



Waste Audit Report

Prepared for:

**Queen's University
Full Campus Waste Audit**

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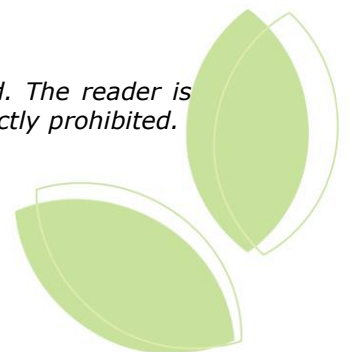
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October 17th - 21st, 2022

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EXECUTIVE SUMMARY

Queen’s University retained GFL Environmental Inc. to conduct a solid, non-hazardous waste audit for the main campus, located in Kingston, Ontario. A point of generation waste audit was performed for the University on October 17th - 21st, 2022.

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, bags of waste were collected from designated representative campus buildings, which were pre-determined prior to the audit start. A minimum of 10 bags were selected, per generating area, which were groups of like buildings, were chosen to be representative of different areas throughout the Queen’s campus. After a 24-hour collection period, Facilities collected bags from each of the designated audit buildings and brought each sample to the onsite sorting area located in the Biosciences Atrium on campus. GFL Environmental, along with student volunteers, received the waste samples and conducted the audit and analysis of the waste stream from each building type. An overall survey was completed by the auditing team over the course of five (5) days; bags of waste material were opened and separated into commodity types (paper, plastic, metal, glass, organic and ‘other’) and the resulting subcategories. Each commodity type and subcategory were weighed individually, and photographs were taken for inclusion in the waste audit report.

WASTE AUDIT RESULTS

The following chart breaks down the audited waste to landfill sample into the following categories: paper, plastics, metal, glass, household special waste (HSW), organics and ‘other’ materials. This chart displays how much of each material category is generated and disposed of in the general waste stream, annually, at Queen’s University.

Audited Waste Category Breakdown (kg/ year)

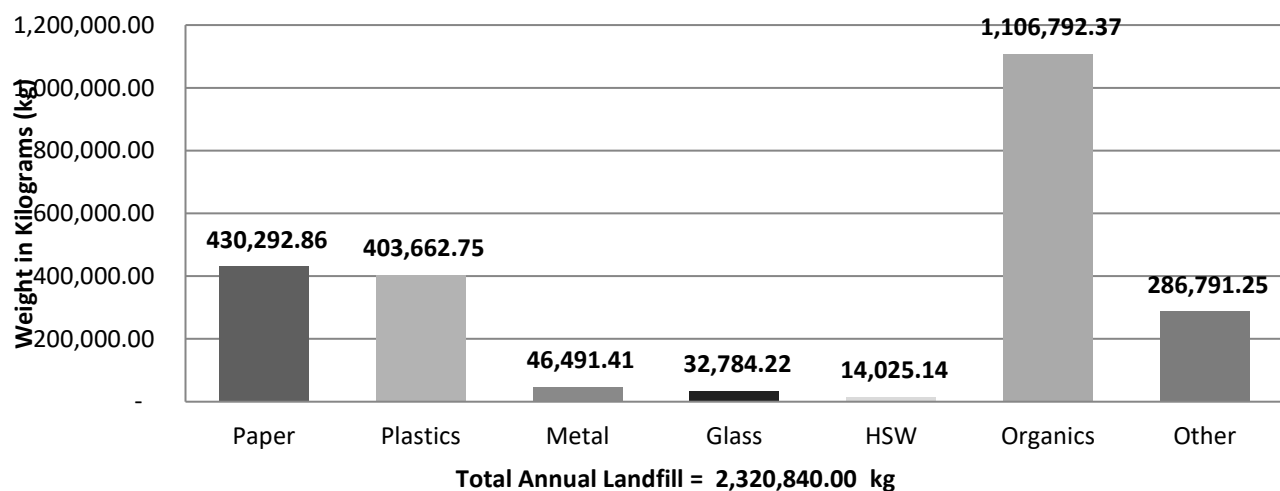


Figure 1 Audited Waste Category Breakdown (kg/ year)

Total Materials Recycled and/or Sent to Landfill

The table below outlines data collected from landfill and recycling pick-ups in an annualized format. This table breaks down how much of the total annual generated materials are comprised of disposed waste (Landfill Waste), versus diverted recyclables (Recycled).

Material Destination	Annual Total		
	KILOGRAMS (kg)	METRIC TONNES (t)	PERCENTAGE (%)
Landfill Waste	2,320,840.00	2,320.84	75.28
Recycled	762,300.00	762.30	24.72
TOTAL GENERATED	3,083,140.00	3,083.14	100.00

DIVERSION RATE

The 2022 waste diversion rate for Queen’s University is **24.72%**, 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:

- **Training and Education:** Ensure that all students are well-versed in the recycling culture while on campus. Continually refresh the program for students throughout each semester through online communications, special events, and information sessions.
- **Improving existing organics recycling program:** Organic materials are the heaviest contributor to overall landfill waste weight. By diverting more organic waste from landfill, Queen’s University could potentially divert an additional 1,106,792.37 kg from landfill annually.
- **Review signage and collection bins:** Ensure all campus buildings are equipped with the proper guidance signage for source separation of materials and ensure that all bins are appropriately colour-coded with corresponding signage.

POTENTIAL DIVERSION RATE

If the above recommendations are implemented, the potential diversion rate at Queen’s University could be **75.24%**. For full calculation of the potential diversion rate, please refer to page 21 of this report.

STATEMENT OF LIMITATIONS

- The waste audit conducted at Queen's University on October 17th - 21st, 2022 reflect all materials observed at the time of the audit over the five (5) day auditing 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 Recycling Council of Ontario;
- 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. The full campus waste audit that was completed in 2022 is not fully representative of waste generation volumes pre-COVID. Due to remote work and remote learning, the total number of staff/faculty, and students has decreased, and thus reflects in the waste and recycling figures presented within this report.

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1 INTRODUCTION

Queen's University retained GFL Environmental Inc. to conduct a solid, non-hazardous waste audit for the main campus located in Kingston, Ontario. A point of generation waste audit was performed for Queen's University on October 17th - 21st, 2022.

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 Queen's University.

2 AUDITEE PROFILE AND PROJECT SCOPE

The following section provides contextual information regarding Queen’s University and the waste audit that was completed for the facility on October 17th - 21st , 2022.

Queen’s University is a prestigious Canadian University that focuses on experiential learning that expands beyond the bounds of the classroom. The university offers a research-intensive environment and boasts a collection of six (6) libraries on campus, as well as several museums and arts facilities. Queen’s University offers academically strong programs such as physics, cancer research, geo-engineering, data analytics, and social sciences. The school hosts more than 24,000 students each year from a multitude of countries.

The audited areas are identified as numbered groups throughout the body of this report. Below is a table outlining the corresponding numbered group and what type/name of building(s) this number represents.

Numbered Group	Building Name/Type
2	Offices; located in houses
3	Offices including labs and medical offices
5	Central Power Plant
6	Donald Gordon Centre and University Club
7	Grant Hall
8	Libraries
9	Offices in Halls (i.e.- Watson Hall, Rideau Building, etc.)
10	Buildings containing offices and classrooms (i.e.- Kingston Hall, Theological Hall, etc.)
11	Buildings containing offices, labs, and classrooms (i.e.- Etherington Hall, School of Medicine, etc.)
12	Buildings containing offices, classrooms, and food service outlets (i.e.- Goodes Hall, Mackintosh-Corry, etc.)
13	Duncan McArthur Hall (School of Education)
16	Queen’s Centre
17	Underground Parking Garages (Stuart St. & Union Ave.)
18	Student Residence Buildings
19	Large campus kitchens (i.e.- Ban Righ Kitchen, Lazy Scholar)
20	Residence with Retail Food Outlet (i.e.- Smith House)
21	Daycare
22	355 King- Office, Stores, Trades

2.2 CURRENT WASTE MANAGEMENT PROGRAM

Queen's University has programs in place to manage waste and recycling programs for the campus. The table below describes the containers used and the service schedule for each of the different materials.

Material Stream	Container	Hauler
Landfill Waste	2 yd - 8 yd containers placed strategically around the campus. Scheduling is based on day-to-day operational needs which fluctuates seasonally.-	Waste Management
Landfill Waste (West Campus Roll-Off)	30 yd roll-off on campus for disposal of large items. Weekly collection	Waste Management
Mixed Recycling	96 gal totes placed across the campus. Scheduling is based on day-to-day operational needs which fluctuates seasonally.	Waste Management
Mixed Fiber Recycling	96 gal totes placed across the campus. Scheduling is based on day-to-day operational needs which fluctuates seasonally.	Waste Management
Cardboard	2 yd - 8 yd containers placed strategically around the campus. Scheduling is based on day-to-day operational needs which fluctuates seasonally.	Waste Management
Organics	64 gal totes placed across the campus. Scheduling is based on day-to-day operational needs which fluctuates seasonally.	Waste Management
Scrap Metal	30 yd roll-off on campus for disposal of large items. Weekly collection	Waste Management
Leaf & Yard Waste	Facilities Grounds department collects this material and takes to KARC	KARC
E-waste	Electronic waste is collected on campus in sea cans and transported to Greentec for electronic recycling	Greentec
Furniture Re-use	Campus furniture reuse program	Queen's Facilities
Flourescent Tube Recycling	Expired lighting is collected and picked up by Wesco as required.	Wesco
Batteries	Collection containers across the campus for public battery	RMC Battery Recycling and RPR

	collection program. Other batteries collected from the campus by RPR Environmental.	
Paint	Environmental Health & Safety arranges for RPR Environmental to pick up paint as needed.	RPR Environmental
Book Recycling	Collection containers across the campus for public textbook collection program.	Textbooks for Change
Grease	Grease collection containers situated at all campus dining halls and retail food outlets. Grease is picked up by Darling Ingredients according to a schedule.	Darling Ingredients
Liquor/Beer Bottle Returns	Restaurants, catering that serve alcohol participate in the ODRP	Ontario Deposit Return Program (ODRP)
Paper Shredding	96 gal toters are requested by departments for document shredding. Iron Mountain removes the toters at the request of the department.	Iron Mountain

3 WASTE AUDIT METHODOLOGY

3.1 AUDIT PROCEDURE

To collect an appropriate sample of waste for the audit, bags of waste were collected from designated representative campus buildings, which were pre-determined prior to the audit start. A minimum of 10 bags were selected, per generating area, which were groups of like buildings, were chosen to be representative of different areas throughout the Queen's campus. After a 24-hour collection period, Facilities collected bags from each of the designated audit buildings and brought each sample to the onsite sorting area located in the Biosciences Atrium on campus. GFL Environmental, along with student volunteers, received the waste samples and conducted the audit and analysis of the waste stream from each building type. An overall survey was completed by the auditing team over the course of five (5) days; bags of waste material were opened and separated into commodity type (paper, plastic, metal, glass, organic and 'other') and the resulting subcategories. Each commodity type and subcategory were weighed individually, and photographs were taken for inclusion in the waste audit report.

3.2 AUDITOR PROFILE

Laura McAlpine, Christy Jamieson, Katie McMillan and Morgan Bragg were the lead auditors who conducted the audit organization, preparation and supervision; all auditors are 3R Certified auditors through the Recycling Council of Ontario (RCO). The lead auditors were assisted by Jaylynn Stone and student volunteers during the waste audit for Queen's University.

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 Queen's University. 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 Queen’s University is estimated to be 9,246.37 kilograms (kg) or 9.25 metric tonnes (t) during a 24-hour period or 2,320,840.00 kg (2,320.84 t) annually.

From the audited waste sample, organic materials represent 47.69%; paper materials represent 18.54%; plastic materials represent 17.39%; ‘other’ materials represent 12.36%; metal materials represent 2.00%; glass materials represent 1.41% and HSW materials represent 0.60% of the total annual waste disposed and sent to landfill.

Total Annual Waste Generated 2022*

COMMODITY CATEGORY	KILOGRAMS (kg)	PERCENTAGE (%)
Organics	1,106,792.37	47.69
Paper	430,292.86	18.54
Plastics	403,662.75	17.39
‘Other’	286,791.25	12.36
Metal	46,491.41	2.00
Glass	32,784.22	1.41
HSW	14,025.14	0.60
TOTAL	2,320,840.00	100.00

Total Annual Waste Stream Composition 2022*

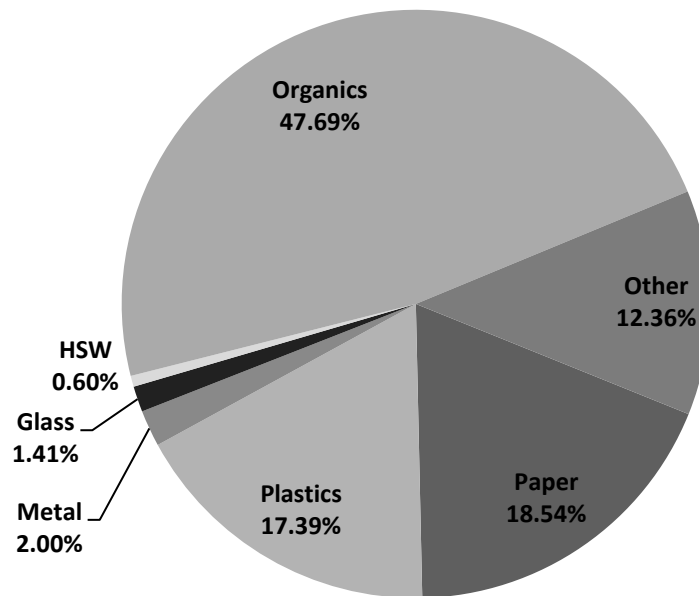


Figure 2 Total Annual Waste Stream Composition 2022

*Figures are based on five (5) day waste audit sample. Annual projection is based on number of facility operational days.

Categorical Waste Composition

The following tables and graphs illustrate the composition breakdown of the audited waste sample from Queen’s University. 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 except HSW.

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
Group 18	-	1,307.13	10,633.67	26,248.57	5,652.45	2,790.90	12,152.77	19,465.63	317.95	1,907.70	2,649.59	2,049.01	85,175.38
Group 11	635.90	777.21	1,059.83	8,302.04	16,816.04	1,059.83	2,684.91	12,929.98	-	10,563.02	3,285.49	1,201.15	59,315.41
Group 10	70.66	4,309.99	4,451.31	529.92	24,446.85	141.31	1,201.15	5,016.55	-	12,188.10	2,967.54	141.31	55,464.68
Group 9	35.33	706.56	70.66	4,345.32	21,549.97	388.61	2,049.01	4,239.34	1,130.49	4,345.32	353.28	282.62	39,496.50
Group 12	-	-	6,853.60	211.97	1,943.03	-	2,755.57	7,206.88	-	5,440.48	494.59	529.92	25,436.03
Richardson Stadium	-	-	7,560.15	1,731.06	6,182.37	247.29	1,095.16	2,720.24	-	1,201.15	1,059.83	-	21,797.27
Group 3	141.31	2,896.88	1,554.42	2,260.98	4,733.93	141.31	1,554.42	4,839.91	-	3,108.85	105.98	35.33	21,373.33
Group 19	-	-	-	2,684.91	1,554.42	-	2,049.01	7,171.55	-	211.97	-	2,543.60	16,215.47
Queens Centre	-	-	-	989.18	35.33	141.31	918.52	9,149.91	-	2,472.95	141.31	211.97	14,060.47
Lazy Scholar	-	-	-	-	105.98	-	35.33	10,633.67	-	459.26	-	282.62	11,516.87
TOTAL	953.85	13,035.97	38,048.06	57,478.36	90,827.83	6,606.30	33,702.74	109,516.24	1,448.44	55,464.68	12,824.00	10,386.38	430,292.86
	0.22%	3.03%	8.84%	13.36%	21.11%	1.54%	7.83%	25.45%	0.34%	12.89%	2.98%	2.41%	100.00%

TOP 10 PAPER PRODUCERS IN THE LANDFILL

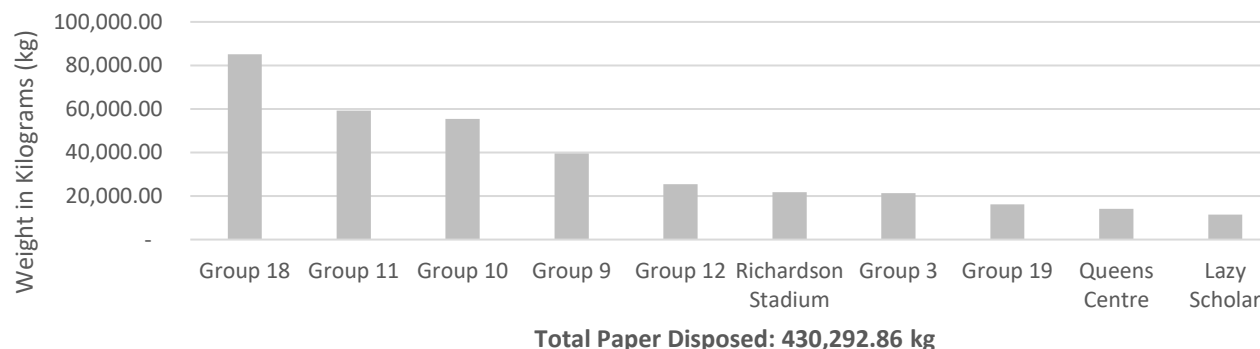


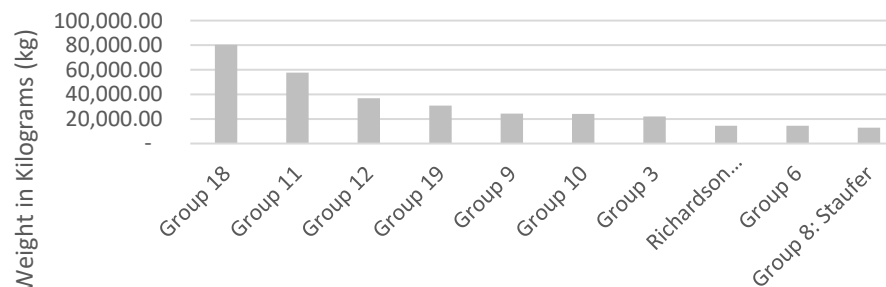
Figure 3 Total Annual Paper Materials Generated (kg/ yr)

The figure above shows the amount of paper materials generated and disposed of as waste, per area. The top two (2) producing areas are Group 18 generating 85,175.38 kg per year, and Group 11, generating 59,315.41 kg per year. Cardboard and boxboard are the highest generated recyclable paper materials found in the waste stream. It is important to keep these materials dry and free of contamination.

Total Annual Plastic Materials Generated (kg/yr)

GENERATING AREAS	# 1 PETE Containers	# 1 PETE Water Bottles (>500 ML)	# 1 PETE Water Bottles (<1000 ML)	# 1 PETE Soft Drinks	# 2 HDPE	# 3 PVC	# 4 LDPE Recyclable Film	# 5 PP	# 6 PS (Styrofoam)	# 6 PS (Clear/Hard)	# 7 Other	Non-Recyclable Film	Rigid Plastics	Plastic Strapping	Total Plastics
Group 18	6,535.65	3,532.78	741.88	8,054.74	1,978.36	-	35.33	10,527.69	1,236.47	3,532.78	565.25	36,465.38	6,394.34	706.56	80,307.20
Group 11	3,391.47	847.87	70.66	2,472.95	1,024.51	-	-	6,253.02	1,342.46	2,155.00	635.90	34,091.35	5,122.53	353.28	57,760.99
Group 12	1,695.74	847.87	-	2,826.23	-	-	-	5,087.21	671.23	1,377.79	-	22,362.51	1,943.03	35.33	36,846.92
Group 19	2,614.26	70.66	-	600.57	918.52	-	-	35.33	70.66	671.23	-	25,082.75	777.21	-	30,841.19
Group 9	1,413.11	211.97	-	494.59	211.97	-	-	3,921.39	529.92	1,201.15	-	13,601.21	2,755.57	70.66	24,411.52
Group 10	141.31	282.62	-	1,271.80	247.29	-	-	4,168.68	353.28	812.54	-	14,166.46	2,684.91	35.33	24,164.23
Group 3	141.31	1,271.80	-	317.95	847.87	141.31	-	1,872.37	494.59	1,059.83	-	14,590.39	1,201.15	-	21,938.58
Richardson Stadium	671.23	1,271.80	-	2,826.23	-	-	-	282.62	812.54	812.54	-	6,111.71	1,660.41	70.66	14,519.73
Group 6	282.62	-	-	35.33	635.90	-	-	211.97	-	141.31	-	11,728.84	1,413.11	35.33	14,484.41
Group 8: Stauffer	-	35.33	-	-	-	-	-	1,589.75	282.62	459.26	-	9,821.13	777.21	-	12,965.31
Queens Centre	989.18	282.62	-	1,695.74	-	-	-	1,978.36	635.90	635.90	35.33	4,592.62	777.21	-	10,986.95
Lazy Scholar	-	-	-	-	-	-	-	-	35.33	70.66	-	10,209.74	247.29	-	10,563.02
Group 2	423.93	423.93	-	141.31	-	-	-	1,165.82	70.66	70.66	70.66	6,712.29	494.59	-	9,573.84
Wally's	1,024.51	-	-	-	883.20	-	-	141.31	-	423.93	-	3,780.08	1,448.44	-	7,701.46
Group 5	-	635.90	-	70.66	1,978.36	-	918.52	211.97	105.98	211.97	-	3,108.85	211.97	211.97	7,666.14
Group 17: Stuart St.	-	247.29	-	247.29	-	-	-	-	282.62	1,130.49	-	5,299.17	70.66	-	7,277.53
Group 8: Douglas	-	141.31	-	353.28	-	-	-	1,059.83	-	176.64	-	4,239.34	70.66	-	6,041.06
BioSci Exterior	-	35.33	-	141.31	70.66	-	-	70.66	635.90	635.90	-	4,592.62	141.31	-	5,687.78
Group 13	423.93	141.31	-	141.31	-	-	-	423.93	70.66	211.97	-	3,250.16	565.25	-	5,228.52
Group 21	282.62	35.33	-	-	989.18	-	-	-	-	494.59	-	2,049.01	247.29	-	4,098.03
Group 17: Union St.	423.93	70.66	-	353.28	-	-	-	388.61	70.66	70.66	-	1,271.80	282.62	-	2,861.55
Group 22	-	-	-	-	-	-	-	70.66	-	-	-	1,907.70	70.66	-	2,049.01
Group 21: David C. Smith	-	-	-	-	-	-	-	35.33	-	211.97	-	1,059.83	353.28	-	1,660.41
Smith Outside	-	35.33	-	565.25	-	-	-	141.31	-	211.97	-	353.28	70.66	-	1,377.79
Brant Outside	423.93	70.66	-	-	-	-	-	70.66	-	70.66	-	423.93	141.31	-	1,201.15
Bookstore (Clark Hall)	-	-	-	141.31	-	-	-	-	-	-	-	777.21	70.66	-	989.18
Tea Room	-	-	-	-	-	-	-	-	70.66	-	-	353.28	35.33	-	459.26
TOTAL	20,878.74	10,492.36	812.54	22,751.12	9,785.81	141.31	953.85	39,708.47	6,500.32	16,780.71	1,307.13	242,002.64	30,028.65	1,519.10	403,662.75
	5.17%	2.60%	0.20%	5.64%	2.42%	0.04%	0.24%	9.84%	1.61%	4.16%	0.32%	59.95%	7.44%	0.38%	100.00%

TOP 10 PLASTIC PRODUCERS IN THE LANDFILL



Total Plastic Disposed: 403,662.75 kg

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 Group 18 (80,307.20 kg) and Group 11 (57,760.99 kg).

#5 PP Lids and Containers and #1 PETE Soft Drink Bottles are the highest generated recyclable plastic materials found in the waste stream. It is important to encourage the use of reusable water bottles, mugs, and containers to reduce the overall generation of single-use materials on site. Currently, there is a ban on the sale of water in single-use containers under 500 ml, which should drive students and faculty to use reusable bottles at the various filling stations throughout campus.

Total Annual Metal Materials Generated (kg/yr)

GENERATING AREAS	Aluminum Cans	Aluminum Foil	Aluminum Trays	Aerosol Cans	Steel	Scrap Metal	TOTAL METALS
Group 18	4,945.89	141.31	211.97	1,236.47	1,483.77	1,165.82	9,185.23
Group 19	529.92	1,095.16	2,155.00	-	2,013.69	-	5,793.76
Group 11	1,483.77	1,483.77	35.33	-	1,695.74	247.29	4,945.89
Group 3	1,554.42	35.33	-	565.25	70.66	2,720.24	4,945.89
Group 12	1,554.42	247.29	-	-	2,190.32	70.66	4,062.70
Group 5	141.31	-	-	-	-	3,603.44	3,744.75
Group 2	1,625.08	70.66	70.66	-	-	1,271.80	3,038.19
Richardson Stadium	1,271.80	388.61	-	-	-	-	1,660.41
Group 17: Union St.	1,625.08	-	-	-	-	-	1,625.08
Group 10	706.56	70.66	-	-	141.31	353.28	1,271.80
TOTAL	19,642.27	4,451.31	2,649.59	1,907.70	7,595.48	10,245.07	46,491.41
	42.25%	9.57%	5.70%	4.10%	16.34%	22.04%	100.00%

TOP 10 METAL PRODUCERS IN THE LANDFILL

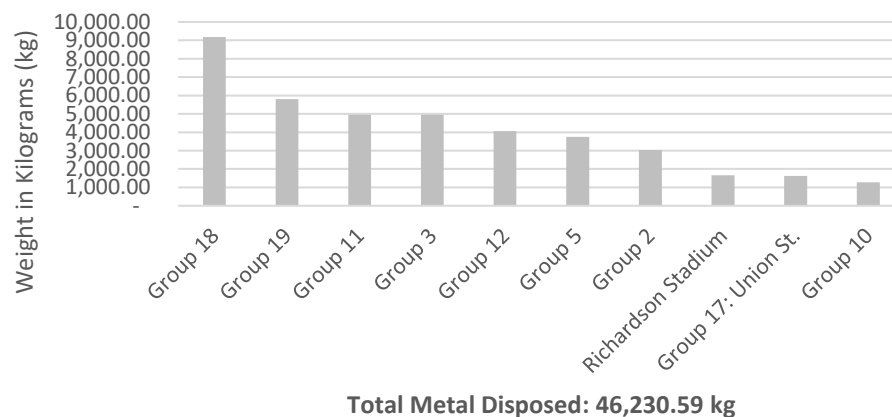


Figure 5 Total Annual Metal Materials Generated (kg/yr)

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 Group 18 (9,185.23 kg) and Group 19 (5,793.76 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, and ensure that they are placed into the appropriate collection containers provided.

Total Annual Glass Materials Generated (kg/yr)

GENERATING AREAS	Glass (Clear/ Coloured)	Liquor Bottles	Other Glass	TOTAL GLASS
Group 18	-	14,590.39	-	14,590.39
Group 12	5,157.86	-	1,165.82	6,323.68
Richardson Stadium	2,755.57	-	-	2,755.57
Group 9	1,978.36	-	-	1,978.36
Group 10	1,978.36	-	-	1,978.36
Group 5	1,695.74	-	-	1,695.74
Queens Centre	1,342.46	-	-	1,342.46
Group 3	1,201.15	-	-	1,201.15
Group 6	918.52	-	-	918.52
TOTAL	17,028.01	14,590.39	1,165.82	32,784.22
	51.94%	44.50%	3.56%	100.00%

GLASS PRODUCERS IN THE LANDFILL

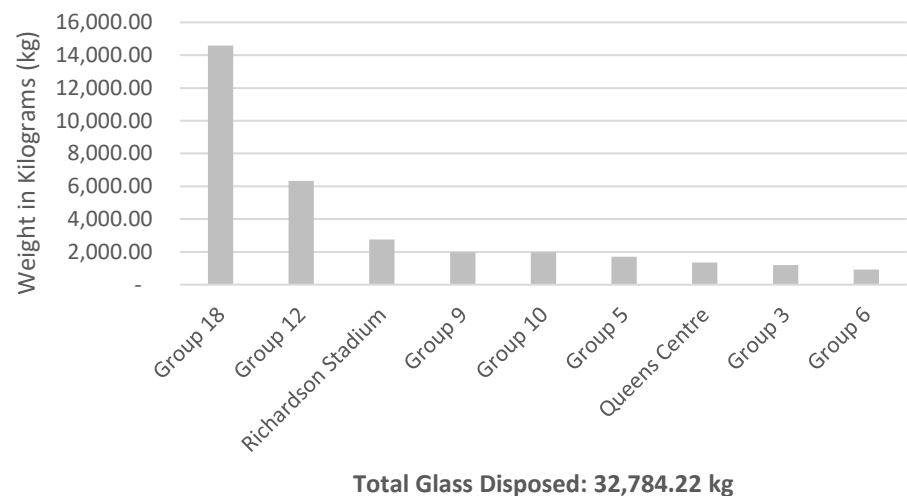


Figure 6 Total Annual Glass Materials Generated (kg/yr)

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 Group 18 (14,590.39 kg) and Group 12 (6,323.68 kg). Clear/coloured glass was the highest generated recyclable glass material found in the waste stream. These glass food and beverage containers are recyclable in the program on campus.

Total Annual HSW Materials Generated (kg/yr)

GENERATING AREAS	Batteries	Ink Cartridges	Lightbulbs	E-Waste	TOTAL HSW
Group 18	-	-	-	3,179.50	3,179.50
Group 13	70.66	-	141.31	2,896.88	3,108.85
Group 9	282.62	-	2,614.26	70.66	2,967.54
Group 3	70.66	-	-	1,837.05	1,907.70
Group 12	282.62	-	-	883.20	1,165.82
Group 11	635.90	423.93	-	-	1,059.83
Group 22	70.66	-	-	211.97	282.62
Group 2	211.97	-	-	-	211.97
Group 10	70.66	-	-	-	70.66
Queens Centre	-	-	-	35.33	35.33
Lazy Scholar	-	-	-	35.33	35.33
TOTAL	1,695.74	423.93	2,755.57	9,149.91	14,025.14
	12.09%	3.02%	19.65%	65.24%	100.00%

HSW PRODUCERS IN THE LANDFILL

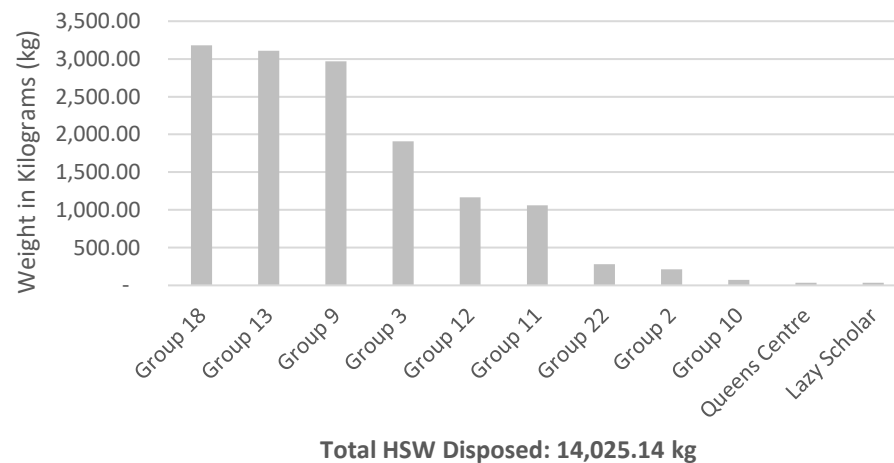


Figure 7 Total Annual HSW Materials Generated (kg/yr)

The figure above shows the amount of glass materials generated and disposed of as waste, per area. The top two (2) HSW producing areas are Group 18 (3,179.50 kg) and Group 13 (3,108.85 kg). E-waste was the highest generated material in this category. Consider placing additional e-waste receptacles within these building groups to encourage proper diversion of these materials.

Total Annual Organic Materials Generated (kg/yr)

GENERATING AREAS	Food Waste	Tissue/ Towelings	Beverage Liquids	Compostable Containers	Compostable Clamshells	Yard/ Plant Waste	TOTAL ORGANICS
Group 18	170,668.70	31,053.15	35,539.79	2,684.91	3,815.40	-	243,761.96
Group 11	62,706.88	30,770.53	16,144.81	9,609.17	1,165.82	1,801.72	122,198.93
BioSci Exterior	89,167.42	247.29	3,179.50	1,201.15	282.62	-	94,077.99
Group 19	82,631.77	5,193.19	847.87	1,024.51	-	-	89,697.34
Group 10	42,110.76	24,800.13	12,011.46	7,630.81	423.93	35.33	87,012.42
Group 12	35,257.17	6,429.66	18,971.04	3,568.11	1,024.51	1,625.08	66,875.57
Group 9	30,205.29	8,761.30	706.56	3,815.40	635.90	1,059.83	45,184.28
Group 21	32,996.18	7,348.19	-	-	-	35.33	40,379.70
Group 17: Union St.	32,077.66	1,413.11	211.97	282.62	211.97	-	34,197.33
Group 6	25,930.62	6,147.04	-	353.28	423.93	70.66	32,925.53
TOTAL	720,970.17	179,571.31	140,180.79	38,161.11	15,120.31	12,788.67	1,106,792.37
	65.14%	16.22%	12.67%	3.45%	1.37%	1.16%	100.00%

TOP 10 ORGANICS PRODUCERS IN LANDFILL

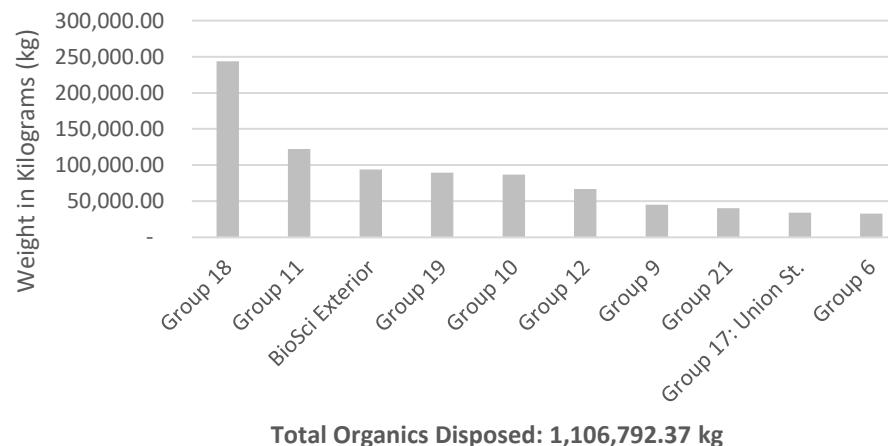


Figure 8 Total Annual Organic Materials Generated (kg/ yr)

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 Group 18 (243,761.96 kg) and Group 11 (122,198.93 kg).

Food waste is the highest generated recyclable organic material found in the waste stream. It is important to keep these materials separate from all other waste streams and provide organic collection containers for proper source separation, where applicable.

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

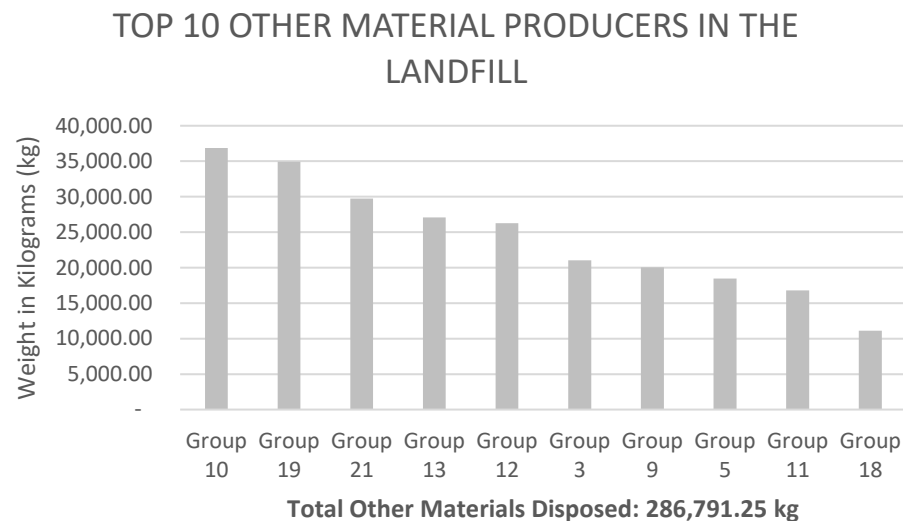


Figure 9 Total Annual 'Other' Materials Generated (kg/ yr)

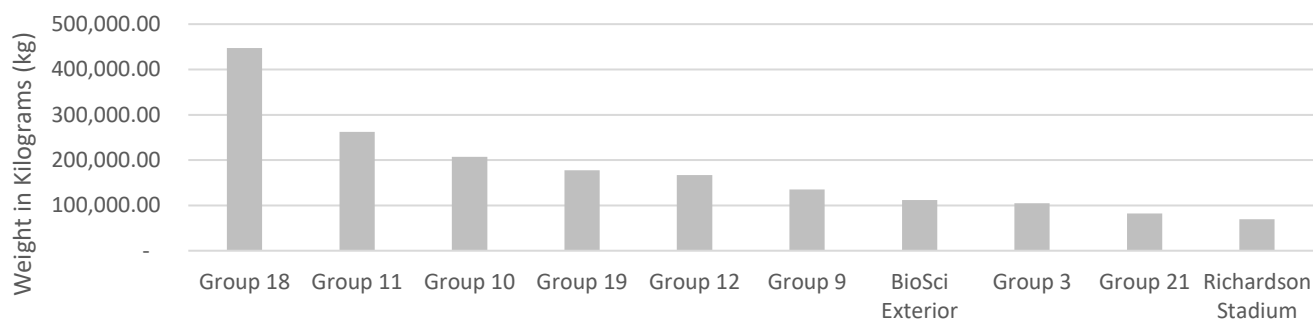
The figure above shows the amount of 'other' materials generated and disposed of as waste, per area. The top two (2) 'other' producing areas are Group 10 (36,882.25 kg) and Group 19 (34,939.21 kg).

It is important to keep these materials separate from all recyclable material streams on site, as they are not accepted in traditional recycling programs. If programs are available, consider implementing specialty recycling or reuse programs for office supplies, shrink wrap, writing utensils, masks, and disposable gloves.

Total Annual Materials Generated (kg/yr)

GENERATING AREAS	Paper	Plastic	Metal	Glass	HSW	Organics	Other Materials	TOTAL MATERIALS
Group 18	85,175.38	80,307.20	9,185.23	14,590.39	3,179.50	243,761.96	11,092.94	447,292.61
Group 11	59,315.41	57,760.99	4,945.89	-	1,059.83	122,198.93	16,780.71	262,061.78
Group 10	55,464.68	24,164.23	1,271.80	1,978.36	70.66	87,012.42	36,882.25	206,844.39
Group 19	16,215.47	30,841.19	5,793.76	-	-	89,697.34	34,939.21	177,486.97
Group 12	25,436.03	36,846.92	4,062.70	6,323.68	1,165.82	66,875.57	26,248.57	166,959.28
Group 9	39,496.50	24,411.52	989.18	1,978.36	2,967.54	45,184.28	20,030.87	135,058.26
BioSci Exterior	7,242.20	5,687.78	353.28	-	-	94,077.99	4,309.99	111,671.24
Group 3	21,373.33	21,938.58	4,945.89	1,201.15	1,907.70	32,579.32	21,020.05	104,966.02
Group 21	7,630.81	4,098.03	70.66	-	-	40,379.70	29,746.03	81,925.22
Richardson Stadium	21,797.27	14,519.73	1,660.41	2,755.57	-	24,623.49	3,780.08	69,136.55
TOTAL	430,292.86	403,662.75	46,491.41	32,784.22	14,025.14	1,106,792.37	286,791.25	2,320,840.00
	18.54%	17.39%	2.00%	1.41%	0.60%	47.69%	12.36%	100.00%

TOP 10 GENERATING AREAS IN THE LANDFILL



Total Materials Disposed: 2,320,840.00 kg

Figure 10 Total Annual Materials Generated (kg/yr)

In summary, the waste audit sample consisted primarily of organic materials (47.69%) and paper materials (18.54%). With these being the highest generated materials on site, it is important to maintain education and awareness surrounding the importance of recycling and source separation. Focusing on accessible and detailed signage, bin placement and education surrounding the recyclability of high generating divertible materials would have the greatest impact on the overall diversion rate for Queen’s University.

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 total number of full-time students and staff/faculty will be used to calculate the WGI.

Currently at Queen's University there are 33,842 full-time students, and 10,262 full-time faculty and staff, for a total of 44,104 persons on campus.

Waste Generation Index is calculated as follows:

$$\text{Waste Generation Index} = \frac{\text{(Total Material Generated on Campus)}}{\text{(Total Full Time Persons on Campus)}}$$

- Total Material Generated Annually: 3,083,140.00 kg
- Total Number of Persons: 44,104 Persons

$$WI = \frac{3,083,140.00 \text{ kg}}{44,104 \text{ Persons}}$$

$$WI = 69.91 \text{ kg/person}$$

Therefore, each person at Queen's University is generating 69.91 kg of waste per year.

6 CONTAMINATION OF AUDIT SAMPLE

Based on the waste audit results, 1,557,363.40 kg (67.10%) of the landfill waste sample was contaminated with recyclable materials. Of that total, 1,106,762.37 kg (1,106.76 t) was recyclable organic materials; 240,653.12 kg (240.65 t) was recyclable paper materials; 121,209.75 kg (121.21 t) was recyclable plastic materials; 17,028.01 kg (17.03 t) was recyclable glass materials; 14,025.14 kg (14.03 t) was recyclable HSW materials; 40,132.40 kg (40.13 t) was recyclable metal materials and 2,255.65 kg (2.26 t) of recyclable 'other' materials. The graph below identifies the breakdown of the audited waste samples by main categories. The blue bars represent recyclable materials that were found in the waste stream that could be diverted to available recycling programs, and the grey bars represent waste materials that should continue to be disposed of as waste and those items which cannot be diverted as recycling.

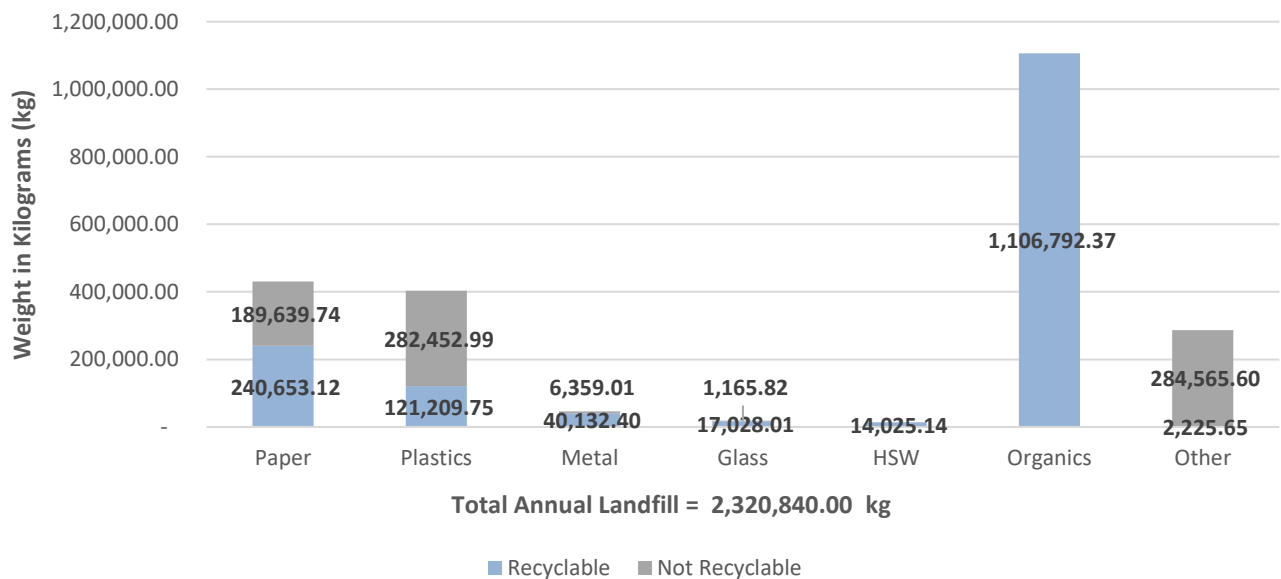


Figure 11 Contamination of Waste Audit Sample

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

2,320,840.00 kg + 762,300.00 kg = 3,083,140.00 kg

Diversion Rate is calculated as follows:

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

= $\frac{762,300.00 \text{ kg}}{3,083,140.00 \text{ kg}}$

= 0.2472 x 100%

= **24.72%**

Based on industry standards and service information, a total of 762,300.00 kg or 762.30 t of materials are removed and recycled at Queen's University on an annual basis.

Material Destination	Annual Total		
	KILOGRAMS (kg)	METRIC TONNES (t)	PERCENTAGE (%)
Landfill Waste	2,320,840.00	2,320.84	75.28
Recycled	762,300.00	762.30	24.72
TOTAL GENERATED	3,083,140.00	3,083.14	100.00

Therefore, the annual diversion rate for Queen's University is **24.72%**.

Annual Diversion Rate 2022

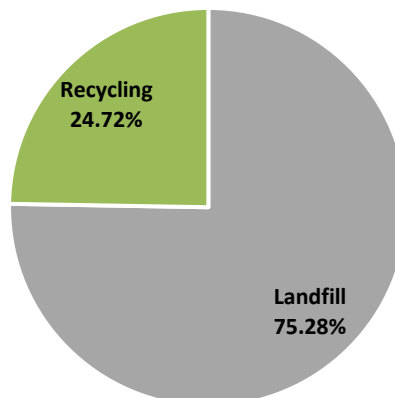


Figure 12 Annual Diversion Rate 2022

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: 762,300.00 kg
- Divertable materials found in waste stream: 1,557,363.40 kg
- Total divertable material generated: 762,300.00 kg + 1,557,363.40 kg = 2,319,663.40 kg

Total Recycling Generated ÷ Total Divertable Materials Generated = Capture Rate

$$c = \frac{762,300.00 \text{ kg}}{2,319,663.40 \text{ kg}}$$

$$c = 0.3286 \times 100\%$$

$$c = 32.86\%$$

Therefore, the capture rate for Queen's University is **32.86%**.

Annual Capture Rate 2022

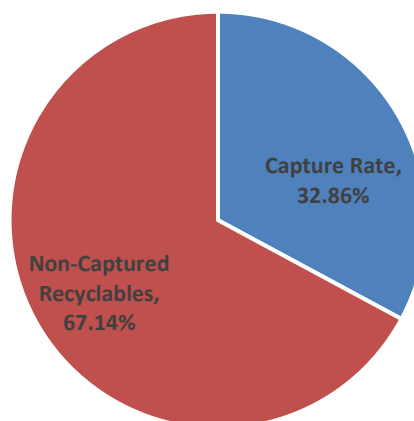


Figure 13 Annual Capture Rate 2022

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: 762,300.00 kg
- Divertable materials found in landfill waste stream: 1,557,363.40 kg
- Total divertable material generated: 762,300.00 kg + 1,557,363.40 kg = 2,319,663.40 kg

Potential Diversion Rate is calculated as follows:

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

$$p = \frac{2,319,663.40 \text{ kg}}{3,083,140.00 \text{ kg}}$$

$$p = 0.7524 \times 100\%$$

$$p = 75.24\%$$

Therefore, the potential diversion rate for Queen's University is **75.24%**.

Annual Potential Diversion Rate 2022

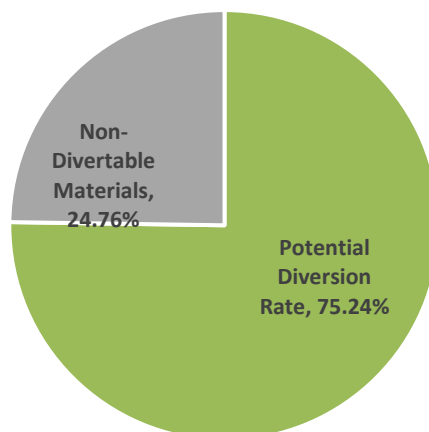


Figure 14 Annual Potential Diversion Rate 2022

10 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 Queen's University, 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.

10.1 IMPROVE ORGANICS RECYCLING

A total of 47.69% 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. Most of the organic material found in the sample consisted of food waste (65.14%). It is recommended to review your current organics recycling signage and ensure all recycling participants understand which materials are accepted into the organics recycling program. Consider assigning staff or student volunteers to supervise waste receptacles in cafeterias at mealtimes, to assist in diverting these materials into the appropriate waste stream.

10.3 IMPROVE PAPER RECYCLING

A total of 18.54% of the landfill waste sample was paper materials. As paper materials are the second heaviest contributor to overall disposal figures, diverting as much recyclable paper material from the landfill waste stream as possible will greatly increase the diversion rate and reduce the amount of waste sent to landfill annually by 240,653.12 kg. Paper materials should be dry before placing into the appropriate recycling containers provided. It is recommended to switch to more electronic emailing/communication instead of printing where possible.

10.4 CONSIDER IMPLEMENTING ADDITIONAL SPECIALTY RECYCLING PROGRAMS

A number of additional recycling opportunities were found in the 'other' materials commodity category. For example, a total of 8.38% of the 'other' materials found in the waste sample consisted of disposable gloves. This material can be collected and turned into raw materials by Terracycle. Terracycle provides RightCycle collection boxes to collect these materials and divert them from landfill. Diverting as many disposable gloves from the waste stream as possible will increase Queen's University's diversion rate, reduce the amount of waste sent to landfill annually, and provide material resources to create useful and eco-friendly products. Other materials identified as potentially divertable through additional programs are masks, writing utensils, and sanitary products.

10.5 CONSIDER EXPANDING CURRENT SPECIALTY RECYCLING PROGRAMS

Although there are programs in place to collect e-waste and batteries for recycling, these materials were found in the landfill waste samples. Batteries were found in samples from Groups 2, 3, 9, 10, 11, 12, 13, and 22. E-waste was found in groups 3, 9, 12, 13, 18, 22, Lazy Scholar, and

Queen's Centre. Consider placing collection bins strategically in these areas to help divert e-waste and batteries. Promoting the addition of these bins should help generate awareness surrounding how and where staff and students can properly divert these materials.

10.6 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.

10.7 SIGNAGE AND EDUCATION

Employee and Student Education

Educational information should be displayed on an 'Environmental Board' and frequently updated to encourage and engage employee and student 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.

10.8 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 and students 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.

10.9 CONTINUAL PROGRAM REVIEW

The success of the existing recycling program should be continually reviewed by Facilities 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 employees and students on campus, 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 employees and students, and sign documents in all applicable areas (as located on pages 49 and 74 in this report).

11 CONCLUSION

Based on the waste audit figures, Queen's University generates 3,083,140.00 kg (3,083.14 t) of material annually, 762,300.00 kg (762.30 t) of which is diverted as recycling and 2,320,840.00 kg (2,320.84 t) of which is disposed of as landfill waste. 1,557,363.40 kg (1,557.36 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 Queen's University, consider the following suggestions to improve the existing program and efforts of employees, faculty, students, 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 and students 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 Queen's University, the greater the success of the program.

APPENDIX I - TABLE OF WASTE AUDIT DATA

NAME: Queen's University ADDRESS: 355 King St W, Kingston, ON DATE: October 17-21		WASTE AUDIT DATA				
PAPER	%	%	(KGS)	(KGS)	(KGS)	(KGS)
			Annual	Monthly	Weekly	Daily
Newspaper	0.22%		953.85	79.49	18.34	3.80
Magazines	3.03%		13,035.97	1,086.33	250.69	51.94
Cardboard	8.84%		38,048.06	3,170.67	731.69	151.59
Boxboard	13.36%		57,478.36	4,789.86	1,105.35	229.00
Mixed Papers	21.11%		90,827.83	7,568.99	1,746.69	361.86
Molded Pulp	1.54%		6,606.30	550.53	127.04	26.32
Kraft Paper	7.81%		33,702.74	2,808.56	649.13	134.27
Other Paper	25.45%		109,516.24	9,126.35	2,106.08	436.32
Spiral Wound	0.34%		1,448.44	120.70	27.85	5.77
Coffee Cups	12.89%		55,464.68	4,622.06	1,066.63	220.97
Assetic Containers	2.98%		12,824.40	1,068.67	246.62	51.09
Gable Top Containers	2.41%		10,386.38	865.53	199.74	41.38
Total Paper	18.54%	100.00%	430,292.86	35,857.74	8,274.86	1,714.31
PLASTICS						
# 1 PETE Containers	5.17%		20,878.74	1,739.90	401.51	83.18
# 1 PETE Water Bottles (>500 ML)	2.60%		10,492.36	874.36	201.78	41.80
# 1 PETE Water Bottles (<1000 ML)	0.20%		812.54	67.21	15.63	3.24
# 1 PETE Soft Drinks	5.64%		22,751.12	1,895.93	437.52	90.64
# 2 HDPE	2.42%		9,785.81	815.48	188.19	38.99
# 3 PVC	0.04%		141.31	11.78	2.72	0.56
# 4 LDPE Recyclable Film	0.24%		953.85	79.49	18.34	3.80
# 5 PP	9.84%		39,708.47	3,309.04	763.62	158.20
# 6 PS (Styrofoam)	1.61%		6,500.32	541.69	125.01	25.90
# 6 PS (Clear/ Hard)	4.16%		16,780.71	1,398.39	322.71	66.86
# 7 Other	0.32%		1,307.13	108.93	25.14	5.21
Non-Recyclable Film	59.95%		242,002.64	20,166.89	4,653.90	964.15
Rigid Plastics	7.44%		30,388.65	2,532.39	577.47	119.64
Plastic Strapping	0.38%		1,519.10	126.59	29.21	6.05
Total Plastics	17.39%	100.00%	403,662.75	33,638.56	7,762.75	1,608.22
METALS						
Aluminum Cans	42.25%		19,642.27	1,636.86	377.74	78.26
Aluminum Foil	9.57%		4,451.31	370.94	85.60	17.73
Aluminum Trays	5.70%		2,649.59	220.80	50.95	10.56
Aerosol Cans	4.10%		1,907.70	158.98	36.69	7.60
Steel	16.34%		7,595.48	632.96	146.07	30.25
Scrap Metal	22.04%		10,245.07	853.76	197.02	40.82
Total Metals	2.00%	100.00%	46,491.41	3,874.28	894.07	185.22
GLASS						
Glass (Clear/ Coloured)	51.94%		17,028.01	1,419.00	327.46	67.84
Liquor Bottles	44.50%		14,590.39	1,215.87	280.58	58.13
Other Glass	3.56%		1,165.82	97.15	22.42	4.64
Total Glass	1.41%	100.00%	32,784.22	2,732.02	630.47	130.61
HSW						
Batteries	12.09%		1,695.74	141.31	32.61	6.76
Ink Cartridges	4.23%		423.93	35.33	8.15	1.69
Lightbulbs	19.65%		2,755.57	229.63	52.99	10.98
E-Waste	65.24%		9,140.91	762.49	175.96	36.45
Total HSW	0.60%	100.00%	14,025.14	1,168.76	269.71	55.88
ORGANICS						
Food Waste	65.14%		720,970.17	60,080.85	13,864.81	2,872.39
Tissue/ Toweling	16.21%		179,571.31	14,964.28	3,453.29	715.42
Beverage Liquids	12.67%		140,180.79	11,681.73	2,695.78	558.49
Compostable Containers	3.45%		38,161.11	3,180.09	733.87	152.04
Compostable Clamshells	1.37%		15,120.31	1,260.03	290.78	60.24
Yard/ Plant Waste	1.18%		12,788.67	1,065.72	245.94	50.95
Total Organics	47.69%	100.00%	1,106,792.37	92,232.70	21,284.47	4,409.53
OTHER MATERIALS						
Textiles	7.61%		21,832.59	1,819.38	419.86	86.98
Disposable Gloves	8.38%		24,021.92	2,001.91	461.98	95.71
Masks	3.39%		9,715.15	809.60	186.83	38.71
Diapers	10.72%		30,735.20	2,561.27	591.06	122.45
Paint Bottles	0.34%		989.18	82.43	19.02	3.94
Crafts	0.32%		918.52	76.54	17.66	3.66
Shavings	0.07%		211.97	17.66	4.08	0.84
Book	3.55%		10,174.41	847.87	195.66	40.54
Writing Utensils	0.67%		1,907.70	158.98	36.69	7.60
Construction Waste	14.12%		40,626.99	3,385.58	781.29	161.86
Cigarettes	0.06%		176.64	14.72	3.40	0.70
Wax	0.14%		388.61	32.38	7.47	1.55
Hair	0.16%		459.26	38.27	8.83	1.83
Rubber Band	0.10%		282.62	23.55	5.44	1.13
Sanitary Products	1.05%		3,002.86	250.24	57.75	11.96
Silicon	0.27%		777.21	64.77	14.95	3.10
Sweepings	0.22%		635.90	52.99	12.23	2.53
Ear Plugs	0.01%		141.31	11.78	2.72	0.56
Coffee pods	4.02%		11,516.87	959.74	221.48	45.88
Toiletries	0.39%		1,130.49	94.21	21.74	4.50
Silica Packs	0.25%		706.56	58.88	13.59	2.81
Cosmetics	0.23%		671.23	55.94	12.91	2.67
Rubber	0.17%		494.59	41.22	9.51	1.97
Duster	0.02%		70.66	5.89	1.36	0.28
Medical Waste	0.84%		2,402.29	200.19	46.20	9.57
Hair Net	0.46%		1,307.13	108.93	25.14	5.21
Lint	0.46%		1,307.13	108.93	25.14	5.21
Foam	0.52%		1,483.77	123.65	28.53	5.91
Starbucks Bullet	0.02%		70.66	5.89	1.36	0.28
Pet Waste	2.00%		6,005.73	500.48	115.49	23.93
Umbrella	3.23%		9,255.89	771.32	178.00	36.88
Queen's promotional Items	0.32%		918.52	76.54	17.66	3.66
Foam Wrap	0.57%		1,625.08	135.42	31.25	6.47
Mouse Pad	0.10%		282.62	23.55	5.44	1.13
Picture	1.26%		3,603.44	300.29	69.30	14.36
Condom	0.01%		35.33	2.94	0.68	0.14
School Containers	0.17%		494.59	41.22	9.51	1.97
Medication	0.09%		247.49	20.61	4.76	0.99
Shrink Wrap	0.91%		2,614.26	217.85	50.27	10.42
Sports Tape	1.22%		3,497.45	291.45	67.26	13.93
Sports Wrap	0.02%		70.66	5.89	1.36	0.28
Scrub Pad	0.22%		635.90	52.99	12.23	2.53
Metal Cutlery	0.20%		565.25	47.10	10.87	2.25
J-Cloths	2.35%		6,747.61	562.30	129.76	26.88
Non-recyclable Wood	1.16%		3,320.82	276.73	63.86	13.23
Nylon Straps	0.81%		2,331.64	194.30	44.84	9.29
Handers	0.44%		1,271.80	105.98	24.46	5.07
Filter	0.20%		565.25	47.10	10.87	2.25
Lamp	2.56%		7,348.19	612.35	141.31	29.28
Lighter	0.02%		70.66	5.89	1.36	0.28
Clay	8.08%		23,175.05	1,931.25	445.67	92.33
Wood	0.78%		2,225.65	185.47	42.80	8.87
Glue Trap	0.02%		70.66	5.89	1.36	0.28
Plastic Netting	0.01%		35.33	2.94	0.68	0.14
Medical Sensors	0.01%		35.33	2.94	0.68	0.14
Tubing	0.89%		2,543.60	211.97	48.92	10.13
Lab Equipment	0.47%		1,342.46	111.87	25.82	5.35
Binder	2.35%		6,747.61	562.30	129.76	26.88
Tape	0.99%		2,826.23	235.52	54.35	11.26
Steel Wool	0.04%		105.98	8.83	2.04	0.42
Stamp	0.02%		70.66	5.89	1.36	0.28
Clipboard	0.22%		777.21	64.77	14.95	3.10
Mop Head	6.87%		19,712.92	1,642.74	379.09	78.54
IV	0.44%		1,271.80	105.98	24.46	5.07
Nylon Bags	0.02%		70.66	5.89	1.36	0.28
Drywall	0.01%		35.33	2.94	0.68	0.14
Medical Gowns	1.65%		4,733.93	394.49	91.04	18.86
Deoderant	0.10%		282.62	23.55	5.44	1.13
Queens Branded Cloth Bags	0.07%		211.97	17.66	4.08	0.84
Balloons	0.01%		35.33	2.94	0.68	0.14
Glue	0.07%		211.97	17.66	4.08	0.84
Hair Elastic	0.01%		35.33	2.94	0.68	0.14
Glue Stick	0.01%		35.33	2.94	0.68	0.14
Feathers	0.18%		529.92	44.16	10.19	2.11
Total Other	12.36%	100.00%	286,791.25	23,899.27	5,515.22	1,142.59
TOTAL ANNUAL WASTE	100.00%		2,320,940.00	193,403.33	44,631.54	9,246.37
Total Annual Divertable Materials	67.10%		1,557,363.40			
Total Annual Non-Divertable Materials	32.90%		763,476.60			
*The highlighted items are not acceptable items for recycling in the regular recycling bin.						

APPENDIX II – GENERATING AREA WASTE BREAKDOWN TABLES

Paper Materials Found in Landfill Stream

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
Group 18	-	1,307.13	10,633.67	26,248.57	5,652.45	2,790.90	12,152.77	19,465.63	317.95	1,907.70	2,649.59	2,049.01	85,175.38
Group 11	635.90	777.21	1,059.83	8,302.04	16,816.04	1,059.83	2,684.91	12,929.98	-	10,563.02	3,285.49	1,201.15	59,315.41
Group 10	70.66	4,309.99	4,451.31	529.92	24,446.85	141.31	1,201.15	5,016.55	-	12,188.10	2,967.54	141.31	55,464.68
Group 9	35.33	706.56	70.66	4,345.32	21,549.97	388.61	2,049.01	4,239.34	1,130.49	4,345.32	353.28	282.62	39,496.50
Group 12	-	-	6,853.60	211.97	1,943.03	-	2,755.57	7,206.88	-	5,440.48	494.59	529.92	25,436.03
Richardson Stadium	-	-	7,560.15	1,731.06	6,182.37	247.29	1,095.16	2,720.24	-	1,201.15	1,059.83	-	21,797.27
Group 3	141.31	2,896.88	1,554.42	2,260.98	4,733.93	141.31	1,554.42	4,839.91	-	3,108.85	105.98	35.33	21,373.33
Group 19	-	-	-	2,684.91	1,554.42	-	2,049.01	7,171.55	-	211.97	-	2,543.60	16,215.47
Queens Centre	-	-	-	989.18	35.33	141.31	918.52	9,149.91	-	2,472.95	141.31	211.97	14,060.47
Lazy Scholar	-	-	-	-	105.98	-	35.33	10,633.67	-	459.26	-	282.62	11,516.87
Group 2	-	-	1,201.15	883.20	3,532.78	141.31	423.93	1,342.46	-	1,413.11	353.28	353.28	9,644.50
Group 17: Stuart St.	-	-	989.18	635.90	1,024.51	141.31	635.90	2,472.95	-	1,766.39	635.90	-	8,302.04
Group 13	-	1,554.42	-	565.25	1,625.08	141.31	883.20	1,271.80	-	1,342.46	141.31	494.59	8,019.42
Group 21	-	-	141.31	1,766.39	353.28	-	-	5,369.83	-	-	-	-	7,630.81
Group 6	-	1,483.77	141.31	353.28	494.59	211.97	211.97	3,674.09	-	141.31	-	635.90	7,348.19
BioSci Exterior	-	-	777.21	989.18	-	-	-	3,744.75	-	1,554.42	141.31	35.33	7,242.20
Group 8: Staufer	-	-	706.56	1,413.11	35.33	-	1,766.39	282.62	-	2,826.23	141.31	-	7,171.55
Group 17: Union St.	-	-	494.59	282.62	-	282.62	3,108.85	1,483.77	-	777.21	141.31	141.31	6,712.29
Wally's	-	-	-	953.85	-	777.21	-	1,413.11	-	1,059.83	35.33	1,024.51	5,263.85
Group 5	70.66	-	70.66	1,554.42	211.97	-	70.66	211.97	-	1,059.83	35.33	-	3,285.49
Brant Outside	-	-	1,342.46	-	-	-	35.33	423.93	-	353.28	-	35.33	2,190.32
Smith Outside	-	-	-	141.31	-	-	-	1,342.46	-	423.93	-	211.97	2,119.67
Group 8: Douglas	-	-	-	211.97	35.33	-	-	1,201.15	-	494.59	70.66	70.66	2,084.34
Group 21: David C.	-	-	-	-	-	-	-	1,377.79	-	-	-	105.98	1,483.77
Group 22	-	-	-	282.62	423.93	-	70.66	211.97	-	353.28	-	-	1,342.46
Bookstore (Clark Tea Room)	-	-	-	141.31	70.66	-	-	282.62	-	-	70.66	-	565.25
TOTAL	953.85	13,035.97	38,048.06	57,478.36	90,827.83	6,606.30	33,702.74	109,516.24	1,448.44	55,464.68	12,824.00	10,386.38	430,292.86
	0.22%	3.03%	8.84%	13.36%	21.11%	1.54%	7.83%	25.45%	0.34%	12.89%	2.98%	2.41%	100.00%

Plastic Materials Found in Landfill Stream

GENERATING AREAS	# 1 PETE Containers	# 1 PETE Water Bottles (>500 ML)	# 1 PETE Water Bottles (<1000 ML)	# 1 PETE Soft Drinks	# 2 HDPE	# 3 PVC	# 4 LDPE Recyclable Film	# 5 PP	# 6 PS (Styrofoam)	# 6 PS (Clear/Hard)	# 7 Other	Non-Recyclable Film	Rigid Plastics	Plastic Strapping	Total Plastics
Group 18	6,535.65	3,532.78	741.88	8,054.74	1,978.36	-	35.33	10,527.69	1,236.47	3,532.78	565.25	36,465.38	6,394.34	706.56	80,307.20
Group 11	3,391.47	847.87	70.66	2,472.95	1,024.51	-	-	6,253.02	1,342.46	2,155.00	635.90	34,091.35	5,122.53	353.28	57,760.99
Group 12	1,695.74	847.87	-	2,826.23	-	-	-	5,087.21	671.23	1,377.79	-	22,362.51	1,943.03	35.33	36,846.92
Group 19	2,614.26	70.66	-	600.57	918.52	-	-	35.33	70.66	671.23	-	25,082.75	777.21	-	30,841.19
Group 9	1,413.11	211.97	-	494.59	211.97	-	-	3,921.39	529.92	1,201.15	-	13,601.21	2,755.57	70.66	24,411.52
Group 10	141.31	282.62	-	1,271.80	247.29	-	-	4,168.68	353.28	812.54	-	14,166.46	2,684.91	35.33	24,164.23
Group 3	141.31	1,271.80	-	317.95	847.87	141.31	-	1,872.37	494.59	1,059.83	-	14,590.39	1,201.15	-	21,938.58
Richardson Stadium	671.23	1,271.80	-	2,826.23	-	-	-	282.62	812.54	812.54	-	6,111.71	1,660.41	70.66	14,519.73
Group 6	282.62	-	-	35.33	635.90	-	-	211.97	-	141.31	-	11,728.84	1,413.11	35.33	14,484.41
Group 8: Staufer	-	35.33	-	-	-	-	-	1,589.75	282.62	459.26	-	9,821.13	777.21	-	12,965.31
Queens Centre	989.18	282.62	-	1,695.74	-	-	-	1,978.36	-	635.90	35.33	4,592.62	777.21	-	10,986.95
Lazy Scholar	-	-	-	-	-	-	-	-	35.33	70.66	-	10,209.74	247.29	-	10,563.02
Group 2	423.93	423.93	-	141.31	-	-	-	1,165.82	70.66	70.66	70.66	6,712.29	494.59	-	9,573.84
Wally's	1,024.51	-	-	-	883.20	-	-	141.31	-	423.93	-	3,780.08	1,448.44	-	7,701.46
Group 5	-	635.90	-	70.66	1,978.36	-	918.52	211.97	105.98	211.97	-	3,108.85	211.97	211.97	7,666.14
Group 17: Stuart St.	-	247.29	-	247.29	-	-	-	-	282.62	1,130.49	-	5,299.17	70.66	-	7,277.53
Group 8: Douglas	-	141.31	-	353.28	-	-	-	1,059.83	-	176.64	-	4,239.34	70.66	-	6,041.06
BioSci Exterior	-	35.33	-	141.31	70.66	-	-	70.66	-	635.90	-	4,592.62	141.31	-	5,687.78
Group 13	423.93	141.31	-	141.31	-	-	-	423.93	70.66	211.97	-	3,250.16	565.25	-	5,228.52
Group 21	282.62	35.33	-	-	989.18	-	-	-	-	494.59	-	2,049.01	247.29	-	4,098.03
Group 17: Union St.	423.93	70.66	-	353.28	-	-	-	388.61	70.66	-	-	1,271.80	282.62	-	2,861.55
Group 22	-	-	-	-	-	-	-	70.66	-	-	-	1,907.70	70.66	-	2,049.01
Group 21: David C.	-	-	-	-	-	-	-	35.33	-	211.97	-	1,059.83	353.28	-	1,660.41
Smith Outside	-	35.33	-	565.25	-	-	-	141.31	-	211.97	-	353.28	70.66	-	1,377.79
Brant Outside	423.93	70.66	-	-	-	-	-	70.66	-	70.66	-	423.93	141.31	-	1,201.15
Bookstore (Clark Hall)	-	-	-	141.31	-	-	-	-	-	-	-	777.21	70.66	-	989.18
Tea Room	-	-	-	-	-	-	-	-	70.66	-	-	353.28	35.33	-	459.26
TOTAL	20,878.74	10,492.36	812.54	22,751.12	#####	141.31	953.85	39,708.47	6,500.32	16,780.71	#####	242,002.64	30,028.65	#####	403,662.75
	5.17%	2.60%	0.20%	5.64%	2.42%	0.04%	0.24%	9.84%	1.61%	4.16%	0.32%	59.95%	7.44%	0.38%	100.00%

Metal Materials Found in Landfill Stream

GENERATING AREAS	Aluminum Cans	Aluminum Foil	Aluminum Trays	Aerosol Cans	Steel	Scrap Metal	TOTAL METALS
Group 18	4,945.89	141.31	211.97	1,236.47	1,483.77	1,165.82	9,185.23
Group 19	529.92	1,095.16	2,155.00	-	2,013.69	-	5,793.76
Group 11	1,483.77	1,483.77	35.33	-	1,695.74	247.29	4,945.89
Group 3	1,554.42	35.33	-	565.25	70.66	2,720.24	4,945.89
Group 12	1,554.42	247.29	-	-	2,190.32	70.66	4,062.70
Group 5	141.31	-	-	-	-	3,603.44	3,744.75
Group 2	1,625.08	70.66	70.66	-	-	1,271.80	3,038.19
Richardson Stadium	1,271.80	388.61	-	-	-	-	1,660.41
Group 17: Union St.	1,625.08	-	-	-	-	-	1,625.08
Group 10	706.56	70.66	-	-	141.31	353.28	1,271.80
Group 8: Douglas	1,165.82	-	-	-	-	-	1,165.82
Group 9	423.93	176.64	141.31	-	-	247.29	989.18
Queens Centre	494.59	141.31	-	-	-	-	635.90
Group 13	282.62	35.33	-	-	-	282.62	600.57
Group 6	35.33	388.61	-	-	-	176.64	600.57
Wally's	459.26	35.33	-	-	-	-	494.59
Group 8: Staufer	388.61	70.66	-	-	-	-	459.26
BioSci Exterior	353.28	-	-	-	-	-	353.28
Group 17: Stuart St.	317.95	-	-	-	-	-	317.95
Brant Outside	211.97	-	-	-	-	-	211.97
Tea Room	-	70.66	-	-	-	70.66	141.31
Lazy Scholar	-	-	-	105.98	-	-	105.98
Group 21	70.66	-	-	-	-	-	70.66
Group 22	-	-	-	-	-	35.33	35.33
Smith Outside	-	-	35.33	-	-	-	35.33
Bookstore (Clark Hall)	-	-	-	-	-	-	-
Group 21: David C.	-	-	-	-	-	-	-
TOTAL	19,642.27	4,451.31	2,649.59	1,907.70	7,595.48	10,245.07	46,491.41
	42.25%	9.57%	5.70%	4.10%	16.34%	22.04%	100.00%

Glass Materials Found in Landfill Stream

GENERATING AREAS	Glass (Clear/ Coloured)	Liquor Bottles	Other Glass	TOTAL GLASS
Group 18	-	14,590.39	-	14,590.39
Group 12	5,157.86	-	1,165.82	6,323.68
Richardson Stadium	2,755.57	-	-	2,755.57
Group 9	1,978.36	-	-	1,978.36
Group 10	1,978.36	-	-	1,978.36
Group 5	1,695.74	-	-	1,695.74
Queens Centre	1,342.46	-	-	1,342.46
Group 3	1,201.15	-	-	1,201.15
Group 6	918.52	-	-	918.52
Tea Room	-	-	-	-
Bookstore (Clark Hall)	-	-	-	-
Group 21	-	-	-	-
Group 13	-	-	-	-
Group 22	-	-	-	-
Group 2	-	-	-	-
Group 11	-	-	-	-
BioSci Exterior	-	-	-	-
Smith Outside	-	-	-	-
Brant Outside	-	-	-	-
Group 17: Stuart St.	-	-	-	-
Group 17: Union St.	-	-	-	-
Group 8: Staufer	-	-	-	-
Group 8: Douglas	-	-	-	-
Group 21: David C.	-	-	-	-
Wally's	-	-	-	-
Lazy Scholar	-	-	-	-
Group 19	-	-	-	-
TOTAL	17,028.01	14,590.39	1,165.82	32,784.22
	51.94%	44.50%	3.56%	100.00%

HSW (Hazardous) Materials Found in Landfill Stream

GENERATING AREAS	Batteries	Ink Cartridges	Lightbulbs	E-Waste	TOTAL HSW
Group 18	-	-	-	3,179.50	3,179.50
Group 13	70.66	-	141.31	2,896.88	3,108.85
Group 9	282.62	-	2,614.26	70.66	2,967.54
Group 3	70.66	-	-	1,837.05	1,907.70
Group 12	282.62	-	-	883.20	1,165.82
Group 11	635.90	423.93	-	-	1,059.83
Group 22	70.66	-	-	211.97	282.62
Group 2	211.97	-	-	-	211.97
Group 10	70.66	-	-	-	70.66
Queens Centre	-	-	-	35.33	35.33
Lazy Scholar	-	-	-	35.33	35.33
Tea Room	-	-	-	-	-
Bookstore (Clark Hall)	-	-	-	-	-
Group 21	-	-	-	-	-
Group 6	-	-	-	-	-
BioSci Exterior	-	-	-	-	-
Smith Outside	-	-	-	-	-
Brant Outside	-	-	-	-	-
Richardson Stadium	-	-	-	-	-
Group 17: Stuart St.	-	-	-	-	-
Group 17: Union St.	-	-	-	-	-
Group 5	-	-	-	-	-
Group 8: Staufer	-	-	-	-	-
Group 8: Douglas	-	-	-	-	-
Group 21: David C.	-	-	-	-	-
Wally's	-	-	-	-	-
Group 19	-	-	-	-	-
TOTAL	1,695.74	423.93	2,755.57	9,149.91	14,025.14
	12.09%	3.02%	19.65%	65.24%	100.00%

Organic Materials Found in Landfill Stream

GENERATING AREAS	Food Waste	Tissue/ Towelng	Beverage Liquids	Compostable Containers	Compostable Clamshells	Yard/ Plant Waste	TOTAL ORGANICS
Group 18	170,668.70	31,053.15	35,539.79	2,684.91	3,815.40	-	243,761.96
Group 11	62,706.88	30,770.53	16,144.81	9,609.17	1,165.82	1,801.72	122,198.93
BioSci Exterior	89,167.42	247.29	3,179.50	1,201.15	282.62	-	94,077.99
Group 19	82,631.77	5,193.19	847.87	1,024.51	-	-	89,697.34
Group 10	42,110.76	24,800.13	12,011.46	7,630.81	423.93	35.33	87,012.42
Group 12	35,257.17	6,429.66	18,971.04	3,568.11	1,024.51	1,625.08	66,875.57
Group 9	30,205.29	8,761.30	706.56	3,815.40	635.90	1,059.83	45,184.28
Group 21	32,996.18	7,348.19	-	-	-	35.33	40,379.70
Group 17: Union St.	32,077.66	1,413.11	211.97	282.62	211.97	-	34,197.33
Group 6	25,930.62	6,147.04	-	353.28	423.93	70.66	32,925.53
Group 3	12,859.33	13,212.61	4,804.58	395.67	777.21	529.92	32,579.32
Group 2	20,560.79	7,065.56	1,695.74	1,201.15	282.62	1,130.49	31,936.35
Group 8: Stauffer	6,676.96	16,851.37	6,253.02	105.98	953.85	-	30,841.19
Queens Centre	8,478.68	1,801.72	10,527.69	2,543.60	1,837.05	-	25,188.74
Richardson Stadium	14,378.42	2,296.31	6,147.04	1,801.72	-	-	24,623.49
Group 8: Douglas	989.18	7,030.24	6,394.34	-	812.54	-	15,226.29
Wally's	10,633.67	741.88	1,130.49	176.64	1,519.10	-	14,201.78
Group 17: Stuart St.	4,168.68	211.97	7,136.22	565.25	-	1,837.05	13,919.16
Smith Outside	10,457.03	565.25	706.56	211.97	-	-	11,940.80
Group 5	494.59	989.18	4,804.58	105.98	-	4,663.27	11,057.61
Brant Outside	8,902.61	141.31	211.97	282.62	777.21	-	10,315.72
Group 21: David C. Smith	7,312.86	741.88	635.90	141.31	-	-	8,831.96
Group 13	4,451.31	777.21	2,049.01	423.93	141.31	-	7,842.78
Lazy Scholar	4,804.58	1,095.16	-	-	35.33	-	5,935.07
Group 22	2,049.01	3,391.47	70.66	35.33	-	-	5,546.47
Bookstore (Clark Hall)	-	494.59	-	-	-	-	494.59
Tea Room	-	-	-	-	-	-	-
TOTAL	720,970.17	179,571.31	140,180.79	38,161.11	15,120.31	12,788.67	1,106,792.37
	65.14%	16.22%	12.67%	3.45%	1.37%	1.16%	100.00%

'Other' Materials Found in Landfill Stream

GENERATING AREAS	Textiles	Disposable Gloves	Masks	Diapers	Paint Bottles	Crafts	Shavings	Book	Writing Utensils	Construction Waste	Cigarettes	Wax	Hair	Rubber Band	Sanitary Products	Silicon	Sweepings	Ear Plugs
Group 10	3,603.44	423.93	565.25	-	-	-	-	-	211.97	-	-	35.33	35.33	70.66	-	-	-	-
Group 19	812.54	9,114.58	35.33	-	-	-	-	-	35.33	-	-	-	35.33	-	-	-	-	-
Group 21	70.66	70.66	141.31	27,343.73	989.18	918.52	211.97	-	-	-	-	-	-	-	-	-	-	-
Group 13	-	-	70.66	-	-	-	-	1,837.05	141.31	24,835.46	35.33	70.66	35.33	35.33	-	-	-	-
Group 12	847.87	1,271.80	70.66	-	-	-	-	-	105.98	15,296.95	-	-	-	-	-	-	-	-
Group 3	1,554.42	1,554.42	671.23	2,755.57	-	-	-	-	247.29	-	35.33	141.31	35.33	35.33	-	-	-	-
Group 9	635.90	211.97	247.29	-	-	-	-	7,772.12	706.56	-	35.33	105.98	-	105.98	777.21	-	-	105.98
Group 5	2,896.88	635.90	282.62	-	-	-	-	-	-	-	35.33	-	-	-	-	-	-	-
Group 11	847.87	2,013.69	3,214.83	-	-	-	-	-	247.29	494.59	-	35.33	-	35.33	423.93	-	494.59	-
Group 18	3,815.40	529.92	918.52	-	-	-	-	-	-	-	35.33	-	247.29	-	671.23	-	-	-
Group 6	5,228.52	1,413.11	35.33	635.90	-	-	-	-	-	-	-	-	35.33	-	-	-	-	-
Group 17: Union St.	-	-	141.31	-	-	-	-	-	-	-	-	-	-	-	70.66	-	-	-
Lazy Scholar	-	3,214.83	-	-	-	-	-	-	35.33	-	-	-	-	-	-	-	-	-
BioSci Exterior	-	282.62	635.90	-	-	-	-	-	70.66	-	-	-	-	-	-	-	-	-
Richardson Stadium	105.98	70.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Queens Centre	-	-	423.93	-	-	-	-	-	35.33	-	-	-	-	-	-	-	-	-
Group 22	1,201.15	35.33	35.33	-	-	-	-	-	-	-	-	-	-	-	282.62	777.21	141.31	35.33
Wally's	-	1,554.42	35.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Group 2	211.97	282.62	176.64	-	-	-	-	565.25	70.66	-	-	-	35.33	-	70.66	-	-	-
Group 17: Stuart St.	-	-	1,837.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Group 8: Stauffer	-	918.52	35.33	-	-	-	-	-	-	-	-	-	-	-	706.56	-	-	-
Group 8: Douglas	-	35.33	35.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brant Outside	-	70.66	70.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Group 21: David C.	-	317.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smith Outside	-	-	35.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tea Room	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bookstore (Clark Hall)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	21,832.59	24,022.92	9,715.15	30,735.20	989.18	918.52	211.97	10,174.41	1,907.70	40,626.99	176.64	388.61	459.26	282.62	3,002.86	777.21	635.90	141.31
	7.61%	8.38%	3.39%	10.72%	0.34%	0.32%	0.07%	3.55%	0.67%	14.17%	0.06%	0.14%	0.16%	0.10%	1.05%	0.27%	0.22%	0.05%
Coffee pods	Toilettries	Silica Packs	Cosmetics	Rubber	Duster	Medical Waste	Hair Net	Lint	Foam	Starbucks Bullet	Pet Waste	Umbrella	Queen's promotional Items	Foam Wrap	Mouse Pad	Picture	Condom	School Containers
847.87	-	-	-	-	-	-	-	35.33	-	-	-	2,826.23	423.93	141.31	-	-	-	-
-	-	-	-	-	-	-	317.95	-	-	-	-	-	-	35.33	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
388.61	-	-	-	-	-	-	-	35.33	-	-	-	-	105.98	423.93	-	-	-	-
1,377.79	-	-	-	35.33	-	1,483.77	-	-	-	-	-	1,554.42	35.33	35.33	282.62	3,603.44	35.33	494.59
1,801.72	494.59	-	-	388.61	-	-	-	35.33	211.97	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	918.52	-	-	-	-	-	282.62	-	-	-	-	-
4,451.31	-	-	-	-	-	282.62	-	989.18	1,130.49	70.66	-	1,342.46	70.66	529.92	-	-	-	-
883.20	-	635.90	529.92	-	-	-	-	105.98	35.33	-	-	-	-	459.26	-	-	-	-
1,413.11	635.90	70.66	141.31	35.33	70.66	635.90	35.33	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	70.66	-	-	4,521.96	1,271.80	-	-	-	-	-	-
-	-	-	-	-	-	-	35.33	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	35.33	-	-	-	-	-	-	1,059.83	2,260.98	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
353.28	-	-	-	-	-	-	-	35.33	105.98	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11,516.87	1,130.49	706.56	671.23	494.59	70.66	2,402.29	1,307.13	1,307.13	1,483.77	70.66	6,005.73	9,255.89	918.52	1,625.08	282.62	3,603.44	35.33	494.59
4.02%	0.39%	0.25%	0.23%	0.17%	0.02%	0.84%	0.46%	0.46%	0.52%	0.02%	2.09%	3.23%	0.32%	0.57%	0.10%	1.26%	0.01%	0.17%

Medication	Shrink Wrap	Sports Tape	Sports Wrap	Scrub Pad	Metal Cutlery	J-Cloths	Non-recyclable Wood	Nylon Straps	Handers	Filter	Lamp	Lighter	Clay	Wood	Glue Trap	Plastic Netting	Medical Sensors	Tubing
-	-	-	-	-	-	-	-	-	-	-	-	-	23,175.05	1,130.49	70.66	35.33	-	-
-	-	-	-	635.90	565.25	3,638.77	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.33	-	-	-	-	-	-	-	-	-	423.93	-	-	-	1,095.16	-	-	-	2,543.60
35.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3,320.82	2,331.64	211.97	141.31	7,348.19	70.66	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.33	-
105.98	-	-	-	-	-	-	-	-	1,059.83	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	1,907.70	-	-	-	-	-	-	-	-	-	-	-	-
-	-	3,497.45	70.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	2,614.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	388.61	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	812.54	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
247.29	2,614.26	3,497.45	70.66	635.90	565.25	6,747.61	3,320.82	2,331.64	1,271.80	565.25	7,348.19	70.66	23,175.05	2,225.65	70.66	35.33	35.33	2,543.60
0.09%	0.91%	1.22%	0.02%	0.22%	0.20%	2.35%	1.16%	0.81%	0.44%	0.20%	2.56%	0.02%	8.08%	0.78%	0.02%	0.01%	0.01%	0.89%
Lab Equipment	Binder	Tape	Steel Wool	Stamp	Clipboard	Mop Head	IV	Nylon Bags	Drywall	Medical Gowns	Deoderant	Queens Branded Cloth Bags	Balloons	Glue	Hair Elastic	Glow Stick	Feathers	TOTAL OTHER
-	-	2,472.95	-	-	777.21	-	-	-	-	-	-	-	-	-	-	-	-	36,882.25
-	-	-	-	-	-	19,712.92	-	-	-	-	-	-	-	-	-	-	-	34,939.21
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29,746.03
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,061.11
1,342.46	1,801.72	353.28	35.33	70.66	-	-	-	-	-	-	-	-	-	-	-	-	-	26,248.57
-	-	-	-	-	-	-	-	-	-	4,733.93	282.62	-	-	-	-	-	-	21,020.05
-	4,945.89	-	-	-	-	-	1,271.80	70.66	35.33	-	-	-	-	-	-	-	-	20,030.87
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18,476.45
-	-	-	70.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,780.71
-	-	-	-	-	-	-	-	-	-	-	-	211.97	35.33	211.97	35.33	35.33	529.92	11,092.94
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,386.38
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,076.39
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,193.19
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,309.99
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,780.08
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,073.52
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,508.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,978.36
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,907.70
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,837.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,660.41
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	883.20
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	565.25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	317.95
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,342.46	6,747.61	2,826.23	105.98	70.66	777.21	19,712.92	1,271.80	70.66	35.33	4,733.93	282.62	211.97	35.33	211.97	35.33	35.33	529.92	286,791.25
0.47%	2.35%	0.99%	0.04%	0.02%	0.27%	6.87%	0.44%	0.02%	0.01%	1.65%	0.10%	0.07%	0.01%	0.07%	0.01%	0.01%	0.18%	100.00%

Total Annual Materials Found in Landfill Stream

GENERATING AREAS	Paper	Plastic	Metal	Glass	HSW	Organics	Other Materials	TOTAL MATERIALS
Group 18	85,175.38	80,307.20	9,185.23	14,590.39	3,179.50	243,761.96	11,092.94	447,292.61
Group 11	59,315.41	57,760.99	4,945.89	-	1,059.83	122,198.93	16,780.71	262,061.78
Group 10	55,464.68	24,164.23	1,271.80	1,978.36	70.66	87,012.42	36,882.25	206,844.39
Group 19	16,215.47	30,841.19	5,793.76	-	-	89,697.34	34,939.21	177,486.97
Group 12	25,436.03	36,846.92	4,062.70	6,323.68	1,165.82	66,875.57	26,248.57	166,959.28
Group 9	39,496.50	24,411.52	989.18	1,978.36	2,967.54	45,184.28	20,030.87	135,058.26
BioSci Exterior	7,242.20	5,687.78	353.28	-	-	94,077.99	4,309.99	111,671.24
Group 3	21,373.33	21,938.58	4,945.89	1,201.15	1,907.70	32,579.32	21,020.05	104,966.02
Group 21	7,630.81	4,098.03	70.66	-	-	40,379.70	29,746.03	81,925.22
Richardson Stadium	21,797.27	14,519.73	1,660.41	2,755.57	-	24,623.49	3,780.08	69,136.55
Group 6	7,348.19	14,484.41	600.57	918.52	-	32,925.53	10,386.38	66,663.60
Group 2	9,644.50	9,573.84	3,038.19	-	211.97	31,936.35	1,907.70	56,312.55
Queens Centre	14,060.47	10,986.95	635.90	1,342.46	35.33	25,188.74	3,073.52	55,323.37
Group 8: Staufer	7,171.55	12,965.31	459.26	-	-	30,841.19	1,660.41	53,097.71
Group 13	8,019.42	5,228.52	600.57	-	3,108.85	7,842.78	27,061.11	51,861.24
Group 17: Union St.	6,712.29	2,861.55	1,625.08	-	-	34,197.33	6,076.39	51,472.64
Group 5	3,285.49	7,666.14	3,744.75	1,695.74	-	11,057.61	18,476.45	45,926.17
Lazy Scholar	11,516.87	10,563.02	105.98	-	35.33	5,935.07	5,193.19	33,349.46
Group 17: Stuart St.	8,302.04	7,277.53	317.95	-	-	13,919.16	1,837.05	31,653.73
Wally's	5,263.85	7,701.46	494.59	-	-	14,201.78	1,978.36	29,640.04
Group 8: Douglas	2,084.34	6,041.06	1,165.82	-	-	15,226.29	883.20	25,400.70
Smith Outside	2,119.67	1,377.79	35.33	-	-	11,940.80	35.33	15,508.91
Brant Outside	2,190.32	1,201.15	211.97	-	-	10,315.72	565.25	14,484.41
Group 21: David C.	1,483.77	1,660.41	-	-	-	8,831.96	317.95	12,294.08
Group 22	1,342.46	2,049.01	35.33	-	282.62	5,546.47	2,508.28	11,764.16
Bookstore (Clark	565.25	989.18	-	-	-	494.59	-	2,049.01
Tea Room	35.33	459.26	141.31	-	-	-	-	635.90
TOTAL	430,292.86	403,662.75	46,491.41	32,784.22	14,025.14	1,106,792.37	286,791.25	2,320,840.00
	18.54%	17.39%	2.00%	1.41%	0.60%	47.69%	12.36%	100.00%

MOE FORMS

APPENDIX III – 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: Queen's University		
Name of Contact Person: Llynwen Osborne	Telephone #: 613-533-6000 x. 33396	Email address: lrao@queensu.ca
Street Address(es) of Entity(ies): 99 University Avenue		
Municipality: Kingston, ON		
Type of Entity (check one)		
<input type="checkbox"/> 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"/>
<input type="checkbox"/> Restaurants	<input type="checkbox"/> Large Manufacturing Establishments	

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

II. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ties): Queen's University is a prestigious Canadian University that focuses on experiential learning that expands beyond the bounds of the classroom. The university offers a research-intensive environment and boasts a collection of six libraries on campus, as well as several museums and arts facilities. Queen's University offers academically strong programs such as physics, cancer research, geo-engineering, data analytics, and social sciences. The school hosts more than 24,000 students each year from a multitude of countries.

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 waste.
Aseptic Containers	Generated by participants. Material is deposited into designated container for waste.
Gable top Containers	Generated by participants. Material is deposited into designated container for waste.
# 1 PETE Containers	Generated by participants. Material is deposited into designated container for recycling.
# 1 PETE Water Bottles (>500 ML)	Generated by participants. Material is deposited into designated container for recycling.
# 1 PETE Water Bottles (<1000 ML)	Generated by participants. Material is deposited into designated container for recycling.
# 1 PETE Soft Drinks	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.
Aerosol Cans	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 and Beverage Containers)	Generated by participants. Material is deposited into designated container for recycling.
Liquor Bottles	Generated by participants. Material is deposited into designated container for recycling.
Other Glass	Generated by participants. Material is deposited into designated container for waste.
Batteries	Generated by participants. Material is deposited into designated container for recycling.
Ink Cartridges	Generated by participants. Material is deposited into designated container for recycling.
Lightbulbs	Generated by participants. Material is deposited into designated container for recycling.
E-Waste	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.
Compostable Clamshells	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 recycling.
Diapers	Generated by participants. Material is deposited into designated container for waste.
Paint Bottles	Generated by participants. Material is deposited into designated container for waste.
Crafts	Generated by participants. Material is deposited into designated container for waste.
Shavings	Generated by participants. Material is deposited into designated container for waste.

Book	Generated by participants. Material is deposited into designated container for recycling. Hard covers from books are disposed of as waste.
Writing Utensils	Generated by participants. Material is deposited into designated container for waste.
Construction Waste	Generated by participants. Material is deposited into designated container for waste.
Cigarettes	Generated by participants. Material is deposited into designated container for waste.
Wax	Generated by participants. Material is deposited into designated container for waste.
Hair	Generated by participants. Material is deposited into designated container for waste.
Rubber Band	Generated by participants. Material is deposited into designated container for waste.
Sanitary Products	Generated by participants. Material is deposited into designated container for waste.
Silicon	Generated by participants. Material is deposited into designated container for waste.
Sweepings	Generated by participants. Material is deposited into designated container for waste.
Ear Plugs	Generated by participants. Material is deposited into designated container for waste.
Coffee pods	Generated by participants. Material is deposited into designated container for waste.
Toiletries	Generated by participants. Material is deposited into designated container for waste.
Silica Packs	Generated by participants. Material is deposited into designated container for waste.
Cosmetics	Generated by participants. Material is deposited into designated container for waste.
Rubber	Generated by participants. Material is deposited into designated container for waste.
Duster	Generated by participants. Material is deposited into designated container for waste.
Medical Waste	Generated by participants. Material is deposited into designated container for waste.
Hair Net	Generated by participants. Material is deposited into designated container for waste.
Lint	Generated by participants. Material is deposited into designated container for waste.
Foam	Generated by participants. Material is deposited into designated container for waste.
Starbucks Bullet	Generated by participants. Material is deposited into designated container for waste.
Pet Waste	Generated by participants. Material is deposited into designated container for waste.
Umbrella	Generated by participants. Material is deposited into designated container for waste.
Queen's promotional Items	Generated by participants. Material is deposited into designated container for waste.
Foam Wrap	Generated by participants. Material is deposited into designated container for waste.

Mouse Pad	Generated by participants. Material is deposited into designated container for waste.
Picture	Generated by participants. Material is deposited into designated container for waste.
Condom	Generated by participants. Material is deposited into designated container for waste.
School Containers	Generated by participants. Material is deposited into designated container for waste.
Medication	Generated by participants. Material is deposited into designated container for waste.
Shrink Wrap	Generated by participants. Material is deposited into designated container for waste.
Sports Tape	Generated by participants. Material is deposited into designated container for waste.
Sports Wrap	Generated by participants. Material is deposited into designated container for waste.
Scrub Pad	Generated by participants. Material is deposited into designated container for waste.
Metal Cutlery	Generated by participants. Material is deposited into designated container for waste.
J-Cloths	Generated by participants. Material is deposited into designated container for waste.
Non-recyclable Wood	Generated by participants. Material is deposited into designated container for waste.
Nylon Straps	Generated by participants. Material is deposited into designated container for waste.
Handers	Generated by participants. Material is deposited into designated container for waste.
Filter	Generated by participants. Material is deposited into designated container for waste.
Lamp	Generated by participants. Material is deposited into designated container for waste.
Lighter	Generated by participants. Material is deposited into designated container for waste.
Clay	Generated by participants. Material is deposited into designated container for waste.
Wood	Generated by participants. Material is deposited into designated container for recycling.
Glue Trap	Generated by participants. Material is deposited into designated container for waste.
Plastic Netting	Generated by participants. Material is deposited into designated container for waste.
Medical Sensors	Generated by participants. Material is deposited into designated container for waste.
Tubing	Generated by participants. Material is deposited into designated container for waste.
Lab Equipment	Generated by participants. Material is deposited into designated container for waste.
Binder	Generated by participants. Material is deposited into designated container for waste.
Tape	Generated by participants. Material is deposited into designated container for waste.
Steel Wool	Generated by participants. Material is deposited into designated container for waste.

Stamp	Generated by participants. Material is deposited into designated container for waste.
Clipboard	Generated by participants. Material is deposited into designated container for waste.
Mop Head	Generated by participants. Material is deposited into designated container for waste.
IV	Generated by participants. Material is deposited into designated container for waste.
Nylon Bags	Generated by participants. Material is deposited into designated container for waste.
Drywall	Generated by participants. Material is deposited into designated container for waste.
Medical Gowns	Generated by participants. Material is deposited into designated container for waste.
Deodorant	Generated by participants. Material is deposited into designated container for waste.
Queens Branded Cloth Bags	Generated by participants. Material is deposited into designated container for waste.
Balloons	Generated by participants. Material is deposited into designated container for waste.
Glue	Generated by participants. Material is deposited into designated container for waste.
Hair Elastic	Generated by participants. Material is deposited into designated container for waste.
Glow Stick	Generated by participants. Material is deposited into designated container for waste.
Feathers	Generated by participants. Material is deposited into designated container for waste.

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 place in waste bins.	
Aseptic Containers	Participants place in waste bins.	
Gable top Containers	Participants place in waste bins.	
# 1 PETE Containers		Participants deposit PETE #1 plastics into the recycling bins provided.
# 1 PETE Water Bottles (>500 ML)		Participants deposit PETE #1 plastics into the recycling bins provided.
# 1 PETE Water Bottles (<1000 ML)		Participants deposit PETE #1 plastics into the recycling bins provided.
# 1 PETE Soft Drinks		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 place in waste bins.	
PP #5		Participants are asked to rinse #5 PP cups or containers, if needed, before depositing into the recycling bins provided.
PS #6 (Styrofoam)	Participants place in waste bins.	
PS #6 (Clear/Hard)		Participants are asked to rinse #6 PS lids and containers, if needed, before depositing 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 are asked to rinse aluminum cans, if needed, before depositing into the recycling bins provided.
Aluminum Foil	Participants place in waste bins.	
Aluminum Trays		Participants deposit aluminum into the recycling bins provided.
Aerosol Cans		Participants place containers into designated container for recycling through EHS.
Steel Food /Beverage Cans		Participants are asked to rinse steel cans, if needed, before depositing into the recycling bins provided.

Scrap Metal		Staff deposit scrap metal into the designated recycling bins.
Glass (Food and Beverage Containers)		Participants are asked to rinse glass containers, if needed, before depositing into the recycling bins provided.
Liquor Bottles		Participants are asked to rinse glass containers before returning for refund where applicable or depositing into the recycling bins provided.
Other Glass	Participants place in waste bins.	
Batteries		Staff and students deposit spent batteries into the designated collection bins
Ink Cartridges		Staff deposit spent ink cartridges into the designated collection bins
Lightbulbs		Staff deposit spent bulbs into the designated collection bins.
E-Waste		Staff and students deposit e-waste into the designated collection bins.
Food Waste		Participants deposit food waste into the organic bins in all applicable areas.
Tissue/Toweling		Participant deposits tissue and toweling into the organic 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 organic bins in all applicable areas.
Compostable Clamshells		Participants deposits compostable materials into the organic bins in all applicable areas.
Yard/ Plant Waste		Staff deposit yard/plant waste into the specialty bins.
Textiles	Participants place in waste bins.	
Disposable Gloves	Participants place in waste bins.	
Masks		Participants deposit masks into collection containers provided for recycling.
Diapers	Participants place in waste bins.	
Paint Bottles	Participants place in waste bins.	
Crafts	Participants place in waste bins.	

Shavings	Participants place in waste bins.	
Book		Softcover books can be recycled; hardcover books can be recycled after covers removed. Books and textbooks also donated through the Tri-Colour Bookstore and Textbooks for Change.
Writing Utensils	Participants place in waste bins.	
Construction Waste	Participants place in waste bins.	
Cigarettes	Participants place in waste bins.	
Wax	Participants place in waste bins.	
Hair	Participants place in waste bins.	
Rubber Band	Participants place in waste bins.	
Sanitary Products	Participants place in waste bins.	
Silicon	Participants place in waste bins.	
Sweepings	Participants place in waste bins.	
Ear Plugs	Participants place in waste bins.	
Coffee pods	Participants place in waste bins.	
Toiletries	Participants place in waste bins.	
Silica Packs	Participants place in waste bins.	
Cosmetics	Participants place in waste bins.	
Rubber	Participants place in waste bins.	
Duster	Participants place in waste bins.	
Medical Waste	Participants place in waste bins.	
Hair Net	Participants place in waste bins.	
Lint	Participants place in waste bins.	
Foam	Participants place in waste bins.	
Starbucks Bullet	Participants place in waste bins.	
Pet Waste	Participants place in waste bins.	
Umbrella	Participants place in waste bins.	

Queen's promotional Items	Participants place in waste bins.	
Foam Wrap	Participants place in waste bins.	
Mouse Pad	Participants place in waste bins.	
Picture	Participants place in waste bins.	
Condom	Participants place in waste bins.	
School Containers	Participants place in waste bins.	
Medication	Participants place in waste bins.	
Shrink Wrap	Participants place in waste bins.	
Sports Tape	Participants place in waste bins.	
Sports Wrap	Participants place in waste bins.	
Scrub Pad	Participants place in waste bins.	
Metal Cutlery	Participants place in waste bins.	
J-Cloths	Participants place in waste bins.	
Non-recyclable Wood	Participants place in waste bins.	
Nylon Straps	Participants place in waste bins.	
Handers	Participants place in waste bins.	
Filter	Participants place in waste bins.	
Lamp	Participants place in waste bins.	
Lighter	Participants place in waste bins.	
Clay	Participants place in waste bins.	
Wood		Staff deposit wood into the designated collection bins.
Glue Trap	Participants place in waste bins.	
Plastic Netting	Participants place in waste bins.	
Medical Sensors	Participants place in waste bins.	
Tubing	Participants place in waste bins.	
Lab Equipment	Participants place in waste bins.	
Binder	Participants place in waste bins.	

Tape	Participants place in waste bins.	
Steel Wool	Participants place in waste bins.	
Stamp	Participants place in waste bins.	
Clipboard	Participants place in waste bins.	
Mop Head	Participants place in waste bins.	
IV	Participants place in waste bins.	
Nylon Bags	Participants place in waste bins.	
Drywall	Participants place in waste bins.	
Medical Gowns	Participants place in waste bins.	
Deodorant	Participants place in waste bins.	
Queens Branded Cloth Bags	Participants place in waste bins.	
Balloons	Participants place in waste bins.	
Glue	Participants place in waste bins.	
Hair Elastic	Participants place in waste bins.	
Glow Stick	Participants place in waste bins.	
Feathers	Participants place in waste bins.	

V. ESTIMATED QUANTITY OF WASTE PRODUCED ANNUALLY

ESTIMATED QUANTITY OF WASTE PRODUCED ANNUALLY									
NAME: Queen's University									
ADDRESS: 99 University Ave.,									
Categories of Waste	Generated (t)			Recycled (t)			Disposed (t)		
	'A' Base Year (2021)	'B' Current Year (2022)	'C' Change (A-B)	'A' Base Year (2021)	'B' Current Year (2022)	'C' Change (A-B)	'A' Base Year (2021)	'B' Current Year (2022)	'C' Change (A-B)
Newspaper	-	24.39	24.39	-	23.44	23.44	-	0.95	0.95
Magazines	-	20.85	20.85	-	7.81	7.81	-	13.04	13.04
Cardboard	-	77.11	77.11	-	39.05	39.05	-	38.05	38.05
Boxboard	-	116.07	116.07	-	58.59	58.59	-	57.48	57.48
Mixed Papers	-	208.00	208.00	-	117.18	117.18	-	90.83	90.83
Molded Pulp	-	14.42	14.42	-	7.81	7.81	-	6.61	6.61
Kraft Paper	-	37.61	37.61	-	3.91	3.91	-	33.70	33.70
Other Paper	-	109.52	109.52	-	-	-	-	109.52	109.52
Spiral Wound	-	1.45	1.45	-	-	-	-	1.45	1.45
Coffee Cups	-	164.83	164.83	-	109.37	109.37	-	55.46	55.46
Aseptic Containers	-	20.64	20.64	-	7.81	7.81	-	12.82	12.82
Table Top Containers	-	26.01	26.01	-	15.62	15.62	-	10.39	10.39
# 1 PETE Containers	-	92.36	92.36	-	71.48	71.48	-	20.88	20.88
# 1 PETE Water Bottles (>500)	-	10.49	10.49	-	-	-	-	10.49	10.49
# 1 PETE Water Bottles (<100)	-	0.81	0.81	-	-	-	-	0.81	0.81
# 1 PETE Soft Drinks	-	22.75	22.75	-	-	-	-	22.75	22.75
# 2 HDPE	-	14.40	14.40	-	4.61	4.61	-	9.79	9.79
# 3 PVC	-	0.14	0.14	-	-	-	-	0.14	0.14
# 4 LDPE Recyclable Film	-	7.87	7.87	-	6.92	6.92	-	0.95	0.95
# 5 PP	-	46.63	46.63	-	6.92	6.92	-	39.71	39.71
# 6 PS (Styrofoam)	-	6.50	6.50	-	-	-	-	6.50	6.50
# 6 PS (Clear/ Hard)	-	42.14	42.14	-	25.36	25.36	-	16.78	16.78
# 7 Other	-	1.31	1.31	-	-	-	-	1.31	1.31
Non-Recyclable Film	-	242.00	242.00	-	-	-	-	242.00	242.00
Rigid Plastics	-	30.03	30.03	-	-	-	-	30.03	30.03
Plastic Strapping	-	1.52	1.52	-	-	-	-	1.52	1.52
Aluminum Cans	-	40.18	40.18	-	20.54	20.54	-	19.64	19.64
Aluminum Foil	-	4.67	4.67	-	0.22	0.22	-	4.45	4.45
Aluminum Trays	-	2.87	2.87	-	0.22	0.22	-	2.65	2.65
Aerosol Cans	-	1.91	1.91	-	-	-	-	1.91	1.91
Steel	-	7.81	7.81	-	0.22	0.22	-	7.60	7.60
Scrap Metal	-	109.65	109.65	-	99.40	99.40	-	10.25	10.25
Glass (Clear/ Coloured)	-	24.23	24.23	-	7.21	7.21	-	17.03	17.03
Liquor Bottles	-	14.59	14.59	-	-	-	-	14.59	14.59
Other Glass	-	1.17	1.17	-	-	-	-	1.17	1.17
Batteries	-	1.70	1.70	-	-	-	-	1.70	1.70
Ink Cartridges	-	0.42	0.42	-	-	-	-	0.42	0.42
Lightbulbs	-	2.76	2.76	-	-	-	-	2.76	2.76
E-Waste	-	31.12	31.12	-	21.97	21.97	-	9.15	9.15
Food Waste	-	771.62	771.62	-	50.65	50.65	-	720.97	720.97
Tissue/ Toweling	-	187.60	187.60	-	8.03	8.03	-	179.57	179.57
Beverage Liquids	-	142.03	142.03	-	1.85	1.85	-	140.18	140.18
Compostable Containers	-	39.40	39.40	-	1.24	1.24	-	38.16	38.16
Compostable Clamshells	-	15.12	15.12	-	-	-	-	15.12	15.12
Yard/ Plant Waste	-	49.42	49.42	-	36.63	36.63	-	12.79	12.79
Textiles	-	21.83	21.83	-	-	-	-	21.83	21.83
Disposable Gloves	-	24.02	24.02	-	-	-	-	24.02	24.02
Masks	-	9.72	9.72	-	-	-	-	9.72	9.72
Diapers	-	30.74	30.74	-	-	-	-	30.74	30.74
Paint Bottles	-	0.99	0.99	-	-	-	-	0.99	0.99
Crafts	-	0.92	0.92	-	-	-	-	0.92	0.92
Shavings	-	0.21	0.21	-	-	-	-	0.21	0.21
Book	-	18.43	18.43	-	8.26	8.26	-	10.17	10.17
Writing Utensils	-	1.91	1.91	-	-	-	-	1.91	1.91
Construction Waste	-	40.63	40.63	-	-	-	-	40.63	40.63
Cigarettes	-	0.18	0.18	-	-	-	-	0.18	0.18
Wax	-	0.39	0.39	-	-	-	-	0.39	0.39
Hair	-	0.46	0.46	-	-	-	-	0.46	0.46
Rubber Band	-	0.28	0.28	-	-	-	-	0.28	0.28
Sanitary Products	-	3.00	3.00	-	-	-	-	3.00	3.00
Silicon	-	0.78	0.78	-	-	-	-	0.78	0.78
Sweepings	-	0.64	0.64	-	-	-	-	0.64	0.64
Ear Plugs	-	0.14	0.14	-	-	-	-	0.14	0.14
Coffee pods	-	11.52	11.52	-	-	-	-	11.52	11.52
Toiletries	-	1.13	1.13	-	-	-	-	1.13	1.13
Silica Packs	-	0.71	0.71	-	-	-	-	0.71	0.71
Cosmetics	-	0.67	0.67	-	-	-	-	0.67	0.67
Rubber	-	0.49	0.49	-	-	-	-	0.49	0.49
Duster	-	0.07	0.07	-	-	-	-	0.07	0.07
Medical Waste	-	2.40	2.40	-	-	-	-	2.40	2.40
Hair Net	-	1.31	1.31	-	-	-	-	1.31	1.31
Lint	-	1.31	1.31	-	-	-	-	1.31	1.31
Foam	-	1.48	1.48	-	-	-	-	1.48	1.48
Starbucks Bullet	-	0.07	0.07	-	-	-	-	0.07	0.07
Pet Waste	-	6.01	6.01	-	-	-	-	6.01	6.01
Umbrella	-	9.26	9.26	-	-	-	-	9.26	9.26
Queen's promotional Items	-	0.92	0.92	-	-	-	-	0.92	0.92
Foam Wrap	-	1.63	1.63	-	-	-	-	1.63	1.63
Mouse Pad	-	0.28	0.28	-	-	-	-	0.28	0.28
Picture	-	3.60	3.60	-	-	-	-	3.60	3.60
Condom	-	0.04	0.04	-	-	-	-	0.04	0.04
School Containers	-	0.49	0.49	-	-	-	-	0.49	0.49
Medication	-	0.25	0.25	-	-	-	-	0.25	0.25
Shrink Wrap	-	2.61	2.61	-	-	-	-	2.61	2.61
Sports Tape	-	3.50	3.50	-	-	-	-	3.50	3.50
Sports Wrap	-	0.07	0.07	-	-	-	-	0.07	0.07
Scrub Pad	-	0.64	0.64	-	-	-	-	0.64	0.64
Metal Cutlery	-	0.57	0.57	-	-	-	-	0.57	0.57
J-Cloths	-	6.75	6.75	-	-	-	-	6.75	6.75
Non-recyclable Wood	-	3.32	3.32	-	-	-	-	3.32	3.32
Nylon Straps	-	2.33	2.33	-	-	-	-	2.33	2.33
Handers	-	1.27	1.27	-	-	-	-	1.27	1.27
Filter	-	0.57	0.57	-	-	-	-	0.57	0.57
Lamp	-	7.35	7.35	-	-	-	-	7.35	7.35
Lighter	-	0.07	0.07	-	-	-	-	0.07	0.07
Clay	-	23.18	23.18	-	-	-	-	23.18	23.18
Wood	-	2.23	2.23	-	-	-	-	2.23	2.23
Glue Trap	-	0.07	0.07	-	-	-	-	0.07	0.07
Plastic Netting	-	0.04	0.04	-	-	-	-	0.04	0.04
Medical Sensors	-	0.04	0.04	-	-	-	-	0.04	0.04
Tubing	-	2.54	2.54	-	-	-	-	2.54	2.54
Lab Equipment	-	1.34	1.34	-	-	-	-	1.34	1.34
Binder	-	6.75	6.75	-	-	-	-	6.75	6.75
Tape	-	2.83	2.83	-	-	-	-	2.83	2.83
Steel Wool	-	0.11	0.11	-	-	-	-	0.11	0.11
Stamp	-	0.07	0.07	-	-	-	-	0.07	0.07
Clipboard	-	0.78	0.78	-	-	-	-	0.78	0.78
Mop Head	-	19.71	19.71	-	-	-	-	19.71	19.71
IV	-	1.27	1.27	-	-	-	-	1.27	1.27
Nylon Bags	-	0.07	0.07	-	-	-	-	0.07	0.07
Drywall	-	0.04	0.04	-	-	-	-	0.04	0.04
Medical Gowns	-	4.73	4.73	-	-	-	-	4.73	4.73
Deodorant	-	0.28	0.28	-	-	-	-	0.28	0.28
Queens Branded Cloth Bags	-	0.21	0.21	-	-	-	-	0.21	0.21
Balloons	-	0.04	0.04	-	-	-	-	0.04	0.04
Glue	-	0.21	0.21	-	-	-	-	0.21	0.21
Hair Elastic	-	0.04	0.04	-	-	-	-	0.04	0.04
Glow Stick	-	0.04	0.04	-	-	-	-	0.04	0.04
Feathers	-	0.53	0.53	-	-	-	-	0.53	0.53
Total	-	3,083.14	3,083.14	-	762.30	762.30	-	2,320.84	2,320.84

**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 IV - 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: Queen's University		
Name of Contact Person: Llynwen Osborne	Telephone #: 613-533-6000 x. 33396	Email address: lrao@queensu.ca
Street Address(es) of Entity(ies): 99 University Avenue		
Municipality: Kingston, ON		
Type of Entity (check one)		
<input type="checkbox"/> 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"/>
<input type="checkbox"/> Restaurants	<input type="checkbox"/> Large Manufacturing Establishments	

II. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ties):
Queen's University is a prestigious Canadian University that focuses on experiential learning that expands beyond the bounds of the classroom. The university offers a research-intensive environment and boasts a collection of six libraries on campus, as well as several museums and arts facilities. Queen's University offers academically strong programs such as physics, cancer research, geo-engineering, data analytics, and social sciences. The school hosts more than 24,000 students each year from a multitude of countries.

III. PLANS TO REDUCE, REUSE AND RECYCLE

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

	<p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Aseptic Containers	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products.</p> <p>Reuse: N/A</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Gable top Containers	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products.</p> <p>Reuse: N/A</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
# 1 PETE Containers	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced. Promote reusable containers to participants.</p> <p>Reuse: Reuse material for water throughout the day.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
# 1 PETE Water Bottles (>500 ML)	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced. Promote reusable containers to participants.</p> <p>Reuse: Reuse material for water throughout the day.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
# 1 PETE Water Bottles (<1000 ML)	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced. Promote reusable containers to participants.</p> <p>Reuse: Reuse material for water throughout the day.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
# 1 PETE Soft Drinks	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced. Promote reusable containers to participants.</p> <p>Reuse: Reuse material for water throughout the day.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
HDPE #2 plastics jugs, crates, totes and drums	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>Reuse: Containers are reused in kitchen areas for collection of organic waste (i.e. large white tubs).</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
PVC #3	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material.</p> <p>Reuse: Reuse as protective packaging for shipments.</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>

LDPE #4 Recyclable Film	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>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.</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
PP #5	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>Reuse: Reuse container for food or snacks throughout the day.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
PS #6 (Styrofoam)	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material.</p> <p>Reuse: Reuse as protective packaging for shipments.</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
PS #6 (Clear/Hard)	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Non-Recyclable Film	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material.</p> <p>Reuse: Reuse as protective packaging for shipments.</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Rigid Plastics	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material.</p> <p>Reuse: N/A</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Plastic Strapping	<p>Reduce: Encourage suppliers to provide goods in alternative material, other than plastic.</p> <p>Reuse: Reuse current material for shipping/receiving and packaging.</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Aluminum Food /Beverage Cans	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Aluminum Foil	<p>Reduce: Encourage suppliers to provide goods packaged in reusable products. Refuse products packaged in this material.</p> <p>Reuse: N/A</p>

	<p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Aluminum Trays	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Aerosol Cans	<p>Reduce: Refuse products packaged in this material.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Steel Food /Beverage Cans	<p>Reduce: Encourage suppliers to provide goods in bulk to cut down on the amount of material produced.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Scrap Metal	<p>Reduce: N/A</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Glass Food /Beverage Containers	<p>Reduce: Implement sustainable purchasing policy to ensure amounts are not ordered in excess.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Liquor Bottles	<p>Reduce: Implement sustainable purchasing policy to ensure amounts are not ordered in excess.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Other Glass	<p>Reduce: Implement sustainable purchasing policy to ensure amounts are not ordered in excess.</p> <p>Reuse: N/A</p> <p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Batteries	<p>Reduce: N/A</p> <p>Reuse: Encourage the use of rechargeable batteries to reduce the number of batteries used.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Ink Cartridges	<p>Reduce: N/A</p> <p>Reuse: Encourage the use of refillable ink cartridges to reduce the number of replacements needed.</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Lightbulbs	<p>Reduce: Encourage the use and installation of long lasting LED lights.</p> <p>Reuse: N/A</p> <p>Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
E-Waste	<p>Reduce: N/A</p>

	<p>Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Food Waste	<p>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.</p>
Tissue/Toweling	<p>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.</p>
Beverage Liquids	<p>Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Compostable Containers	<p>Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Compostable Clamshells	<p>Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Yard/Plant Waste	<p>Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Textiles	<p>Reduce: Encourage suppliers to provide reusable material. Refuse single-use material. Reuse: Reuse material once appropriately cleaned and sanitized. Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Disposable Gloves	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Masks	<p>Reduce: N/A Reuse: N/A Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Diapers	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Paint Bottles	<p>Reduce: N/A Reuse: N/A</p>

	<p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Crafts	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Shavings	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Book	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Writing Utensils	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Construction Waste	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Cigarettes	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Wax	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Hair	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Rubber Band	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Sanitary Products	<p>Reduce: N/A Reuse: N/A</p>

	<p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Silicon	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Sweepings	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Ear Plugs	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Coffee pods	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Toiletries	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Silica Packs	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Cosmetics	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Rubber	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Duster	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Medical Waste	<p>Reduce: N/A Reuse: N/A</p>

	Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Hair Net	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Lint	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Foam	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Starbucks Bullet	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Pet Waste	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Umbrella	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Queen's promotional Items	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Foam Wrap	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Mouse Pad	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Picture	Reduce: N/A Reuse: N/A

	Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Condom	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
School Containers	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Medication	Reduce: N/A Reuse: N/A Recycle: 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: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Sports Tape	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Sports Wrap	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Scrub Pad	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Metal Cutlery	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
J-Cloths	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Non-recyclable Wood	Reduce: N/A Reuse: N/A

	<p>Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Nylon Straps	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Handers	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Filter	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Lamp	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Lighter	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Clay	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Wood	<p>Reduce: Implement sustainable purchasing policy to ensure amounts are not ordered in excess. Reuse: Reuse scrap wood and wood pallets whenever possible. Recycle: Program in place. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Glue Trap	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Plastic Netting	<p>Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.</p>
Medical Sensors	<p>Reduce: N/A Reuse: N/A</p>

	Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Tubing	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Lab Equipment	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Binder	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Tape	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Steel Wool	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Stamp	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Clipboard	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Mop Head	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
IV	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Nylon Bags	Reduce: N/A Reuse: N/A

	Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Drywall	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Medical Gowns	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Deodorant	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Queens Branded Cloth Bags	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Balloons	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Glue	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Hair Elastic	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Glow Stick	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. Through education and awareness, ensure all participants understand current recycling programs and initiatives.
Feathers	Reduce: N/A Reuse: N/A Recycle: Material is not recyclable. 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 #
Llynwen Osborne	Responsible for implementing the Waste Reduction Work Plan	613-533-6000 x. 33396

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-2023.
Spiral Wound	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Coffee Cups	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Aseptic Containers	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Gable top Containers	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
# 1 PETE Containers	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
# 1 PETE Water Bottles (>500 ML)	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
# 1 PETE Water Bottles (<1000 ML)	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
# 1 PETE Soft Drinks	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-2023.
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-2023.
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-2023.
Non- Recyclable film	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.

Plastic Strapping	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
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-2023.
Aluminum Trays	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Aerosol Cans	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.
Liquor Bottles	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Other Glass	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Batteries	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Ink Cartridges	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Lightbulbs	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
E-Waste	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.
Compostable Clamshells	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-2023.
Disposable Gloves	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Masks	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Diapers	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Paint Bottles	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Crafts	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.

Shavings	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Book	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Writing Utensils	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Construction Waste	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Cigarettes	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Wax	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Hair	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Rubber Band	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Sanitary Products	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Silicon	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Sweepings	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Ear Plugs	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Coffee pods	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Toiletries	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Silica Packs	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Cosmetics	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Rubber	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Duster	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Medical Waste	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Hair Net	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Lint	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Foam	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Starbucks Bullet	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Pet Waste	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Umbrella	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Queen's promotional Items	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.

Foam Wrap	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Mouse Pad	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Picture	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Condom	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
School Containers	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Medication	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Shrink Wrap	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Sports Tape	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Sports Wrap	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Scrub Pad	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Metal Cutlery	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
J-Cloths	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Non-recyclable Wood	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Nylon Straps	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Handers	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Filter	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Lamp	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Lighter	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Clay	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Wood	3Rs Program is currently in place. The facility is continuously working on improving diversion and reduction initiatives.
Glue Trap	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Plastic Netting	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Medical Sensors	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Tubing	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Lab Equipment	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Binder	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.

Tape	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Steel Wool	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Stamp	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Clipboard	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Mop Head	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
IV	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Nylon Bags	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Drywall	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Medical Gowns	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Deodorant	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Queens Branded Cloth Bags	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Balloons	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Glue	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Hair Elastic	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Glow Stick	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.
Feathers	Material is not recyclable. Ensure participants understand what is accepted in the recycling program by mid-2023.

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	24.39	Mixed Paper Recycling	-	-	14.63	60.00
Magazines	20.85	Mixed Paper Recycling	-	-	12.51	60.00
Cardboard	77.11	Mixed Paper Recycling	-	-	46.26	60.00
Boxboard	116.07	Mixed Paper Recycling	-	-	69.64	60.00
Mixed Papers	208.00	Mixed Paper Recycling	-	-	124.80	60.00
Molded Pulp	14.42	Mixed Paper Recycling	-	-	8.65	60.00
Kraft Paper	37.61	Mixed Paper Recycling	-	-	22.57	60.00
Other Paper	109.52	Waste	10.95	-	-	10.00
Spiral Wound	1.45	Waste	0.14	-	-	10.00
Coffee Cups	164.83	Waste	16.48	-	-	10.00
Aseptic Containers	20.64	Waste	2.06	-	-	10.00
Gable Top Containers	26.01	Waste	2.60	-	-	10.00
# 1 PETE Containers	92.36	Commingled Recycling	-	-	55.41	60.00
# 1 PETE Water Bottles (>500 ML)	10.49	Commingled Recycling	-	-	6.30	60.00
# 1 PETE Water Bottles (<1000 ML)	0.81	Commingled Recycling	-	-	0.49	60.00
# 1 PETE Soft Drinks	22.75	Commingled Recycling	-	-	13.65	60.00
# 2 HDPE	14.40	Commingled Recycling	-	-	8.64	60.00
# 3 PVC	0.14	Waste	0.01	-	-	10.00
# 4 LDPE Recyclable Film	7.87	Waste	0.79	-	-	10.00
# 5 PP	46.63	Commingled Recycling	-	-	27.98	60.00
# 6 PS (Styrofoam)	6.50	Waste	0.65	-	-	10.00
# 6 PS (Clear/Hard)	42.14	Commingled Recycling	-	-	25.29	60.00
# 7 Other	1.31	Waste	0.13	-	-	10.00

Non-Recyclable Film	242.00	Waste	24.20	-	-	10.00
Rigid Plastics	30.03	Waste	3.00	-	-	10.00
Plastic Strapping	1.52	Waste	0.15	-	-	10.00
Aluminum Cans	40.18	Commingled Recycling	-	-	24.11	60.00
Aluminum Foil	4.67	Waste	-	-	2.80	60.00
Aluminum Trays	2.87	Commingled Recycling	-	-	1.72	60.00
Aerosol Cans	1.91	Waste	-	-	1.15	60.00
Steel	7.81	Commingled Recycling	-	-	4.69	60.00
Scrap Metal	109.65	Commingled Recycling	-	-	65.79	60.00
Glass (Clear/ Coloured)	24.23	Commingled Recycling	-	-	14.54	60.00
Liquor Bottles	14.59	Alternative Recycling Program	-	-	8.75	60.00
Other Glass	1.17	Waste	0.12	-	-	10.00
Batteries	1.70	Alternative Recycling Program	-	-	1.02	60.00
Ink Cartridges	0.42	Alternative Recycling Program	-	-	0.25	60.00
Lightbulbs	2.76	Alternative Recycling Program	-	-	1.65	60.00
E-Waste	31.12	Alternative Recycling Program	-	-	18.67	60.00
Food Waste	771.62	Organics Recycling	-	-	462.97	60.00
Tissue/ Toweling	187.60	Organics Recycling	-	-	112.56	60.00
Beverage Liquids	142.03	Organics Recycling	-	-	85.22	60.00
Compostable Containers	39.40	Organics Recycling	-	-	23.64	60.00
Compostable Clamshells	15.12	Organics Recycling	-	-	9.07	60.00
Yard/ Plant Waste	49.42	Organics Recycling	-	-	29.65	60.00
Textiles	21.83	Waste	2.18	-	-	10.00
Disposable Gloves	24.02	Waste	2.40	-	-	10.00
Masks	9.72	Waste	-	-	5.83	60.00
Diapers	30.74	Waste	3.07	-	-	10.00
Paint Bottles	0.99	Waste	0.10	-	-	10.00
Crafts	0.92	Waste	0.09	-	-	10.00

Shavings	0.21	Waste	0.02	-	-	10.00
Book	18.43	Waste	1.84	-	-	10.00
Writing Utensils	1.91	Waste	0.19	-	-	10.00
Construction Waste	40.63	Waste	4.06	-	-	10.00
Cigarettes	0.18	Waste	0.02	-	-	10.00
Wax	0.39	Waste	0.04	-	-	10.00
Hair	0.46	Waste	0.05	-	-	10.00
Rubber Band	0.28	Waste	0.03	-	-	10.00
Sanitary Products	3.00	Waste	0.30	-	-	10.00
Silicon	0.78	Waste	0.08	-	-	10.00
Sweepings	0.64	Waste	0.06	-	-	10.00
Ear Plugs	0.14	Waste	0.01	-	-	10.00
Coffee pods	11.52	Waste	1.15	-	-	10.00
Toiletries	1.13	Waste	0.11	-	-	10.00
Silica Packs	0.71	Waste	0.07	-	-	10.00
Cosmetics	0.67	Waste	0.07	-	-	10.00
Rubber	0.49	Waste	0.05	-	-	10.00
Duster	0.07	Waste	0.01	-	-	10.00
Medical Waste	2.40	Waste	0.24	-	-	10.00
Hair Net	1.31	Waste	0.13	-	-	10.00
Lint	1.31	Waste	0.13	-	-	10.00
Foam	1.48	Waste	0.15	-	-	10.00
Starbucks Bullet	0.07	Waste	0.01	-	-	10.00
Pet Waste	6.01	Waste	0.60	-	-	10.00
Umbrella	9.26	Waste	0.93	-	-	10.00
Queen's promotional Items	0.92	Waste	0.09	-	-	10.00
Foam Wrap	1.63	Waste	0.16	-	-	10.00
Mouse Pad	0.28	Waste	0.03	-	-	10.00

Picture	3.60	Waste	0.36	-	-	10.00
Condom	0.04	Waste	0.00	-	-	10.00
School Containers	0.49	Waste	0.05	-	-	10.00
Medication	0.25	Waste	0.02	-	-	10.00
Shrink Wrap	2.61	Waste	0.26	-	-	10.00
Sports Tape	3.50	Waste	0.35	-	-	10.00
Sports Wrap	0.07	Waste	0.01	-	-	10.00
Scrub Pad	0.64	Waste	0.06	-	-	10.00
Metal Cutlery	0.57	Waste	0.06	-	-	10.00
J-Cloths	6.75	Waste	0.67	-	-	10.00
Non-recyclable Wood	3.32	Waste	0.33	-	-	10.00
Nylon Straps	2.33	Waste	0.23	-	-	10.00
Handers	1.27	Waste	0.13	-	-	10.00
Filter	0.57	Waste	0.06	-	-	10.00
Lamp	7.35	Waste	0.73	-	-	10.00
Lighter	0.07	Waste	0.01	-	-	10.00
Clay	23.18	Waste	2.32	-	-	10.00
Wood	2.23		-	-	1.34	60.00
Glue Trap	0.07	Waste	0.01	-	-	10.00
Plastic Netting	0.04	Waste	0.00	-	-	10.00
Medical Sensors	0.04	Waste	0.00	-	-	10.00
Tubing	2.54	Waste	0.25	-	-	10.00
Lab Equipment	1.34	Waste	0.13	-	-	10.00
Binder	6.75	Waste	0.67	-	-	10.00
Tape	2.83	Waste	0.28	-	-	10.00
Steel Wool	0.11	Waste	0.01	-	-	10.00
Stamp	0.07	Waste	0.01	-	-	10.00
Clipboard	0.78	Waste	0.08	-	-	10.00

Mop Head	19.71	Waste	1.97	-	-	10.00
IV	1.27	Waste	0.13	-	-	10.00
Nylon Bags	0.07	Waste	0.01	-	-	10.00
Drywall	0.04	Waste	0.00	-	-	10.00
Medical Gowns	4.73	Waste	0.47	-	-	10.00
Deodorant	0.28	Waste	0.03	-	-	10.00
Queens Branded Cloth Bags	0.21	Waste	0.02	-	-	10.00
Balloons	0.04	Waste	0.00	-	-	10.00
Glue	0.21	Waste	0.02	-	-	10.00
Hair Elastic	0.04	Waste	0.00	-	-	10.00
Glow Stick	0.04	Waste	0.00	-	-	10.00
Feathers	0.53	Waste	0.05	-	-	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 V - 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)

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)

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)

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?

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.

APPENDIX VI - 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.

Recycling Council of Ontario (RCO)

Is a not-for-profit membership based 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 VII – CALIBRATION CERTIFICATE

Calibration Certificate

Date of Calibration: October 17th - 21st , 2022

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	10/17/22 through 10/21/22
5 lbs	5 lbs	H-5837	01804016006	Stainless Steel Scale	10/17/22 through 10/21/22



Laura McAlpine
Environmental Manager
GFL Environmental Inc.

APPENDIX VIII -PHOTOGRAPHS

Contamination Photos



Tissue/toweling found in Watts Hall landfill sample.



Cardboard found in the stadium landfill waste sample.



Kraft paper and boxboard found in the McNeill House waste sample.



Aluminum cans and #1 PETE soft drink bottles found in the McNeill House sample.



Boxboard and food waste found in the Leonard Hall landfill sample.



Cardboard found in the Leonard Hall waste sample.



Food waste found in the West Campus Dining Hall sample.



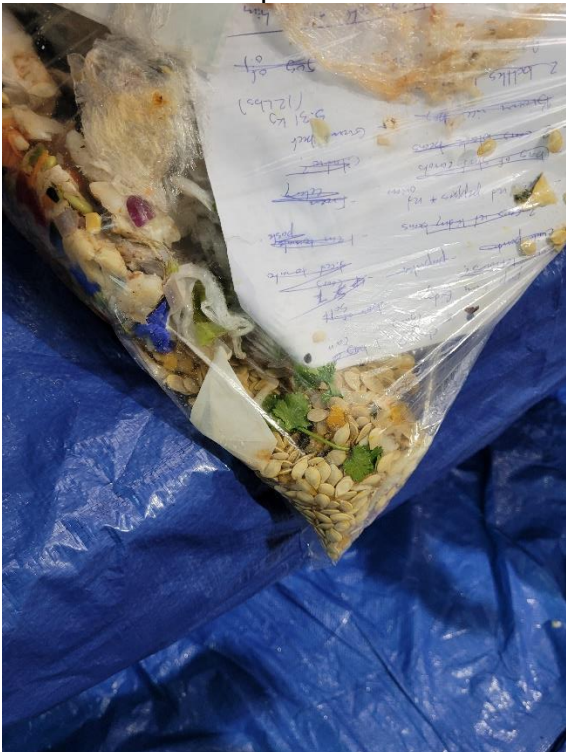
Food waste found in the West Campus Dining Hall sample.



Aluminum can and #1 PETE food container found in the David C. Smith House waste sample.



Aluminum can and kraft paper found in the David C. Smith House waste sample.



Food waste and mixed papers found in the Ban Righ Hall – Dining Room landfill sample.



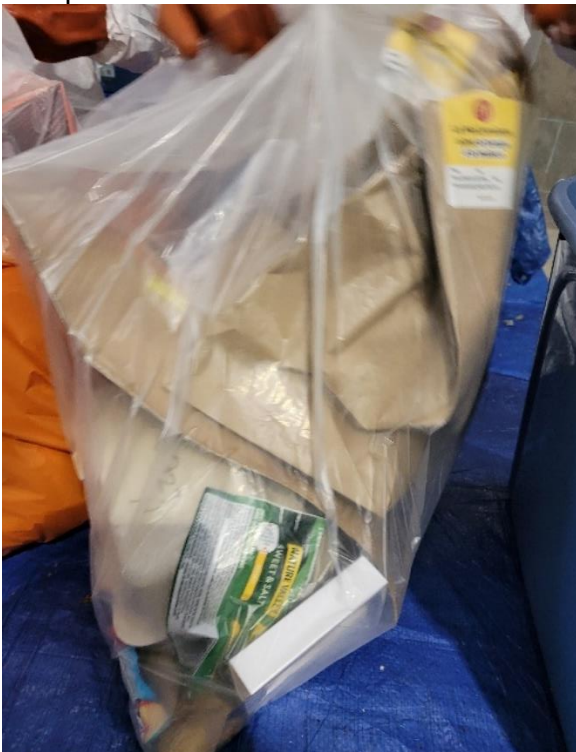
Mixed paper found in the Law Building waste sample.



Compostable clamshells and containers found in the Stauffer Library Offices sample.



Compostable clamshell, #5 PP lid, and compostable plate found in the Cancer Research Institute waste sample.



Recyclable boxboard and kraft paper found in the Robert Sutherland Hall sample.

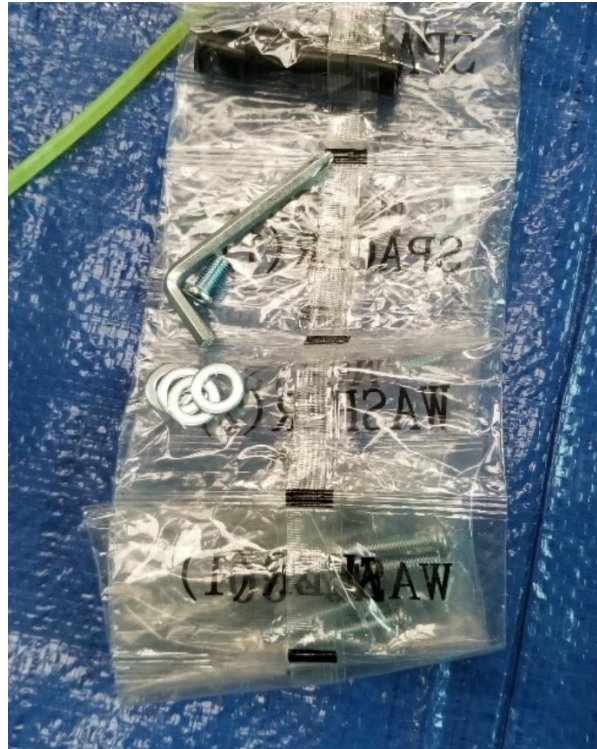


Tissue/toweling and #5 PP lid found in the Isabel Bader Performing Arts Centre waste sample.

Sorted Material Photos



Boxboard found in the landfill waste samples.



Scrap metal found in the landfill waste samples.



#1 PETE Soft Drink bottles found in the landfill waste samples.



#1 PETE Containers found in the landfill waste samples.



Compostable clamshells found in the landfill waste samples.



Food waste found in the landfill waste samples.



Aluminum cans found in the landfill waste samples.



Aseptic containers found in the landfill waste samples.



Rigid plastic found in the landfill waste samples.



#6PS Styrofoam containers found in the landfill waste samples.



E-waste found in the landfill waste samples.



Disposable gloves found in the landfill waste samples.