



**Unity Health Toronto Waste Audit Report
St. Michael's Hospital**

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Executive Summary

Waste Reduction Group Inc. (WRG) was retained by Unity Health Toronto to conduct a solid non-hazardous waste audit for their facility operations within the St. Michael's Hospital. The waste audit was conducted in compliance with the Environmental Protection Act, O.Reg. 102/94, Waste Audits and Waste Reduction Work Plans, specifically Part VI (Office Buildings) and O.Reg. 103/94, Industrial, Commercial and Institutional Source Separation Program.

The audit included an onsite waste characterization study to determine the waste composition by point of origin and the quantification of the annual waste generation and waste diversion rates. Waste samples from the Garbage and Recycling streams were collected from St. Michael's Hospital. Samples were sorted into predetermined categories and the results of the audit are detailed in this report. Waste samples were collected over a 24-hour period between March 28th, 2021 and March 29th, 2021. All waste audit activities were conducted between March 30th, 2021 and April 1st, 2021 at the Millennium Transfer Station located in Oakville, Ontario.

St. Michael's Hospital is a community teaching hospital located at 30 Bond Street, in Toronto, Ontario. The hospital is comprised of a central building well as a secondary building named the Peter Gilgan Tower. The total area of the hospital 1,709,057ft. The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year.

Currently, the following waste streams and diversion programs are in place at the hospital: Garbage (landfill) stream, Comingled Recycling Program, Organics Diversion program, Lamps Recycling, Scrap Metals Recycling, E-Waste Recycling, Battery Recycling, and Pallet Recycling. Waste receptacles are emptied out by Unity Health Toronto staff and placed into compactors, front-end containers, or totes that are picked up by their respective waste service provider.

This waste audit determined that a total of 642.00 tonnes of waste was generated during the one-year reporting period. Of this amount, 63.24% can be attributed to the Garbage stream (406.00 tonnes) and 20.91% can be attributed to the Recycling stream (134.25 tonnes). The remaining waste was disposed into the Organics stream (8.19%), the WEEE stream (0.31%), and the Operational Waste stream (7.34%) which includes recycling for Lamps, Scrap Metals, Batteries, and Pallets. The hospital's waste diversion rate was determined to be 30.24%.

An in-depth analysis of the Garbage and Recycling streams was also conducted. It was determined that 48% of the Garbage stream was composed of divertible Recyclables (24%), Organics (25%), and WEEE (0.12%). The remainder of the Garbage stream included MHSW (32%) and Non-Recyclable Garbage (20%). The overall diversion rate for the Garbage and Recycling streams for all hospital wings was determined to be 17.17%.

In the Recycling stream, the majority of materials were determined to be Recyclables (69%) whereas the remainder of the stream was composed of Organics (4%), WEEE (1%), MHSW (18%), and Non-Recyclable Garbage (8%). The Recycling stream was found to have an overall contamination rate of 30.90%.

The following recommendations are proposed:

- Continue to maintain waste diversion programs for aluminum, corrugated cardboard, fine paper, newsprint, steel food or beverage cans, and glass bottles and jars, assuming the materials are generated on-site in sufficient quantities.

- Conduct continuous monitoring and reporting for this hospital on a yearly basis through annual waste audits to maintain adherence to regulatory requirements.
- Continue to increase awareness of existing diversion programs through employee and cleaner education. Such programs can include an introduction to waste management and diversion during all staff onboarding/orientation sessions as well as the placement of informative posters in strategic locations around the building. Staff should evaluate, improve, and expand the waste reduction systems in their own areas. Management can be encouraged to actively seek out opinions and ideas from employees/sanitation staff on issues relating to recycling or diversion programs.
- Invest in efforts to promote the existing WEEE and operational wastes diversion programs including those for E-Waste Recycling, Lamp Recycling, Scrap Metals Recycling, Battery Recycling, and Pallet Recycling.
- It is recommended that Unity Health Toronto continue to increase awareness regarding appropriate waste disposal into each waste stream among all staff, employees, and visitors. Training can be provided during employee onboarding or through regular communications such as through a newsletter or campaign.
- Equip each generation point with appropriately marked waste receptacles with easy-to-follow signage. Signs and labels must contain language and visuals easily understood by any staff or visitor regardless of age or language proficiency.
- It is recommended that waste generation areas that typically generate MHSW, such as an operating room, inpatient room, or surgery room, use clear plastic bags. This way, sanitation staff can easily distinguish if bags contain MHSW and need to be discarded through a hazardous waste stream, or if bags contain only solid non-hazardous waste and can be discarded through the Garbage stream.
- Provide easy access to contact information for help with questions regarding the recycling and waste diversion programs. These programs should have as much consistency as possible across all Unity Health Toronto buildings.
- Conduct a full review of other possible reduction/reuse/recycle programs that may be implemented on-site that are not documented in this report.
- Ensure that the Unity Health Toronto's Environmental Policy and clearly visible in common areas throughout the hospital and emphasize commitment to environmental stewardship in its newsletters, brochures, annual reports, and contracts.
- Support and encourage the purchase and use of "environmentally friendly", reusable, recyclable, or compostable materials and packaging, and/or those that contain recycled content.
- Ensure that the waste diversion programs have the full support of the Unity Health Toronto management team.

1. Introduction

Waste Reduction Group Inc. (WRG) was retained by Unity Health Toronto to conduct a solid non-hazardous waste audit for their facility operations within the St. Michael's Hospital. The waste audit was conducted in compliance with the Environmental Protection Act, O.Reg. 102/94, Waste Audits and Waste Reduction Work Plans, specifically Part VI (Office Buildings) and O.Reg. 103/94, Industrial, Commercial and Institutional Source Separation Program.

The audit included an onsite waste characterization study to determine the waste composition by point of origin and the quantification of the annual waste generation and waste diversion rates. Waste samples from the Garbage and Recycling streams were collected over a period of 24 hours from each hospital wing of St. Michael's Hospital. All waste samples included in this audit are assumed to be representative of the current waste management systems in place. Samples were sorted into predetermined categories and the results of the audit are detailed in this report.

1.1. Objectives

This waste audit was conducted to meet the following objectives:

- Comply with Ontario Regulation 102/94 – Waste Audits and Waste Reduction Work Plans Part VI, which requires large office environments to conduct a waste audit covering the waste generated by the establishment operating at the site (refer to Appendix A for a partial excerpt from the Regulation);
- Confirm compliance with Ontario Regulation 103/94 – IC&I Source Separation Programs (refer to Appendix A for a partial excerpt from the Regulation);
- Review current waste management practices and suggest improvements;
- Determine the annual waste generation of the Garbage stream for the reporting period of the calendar year 2020;
- Identify and quantify the composition the Garbage and Recycling streams;
- Identify opportunities for additional waste reduction and diversion;
- Manage risk and demonstrate responsible operations to the community; and
- Address any specific concerns or opportunities identified during the study.

1.2. Scope of Work

1.2.1. Sorting Location and Dates

All samples included in this audit were collected over a 24h period between March 28th and March 29th, 2021. Samples were delivered to Millennium Transfer Station located at 2440 Beryl Road, Oakville, Ontario, L6J 7X4.

All sorting activities were conducted at the Millennium Transfer Station between March 30th, 2021 to April 1st, 2021.

1.2.2. Facility Description

St. Michael's Hospital is a teaching hospital and medical center located at 30 Bond Street, in Toronto, Ontario. The facility is comprised of a central building containing four distinct hospital wings and the Peter Gilgan Tower in a separate building (Figure 1). The total area of the hospital is 1,709,057ft². The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year.

The hospital employs 10,576 staff, medical staff, medical trainees, and health professional learners. The hospital provides a variety of medical services including:

- Chiropody
- Chiropractic
- Coronary Care Unit
- Critical Care
- Diabetes Comprehensive Care
- Vitreoretinal Surgery
- Inner City Health
- Neurology and Musculoskeletal Disorders
- Obstetrics and Gynecology
- Pediatrics
- Psychiatry
- Specialized Complex Care
- General Surgery and Acute Care Surgery
- Advanced Colorectal Surgery
- Complex Surgical Oncology
- Breast Surgery
- Minimally Invasive Surgery
- Therapeutic Endoscopy

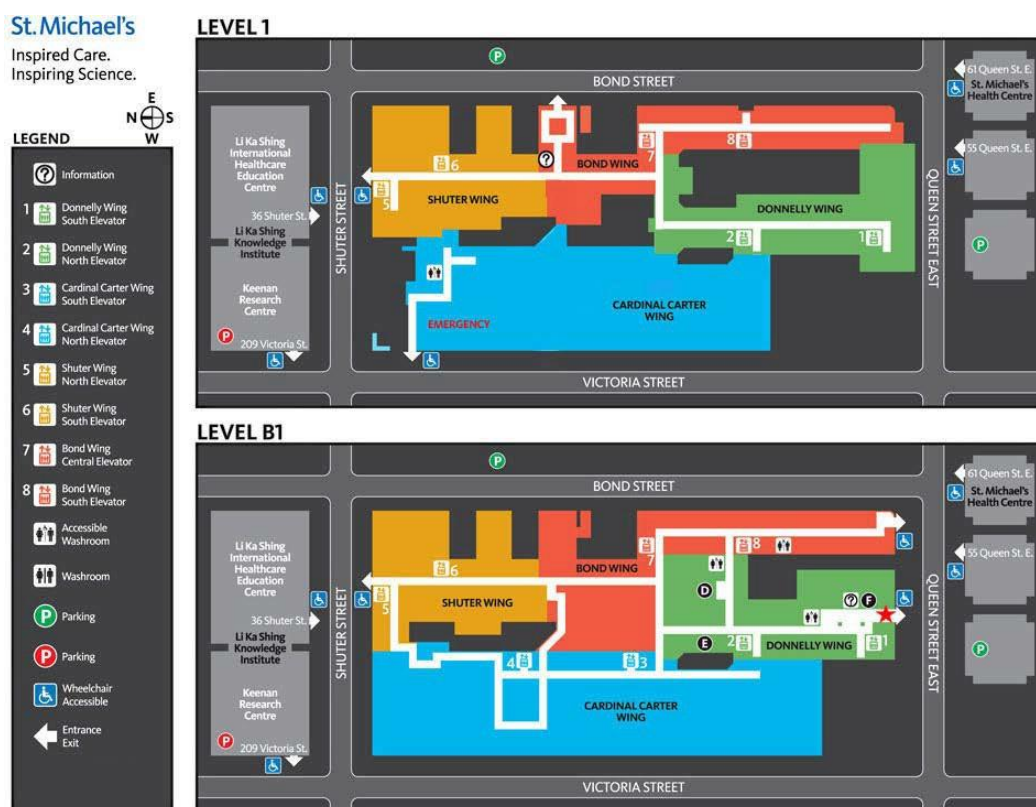


Figure 1: Aerial map of St. Michael's Hospital. The distinct hospital wings are labelled and distinguished by different colours.

For the purposes of this audit, waste samples were collected from each of the four distinct hospital wings (Bond, Shuter, Donnelly, and Cardinal Carter) and the Peter Gilgan Tower. Each hospital wing comprised of 10 floors and several generation points.

Table 1: Generation points within St. Michael's Hospital

Hospital Wing	Generation Points
Bond	Floors B1 – 8
Shuter	Floors B1 – 6
Donnelly	Floors B2 – 10
Cardinal Carter	Floors B2 – 17
Peter Gilgan Tower	Floors B2 – 17

2. Waste Program Description

2.1. Current Waste Streams and Diversion Programs

Unity Health Toronto currently has several waste streams and waste diversion programs implemented at the St. Michael's Hospital. These waste streams and diversion programs, along with their service providers, are described in Table 2, below.

Table 2: Waste streams and diversion programs currently in place, along with a brief description and service provider.

Waste Stream or Diversion Program	Description of waste	Service Provider
Garbage (Landfill) Waste Stream	Non-recyclable waste materials that are destined for landfill disposal.	Waste Management
Comingled Recycling Program	Materials that can be recycled in a Material Recovery Facility. Items are composed of paper/fibre, boxboard, cardboard, glass, metals, or plastics.	Waste Management
Organics Diversion Program	Food and non-food organic waste that can be composted through industrial composting	Waste Management
Lamps Recycling Program	Hazardous lighting fixtures.	Aevitas Inc.
Scrap Metals Recycling Program	Miscellaneous scrap metals that cannot be processed through the Comingled Recycling Program.	G.B. Scrap Metals LTD.
E-Waste Recycling Program	Waste from electronic / electrical equipment that are not recyclable through the Comingled Recycling Program.	G.B. Scrap Metals LTD.
Battery Recycling Program	Single-use and dry-cell batteries.	G.B. Scrap Metals LTD.
Pallet Recycling Program	Wooden skids / equipment used in the shipping and delivery process.	Pam Pallets.

2.2. Current Waste Handling Processes

Each generation point is equipped with waste receptacles designated for the Garbage, Comingled Recycling, and Organics streams (Figure 2). Receptacles are emptied by Unity Health Toronto staff on a daily basis. Staff members remove bags from the receptacles, tie them off, and place

them into a rolling bin that is then rolled off to the waste disposal area. At the waste disposal area, bags of waste are disposed into the compactors, front-end bins, and totes appropriate for that waste stream. Service providers empty out the compactors, front-end bins, and totes through picking up the material.

Figure 2: The waste management system within the hospital includes a Garbage, Comingled Recycling, and Organics receptacle set up.

Adequate signage is provided on the receptacles to educate staff and visitors of proper waste disposal. Figure 3 below is an example of an educational campaign poster distributed within the hospital.



Figure 3: Educational campaign poster created for and distributed within St. Michael's Hospital.

2.3. Waste Services Providers and Schedules

Unity Health Toronto employs several service providers for a variety of waste hauling and recycling services including the following:

- The Garbage (Landfill) waste stream is serviced by Waste Management. Unity Health Toronto staff place waste into a 35-yard compactor that is emptied by Waste Management 9 to 17 times per month and/or into a 20-yard compactor that is emptied 3 to 11 times per month, and/or a 40-yard compactor that is emptied 5 to 10 times per month.
- The Comingled Recycling waste stream is serviced by Waste Management. Unity Health Toronto staff place waste into a 35-yard compactor that is emptied by Waste Management 8 to 14 times per month.
- The Organics waste stream is serviced by Waste Management. Unity Health Toronto staff place waste into fifteen 35-gallon totes that are emptied by Waste Management on an on-call basis.
- The Lamps Recycling program is serviced by Aevitas Inc.
- The Scrap Metal Recycling program is serviced by G.B. Scrap Metals LTD.
- The E-Waste Recycling program is serviced by G.B. Scrap Metals LTD.
- The Battery Recycling program is serviced by G.B. Scrap Metals LTD.
- The Pallet Recycling program is serviced by Pam Pallets.

3. Audit Methodology

3.1. Sample Collection Procedure

The samples included in this audit were collected by members of the Unity Health Toronto sanitation team over a 24-hour period between March 28th, 2021 and March 29th, 2021. These samples include waste that are representative of the waste typically generated in a single day at the facility. All samples were delivered to the sorting location.

3.2. Waste Sorting Requirements

The WRG team met the following requirements for all waste auditing activities:

- All equipment, including bins, tables, PPE, and scales, were provided by WRG;
- Prior to weighing, WRG staff ensured that the scale was appropriately calibrated in order to obtain an accurate reading of the material weight;

All equipment and resources were provided by WRG prior to the scheduled date of on-site audits. These equipment include:

- Personal Protective Equipment for each WRG staff member. This includes heavy-duty puncture resistant gloves, safety footwear, high-visibility safety vests, safety glasses, protective coveralls, ear plugs, and air-filter safety masks;
- A sharps container for storing all hazardous and/or sharp material (e.g. needles, syringes, lancets, etc.);
- Worktables on which to sort the sample material;
- Leak proof containers to use for storing and weighing sorted material;
- Cleaners and sanitary equipment necessary for cleaning the sort area and maintaining cleanliness including hand sanitizers, hand soap, broom, dustpan, scissors, and cleaning cloths;
- An electronic weighing scale which has been certified by Weights and Measures Canada and is capable of measuring from 0.01kg to at least 60kg. WRG ensured that the scale was of sufficient accuracy to provide weight measurements within plus or minus one percent of true weight.

3.3. Waste Sorting Procedure

All waste sorting activities were completed on March 30th, 2021 to April 1st, 2021. All sorting activities were conducted by a team of WRG staff, led by the Lead Waste Auditor. Once all the samples were delivered to the sorting area, the WRG team segregated the garbage samples from the recycling samples, and matched samples that were obtained from the same generation point - distinguishable by labels. The team sorted samples one generation point at a time and one sample at a time. The pre-sort weight of each sample was collected.

To sort a sample, the WRG team placed the sample atop the sorting table and cut the bag open with a pair of scissors. The team then proceeded to identify and categorize each piece of waste within the bag into the predetermined material categories. The WRG team allocated one sorting container for each of the material categories present in the sample. Once all contents of the sample were sorted, the team then proceeded to weigh each container and record the weight of each container/category into an electronic datasheet.

A list of the material categories used can be found in Appendix B: Material Categories. The material categories can be categorized into the following:

- Recyclable (Paper, Boxboard, Cardboard)

- Recyclable (Glass, Metals, Plastics)
- Organics (Non-Food and Food Waste)
- Waste from Electrical and Electronic Equipment (WEEE)
- Municipal Hazardous or Special Waste (MHSW)
- Operational Wastes
- Non-Recyclable/Garbage (Landfill Waste)

4. Results and Analysis

4.1. Annual Waste Generation

It is estimated that St. Michael's Hospital generated a total of **642.00 tonnes of waste** during the reporting period. Of this amount, 63.24% can be attributed to the Garbage stream (406.00 tonnes) and 20.91% can be attributed to the Recycling stream (134.25 tonnes). The remaining waste was disposed into the Organics stream (8.19%), the WEEE stream (0.31%), and the Operational Waste stream (7.34%) which includes recycling for Lamps, Scrap Metals, Batteries, and Pallets. This information is summarized in Table 3, below.

Table 3: Annual waste generation at St. Michael's Hospital.

Waste Stream	Service Provider	Total Waste Generated (tonnes)	Composition (%)
Garbage	Waste Management	406.00	63.24%
Comingled Recycling	Waste Management	134.25	20.91%
Organics	Waste Management	52.58	8.19%
Lamp Recycling	Aevitas	0.50	0.08%
Scrap Metal Recycling	GB Scrap Metal LTD	5.22	0.81%
E-Waste Recycling	GB Scrap Metal LTD	2.02	0.31%
Battery Recycling	GB Scrap Metal LTD	1.47	0.23%
Pallet Recycling	Pam Pallets	39.96	6.22%
Total		642.00	100.00%

4.2. Waste Diversion Rate

The waste diversion rate is the percentage of waste materials that are diverted away from landfill through programs like the Unity Health's Recycling or Organics programs. For the purposes of this waste audit, the diversion rate was calculated using the following formula:

$$\text{Diversion Rate} = \frac{\text{Total Waste Diverted from Landfill (tonnes/yr)}}{\text{Total Waste Generated (tonnes/yr)}} * 100$$

For the purposes of this waste audit, the Total Waste Diverted from Landfill includes all waste streams in which materials were recycled, composted, or otherwise reused rather than sent to a landfill to be disposed of. The Total Waste Generated includes all waste streams, including all waste streams diverted from landfill as well as the Garbage waste stream that is destined for landfill disposal.

Based on the available data from all waste streams, the diversion rate for the Unity Health St. Michael's Hospital was determined to be **30.24%**. Table 4 below summarizes this data.

Table 4: The waste generation per stream was determined along with the total waste generation and diversion rate.

Stream	Garbage	Recycling	Organics	Operational Recycling	All Streams	Diversion Rate
Recyclables (Paper, Boxboard, Cardboard)	54.48	66.53	-	-	121.01	30.24%
Recyclables (Glass, Metals, Plastic)	41.15	25.87	-	-	67.02	
Organics	99.85	4.79	52.58	-	157.22	
WEEE	0.49	1.82	-	2.02	4.32	
MHSW	130.19	23.91	-	-	154.10	
Operational Wastes	0.00	0.00	-	47.15	47.15	
Non-Recyclable/Garbage	79.84	11.33	-	-	91.17	
Total	406.00	134.25	52.58	49.17	642.00	

4.3. Analysis of the Garbage and Recycling Streams

An in-depth analysis of the Garbage and Recycling streams was conducted, and the results obtained are presented in the following tables and figures. This audit determined that St. Michael's Hospital generated 559.53 tonnes of the Garbage stream and 144.18 tonnes of the Recycling stream, for a total of 703.72 tonnes of waste during the reporting period of 2020. Table 5, below, provides a breakdown of the waste generation for each hospital wing.

Table 5: The Annual Waste Generation was determined for the Garbage and Recycling streams.

Hospital Wing	Annual Garbage Generation (tonnes/yr)	Annual Recycling Generation (tonnes/yr)	Total Waste Generation (tonnes/yr)
Bond	32.05	10.81	42.85
Shuter	40.90	13.52	54.41
Donnelly	23.67	8.75	32.42
Cardinal Carter	289.11	94.43	383.53
Peter Gilgan Tower	20.28	6.76	27.03
Total	406.00	134.25	540.25

4.3.1. Waste Composition of the Bond Hospital Wing

The Bond hospital wing was determined to generate 32.05 tonnes/yr of Garbage stream material and 10.81 tonnes/yr of Recycling stream material. Table 6 and Figure 4 shows a detailed breakdown of the composition of the Garbage and Recycling streams.

The Garbage stream was found to contain Recyclables (23.77%), MHSW (31.23%), Organics (28.31%), and Non-Recyclable Garbage (16.69%). It was determined that 47.92% of the Garbage stream was composed of Non-Recyclable Garbage. Overall, divertible materials made up 52.08% of the entire stream.

The large portion of the Recycling stream was determined to be Recyclable (72.98%), while the remainder of the stream was composed of MHSW (16.48%), Non-Recyclable Garbage (8.54%), and Organics (1.99%). 74.97% of the stream was determined to be recyclable.

Table 6: Composition breakdown of the Garbage and Recycling streams for the Bond hospital wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	3.89	12.13%	6.05	55.99%
Recyclables (Glass, Metals, Plastic)	3.73	11.64%	1.84	16.99%
Organics	9.07	28.31%	0.22	1.99%
WEEE	0.00	0.00%	0.00	0.00%
MHSW	10.01	31.23%	1.78	16.48%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	5.35	16.69%	0.92	8.54%
Total	32.05	100.00%	10.81	100.00%
Total Divertible Materials (Recyclables + Organics)	16.69	52.08%	8.10	74.97%
Recyclables	7.62	23.77%	7.89	72.98%
Organics	9.07	28.31%	0.22	1.99%
WEEE	0.00	0.00%	0.00	0.00%
Total Non-Divertible Waste Materials	15.36	47.92%	2.70	25.03%
Total	32.05	100.00%	10.81	100.00%

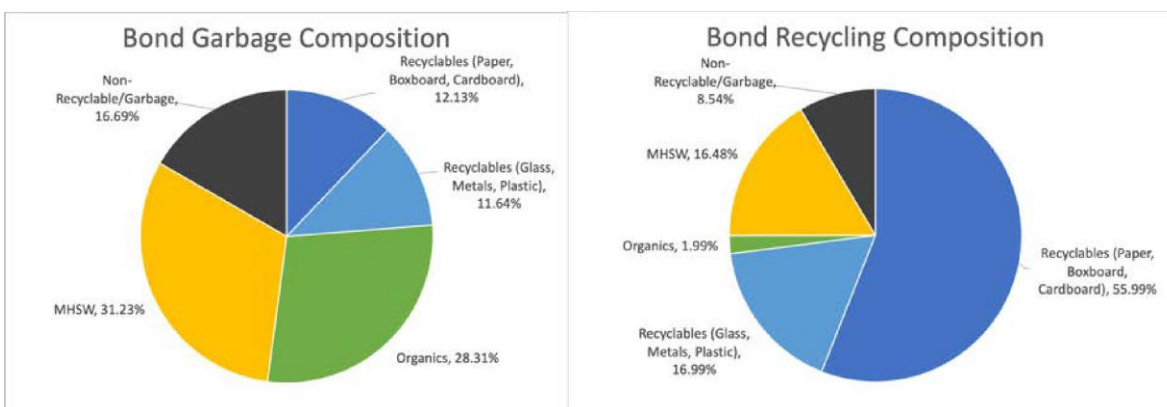


Figure 4: The composition of the Garbage (left) and Recycling (right) waste streams were determined for the Bond hospital wing.

4.3.2. Waste Composition of the Shuter Hospital Wing

The Shuter hospital wing was determined to generate 40.90 tonnes/yr of Garbage and 13.52 tonnes/yr of Recycling. A summary of the composition is presented in Table 7 and Figure 5.

The Garbage stream was found to contain a large amount of MHSW (34.18%) and Recyclables (26.27%). The remaining material was comprised of Organics (20.71%) and Non-Recyclable Garbage (18.83%). It was determined that 46.99% of the entire Garbage stream was divertible.

The Recycling stream was found to be composed mostly of Recyclables (70.70%) and also contained MHSW (17.99%), Non-Recyclable Garbage (5.81%), Organics (3.78%), and WEEE (1.73%). Overall, 76.21% of the Recycling stream was determined to be divertible.

Table 7: Composition breakdown of the Shuter hospital wing Garbage and Recycling streams.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	5.88	14.38%	6.22	45.99%
Recyclables (Glass, Metals, Plastic)	4.87	11.90%	3.34	24.71%
Organics	8.47	20.71%	0.51	3.78%
WEEE	0.00	0.00%	0.23	1.73%
MHSW	13.98	34.18%	2.43	17.99%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	7.70	18.83%	0.78	5.81%
Total	40.90	100.00%	13.52	100.00%
Total Divertible Materials (Recyclables + Organics)	19.22	46.99%	10.30	76.21%
Recyclables	10.75	26.27%	9.56	70.70%
Organics	8.47	20.71%	0.51	3.78%
WEEE	0.00	0.00%	0.23	1.73%
Total Non-Divertible Waste Materials	21.68	53.01%	3.22	23.79%
Total	40.90	100.00%	13.52	100.00%

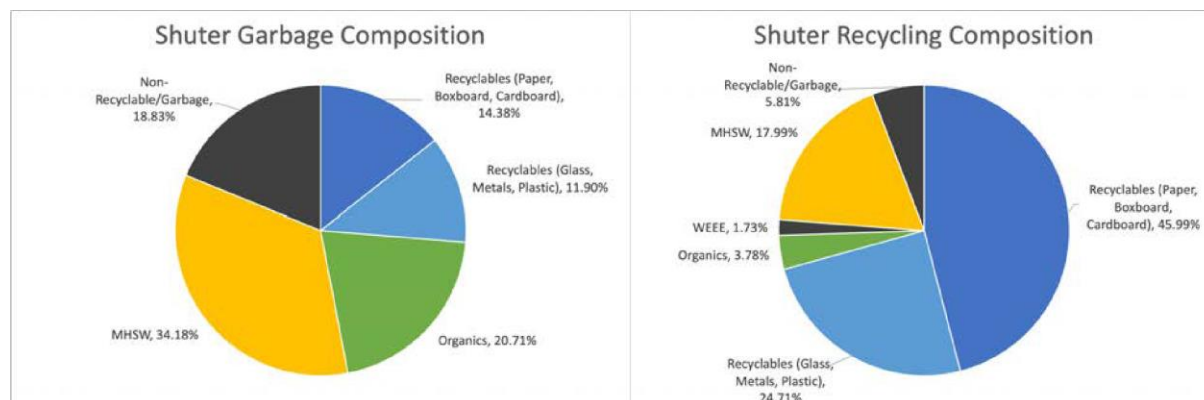


Figure 5: The composition of the Garbage (left) and Recycling (right) streams were determined for the Shuter hospital wing.

4.3.3. Waste Composition of the Donnelly Hospital Wing

The Donnelly hospital wing generated 32.42 tonnes/yr of Garbage and 8.75 tonnes/yr of Recycling. Table 8 Figure 6 summarizes the composition of each waste stream.

The Garbage stream was determined to be composed of MHSW (33.25%), Recyclables (23.64%), Organics (23.61%), Non-Recyclable Garbage (17.44%), and WEEE (2.05%). Divertible materials comprised almost half (49.31%) of the Garbage stream.

In the Recycling stream, it was determined that the 79.27% was composed of divertible materials, with 77.43% of the entire stream as Recyclables and 1.84% as Organics. Also present were Non-Recyclable Garbage (5.55%) and MHSW (15.19%).

Table 8: Composition breakdown of the Garbage and Recycling streams for the Donnelly hospital wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	2.68	11.30%	5.11	58.41%
Recyclables (Glass, Metals, Plastic)	2.92	12.34%	1.66	19.02%
Organics	5.59	23.61%	0.16	1.84%
WEEE	0.49	2.05%	0.00	0.00%
MHSW	7.87	33.25%	1.33	15.19%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	4.13	17.44%	0.49	5.55%
Total	23.67	100.00%	8.75	100.00%
Total Divertible Materials (Recyclables + Organics)	11.67	49.31%	6.94	79.27%
Recyclables	5.60	23.64%	6.77	77.43%
Organics	5.59	23.61%	0.16	1.84%
WEEE	0.49	2.05%	0.00	0.00%
Total Non-Divertible Waste Materials	12.00	50.69%	1.81	20.73%
Total	23.67	100.00%	8.75	100.00%

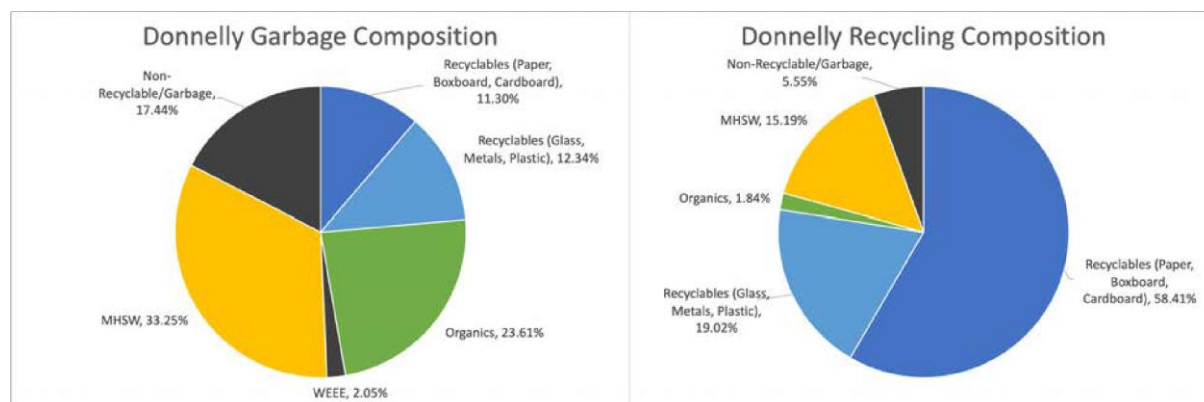


Figure 6: The composition of the Garbage (left) and Recycling (right) streams were determined for the Donnelly hospital wing.

4.3.4. Waste Composition of the Cardinal Carter Hospital Wing

The Cardinal Carter hospital wing was determined generate 289.11 tonnes/yr of Garbage and 94.43 tonnes/yr of Recycling. Table 9 Figure 7 summarize this information.

Less than half (48.13%) of the Garbage stream was determined to be composed of divertible materials including Recyclables (22.76%) and Organics (25.37%). The remainder of the stream was determined to be comprised of MHSW (31.84%) and Non-Recyclable Garbage (20.03%).

The Recycling stream was observed to contain 73% of divertible Recyclables (67.41%) and Organics (4.06%). Also observed were MHSW (18.28%) and Non-Recyclable Garbage (8.73%).

Table 9: Composition breakdown of the Garbage and Recycling streams for the Cardinal Carter hospital wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	38.46	13.30%	45.44	48.12%
Recyclables (Glass, Metals, Plastic)	27.32	9.45%	18.22	19.29%
Organics	73.35	25.37%	3.84	4.06%
WEEE	0.00	0.00%	1.44	1.52%
MHSW	92.05	31.84%	17.26	18.28%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	57.91	20.03%	8.24	8.73%
Total	289.11	100.00%	94.43	100.00%
Total Divertible Materials (Recyclables + Organics)	139.14	48.13%	68.93	73.00%
Recyclables	65.79	22.76%	63.65	67.41%
Organics	73.35	25.37%	3.84	4.06%
WEEE	0.00	0.00%	1.44	1.52%
Total Non-Divertible Waste Materials	149.97	51.87%	25.50	27.00%
Total	289.11	100.00%	94.43	100.00%

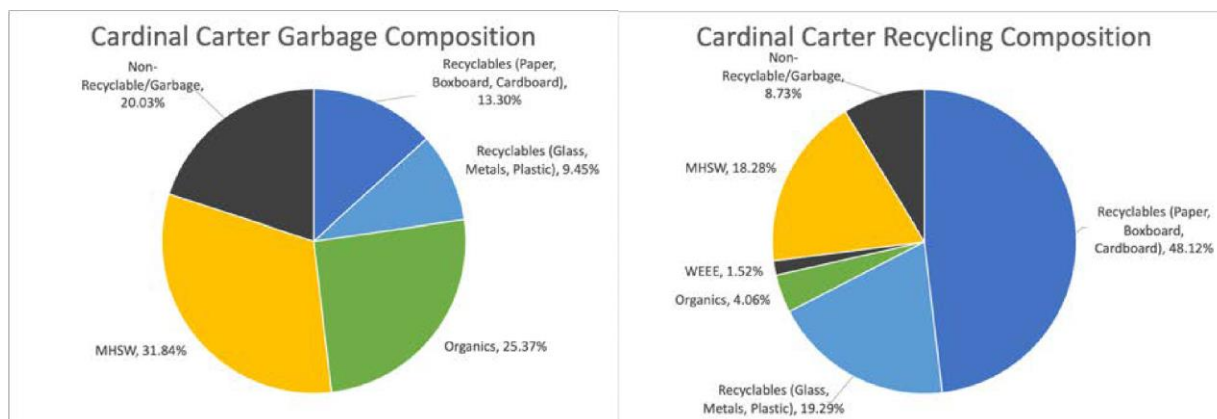


Figure 7: The composition of the Garbage (left) and Recycling (right) streams were determined for the Cardinal Carter hospital wing.

4.3.5. Waste Composition of the Peter Gilgan Tower

The Peter Gilgan Tower was determined to generate 20.28 tonnes/yr of Garbage and 6.76 tonnes/yr of Recycling. Table 10 and Figure 8 below provide a detailed breakdown of both.

The Garbage stream was observed to contain a large amount of MHSW (30.98%) as well as Recyclables (29.00%). The stream was also observed to contain 23.42% of Non-Recyclable Garbage and 16.60% of Organics.

The Recycling stream was observed to contain 75.63% of divertible materials including Recyclables (72.50%), Organics (1.51%), and WEEE (1.62%). Non-divertible materials included MHSW (16.48%) and Non-Recyclable Garbage (7.89%).

Table 10: Composition breakdown of the Garbage and Recycling streams for the Peter Gilgan Tower.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	3.57	17.61%	3.72	55.05%
Recyclables (Glass, Metals, Plastic)	2.31	11.40%	1.18	17.45%
Organics	3.37	16.60%	0.10	1.51%
WEEE	0.00	0.00%	0.11	1.62%
MHSW	6.28	30.98%	1.11	16.48%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	4.75	23.42%	0.53	7.89%
Total	20.28	100.00%	6.76	100.00%
Total Divertible Materials (Recyclables + Organics)	9.25	45.60%	5.11	75.63%
Recyclables	5.88	29.00%	4.90	72.50%
Organics	3.37	16.60%	0.10	1.51%
WEEE	0.00	0.00%	0.11	1.62%
Total Non-Divertible Waste Materials	11.03	54.40%	1.65	24.37%
Total	20.28	100.00%	6.76	100.00%

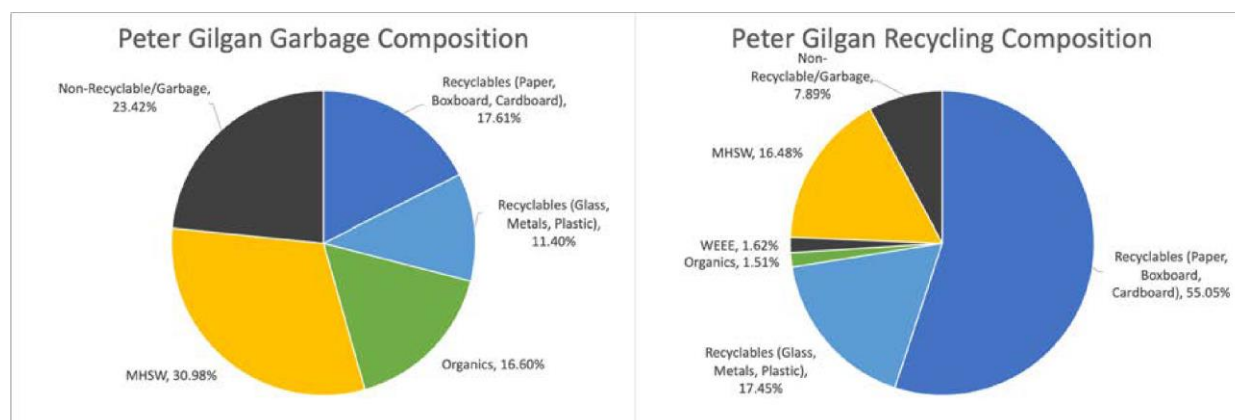


Figure 8: The composition of the Garbage (left) and Recycling (right) streams were determined for the Peter Gilgan Tower.

4.3.6. Overall Waste Composition

The composition breakdown of the Garbage and Recycling streams are presented in Table 13 and Figure 11, below. In this analysis, waste materials in the Garbage stream were combined for the four hospital wings and Peter Gilgan Tower to determine the overall Garbage stream composition. Likewise, the waste materials in the Recycling stream from all generation points were combined to determine the overall Recycling stream composition.

Table 13: Composition of the Garbage and Recycling streams for St. Michael's Hospital.

Material Categories	Garbage (kg/yr)	Composition (%)	Recycling (kg/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	54.48	13.42%	66.53	49.56%
Recyclables (Glass, Metals, Plastic)	41.15	10.14%	26.24	19.54%
Organics	99.85	24.59%	4.83	3.59%
WEEE	0.49	0.12%	1.78	1.33%
MHSW	130.19	32.07%	23.91	17.81%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	79.84	19.67%	10.97	8.17%
Total	406.00	100.00%	134.25	100.00%
Total Divertible Materials (Recyclables + Organics + WEEE)	195.96	48.27%	99.37	74.02%
Recyclables	95.63	23.55%	92.77	69.10%
Organics	99.85	24.59%	4.83	3.59%
WEEE	0.49	0.12%	1.78	1.33%
Total Non-Divertible Waste Materials	210.03	51.73%	34.88	25.98%
Total	406.00	100.00%	134.25	100.00%

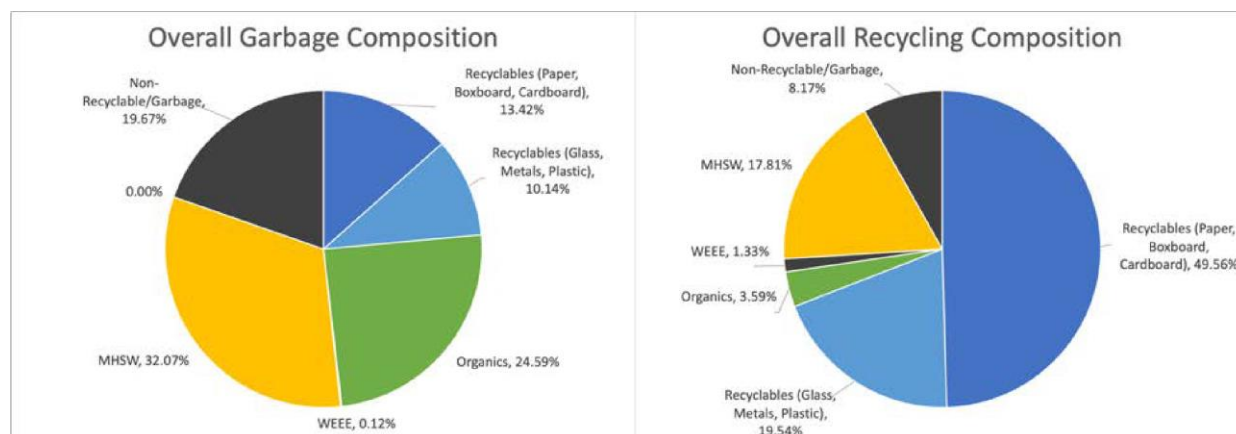


Figure 11: The overall composition of the Garbage stream (left) and the overall composition of the Recycling stream (right) were determined.

An estimated total of 406.00 tonnes of waste was disposed into the Garbage stream during the reporting period. From this amount, 195.96 tonnes (48.27%) were determined to be divertible through existing waste diversion programs and includes 23.55% of Recyclables (papers, plastics, metals, and glass), 24.59% of Organics (food and non-food waste organics), and 0.12% of WEEE. A large amount of the Garbage stream was determined to be comprised of MHSW (32.07%), whereas 19.67% was determined to be Non-Recyclable Garbage.

An estimated total of 134.25 tonnes of waste was disposed into the Recycling stream during the reporting period. Much of the stream was composed of divertible materials, including 69.10% of Recyclables (papers, plastics, metals, and glass), 3.59% of Organics (food and non-food waste organics) and 1.33% of WEEE. The remainder of the stream was observed to be comprised of MHSW (17.81%) and Non-Recyclable Garbage (8.17%).

4.3.7. Diversion and Contamination

The diversion rate for each hospital wing was determined, along with the contamination rate in the Recycling stream. This information is summarized in Table 14.

Based on the data gathered from the Garbage and Recycling streams, the Donnelly hospital wing was determined to have the highest diversion rate of 20.90% and lowest Recycling contamination rate of 22.57%. The lowest diversion rate was observed in the Cardinal Carter hospital wing, which had a diversion rate of 16.60 % and a Recycling contamination rate of 32.59%.

Table 14: Diversion and contamination rates for each hospital wing as well as overall.

Hospital Wing	Annual Recycling Generation (tonnes/yr)	Total Waste Generation (tonnes/yr)	Diverted Recyclables	Diversion Rate of Garbage and Recycling Streams (%)	Recycling Stream Contamination Rate (%)
Bond	10.81	42.85	7.89	18.41%	27.02%
Shuter	13.52	54.41	9.56	17.56%	29.30%
Donnelly	8.75	32.42	6.77	20.90%	22.57%
Cardinal Carter	94.43	383.53	63.65	16.60%	32.59%
Peter Gilgan Tower	6.76	27.03	4.90	18.12%	27.50%
Total	134.25	540.25	92.77	17.17%	30.90%

5. Conclusions & Recommendations

5.1. Summary of Analysis

The following conclusions can be made based on the estimated waste generated by St. Michael's Hospital:

- **Annual Waste Generation:** It is estimated that St. Michael's Hospital generated a total of 642.00 tonnes of waste during the calendar year of 2020. The majority of this waste (63.24%) is attributed to the Garbage waste stream that is destined for landfill disposal. Comingled Recycling accounted for 20.91% of this waste, while Organics accounted for 8.19%, Operational Wastes accounted for 7.34%, and E-Waste accounted for 0.31%.
- **Waste Diversion:** Out of all the waste generated at the hospital, 194.15 tonnes of waste were diverted through existing waste diversion programs. This equates to a diversion rate of 30.24%.
- **Bond Composition:** This hospital wing was determined to generate 42.85 tonnes of waste per year. The Garbage stream comprised of 32.05 tonnes of waste, with 52% divertible materials and 48% of non-divertible waste. The Recycling stream comprised of 10.81 tonnes of waste and was found to have a contamination rate of 27.02%. The waste diversion rate was determined to be 18.41%.
- **Shuter Composition:** This hospital wing was determined to generate 54.41 tonnes of waste per year. The Garbage stream comprised of 40.90 tonnes of waste, with 47% divertible materials and 53% of non-divertible waste. The Recycling stream comprised of 13.52 tonnes of waste and was found to have a contamination rate of 29.30%. The waste diversion rate was determined to be 17.56%.
- **Donnelley Composition:** This hospital wing was determined to generate 32.42 tonnes of waste per year. The Garbage stream comprised of 23.67 tonnes of waste, with 49% divertible materials and 51% of non-divertible waste. The Recycling stream comprised of 8.75 tonnes of waste and was found to have a contamination rate of 22.57%. The waste diversion rate was determined to be 20.90 %.
- **Cardinal Carter Composition:** This hospital wing was determined to generate 383.53 tonnes of waste per year. The Garbage stream comprised of 289.11 tonnes of waste, with 48% divertible materials and 52% of non-divertible waste. The Recycling stream comprised of 94.43 tonnes of waste and was found to have a contamination rate of 32.59%. The waste diversion rate was determined to be 16.60 %.
- **Peter Gilgan Tower Composition:** This building was determined to generate 27.03 tonnes of waste per year. The Garbage stream comprised of 20.28 tonnes of waste, with 46% divertible materials and 54% of non-divertible waste. The Recycling stream comprised of 6.76 tonnes of waste and was found to have a contamination rate of 27.50%. The waste diversion rate was determined to be 18.12%.
- **Overall Composition:** A significant portion of the Garbage stream was determined to be divertible, with 23.55% composed of Recyclables, 24.59% composed of Organics, and 0.12% composed of WEEE. The Recycling stream was determined to contain Recyclables

(69.10%), Organics (3.59%), WEEE (1.33%), MHSW (17.81%), and Non-Recyclable Garbage (8.17%). The Recycling stream was determined to have an overall contamination rate of 30.90%.

5.2. Recommendations for Improvement

5.2.1. Continue to Comply with Required Regulations

Waste diversion programs have been implemented on site for Comingled Recycling and Organics diversion. Waste diversion programs implemented meet the minimum requirements of O. Reg. 103/94 for "Hospitals". It is recommended that Unity Health Toronto continue to maintain waste diversion programs for aluminum, corrugated cardboard, fine paper, newsprint, steel food or beverage cans, and glass bottles and jars, assuming the materials are generated on-site in sufficient quantities.

It is also recommended that Unity Health Toronto conducts continuous monitoring and reporting for this hospital on a yearly basis. This can be achieved through the use of annually conducted waste audits. Comparisons between yearly results would provide insight into important trends that can then be used as a basis for policy decisions regarding solid waste management. From there, further improvements to waste disposal can be created and continuous adherence to regulatory requirements can be achieved.

5.2.2. Continue to Increase Awareness

Across all hospital wings, large proportion of the Garbage stream was determined to be recyclable material, with recyclables accounting for approximately 23.55% of the overall composition. A large amount of organic material was observed in the Garbage stream (24.59%) and a small amount in the Recycling stream (3.59%). It is recommended that Unity Health Toronto continue to increase awareness of existing diversion programs through employee and cleaner education. Such programs can include an introduction to waste management and diversion during all staff onboarding/orientation sessions as well as the placement of informative posters in strategic locations around the building.

Staff should evaluate, improve, and expand the waste reduction systems in their own areas. Management can be encouraged to actively seek out opinions and ideas from employees/sanitation staff on issues relating to recycling or diversion programs. Employee/sanitation staff involvement will generate cooperation and enthusiasm. In addition, a suggestion box and/or email address may be helpful in communicating employee/sanitation staff concerns and suggesting when developing or changing existing diversion programs.

Although only small amounts of WEEE materials and operational wastes were found during this waste audit (0.31% and 7.34%, respectively), it is recommended that Unity Health Toronto invest in efforts to promote the existing WEEE and operational wastes diversion programs including those for E-Waste Recycling, Lamp Recycling, Scrap Metals Recycling, Battery Recycling, and Pallet Recycling.

5.2.3. Disposal of Hazardous Waste

The Garbage stream was determined to contain 130.19 tonnes of hazardous waste (MHSW), which accounted for 32.07% of the stream. The Recycling stream was determined to contain 23.91 tonnes, or 17.81% of hazardous waste. MHSW materials observed during the audit include pharmaceuticals (eg. medicine and medical pills), hospital equipment (catheters and other tubes, single-use medical gowns, and gauze), sharps (used and unused needles/syringes), glass vials, bloody tissues, and biohazardous and anatomical wastes.

It is recommended that Unity Health Toronto continue to increase awareness regarding appropriate waste disposal into each waste stream among all staff, employees, and visitors. Training can be provided during employee onboarding or through regular communications such as through a newsletter or campaign.

In addition, it is also recommended that each generation point is equipped with appropriately marked waste receptacles with easy-to-follow signage. Signs and labels must contain language and visuals easily understood by any staff or visitor regardless of age or language proficiency.

It is recommended that waste generation areas that typically generate MHSW, such as an operating room, inpatient room, or surgery room, use clear plastic bags. This way, sanitation staff can easily distinguish if bags contain MHSW and need to be discarded through a hazardous waste stream, or if bags contain only solid non-hazardous waste and can be discarded through the Garbage stream.

5.2.4. General Recommendations

Other general recommendations include:

- All waste materials should be collected in clear plastic garbage bags to allow maintenance staff to monitor waste collection, as well as to ensure that separated waste streams are disposed of in the correct containers.
- Provide easy access to contact information for help with questions regarding the recycling and waste diversion programs. These programs should have as much consistency as possible across all Unity Health Toronto buildings.
- Conduct a full review of other possible reduction/reuse/recycle programs that may be implemented on-site that are not documented in this report.
- Ensure that the Unity Health Toronto's Environmental Policy and clearly visible in common areas throughout the hospital and emphasize commitment to environmental stewardship in its newsletters, brochures, annual reports, and contracts.
- Support and encourage the purchase and use of "environmentally friendly", reusable, recyclable, or compostable materials and packaging, and/or those that contain recycled content.
- Ensure that the waste diversion programs have the full support of the Unity Health Toronto management team.

Appendix A

Regulatory Requirements

Waste Audits and Waste Reduction Work Plans, Ontario Reg 102/94, s 3 (1994):

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.

IC&I Source Separation Programs, Ontario Reg 103/94, s 2 (2011):

2. (1) A source separation program required under this Regulation must include,
- (a) 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;
 - (b) measures to ensure that the source separated wastes that are collected are removed;
 - (c) the provision of information to users and potential users of the program,
 - (i) describing the performance of the program,
 - (ii) encouraging effective source separation of waste and full use of the program;
 - (d) reasonable efforts to ensure that full use is made of the program and that the separated waste is reused or recycled.

Appendix B

Equipment Inventory

Inventory List

Audit Date: March 30th, 2021 to April 1st, 2021

Audit Location: 2440 Beryl Road, Oakville

Equipment	Required?	Count
Large Bins	Yes	25
Small Bins	Yes	10
Sorting Tables	Yes	1
Clean Tables	Yes	1
Shovels	Yes	1
Brooms	Yes	1
Bags	Yes	1 pack
Scale	Yes	1 (+ extra scale head)
Tarps	Yes	1
Tents	No	N/A
PPE	Required?	Count
Gloves (pairs)	Yes	3 (pairs)
Coveralls	Yes	3
Safety Glasses	Yes	3
Hard Hats	Yes	3
Safety Boots	Yes	3 (pairs)
Hi-Vis Vests	Yes	3
Masks	Yes	3
Earplugs	No	0
First Aid Kit	Yes	1
Eye Wash Kit	Yes	1
Hand Sanitizer	Yes	2
Water	Yes	1 pack per day

Appendix C

Material Categories and Subcategories

St. Michael's Hospital – Category List

Recyclables - Paper

Boxboard
Gable Top
Molded Pulp
Kraft Paper
Aseptic Containers
Cardboard
Mixed Fine Paper

Recyclables - Plastic & Metals

HDPE Other
Expanded Polystyrene
Polystyrene Rigid
Other Plastic Bottles, Jugs & Jars
PET Beverage
Non-alcohol Aluminum Cans
Other Polyethylene Plastic Bags & Films

Organics - Food & Non-food

Tissue
Sanitary
Organic Food Waste

Electronic/Electrical Waste (WEEE)

Other Household Special Waste (MHSW)

Medical Gown

Garbage - Non-recyclable/Other Waste

Rigid Food Packaging
Plastic Cutlery
Textile
Cold Beverage Paper Cups
Hot Beverage Paper Cups
Other Plastic Bags & Films
PPE - Masks & Gloves
Single Use Wipe

Appendix D

Measured Data and Analysis

Collection Date: March 28th, 2021 to March 29th, 2021
Collection Location: St. Michael's Hospital
Collection Address: 30 Bond Street, Toronto, ON
Building Notes: Includes central building and Peter Gilgan Tower

Bond Street

	Weight (kg)		Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage	Recycling	Garbage	Recycling	Total	Garbage	Recycling	Total
Recyclables - Paper								
Boxboard	2.66	5.33	0.97	1.95	2.92	3.03%	18.00%	6.81%
Gable Top	0.89	0.59	0.32	0.22	0.54	1.01%	1.99%	1.26%
Molded Pulp	0.89	0.59	0.32	0.22	0.54	1.01%	1.99%	1.26%
Kraft Paper	0.44	0.89	0.16	0.32	0.49	0.50%	3.01%	1.13%
Aseptic Containers	0.44	0.30	0.16	0.11	0.27	0.50%	1.01%	0.63%
Cardboard	3.55	5.92	1.30	2.16	3.46	4.04%	19.99%	8.07%
Mixed Fine Paper	1.78	2.96	0.65	1.08	1.73	2.03%	10.00%	4.04%
Recyclables - Plastic & Metals								
HDPE Other	1.78	0.59	0.65	0.22	0.87	2.03%	1.99%	2.02%
Expanded Polystyrene	1.33	0.15	0.49	0.05	0.54	1.51%	0.51%	1.26%
Polystyrene Rigid	0.44	0.15	0.16	0.05	0.22	0.50%	0.51%	0.50%
Other Plastic Bottles, Jugs & Jars	0.89	1.48	0.32	0.54	0.87	1.01%	5.00%	2.02%
PET Beverage	1.78	1.18	0.65	0.43	1.08	2.03%	3.99%	2.52%
Non-alcohol Aluminum Cans	0.89	0.59	0.32	0.22	0.54	1.01%	1.99%	1.26%
Other Polyethylene Plastic Bags & Films	3.11	0.89	1.14	0.32	1.46	3.54%	3.01%	3.41%
Organics - Food & Non-food								
Tissue	7.99	0.00	2.92	0.00	2.92	9.10%	0.00%	6.81%
Sanitary	9.77	0.00	3.57	0.00	3.57	11.13%	0.00%	8.32%
Organic Waste - Food	7.10	0.59	2.59	0.22	2.81	8.09%	1.99%	6.55%
Electronic/Electrical Waste								
Other Household Special Waste - Medical Waste	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Medical Plastic Gown	13.21	2.07	4.82	0.76	5.58	15.05%	6.99%	13.01%
Medical Textile Gown	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Medical Textile Gown	14.21	2.81	5.19	1.03	6.21	16.18%	9.49%	14.50%
Garbage - Non-recyclable/Other Waste								
Rigid Food Packaging	0.00	0.30	0.00	0.11	0.11	0.00%	1.01%	0.26%
Plastic Cutlery	0.44	0.00	0.16	0.00	0.16	0.50%	0.00%	0.37%
Cold Beverage Paper Cups	0.44	0.30	0.16	0.11	0.27	0.50%	1.01%	0.63%
Hot Beverage Paper Cups	1.78	0.89	0.65	0.32	0.97	2.03%	3.01%	2.27%
Other Plastic Bags & Films	0.89	0.15	0.32	0.05	0.38	1.01%	0.51%	0.89%
PPE - Masks & Gloves	10.66	0.89	3.89	0.32	4.22	12.14%	3.01%	9.84%

Single Use Wipe	0.44	0.00	0.16	0.00	0.16	0.50%	0.00%	0.37%
Total	87.80	29.61	32.05	10.81	42.85	100.00%	100.00%	100.00%

Material Stream	Amount (kg/yr)	Distribution (%)
Garbage	32.05	74.78%
Recycling	10.81	25.22%
Total	42.85	100.00%

Material Categories	Garbage (kg/yr)	Recycling (kg/yr)	Total (kg/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	3.89	6.05	9.94	23.19%
Recyclables (Glass, Metals, Plastic)	3.73	1.84	5.57	12.99%
Organics	9.07	0.22	9.29	21.68%
WEEE	0.00	0.00	0.00	0.00%
MHSW	10.01	1.78	11.79	27.51%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	5.35	0.92	6.27	14.63%
Total	32.05	10.81	42.85	100.00%

Material Categories	Garbage (kg/yr)	Composition (%)	Recycling (kg/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	3.89	12.13%	6.05	55.99%
Recyclables (Glass, Metals, Plastic)	3.73	11.64%	1.84	16.99%
Organics	9.07	28.31%	0.22	1.99%
WEEE	0.00	0.00%	0.00	0.00%
MHSW	10.01	31.23%	1.78	16.48%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	5.35	16.69%	0.92	8.54%
Total	32.05	100.00%	10.81	100.00%
Total Divertible Materials (Recyclables + Organics + WEEE)	16.69	52.08%	8.10	74.97%
Recyclables	7.62	23.77%	7.89	72.98%
Organics	9.07	28.31%	0.22	1.99%
WEEE	0.00	0.00%	0.00	0.00%
Total Non-Divertible Waste Materials	15.36	47.92%	2.70	25.03%
Total	32.05	100.00%	10.81	100.00%

Shuter Hospital Wing

	Weight (kg)		Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage	Recycling	Garbage	Recycling	Total	Garbage	Recycling	Total
Recyclables - Paper								
Boxboard	5.55	5.18	2.03	1.89	3.92	4.95%	13.99%	7.20%
Gable Top	0.56	0.37	0.20	0.14	0.34	0.50%	1.00%	0.62%
Molded Pulp	0.56	0.74	0.20	0.27	0.47	0.50%	2.00%	0.87%
Kraft Paper	1.67	1.11	0.61	0.41	1.01	1.49%	3.00%	1.86%
Aseptic Containers	0.00	0.56	0.00	0.20	0.20	0.00%	1.51%	0.38%
Cardboard	4.44	5.55	1.62	2.03	3.65	3.96%	14.99%	6.70%
Mixed Fine Paper	3.33	3.52	1.22	1.28	2.50	2.97%	9.51%	4.59%
Recyclables - Plastic & Metals								
HDPE Other	1.11	0.93	0.41	0.34	0.74	0.99%	2.51%	1.37%
Expanded Polystyrene	0.56	0.37	0.20	0.14	0.34	0.50%	1.00%	0.62%
Polystyrene Rigid	1.11	0.19	0.41	0.07	0.47	0.99%	0.51%	0.87%
Other Plastic Bottles, Jugs & Jars	2.22	2.11	0.81	0.77	1.58	1.98%	5.70%	2.90%
PET Beverage	3.33	2.96	1.22	1.08	2.30	2.97%	7.99%	4.22%
Non-alcohol Aluminum Cans	1.67	1.48	0.61	0.54	1.15	1.49%	4.00%	2.11%
Other Polyethylene Plastic Bags & Films	3.33	1.11	1.22	0.41	1.62	2.97%	3.00%	2.98%
Organics - Food & Non-food								
Tissue	9.88	0.19	3.61	0.07	3.68	8.82%	0.51%	6.75%
Sanitary	7.22	0.00	2.64	0.00	2.64	6.44%	0.00%	4.84%
Organic Waste - Food	6.11	1.21	2.23	0.44	2.67	5.45%	3.27%	4.91%
Electronic/Electrical Waste								
Other Household Special Waste - Medical Waste	0.00	0.64	0.00	0.23	0.23	0.00%	1.73%	0.43%
Medical Plastic Gown	18.87	2.22	6.89	0.81	7.70	16.84%	6.00%	14.15%
Medical Textile Gown	0.00	0.37	0.00	0.14	0.14	0.00%	1.00%	0.25%
Medical Textile Gown	19.43	4.07	7.09	1.49	8.58	17.34%	10.99%	15.76%
Garbage - Non-recyclable/Other Waste								
Rigid Food Packaging	0.00	0.19	0.00	0.07	0.07	0.00%	0.51%	0.13%
Plastic Cutlery	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Cold Beverage Paper Cups	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Hot Beverage Paper Cups	2.78	0.74	1.01	0.27	1.28	2.48%	2.00%	2.36%
Other Plastic Bags & Films	1.11	0.74	0.41	0.27	0.68	0.99%	2.00%	1.24%
PPE - Masks & Gloves	16.65	0.48	6.08	0.18	6.25	14.86%	1.30%	11.49%
Single Use Wipe	0.56	0.00	0.20	0.00	0.20	0.50%	0.00%	0.38%
Total	112.05	37.03	40.90	13.52	54.41	100.00%	100.00%	100.00%

Material Stream	Amount (kg/yr)	Distribution (%)
Garbage	40.90	75.16%
Recycling	13.52	24.84%
Total	54.41	100.00%

Material Categories	Garbage (kg/yr)	Recycling (kg/yr)	Total (kg/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	5.88	6.22	12.10	22.23%
Recyclables (Glass, Metals, Plastic)	4.87	3.34	8.21	15.08%
Organics	8.47	0.51	8.98	16.51%
WEEE	0.00	0.23	0.23	0.43%
MHSW	13.98	2.43	16.41	30.16%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	7.70	0.78	8.49	15.60%
Total	40.90	13.52	54.41	100.00%

Material Categories	Garbage (kg/yr)	Composition (%)	Recycling (kg/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	5.88	14.38%	6.22	45.99%
Recyclables (Glass, Metals, Plastic)	4.87	11.90%	3.34	24.71%
Organics	8.47	20.71%	0.51	3.78%
WEEE	0.00	0.00%	0.23	1.73%
MHSW	13.98	34.18%	2.43	17.99%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	7.70	18.83%	0.78	5.81%
Total	40.90	100.00%	13.52	100.00%
Total Divertible Materials (Recyclables + Organics + WEEE)	19.22	46.99%	10.30	76.21%
Recyclables	10.75	26.27%	9.56	70.70%
Organics	8.47	20.71%	0.51	3.78%
WEEE	0.00	0.00%	0.23	1.73%
Total Non-Divertible Waste Materials	21.68	53.01%	3.22	23.79%
Total	40.90	100.00%	13.52	100.00%

Donnelley Hospital Wing

	Weight (kg)		Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage	Recycling	Garbage	Recycling	Total	Garbage	Recycling	Total
Recyclables - Paper								
Boxboard	0.00	4.56	0.00	1.66	1.66	0.00%	19.02%	5.13%
Gable Top	0.33	0.56	0.12	0.20	0.32	0.51%	2.34%	1.00%
Molded Pulp	0.67	0.67	0.24	0.24	0.49	1.03%	2.80%	1.51%
Kraft Paper	0.67	0.89	0.24	0.32	0.57	1.03%	3.71%	1.76%
Aseptic Containers	0.00	0.22	0.00	0.08	0.08	0.00%	0.92%	0.25%
Cardboard	3.00	4.66	1.10	1.70	2.80	4.63%	19.44%	8.63%
Mixed Fine Paper	2.66	2.44	0.97	0.89	1.86	4.10%	10.18%	5.74%
Recyclables - Plastic & Metals								
HDPE Other	1.00	1.11	0.37	0.41	0.77	1.54%	4.63%	2.38%
Expanded Polystyrene	0.33	0.11	0.12	0.04	0.16	0.51%	0.46%	0.50%
Polystyrene Rigid	0.67	0.11	0.24	0.04	0.28	1.03%	0.46%	0.88%
Other Plastic Bottles, Jugs & Jars	1.67	1.11	0.61	0.41	1.01	2.58%	4.63%	3.13%
PET Beverage	1.33	0.89	0.49	0.32	0.81	2.05%	3.71%	2.50%
Non-alcohol Aluminum Cans	1.00	0.56	0.37	0.20	0.57	1.54%	2.34%	1.76%
Other Polyethylene Plastic Bags & Films	2.00	0.67	0.73	0.24	0.97	3.08%	2.80%	3.01%
Organics - Food & Non-food								
Tissue	5.99	0.11	2.19	0.04	2.23	9.24%	0.46%	6.87%
Sanitary	3.66	0.00	1.34	0.00	1.34	5.64%	0.00%	4.12%
Organic Waste - Food	5.66	0.33	2.07	0.12	2.19	8.73%	1.38%	6.74%
Electronic/Electrical Waste								
Other Household Special Waste - Medical Waste	1.33	0.00	0.49	0.00	0.49	2.05%	0.00%	1.50%
Medical Plastic Gown	9.90	2.09	3.61	0.76	4.38	15.27%	8.72%	13.50%
Medical Textile Gown	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
	11.66	1.55	4.26	0.57	4.82	17.98%	6.47%	14.87%
Garbage - Non-recyclable/Other Waste								
Rigid Food Packaging	0.33	0.00	0.12	0.00	0.12	0.51%	0.00%	0.37%
Plastic Cutlery	0.33	0.00	0.12	0.00	0.12	0.51%	0.00%	0.37%
Cold Beverage Paper Cups	0.33	0.11	0.12	0.04	0.16	0.51%	0.46%	0.50%
Hot Beverage Paper Cups	1.00	0.33	0.37	0.12	0.49	1.54%	1.38%	1.50%
Other Plastic Bags & Films	0.33	0.22	0.12	0.08	0.20	0.51%	0.92%	0.62%
PPE - Masks & Gloves	8.66	0.67	3.16	0.24	3.41	13.36%	2.80%	10.51%
Single Use Wipe	0.33	0.00	0.12	0.00	0.12	0.51%	0.00%	0.37%
Total	64.84	23.97	23.67	8.75	32.42	100.00%	100.00%	100.00%

Material Stream	Amount (kg/yr)	Distribution (%)
Garbage	23.67	73.01%
Recycling	8.75	26.99%
Total	32.42	100.00%

Material Categories	Garbage (kg/yr)	Recycling (kg/yr)	Total (kg/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	2.68	5.11	7.79	24.02%
Recyclables (Glass, Metals, Plastic)	2.92	1.66	4.58	14.14%
Organics	5.59	0.16	5.75	17.73%
WEEE	0.49	0.00	0.49	1.50%
MHSW	7.87	1.33	9.20	28.38%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	4.13	0.49	4.61	14.23%
Total	23.67	8.75	32.42	100.00%

Material Categories	Garbage (kg/yr)	Composition (%)	Recycling (kg/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	2.68	11.30%	5.11	58.41%
Recyclables (Glass, Metals, Plastic)	2.92	12.34%	1.66	19.02%
Organics	5.59	23.61%	0.16	1.84%
WEEE	0.49	2.05%	0.00	0.00%
MHSW	7.87	33.25%	1.33	15.19%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	4.13	17.44%	0.49	5.55%
Total	23.67	100.00%	8.75	100.00%
Total Divertible Materials (Recyclables + Organics + WEEE)	11.67	49.31%	6.94	79.27%
Recyclables	5.60	23.64%	6.77	77.43%
Organics	5.59	23.61%	0.16	1.84%
WEEE	0.49	2.05%	0.00	0.00%
Total Non-Divertible Waste Materials	12.00	50.69%	1.81	20.73%
Total	23.67	100.00%	8.75	100.00%

Cardinal Carter Hospital Wing

	Weight (kg)		Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage	Recycling	Garbage	Recycling	Total	Garbage	Recycling	Total
Recyclables - Paper								
Boxboard	19.70	28.90	7.19	10.55	17.74	2.49%	11.17%	4.63%
Gable Top	0.00	5.25	0.00	1.92	1.92	0.00%	2.03%	0.50%
Molded Pulp	7.88	10.51	2.88	3.84	6.71	0.99%	4.06%	1.75%
Kraft Paper	7.88	10.51	2.88	3.84	6.71	0.99%	4.06%	1.75%
Aseptic Containers	7.88	2.63	2.88	0.96	3.84	0.99%	1.02%	1.00%
Cardboard	34.46	45.66	12.58	16.67	29.24	4.35%	17.65%	7.62%
Mixed Fine Paper	27.58	21.02	10.07	7.67	17.74	3.48%	8.13%	4.63%
Recyclables - Plastic & Metals								
HDPE Other	11.82	3.94	4.31	1.44	5.75	1.49%	1.52%	1.50%
Expanded Polystyrene	7.88	1.31	2.88	0.48	3.35	0.99%	0.51%	0.87%
Polystyrene Rigid	3.94	1.31	1.44	0.48	1.92	0.50%	0.51%	0.50%
Other Plastic Bottles, Jugs & Jars	7.88	10.51	2.88	3.84	6.71	0.99%	4.06%	1.75%
PET Beverage	11.82	14.45	4.31	5.27	9.59	1.49%	5.59%	2.50%
Non-alcohol Aluminum Cans	3.94	7.88	1.44	2.88	4.31	0.50%	3.05%	1.12%
Other Polyethylene Plastic Bags & Films	27.58	10.51	10.07	3.84	13.90	3.48%	4.06%	3.62%
Organics - Food & Non-food								
Tissue	78.81	2.63	28.77	0.96	29.73	9.95%	1.02%	7.75%
Sanitary	59.11	0.00	21.58	0.00	21.58	7.46%	0.00%	5.63%
Organic Waste - Food	63.05	7.88	23.01	2.88	25.89	7.96%	3.05%	6.75%
Electronic/Electrical Waste								
Other Household Special Waste -	0.00	3.94	0.00	1.44	1.44	0.00%	1.52%	0.37%
Medical Waste	133.98	23.64	48.90	8.63	57.53	16.91%	9.14%	15.00%
Medical Plastic Gown	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Medical Textile Gown	118.22	23.64	43.15	8.63	51.78	14.93%	9.14%	13.50%
Garbage - Non-recyclable/Other Waste								
Rigid Food Packaging	0.00	1.31	0.00	0.48	0.48	0.00%	0.51%	0.12%
Plastic Cutlery	7.88	0.00	2.88	0.00	2.88	0.99%	0.00%	0.75%
Cold Beverage Paper Cups	0.00	2.63	0.00	0.96	0.96	0.00%	1.02%	0.25%
Hot Beverage Paper Cups	22.70	7.51	8.29	2.74	11.03	2.87%	2.90%	2.88%
Other Plastic Bags & Films	11.82	5.25	4.31	1.92	6.23	1.49%	2.03%	1.62%
PPE - Masks & Gloves	112.33	5.88	41.00	2.15	43.15	14.18%	2.27%	11.25%
Single Use Wipe	3.94	0.00	1.44	0.00	1.44	0.50%	0.00%	0.37%
Total	792.08	258.70	289.11	94.43	383.53	100.00%	100.00%	100.00%

Material Stream	Amount (kg/yr)	Distribution (%)
Garbage	289.11	75.38%
Recycling	94.43	24.62%
Total	383.53	100.00%

Material Categories	Garbage (kg/yr)	Recycling (kg/yr)	Total (kg/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	38.46	45.44	83.90	21.88%
Recyclables (Glass, Metals, Plastic)	27.32	18.22	45.54	11.87%
Organics	73.35	3.84	77.19	20.13%
WEEE	0.00	1.44	1.44	0.37%
MHSW	92.05	17.26	109.31	28.50%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	57.91	8.24	66.16	17.25%
Total	289.11	94.43	383.53	100.00%

Material Categories	Garbage (kg/yr)	Composition (%)	Recycling (kg/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	38.46	13.30%	45.44	48.12%
Recyclables (Glass, Metals, Plastic)	27.32	9.45%	18.22	19.29%
Organics	73.35	25.37%	3.84	4.06%
WEEE	0.00	0.00%	1.44	1.52%
MHSW	92.05	31.84%	17.26	18.28%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	57.91	20.03%	8.24	8.73%
Total	289.11	100.00%	94.43	100.00%
Total Divertible Materials (Recyclables + Organics + WEEE)	139.14	48.13%	68.93	73.00%
Recyclables	65.79	22.76%	63.65	67.41%
Organics	73.35	25.37%	3.84	4.06%
WEEE	0.00	0.00%	1.44	1.52%
Total Non-Divertible Waste Materials	149.97	51.87%	25.50	27.00%
Total	289.11	100.00%	94.43	100.00%

Peter Gilgan Tower

	Weight (kg)		Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage	Recycling	Garbage	Recycling	Total	Garbage	Recycling	Total
Recyclables - Paper								
Boxboard	2.78	2.59	1.01	0.95	1.96	5.00%	13.99%	7.25%
Gable Top	0.28	0.37	0.10	0.14	0.24	0.50%	2.00%	0.88%
Molded Pulp	1.11	0.56	0.41	0.20	0.61	2.00%	3.03%	2.25%
Kraft Paper	0.33	0.56	0.12	0.20	0.32	0.59%	3.03%	1.20%
Aseptic Containers	0.28	0.19	0.10	0.07	0.17	0.50%	1.03%	0.63%
Cardboard	3.33	4.07	1.22	1.49	2.70	5.99%	21.99%	9.99%
Mixed Fine Paper	1.67	1.85	0.61	0.68	1.28	3.01%	9.99%	4.75%
Recyclables - Plastic & Metals								
HDPE Other	0.56	0.09	0.20	0.03	0.24	1.01%	0.49%	0.88%
Expanded Polystyrene	0.83	0.09	0.30	0.03	0.34	1.49%	0.49%	1.24%
Polystyrene Rigid	0.28	0.09	0.10	0.03	0.14	0.50%	0.49%	0.50%
Other Plastic Bottles, Jugs & Jars	1.11	1.27	0.41	0.46	0.87	2.00%	6.86%	3.21%
PET Beverage	0.83	0.74	0.30	0.27	0.57	1.49%	4.00%	2.12%
Non-alcohol Aluminum Cans	0.78	0.37	0.28	0.14	0.42	1.40%	2.00%	1.55%
Other Polyethylene Plastic Bags & Films	1.94	0.58	0.71	0.21	0.92	3.49%	3.13%	3.40%
Organics - Food & Non-food								
Tissue	2.78	0.00	1.01	0.00	1.01	5.00%	0.00%	3.75%
Sanitary	1.94	0.00	0.71	0.00	0.71	3.49%	0.00%	2.62%
Organic Waste - Food	4.50	0.28	1.64	0.10	1.74	8.10%	1.51%	6.45%
Electronic/Electrical Waste								
Other Household Special Waste - Medical Waste	0.00	0.30	0.00	0.11	0.11	0.00%	1.62%	0.41%
Medical Plastic Gown	9.44	1.57	3.45	0.57	4.02	16.99%	8.48%	14.87%
Medical Textile Gown	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Medical Textile Gown	7.77	1.48	2.84	0.54	3.38	13.99%	8.00%	12.49%
Garbage - Non-recyclable/Other Waste								
Rigid Food Packaging	1.06	0.00	0.39	0.00	0.39	1.91%	0.00%	1.43%
Plastic Cutlery	0.56	0.00	0.20	0.00	0.20	1.01%	0.00%	0.76%
Cold Beverage Paper Cups	0.56	0.09	0.20	0.03	0.24	1.01%	0.49%	0.88%
Hot Beverage Paper Cups	1.39	0.46	0.51	0.17	0.68	2.50%	2.49%	2.50%
Other Plastic Bags & Films	1.39	0.19	0.51	0.07	0.58	2.50%	1.03%	2.13%
PPE - Masks & Gloves	7.77	0.72	2.84	0.26	3.10	13.99%	3.89%	11.46%
Single Use Wipe	0.28	0.00	0.10	0.00	0.10	0.50%	0.00%	0.38%
Total	55.55	18.51	20.28	6.76	27.03	100.00%	100.00%	100.00%

Material Stream	Amount (kg/yr)	Distribution (%)
Garbage	20.28	75.01%
Recycling	6.76	24.99%
Total	27.03	100.00%

Material Categories	Garbage (kg/yr)	Recycling (kg/yr)	Total (kg/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	3.57	3.72	7.29	26.96%
Recyclables (Glass, Metals, Plastic)	2.31	1.18	3.49	12.91%
Organics	3.37	0.10	3.47	12.83%
WEEE	0.00	0.11	0.11	0.41%
MHSW	6.28	1.11	7.39	27.36%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	4.75	0.53	5.28	19.54%
Total	20.28	6.76	27.03	100.00%

Material Categories	Garbage (kg/yr)	Composition (%)	Recycling (kg/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	3.57	17.61%	3.72	55.05%
Recyclables (Glass, Metals, Plastic)	2.31	11.40%	1.18	17.45%
Organics	3.37	16.60%	0.10	1.51%
WEEE	0.00	0.00%	0.11	1.62%
MHSW	6.28	30.98%	1.11	16.48%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	4.75	23.42%	0.53	7.89%
Total	20.28	100.00%	6.76	100.00%
Total Divertible Materials (Recyclables + Organics + WEEE)	9.25	45.60%	5.11	75.63%
Recyclables	5.88	29.00%	4.90	72.50%
Organics	3.37	16.60%	0.10	1.51%
WEEE	0.00	0.00%	0.11	1.62%
Total Non-Divertible Waste Materials	11.03	54.40%	1.65	24.37%
Total	20.28	100.00%	6.76	100.00%

Appendix E

Photos of Material Categories

Garbage Stream

Recycling Stream

Appendix F

Report of A Waste Audit

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 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(ies) and Company Name: Unity Health Toronto			
Name of Contact Person: Joseph Raab		Telephone #: 416 8646060 ext 2666	Email address: Joseph.Raab@unityhealth.to
Street Address(es) of Entity(ies): 30 Bond Street, Toronto, Ontario, M5B 1X1			
Municipality: 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 checked="" type="checkbox"/>
Office Buildings	<input type="checkbox"/>	Educational Institutions	<input type="checkbox"/>
Restaurants	<input type="checkbox"/>	Large Manufacturing Establishments	<input type="checkbox"/>

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

II. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ies):
<p>St. Michael's Hospital is a teaching hospital and medical center located at 30 Bond Street, in Toronto, Ontario. The facility is comprised of a central building containing four distinct hospital wings and the Peter Gilgan Tower (Figure 1). The total area of the hospital is 1,709,057sq. ft. The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year. The hospital employs 7,691 staff, medical staff, medical trainees, and health professional learners.</p>

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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 the waste.

Categories of Waste	How Is The Waste Produced and What Management Decisions/Policies Affect Its Production?
Recyclables – Paper Products	
Boxboard	Generated inside the building from packaging of supplies/equipment and brought into the facility by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Gable Top Containers	Generated inside the building from packaging of food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Molded Pulp	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Kraft Paper	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Aseptic Containers	Generated inside the building from packaging of food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Cardboard	Generated inside the building from packaging of supplies/equipment. Brought inside the facility by individuals or through the shipping and delivery process.
Mixed Fine Paper	Generated inside the building through administrative office work, shipping and deliver processes, and receipts.
Recyclables – Plastics, Metals, Glass	
HDPE Beverage and Non-Beverage	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors.

	Brought inside the facility by individuals or through the shipping and delivery process.
Expanded Polystyrene	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Polystyrene Rigid Packaging	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Other Plastic Bottles, Jars, Jugs	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
PET Beverage and Non-Beverage	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Aluminum Cans	Generated inside the building from packaging of food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
LDPE Plastic Bags and Film	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Organics – Food and Non-Food Waste	
Tissues	Generated inside the building from daily operations and sanitary/maintenance operations. Brought into the facility by individuals or through the shipping and delivery process.
Sanitary Products	Generated inside the building for personal sanitary use by employees, staff, and/or visitors. Brought into the facility by individuals or through the shipping and delivery process.
Organic Food Waste	Generated inside the building by individual employees, staff, and/or visitors or as products of food vendors located inside the building. Can also be brought into the facility from outside sources.

Waste From Electrical / Electronic Equipment (WEEE)	
Electronic / Electrical Waste	Generated inside the building from daily operational use of electrical equipment by employees, staff, and/or visitors.
Municipal Hazardous Special Waste (MHSW)	
Other Special Waste	Generated inside the building by employees, staff, and/or visitors from daily operations.
Medical Gowns	Generated inside the building by employees, staff, and/or visitors from daily operations.
Non-Recyclable Garbage	
Rigid Plastic Packaging	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Plastic Cutlery	Generated inside the building by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Textiles	Generated inside the building by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Cold Beverage Paper Cups	Generated inside the building from packaging of food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Hot Beverage Paper Cups	Generated inside the building from packaging of food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Other Plastic Bags and Films	Generated inside the building from packaging of supplies/equipment and/or food and beverages consumed by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Single Use Personal Protective Equipment (PPE) – Face Masks and Gloves	Generated inside the building by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.

Single Use Wipes	Generated inside the building by employees, staff, and/or visitors. Brought inside the facility by individuals or through the shipping and delivery process.
Operational Wastes	
Lamps	Generated inside the building through daily operations. Brought inside the facility through the shipping and delivery process by staff and disposed of by maintenance staff.
Scrap Metals	Generated inside the building through daily operations. Brought inside the facility through the shipping and delivery process by staff and disposed of by maintenance staff.
Batteries	Generated inside the building through daily operations. Brought inside the facility through the shipping and delivery process by staff and disposed of by maintenance staff.
Pallets	Generated inside the building through daily operations. Brought inside the facility through the shipping and delivery process by staff and disposed of by maintenance staff.

Note: When completing this form, write “n/a” in the columns where the entity will not produce any waste for a category of waste.

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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
Recyclables – Paper Products		
Boxboard		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Gable Top		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Molded Pulp		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Kraft Paper		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Aseptic Containers		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Cardboard		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Mixed Fine Paper		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Recyclables – Plastics, Metals, Glass		
HDPE Beverage and Non-Beverage		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.

Expanded Polystyrene		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Polystyrene Rigid Packaging		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Other Plastic Bottles, Jars, Jugs		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
PET Beverage and Non-Beverage		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Aluminum Cans		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
LDPE Plastic Bags and Film		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation staff.
Organics – Food and Non-Food Waste		
Tissues		Organics program implemented: employees, staff, and visitors dispose of material in organics receptacles that are collected and emptied by sanitation staff.
Sanitary Products		Organics program implemented: employees, staff, and visitors dispose of material in organics receptacles that are collected and emptied by sanitation staff.
Organic Food Waste		Organics program implemented: employees, staff, and visitors dispose of material in organics receptacles that are collected and emptied by sanitation staff.

Waste From Electrical / Electronic Equipment		
Electronic / Electrical Waste		Recycling program implemented: employees, staff, and visitors dispose of material in recycling receptacles that are collected and emptied by sanitation /maintenance staff.
Municipal Hazardous Special Waste (MHSW)		
Other Special Waste	Disposed of in the Garbage stream. Must be disposed in Hazardous Waste stream.	
Medical Gowns	Disposed of in the Garbage stream. Must be disposed in Hazardous Waste stream.	
Non-Recyclable Garbage		
Rigid Plastic Packaging	Disposed of in the Garbage stream.	
Plastic Cutlery	Disposed of in the Garbage stream.	
Textiles	Disposed of in the Garbage stream.	
Cold Beverage Paper Cups	Disposed of in the Garbage stream.	
Hot Beverage Paper Cups	Disposed of in the Garbage stream.	
Other Plastic Bags and Films	Disposed of in the Garbage stream.	
Single Use Personal Protective Equipment (PPE) – Face Masks and Gloves	Disposed of in the Garbage stream.	
Single Use Wipes	Disposed of in the Garbage stream.	
Operational Wastes		
Lamps		Material is collected by maintenance staff and collected by a third-party service provider to be recycled off site.
Scrap Metals		Material is collected by maintenance staff and collected by a third-party service provider to be recycled off site.
Batteries		Material is collected by maintenance staff and collected by a third-party service provider to be recycled off site.

Pallets		Material is collected by maintenance staff and collected by a third-party service provider to be recycled off site.
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V. ESTIMATED QUANTITY OF WASTE PRODUCED ANNUALLY

	Estimated Amount of Waste Produced (tonnes/yr)											
	Generated			Reused			Recycled			Disposed		
Categories of Waste	"A" Base Year	"B" Current Year	"C" Change	"A" Base Year	"B" Current Year	"C" Change	"A" Base Year	"B" Current Year	"C" Change	"A" Base Year	"B" Current Year	"C" Change
Recyclables - Paper												
Boxboard		28.20			-			16.99			11.20	
Gable Top		3.36			-			2.61			0.75	
Molded Pulp		8.83			-			4.77			4.06	
Kraft Paper		9.11			-			5.10			4.01	
Aseptic Containers		4.56			-			1.42			3.14	
Cardboard		41.84			-			24.04			17.80	
Mixed Fine Paper		25.12			-			11.60			13.51	
Recyclables - Plastic & Metals												
HDPE Other		8.37			-			2.43			5.94	
Expanded Polystyrene		4.73			-			0.74			3.99	
Polystyrene Rigid		3.03			-			0.68			2.35	
Other Plastic Bottles, Jugs & Jars		10.68			-			5.65			5.03	
PET Beverage		14.35			-			7.38			6.97	
Non-alcohol Aluminum Cans		6.99			-			3.97			3.02	
Other Polyethylene Plastic Bags & Films		18.88			-			5.02			13.86	
Organics - Food & Non-food												
Tissue		39.56			-			1.07			38.49	
Sanitary		29.82			-			0.00			29.82	
Organic Waste - Food		87.84			-			3.72			31.54	
Waste From Electronic / Electrical Equipment (WEEE)												

Electronic / Electrical Waste		4.32			-			1.82			0.49	
Municipal Hazardous Special Waste (MHSW)												
Other Special Waste - Medical Waste		79.20			-			11.53			67.67	
Medical Plastic Gown		0.14			-			0.14			0.00	
Medical Textile Gown		74.77			-			12.25			62.52	
Garbage - Non-recyclable/Other Waste												
Rigid Food Packaging		1.16			-			0.66			0.51	
Plastic Cutlery		3.36			-			0.00			3.36	
Textile		1.63			-			1.14			0.49	
Cold Beverage Paper Cups		14.45			-			3.62			10.82	
Hot Beverage Paper Cups		8.06			-			2.39			5.67	
Other Plastic Bags & Films		60.48			-			3.52			56.97	
PPE - Masks & Gloves		2.03			-			0.00			2.03	
Single Use Wipe		1.16			-			0.66			0.51	
Operational Wastes												
Lamp Recycling		0.50			-			0.50			-	
Scrap Metals		5.22			-			5.22			-	
Batteries		1.47			-			1.47			-	
Pallets		39.96			-			39.96			-	
Total Weight		0.50			-			0.50			-	

VI. 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.

Unity Health includes environmental considerations in our purchasing policies and practices in order to ensure the use of environmentally sustainable resources and pollution prevention measures.

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 applicable:

*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: <i>Joseph Raab</i>	Title: Manager – Environmental Services Department	Date: September 21, 2021

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Appendix G

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 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)*

VII. GENERAL INFORMATION

Name of Owner and/or Operator of Entity(ies) and Company Name: Unity Health Toronto			
Name of Contact Person: Joseph Raab.		Telephone #: 416 864 6060 ext 2666	Email address: Joseph.Raab@unityhealth.to
Street Address(es) of Entity(ies): 30 Bond Street, Toronto, Ontario, M5B 1X1			
Municipality: 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 checked="" type="checkbox"/>
Office Buildings	<input type="checkbox"/>	Educational Institutions	<input type="checkbox"/>
Restaurants	<input type="checkbox"/>	Large Manufacturing Establishments	<input type="checkbox"/>

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

VIII. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ies):
<p>St. Michael's Hospital is a teaching hospital and medical centre located at 30 Bond Street, in Toronto, Ontario. The facility is comprised of a central building containing four distinct hospital wings and the Peter Gilgan Tower (Figure 1). The total area of the hospital is 2,500,000ft.. The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year. The hospital employs 10,576 staff, medical staff, medical trainees, and health professional learners.</p>

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IX. PLANS TO REDUCE, REUSE AND RECYCLE WASTE

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.	
Waste Category (as stated in Part V of your ‘Report of a Waste Audit’)	Source Separation and 3Rs Program
Recyclables - Paper	
Boxboard	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Unity Health staff will be encouraged to purchase supplies in bulk to avoid excess packaging.</p> <p><u>Reuse:</u> Staff will be encouraged to reuse boxboard materials for storing, moving, shipping materials, and/or other uses when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Gable Top	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Staff and visitors will be encouraged to make use of reusable beverage containers to reduce the quantity of disposable containers used on site.</p> <p><u>Reuse:</u> Staff will be encouraged to reuse materials for individual uses when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Molded Pulp	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Unity Health staff will be encouraged to purchase supplies in bulk to avoid excess packaging.</p> <p><u>Reuse:</u> Staff will be encouraged to reuse materials for individual uses when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Kraft Paper	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Unity Health staff will be encouraged to purchase supplies in bulk to avoid excess packaging. Staff and visitors will be</p>

	<p>encouraged to make use of reusable beverage containers to reduce the quantity of disposable containers used on site.</p> <p><u>Reuse:</u> Staff will be encouraged to reuse materials for individual uses when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Aseptic Containers	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Staff and visitors will be encouraged to make use of reusable beverage containers to reduce the quantity of disposable containers used on site.</p> <p><u>Reuse:</u> Staff will be encouraged to reuse materials for individual uses when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Cardboard	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Unity Health staff will be encouraged to purchase supplies in bulk to avoid excess packaging.</p> <p><u>Reuse:</u> Staff will be encouraged to reuse cardboard materials for storing, moving, shipping materials, and/or other uses when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Mixed Fine Paper	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers, third party partners, and staff will be encouraged to transition to digital records to reduce the use of printed paper.</p> <p><u>Reuse:</u> Staff will be encouraged to print on both sides of each piece of paper, not print when it is unnecessary, and reuse printed paper when appropriate.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Recyclables - Plastic & Metals	
HDPE Other	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for shipment of supplies. Unity Health staff will be encouraged to purchase supplies in bulk to avoid excess packaging. Staff will also be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p>

	<p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Expanded Polystyrene	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to use reusable dishware in foodservice areas.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Polystyrene Rigid	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Other Plastic Bottles, Jugs & Jars	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
PET Beverage	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Unity Health will consider discontinuing the use of disposable water bottles on site and installing water fountains to reduce the number of disposable beverage containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>

Non-alcohol Aluminum Cans	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Other Polyethylene Plastic Bags & Films	<p><u>“Comingled Recycling Program”</u></p> <p><u>Reduce:</u> Suppliers will be encouraged to discontinue to the use of disposable film for the shipment of supplies and instead make use of reusable containers.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable bags on site.</p> <p><u>Recycle:</u> Staff will be trained about existing recycling program. Cleaners will be trained of how to dispose of waste appropriately. Recycling receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Organics - Food & Non-food	
Tissue	<p><u>“Organics Diversion Program”</u></p> <p><u>Reduce:</u> Staff and visitors will be encouraged to make use of electronic hand dryers in washroom areas and reusable kitchen towels in kitchen, cafeteria, and foodservice areas.</p> <p><u>Reuse:</u> Staff will be encouraged to make use of reusable kitchen towels in kitchen, cafeteria, and foodservice areas.</p> <p><u>Recycle:</u> Staff will be trained about existing diversion program. Cleaners will be trained of how to dispose of waste appropriately. Organics receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Sanitary	No diversion program in place.
Organic Waste - Food	<p><u>“Organics Diversion Program”</u></p> <p><u>Reduce:</u> Staff and visitors will be encouraged to bring uneaten food items home for later consumption. Unopened un-perishable food will be donated to a local food drive.</p> <p><u>Reuse:</u> Staff will be encouraged to make use of reusable kitchen towels in kitchen, cafeteria, and foodservice areas.</p> <p><u>Recycle:</u> Staff will be trained about existing diversion program. Cleaners will be trained of how to dispose of waste appropriately. Organics receptacles with adequate signage will be placed next to each garbage receptacle to encourage diversion by staff and visitors.</p>
Waste From Electronic / Electrical Equipment (WEEE)	
Electronic / Electrical Waste	<p><u>“WEEE Recycling Program”</u></p> <p><u>Reduce:</u> N/A</p> <p><u>Reuse:</u> Staff will be encouraged to reuse electronic equipment until end of life.</p> <p><u>Recycle:</u> Staff will be trained about existing diversion program. Cleaners will be trained of how to dispose of waste appropriately.</p>

Municipal Hazardous Special Waste (MHSW)	
Other Special Waste - Medical Waste	No diversion program in place.
Medical Gown	No diversion program in place.
Garbage - Non-recyclable/Other Waste	
Rigid Food Packaging	<p>No diversion program in place.</p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Unity health will consider a partnership with recycling companies that are able to recycle this material.</p>
Plastic Cutlery	<p>No diversion program in place.</p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Unity health will consider a partnership with recycling companies that are able to recycle this material.</p>
Textile	<p>No diversion program in place.</p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Unity health will consider creating a textile donation bin and/or a partnership with recycling companies that are able to recycle this material.</p>
Cold Beverage Paper Cups	<p>No diversion program in place.</p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Unity health will consider a partnership with recycling companies that are able to recycle this material.</p>
Hot Beverage Paper Cups	<p>No diversion program in place.</p> <p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Unity health will consider a partnership with recycling companies that are able to recycle this material.</p>
Other Plastic Bags & Films	No diversion program in place.

	<p><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for their products. Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site.</p> <p><u>Reuse:</u> Staff and visitors will be encouraged to bring reusable containers on site.</p> <p><u>Recycle:</u> Unity health will consider a partnership with recycling companies that are able to recycle this material.</p>
PPE - Masks & Gloves	<p>No diversion program in place.</p> <p><u>Reduce:</u> N/A.</p> <p><u>Reuse:</u> N/A.</p> <p><u>Recycle:</u> Cleaners will be trained on how to dispose of material appropriately. Unity Health will consider partnership with third-party recycler to dispose of single-use PPE through pyrolysis.</p>
Single Use Wipe	No diversion program in place.
Operational Wastes	
Lamp Recycling	<p><u>“Lamp Recycling”</u></p> <p><u>Reduce:</u> Staff will be encouraged to purchase durable and long-lasting lighting fixtures to reduce the number of lamps/lightbulbs replaced.</p> <p><u>Reuse:</u> N/A.</p> <p><u>Recycle:</u> Cleaners will be trained on how to dispose of material appropriately. Unity Health will continue partnership with third-party recycler (Aevitas) to dispose of lamps.</p>
Scrap Metals	<p><u>“Scrap Metal Recycling”</u></p> <p><u>Reduce:</u> Staff will be encouraged to purchase durable and long-lasting metal fixtures.</p> <p><u>Reuse:</u> N/A.</p> <p><u>Recycle:</u> Cleaners will be trained on how to dispose of material appropriately. Unity Health will continue partnership with third-party recycler (G. B. Scrap Metal LTD) to dispose of scrap metals.</p>
Batteries	<p><u>“Battery Recycling”</u></p> <p><u>Reduce:</u> Staff will be encouraged to transition to electrical equipment with rechargeable batteries to reduce the use of disposable batteries.</p> <p><u>Reuse:</u> N/A.</p> <p><u>Recycle:</u> Cleaners will be trained on how to dispose of material appropriately. Unity Health will continue partnership with third-party recycler (G. B. Scrap Metal LTD) to dispose of batteries.</p>
Pallets	<p><u>“Pallet Recycling”</u></p> <p><u>Reduce:</u> Staff will be encouraged to purchase durable and long-lasting pallets to reduce the number of new pallets purchased.</p> <p><u>Reuse:</u> N/A.</p> <p><u>Recycle:</u> Cleaners will be trained on how to dispose of material appropriately. Unity Health will continue partnership with third-party recycler (Pam Pallets) to dispose of pallets.</p>

Note: When completing this form, write “n/a” in the columns where the entity will not produce any waste for a category of waste.

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X. 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 #

XI. TIMETABLE FOR IMPLEMENTING THE 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
Comingled Recycling Program	Recycling program currently in place. Additional signage and promotional campaign will be considered for 2021.
Organics Diversion Program	Diversion program currently in place. Additional signage and promotional campaign will be considered for 2021.
E-Waste Recycling Program	Recycling program is currently in place.
Lamp Recycling Program	Recycling program is currently in place.
Scrap Metals Recycling Program	Recycling program is currently in place.
Battery Recycling Program	Recycling program is currently in place.
Pallet Recycling Program	Recycling program is currently in place.
PPE Pyrolysis	Unity Health will consider implementing a pyrolysis program for single-use PPE. No recycling program is currently in place for this material.

XII. 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:
<p>Unity Health Toronto staff will increase awareness of recycling programs at the facility through education programs and increased signage. This may include the placement of visual signs above each waste receptacle, posters in strategic locations (e.g. close to waste receptacles), and e-mail messages to inform staff of appropriate waste disposal practices.</p> <p>These actions, once implemented, will ensure that all staff/employees and visitors are aware of the Waste Reduction Work Plan and are able to appropriately dispose of waste materials. Additionally, copies of the Waste Reduction Work Plan will be placed in areas where most staff will be able to access and read it, such as lunch/break rooms.</p>

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XIII. ESTIMATED WASTE PRODUCED BY MATERIAL TYPE AND THE PROJECTED AMOUNT

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	
Recyclables - Paper						
Boxboard	28.20	Comingled Recycling	5.64		12.69	65
Gable Top	3.36	Comingled Recycling	0.67		1.51	65
Molded Pulp	8.83	Comingled Recycling	1.77		3.97	65
Kraft Paper	9.11	Comingled Recycling	1.82		4.10	65
Aseptic Containers	4.56	Comingled Recycling	0.91		2.05	65
Cardboard	41.84	Comingled Recycling	8.37		18.83	65
Mixed Fine Paper	25.12	Comingled Recycling	5.02		11.30	65
Recyclables - Plastic & Metals						
HDPE Other	8.37	Comingled Recycling	1.67		3.77	65
Expanded Polystyrene	4.73	Comingled Recycling	0.95		2.13	65
Polystyrene Rigid	3.03	Comingled Recycling	0.61		1.36	65
Other Plastic Bottles, Jugs & Jars	10.68	Comingled Recycling	2.14		4.80	65
PET Beverage	14.35	Comingled Recycling	2.87		6.46	65
Non-alcohol Aluminum Cans	6.99	Comingled Recycling	1.40		3.15	65
Other Polyethylene Plastic Bags & Films	18.88	Comingled Recycling	3.78		8.50	65
Organics - Food & Non-food						
Tissue	39.56	Organics Program	7.91		17.80	65
Sanitary	29.82	Organics Program	5.96		13.42	65
Organic Waste - Food	87.84	Organics Program	17.57		39.53	65

Waste From Electronic / Electrical Equipment (WEEE)						
Electronic / Electrical Waste	4.32	E-Waste Recycling			2.81	65
Municipal Hazardous Special Waste (MHSW)						
Other Special Waste - Medical Waste	79.20				51.48	65
Medical Plastic Gown	0.14				0.09	65
Medical Textile Gown	74.77				48.60	65
Garbage - Non-recyclable/Other Waste						
Rigid Food Packaging	1.16		0.70			60
Plastic Cutlery	3.36		2.02			60
Cold Beverage Paper Cups	1.63		0.98			60
Hot Beverage Paper Cups	14.45		8.67			60
Other Plastic Bags & Films	8.06		4.84			60
PPE - Masks & Gloves	60.48		36.29			60
Single Use Wipe	2.03		1.22			60
Operational Wastes						
Lamp Recycling	0.50	Lamp Recycling			0.50	100
Scrap Metals	5.22	Scrap Metal Recycling			5.22	100
Batteries	1.47	Battery Recycling			1.47	100
Pallets	39.96	Pallet Recycling			39.96	100

**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: <i>Joseph Reab</i>	Title: EVS Manager	Date: September 23, 2021

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