste	**<0.1%**	**<0.1%**	**0.2%**
43. Household Hazardous Waste	<0.1%	<0.1%	0.2%
07 Food Waste	**0.6%**	**0.7%**	**5.3%**
44. Avoidable Food Waste	0.6%	0.5%	4.4%
45. Unavoidable Food Waste	<0.1%	0.2%	0.9%
08 Yard Waste	**0.1%**	**0.2%**	0.1%
46. Yard and Garden Debris	0.1%	0.2%	0.1%
47. Brush and Branches	0.0%	<0.1%	0.0%
09 Waste Electrical and Electronic Equipment	**0.0%**	**<0.1%**	**1.3%**
48. Electronics	0.0%	<0.1%	1.3%
10 Construction and Demolition Wastes	**0.2%**	**0.1%**	**0.2%**
49. Dimensional Lumber – Untreated	0.0%	<0.1%	0.0%
50. Dimensional Lumber – Treated	0.1%	0.1%	0.2%
51. Composite Wood	0.0%	0.0%	0.0%
52. Gypsum Wallboard	0.0%	0.0%	0.0%
53. Asphalt Roofing Shingles	0.0%	0.0%	0.0%
54. Mixed Metals	0.0%	0.0%	0.0%
55. Concrete, Bricks	0.1%	<0.1%	0.0%
56. Ceramics, Porcelain	0.0%	0.0%	0.0%
57. Carpeting	0.0%	0.0%	0.0%
58. Other Construction and Demolition Wastes	0.0%	0.0%	0.0%
11 Bulky Waste	**0.0%**	**0.0%**	**2.9%**
59. Furniture or Fixtures	0.0%	0.0%	2.9%
60. Other Large Bulky Items	0.0%	0.0%	0.0%
12 Household Hygiene	**0.2%**	**0.8%**	**0.1%**
61. Diapers	0.0%	0.1%	0.0%
62. Sanitary Products	0.2%	<0.1%	0.1%
63. Pet Waste	0.0%	0.6%	0.0%
13 Other Materials	**1.6%**	**1.1%**	**1.1%**
64. Textiles	1.2%	0.7%	0.7%
65. Tires and Other Rubber	0.0%	0.1%	0.1%
66. Other Waste	0.2%	0.1%	0.4%
67. Wood Utensils	0.2%	0.1%	0.1%
	100.0%	**100.0%**	**100.0%**

Table D-3: Annual Waste Composition Results – Single Family Organics

	Summer 2024	Fall 2024	Winter 2025
01 Paper	**2.3%**	**1.7%**	**10.0%**
01. Mixed Paper	0.1%	0.1%	0.2%
02. Tissue/Toweling	1.8%	1.4%	6.8%
03. Food Soiled Paper	0.3%	0.2%	1.0%
04. Shredded Paper	0.0%	0.0%	2.0%
05. Other Paper – Non-Obligated	0.1%	0.0%	0.0%
02 Paper Packaging	**0.9%**	**1.5%**	**2.8%**
06. Corrugated Cardboard	0.6%	1.1%	0.9%
07. Boxboard / Cores	0.1%	0.1%	0.2%
08. Kraft Paper	0.1%	0.1%	0.2%
09. Molded Pulp	0.1%	0.1%	0.4%
10. Polycoat Beverage Cups	<0.1%	<0.1%	0.0%
11. Ice Cream Containers and Other Bleached Long Polycoat Fiber	<0.1%	0.0%	0.0%
12. Laminated Paper Packaging	<0.1%	0.1%	1.1%
13. Spiral Wound Containers	0.0%	0.0%	0.0%
14. Gable Top Containers – Beverage	0.0%	0.0%	0.0%
15. Gable-top Containers – Non-Beverage	0.0%	0.0%	0.0%
16. Aseptic Containers – Beverage	0.0%	0.0%	0.0%
17. Aseptic Containers – Non-Beverage	0.0%	0.0%	0.0%
03 Plastics	**0.5%**	**0.5%**	**1.9%**
18. #1 Polyethylene Terephthalate Bottles – Beverage	0.0%	0.0%	0.0%
19. #1 Polyethylene Terephthalate Bottles, Jugs, and Jars – Non-Beverage	0.0%	0.0%	0.0%
20. #1 Polyethylene Terephthalate Thermoform	<0.1%	<0.1%	0.0%
21. #2 High-Density Polyethylene Beverage	0.0%	0.0%	0.0%
22. #2 High-Density Polyethylene Non-Beverage	0.0%	<0.1%	0.0%
23. #3 Polyvinyl Chloride	0.0%	0.0%	0.0%
24. #5 Polypropylene	<0.1%	<0.1%	0.0%
25. #6 Polystyrene – Expanded	<0.1%	<0.1%	0.0%
26. #6 Polystyrene – Non-Expanded	0.0%	0.0%	0.0%
27. #7 Biodegradable/Compostable Plastics	0.3%	0.3%	1.0%
28. Plastic Film	<0.1%	<0.1%	0.1%
29. Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Packaging/Non-Recyclable)	<0.1%	<0.1%	0.1%
30. Plastic Laminates and Other Film Packaging	<0.1%	<0.1%	0.6%
31. Other Rigid Plastic Packaging	<0.1%	<0.1%	0.1%
32. Durable Plastic Products	0.1%	<0.1%	0.0%
04 Metals	**<0.1%**	**<0.1%**	**0.0%**
33. Aluminum Beverage Cans	0.0%	0.0%	0.0%
34. Aluminum Non-Beverage	<0.1%	0.0%	0.0%
35. Aerosol Containers	0.0%	0.0%	0.0%
36. Other Aluminum	<0.1%	<0.1%	0.0%

	Summer 2024	Fall 2024	Winter 2025
37. Steel Beverage Cans	0.0%	0.0%	0.0%
38. Steel Food Cans	0.0%	0.0%	0.0%
39. Other Metal	<0.1%	0.0%	0.0%
05 Glass	**0.0%**	**0.0%**	0.0%
40. Glass Beverage Containers	0.0%	0.0%	0.0%
41. Glass Non-Beverage	0.0%	0.0%	0.0%
42. Other Glass	0.0%	0.0%	0.0%
06 Household Hazardous Waste	**<0.1%**	**0.0%**	**0.0%**
43. Household Hazardous Waste	<0.1%	0.0%	0.0%
07 Food Waste	**11.5%**	**17.9%**	**78.7%**
44. Avoidable Food Waste	6.3%	11.5%	41.5%
45. Unavoidable Food Waste	5.2%	6.4%	37.2%
08 Yard Waste	**84.1%**	**76.6%**	**5.8%**
46. Yard and Garden Debris	74.2%	72.2%	4.9%
47. Brush and Branches	9.9%	4.4%	0.9%
09 Waste Electrical and Electronic Equipment	**0.0%**	**0.0%**	**0.0%**
48. Electronics	0.0%	0.0%	0.0%
10 Construction and Demolition Wastes	**0.4%**	**1.6%**	**0.0%**
49. Dimensional Lumber – Untreated	0.0%	0.1%	0.0%
50. Dimensional Lumber – Treated	0.4%	0.1%	0.0%
51. Composite Wood	0.0%	<0.1%	0.0%
52. Gypsum Wallboard	0.0%	0.0%	0.0%
53. Asphalt Roofing Shingles	0.0%	0.0%	0.0%
54. Mixed Metals	0.0%	0.0%	0.0%
55. Concrete, Bricks	0.0%	1.4%	0.0%
56. Ceramics, Porcelain	0.0%	0.0%	0.0%
57. Carpeting	0.0%	0.0%	0.0%
58. Other Construction and Demolition Wastes	0.0%	0.0%	0.0%
11 Bulky Waste	**0.0%**	**0.0%**	**0.0%**
59. Furniture or Fixtures	0.0%	0.0%	0.0%
60. Other Large Bulky Items	0.0%	0.0%	0.0%
12 Household Hygiene	**0.1%**	**<0.1%**	**0.1%**
61. Diapers	0.1%	0.0%	0.0%
62. Sanitary Products	<0.1%	<0.1%	0.1%
63. Pet Waste	<0.1%	<0.1%	0.0%
13 Other Materials	**0.2%**	**0.2%**	**0.6%**
64. Textiles	0.0%	<0.1%	0.0%
65. Tires and Other Rubber	0.0%	<0.1%	0.0%
66. Other Waste	0.1%	0.1%	0.5%
67. Wood Utensils	0.1%	<0.1%	0.1%
	100.0%	**100.0%**	**100.0%**

Table D-4: Annual Waste Composition Results – Multi-Unit Garbage

	Summer 2024	Fall 2024	Winter 2025
01 Paper	**8.8%**	**8.5%**	**8.9%**
01. Mixed Paper	2.4%	2.3%	2.7%
02. Tissue/Toweling	5.1%	5.1%	5.7%
03. Food Soiled Paper	0.7%	0.5%	0.4%
04. Shredded Paper	0.0%	0.1%	0.0%
05. Other Paper – Non-Obligated	0.6%	0.3%	0.0%
02 Paper Packaging	**5.7%**	**6.7%**	**10.4%**
06. Corrugated Cardboard	0.9%	1.7%	4.0%
07. Boxboard / Cores	2.7%	2.5%	3.0%
08. Kraft Paper	0.7%	0.8%	0.7%
09. Molded Pulp	0.2%	0.3%	0.5%
10. Polycoat Beverage Cups	0.3%	0.3%	0.3%
11. Ice Cream Containers and Other Bleached Long Polycoat Fiber	0.1%	0.1%	0.1%
12. Laminated Paper Packaging	0.6%	0.8%	1.1%
13. Spiral Wound Containers	0.1%	0.1%	0.1%
14. Gable Top Containers – Beverage	0.0%	0.1%	0.3%
15. Gable-top Containers – Non-Beverage	0.0%	<0.1%	0.1%
16. Aseptic Containers – Beverage	0.1%	<0.1%	0.1%
17. Aseptic Containers – Non-Beverage	0.0%	0.0%	0.0%
03 Plastics	**10.2%**	**12.3%**	**11.6%**
18. #1 Polyethylene Terephthalate Bottles – Beverage	0.3%	0.4%	0.5%
19. #1 Polyethylene Terephthalate Bottles, Jugs, and Jars – Non-Beverage	0.3%	0.7%	0.6%
20. #1 Polyethylene Terephthalate Thermoform	0.5%	0.8%	0.8%
21. #2 High-Density Polyethylene Beverage	0.1%	0.1%	0.1%
22. #2 High-Density Polyethylene Non-Beverage	0.5%	0.7%	0.8%
23. #3 Polyvinyl Chloride	0.0%	<0.1%	0.0%
24. #5 Polypropylene	0.9%	1.2%	1.2%
25. #6 Polystyrene – Expanded	0.1%	0.3%	0.1%
26. #6 Polystyrene – Non-Expanded	0.0%	0.1%	0.1%
27. #7 Biodegradable/Compostable Plastics	0.0%	<0.1%	0.0%
28. Plastic Film	1.1%	1.3%	1.4%
29. Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Packaging/Non-Recyclable)	2.0%	1.6%	1.3%
30. Plastic Laminates and Other Film Packaging	2.2%	1.9%	1.9%
31. Other Rigid Plastic Packaging	0.4%	0.7%	0.6%
32. Durable Plastic Products	1.8%	2.4%	2.2%
04 Metals	**7.7%**	**4.9%**	**3.6%**
33. Aluminum Beverage Cans	0.1%	0.1%	0.2%
34. Aluminum Non-Beverage	0.6%	0.8%	0.9%
35. Aerosol Containers	0.1%	0.1%	0.0%
36. Other Aluminum	0.0%	0.3%	0.0%

	Summer 2024	Fall 2024	Winter 2025
37. Steel Beverage Cans	0.0%	0.0%	0.3%
38. Steel Food Cans	0.5%	0.4%	0.5%
39. Other Metal	6.3%	3.2%	1.7%
05 Glass	**2.0%**	**1.8%**	**1.8%**
40. Glass Beverage Containers	0.1%	0.2%	0.2%
41. Glass Non-Beverage	1.0%	0.9%	1.1%
42. Other Glass	0.9%	0.6%	0.5%
06 Household Hazardous Waste	**1.2%**	**0.4%**	**0.3%**
43. Household Hazardous Waste	1.2%	0.4%	0.3%
07 Food Waste	**17.7%**	**21.9%**	**31.3%**
44. Avoidable Food Waste	13.7%	16.5%	23.6%
45. Unavoidable Food Waste	4.0%	5.4%	7.6%
08 Yard Waste	**1.8%**	**6.7%**	**1.4%**
46. Yard and Garden Debris	1.8%	6.7%	1.4%
47. Brush and Branches	0.0%	0.1%	0.0%
09 Waste Electrical and Electronic Equipment	**11.8%**	**6.8%**	**1.9%**
48. Electronics	11.8%	6.7%	1.9%
10 Construction and Demolition Wastes	**10.0%**	**8.9%**	**5.3%**
49. Dimensional Lumber – Untreated	0.0%	<0.1%	0.1%
50. Dimensional Lumber – Treated	6.2%	4.0%	0.3%
51. Composite Wood	0.9%	1.9%	4.1%
52. Gypsum Wallboard	0.0%	0.0%	0.7%
53. Asphalt Roofing Shingles	0.0%	0.0%	0.0%
54. Mixed Metals	0.0%	0.0%	0.0%
55. Concrete, Bricks	0.0%	0.2%	0.1%
56. Ceramics, Porcelain	0.0%	0.0%	0.0%
57. Carpeting	2.3%	2.0%	0.0%
58. Other Construction and Demolition Wastes	0.6%	0.9%	0.0%
11 Bulky Waste	**1.4%**	**1.5%**	**5.2%**
59. Furniture or Fixtures	1.4%	1.2%	4.0%
60. Other Large Bulky Items	0.0%	0.3%	1.2%
12 Household Hygiene	**8.8%**	**10.2%**	**12.0%**
61. Diapers	5.0%	5.7%	5.4%
62. Sanitary Products	0.7%	1.3%	1.3%
63. Pet Waste	3.2%	3.2%	5.3%
13 Other Materials	**12.9%**	**9.4%**	**6.4%**
64. Textiles	12.0%	5.0%	5.3%
65. Tires and Other Rubber	0.3%	2.9%	0.2%
66. Other Waste	0.5%	1.3%	0.9%
67. Wood Utensils	0.2%	0.2%	0.1%
	100.0%	**100.0%**	**100.0%**

Table D-5: Annual Waste Composition Results – Drop-Off Garbage

	Summer 2024	Fall 2024
01 Paper	**0.7%**	**0.1%**
01. Mixed Paper	0.2%	0.0%
02. Tissue/Toweling	0.0%	0.0%
03. Food Soiled Paper	0.0%	0.0%
04. Shredded Paper	0.0%	0.0%
05. Other Paper – Non-Obligated	0.5%	0.1%
02 Paper Packaging	**0.2%**	**0.4%**
06. Corrugated Cardboard	0.2%	0.4%
07. Boxboard / Cores	0.0%	0.0%
08. Kraft Paper	0.0%	0.0%
09. Molded Pulp	0.0%	0.0%
10. Polycoat Beverage Cups	0.0%	0.0%
11. Ice Cream Containers and Other Bleached Long Polycoat Fiber	0.0%	0.0%
12. Laminated Paper Packaging	0.0%	0.0%
13. Spiral Wound Containers	0.0%	0.0%
14. Gable Top Containers – Beverage	0.0%	0.0%
15. Gable-top Containers – Non-Beverage	0.0%	0.0%
16. Aseptic Containers – Beverage	0.0%	0.0%
17. Aseptic Containers – Non-Beverage	0.0%	0.0%
03 Plastics	**0.4%**	**0.3%**
18. #1 Polyethylene Terephthalate Bottles – Beverage	0.0%	0.0%
19. #1 Polyethylene Terephthalate Bottles, Jugs, and Jars – Non-Beverage	0.0%	0.0%
20. #1 Polyethylene Terephthalate Thermoform	0.0%	0.0%
21. #2 High-Density Polyethylene Beverage	0.0%	0.0%
22. #2 High-Density Polyethylene Non-Beverage	0.0%	<0.1%
23. #3 Polyvinyl Chloride	0.0%	0.0%
24. #5 Polypropylene	0.0%	0.0%
25. #6 Polystyrene – Expanded	0.0%	0.0%
26. #6 Polystyrene – Non-Expanded	0.0%	0.0%
27. #7 Biodegradable/Compostable Plastics	0.0%	0.0%
28. Plastic Film	0.0%	0.0%
29. Low-Density Polyethylene and High-Density Polyethylene Film – Products (Non-Packaging/Non-Recyclable)	0.0%	0.0%
30. Plastic Laminates and Other Film Packaging	0.0%	0.0%
31. Other Rigid Plastic Packaging	0.0%	0.0%
32. Durable Plastic Products	0.3%	0.3%
04 Metals	**0.9%**	**0.9%**
33. Aluminum Beverage Cans	0.0%	0.0%
34. Aluminum Non-Beverage	0.0%	0.0%
35. Aerosol Containers	0.0%	0.0%
36. Other Aluminum	0.0%	0.0%
37. Steel Beverage Cans	0.0%	0.0%

	Summer 2024	Fall 2024
38. Steel Food Cans	0.0%	0.0%
39. Other Metal	0.9%	0.9%
05 Glass	**2.6%**	**0.0%**
40. Glass Beverage Containers	0.0%	0.0%
41. Glass Non-Beverage	0.0%	0.0%
42. Other Glass	2.6%	0.0%
06 Household Hazardous Waste	**0.0%**	**0.0%**
43. Household Hazardous Waste	0.0%	0.0%
07 Food Waste	**0.0%**	**0.3%**
44. Avoidable Food Waste	0.0%	0.3%
45. Unavoidable Food Waste	0.0%	0.0%
08 Yard Waste	**16.0%**	**14.9%**
46. Yard and Garden Debris	0.1%	0.3%
47. Brush and Branches	15.9%	14.6%
09 Waste Electrical and Electronic Equipment	**4.1%**	**2.6%**
48. Electronics	4.1%	2.6%
10 Construction and Demolition Wastes	**53.1%**	**58.5%**
49. Dimensional Lumber – Untreated	0.0%	0.0%
50. Dimensional Lumber – Treated	37.4%	29.2%
51. Composite Wood	3.7%	2.8%
52. Gypsum Wallboard	0.2%	2.9%
53. Asphalt Roofing Shingles	0.5%	1.4%
54. Mixed Metals	0.0%	0.0%
55. Concrete, Bricks	0.3%	0.0%
56. Ceramics, Porcelain	4.9%	3.7%
57. Carpeting	5.0%	0.9%
58. Other Construction and Demolition Wastes	1.1%	17.6%
11 Bulky Waste	**14.1%**	**12.0%**
59. Furniture or Fixtures	14.1%	12.0%
60. Other Large Bulky Items	0.0%	0.0%
12 Household Hygiene	**0.0%**	**0.2%**
61. Diapers	0.0%	0.0%
62. Sanitary Products	0.0%	0.0%
63. Pet Waste	0.0%	0.2%
13 Other Materials	**0.8%**	**0.9%**
64. Textiles	0.8%	0.9%
65. Tires and Other Rubber	0.0%	<0.1%
66. Other Waste	0.0%	0.0%
67. Wood Utensils	0.0%	0.0%
14 Other Materials	**7.2%**	**8.9%**
68. Bagged Garbage	7.2%	8.9%
	100.0%	**100.0%**

APPENDIX E

SECTORS AND NAMING CONVENTIONS

Sectors & Naming Convention

The naming convention for samples should be as follows:

Example: **SU24 - NUT - G**

Season and Year	Route	Stream
Summer = SU24 Fall = FA24 Winter = WI25	See Table	Garbage = G Recycling = R Organics = O

Example: **SU24 - MU - 01**

Season and Year	Stream	Sample Number
Summer = SU24 Fall = FA24 Winter = WI25	MU = Multi-unit DO = Drop off	Number Consecutively as loads arrive

Route	Collection Route	Community
NUT	01	Nutana
NPA	02	Nutana Park
EAS	03	Eastview
ROS	04	Rosewood
WIL	05	Willowgrove
CIT	06	City Park
SIL	07	Silverwood Heights
MOU	08	Mount Royal
DUN	09	Dundonald
PAR	10	Parkridge