



Waste Audit Report

Prepared for:

Mohawk College: Fennell Campus
135 Fennell Avenue West
Hamilton, ON
L9C 0EC

Prepared by:

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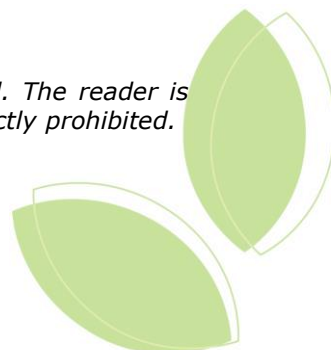
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November 1, 2024

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EXECUTIVE SUMMARY

Mohawk College retained GFL Environmental Inc. to conduct a solid, non-hazardous waste audit for the Mohawk College main campus, located at 135 Fennell Avenue West in Hamilton, Ontario. A point of generation waste audit was performed for the Fennell Campus on November 1, 2024.

PURPOSE

The purpose of the waste audit was to identify, quantify and analyze the composition of the waste stream and to ensure compliance with the requirements outlined in the Ministry of the Environment Ontario (MOE) Regulations 102/94 and 103/94.

AUDIT METHODOLOGY

To collect an appropriate sample of waste for the audit, the campus was asked to save waste from an approximate 24-hour period. The GFL Environmental Inc. team received the waste sample and conducted the audit and analysis of the waste stream on-site . An overall survey was completed by the GFL Environmental Inc. audit team; bags of waste material were opened and separated into commodity type (paper, plastic, metal, glass, organic and 'other') and the resulting subcategories (as listed in Appendix I, page 28). Each commodity type and subcategory were weighed individually, and photographs were taken for inclusion in the waste audit report.

WASTE AUDIT RESULTS

The information contained in this waste audit report was gathered from the on-site point of generation waste audit, discussions with Mohawk College personnel, and an analysis of the current waste management handling practices used on site at the facility. The figure below displays the total projected annual waste categories as represented from the materials analyzed in the audit.

Audited Waste Category Breakdown (kg/ year)

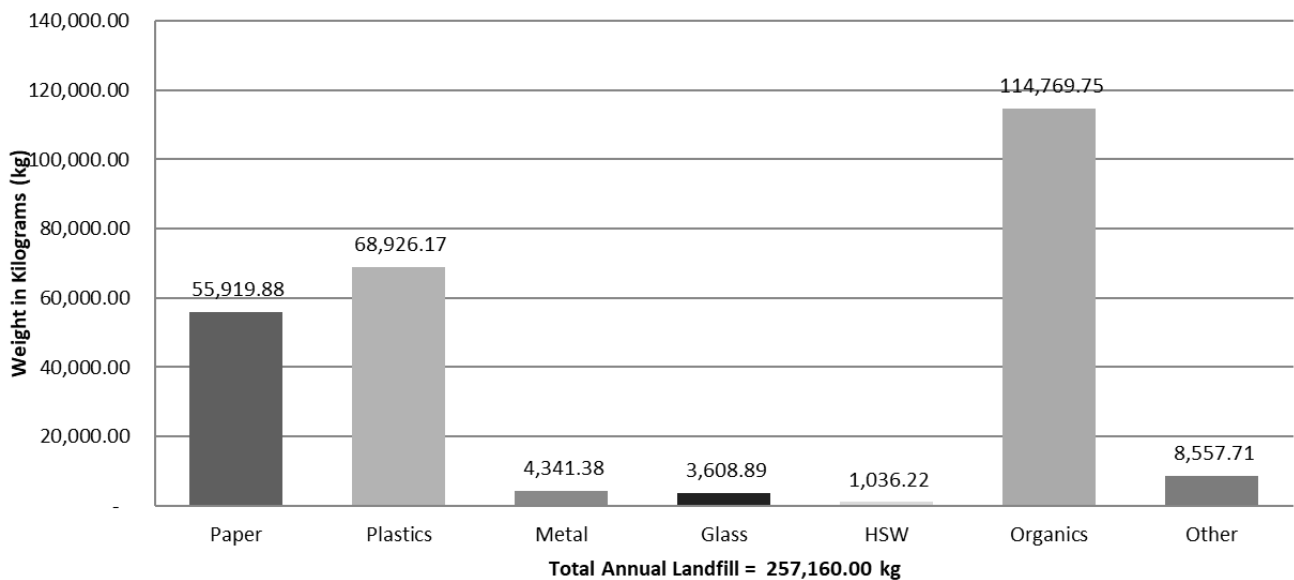


Figure 1 Audited Waste Category Breakdown (kg/ year)

Total Materials Recycled and/or Sent to Landfill

Material Destination	Annual Total		
	KILOGRAMS (kg)	METRIC TONNES (t)	PERCENTAGE (%)
Landfill Waste	257,160.00	257.16	62.29
Recycled	155,667.97	155.67	37.71
TOTAL GENERATED	412,827.97	412.83	100.00

DIVERSION RATE

The 2024 waste diversion rate for the Fennell Campus is **37.71%**, as shown calculated on page 17 of this report.

RECOMMENDATIONS

Based on the waste audit findings, the top areas of focus should be on initiatives driven towards:

- **Improving signage:** Implementing clear and consistent signage will allow for a better understanding of and participation in the program.
- **Improving existing organics recycling program:** Organic materials are the heaviest contributor to landfill waste weight. By diverting organic waste from landfill, the Fennell Campus could potentially divert 114,769.75 kg from landfill annually.
- **Training and education:** Educating visitors, tenants, employees, and participants on a semi-annual basis will help improve and continue the success of the program.

POTENTIAL DIVERSION RATE

If the above recommendations are implemented, the potential diversion rate of the Fennell Campus could be **85.87%**. For full calculation of potential diversion rate, please refer to page 19 of this report.

STATEMENT OF LIMITATIONS

- The waste audit conducted at Mohawk College: Fennell Campus on November 1, 2024 reflect all materials observed at the time of the audit for the 24-hour sample period;
- Waste audit methodology is based on industry standards as well as the waste auditing team's expertise in waste management. The majority of GFL Environmental Inc.'s waste auditors are 3R Certified through the Circular Innovation Council (CIC);
- Data is annualized in accordance with the Ministry of the Environment's reporting requirements. GFL Environmental Inc. cannot guarantee day-to-day generation produces the same quantities of materials;
- Analysis and recommendations are based on our observations, knowledge, judgement, industry best practices and consultations with the client; and
- Overall report and methodology have been designed to meet project objectives/deliverables.

ANOMALIES

Anomalies are physical items or operational challenges (e.g. work events such as barbecues, scheduled special events, etc.) that would alter the composition of the waste stream as a one off occurrence. No anomalies were found in the waste audit sample.

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1 INTRODUCTION

Mohawk College retained GFL Environmental Inc. to conduct a solid, non-hazardous waste audit for the Mohawk College main campus, located at 135 Fennell Avenue West in Hamilton, Ontario. A point of generation waste audit was performed for the Fennell Campus on November 1, 2024.

The overall purpose of the waste audit is to identify, quantify and analyze the composition of the landfill waste stream to ensure compliance with the requirements outlined in the Ministry of the Environment Ontario (MOE) Regulations 102/94 and 103/94. Under O.Reg. 102/94, all waste audits must address:

- Identify the amount, nature and composition of the waste generated in designated functional areas of the entity;
- How the waste is produced, including relevant management decisions and policies;
- How the waste is managed; and
- The extent to which materials or products used or sold consist of recycled or reused materials or products.

Waste audits are also used to determine:

- The ability to reduce, reuse and recycle materials from the existing waste stream;
- Identify the overall diversion rates for all recyclable materials;
- Identify further opportunities for greater diversion, and;
- Pinpoint new recycling opportunities, and to enhance and strengthen the existing recycling initiatives currently in place.

This analysis aids the formation of a Waste Reduction Work Plan; a plan to go forward with a successful diversion program, drawing from the audit results and the subsequent diversion recommendations made by GFL Environmental Inc., in partnership with input and insight from Mohawk College.

2 AUDITEE PROFILE AND PROJECT SCOPE

The following section provides contextual information regarding Mohawk College: Fennell Campus and the waste audit that was completed for the facility on November 1, 2024.

The Mohawk College Fennell Campus, located at 135 Fennell Avenue West, is a post-secondary education facility. Mohawk College has approximately 13,000 full time students, including 3,000 international students, 4,000 apprentices and more than 20,000 continuing education students. The Fennell Campus also includes a state-of-the-art fitness center and gymnasium, an on-site pub, and cafeteria.

2.2 CURRENT WASTE MANAGEMENT PROGRAM

The campus at 135 Fennell Avenue West currently has programs in place for landfill waste, cardboard, organics and mixed recycling. The table below describes the containers used on site and the service schedule for each material stream.

Material Stream	Container	Service Schedule	Hauler
Landfill Waste	1 x 35 yard compactor	Serviced once (1) per week	GFL Environmental Inc.
Landfill Waste	1 x 3 yard bin	On-call service	GFL Environmental Inc.
Landfill Waste	1 x 40 yard bin	On-call service	GFL Environmental Inc.
Cardboard	1 x 8 yard bin	Serviced once (1) per week	GFL Environmental Inc.
Mixed Paper	1 x 8 yard bin	Serviced once (1) per week	GFL Environmental Inc.
Shredding	Drop-off bins	On-call service	Shred-it
Mixed (Commingled) Recycling	16 x 95 gallon totes	Serviced once (1) per week	GFL Environmental Inc.
Organics	3 x 32 gallon totes	Serviced five (5) times per week	Davidson Environmental
Scrap Metal	Third-Party	On-call service	Wentworth Metal Recycling
Electronic Waste Recycling	Third-Party	On-call service	Quantum Lifecycle Partners LP
Battery Recycling	Third-Party	On-call service	Raw Materials Company
Lightbulbs	Third-Party	On-call service	-
PPE (Disposable Masks) Recycling	Large Box	On-call service	Terracycle
Drywall	Third-Party	On-call service	Wentworth Metal Recycling

3 WASTE AUDIT METHODOLOGY

3.1 AUDIT PROCEDURE

To collect an appropriate sample of waste for the audit, the campus was asked to save waste from an approximate 24-hour period. The GFL Environmental Inc. team received the waste sample and conducted the audit and analysis of the waste stream at an on-site location. An overall survey was completed by the GFL Environmental Inc. audit team; bags of waste material were opened and separated into commodity type (paper, plastic, metal, glass, organic and 'other') and the resulting subcategories (as listed in Appendix I, page 28). Each commodity type and subcategory were weighed individually, and photographs were taken for inclusion in the waste audit report.

3.2 AUDITOR PROFILE

Morgan Bragg was the lead auditors who conducted the audit organization, preparation and supervision. The lead auditor was assisted by Naomi Alon, Evan Davis, Pranav Rendalkar, Curtis Drager, Angelina Monette and Zoë Williams-Dale during the waste audit for the Mohawk College Fennell Campus. All auditors are 3R Certified auditors through the Circular Innovation Council (CIC).

3.3 COMMODITIES SORTED

The following is a list of commodities categories. The major categories of commodities sorted are paper, plastic, metal, glass, household special waste, organics, and 'other' materials. Within these major categories are subcategories, and these help to further sort the commodities.

Paper	
Newspaper	Non-glossy; colour flyers, daily papers
Magazines	Glossy; magazines and catalogues
Cardboard	Corrugated cardboard boxes and tubes
Boxboard	Thin paper board boxes (cereal, crackers, tissue, etc.)
Mixed paper	Printer paper, envelopes
Molded pulp	Egg cartons, take-out beverage trays
Other paper	Cold beverage cups, layered paper envelopes, waxed papers, etc.
Coffee cups	Take-out, non-styrofoam paper coffee cups
Spiral Wound Containers	Pringles cans, concentrated juice cans, etc.
Gable Top Containers	Milk and juice cartons
Aseptic (Tetra) Containers	Juice boxes, wine cartons, etc.
Plastic	
#1 PET	Single-use water, juice and pop bottles; clear clamshells, take-out packaging, food packaging and bottles
#2 HDPE	Bottles and jugs, buckets, tubs, bags, etc.
#3 PVC	Clamshell packaging
#4 LDPE	Bags, bottles, tubs and containers
#5 PP	Cups and take-out packaging, jugs and tubs
#6 Styrofoam	Take out styrofoam containers

#6 Styrofoam (Packaging)	Styrofoam peanuts, block packaging
#6 Rigid	Coffee cup lids, cups, clamshells, take-out food packaging, etc.
#7 Other	Durable containers, packaging
Rigid Plastic	Pens, tooth brushes, gift gards, straws, cutlery, etc.
Plastic Strapping	Plastic binding for newspapers, packages, etc.
Metal	
Aluminum cans	Pop and juice cans
Aluminum foil	Foil wrap
Aluminum trays	Catering trays, pie plates, etc.
Aerosal cans	Hair spray, paint, compressed air, etc.
Steel cans	Large soup cans
Scrap metal	Wire hangers, nuts and bolts, metal cookie tins, metal strapping
Glass	
Clear/ Coloured	Clear and coloured glass food and beverage packaging
Liquor Bottles	Refundable containers
Other glass	Ceramics, cups, plates, mirrors, window glass, non-LED or fluorescent lightbulbs
Household Special Waste (HSW)	
Batteries	All types
Toner cartridges	Printer toner cartridges
Chemicals/ Liquids	Paints, solvents, oils, etc.; cosmetics, lotions, healthcare products, etc.
E-Waste	Electronics, small appliances, phones, computer equipment, cables, etc.
Lightbulbs	Fluorescent tubes, LED
Organics	
Food waste	All food scraps, peels, bones, skin, pits, coffee grounds and filters, tea bags
Tissue/ Toweling	Facial tissue, napkins, paper towel
Beverage liquids	Water, coffee, pop, juice, soup, etc.
Compostable Ware	Compostable packaging, coffee cups, cutlery; wooden stir sticks, bamboo serveware, wooden chopsticks, etc.
Plants and Flowers	Flowers, potted plants, dead leaves
Other Materials	
Other	Many different other materials are found in audit samples. Additional notes and subcategories are to be recorded on the waste audit sorting sheet.

Note: Commodities sorted consists of materials found in the audit. However, additional materials known to be generated at the facility may not have been in the audit sample. The additional materials have been included in the audit results as part of the diversion program in place.

3.4 METHOD OF ANNUALIZATION

The Mass Ratio Method was used when calculating the mass of materials generated for the entire year at the Mohawk College Fennell Campus. This is the more useful and preferred method when annual waste and recycling records are deemed accurate and verifiable. The Mass Ratio Method formula is as follows:

$$m = \left(\frac{T_s}{T_c} \right) (T_t) + T_r$$

m = total annual mass of each material. Note that this should be calculated for each category of waste and for each method of disposition (reuse, recycling and disposal.)

T_s = total material generated in a specific category found in the audit sample.

T_c = total mass of all materials found in the audit sample with a specific method of disposition (reuse or recycling or disposal.) For materials analyzed during the audit, there will likely be a different value of T_c for all materials sent for disposal, for all materials sent for reuse, and for all materials sent for recycling during the sampling period.

T_t = total annual mass of material, substantiated by records, per container. For example, a site may have records for each haul of a 40-yard bin of waste. Therefore, T_t for this container would be the sum of the mass of all hauls that year for that container.

T_r = annual mass per category of materials of items not found in the audit sample for which there are records or reasonable estimates. These would be materials that would not have been found in the audit sample but are a regularly generated waste stream, such as furniture or wood pallets offered for external reuse. This is quantified and substantiated by records kept by the auditee. These materials should be accounted for in the final calculation.

4 WASTE AUDIT RESULTS

Based on the waste audit sample, the total amount of materials generated and disposed of in the waste stream at the Fennell Campus is estimated to be 1,020.48 kilograms (kg) or 1.02 metric tonnes (t) during a 24-hour period or 257,160.00 kg (257.16 t) annually.

From the audited waste sample, organic materials represent 44.63%; plastic materials represent 26.80%; paper materials represent 21.75%; 'other' materials represent 3.33%; metal materials represent 1.69%; glass materials represent 1.40%, and HSW materials represent 0.40% of the total annual waste disposed and sent to landfill.

Total Annual Waste Generated 2024*

COMMODITY CATEGORY	KILOGRAMS (kg)	PERCENTAGE (%)
Organics	114,769.75	44.63
Plastic	68,926.17	26.80
Paper	55,919.88	21.75
'Other'	8,557.71	3.33
Metal	4,341.38	1.69
Glass	3,608.89	1.40
HSW	1,036.22	0.40
TOTAL	257,160.00	100.00

Total Annual Waste Stream Composition 2024*

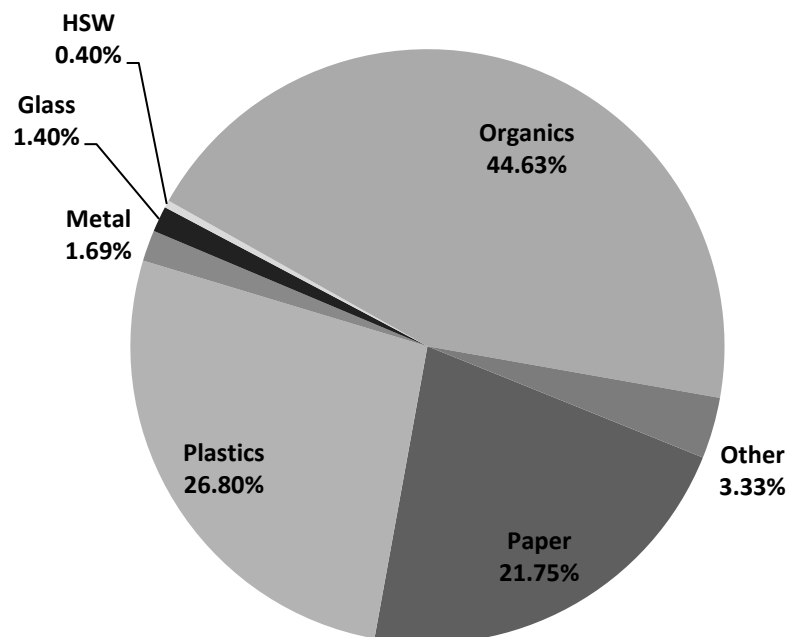


Figure 2 Total Annual Waste Stream Composition 2024

**Figures are based on 24-hour waste audit sample. Annual projection is based on number of operational days.*

Categorical Waste Composition

The following tables and graphs illustrate the composition breakdown of the audited waste sample from the Mohawk College Fennell Campus at 135 Fennell Avenue West. Seven (7) commodity categories were audited: paper, plastic, metal, glass Household Special Waste (HSW), organics and 'other' materials. Materials were found in all commodity categories.

Total Annual Paper Materials Generated (kg/yr)

GENERATING AREAS	Newspaper	Magazines	Cardboard	Boxboard	Mixed Papers	Molded Pulp	Kraft Paper	Other Paper	Spiral Wound	Coffee Cups	Aseptic Containers	Gable Top Containers	TOTAL PAPER
A	-	-	-	500.24	1,107.68	107.19	678.90	1,286.34	-	2,858.52	71.46	214.39	6,824.73
C	-	-	250.12	786.09	750.36	357.32	178.66	2,429.75	-	1,214.87	35.73	-	6,002.90
I	-	-	-	1,250.60	393.05	-	-	1,000.48	-	2,644.14	142.93	250.12	5,681.32
B	71.46	214.39	107.19	285.85	964.75	-	71.46	1,179.14	-	2,108.16	35.73	107.19	5,145.34
J	-	-	-	964.75	142.93	250.12	-	1,393.53	-	1,107.68	535.97	-	4,394.98
R	-	-	1,000.48	285.85	428.78	-	214.39	1,357.80	107.19	500.24	357.32	-	4,252.06
H	-	-	-	214.39	178.66	71.46	-	1,536.46	-	1,715.11	107.19	71.46	4,037.67
GROUPS	-	-	1,214.87	214.39	678.90	-	786.09	285.85	-	393.05	107.19	-	3,680.35
E	-	-	-	428.78	35.73	-	107.19	1,214.87	-	1,715.11	107.19	71.46	3,680.35
F	-	-	250.12	250.12	142.93	-	107.19	678.90	-	1,071.95	464.51	-	2,965.72
EA	-	-	-	393.05	35.73	-	1,750.85	357.32	-	285.85	35.73	71.46	2,929.99
G	-	-	1,286.34	35.73	571.70	-	-	214.39	-	107.19	250.12	357.32	2,822.79
M	-	-	-	500.24	1,250.60	-	-	71.46	-	71.46	-	-	1,893.77
Q	-	-	-	321.58	71.46	-	17.87	-	-	464.51	-	-	875.42
N	-	-	-	107.19	303.72	-	-	142.93	-	142.93	35.73	-	732.50
TOTAL	71.46	214.39	4,109.13	6,538.87	7,056.98	786.09	4,055.53	13,149.21	107.19	16,400.78	2,286.82	1,143.41	55,919.88
	0.13%	0.38%	7.35%	11.69%	12.62%	1.41%	7.25%	23.51%	0.19%	29.33%	4.09%	2.04%	100.00%

Top 10 Paper Producers in Landfill

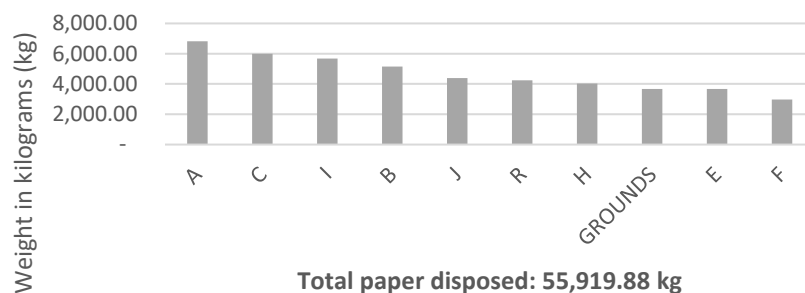


Figure 3 Total Annual Paper Materials Generated (kg/ yr)

The figure above shows the amount of paper materials generated and disposed of as waste, per area. The top two (2) producing areas are A Wing, generating 6,824.73 kg per year, and C Wing, generating 6,002.90 kg per year.

Coffee cups and mixed paper are the highest generated recyclable paper materials found in the waste stream. It is important to keep these materials dry and free of contamination prior to recycling. This may include separating coffee cups from cardboard, mixed paper, and boxboard material due to potential beverage liquid remains in coffee cups.

Total Annual Plastic Materials Generated (kg/yr)

GENERATING AREAS	# 1 PETE Soft Drinks	# 2 HDPE	# 3 PVC	# 4 LDPE Recyclable Film	# 5 PP	# 6 PS (Styrofo am)	# 6 PS (Clear/ Hard)	# 7 Other	Non- Recyclable Film	Rigid Plastics	Plastic Strapping	TOTAL PLASTICS
A	1,464.99	-	-	-	1,715.11	-	571.70	-	5,931.44	250.12	35.73	9,969.10
G	-	6,717.53	-	-	-	-	285.85	178.66	2,501.21	-	-	9,683.25
I	821.83	-	-	-	1,107.68	-	607.44	-	4,287.79	142.93	-	6,967.65
EA	321.58	571.70	-	250.12	1,071.95	-	178.66	-	3,537.42	35.73	-	5,967.17
E	643.17	-	-	-	1,214.87	17.87	357.32	-	2,572.67	107.19	-	4,913.09
C	1,143.41	357.32	-	-	857.56	428.78	321.58	-	1,679.38	35.73	71.46	4,895.22
B	714.63	-	-	-	643.17	107.19	357.32	-	2,679.87	107.19	178.66	4,788.03
R	821.83	786.09	-	428.78	571.70	-	214.39	-	1,536.46	285.85	-	4,645.10
J	535.97	-	-	-	250.12	-	178.66	71.46	2,965.72	321.58	-	4,323.52
H	250.12	35.73	-	-	1,071.95	-	464.51	-	1,786.58	-	-	3,608.89
GROUND	-	-	-	-	1,107.68	-	142.93	-	1,250.60	-	-	2,501.21
N	1,643.65	-	-	-	71.46	-	17.87	-	607.44	17.87	-	2,358.28
M	142.93	-	-	-	17.87	-	107.19	-	1,464.99	17.87	-	1,750.85
Q	321.58	-	-	-	-	-	71.46	-	1,071.95	107.19	-	1,572.19
F	285.85	-	-	-	393.05	-	285.85	-	-	17.87	-	982.62
TOTAL	9,111.55	8,468.38	-	678.90	10,094.16	553.84	4,162.73	250.12	33,873.51	1,447.13	285.85	68,926.17
	13.22%	12.29%	0.00%	0.98%	14.64%	0.80%	6.04%	0.36%	49.14%	2.10%	0.41%	100.00%

Top 10 Plastic Producers in Landfill

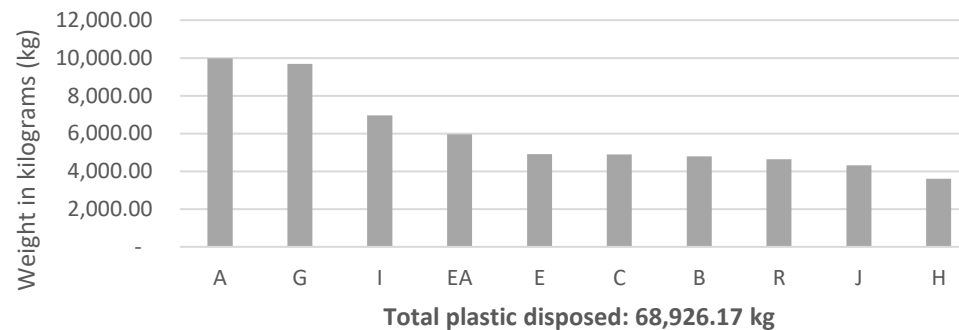


Figure 4 Total Annual Plastic Materials Generated (kg/ yr)

The figure above shows the amount of plastic materials generated and disposed of as waste, per area. The top two (2) plastic producing areas are A Wing (9,969.10 kg) and G Wing (9,683.25 kg).

#5 PP and #1 PETE are the highest generated recyclable plastic materials found in the waste stream. It is important to encourage the use of reusable water bottles and mugs to reduce overall generation of these single-use materials on site. This may include distributing e-newsletters promoting the positive impacts of reusable bottles and mugs.

Total Annual Metal Materials Generated (kg/yr)

GENERATING AREAS	Aluminum Cans	Aluminum Foil	Aluminum Trays	Aerosol Cans	Steel	Scrap Metal	TOTAL METALS
C	250.12	-	-	-	-	500.24	750.36
N	714.63	-	-	-	-	-	714.63
J	142.93	71.46	285.85	-	35.73	107.19	643.17
R	393.05	35.73	-	-	-	-	428.78
EA	35.73	-	-	-	321.58	-	357.32
I	285.85	-	-	-	-	-	285.85
A	250.12	-	-	-	-	-	250.12
B	250.12	-	-	-	-	-	250.12
H	178.66	-	-	-	-	-	178.66
Q	178.66	-	-	-	-	-	178.66
E	142.93	-	-	-	-	-	142.93
F	-	-	-	-	-	142.93	142.93
G	17.87	-	-	-	-	-	17.87
GROUPS	-	-	-	-	-	-	-
M	-	-	-	-	-	-	-
TOTAL	2,840.66	107.19	285.85	-	357.32	750.36	4,341.38
	65.43%	2.47%	6.58%	0.00%	8.23%	17.28%	100.00%

Top 10 Metal Producers in Landfill

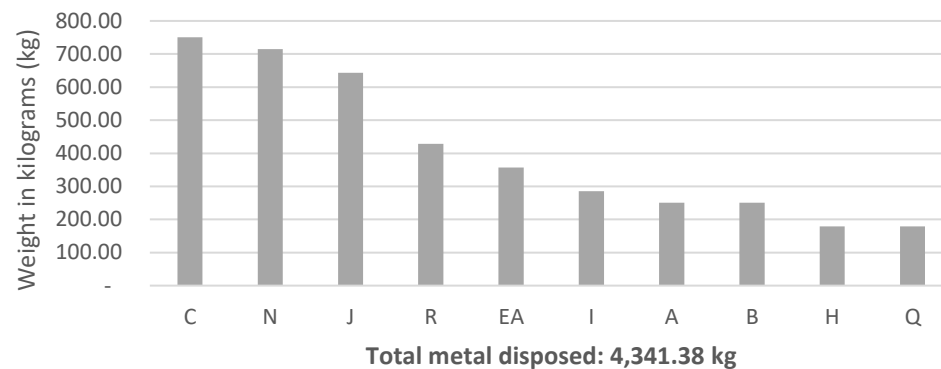


Figure 5 Total Annual Metal Materials Generated (kg/yr)

The figure above shows the amount of metal materials generated and disposed of as waste, per area. The top two (2) metal producing areas are C Wing (750.36 kg) and N Wing (714.63 kg).

Aluminum cans are the highest generated recyclable metal material found in the waste stream. It is important to keep these materials free of contamination, including liquids and food waste prior to placing in recycling containers.

Total Annual Glass Materials Generated (kg/yr)

GENERATING AREAS	Glass (Clear/ Coloured)	TOTAL GLASS
EA	1,572.19	1,572.19
G	1,393.53	1,393.53
R	464.51	464.51
GROUNDS	178.66	178.66
A	-	-
B	-	-
C	-	-
I	-	-
E	-	-
F	-	-
H	-	-
J	-	-
M	-	-
Q	-	-
N	-	-
TOTAL	3,608.89	3,608.89
	100.00%	100.00%

Top Glass Producers in Landfill

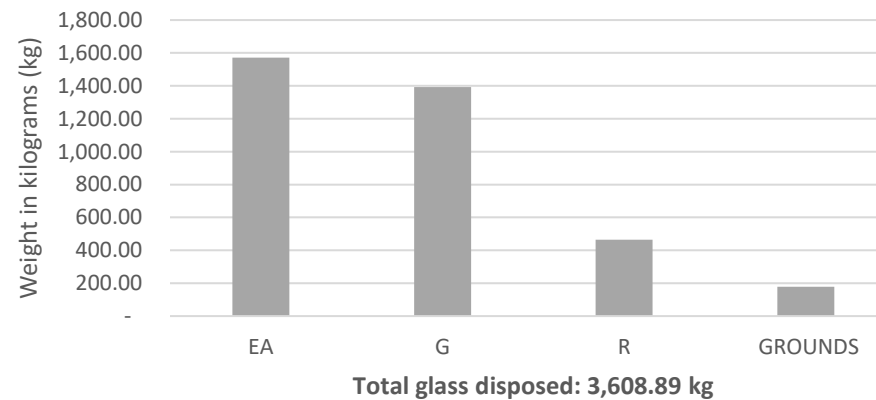


Figure 6 Total Annual Glass Materials Generated (kg/yr)

The figure above shows the amount of glass materials generated and disposed of as waste, per area. The top two (2) glass producing areas are EA Wing (1,572.19 kg) and G Wing (1,393.53 kg). It is important to keep recyclable glass materials free of contamination, including liquids, prior to placing materials into recycling collection containers.

Total Annual HSW Materials Generated (kg/yr)

GENERATING AREAS	Batteries	E-Waste	Toner	TOTAL HSW
B	-	500.24	-	500.24
A	-	178.66	71.46	250.12
C	178.66	-	-	178.66
GROUNDS	-	107.19	-	107.19
I	-	-	-	-
E	-	-	-	-
F	-	-	-	-
G	-	-	-	-
H	-	-	-	-
EA	-	-	-	-
R	-	-	-	-
J	-	-	-	-
M	-	-	-	-
Q	-	-	-	-
N	-	-	-	-
TOTAL	178.66	786.09	71.46	1,036.22
	17.24%	75.86%	6.90%	100.00%

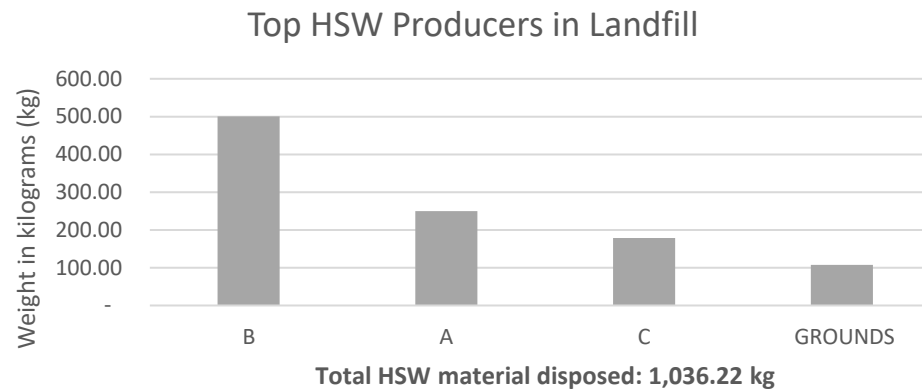


Figure 7 Total Annual HSW Materials Generated (kg/yr)

The figure above shows the amount of HSW materials generated and disposed of as waste, per area. The top two HSW producing areas are B Wing (500.24 kg) and A Wing (250.12 kg). Electronic waste is the highest generated HSW material found in the waste sample. It is important to keep these materials separate from all other waste streams on site, and to ensure they are diverted through specialized handling and recycling programs.

Total Annual Organic Materials Generated (kg/yr)

GENERATING AREAS	Food Waste	Tissue/ Toweling	Beverage Liquids	Compos- table Containers	Yard/ Plant Waste	TOTAL ORGANICS
G	30,907.79	571.70	607.44	1,107.68	-	33,194.61
A	7,718.02	3,072.91	2,679.87	357.32	-	13,828.11
E	5,002.42	2,108.16	2,286.82	571.70	-	9,969.10
EA	3,287.30	5,502.66	321.58	250.12	-	9,361.67
I	3,358.77	1,679.38	2,536.94	571.70	-	8,146.79
B	3,144.38	1,357.80	1,393.53	607.44	714.63	7,217.77
J	4,609.37	964.75	535.97	1,000.48	-	7,110.58
R	1,750.85	3,037.18	821.83	178.66	-	5,788.51
GROUNDS	3,573.16	357.32	1,679.38	71.46	-	5,681.32
C	2,715.60	857.56	857.56	71.46	-	4,502.18
H	2,143.89	571.70	857.56	35.73	-	3,608.89
F	1,357.80	1,929.50	-	142.93	-	3,430.23
M	1,107.68	321.58	-	71.46	-	1,500.73
Q	-	142.93	-	607.44	-	750.36
N	-	678.90	-	-	-	678.90
TOTAL	70,677.02	23,154.05	14,578.47	5,645.59	714.63	114,769.75
	61.58%	20.17%	12.70%	4.92%	0.62%	100.00%

Top 10 Organics Producers in Landfill

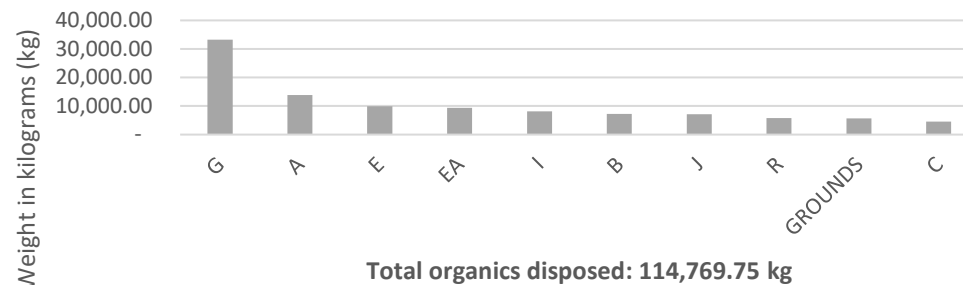


Figure 8 Total Annual Organic Materials Generated (kg/ yr)

The figure above shows the amount of organic materials generated and disposed of as waste, per area. The top two (2) organic producing areas are G Wing (33,194.61 kg) and A Wing (13,828.11 kg).

Food waste is the highest generated material amongst all organics found in the waste stream. It is important to keep these materials separate from all other waste streams on site. This may include improving the current organics recycling program to include additional collection containers in high-generating area.

Total Annual 'Other' Materials Generated (kg/yr)

GENERATING AREAS	Textiles	Disposable Gloves	Masks	Coffee Pods	Sanitary Products	Friender Packaging	Condoms	Books	Writing Utensils	Sweepings	Shrink Wrap	Vape Cartridge	TOTAL OTHER
A	35.73	71.46	-	107.19	-	17.87	-	1,036.22	71.46	178.66	-	-	1,518.59
E	-	464.51	17.87	-	-	1,000.48	-	-	-	-	-	-	1,482.86
EA	464.51	178.66	-	-	-	178.66	-	500.24	-	-	-	-	1,322.07
I	-	-	-	393.05	-	678.90	-	-	-	-	-	17.87	1,089.81
C	178.66	142.93	-	-	-	71.46	-	-	-	-	607.44	-	1,000.48
H	-	17.87	-	-	250.12	-	-	-	-	214.39	-	-	482.38
R	357.32	107.19	-	-	-	-	-	-	-	-	-	-	464.51
J	-	178.66	-	-	-	250.12	-	-	35.73	-	-	-	464.51
F	-	107.19	17.87	-	-	142.93	-	-	35.73	-	-	-	303.72
B	-	35.73	-	35.73	-	107.19	17.87	-	-	-	-	-	196.52
N	-	142.93	-	-	-	-	-	-	-	-	-	-	142.93
G	-	-	-	-	-	71.46	-	-	-	-	-	-	71.46
GROUNDS	-	-	-	-	-	-	-	-	17.87	-	-	-	17.87
M	-	-	-	-	-	-	-	-	-	-	-	-	-
Q	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1,036.22	1,447.13	35.73	535.97	250.12	2,519.07	17.87	1,536.46	160.79	393.05	607.44	17.87	8,557.71
	12.11%	16.91%	0.42%	6.26%	2.92%	29.44%	0.21%	17.95%	1.88%	4.59%	7.10%	0.21%	100.00%

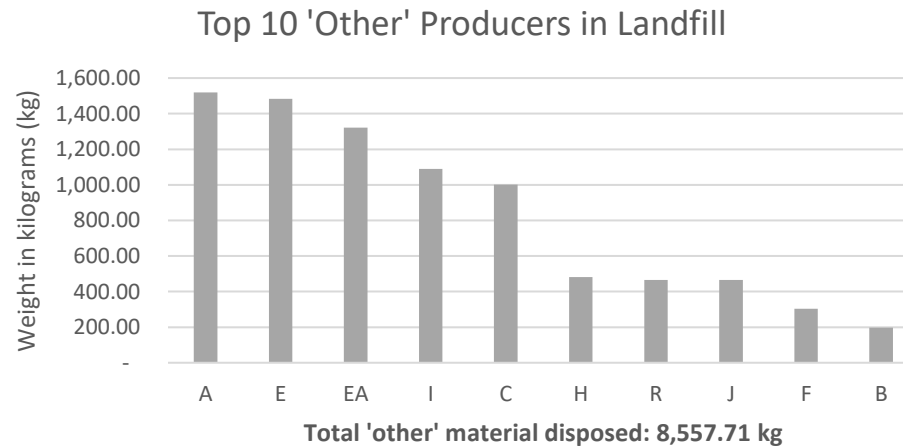


Figure 9 Total Annual 'other' Materials Generated (kg/ yr)

The figure above shows the amount of 'other' materials generated and disposed of as waste, per area. The top two (2) producing areas are A Wing (1,518.59 kg) and E Wing (1,482.86 kg). As these materials are not currently recyclable, ensure that they are placed in the waste bin.

Total Annual Materials Generated (kg/yr)

GENERATING AREAS	Paper	Plastic	Metal	Glass	HSW	Organics	Other Materials	TOTAL MATERIALS
G	2,822.79	9,683.25	17.87	1,393.53	-	33,194.61	71.46	47,183.52
A	6,824.73	9,969.10	250.12	-	250.12	13,828.11	1,518.59	32,640.78
I	5,681.32	6,967.65	285.85	-	-	8,146.79	1,089.81	22,171.43
EA	2,929.99	5,967.17	357.32	1,572.19	-	9,361.67	1,322.07	21,510.40
E	3,680.35	4,913.09	142.93	-	-	9,969.10	1,482.86	20,188.33
B	5,145.34	4,788.03	250.12	-	500.24	7,217.77	196.52	18,098.03
C	6,002.90	4,895.22	750.36	-	178.66	4,502.18	1,000.48	17,329.80
J	4,394.98	4,323.52	643.17	-	-	7,110.58	464.51	16,936.76
R	4,252.06	4,645.10	428.78	464.51	-	5,788.51	464.51	16,043.47
GROUNDS	3,680.35	2,501.21	-	178.66	107.19	5,681.32	17.87	12,166.59
H	4,037.67	3,608.89	178.66	-	-	3,608.89	482.38	11,916.47
F	2,965.72	982.62	142.93	-	-	3,430.23	303.72	7,825.21
M	1,893.77	1,750.85	-	-	-	1,500.73	-	5,145.34
N	732.50	2,358.28	714.63	-	-	678.90	142.93	4,627.24
Q	875.42	1,572.19	178.66	-	-	750.36	-	3,376.63
TOTAL	55,919.88	68,926.17	4,341.38	3,608.89	1,036.22	114,769.75	8,557.71	257,160.00
	21.75%	26.80%	1.69%	1.40%	0.40%	44.63%	3.33%	100.00%

Top 10 Producers in Landfill

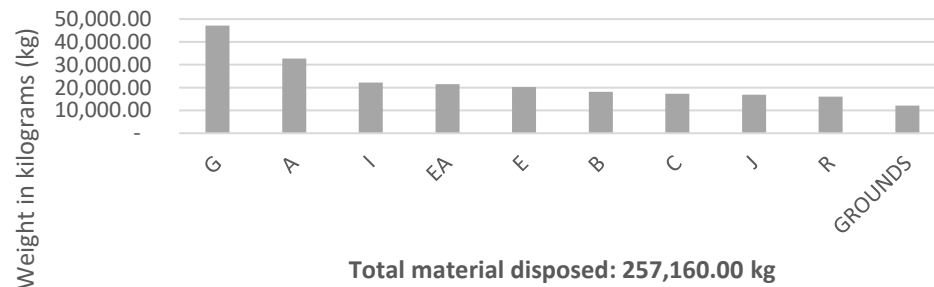


Figure 10 Total Annual Materials Generated (kg/yr)

In summary, the waste audit sample consisted of primarily organic materials (44.63%) and plastic materials (26.80%). With these being the highest generated materials on site, it is important to implement/maintain education and awareness surrounding the importance of recycling. It is also important to ensure that the proper equipment is in place all disposal locations. Focusing on signage, bin placement and education surrounding the recyclability of these materials would have the greatest impact on the overall diversion rate for the Fennell Campus.

5 WASTE GENERATION INDEX

The waste generation index (WGI) is the unit most closely related to the amount of solid waste generated by the facility using a common unit of measurement. This is used to normalize the data so that it can be used to compare to previous years generation data by unit.

For the purpose of this waste audit, the WGI is calculated using the total square footage of the Fennell Campus.

Mohawk College, Fennell Campus is 919,467.00 ft² in size.

Waste Generation Index is calculated as follows:

$$\text{Waste Generation Index} = \frac{(\text{Total Material Generated by the Facility})}{(\text{Total Square Footage})}$$

- Total Facility Square Footage: 919,467.00 ft²
- Material Generated Annually: 412,827.97 kg

$$WI = \frac{412,827.97 \text{ kg}}{919,467.00 \text{ ft}^2}$$

$$WI = 0.45 \text{ kg/ ft}^2$$

Therefore, the Fennell Campus generates 0.45 kg of waste per square foot.

6 CONTAMINATION OF AUDIT SAMPLE

Based on the waste audit results, 198,828.24 kg (77.32%) of the landfill waste sample was contaminated with recyclable materials. Of that total, 114,769.75 kg (114.77 t) was recyclable organics materials; 42,663.48 kg (42.66 t) was recyclable paper materials; 32,515.71 kg (32.52 t) was recyclable plastic materials; 4,234.19 kg (4.23 t) was recyclable metal materials; 3,608.89 kg (3.61 t) was recyclable glass materials and 964.75 kg (0.96 t) was recyclable HSW materials.

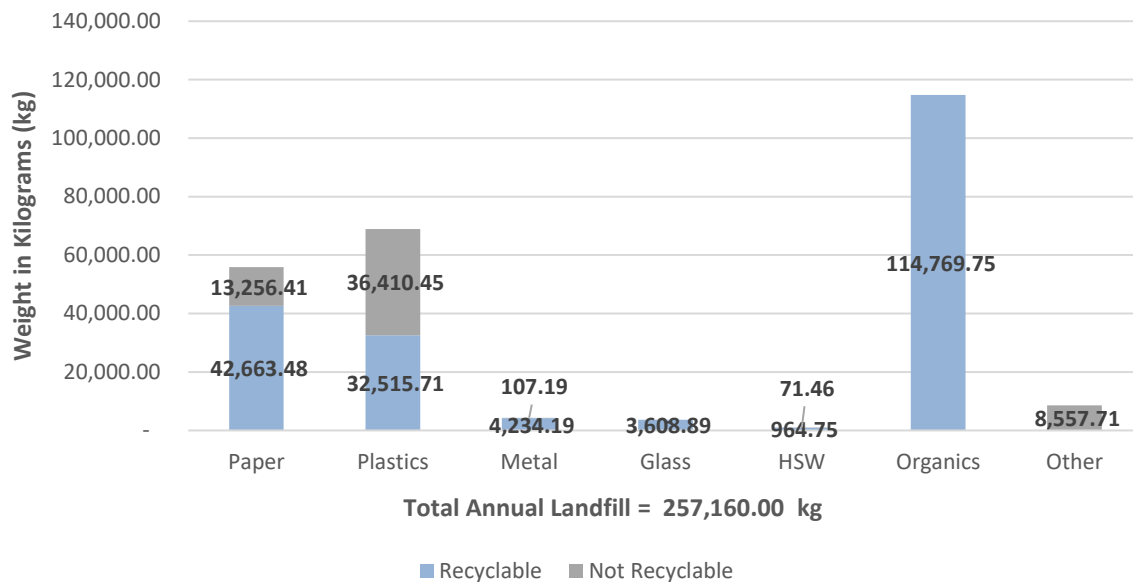


Figure 11 Contamination of Waste Audit Sample

7 DIVERSION RATE

A **waste diversion rate** is the percentage of total materials that are diverted from landfill. The annual diversion rate is calculated as follows:

Total Generated materials is calculated as follows:

Total Generated = Landfill Waste + Recycling

257,160.00 kg + 155,667.97 kg = 412,827.97 kg

Diversion Rate is calculated as follows:

Diversion Rate = $\frac{\text{(amount diverted from the facility)}}{\text{(total amount of material generated)}} \times 100\%$

= $\frac{155,667.97 \text{ kg}}{412,827.97 \text{ kg}}$

= 0.3771 x 100%

= **37.71%**

Based on industry standards, service information and available monthly data reporting, a total of 155,667.97 kg or 155.67 t of materials are removed and recycled at Mohawk College: Fennell Campus on an annual basis.

Material Destination	Annual Total		
	KILOGRAMS (kg)	METRIC TONNES (t)	PERCENTAGE (%)
Landfill Waste	257,160.00	257.16	62.29
Recycled	155,667.97	155.67	37.71
TOTAL GENERATED	412,827.97	412.83	100.00

Therefore, the current annual diversion rate is **37.71%**.

Annual Diversion Rate 2024

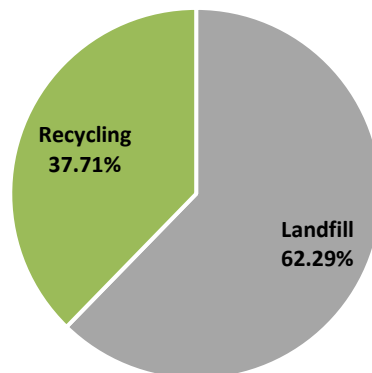


Figure 12 Annual Diversion Rate 2024

8 CAPTURE RATE

The **capture rate (c)** indicates the proportion of divertable waste, expressed as a percentage, which is successfully diverted for disposal. This figure includes all generated divertable waste, from all audited streams.

Total Divertable Materials is calculated as follows:

Total Divertable Materials Generated = Total Recycling Generated + Total Divertable Materials Found in Waste Stream

- Total recycling generated: 155,667.97 kg
- Divertable materials found in waste stream: 198,828.24 kg
- Total divertable material generated: 155,667.97 kg + 198,828.24 kg = 354,496.20 kg

Total Recycling Generated ÷ Total Divertable Materials Generated = Capture Rate

$$c = \frac{155,667.97 \text{ kg}}{354,496.20 \text{ kg}}$$

$$c = 0.4391 \times 100\%$$

$$c = 43.91\%$$

Therefore, the capture rate for the Fennell Campus is **43.91%**.

Annual Capture Rate 2024

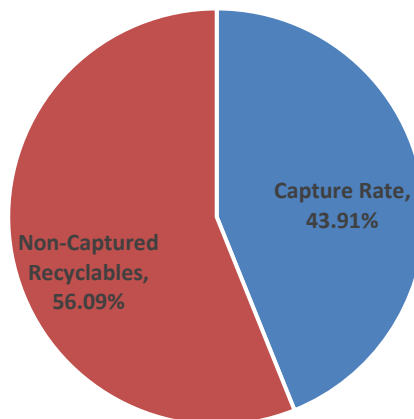


Figure 13 Annual Capture Rate 2024

9 POTENTIAL DIVERSION

The **potential diversion rate (P)** is the percentage of total materials that could be diverted from landfill if all divertable materials were placed in the proper recycling stream. The potential current diversion rate is calculated as follows:

Total Divertable Materials is calculated as follows:

Total Divertable Materials Generated = Total Recycling Generated + Total Divertable Materials Found in Waste Stream

- Total recycling generated: 155,667.97 kg
- Divertable materials found in landfill waste stream: 198,828.24 kg
- Total divertable material generated: 155,667.97 kg + 198,828.24 kg = 354,496.20 kg

Potential Diversion Rate is calculated as follows:

Potential Diversion Rate = $\frac{(\text{total divertable materials generated})}{(\text{total materials generated})}$

$$p = \frac{354,496.20 \text{ kg}}{412,827.97 \text{ kg}}$$

$$p = 0.8587 \times 100\%$$

$$p = 85.87\%$$

Therefore, the potential diversion rate for the Fennell Campus is **85.87%**.

Annual Potential Diversion Rate 2024

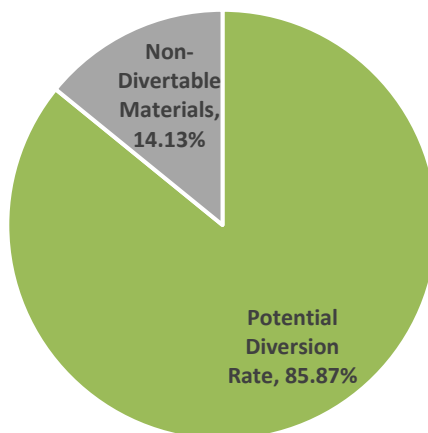


Figure 14 Annual Potential Diversion Rate 2024

10 CURRENT INITIATIVES AND WASTE MANAGEMENT PROGRAMS

Mohawk College's Fennell Campus has tools in place that help to ensure that the recycling program at the college is easy to use, clear, and organized in all areas of the campus. The following section outlines specific areas of the college campus where programs for the collection and source separation of recyclable materials have been implemented and maintained.

Centralized Waste Station

The centralized waste station is located in the main cafeteria, creating a single collection point for waste. This station places a greater emphasis on sorting, and provides organics bins as well as rinsing stations. This helps reduce contamination in the recycling streams. The signage incorporated in the stations serves as an education opportunity on waste sorting for the college community.



Green Team

September 2022 saw the launch of the Green Team volunteer program. The Green Team is a group of students who volunteer with the Mohawk College Sustainability Office. To date we've had 53 trained volunteers, currently 22 students are actively volunteering. The Green Team primarily assists members of the College community with sorting their waste using College Waste Stations (shown below) and educating them about the importance of proper waste sorting. Volunteers have also taken part in events enhancing local sustainability, such as cleanups and outreach events focused on sustainable waste practices. To date, a combined total of 230 volunteer hours have been accumulated.



Outdoor Bins

Three-stream bins are located outdoors throughout the Fennell Campus grounds. These bins provide the opportunity for staff, students and visitors to place material in the proper stream which helps to divert more waste from the landfill. These bins include a cans and bottles stream, paper stream and landfill waste stream.



Source Separation Containers in Classrooms

In 2016, Mohawk College began to roll out landfill waste and recycling collection containers for a certain number of classrooms that would allow individuals to source separate their materials rather than disposing all materials into one landfill bin. The program was successfully rolled out to all classrooms on campus in 2017. Additional bins were added in 2018 to enhance the program, providing a greater opportunity to increase the diversion of recyclable material from landfill.

Dishwashing Station

Fennell Campus has a dishwashing station in the cafeteria to encourage staff and students to bring their lunch from home in reusable containers. It was previously upgraded for easy use and a more pleasant experience for staff and students, further encouraging participants to neatly wash their reusable containers.

Water Bottle Refill Stations

Mohawk College has 32 water bottle refill stations across Fennell Campus. Since 2016, these stations have helped to divert 6,160,213 water bottles from the landfill waste and recycling streams.

Single-Use Plastic Ban

In 2013, Mohawk College implemented a single-use plastic ban across campus. All single use (one litre or less) plastic water bottles and single-use bags intended for personal use or distribution of goods, are not allowed on campus. This encourages staff and students to bring their own reusable bottles and bags to campus.

Electronic Waste & Battery Recycling Program

The electronic waste (e-waste) and battery recycling program at Fennell Campus was initiated in 2012. In 2017, Mohawk College improved this recycling program. There is now a collection cabinet on campus that stores e-waste, and drop-off bins for batteries are dispersed throughout the campus. A total of 4.89 tons (9,792 lbs.) electronic waste has been collected for recycling in the last twelve (12) months.



PPE Collection

In spring 2020, Mohawk College initiated PPE collection at both campuses. In Fall 2021, this program was operationalized with our housekeeping team implementing Terracycle Disposable Mask Collection boxes. This was accomplished by providing several collection boxes at designated sites around campus. To date, Fennell Campus has filled 45 large boxes, representing 143,468 masks diverted from landfill!



PaperCut™ Software for Paper Reduction

In September 2019, Mohawk College introduced PaperCut™ software to the Fennell campus. The software program allows the college to better track paper use, in order to coordinate reduction campaigns and initiatives. Paper consumption on campus has reduced significantly over the pandemic and the college has implemented digital file management systems to continue to reduce paper use post-pandemic.

Paperless News Initiative

At Mohawk College, all staff and students have access to the municipal newspaper through their Mohawk login. This has eliminated the overall generation of printed paper.

Friendlier

In Fall of 2023, Mohawk College introduced a reusable container program pilot at Mo's Restaurant in the Mohawk College Residence, in partnership with Chartwells and Friendlier.

The pilot was successful and in Fall of 2024 this initiative was expanded to additional food service areas at the Fennell Campus. The program is currently holding an 76% return rate is expected to significantly reduce waste from foodservices by replacing many types of single-use packaging with a deposit and return system, with a goal of reducing 100,000 single-use items in the first year.



Excess Paper Towel Dispenser Removal

In the 2023 Waste Audit it was identified that organics made up the largest portion of items found in Mohawk College's landfill stream with 31.7% of organics being tissue/toweling. To begin to address this Facility Services and Mohawk Sustainability worked together to lower paper towels usage on campus. The removal of paper towel dispensers was an opportunity to lower carbon emissions and send less paper towel to landfill. Facilities services removed 95 excess paper towels dispensers at the Fennell and Stoney Creek campuses in a number of washrooms where an air dryer already existed.

11 RECOMMENDATIONS

Based on the waste audit results, it is important to identify the main areas of improvement to focus on and pinpoint where improvements can currently be made. Tackling one initiative at a time will increase the chances of success. Whether changes need to be made to the existing program itself or increasing education and awareness, narrowing down your options and targeting an issue every quarter or semi-annually, these options will help attain meaningful results.

In order to improve the effectiveness of the recycling program at Mohawk College: Fennell Campus, there are several initiatives to take into consideration. To divert as much material from landfill as possible, it would be beneficial for the facility to direct all recycling efforts towards further source separating recyclable materials.

11.1 IMPROVE ORGANICS RECYCLING

A total of 44.63% of the landfill waste sample was organic waste material. As organic materials are the heaviest contributor to overall disposal figures, diverting as much organic material from the waste stream as possible will greatly increase the diversion rate and reduce the amount of waste sent to landfill annually.

11.2 IMPROVE POINT-OF-GENERATION RECYCLING

It is recommended that internal waste assessments be conducted throughout the facility on a regular, unscheduled basis. Staff should not be aware of when these assessments are being done, to ensure accuracy of results. The goal is to determine which area(s) need improvements. Proper signage, recycling bins and education will help source separate these items and capture more recyclable materials.

11.3 SIGNAGE AND EDUCATION

Faculty/Student Education

Educational information should be displayed on an 'Environmental Board' and frequently updated to encourage and engage facility participation. Posting information in the area near the recycling receptacles and/or in common areas will show management initiative and engage employees. While education and training on waste reduction should be ongoing, formal education should take place sporadically (for example, 1-2 times per year).

Visitor Education

Clear, visible guidelines and signage are very important to the success of the recycling program. All areas of the facility should be equipped with appropriate signage to clearly indicate to visitors which materials are accepted in the receptacles and to remind them of the importance of their involvement in the recycling program. Recycling guidelines should be posted wherever receptacles and collection containers are stationed. Inquire with your waste hauler about what is accepted in your recycling program in your region.

11.4 MONITORING AND EVALUATION

One of the keys to a successful recycling program is gathering quantifiable results to follow the progress of the program over the course of time. Ensure that a waste audit is completed once every twelve (12) months and keep track of the data results year to year to compare disposal and recycling rates. Receive monthly diversion reports and display or send out results in a newsletter to reach all employees to pinpoint where improvements can be made.

It is suggested that landfill waste and recycling disposal areas be monitored so that the number of receptacles and pick up schedule can be adjusted as necessary. Maintain up-to-date records of waste diversion initiatives (e.g. diversion charts, educational or promotional efforts etc.) to see if changes need to be made to the existing waste and recycling programs.

11.5 CONTINUAL PROGRAM REVIEW

The success of the existing recycling program should be continually reviewed by facility management in order to establish goals and monitor improvement over time. This should include but not be limited to:

- The adequacy and accessibility of available bins;
- The disposal methods used by staff of the building, and the location of signage or labels on bins, and;
- The assessment of how materials are being sorted and the potential for new materials to be recycled as the hauler systems and industry changes.

As always, please post and make available the MOE work plan for all college employees, and sign documents in all applicable areas (as located on pages 36 and 48 in this report).

12 CONCLUSION

Based on the waste audit figures, the Fennell Campus generates 412,827.97 kg (412.83 t) of material annually, 155,667.97 kg (155.67 t) of which is diverted as recycling and 257,160.00 kg (257.16 t) of which is disposed of as landfill waste. 198,828.24 kg (198.83 t) of the total landfill waste could have been diverted and recycled.

In order to address and monitor the effectiveness of the recycling program at the Mohawk College Fennell Campus, consider the following suggestions to improve the existing program and efforts of employees and visitors:

- Provide recycling receptacles wherever garbage bins exist so that there are no excuses for not participating in the recycling program;
- Ensure that adequate signage is placed on or above all recycling receptacles and that the signage remains consistent throughout the building;
- Education throughout the facilities can be promoted through promotional and awareness events (especially during Earth Month in April and Waste Reduction Week in October), and;
- Provide employees/tenants/visitors with information on recycling procedures and services.

The success of these initiatives depends on the involvement of all parties, from management to employees. The more involved all parties are in the waste reduction goals of Mohawk College, the greater the success of the program.

APPENDIX I - TABLE OF WASTE AUDIT DATA

NAME: Mohawk College Fennell Camp			WASTE AUDIT DATA			
ADDRESS: 135 Fennell Ave W, Hamilton						
DATE: November 1 2024						
PAPER	%	%	(KGS) Annual	(KGS) Monthly	(KGS) Weekly	(KGS) Daily
Newspaper		0.13%	71.46	5.96	1.37	0.28
Magazines		0.38%	214.39	17.87	4.12	0.85
Cardboard		7.35%	4,109.13	342.43	79.02	16.31
Boxboard		11.69%	6,538.87	544.91	125.75	25.95
Mixed Papers		12.62%	7,056.98	588.08	135.71	28.00
Molded Pulp		1.41%	786.09	65.51	15.12	3.12
Kraft Paper		7.25%	4,055.53	337.96	77.99	16.09
Other Paper		23.51%	13,149.21	1,095.77	252.87	52.18
Spiral Wound		0.19%	107.19	8.93	2.06	0.43
Coffee Cups		29.33%	16,400.78	1,366.73	315.40	65.08
Aseptic Containers		4.09%	2,286.82	190.57	43.98	9.07
Gable Top Containers		2.04%	1,143.41	95.28	21.99	4.54
Total Paper	21.75%	100.00%	55,919.88	4,659.99	1,075.38	221.90
PLASTICS						
# 1 PETE Soft Drinks		13.22%	9,111.55	759.30	175.22	36.16
# 2 HDPE		12.29%	8,468.38	705.70	162.85	33.60
# 3 PVC		0.00%	-	-	-	-
# 4 LDPE Recyclable Film		0.98%	678.90	56.57	13.06	2.69
# 5 PP		14.64%	10,094.16	841.18	194.12	40.06
# 6 PS (Styrofoam)		0.80%	553.84	46.15	10.65	2.20
# 6 PS (Clear/ Hard)		6.04%	4,162.73	346.89	80.05	16.52
# 7 Other		0.36%	250.12	20.84	4.81	0.99
Non-Recyclable Film		49.14%	33,873.51	2,822.79	651.41	134.42
Rigid Plastics		2.10%	1,447.13	120.59	27.83	5.74
Plastic Strapping		0.41%	285.85	23.82	5.50	1.13
Total Plastics	26.80%	100.00%	68,926.17	5,743.85	1,325.50	273.52
METALS						
Aluminum Cans		65.43%	2,840.66	236.72	54.63	11.27
Aluminum Foil		2.47%	107.19	8.93	2.06	0.43
Aluminum Trays		6.58%	285.85	23.82	5.50	1.13
Aerosol Cans		0.00%	-	-	-	-
Steel		8.23%	357.32	29.78	6.87	1.42
Scrap Metal		17.28%	750.36	62.53	14.43	2.98
Total Metals	1.69%	100.00%	4,341.38	361.78	83.49	17.23
GLASS						
Glass (Clear/ Coloured)		100.00%	3,608.89	300.74	69.40	14.32
Other Glass		0.00%	-	-	-	-
Total Glass	1.40%	100.00%	3,608.89	300.74	69.40	14.32
HSW						
Batteries		17.24%	178.66	14.89	3.44	0.71
E-Waste		75.86%	786.09	65.51	15.12	3.12
Toner		6.90%	71.46	5.96	1.37	0.28
Total HSW	0.40%	100.00%	1,036.22	86.35	19.93	4.11
ORGANICS						
Food Waste		61.58%	70,677.02	5,889.75	1,359.17	280.46
Tissue/ Toweling		20.17%	23,154.05	1,929.50	445.27	91.88
Beverage Liquids		12.70%	14,578.47	1,214.87	280.36	57.85
Compostable Containers		4.92%	5,645.59	470.47	108.57	22.40
Yard/ Plant Waste		0.62%	714.63	59.55	13.74	2.84
Total Organics	44.63%	100.00%	114,769.75	9,564.15	2,207.11	455.44
OTHER MATERIALS						
Textiles		12.11%	1,036.22	86.35	19.93	4.11
Disposable Gloves		16.91%	1,447.13	120.59	27.83	5.74
Masks		0.42%	35.73	2.98	0.69	0.14
Coffee Pods		6.26%	535.97	44.66	10.31	2.13
Sanitary Products		2.92%	250.12	20.84	4.81	0.99
Friendlier Packaging		29.44%	2,519.07	209.92	48.44	10.00
Condoms		0.21%	17.87	1.49	0.34	0.07
Books		17.95%	1,536.46	128.04	29.55	6.10
Writing Utensil		1.88%	160.79	13.40	3.09	0.64
Sweepings		4.59%	393.05	32.75	7.56	1.56
Shrink Wrap		7.10%	607.44	50.62	11.68	2.41
Vape Cartridge		0.21%	17.87	1.49	0.34	0.07
Total Other	3.33%	100.00%	8,557.71	713.14	164.57	33.96
TOTAL ANNUAL WASTE						
	100.00%		257,160.00	21,430.00	4,945.38	1,020.48
Total Annual Divertable Materials	77.32%		198,828.24			
Total Annual Non-Divertable Materials	22.68%		58,331.76			
*The highlighted items are not acceptable items for recycling in the regular recycling bin						

MOE FORMS

APPENDIX II – WASTE AUDIT SUMMARY SHEET

Ministry of the Environment Waste Form

Report of a Waste Audit – Waste Audit Summary Sheet

Industrial, Commercial and Institutional Establishments

As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and retained on file for at least five years after it is prepared, and be made available to the ministry upon request.

I. GENERAL INFORMATION

Name of Owner and/or Operator of Entity(ies) and Company Name: Mohawk College- Fennell Campus		
Name of Contact Person: Ashley Packer	Telephone #: 905-575-1212	Email address: Ashley.packer@mohawkcollege.ca
Street Address(es) of Entity(ies): 135 Fennell Avenue West		
Municipality: Hamilton, ON		
Type of Entity (check one)		
Retail Shopping Establishments	Hotels and Motels	
Retail Shopping Complexes	Hospitals	
Office Buildings	Educational Institutions	X
Restaurants	Large Manufacturing Establishments	

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

II. DESCRIPTION OF ENTITY

<p>Provide a brief overview of the entity(ties):</p> <p>Mohawk College is a post-secondary education facility located at 135 Fennell Avenue West in Hamilton, Ontario. Mohawk College has approximately 13,000 full time students, including 3,000 international students, 4,000 apprentices and more than 20,000 continuing education students. The Fennell Campus also includes a state-of-the-art fitness center and gymnasium, an on-site pub, and cafeteria</p>
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III. HOW WASTE IS PRODUCED AND DECISIONS AFFECTING THE PRODUCTION OF WASTE

Categories of Waste	How Is the Waste Produced and What Management Decisions/Policies Affect Its Production?
Newspaper	Generated by participants. Material is deposited into designated container for recycling.
Magazines	Generated by participants. Material is deposited into designated container for recycling.
Cardboard	Generated by participants. Material is deposited into designated container for recycling.
Boxboard	Generated by participants. Material is deposited into designated container for recycling.
Mixed paper	Generated by participants. Material is deposited into designated container for recycling.
Molded Pulp	Generated by participants. Material is deposited into designated container for recycling.
Kraft Paper	Generated by participants. Material is deposited into designated container for recycling.
Other Paper	Generated by participants. Material is deposited into designated container for waste.
Spiral Wound	Generated by participants. Material is deposited into designated container for waste.
Coffee Cups	Generated by participants. Material is deposited into designated container for recycling.
Aseptic Containers	Generated by participants. Material is deposited into designated container for recycling.
Gable top Containers	Generated by participants. Material is deposited into designated container for recycling.
PETE #1 plastic beverage bottles and clam shells	Generated by participants. Material is deposited into designated container for recycling.
HDPE #2 plastics jugs, crates, totes and drums	Generated by participants. Material is deposited into designated container for recycling.
PVC #3	Generated by participants. Material is deposited into designated container for waste.
LDPE #4 Recyclable Film	Generated by participants. Material is deposited into designated container for recycling.
PP #5	Generated by participants. Material is deposited into designated container for recycling.
PS #6 (Styrofoam)	Generated by participants. Material is deposited into designated container for waste.
PS #6 (Clear/Hard)	Generated by participants. Material is deposited into designated container for recycling.
Non-Recyclable Film	Generated by participants. Material is deposited into designated container for waste.
Rigid Plastics	Generated by participants. Material is deposited into designated container for waste.
Plastic Strapping	Generated by participants. Material is deposited into designated container for waste.
Aluminum Food /Beverage Cans	Generated by participants. Material is deposited into designated container for recycling.
Aluminum Foil	Generated by participants. Material is deposited into designated container for waste.

Aluminum Trays	Generated by participants. Material is deposited into designated container for recycling.
Steel Food /Beverage Cans	Generated by participants. Material is deposited into designated container for recycling.
Scrap Metal	Generated by participants. Material is deposited into designated container for recycling.
Glass Food /Beverage Containers	Generated by participants. Material is deposited into designated container for recycling.
Food Waste	Generated by participants. Material is deposited into designated container for recycling.
Tissue/Toweling	Generated by participants. Material is deposited into designated container for recycling.
Beverage Liquids	Generated by participants. Material is deposited into designated container for recycling.
Compostable Containers	Generated by participants. Material is deposited into designated container for recycling.
Yard/ Plant Waste	Generated by participants. Material is deposited into designated container for recycling.
Textiles	Generated by participants. Material is deposited into designated container for waste.
Disposable Gloves	Generated by participants. Material is deposited into designated container for waste.
Masks	Generated by participants. Material is deposited into designated container for waste.
Coffee Pods	Generated by participants. Material is deposited into designated container for waste.
Sanitary Products	Generated by participants. Material is deposited into designated container for waste.
Friendlier Packaging	Generated by participants. Material is deposited into designated container for waste.
Condoms	Generated by participants. Material is deposited into designated container for waste.
Books	Generated by participants. Material is deposited into designated container for waste.
Writing Utensil	Generated by participants. Material is deposited into designated container for waste.
Sweepings	Generated by participants. Material is deposited into designated container for waste.
Shrink Wrap	Generated by participants. Material is deposited into designated container for waste.
Vape Cartridge	Generated by participants. Material is deposited into designated container for waste.
Wood	Generated by participants. Material is deposited into designated container for recycling.

IV. MANAGEMENT OF WASTE

Category	Waste to be Disposed	Reused or Recycled Waste
Newspaper		Participants deposit newsprint into the recycling bins provided.
Magazines		Participants deposit magazines into the recycling bins provided.

Cardboard		Staff flattens all cardboard and deposit into the designated collection bins.
Boxboard		Staff flattens all boxboard and deposit into the designated collection bins.
Mixed paper		Participants deposit mixed paper into the recycling bins provided.
Molded Pulp		Participants deposit molded pulp materials into the recycling bins provided.
Kraft Paper		Participants deposits kraft paper materials into the recycling bins provided.
Other Paper	Participants place in waste bins.	
Spiral Wound	Participants place in waste bins.	
Coffee Cups		Participants deposit coffee cups with lids into recycling bins provided.
Aseptic Containers		Participants deposit aseptic containers (i.e. juice boxes) into recycling bins provided.
Gable top Containers		Participants place gable top cartons (i.e. milk cartons) into the recycling bins provided.
PETE #1 plastic		Participants deposit PETE #1 plastics into the recycling bins provided.
HDPE #2 plastics jugs, crates, totes and drums		Participants are asked to rinse HDPE #2 plastics, if needed, before depositing into the recycling bins provided.
PVC #3	Participants place in waste bins.	
LDPE #4 Recyclable Film		Participants deposit recyclable film into the recycling bins provided.
PP #5		Participants deposit #5 plastics into the recycling bins provided.
PS #6 (Styrofoam)	Participants place in waste bins.	
PS #6 (Clear/Hard)		Participants deposit #6, clear/hard plastics into the recycling bins provided.
Non-Recyclable Film	Participants place in waste bins.	
Rigid Plastics	Participants place in waste bins.	
Plastic Strapping	Participants place in waste bins.	
Aluminum Food /Beverage Cans		Participants deposit aluminum into the recycling bins provided.
Aluminum Foil	Participants place in waste bins.	

Aluminum Trays		Participants deposit aluminum into the recycling bins provided.
Steel Food /Beverage Cans		Participants are asked to rinse steel cans, if needed, before depositing into the recycling bins provided.
Scrap Metal		Participants deposit into the recycling bins provided.
Glass Food /Beverage Containers		Participants are asked to rinse glass containers, if needed, before depositing into the recycling bins provided.
Food Waste		Participants deposit food waste into the organic bins in all applicable areas.
Tissue/Toweling		Participant deposits tissue and toweling into the organics bins in all applicable areas.
Beverage Liquids		Participants are to deposit remaining liquids down the drain and place container into the appropriate recycling container.
Compostable Containers		Participants deposits compostable materials into the organics bins in all applicable areas.
Yard/Plant Waste		Staff deposit yard/plant waste into the organic bins.
Textiles	Participants place in waste bins.	
Disposable Gloves	Participants place in waste bins.	
Masks	Participants place in waste bins.	
Coffee Pods	Participants place in waste bins.	
Sanitary Products	Participants place in waste bins.	
Friendlier Packaging	Participants place in waste bins.	
Condoms	Participants place in waste bins.	
Books	Participants place in waste bins.	
Writing Utensil	Participants place in waste bins.	
Sweepings	Participants place in waste bins.	
Shrink Wrap	Participants place in waste bins.	
Vape Cartridge	Participants place in waste bins.	
Wood		Staff deposit wood into the designated collection bins.

V. ESTIMATED QUANTITY OF WASTE PRODUCED ANNUALLY

ESTIMATED QUANTITY OF WASTE PRODUCED ANNUALLY									
NAME: Mohawk College Fennell									
ADDRESS: 135 Fennell Ave W,									
Categories of Waste	Generated (t)			Recycled (t)			Disposed (t)		
	"A" Base Year (2023)	"B" Current Year (2024)	"C" Change (A-B)	"A" Base Year (2023)	"B" Current Year (2024)	"C" Change (A-B)	"A" Base Year (2023)	"B" Current Year (2024)	"C" Change (A-B)
Newspaper	0.14	0.07	(0.07)	-	-	-	0.14	0.07	(0.07)
Magazines	-	0.21	0.21	-	-	-	-	0.21	0.21
Cardboard	15.95	18.45	2.50	13.80	14.34	0.54	2.15	4.11	1.96
Boxboard	4.50	5.54	1.04	-	-	-	4.50	6.54	2.04
Mixed Papers	17.09	18.67	1.57	12.96	11.61	(1.35)	4.13	7.06	2.92
Molded Pulp	0.35	0.79	0.44	-	-	-	0.35	0.79	0.44
Kraft Paper	2.30	4.06	1.76	-	-	-	2.30	4.06	1.76
Other Paper	12.85	13.15	0.30	-	-	-	12.85	13.15	0.30
Spiral Wound	0.07	0.11	0.04	-	-	-	0.07	0.11	0.04
Coffee Cups	10.56	16.40	5.84	-	-	-	10.56	16.40	5.84
Aseptic Containers	2.02	2.29	0.27	-	-	-	2.02	2.29	0.27
Gable Top Containers	0.83	1.14	0.31	-	-	-	0.83	1.14	0.31
# 1 PETE Soft Drinks	25.23	35.99	10.76	21.16	26.88	5.72	4.07	9.11	5.04
# 2 HDPE	3.52	10.20	6.68	1.37	1.73	0.37	2.16	8.47	6.31
# 3 PVC	-	-	-	-	-	-	-	-	-
# 4 LDPE Recyclable Film	2.09	3.28	1.19	2.05	2.60	0.55	0.04	0.68	0.64
# 5 PP	8.42	12.70	4.27	2.05	2.60	0.55	6.37	10.09	3.72
# 6 PS (Styrofoam)	0.01	0.55	0.54	-	-	-	0.01	0.55	0.54
# 6 PS (Clear/Hard)	9.88	13.70	3.82	-	-	-	0.01	4.16	1.79
# 7 Other	0.11	0.25	0.14	7.51	9.54	2.03	2.37	0.25	0.14
Non-Recyclable Film	18.30	33.87	15.58	-	-	-	18.30	33.87	15.58
Rigid Plastic	1.73	1.45	(0.28)	-	-	-	1.73	1.45	(0.28)
Plastic Strapping	0.03	0.29	0.26	-	-	-	0.03	0.29	0.26
Aluminum Cans	7.36	10.56	3.21	6.08	7.72	1.64	1.28	2.84	1.56
Aluminum Foil	0.51	0.19	(0.32)	0.06	0.08	0.02	0.45	0.11	(0.34)
Aluminum Trays	0.24	0.37	0.12	0.06	0.08	0.02	0.18	0.29	0.11
Aerosol Cans	0.01	-	(0.01)	-	-	-	0.01	-	(0.01)
Steel	1.78	0.44	(1.34)	0.06	0.08	0.02	1.71	0.36	(1.36)
Scrap Metal	6.72	0.91	(5.81)	5.93	0.16	(5.77)	0.80	0.25	(0.55)
Glass (Clear/ Coloured)	3.17	6.32	3.15	2.13	2.71	0.58	1.04	3.61	2.57
Batteries	0.05	0.18	0.13	-	-	-	0.05	0.18	0.13
E-Waste	5.95	0.90	(0.04)	5.57	5.12	(0.45)	0.38	0.79	0.40
Toner	-	0.07	0.07	-	-	-	-	0.07	0.07
Food Waste	131.47	128.41	(3.07)	64.58	57.73	(6.86)	66.89	70.68	3.79
Tissue & Towelling	51.99	32.31	(19.68)	10.24	9.15	(1.09)	41.75	23.15	(18.59)
Beverage Liquids	14.69	16.69	2.01	2.36	2.11	(0.25)	12.32	14.58	2.26
Compostable Containers	10.42	7.05	(3.36)	1.58	1.41	(0.17)	8.84	5.65	(3.20)
Plant and Yard Waste	1.84	0.71	(1.12)	-	-	-	1.84	0.71	(1.12)
Textiles	0.36	1.04	0.68	-	-	-	0.36	1.04	0.68
Disposable Gloves	1.85	1.45	(0.40)	-	-	-	1.85	1.45	(0.40)
Masks	0.02	0.04	0.02	-	-	-	0.02	0.04	0.02
Coffee Pods	0.17	0.54	0.37	-	-	-	0.17	0.54	0.37
Sanitary Products	0.45	0.25	(0.20)	-	-	-	0.45	0.25	(0.20)
Friendlier Packaging	-	2.52	2.52	-	-	-	-	2.52	2.52
Condoms	-	0.02	0.02	-	-	-	-	0.02	0.02
Books	-	1.54	1.54	-	-	-	-	1.54	1.54
Writing Utensil	0.05	0.16	0.11	-	-	-	0.05	0.16	0.11
Sweepings	1.80	0.39	(1.40)	-	-	-	1.80	0.39	(1.40)
Shrink Wrap	-	0.61	0.61	-	-	-	-	0.61	0.61
Vape Cartridge	-	0.02	0.02	-	-	-	-	0.02	0.02
Diapers	0.49	-	(0.49)	-	-	-	0.49	-	(0.49)
Scissors	0.06	-	(0.06)	-	-	-	0.06	-	(0.06)
Sponge	0.02	-	(0.02)	-	-	-	0.02	-	(0.02)
Wood	2.39	-	(2.39)	-	-	-	2.39	-	(2.39)
Scoby Gel	1.17	-	(1.17)	-	-	-	1.17	-	(1.17)
Cotton Swab	0.02	-	(0.02)	-	-	-	0.02	-	(0.02)
Lab Equipment	0.19	-	(0.19)	-	-	-	0.19	-	(0.19)
Filter	0.56	-	(0.56)	-	-	-	0.56	-	(0.56)
Insulation	0.13	-	(0.13)	-	-	-	0.13	-	(0.13)
Loose Insulation	1.81	-	(1.81)	-	-	-	1.81	-	(1.81)
PVC Pipe Ends	0.87	-	(0.87)	-	-	-	0.87	-	(0.87)
Butane Can	0.77	-	(0.77)	-	-	-	0.77	-	(0.77)
Eraser	0.14	-	(0.14)	-	-	-	0.14	-	(0.14)
Salt	0.55	-	(0.55)	-	-	-	0.55	-	(0.55)
CD	0.04	-	(0.04)	-	-	-	0.04	-	(0.04)
Cream Bottle	0.04	-	(0.04)	-	-	-	0.04	-	(0.04)
Utensil/Cutlery	0.08	-	(0.08)	-	-	-	0.08	-	(0.08)
Milk Pouches	0.10	-	(0.10)	-	-	-	0.10	-	(0.10)
Playdoh	0.05	-	(0.05)	-	-	-	0.05	-	(0.05)
CO2 Canister	0.03	-	(0.03)	-	-	-	0.03	-	(0.03)
Hydroperoxide Indicators	0.02	-	(0.02)	-	-	-	0.02	-	(0.02)
Plastic Band	0.00	-	(0.00)	-	-	-	0.00	-	(0.00)
Ice Pack	3.13	-	(3.13)	-	-	-	3.13	-	(3.13)
Sports Stick	0.09	-	(0.09)	-	-	-	0.09	-	(0.09)
Deodorant	0.01	-	(0.01)	-	-	-	0.01	-	(0.01)
Total	389.64	412.83	23.19	159.55	155.67	(3.88)	230.09	257.16	27.07
Percent Change (C÷A x 100)			5.95%			-2.43%			11.76%

**VI. TO WHICH MATERIALS OR PRODUCTS USED OR SOLD BY ENTITY
CONSIST OF RECYCLED OR REUSED MATERIALS OR PRODUCTS**

1. Do you have a management policy in place that promotes the purchasing and/or use of materials or products that consist of recycled and/or reused materials or products? If yes, please describe.

Not at this time.

2. Do you have plans to increase the extent to which materials or products used or sold* consist of recycled or reused materials or products? If yes, please describe.

Not at this time.

* Information regarding materials or products "sold" that consist of recycled or reused materials or products is only required from owner(s) of retail shopping establishments and the owner(s) or operator(s) of large manufacturing establishments.

Please attach any additional page(s) as required to answer the above questions

I hereby certify that the information provided in this Report of Waste Audit is complete and correct.		
Signature of authorized official:	Title:	Date:

MOE FORMS

APPENDIX III - REPORT OF WASTE REDUCTION WORK PLAN

Ministry of the Environment Waste Form

Report of a Waste Audit

Industrial, Commercial and Institutional Establishments

As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and retained on file for at least five years after it is prepared, and be made available to the ministry upon request.

I. GENERAL INFORMATION

Name of Owner and/or Operator of Entity(ies) and Company Name: Mohawk College: Fennell Campus			
Name of Contact Person: Ashley Packer		Telephone #: 905-575-1212	Email address: Ashley.packer@mohawkcollege.ca
Street Address(es) of Entity(ies): 135 Fennell Avenue West			
Municipality: Hamilton, ON			
Type of Entity (check one)			
Retail Shopping Establishments	<input type="checkbox"/>	Hotels and Motels	<input type="checkbox"/>
Retail Shopping Complexes	<input type="checkbox"/>	Hospitals	<input type="checkbox"/>
Office Buildings	<input type="checkbox"/>	Educational Institutions	<input checked="" type="checkbox"/>
Restaurants	<input type="checkbox"/>	Large Manufacturing Establishments	<input type="checkbox"/>

II. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ties):
Mohawk College is a post-secondary education facility located at 135 Fennell Avenue West in Hamilton, Ontario. Mohawk College has approximately 13,000 full time students, including 3,000 international students, 4,000 apprentices and more than 20,000 continuing education students. Fennell Campus also includes a state-of-the-art fitness center and gymnasium, an on-site pub, and cafeteria

III. PLANS TO REDUCE, REUSE AND RECYCLE

Waste Category	Source Separation and 3Rs Program
Newspaper	Reduce: Provide digital copies of newspaper to participants. Reuse: Newsprint can be reused for moving and shipping as packaging. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Magazines	Reduce: Encourage use of electronic documents only and to think before purchasing. Reuse: Magazines are shared in guest common areas. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Cardboard	Reduce: Encourage suppliers to provide goods in reusable containers. Purchase supplies in bulk to avoid excess packaging. Reuse: Cardboard boxes can be reused for moving and shipping. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Boxboard	Reduce: Encourage suppliers to provide goods in reusable containers. Purchase supplies in bulk to avoid excess packaging. Reuse: Boxboard can be reused for packaging small goods. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Mixed paper	Reduce: Encourage use of electronic documents only and reconsidering printing. Reuse: Reuse one sided documents for other print jobs. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Molded Pulp	Reduce: Encourage suppliers to provide goods in reusable containers. Purchase supplies in bulk to avoid excess packaging. Reuse: Reuse for packaging and protecting small goods. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Kraft Paper	Reduce: Encourage suppliers to provide goods packaged in reusable products. Reuse: Reuse for packaging and protecting small goods. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Other Paper	Reduce: Refuse products packaged in this material. Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Spiral Wound	Reduce: Refuse products packaged in this material. Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Coffee Cups	Reduce: Encourage tenants and staff to bring reusable coffee mugs to work. Reuse: N/A

	Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Aseptic Containers	Reduce: Encourage suppliers to provide goods packaged in reusable products. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Gable top Containers	Reduce: Encourage suppliers to provide goods packaged in reusable products. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
PETE #1 plastic beverage bottles and clam shells	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Promote reusable containers to participants. Reuse: Reuse material for water throughout the day. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
HDPE #2 plastics jugs, crates, totes and drums	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: Containers are reused in kitchen areas for collection of organic waste (i.e. large white tubs). Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
PVC #3	Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material. Reuse: Reuse as protective packaging for shipments. Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
LDPE #4 Recyclable Film	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: Use plastic bags for other uses such as in back-of house small garbage containers (i.e. in employee offices/washrooms); use as protective packaging for shipments. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
PP #5	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: Reuse container for food or snacks throughout the day. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
PS #6 (Styrofoam)	Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material. Reuse: Reuse as protective packaging for shipments. Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
PS #6 (Clear/Hard)	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: N/A

	Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Non-Recyclable Film	Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material. Reuse: Reuse as protective packaging for shipments. Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Rigid Plastics	Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material. Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Plastic Strapping	Reduce: Encourage suppliers to provide goods in alternative material, other than plastic. Reuse: Reuse current material for shipping/receiving and packaging. Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Aluminum Food /Beverage Cans	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Aluminum Foil	Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material. Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Aluminum Trays	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Steel Food /Beverage Cans	Reduce: Encourage suppliers to provide goods in bulk to cut down on amount of material produced. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Scrap Metal	Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Glass Food /Beverage Containers	Reduce: Implement sustainable purchasing policy to ensure amounts are not ordered in excess. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Food Waste	Reduce: Implement sustainable purchasing policy to ensure amounts are not ordered in excess.

	Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Tissue/Toweling	Reduce: Install hand driers in all washroom areas to reduce the necessity of paper towels. Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Beverage Liquids	Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Compostable Containers	Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Yard/Plant Waste	Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Textiles	Reduce: Encourage suppliers to provide reusable material. Refuse single-use material. Reuse: Reuse material once appropriately cleaned and sanitized. Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Disposable Gloves	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Masks	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Coffee Pods	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Sanitary Products	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Friendlier Packaging	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Condoms	Reduce: N/A

	Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Books	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Writing Utensil	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Sweepings	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Shrink Wrap	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Vape Cartridge	Reduce: N/A Reuse: N/A Recycle: Alternative program not yet in place. Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Wood	Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.

IV. RESPONSIBILITY FOR IMPLEMENTING THE WASTE REDUCTION WORK PLAN

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity (ies). If more than one person is responsible for implementation, identify each person who is responsible and indicate the part of the Waste Reduction Work Plan that each person is responsible for implementing.		
Name of Person	Responsibility	Telephone #
Ashley Packer	Implement the Waste Reduction Work Plan	905-575-1212 x 4474

V. TIMETABLE FOR IMPLEMENTING WASTE REDUCTION WORK PLAN

Source Separation and 3Rs Program	Schedule for Completion
Newspaper	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Magazines	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Cardboard	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Boxboard	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Mixed paper	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Molded Pulp	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Kraft Paper	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Other Paper	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Spiral Wound	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Coffee Cups	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Aseptic Containers	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Gable top Containers	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
PETE #1 plastic beverage bottles	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
HDPE #2 plastics jugs, crates, totes and drums	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
PVC #3	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
LDPE #4 Recyclable Film	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
PP #5	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
PS #6 (Styrofoam)	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
PS #6 (clear/hard)	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Rigid Plastics	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Non- Recyclable film	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Plastic Strapping	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Aluminum Food /Beverage Cans	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Aluminum Foil	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.

Aluminum Trays	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Steel Food /Beverage Cans	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Scrap Metal	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Glass Food /Beverage Containers	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Food Waste	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Tissue/Toweling	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Beverage Liquids	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Compostable Containers	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Yard/Plant Waste	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Textiles	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Disposable Gloves	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Masks	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Coffee Pods	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Sanitary Products	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Friendlier Packaging	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Condoms	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Books	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Writing Utensil	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Sweepings	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Shrink Wrap	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Vape Cartridge	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2025.
Wood	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.

VI. COMMUNICATION TO STAFF, CUSTOMERS, GUESTS AND VISITORS

A copy of the Waste Reduction Work Plan will be posted in an area where most employees will see it and will be made available to employees upon request.

To ensure all participants in the recycling program understand where materials go, new receptacles and new signage will be applied to recycling and waste receptacles and to large collection bins in the loading dock.

VII. ESTIMATED WASTE PRODUCED BY MATERIAL TYPE AND THE PROJECTED AMOUNT TO BE DIVERTED BY THE 3 Rs

Material Categories (as stated in Part III)	Estimated Annual Waste Produced (tonnes)	Name of Proposed 3Rs Program (as stated in Part III)	Projections to Reduce, Reuse or Recycle Waste (tonnes)			Estimated Annual Amount to be Diverted (%)
			Reduce	Reuse	Recycle	
Example: Fine Paper	1.8 t	Fine Paper 3Rs Program	200 t	100 t	1.2 t	60%
Newspaper	0.07	Paper Recycling			0.04	60.00
Magazines	0.21	Paper Recycling			0.13	60.00
Cardboard	18.45	Paper Recycling			11.07	60.00
Boxboard	6.54	Paper Recycling			3.92	60.00
Mixed Papers	18.67	Paper Recycling			11.20	60.00
Molded Pulp	0.79	Paper Recycling			0.47	60.00
Kraft Paper	4.06	Paper Recycling			2.43	60.00
Other Paper	13.15	Waste	1.31		1.31	10.00
Spiral Wound	0.11	Waste	0.01		0.01	10.00
Coffee Cups	16.40	Commingled Recycling			9.84	60.00
Aseptic Containers	2.29	Commingled Recycling			1.37	60.00
Gable Top Containers	1.14	Commingled Recycling			0.69	60.00
# 1 PETE Soft Drinks	35.99	Commingled Recycling			21.60	60.00
# 2 HDPE	10.20	Commingled Recycling			6.12	60.00
# 3 PVC	-	Waste	-		-	10.00
# 4 LDPE Recyclable Film	3.28	Commingled Recycling			1.97	60.00
# 5 PP	12.70	Waste			7.62	60.00
# 6 PS (Styrofoam)	0.55	Commingled Recycling	0.06		0.06	10.00
# 6 PS (Clear/Hard)	13.70	Waste			8.22	60.00
# 7 Other	0.25	Waste	0.03		0.03	10.00
Non-Recyclable Film	33.87	Waste	3.39		3.39	10.00
Rigid Plastic	1.45	Waste	0.14		0.14	10.00
Plastic Strapping	0.29	Commingled Recycling	0.03		0.03	10.00
Aluminum Cans	10.56	Waste			6.34	60.00
Aluminum Foil	0.19	Commingled Recycling	0.02		0.02	10.00
Aluminum Trays	0.37	Waste			0.22	60.00
Aerosol Cans	-	Commingled Recycling	-		-	10.00
Steel	0.44	Commingled Recycling			0.26	60.00
Scrap Metal	0.91	Commingled Recycling			0.55	60.00
Glass (Clear/Coloured)	6.32	Alternative Diversion Program			3.79	60.00
Batteries	0.18	Electronic Waste Recycling			0.11	60.00
E-Waste	5.90	Organics			3.54	60.00

Toner	0.07	Organics	0.01		0.01	10.00
Food Waste	128.41	Organics			77.04	60.00
Tissue & Toweling	32.31	Organics			19.38	60.00
Beverage Liquids	16.69	Organics			10.01	60.00
Compostable Containers	7.05	Waste			4.23	60.00
Plant and Yard Waste	0.71	Waste			0.43	60.00
Textiles	1.04	Waste	0.10		0.10	10.00
Disposable Gloves	1.45	Waste	0.14		0.14	10.00
Masks	0.04	Waste	0.00		0.00	10.00
Coffee Pods	0.54	Waste	0.05		0.05	10.00
Sanitary Products	0.25	Waste	0.03		0.03	10.00
Friendlier Packaging	2.52	Alternative Recycling Program	2.52		2.52	100.00
Condoms	0.02	Waste	0.00		0.00	10.00
Books	1.54	Waste	0.15		0.15	10.00
Writing Utensil	0.16	Waste	0.02		0.02	10.00
Sweepings	0.39	Waste	0.04		0.04	10.00
Shrink Wrap	0.61	Waste	0.06		0.06	10.00
Vape Cartridge	0.02	Waste	0.00		0.00	10.00

* Estimated Waste Produced = Waste Diverted (3Rs) + Waste Disposed

** Estimated Waste Diversion Rate = Amount of Waste Diverted (3Rs) ÷ Estimated Waste Produced x 100%

I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct.		
Signature of authorized official:	Title:	Date:

APPENDIX IV - QUESTIONS TO ASSESS COMPLIANCE

Purpose: To obtain information that will support an assessment of a generator's compliance with Ontario Regulation 103/94 sub-section 2(1) (d) that a source separation program must include "reasonable efforts to ensure that full use is made of the program and that the separated waste is reused or recycled."

Please answer the following questions **for each** waste management company that you have retained for the collection of the source separated material from your site?

1. Which waste management services company do you have a contract or agreement with to collect source separated materials from your site? (Please provide a copy of the contract/agreement for each waste management service company and if applicable, their Environmental Compliance Approval –ECA- or Environmental Activity and Sector Registry registration number)

GFL Environmental Inc. is the contracted waste and recycling service provider. Please contact your sales representative if you need a copy of your invoice. GFL Environmental Inc. provides all solid, non-hazardous waste and recycling removal for the facility.

2. a.)Where are the recyclable materials being sent to? (Please provide a letter including the name, location and ECA –if applicable of each receiving facility)

Please see letter attached in Appendix VI.

b.)If the waste is going to a waste transfer station, where are the recyclables being taken further? (Please provide a letter including the name, location and ECA –if applicable- of each final destination)

Please refer to same letter attached in Appendix VI.

c.)If the source separated material was sent for disposal (e.g., landfill, incineration, etc.) what explanation was provided to you by your waste management services company on the amount of source separated material that was sent for disposal?

No source separated materials are sent to landfill.

3. Please describe any additional efforts made to demonstrate compliance with s. 2(1) (d) of Reg. 103/94 (i.e. that reasonable efforts are made to ensure that the separated waste is reused or recycled). Please provide any documents that outline your efforts.

None at this time.

APPENDIX V - Glossary of Terms

Boxboard	Thick cardstock-like paper used for a variety of consumer product packaging applications.
Capture Rate	The proportion of divertable waste, expressed as a percentage, which is successfully diverted from disposal.
Cardboard	Corrugated containerboard.
Collective Waste Audit	Collective annualized waste audit of waste generated as a whole; no breakdown of separate areas in the building.
Commodity	A raw material product that could be bought or sold, such as metal, cardboard and plastic.
Contamination	Refers to the presence of recyclables in the garbage stream or, conversely, residual waste materials in a recycling stream.
Diversion	The act of diverting waste materials from landfill through reuse off-site or recycling. As well as actions to prevent waste materials from being generated, actions to reduce material generation, reuse (internal or external) source-separation.
Diversion Rate	The proportion by mass of all waste diverted from disposal to the total mass of all waste material generated, expressed as a percentage.
Divertable	Capability of a material being recycled or reused.
Final Destination	The location where materials are sent for disposal by the hauler. This can include a sorting facility
Mass Ration Method of Annualization	A method of annualization of findings by applying the mass ratio of each material to the total mass of material generated that year.
Non-Divertable	Material that is not able to be reused or recycled.
Other Paper	Non-recyclable paper products, glossy paper.
Plastic Resin Codes	The numbers printed on some plastic products, surrounded by a triangle shape of arrows, to indicate

	the plastic resin they are made of. The numbers are 1, 2, 3, 4, 5, 6, and 7. They are used by waste haulers to identify what plastic type is recyclable.
Point of generation waste audit	An annualized audit of waste generated by separate areas of the building.
Potential Diversion Rate	Is the percentage of total materials that could be diverted from landfill if all divertable materials were placed in the proper recycling stream.
Circular Innovation Council (CIC)	Is a not-for-profit organization involved in policy, education and project work around the issues of consumption, waste generation, reduction and diversion, and recycling.
Residual Waste	All material that cannot be diverted in any way with the current program, and thus must be disposed of via the garbage stream. This includes any materials that cannot be reused or recycled.
Source Separation Material	Separating materials by type at the point of discard so they can be recycled.
Source separation program	A program to facilitate the source separation of waste for reuse or recycling.
Waste	Materials that are no longer wanted or needed and are disposed of either through landfill, reuse off-site, or recycling. Waste includes all garbage and recycling materials that is removed from site.
Waste Generation Index	The waste generation index is the unit most closely related to the amount of solid waste generated by the facility such as production units or building population.
Waste per square foot	A measure of total waste used for comparing properties of varying sizes to each other. This measure can also be used to determine the success of waste reduction initiatives.
Waste reduction work plan	From 0.Reg. 102/94, a plan to reduce, reuse and recycle waste.

Waste Stream

A waste, recycling or garbage stream refers to the flow of a group of materials from the generation on-site through to the final destination. For example, Paper stream, landfill stream, commingled stream.

APPENDIX VI – LETTER OF DECLARATION

LETTER OF DECLARATION

Recyclable Material Diversion

GFL Environmental receives materials collected throughout Hamilton and delivers the materials to a variety of center. Waste is disposed of separated and recycling materials are diverted from landfills and recycled in the following manner:

Plastics, Metals and Glass – These materials are collected and sent to Alfa Paper when the material is sorted by type and processed.

Fibre Materials including Corrugated Cardboard, Office Paper, and Newsprint Rolls – These materials are collected and sent to Alfa Paper when the material is sorted by type and processed.

Metal - Scrap metal and other recyclable metals are taken to AIM Recycling for sorting and processing.

Organics – Organic materials are taken to Storm Fisher Environmental Ltd. for processing.

Waste – These materials are collected and sent to Quantum Murray. From here, the materials go to Walker Industries South Landfill.

Company	Address	Tel. #	ECA Number
Alfa Paper	735 Strathearne Ave. N., Hamilton, ON L8H 5L3	905-549-2535	A-650217
AIM Recycling	75 Steel City Ct, Hamilton, ON L8H 3Y2	905-574-5533	Not Required
Quantum Murray	735 Strathearne Ave. N., Hamilton, ON L8H 5L3	905-312-8855	7577-4XGL5P
Storm Fisher Environmental Ltd.	1087 Green Valley Road London, ON N6N 1E4	519-649-2664	1442-7RRKQL
Walkers Industries, South Landfill	3081 Taylor Road, Niagara Falls, ON	905-227-4142	A-021601

Should you have any questions or require further information please do not hesitate to contact:

Laura McAlpine
Environmental Manager

GFL Environmental Inc.

T. 647-624-1439

E. lmcalpine@gflenv.com

APPENDIX VII – CALIBRATION CERTIFICATE

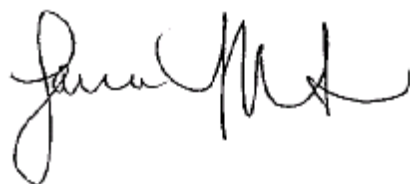
Calibration Certificate

Date of Calibration: November 1, 2024

The Scales used for waste auditing by GFL Environmental Inc. has been checked and calibrated using known mass measures.

To ensure that the scales are performing accurately a 5 pound weight was used in the calibration procedure. The weight was placed on the scale to ensure an accurate reading of 5 pounds on the scale.

Test Weight	Scale Reading	Model # of Scale	Serial # of Scale	Calibrated By (Print Name)	Date
5 lbs	5 lbs	H-5837	02010016008	Blue Top Scale	November 1, 2024
5 lbs	5 lbs	H-5837	01804016006	Stainless Steel Scale	November 1, 2024



Laura McAlpine
Environmental Manager
GFL Environmental Inc.

APPENDIX VIII -PHOTOGRAPHS



Recyclable aluminum trays found in landfill waste



Recyclable e-waste found in landfill waste



Recyclable aseptic containers found in landfill waste



Recyclable #6 PS plastic found in landfill waste



Recyclable #5 PP plastic found in landfill waste



Recyclable #1 PETE plastic found in landfill waste



Recyclable coffee cups found in landfill waste



Recyclable aluminum cans found in landfill waste



Batteries found in landfill waste



Recyclable mixed paper found in landfill waste



Compostable tissue/toweling found in landfill waste



Recyclable boxboard found in landfill waste