

Humber College
2022 Solid Non-Hazardous Waste Audit Report

Prepared for

Humber College

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Executive Summary

Humber College is required to conduct a solid non-hazardous waste audit of its two campuses (North Campus & Lakeshore Campus) located in Toronto, Ontario. All information was acquired directly from haulers and various contractors from Humber College. The data collected includes waste disposal from January 2021 to December 2021, from Humber College.

Waste diversion programs implemented on campus include cardboard, mixed papers, comingled recycling, confidential papers, organics, scrap metals, scrap woods/pallets, electronics, bulbs, batteries, printer toners, used furniture, oil and grease, yard wastes, construction & demolition and air filters, as well as waste reduction programs including water bottle refill stations, double sided printing, PPE collection, pen and pencil recycling, textbook exchange, refillable coffee mug and reusable container programs.

The following table summarizes the estimated annual quantities of waste materials generated, reduced, reused, recycled, composted and disposed.

Table 1: Annual Quantities of Materials Diverted & Disposed

Material	North Campus	Lakeshore Campus	Total Annual Amount	
	Metric Tonnes	Metric Tonnes	Metric Tonnes	Percent
Disposed to Landfill	186.69	81.4	268.1	32%
Materials Diverted	448.47	124.288	572.76	68%
Total Waste Generated	635.16	205.7	840.9	100%

Based on the total annual amount of waste generated and materials reduced, reused, recycled and composted, the waste diversion rate through existing programs at Humber College was determined to be approximately 68%. The provincial objective is 60% waste diversion.

The unprecedented changes that COVID-19 brought to campus operations with varying number of students on campus, led this past year's audit to be an anomaly. Due to the unfamiliarity with re-opening of campus, increased usage of disposable PPE throughout the year and varying number of student bodies present, this led to a variation in the waste collected. It is important to take into consideration that roughly 50% of students were on campus, when looking at the waste diversion rate for 2021.

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1 Introduction

Humber College has completed a solid non-hazardous waste audit, conducted by BEST Service Pros. The waste audit report included information collected through haulers and contractors from Humber College, their reports were from January 2021 to December 2021. The goal of the waste audit report was to gain an understanding of the composition of solid non-hazardous waste generated on campus.

Humber College is a multi-building community that has approximately 21,699 Full-Time Equivalent ([Ontario Colleges Library Service, 2022](#)) that generate waste and divertible materials. Humber College took the initiative to conduct a solid non-hazardous waste audit with the intent of complying with O.Reg.102/94, to confirm compliance with O.Reg.103/94 and to further improve upon their present waste reduction, reuse and recycling initiatives.

1.1 Purpose

The purpose of the solid non-hazardous waste audit was to:

- Comply with Part X of O.Reg. 102/94 ‘Waste Audits and Waste Reduction Work Plans’, which requires the operator of an educational institution with more than 350 students enrolled per year, to conduct an annual waste audit and prepare and implement a waste reduction work plan.
- Confirm compliance with Section 14 of O.Reg.103/94 ‘Industrial, Commercial and institutional Source Separation Programs’ and Part X ‘Educational Institutions’ of the Schedule attached to the Regulation.
- Determine the annual waste diversion rate for Humber College resulting from existing waste reduction, reuse, and recycling programs;
- Identify point of generation and quantify composition of wastes at Humber College;
- Identify any additional opportunities for waste reduction and diversion that may exist at Humber College.
- Address any specific concerns or opportunities identified during the study.

1.2 Scope of Work

To satisfy the purpose of the waste audit, the following scope of work was completed;

- Collected data pertaining to waste composition from North Campus and Lakeshore Campus, from January 2021 to December 2021
- Determined the total quantity of waste materials diverted from landfill by Humber College through current reduction, reuse, and recycling programs;
- Completed a Waste Audit Report that addresses the amount, nature and composition of the waste, how the waste was generated, including management decisions and policies that relate to the production of waste, and the way in which the waste is managed on campus; and
- Completed a Waste Reduction Work Plan regarding plans to reduce, reuse and recycle waste on campus. The report set out who will implement each part of the plan, when each part will be implemented and what the expected results shall be.

2 Methodology

Discussions were held with Humber College personnel to review existing waste management and recycling programs implemented on campus. The waste audit accounted for waste taken from January 2021 to December 2021. Due to COVID-19 and the unforeseen closures of campuses, Humber College has decided to conduct an audit using data from Humber’s waste hauler and custodial contractor.

In coordination with all haulers that are contracted by Humber College, information on waste disposal weights was sent over via email. The weights of waste material from each campus and functional area were calculated. Refer to Appendix B for copies of emails.

3 Diversion Programs & Waste Systems

3.1 Waste Diversion Programs

Waste diversion programs have been implemented at Humber College to reduce/reuse/recycle/compost a wide range of materials as described below.

Cardboard: cardboard recycling is provided across campus. Cardboard boxes are flattened and placed in dedicated bins. Compactor/Roll-off bins are used at North Campus and Front End bins are located at Lakeshore Campus. Cardboard bins are serviced by WasteCO as requested.

Mixed Containers: Mixed containers include assorted plastics food and beverage containers (PET, HDPE, LDPE, PP, and PS), aluminum and metal cans, glass food and beverage containers, gable top containers and aseptic containers (I.e., tetra packs, etc.). Additional items collected in the mixed container stream includes LDPE (#4) plastic films and coffee cups. Mixed containers are collected throughout campus in dedicated recycle depots, primarily concentrated in high waste generating areas. Collected materials are disposed into compactor/roll-off or front-end bins. Bins are serviced by WasteCO as required.

Mixed Papers: Mixed papers include a range of items such items as (but not limited to) newspapers, fine papers, envelopes, magazines, brochures, boxboard, packing paper, shipping/receiving supplies, paper bags and other clean food paper products. Mixed papers are collected throughout campus in dedicated recycle depots, primarily concentrated in high waste generating areas. Collected materials are disposed into dedicated bins. Bins are serviced by WasteCO as required.

Confidential Papers: Confidential papers are collected mainly in office/administrative areas in secure consoles or totes. All shredded materials were recycled via Blue Pencil.

Organics: Organic based food waste is collected on both campuses in pre- and post-consumer areas for composting. Bins are serviced by WasteCO as required.

Scrap Metals: Recyclable ferrous metals are collected by Humber College Staff. Scrap metal recycling service is provided by WasteCO or Recycler Canada as required.

Scrap Wood/Pallets: Scrap woods are collected by Humber College staff. Scrap woods recycling service is provided by WasteCO as required.

Electronics Wastes: Electronic wastes are collected across campus and stored in dedicated locations. Service is provided by Electronic Recycling Services as required.

Bulbs & Ballasts: Fluorescent bulbs and ballasts are collected across campus and stored in dedicated totes. Service is provided by Relamping as required.

Batteries: Various batteries are collected in small, dedicated containers across campus. Service is provided by Raw Materials Company Inc as required.

Printer Toner Cartridges: Humber College returns all empty toner bottles and printer toner cartridges to suppliers for recycling, reuse and/or energy-from-waste as required.

Oil & Grease: Oil & grease is collected from food service areas across campus and stored in dedicated containers. Service is provided by Rothsay as required.

Used Furniture: Used furniture is collected from all areas across campus for recycling, donation and/or energy-from-waste. Service is provided by CSR as required.

Yard Wastes: Yard Wastes are collected from all areas across campus for diversion, service is provided by Humber College.

Air Filters: Air filters are collected from all areas across campus via energy-from-waste. Service is provided by Dafco Filtration Group as required.

Ceiling Tiles: Ceiling Tiles materials are collected across campus for recycling. Service is provided by Viking Recycling and WasteCO as required.

Waste Reduction Initiatives: various waste reduction initiatives have been implemented on-campus including water bottle refilling stations, a double-sided printing policy and a refillable coffee mug program.

PPE Recycling: Single use masks and gloves collected from all areas across campus for diversion, service is provided by Terracycle.

Reusable Containers: O2GO reusable containers are given upon request from several food service areas across campus, significantly reducing single-use takeaway container waste.

Pen and Pencil Collection: Recycling of pens and pencils collected throughout both campuses for easy diversion, service is provided by Terracycle.

Textbook Recycling: Exchange of books through a Canadian based company, Textbook for Change, to send textbooks to third world countries all over the world.

Table 2 summarizes the estimated annual amount of waste materials diverted from landfills due to waste diversion programs implemented at Humber College. **The total amount of waste material diverted from landfill was approximately 572.76 metric Tonnes.** Evidence of annual quantity data obtained from Humber College and/or service providers is provided in Appendix B. Waste diversion programs implemented on campus exceed the minimum requirements of O.Reg. 103/94 for educational institutions.

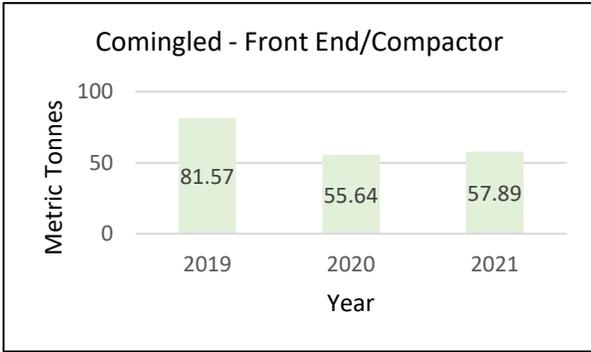
3.2 Waste Disposal Systems

Regular solid non-hazardous waste is collected across campus by Humber College staff and placed in either front-end bins or compactors located at designated waste handling areas. WasteCO is responsible for the collection of waste depending on the waste generating area. **The total quantity of solid non-hazardous waste disposed to landfill in 2021 was estimated to be approximately 268.1 metric Tonnes,** as summarized in Table 2.

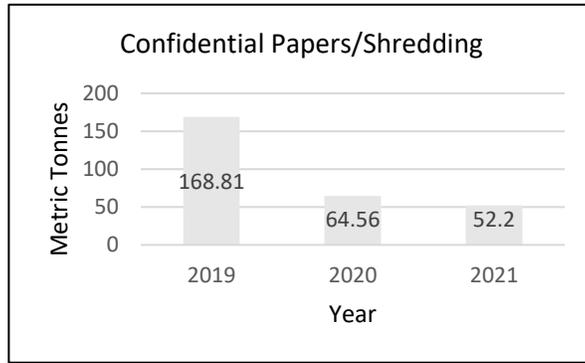
Table 2: Waste Disposal & Diversion Summary

Waste Materials	2019			2020			2021			
	North Campus	Lakeshore Campus	Total	North Campus	Lakeshore Campus	Total	North Campus	Lakeshore Campus	Total	Percent
Waste/Garbage	695.56	252.22	947.78	308.9	116.5	425.4	179.35	80.9	260.3	97%
Air filters	0.49	0.18	0.68	0.26	0	0.26	0.1	0.1	0.2	0.07%
Printer Toners	0	0.0	0.0	0.01	0.01	0.02	0.11	0.01	0.12	0.04%
Used Furniture	2.20	0.82	3.02	7.79	0	7.79	7.13	0.4	7.5	2.7%
Disposal Total	698.26	253.21	951.48	316.96	116.5	433.47	186.69	81.4	268.1	100%
3R Programs										
Organics – Food waste	410.99	134.47	545.46	147.65	39.19	186.84	60.89	4.388	65.287	11.39%
Mixed Papers (office, news, etc.)	267.90	93.89	361.79	44.25	21.91	66.16	9.73	2.52	12.25	2.13%
Comingled – Front End/Compactors	46.04	35.53	81.57	42.02	13.62	55.64	34.26	23.63	57.89	10.10%
Confidential Papers	123.23	45.58	168.61	43.36	21.2	64.56	35	17.2	52.2	9.1%
Electronic Wastes - Scraps	22.70	7.36	30.06	12.6	4.5	17.1	6.5	2.9	9.4	1.64%
Electronic Wastes - Refurbished				4.49	0.58	5.07	4.5	0.67	5.17	0.90%
Used Furniture/Equipment Recycled	29.82	11.03	40.85	13.1	0	13.1	58.74	3.87	62.61	10.93%
Scrap wood/Pallets	138.71	0	138.71	70.01	0	70.01	74.76	0	74.76	13.05%
Used Furniture donated for reuse	45.17	16.70	61.87	13.1	0	13.1	69.62	0	69.62	12.15%
Scrap Metals	57.15	0	57.15	23.74	0	23.74	31.23	0	31.23	5.45%
Cardboard	77.44	118.18	195.62	0	30.18	30.18	15.98	8.56	24.54	4.2%
Ceiling Tiles	55.20	0	55.20	56.81	0	56.81	0.42	0	0.42	0.07%
Light Fixture and Bulbs	-	-	-	-	-	-	0.07	0.03	0.10	0.017%
Fluorescent Bulbs & Ballasts	0.33	0.14	0.48	0.5	0.31	0.82	0.301	0.11	0.411	0.071%
Batteries	0.21	0.15	0.36	0	0	0	0.11	0	0.11	0.019%
Printer Toners (recycled)	0.69	0.26	0.95	0.08	0.07	0.15	0.16	0	0.16	0.02%
Printer Toners (reused)	0.82	0.31	1.13	0.13	0.11	0.24	0.11	0	0.11	0.019%
Textbook Recycling	-	-	-	-	-	-	0.55	0	0.55	0.104%
Textbooks Donated and Resold	-	-	-	-	-	-	0.6	0	0.66	0.09%
PPE Recycling	-	-	-	-	-	-	0.018	-	0.018	0.003%
Oil & Grease	3.32	1.14	4.46	0.44	0.34	0.79	1.242	0.41	1.6542	0.28%
Carpet	3.42	1.26	4.68	2.13		2.13	3.68		3.68	0.34%
Yard Wastes	233.60	86.40	320	65	0	5	40	60	100	17.45%
3Rs Total	1516.74	552.40	2069.2	562.23	132.01	694.26	448.47	124.288	572.7612	68.1%
Grand Total	2215.00	805.62	3020.6	879.18	248.51	1127.70	635.1632	205.7	840.9	--
Waste Diversion Rate	68.5%	68.6%	68.5%	63.98%	53%	61.6%	70.61%	60.43%	68.12%	--

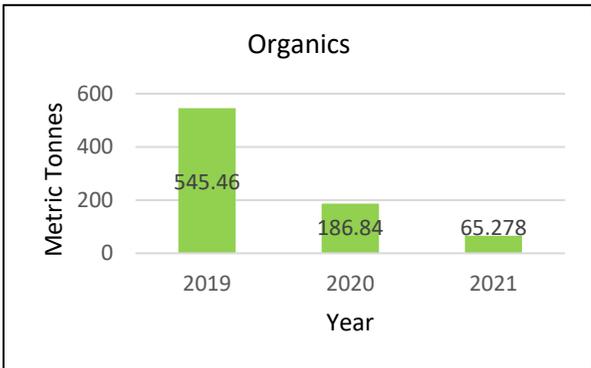
3.4 Breakdown of Waste Streams from 2019 to 2021



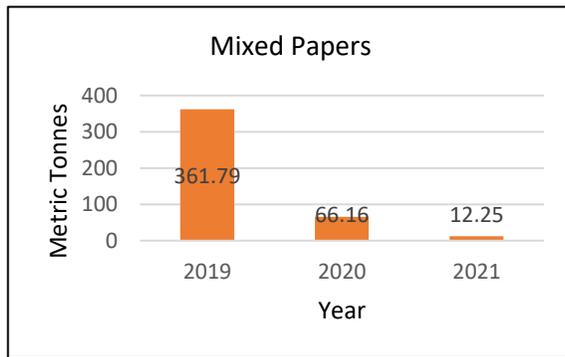
Graph 1 - 3-Year Comingled Recycling Production



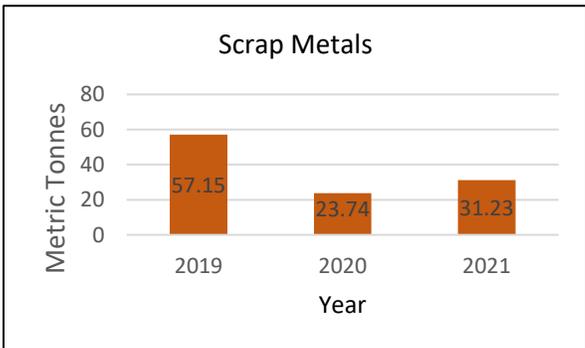
Graph 2 - 3-Year Shredding Paper Production



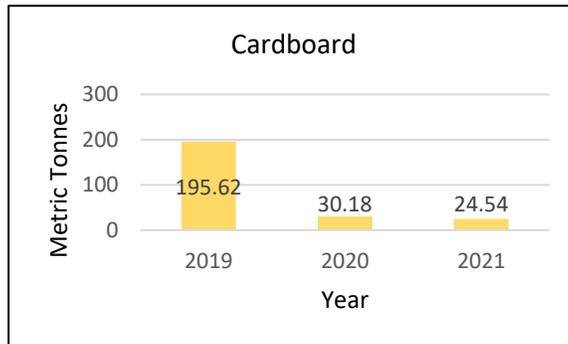
Graph 3 - 3-Year Organics Production



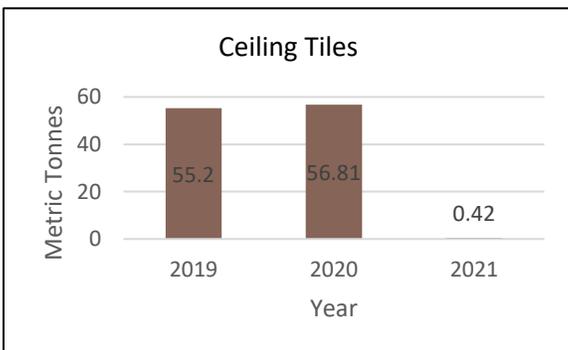
Graph 4 - 3-Year Mixed Paper Production



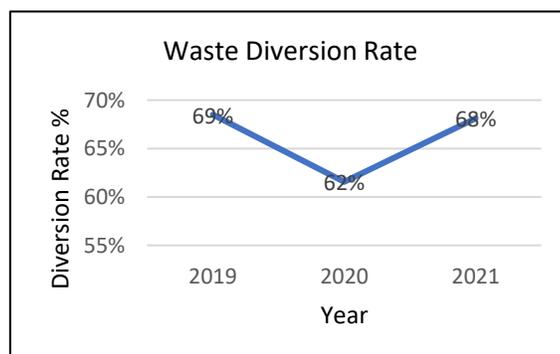
Graph 5 - 3-Year Scrap Metal Production



Graph 6 - 3-Year Cardboard Production



Graph 7 - 3-Year Ceiling Tile Waste



Graph 8 - 3-Year Waste Diversion Rate Progression

4 Performance Indicators

4.1 Waste Diversion Rate

Waste diversion rate is the percentage of waste materials that a facility diverts from landfill due to reduce, reuse and recycling (I.e. 3Rs) programs versus the total amount of waste generated (i.e. 3Rs plus disposed). According to the Ministry of the Environment, Conservation & Parks (MECP), Waste Diversion Rate is calculated as follows:

$$\left(\frac{\text{Weight of diverted waste only}}{\text{Weight of all waste}} \right) * 100 = \text{Diversion rate}$$

Based on the total annual amount of waste generated and materials reduced, reused and recycled in 2021 the waste diversion rate was determined to be approximately 68%. If 60% of all divertible materials found in the garbage stream were successfully captured and diverted, the overall facility could achieve a waste diversion rate of approximately 78%.

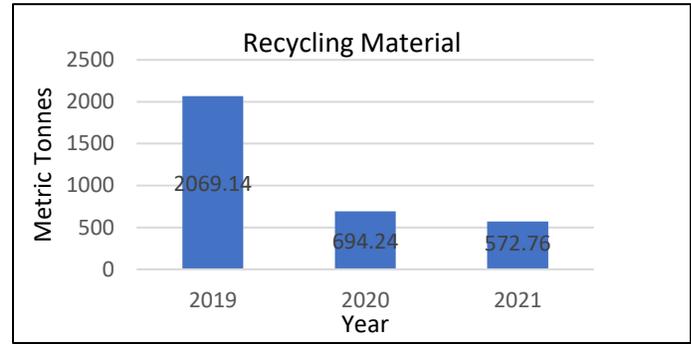
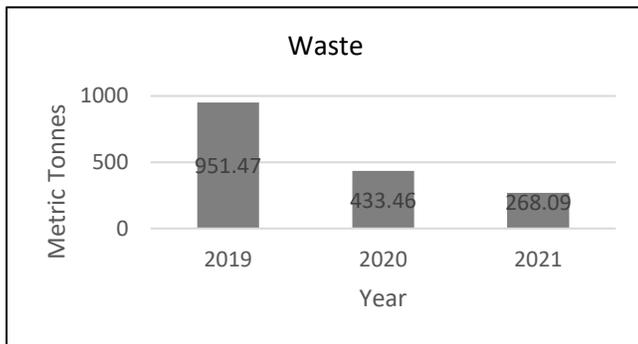
The waste diversion rate for 2021 is determined to be lower this past year, due to several factors: COVID-19 and the changes it has had on campus life, increased usage of disposable wipes across all classroom and labs, and the elimination of the reusable mug program for the entire school year, and increased usage of take-out containers throughout campus eateries.

Table 3 summarizes the quantities of waste diverted, disposed and waste diversion rates between 2019 and 2021. Humber College's waste diversion rate in 2021 exceeded MECP's provincial objective of 60% waste diversion.

Table 3: Quantities of Materials Diverted & Disposed

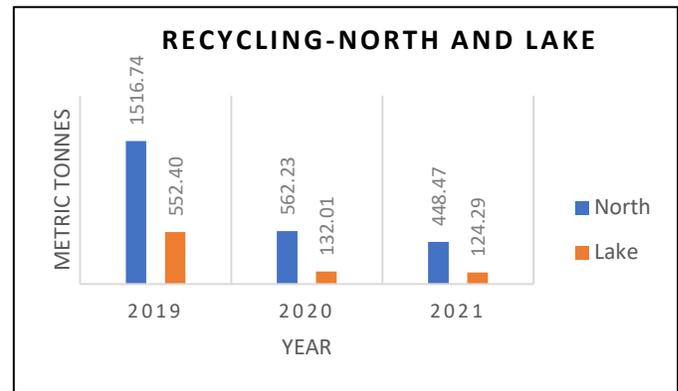
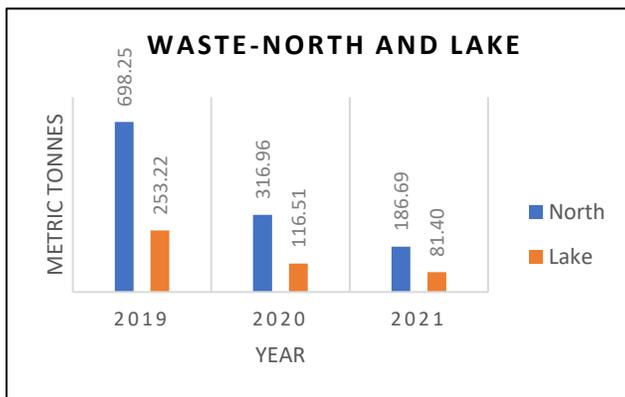
Audit Period	Campus	Waste Disposed to landfill	Waste Materials Diverted	Total Waste Generated	Waste Diversion Rate
		MT	MT	MT	%
2019	North	698.26	1516.74	2214.99	68.5%
	Lakeshore	253.21	552.40	805.62	68.6%
	Total	951.48	2069.15	3020.62	68.5%
2020	North	316.95	562.23	879.16	63.95%
	Lakeshore	116.5	132.01	248.52	53.12%
	Total	433.4	691.74	1125	61.6%
2021	North	186.69	448.47	635.16	70.61%
	Lakeshore	81.4	124.288	205.7	60.43%
	Total	268.1	572.76	840.9	68.12%

4.1.2 Total Materials Disposed and Diverted at Humber College 2019 – 2021



Graph 9 - 3-Year Total Recycling Generation Across Humber Campuses

Graph 10 - 3-Year Total Waste Generation Across Humber Campuses



Graph 11 - 3-Year Comparison of Waste Generation at Humber

Graph 12 - 3-Year Comparison of Recycling Generation at Humber

4.2 Year over Year Changes

Waste diversion rate and capture rate do not always demonstrate how effective a site's 3R programs are operating. This is due to the continual change of many important factors involved in waste and recyclable material generation on campus, such as number of students enrolled, floor area of buildings, etc. **As student numbers change or more buildings are added to the campus, quantities of waste and recyclables change making it difficult to have a direct comparison of data between years.** Year to year comparisons allow the College in gaining an understanding of the effectiveness of their waste diversion programs. For Humber College, the most applicable standard unit is Full-time equivalent students, or FTE.

4.2.1 Year over Year Change in Waste Generation

The 'Year-over-Year Change in Waste Generator' is the indicator of the total amount of materials generated on-site including materials diverted and disposed per FTE compared to previous data. Table 4 summarizes the change in the amount of waste materials generated between 2019 and 2021.

Table 4: Yr-over-Yr Change in Waste Generated

Period	Total Materials Generated (MT)	FTE	Annual Generated Quantity (kg/FTE)	Yr-over-Yr Change in Generated Quantity (kg)	Total Waste Generated per Student (MT/Student)
2019	3020	27146	111.27	+24.15	0.111
2020	1127.72	21963	51.34	-59.93	0.051
2021	840.9	21699	38.71	-12.63	0.038

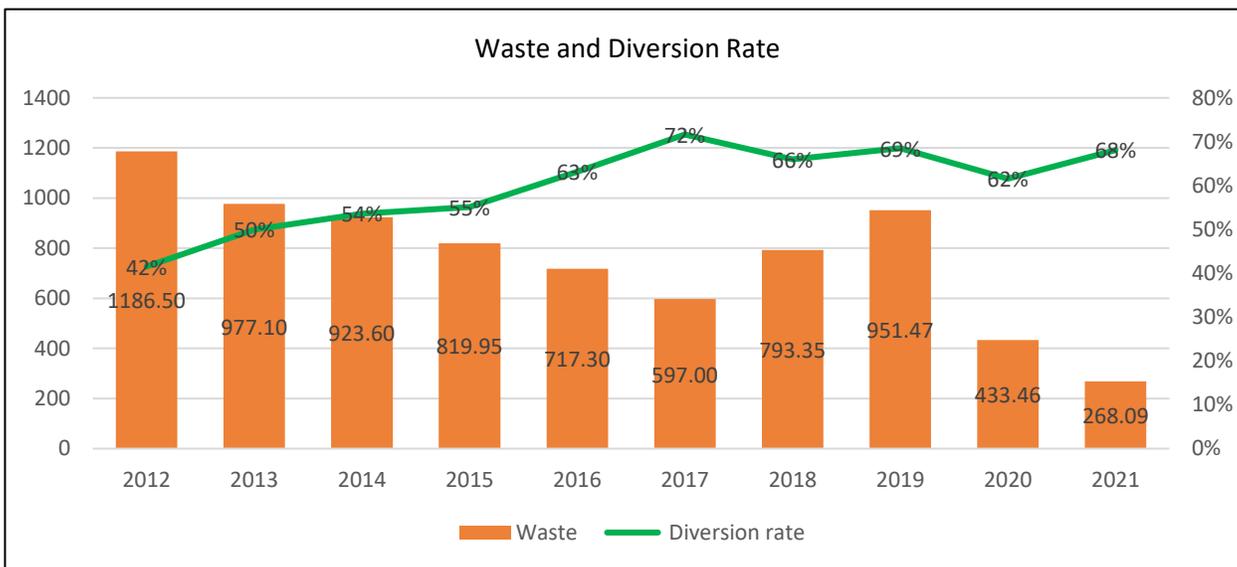
4.2.2 Year-over-Year Change in Garbage Disposed

The ‘Year over Year Change in Garbage Disposed’ is the indicator of the amount of reduction in waste materials disposed to landfill due to waste diversion activities on campus. A reduction in the year over year value will indicate the college is continually reducing wastes disposed to landfill. Table 5 summarizes the change in disposed quantities between 2019 and 2021.

Table 5: Year-over-Year Change in Waste Disposed Quantities

Period	Total Materials disposed (MT)	FTE	Annual Disposed Quantity (kg/FTE)	Yr-Over-Yr Change in Disposed Quantity (kg)
2019	951.48	27146	35.05	+5.43
2020	433.47	21963	19.7	-15.35
2021	268.1	21699	12.35	-7.35

4.2.3 10 Year Change in Waste Generation



Graph 13 - 10-Year Total Waste and Recycling Generation

5 Waste Audit Summary & Waste Reduction Work Plan

Refer to Appendix B and Appendix C for the Waste Audit Summary and the Waste Reduction Work Plan respectively. The last page of each set of forms in the appendices needs to be signed by an authorized person at the College.

According to O.Reg 102/94, the Waste Reduction Work Plan (Appendix C) or a summary of the plan must be posted at

the College in a place where staff/students can review it. If a summary is posted, the entire Work Plan should also be made available for review by any staff/student upon request.

6. Conclusions

- In 2021, it was estimated that Humber College disposed of approximately 268.1 tonnes of solid waste in landfills. Approximately 572.76 tonnes of waste materials were diverted through existing waste diversion programs. This represents a waste diversion rate of approximately 68%. The provincial objective is 60% waste diversion.
- Humber College maintains waste diversion programs for cardboard, mixed papers, commingled recycling, confidential papers, organics, scrap metals, scrap woods/pallets, electronics, bulbs, batteries, printer toners, used furniture, oil and grease, yard wastes, construction & demolition and carpet, as well as waste reduction programs including water bottle refill stations, double sided printing, PPE collection, reusable containers and refillable coffee mug programs. These programs exceed the minimum requirements of O.Reg.103/94 for educational institutions.
- Based on the waste audit results, North Campus generated more garbage and recyclables than Lakeshore Campus, representing approximately 75% of the overall waste production in 2021.
- Humber College is currently working on removing all waste desk-side bins in offices across campus by 2023. All bins will be donated through CSR, to further reduce their contamination rate and decrease waste consumption.
- Humber College is encouraged to increase engagement through orientation and providing all faculty members in the College with an interactive waste training video.
- Humber College is working on removing all single stream waste bins in campus hallways and classrooms, this is another solution Humber College is taking to reduce their contamination rate.

7. Recommendations

Based on the results of the solid non-hazardous waste audit conducted for Humber College, the following conclusions can be made. Recommendations presented below and intended to assist Humber College in maximizing their waste diversion potential.

- Humber College is currently piloting the reusable Ozzi Container program; it is recommended that this program is expanded into all cafeterias and cafes across campus.
- Continue to make use of multi-compartment containers for waste collection and recycling as much as possible.
- It is recommended that signage is continuously updated as new students arrive on campus, with different visual aids added each time, signs are a very effective method of increasing participation, reducing contamination, and increasing capture rate.
- Continue to work with faculties on their specific waste production to reduce contamination on all levels.
- Coordinate and implement waste training for all Humber College students.
- Ensure Humber College's continues to showcase their Environmental Policy in all common areas throughout campus. Continuing to emphasize Humber College's commitment to environmental stewardship in its newsletters, brochures, annual reports, and contracts. Regular newsletters promoting the school's waste reduction programs, goals and concerns will increase students/staff cooperation.

- Continue to increase awareness of current recycling programs through staff and student education programs. Such programs can include brief training programs as well as placement of posters in strategic locations around campus, and posting information regarding campus goals and recycling, reuse, and reduction rates at the school.
- Continue to increase awareness through Green Team and focus on initiatives such as educating staff and students on waste sorting, increasing program awareness through marketing and tabling, and lastly, consistently monitoring the programs Humber College is active in, and continuing to provide feedback.
- Continue to engage with students through tabling or orientation events, to further educate in waste reduction and recycling.
- Coordinate a residence move-out program to reduce contamination, and divert usable items like furniture, or electronics from being thrown into garbage.
- According to O.Reg. 102/94, the Waste Reduction Work Plan (Appendix C) or a summary of the plan must be posted at the facility in a place where it can be viewed. If a summary of the work plan is posted, the full Work Plan must be made available for review upon request by any of the college's staff or students.

Environmental Protection Act

Loi sur la protection de l'environnement

ONTARIO REGULATION 102/94

WASTE AUDITS AND WASTE REDUCTION WORK PLANS

Consolidation Period: From March 3, 1994 to the e-Laws currency date.

No amendments.

This Regulation is made in English only.

PART I

GENERAL

1. In this Regulation,

“waste” means municipal waste as defined in Regulation 347 of the Revised Regulations of Ontario, 1990;

“waste audit” means a study relating to waste;

“waste reduction work plan” means a plan to reduce, reuse and recycle waste. O. Reg. 102/94, s. 1.

2. A waste audit required under this Regulation shall address,

a. the amount, nature and composition of the waste;

b. the manner by which the waste gets produced, including management decisions and policies that relate to the production of waste; and

c. the way in which the waste is managed. O. Reg. 102/94, s. 2.

3. (1) A waste reduction work plan required under this Regulation shall include, to the extent that is reasonable, plans to reduce, reuse and recycle waste and shall set out who will implement each part of the plan, when each part will be implemented and what the expected results are.

(2) In developing the work plan, regard shall be had to the following principles:

1. Reduction is the first objective.

2. If reduction is not possible, then reuse is the next objective.

3. If reduction and reuse are not possible, then recycling is the final objective. O. Reg. 102/94, s. 3.

4. A person who is required under this Regulation to prepare a report of a waste audit or a waste reduction work plan shall prepare it on a form provided by the Ministry or in the same format as such a form. O. Reg. 102/94, s. 4.

5. (1) A person who is required under this Regulation to prepare a report of a waste audit or a waste reduction work plan shall retain a copy of the report or plan for at least five years after it was prepared.

(2) A person who is required under this Regulation to prepare a report of a waste audit or a waste reduction work plan shall submit to the Director, on request, the required report or plan, within seven days of the Director requesting them. O. Reg. 102/94, s. 5.

6. (1) A person who becomes subject to an obligation under this Regulation to prepare a report of a waste audit or a waste reduction work plan shall do so within six months of becoming subject to the obligation.

(2) This section does not apply with respect to updated reports or plans.

(3) This section does not apply with respect to obligations of a builder under Part IV or a demolisher under Part V. O. Reg. 102/94, s. 6.

7. (1) A new owner or operator to whom this Regulation applies is not required to conduct a new waste audit or prepare a new waste reduction work plan if an audit or work plan was conducted or prepared by a previous owner or operator and the new owner or operator updates the audit and work plan as required under this Regulation.
(2) This section does not apply with respect to a builder under Part IV or a demolisher under Part V. O. Reg. 102/94, s. 7.
8. (1) A person who has an obligation to conduct a waste audit and prepare a report under Part II, III, VI, VII, VIII, IX, X or XI in respect of more than one retail shopping establishment, retail shopping complex, building, restaurant, hotel or motel, hospital, location or campus of an educational institution, or site of a manufacturing establishment, may conduct a single
 1. The waste reduction work plan shall include measures for communicating the plan to the operator's employees who work at the hospital and, as a minimum, those measures shall require,
 - a. that the plan or a summary be posted in places where most employees will see it; and
 - b. if a summary is posted, that any employee who requests to look at the plan be allowed to do so. O. Reg. 102/94, s. 50.

PART X

EDUCATIONAL INSTITUTIONS

2. (1) This Part applies to the operator of an educational institution in respect of a location or campus of the institution if, at the location or campus, at any time during the calendar year, more than 350 persons are enrolled.
(2) This Part continues to apply in respect of a location or campus for the two calendar years following the last year in which more than 350 persons were enrolled at the location or campus. O. Reg. 102/94, s. 51.
3. (1) The operator shall conduct a waste audit covering the waste generated by the operation of the institution at the location or campus. The audit shall also address the extent to which materials or products used consist of recycled or reused materials or products.
(2) After conducting the waste audit, the operator shall prepare a written report of the audit.
(3) In every year following the initial waste audit, the operator shall update the audit and prepare an updated written report. O. Reg. 102/94, s. 52.
4. (1) The operator shall prepare a written waste reduction work plan, based on the waste audit, to reduce, reuse and recycle waste generated by the operation of the institution at the location or campus.
(2) In every year following the preparation of the initial waste reduction work plan, the operator shall prepare an updated written plan. O. Reg. 102/94, s. 53.
5. The operator shall implement the waste reduction work plan as updated. O. Reg. 102/94, s. 54.
6. The waste reduction work plan shall include measures for communicating the plan to the operator's employees who work at the location or campus and, as a minimum, those measures shall require,
 - a. that the plan or a summary be posted in places where most employees will see it; and
 - b. if a summary is posted, that any employee who requests to look at the plan be allowed to do so. O. Reg. 102/94, s. 55.

Environmental Protection Act

Loi sur la protection de l'environnement

ONTARIO REGULATION 103/94

INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL SOURCE SEPARATION PROGRAMS

Consolidation Period: From March 3, 1994 to the e-Laws currency date.

No amendments.

This Regulation is made in English only.

SOURCE SEPARATION PROGRAMS

1. In this Regulation,

“Northern Ontario” means the territorial districts of Algoma, Cochrane, Kenora, Manitoulin, Nipissing, Parry Sound, Rainy River, Sudbury, Thunder Bay and Timiskaming and The Regional Municipality of Sudbury;

“source separation program” means a program to facilitate the source separation of waste for reuse or recycling. O. Reg. 103/94, s. 1.

2. (1) A source separation program required under this Regulation must include,
- the provision of facilities for the collection, handling and storage of source separated wastes described in subsection (2) adequate for the quantities of anticipated wastes;
 - measures to ensure that the source separated wastes that are collected are removed;
 - the provision of information to users and potential users of the program,
 - describing the performance of the program,
 - encouraging effective source separation of waste and full use of the program;
 - reasonable efforts to ensure that full use is made of the program and that the separated waste is reused or recycled.

(2) The source separated waste referred to in clause (1) (a) is waste that has been source separated from other kinds of waste and that consists solely of waste from one or more of the following categories:

1. The categories of waste set out in the part of the Schedule applicable to the person required to implement the source separation program.

2. The categories of waste set out in Schedule 1, 2 or 3 of Ontario Regulation 101/94 that the source separation program accepts.

(3) A source separation program required under this Regulation must provide for all the categories of waste set out in the part of the Schedule applicable to the person required to implement the program except for categories of waste that cannot be reasonably anticipated. O. Reg. 103/94, s. 2.

3. Source separation programs required by this Regulation are exempt from sections 27, 40 and 41 of the Act. O. Reg. 103/94, s. 3.
4. (1) A source separation program that is not required by this Regulation is exempt from sections 27, 40 and 41 of the Act if,
- the program is restricted to waste generated at a single site;
 - the program only accepts waste that has been source separated from other kinds of waste and that consists solely of waste from one or more of the categories of waste set out in Schedule 1, 2 or 3 of Ontario Regulation 101/94;
 - the program includes everything set out in subsection 2 (1).

(2) For the purposes of clause (1) (c), the reference to source separated waste in clause 2 (1) (a) shall be deemed to be a reference to the waste described in clause (1) (b). O. Reg. 103/94, s. 4.

EDUCATIONAL INSTITUTIONS

14. 14. (1) This section applies to the operator of an educational institution in respect of a location or campus of the institution if, at the location or campus, at any time during the calendar year, more than 350 persons are enrolled.

(2) The operator shall implement a source separation program for the waste generated by the operation of the institution at the location or campus or shall ensure that such a program is implemented.

(3) This section continues to apply in respect of a location or campus for the two calendar years following the last year in which more than 350 persons were enrolled at the location or campus.

(4) This section applies only in respect of a location or campus located within a local municipality that has a population of at least 5,000.

(5) This section takes effect with respect to a location or campus in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 14.

TRANSITION

16. Except as otherwise provided, a person who, upon the coming into force of this Regulation, or at any time within twelve months after the coming into force of this Regulation, becomes subject to an obligation with respect to the implementation of a source separation program shall fulfil the obligation within twelve months after the coming into force of this Regulation. O.Reg. 103/94, s. 16.

SCHEDULE

WASTES TO BE PROVIDED FOR IN SOURCE SEPARATION PROGRAMS

PART X

EDUCATIONAL INSTITUTIONS

(referred to in section 14)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Steel food or beverage cans (including cans made primarily of steel).

A. ERS-International – Electronic Waste

Location	Regular scrap Lbs	Refurbished Lbs	Regular Sc	Refurbishes
NORTH CAMPUS	2,250	2,044	1.02	0.92
NORTH CAMPUS	1,347	0	0.61	0
NORTH CAMPUS	2,957	2,077	1.34	0.94
NORTH CAMPUS	1,441	2,186	0.65	0.99
NORTH CAMPUS	207	220	0.09	0.09
NORTH CAMPUS	1,379	1,001	0.62	0.45
NORTH CAMPUS	1,579	1,038	0.71	0.47
NORTH CAMPUS	3,376	1,422	1.53	0.64
LAKE CAMPUS	5,480	654	2.48	0.29
LAKE CAMPUS	925	838	0.41	0.38

B. CSR Eco-Solutions: Used Furniture

Social / Environment	Weight - Kg	Weight - Metric T	Weight - %	Value - \$ CAD
Donated	-	0.00	0.00%	\$ -
Internal Reuse	2,326.93	2.33	19.95%	\$ 3,950.00
Liquidated/Resold	-	0.00	0.00%	\$ -
Recycled	8,400.00	8.40	72.01%	\$ 927.30
Diverted	10,725.63	10.73	91.95%	\$ -472.00
None Recoverable	938.88	0.94	8.05%	\$ -
TOTAL	11,664.51	11.67	100.00%	\$ 4,877.30

C. Relamping – Light Bulb and Ballast Recycling

Relamping Services Canada Limited					Lamps Recycled	Weight Lbs
Humber College Recycled Lamps Period Year 2021						
#	Item No.	Item Description	Customer Code	Customer Name		
North Campus						
	ZZAA16	RECYCLE FLUOR. LAMPS 4' T8	HUMB00	HUMBER INST TECH & ADV. LEARNING-North Campus	2,169	521
	ZZAA161	RECYCLE HID LAMPS	HUMB00	HUMBER INST TECH & ADV. LEARNING-North Campus	7	2
	ZZAA162	RECYCLE COMPACT FLUORESCENT LAMPS	HUMB00	HUMBER INST TECH & ADV. LEARNING-North Campus	785	142
Sub-total North Campus					2,961	665
South Campus						
	ZZAA16	RECYCLE FLUOR. LAMPS 4' T8	HUMB001	HUMBER INST TECH & ADV. LEARNING-South Campus	852	205
	ZZAA161	RECYCLE HID LAMPS	HUMB001	HUMBER INST TECH & ADV. LEARNING-South Campus	5	1.5
	ZZAA162	RECYCLE COMPACT FLUORESCENT LAMPS	HUMB001	HUMBER INST TECH & ADV. LEARNING-South Campus	243	44
Sub-total South Campus					1,100	250.5
Total Humber College North & South Campus					4,061	916

D. Raw Materials Company Inc – Battery Recycling

RAW MATERIALS COMPANY INC. BILL OF LADING

SHIPPER: Humber College
 CONSIGNEE: Raw Materials Company Inc.
 DATE: 2021-08-15

COMMODITY: RECYCLED BATTERIES

WEIGHT: 251.00 KG

DATE OF RECEIPT: 2021-08-15

RECEIVED BY: [Signature]

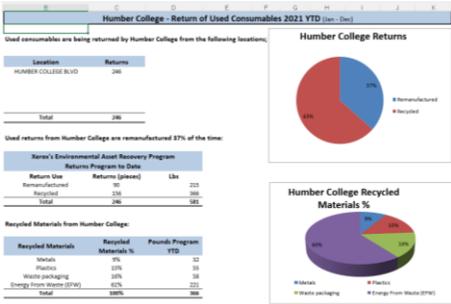


RAW MATERIALS COMPANY INC.
 Battery Recycling Specialists
 17 Inverness Drive Port Colborne, Ontario
 Canada L9K 9V5

Humber College
 205 Humber College Boulevard
 Etobicoke, ON
 Canada M9W 6L7

Date	Document No	Item	Weight (Lbs)	Weight (Kgs)
2021-08-15	144365	ALKALINE CELLS	108	49
2021-08-15	144365	BUTTON CELLS	2	1
2021-08-15	144365	LITHIUM CELLS	4	2
2021-08-15	144365	LITHIUM ION CELLS	10	5
2021-08-15	144365	NICKEL-SEALED CELLS	7	3
2021-08-15	144365	NICKEL METAL HYDRIDE CELLS	7	3
2021-08-15	144365	SCRAP METAL	3	1
2021-08-15	144365	SEALED LEAD ACID CELLS	20	9
		Total	251	114

E. Xerox Printing – Number of Printer Toners Reused and Recycled.



F. Rothsay – Oil and Grease Recycling

Row Labels	Sum of Received Wt
104814	1242
HUMBER COLLEGE HOSPITALITY	1242
Jul	391
20-Jul	391
Nov	851
2-Nov	851
110026	410
HUMBER COLLEGE 27035 ETOBICOKE	410
Feb	410
19-Feb	410
(blank)	
(blank)	
<2/19/2021	
Grand Total	1652

G. Viking Recycling: Carpet Recycling

MATERIAL DIVERSION REPORT



Humber College

2021

Date	Project	Material	Weight (lb)	Weight (MT)	Diversion Rate
2-Mar-21	HUMBER COLLEGE – NORTH CAMPUS205 HUMBER COLLEGE BLVD., BLDG D - CLASSROOM RENOVATION	Carpet	7,476	3.39	100%
9-Sept-21	HUMBER COLLEGE FACULTY OF BUSINESS – PHASE 4	Carpet	221	0.10	
9-Sept-21	HUMBER COLLEGE FACULTY OF BUSINESS – PHASE 4	Ceiling Tile	243	0.11	
9-Sept-21	HUMBER COLLEGE 205 HUMBER COLLEGE BLVD.	Carpet	418	0.19	
26-Oct-21	HUMBER COLLEGE 205 HUMBER COLLEGE BLVD.	Ceiling Tile	692	0.31	
TOTAL			9,050 lbs	4.11 MT	100%

Your efforts are part of a bigger solution!

Thank you for going from linear to circular!

H. Yard Waste – Humber College

From: Robert Gray <Robert.Gray@humber.ca>
Sent: Tuesday, March 1, 2022 9:53 AM
To: Mark Palenchar
 <Mark.Palenchar@humber.ca>; Lindsay Walker
 <Lindsay.Walker@humber.ca>; Safa Al-Haji
 <Safa.Al-Haji@humber.ca>
Cc: Sandra Parra <sparra@best.ca>
Subject: Re: Annual Waste Audit Data Request:
 Yard Waste

From: Mark Palenchar
 <Mark.Palenchar@humber.ca>
Sent: Monday, February 28, 2022 2:22 PM
To: Safa Al-Haji <Safa.Al-Haji@humber.ca>;
 Robert Gray <Robert.Gray@humber.ca>
Cc: Lindsay Walker
 <Lindsay.Walker@humber.ca>; Sandra Parra
 <sparra@best.ca>
Subject: RE: Annual Waste Audit Data Request:
 Yard Waste

Hi All,

I would say we dumped around 60 tons of material down there this year.

Thank you
 Rob

Hi Safa,
 I do NOT have any documentation for the dumping of the yard waste down in the valley. I say approx. 40 – 50 tons of material for 2021. We are planning to have most of that material hauled out in the spring as we are running out of room.

Regards,
 Mark

I. Dafco – Air Filter Recycling



CERTIFICATE OF ENVIRONMENTAL ACHIEVEMENT

Humber College – 205 Humber College Blvd., Toronto, ON

Has taken part in the Filtation Group- IAG Zero Waste & Volume Reduction Program and has returned 1324 filters, representing 802 cubic feet. The total amount of cubic feet sent to landfill in 2021 has been difficult to calculate due to supply chain issues beyond our control.

Filtation Group- IAG will continue to work towards 80% landfill diversion as we move towards local partners.

Filtation Group- IAG congratulates all staff members on the positive impact this initiative has made towards saving our environment to ensure a cleaner future.



PRESENTED BY: Leanne Orosz

ON THIS DAY: January 12, 2022

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 for 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request.*
- *For large construction and demolition projects, please refer to the forms included with "A Guide to Waste Audits and Waste Reduction Work Plans for Construction and Demolition Projects as required Under Ontario Regulation 102/94" (revised July 2008)*

I. General Information

Name of Owner and/or Operator of Entity and Company Name: Humber College			
Name of Contact Person: Lindsay Walker	Telephone #: 416-675-6622	Email Address: Lindsay.Walker@Humber.c a	
Street Address of Entities: North Campus: 205 Humber College Boulevard Lakeshore Campus: 3199 Lakeshore Blvd West			
Municipality: North Campus: Toronto, Ontario Lakeshore Campus: Toronto, Ontario			
Type of Entity (check one)			
Retail Shopping Establishments	<input type="checkbox"/>	Hotels and Motels	<input type="checkbox"/>
Retail Shopping Complexes	<input type="checkbox"/>	Hospitals	<input type="checkbox"/>
Office Buildings	<input type="checkbox"/>	Educational Institutions	<input checked="" type="checkbox"/>
Restaurants	<input type="checkbox"/>	Large Manufacturing Establishments	<input type="checkbox"/>

II. Description of Entity

Provide a brief overview of the entity(ies):
Humber College is an educational institution with approximately 21,963 FTE students which satisfies Part X of Ontario Regulation 102/94 & 103/94. O.Reg. 102/94 requires operators of educational institutions with more than 350 full- or part-time students enrolled during the calendar year to conduct an annual waste audit and implement a waste reduction work plan. O.Reg. 103/94 requires that source separation programs be implemented and maintained for fine papers, newsprint, aluminum cans, steel cans, glass beverage containers and corrugated cardboard. Humber College undertook this audit in order to assist them in reducing wastes generated on campus and/or disposed to landfill, while being in compliance with the required Regulations.

III. How Waste Is Produced and Decisions Affecting the Production of Waste

For each category of waste that is produced at the entity(ies), explain how the waste will be produced and how management decisions and policies will affect the production of waste	
Categories of Waste	How Is the Waste Produced and What Management Decisions/Policies Affect Its Production
PET (#1) Plastic food and beverage bottles	Brought onto campus or generated on campus by staff/students
HDPE (#2) containers	Brought onto campus or generated on campus by staff/students
Polypropylene (#5) Containers	Brought onto campus or generated on campus by staff/students
Polystyrene (#6) Containers	Brought onto campus or generated on campus by staff/students
Glass food and beverage bottles/jars	Brought onto campus or generated on campus by staff/students
Aluminum food and beverage cans	Brought onto campus or generated on campus by staff/students
Steel food and beverage cans	Brought onto campus or generated on campus by staff/students
Gable top containers	Brought onto campus or generated on campus by staff/students
Aseptic containers	Brought onto campus or generated on campus by staff/students
Fine paper	Brought onto campus or generated on campus by staff/students
Newsprint	Brought onto campus or generated on campus by staff/students
Boxboard shoe boxes, cereal boxes, etc.	Brought onto campus or generated on campus by staff/students
Glossy magazines, catalogues, flyers	Brought onto campus or generated on campus by staff/students
Cardboard	Brought onto campus or generated on campus by staff/students
Paper towels	Generated by staff/students on campus
Coffee cups	Brought onto campus or generated on campus by staff/students
Organics/food waste	Brought onto campus or generated on campus by staff/students
LDPE (#4) plastic film	Brought onto campus or generated on campus by staff/students
Styrofoam	Brought onto campus or generated on campus by staff/students
Plastics Strapping	Brought onto campus or generated on campus by staff/students
Scrap Woods/Pallets	Generated by operations on campus
Scrap Metals	Generated by operations on campus
Electronics	Generated by staff/students on campus
Bulbs & Ballasts	Generated by staff/students on campus
Batteries	Generated by staff/students on campus
Printer Toners	Generated by operations on campus
Oil & Grease	Generated by operations on campus
Yard Wastes	Generated by operations on campus

Used Furniture Donations	Generated by operations on campus
Air filters	Generated by operations on campus
Construction & Demolition	Generated by operations on campus
Carpet	Generated by operations on campus
Other/Non-recyclable	Generated by staff/students on campus
PPE	Generated by staff/students on campus
Pens and Pencils	Generated by staff/students on campus

IV. Management of Waste

For each category of waste listed below, indicate which waste items will be disposed or reused/recycled and how each item will be managed at the entity(ies).		
Category	Waste to be Disposed	Reused or Recycled Waste
PET (#1) Plastic food and beverage bottles	Staff/students may place in garbage	Staff/students may place in recycling containers
HDPE (#2) containers	Staff/students may place in garbage	Staff/students may place in recycling containers
Polypropylene (#5) Containers	Staff/students may place in garbage	Staff/students may place in recycling containers
Polystyrene (#6) Containers	Staff/students may place in garbage	Staff/students may place in recycling containers
Glass food and beverage bottles/jars	Staff/students may place in garbage	Staff/students may place in recycling containers
Aluminum food and beverage cans	Staff/students may place in garbage	Staff/students may place in recycling containers
Steel food and beverage cans	Staff/students may place in garbage	Staff/students may place in recycling containers
Gable top containers	Staff/students may place in garbage	Staff/students may place in recycling containers
Aseptic containers	Staff/students may place in garbage	Staff/students may place in recycling containers
Fine paper	Staff/students may place in garbage	Staff/students may place in recycling containers
Newsprint	Staff/students may place in garbage	Staff/students may place in recycling containers
Boxboard shoe boxes, cereal boxes, etc.	Staff/students may place in garbage	Staff/students may place in recycling containers
Glossy magazines, catalogues, flyers	Staff/students may place in garbage	Staff/students may place in recycling containers
Cardboard	Staff/students may place in garbage	Staff/students may place in recycling containers
Paper towels	Staff/students may place in garbage	Staff/students may place in recycling containers
Coffee cups	Staff/students may place in garbage	Staff/students may place in recycling containers
Organics/food waste	Staff/students may place in garbage	Staff/students may place in recycling containers
LDPE (#4) plastic film	Staff/students may place in garbage	Staff/students may place in recycling containers
Styrofoam	Staff/students may place in garbage	No recycling program implemented
Plastics Strapping	Staff/students may place in garbage	No recycling program implemented

Scrap Woods/Pallets	Staff/students may place in garbage	Staff may place in recycling containers
Scrap Metals	Staff/students may place in garbage	Staff may place in recycling containers
Electronics	Staff/students may place in garbage	Staff/students may place in recycling containers
Bulbs & Ballasts	Staff/students may place in garbage	Staff may place in recycling containers
Batteries	Staff/students may place in garbage	Staff/students may place in recycling containers
Printer Toners	Staff/students may place in garbage	Staff/students may place in recycling containers
Oil & Grease	Staff may place in garbage	Staff may place in recycling containers
Yard Wastes	Staff may place in garbage	Staff may place in recycling containers
Used Furniture Donations	Staff may place in garbage	Staff may place in recycling containers
Air filters	Staff may place in garbage	Staff may place in recycling containers
Construction & Demolition	Staff may place in garbage	Staff may place in recycling containers
Carpet	Staff may place in garbage	Staff may place in recycling containers
Other/Non-recyclable	Staff/students may place in garbage	Not applicable
PPE	Staff/students may place in garbage	Staff/students may place in Terracycle container
Pens and Pencil	Staff/students may place in garbage	Staff/students may place in Pen recycling container

V. Extent to Which Materials or Products Used or Sold By the Entity Consist of Recycled or Reused Materials or Products

Please answer the following questions:

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.

Humber College’s [Purchasing Policy](#) has the following language to promote sustainability: “Humber shall incorporate sustainability standards, social responsibility and fair labor practices into the procurement practices as appropriate, and give favorable consideration in its evaluation process to those goods and services that reflect this commitment.”

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.

Humber College’s Social Procurement Committee is working on developing a Social Procurement procedure that prioritizes the purchasing of diverse (owned, operated, and controlled), local, and sustainable businesses. The committee is working collaboratively with other post-secondary institutions and the City of Toronto to establish criteria for the recycling and reuse of materials.

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

Ministry of the Environment Waste Form

Report of a Waste Reduction Work Plan

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 a copy 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 and Company Name: Humber College			
Name of Contact Person: Lindsay Walker		Telephone #: 416-675-6622	Email Address: Lindsay.Walker@Humber.ca
Street Address of Entities: North Campus: 205 Humber College Boulevard Lakeshore Campus: 3199 Lakeshore Blvd West			
Municipality: North Campus: Toronto, Ontario Lakeshore Campus: Toronto, Ontario			
Type of Entity (check one)			
Retail Shopping Establishments	<input type="checkbox"/>	Hotels and Motels	<input type="checkbox"/>
Retail Shopping Complexes	<input type="checkbox"/>	Hospitals	<input type="checkbox"/>
Office Buildings	<input type="checkbox"/>	Educational Institutions	<input checked="" type="checkbox"/>
Restaurants	<input type="checkbox"/>	Large Manufacturing Establishments	<input type="checkbox"/>

II. Description of the Entity

Provide a brief overview of the entity(ies):
Humber College is an educational institution with approximately 21,963 FTE students which satisfies Part X of Ontario Regulation 102/94 & 103/94. O.Reg. 102/94 requires operators of educational institutions with more than 350 full- or part-time students enrolled during the calendar year to conduct an annual waste audit and implement a waste reduction work plan. O.Reg. 103/94 requires that source separation programs be implemented and maintained for fine papers, newsprint, aluminum cans, steel cans, glass beverage containers and corrugated cardboard. Humber College undertook this audit in order to assist them in reducing wastes generated on campus and/or disposed to landfill, while being in compliance with the required Regulations.

III. Plans to Reduce, Reuse and Recycle Waste

<p>For each category of waste described in Part V of “Report of a Waste Audit” (on which this plan is based), explain what your plans are to Reduce, Reuse and Recycle the waste, including: 1) how the waste will be source separated at the establishment, and 2) the programs to reduce, reuse and recycle all source separated waste.</p>	
<p>Waste Category (as stated in Part V of your “Report of a Waste Audit”)</p>	<p>Source Separation and 3Rs Program</p>
<p>Mixed Containers (PET, HDPE, LDPE, PP, PS, Aluminum, Steel, Glass, Aseptic)</p>	<p>Comingled 3Rs Program Reduce: Staff/students will be encouraged to bring reusable containers food/beverage containers for lunch and breaks. Humber College will encourage suppliers to reduce the amount of polystyrene used to transport supplies. Humber College will encourage suppliers to reduce the amount of plastic film and wrapping materials used to transport supplies. Reuse: Staff/Students will be encouraged to reuse plastic crates and totes wherever possible. Recycle: Staff/Students will be provided with recycling bins in high waste generating areas and food service areas for mixed containers/plastics. Staff/Students will be encouraged to place mixed containers/plastics in appropriate recycling bins with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection as required.</p>
<p>Mixed Papers (Fine paper, newsprint, boxboard, magazines, molded papers, kraft, catalogues, flyers, etc.)</p>	<p>“Mixed Paper 3Rs Program” Reduce: Staff/Students will be encouraged to print on both sides of each piece of paper as well as not print when it is unnecessary. Staff/Students will be encouraged to take reading materials home with them after they are finished with them. Staff and students will be sent, via email, news sources that are available online opposed to purchasing paper copies of news. Reuse: Discarded paper with print only on one side will be used for note pads/scrap paper. Staff/Students will be encouraged to leave newspapers they are finished reading in common areas for others to read. Recycle: Staff/Students will be provided with instructions via email. Receptacles will be provided in each office, classroom and high waste generating areas. Staff/Students will be encouraged to place newsprint, fine paper, boxboard, magazines, molded papers, etc in appropriate recycling receptacles. Staff/Students will empty receptacles into centralized containers. Custodial Staff/Students will empty centralized containers into bulk container in designated area for collection as required.</p>
<p>Confidential papers</p>	<p>“Confidential Paper 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program. Receptacles will be provided in each designated office area as required. Staff/Students will be encouraged to place all confidential paper in the designated consoles. Contactor will empty consoles appropriately for shredding and recycling as required.</p>
<p>Cardboard</p>	<p>“Cardboard 3Rs Program” Reduce: Suppliers will be encouraged to make use of reusable containers for the shipment of supplies to Humber College. Reuse: Cardboard boxes will be reused for shipments when appropriate. Recycle: Staff/Students will be reminded of the existing program. Cleaners will be trained on where to dispose of waste correctly.</p>
<p>Paper towels</p>	<p>“Organics 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded that paper towels can be placed in garbage bins where available.</p>
<p>Organics</p>	<p>“Organics 3Rs Program” Reduce: Students will be encouraged to bring uneaten food items home after lunch breaks or uneaten. Non-perishable food items can be donated to a local food drive.</p>

	<p>Reuse: Staff/Students provided with reusable china in some food service areas.</p> <p>Recycle: Staff/Students will be continually reminded of the existing program.</p> <p>Kitchen staff & cleaners trained on where to dispose of waste correctly.</p> <p>Additional bins added to the university food service areas to capture organic materials. Signs improved relating to organics program to assist staff/students in sorting organic stream correctly. Selling of disposable food containers discouraged on campus, and if sold, containers should be compostable.</p> <p>Updated organics handouts for staff/student education/training program.</p> <p>Training of food service staff regarding improvements to organics program</p>
Coffee cups, LDPE (#4) films, plastic strapping	“Comingled 3Rs Program” – Refer above for description
Styrofoam	No 3Rs programs
Wood pallets/scrap woods	“Wood Pallets 3Rs Program” Reduce: Staff to monitor use of Pallet to eliminate/reduce broken pallets. Reuse: Staff will be reminded of the existing program. Staff/Students will be encouraged to use scrap wood before new wood is purchased for use at the College. Recycle: Staff will be reminded of scrap wood recycling program.
Scrap metals	“Scrap Metals 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff will be reminded of the existing program.
Electronic waste	“Electronic Wastes 3Rs Program” Reduce: None. Reuse: Staff/students will be encouraged to reuse/donate electronic wastes if possible. . Recycle: Staff/Students will be reminded of the existing program, continue collecting for proper recycling of waste materials.
Bulbs and ballasts	“Bulbs & Ballasts 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program.
Batteries	“Batteries 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program.
Printer toners	“Electronic Wastes 3Rs Program” Reduce: None. Reuse: Staff/students will be encouraged to reuse/donate electronic wastes if possible. . Recycle: Staff/Students will be reminded of the existing program, continue collecting for proper recycling of waste materials
Oil & grease	“Oil & Grease 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program.
Yard waste	“Yard Wastes 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program.
Used furniture	“Used Furniture 3Rs Program” Reduce: None. Reuse: Staff/Students will be reminded of the existing program. Recycle: Staff/Students will be reminded of the existing program
Air filter	Staff will be reminded of the existing program with Dafco.
Construction & Demolition	“Construction & Demolition 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program.
Carpet	“Carpet 3Rs Program” Reduce: None. Reuse: None. Recycle: Staff/Students will be reminded of the existing program.
Reusable Containers	Use of Ozzi containers in all campus cafeterias
PPE Recycling	Providing alternative recycling program for PPE – gloves, masks, hair nets, etc.
Textbook for Change	Re-routing textbooks to various under-funded schools and students across the world.
Pen Recycling	Recycling pens and highlighters through Staples and Terracycle, to divert waste.

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 each person is responsible for implementing.		
WasteCO – Paul Welsman	Waste/Garbage, Cardboard, Mixed containers, mixed papers, organics, scrap metals, scrap woods, construction & demolition	416-787-5000
Kevin Viflanzoff	Confidential papers/Shredding, printer toners	416-675-6622
Serge Faria	Electronic Wastes	416-675-6622
Scott Skrinas, Chris Nanos	Fluorescent bulbs & ballasts	416-675-6622
Lindsay Walker	Batteries	416-675-6622
Rebecca Moyal	Used Furniture	416-675-6622
Susan Miller	Oil & grease	416-675-6622
Mark Palenchar and Robert Gray	Yard Waste	416-675-6622
Lindsay Walker/Gobi Perumal	O2GO Containers	416-675-6622
Lindsay Walker/Jem Cain	Textbook for Change	416-675-6622
Lindsay Walker	Pen Recycling	416-675-6622

V. Timetable for Implementing Waste Reduction Work Plan

Provide a timetable indicating when each Source Separation and 3Rs program of the Waste Reduction Work Plan will be implemented.	
Source Separation and 3Rs program	Schedule for Completion
Mixed Containers	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Mixed Papers	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Confidential Papers	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Cardboard	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Organics	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Scrap Wood/Wood Pallets	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Scrap Metals	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Electronic Waste	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered

Bulbs & Ballasts	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Batteries	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Printer Toners	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Oil and Grease	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Yard Wastes	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Used Furniture	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Construction & Demolition	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Carpet	3Rs Program currently in place. Continual improvement to signage and additional promotional campaigns to be considered
Reusable Containers	Currently in place. Improve signage and engagement with students and staff to continue use.
PPE Recycling	Currently in place. Provide this recycling alternative to faculties using PPE, and to custodial staff to divert PPE.
Pen Recycling	Currently in place. Provide more locations for recycling pens and highlighters across all campuses.
Textbook for Change	Currently in place.
Office Bin Reduction Project	Currently in place, and expanding throughout the entire campus.
Program Specific Sorting Guides	Not currently in place, pilot program in culinary program, project should take form in the next 2 years.
Custodial Staff Waste Training	Currently in place and is presented annually as staff training.
Waste Training for Humber Staff (Support Staff)	Not currently in place, but could take form in the next year.
Waste Training for Faculty Members	Not currently in place, but could take form in the next 2 years.
Residence Move-Out	Not currently in place, but could pilot in the next year.

VI. Communication to Staff, Customers, Guests and Visitors

Explain how the Waste Reduction Work Plan will be communicated to employees, customers, tenants, guests/visitors and students:

Explain how the Waste Reduction Work Plan will be communicated to employees, customers, tenants, guests/visitors and students. Sustainability committee will review and develop a work plan to be posted on campus for staff and students. Additional promotional campaigns will also be considered to target specific audiences for specific programs. Continue to improve educational materials (hand-outs, flyers) and signage across campus as required.

I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct.

Signature of authorized official:

Title:

Date: