Unity Health Toronto Waste Audit Report
St. Joseph's Health Centre

Prepared for:

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Table of Contents

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. Joseph's Health Centre. 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. Joseph's Health Centre. 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 24th, 2021 and March 25th, 2021. All waste audit activities were conducted on March 25th, 2021 and March 26th, 2021 at the Millennium Transfer Station located in Oakville, Ontario.

St. Joseph's Health Centre is a community teaching hospital located at 30 The Queensway, in Toronto, Ontario. The facility is comprised of a central building well as a secondary building adjacent to the central building. The total area of the hospital 847,905ft. 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 772.59 tonnes of waste was generated during the one-year reporting period. Of this amount, 91.08% can be attributed to the Garbage (559.53 tonnes) and Recycling (144.18 tonnes) waste streams. The remaining waste was disposed into the Organics stream (2.51%), the WEEE stream (0.26%), and the Operational Waste stream (6.15%) which includes recycling for Lamps, Scrap Metals, Batteries, and Pallets. The hospital's waste diversion rate was determined to be 22.33%.

An in-depth analysis of the Garbage and Recycling streams was also conducted. It was determined that 50% of the Garbage stream was composed of divertible Recyclables, Organics, and WEEE. The remainder of the Garbage stream included MHSW (29%) and Non-Recyclable Garbage (21%). The overall diversion rate for the Garbage and Recycling streams for all hospital wings was determined to be 14.73%.

In the Recycling stream, the majority of materials were determined to be Recyclables (72%) whereas the remainder of the stream was composed of Organics (4%), WEEE (0.02%), MHSW (14%), and Non-Recyclable Garbage (10%). The Recycling stream was found to have an overall contamination rate of 28.11%.

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. Joseph's Health Centre. 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. Joseph's Health Centre. 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 24th and March 25th, 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 on March 25th and March 26th, 2021.

1.2.2. Facility Description

St. Joseph's Health Centre is a community teaching hospital located at 30 The Queensway, in Toronto, Ontario. The facility is comprised of a central building containing six distinct hospital wings as well as a secondary building adjacent to the central building (Figure 1). The total area of the hospital is 847,905ft. The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year.

The hospital employs 2,600 staff, 488 physicians, and provides work for 440 volunteers and 1,000 students. The hospital provides a variety of medical services including:

- Birthing Centre & Neonatal Intensive Care Unit
- Diagnostic Imaging Services
- Emergency, Critical Care & Access Clinics
- Laboratory Services
- Medicine, Ambulatory & Seniors' Health Clinics
- Mental Health & Addictions Clinic
- Surgery & Oncology Clinics
- Pharmacy
- Women's, Children's & Family Health

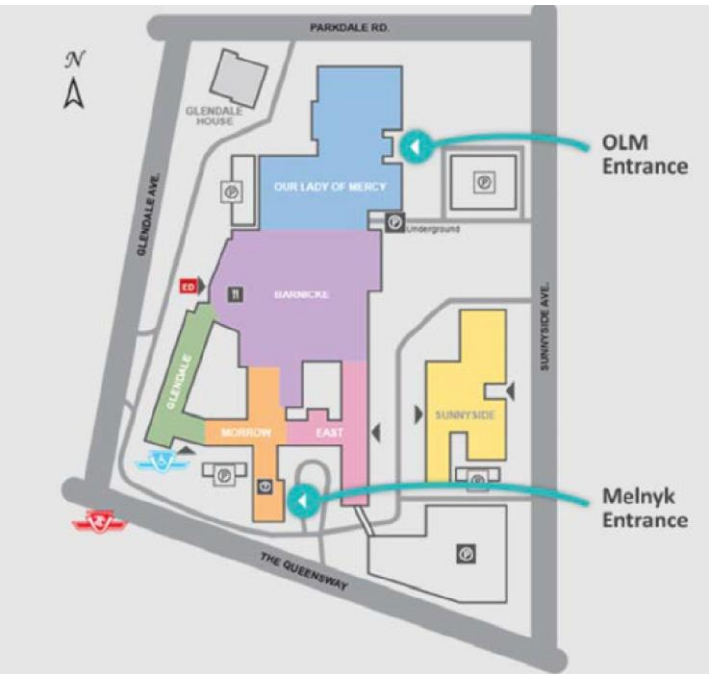

Figure 1: Aerial schematic of St. Joseph's Health Centre. The distinct hospital wings are labelled and distinguished by different colours.

For the purposes of this audit, waste samples were collected from each of the seven distinct hospital wings: Our Lady of Mercy (OLM), Barnicke, Sunnyside Building, Morrow, Glendale, Glendale/Barnicke, and East. Each hospital wing comprised of several generation points from which samples were extracted. Table 1 below lists each generation point.

Table 1: Each hospital wing contains several generation points from which Garbage and Recycling samples were extracted.

Hospital Wing	Generation Point
Our Lady of Mercy (OLM)	NICU, 1L, 2L, 3L, 4L
Barnicke	2B ICU, 2B OR, 2B PACU, CYSTO, Kitchen
Sunnyside	9S, 8S, 7S, 6S, 5S, 4S, 3S, 2S, 1S, BS
Morrow	1M, 2M, 3M, 4M, 5M, 6M, 7M
Glendale	7G, 6G, 5G, 4G, 3G, 2G, 1G, BG
Glendale / Barnicke	Ground ER, MHESU, Supertrack,
East	5E (planning) 6E, HEMO, , Unknown

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. Joseph's Health Centre. 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. Joseph's Health Centre.

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 13 to 14 times per month and/or into a 20-yard compactor that is emptied 3 to 8 times per month.
- The Comingled Recycling waste stream is serviced by Waste Management. Unity Health Toronto staff place waste into a 40-yard compactor that is emptied by Waste Management 3 to 5 times per month.

- The Organics waste stream is serviced by Waste Management. Unity Health Toronto staff place waste into six 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 24th, 2021 and March 25th, 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 25th, 2021 and March 26th, 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. Joseph's Health Centre generated a total of **772.59 tonnes of waste** during the reporting period. Of this amount, 91.08% can be attributed to the Garbage (559.53 tonnes) and Recycling (144.18 tonnes) waste streams. The remaining waste was disposed into the Organics stream (2.51%), the WEEE stream (0.26%), and the Operational Waste stream (6.15%) 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. Joseph's Health Centre.

Waste Stream	Service Provider	Total Waste Generated (tonnes)	Composition (%)
Garbage	Waste Management	559.53	72.42%
Comingled Recycling	Waste Management	144.18	18.66%
Organics	Waste Management	19.36	2.51%
Lamp Recycling	Aevitas	0.85	0.11%
Scrap Metal Recycling	GB Scrap Metal LTD	5.22	0.68%
E-Waste Recycling	GB Scrap Metal LTD	2.02	0.26%
Battery Recycling	GB Scrap Metal LTD	1.47	0.19%
Pallet Recycling	Pam Pallets	39.96	5.17%
Total		**772.59**	**100.00%**

4.2. Waste Diversion Rate

The waste diversion ate 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:

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

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. Joseph's Health Centre was determined to be **22.33%.** 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)	94.45	74.68	-	-	169.13	22.33%
Recyclables (Glass, Metals, Plastic)	66.33	28.98	-	-	95.30	
Organics	117.43	6.07	19.36	-	142.85	
WEEE	1.72	0.03	-	2.02	3.77	
MHSW	162.87	20.52	-	-	183.39	
Operational Wastes	0.00	0.00	-	47.50	47.50	
Non-Recyclable/Garbage	116.74	13.90	-	-	130.65	
Total	**559.53**	**144.18**	**19.36**	**49.51**	**772.59**	

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. Joseph's Health Centre 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)
East	269.13	61.38	330.51
OLM Building	32.10	9.57	41.67
Barnicke	33.47	10.27	43.74
Sunnyside	72.83	19.97	92.80
Morrow Wing	74.54	15.22	89.76
Glendale	46.77	14.34	61.12
Glendale/Barnicke	30.69	13.43	44.12
Total	**559.53**	**144.18**	**703.72**

4.3.1. Waste Composition of the OLM Hospital Wing

The Our Lady of Mercy (OLM) hospital wing was determined to dispose 32.10 tonnes/yr of material into the Garbage stream and 9.57 tonnes/yr into the Recycling stream. Table 6 and Figure 4 shows a detailed breakdown of the composition of the Garbage and Recycling streams.

The OLM Garbage stream was found to contain Recyclables (34.75%), MHSW (24.66%), Organics (21.20%), and WEEE (0.12%). It was determined that only 19.28% of the Garbage stream was composed of Non-Recyclable Garbage. Overall, divertible materials (Recyclables and Organics) made up 56.06% of the entire stream.

The large portion of the OLM Recycling stream was determined to be Recyclable (69.69%), while the remainder of the stream was composed of MHSW (15.08%), Non-Recyclable Garbage (11.23%), Organics (3.56%), and WEEE (0.16%). The vast majority of the stream was determined to be divertible Recyclables, Organics, and WEEE (73.69%).

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

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	6.96	21.67%	4.99	52.14%
Recyclables (Glass, Metals, Plastic)	4.20	13.08%	1.71	17.82%
Organics	6.80	21.20%	0.34	3.56%
WEEE	0.04	0.12%	0.02	0.16%
MHSW	7.92	24.66%	1.44	15.08%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	6.19	19.28%	1.07	11.23%
Total	**32.10**	**100.00%**	**9.57**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	17.99	56.06%	7.05	73.69%
Recyclables	11.15	34.75%	6.70	69.97%
Organics	6.80	21.20%	0.34	3.56%
WEEE	0.04	0.12%	0.02	0.16%
Total Non-Divertible Waste Materials	14.11	43.94%	2.52	26.31%
Total	**32.10**	**100.00%**	**9.57**	**100.00%**

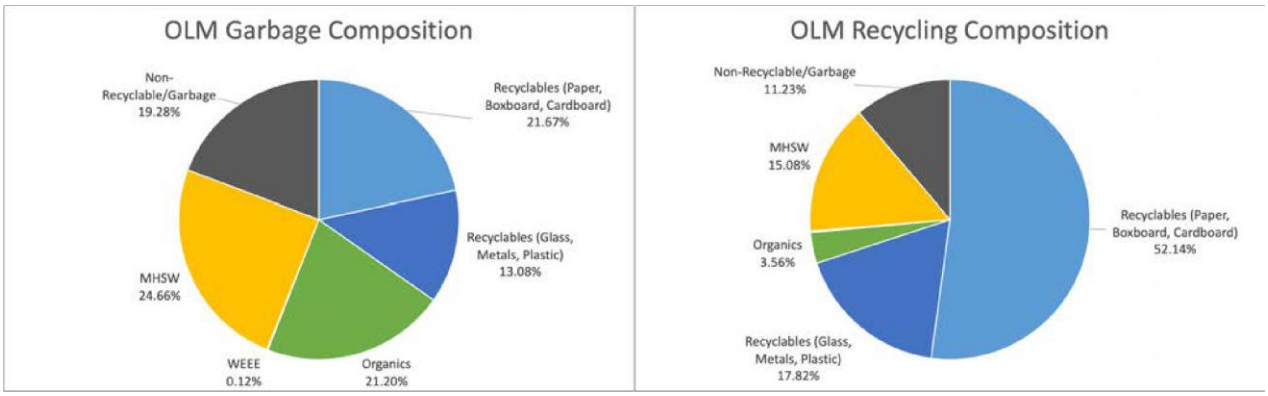

Figure 4: The composition of the Garbage (left) and Recycling (right) waste streams were determined for the OLM hospital wing.

4.3.2. Waste Composition of the Barnicke Hospital Wing

The Barnicke hospital wing was determined to generate 33.47 tonnes/yr of Garbage stream material and 10.27 tonnes/yr of Recycling stream material. A detailed breakdown of the composition can be found below in Table 7 and Figure 5.
The Barnicke Garbage stream was found to contain a large amount of MHSW (33.84%) and Recyclables (33.24%), whereas only 18.08% was determined to be Non-Recyclable Garbage. The remaining material was determined to be Organics (12.29%) and a small amount of WEEE (0.44%). It was determined that 45.97% of the entire Garbage stream was divertible Recyclables or Organics.

In contrast, the Barnicke Recycling stream was found to be composed mostly of Recyclables (61.40%) while the remainder of the stream was MHSW (19.14%), Non-Recyclable Garbage (11.72%), Organics (7.61%), and WEEE (0.13%). Overall, 69.14% of the Recycling stream was determined to be divertible Recyclables and Organics.

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

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	6.89	20.60%	3.57	34.78%
Recyclables (Glass, Metals, Plastic)	4.23	12.64%	2.73	26.62%
Organics	4.11	12.29%	0.78	7.61%
WEEE	0.15	0.44%	0.01	0.13%
MHSW	11.33	33.84%	1.97	19.14%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	6.75	20.18%	1.20	11.72%
Total	**33.47**	**100.00%**	**10.27**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	15.38	45.97%	7.10	69.14%
Recyclables	11.12	33.24%	6.31	61.40%
Organics	4.11	12.29%	0.78	7.61%
WEEE	0.15	0.44%	0.01	0.13%
Total Non-Divertible Waste Materials	18.08	54.03%	3.17	30.86%
Total	**33.47**	**100.00%**	**10.27**	**100.00%**

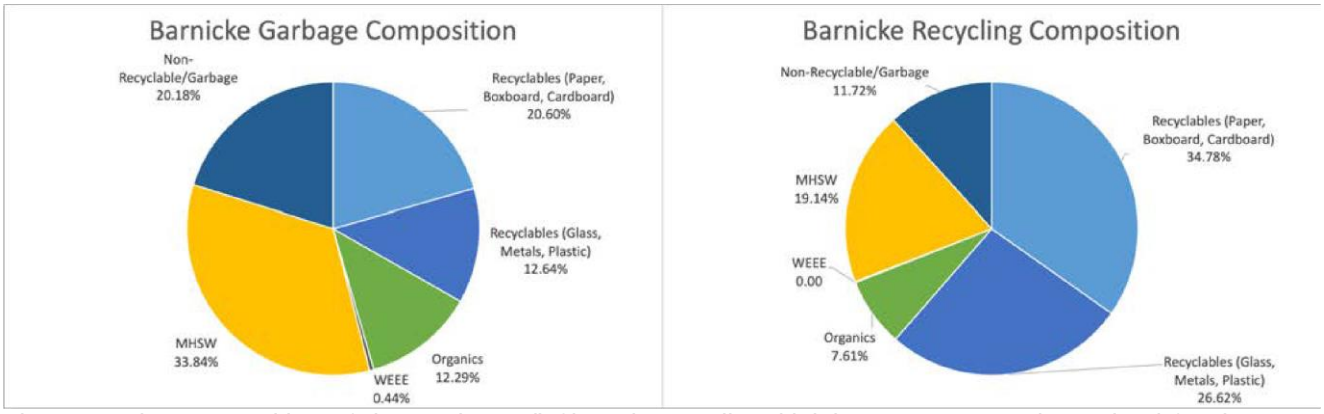

Figure 5: The composition of the Garbage (left) and Recycling (right) streams were determined for the Barnicke hospital wing.

4.3.3. Waste Composition of the Sunnyside Hospital Wing

The Sunnyside hospital wing generated 72.83 tonnes/yr of Garbage stream material and 19.97 tonnes/yr of Recycling stream material. Table 8 Figure 6, below show a detailed breakdown of the composition of each waste stream.

The Sunnyside hospital wing Garbage stream was determined to be composed of mostly MHSW (30.67%), Recyclables (28.03%), Non-Recyclable Garbage (21.78%), and Organics (19.20%). A small amount of WEEE (0.33%) was also found. Divertible materials comprised almost half (47.55%) of the Garbage stream.

In the Sunnyside Recycling stream, it was determined that the 78.02% was composed of divertible materials, with 74% of the entire stream as Recyclables and 3.89% as Organics. There was a small amount of Non-Recyclable Garbage (10.32%) and MHSW (11.66%) found as well.

Table 8: Composition breakdown of the Garbage and Recycling streams for the Sunnyside Building.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	12.05	16.55%	10.51	52.65%
Recyclables (Glass, Metals, Plastic)	8.36	11.48%	4.29	21.48%
Organics	13.98	19.20%	0.78	3.89%
WEEE	0.24	0.33%	0.00	0.00%
MHSW	22.34	30.67%	2.33	11.66%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	15.86	21.78%	2.06	10.32%
Total	**72.83**	**100.00%**	**19.97**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	34.63	47.55%	15.58	78.02%
Recyclables	20.41	28.03%	14.80	74.13%
Organics	13.98	19.20%	0.78	3.89%
WEEE	0.24	0.33%	0.00	0.00%
Total Non-Divertible Waste Materials	38.20	52.45%	4.39	21.98%
Total	**72.83**	**100.00%**	**19.97**	**100.00%**

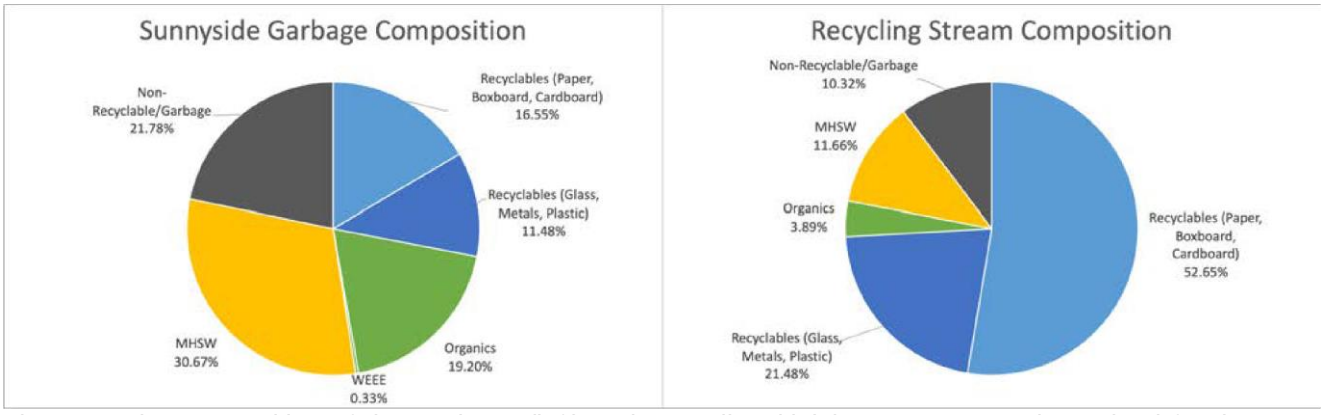

Figure 6: The composition of the Garbage (left) and Recycling (right) streams were determined for the Sunnyside Building.

4.3.4. Waste Composition of the Morrow Wing

The Morrow Wing was determined to have an estimated annual waste generation of 74.54 tonnes/yr for the Garbage stream and 15.22 tonnes/yr of the Recycling stream. The composition of each stream is presented in Table 9 Figure 7, below.

Less than half (44.66%) of the Morrow Wing Garbage stream was determined to be composed of divertible materials including Recyclables (24.11%) and Organics (20.55%). The remainder of the stream was determined to be comprised of MHSW (32%) and Non-Recyclable Garbage (23.34%).

The Morrow Wing Recycling stream was observed to contain 79.45% of divertible Recyclables (73.55%) and Organics (5.91%). A small amount of MHSW (11.01%) and Non-Recyclable Garbage (9.53%) was also observed.

Table 9: Composition breakdown of the Garbage and Recycling streams for the Morrow Wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	10.52	14.12%	7.76	50.98%
Recyclables (Glass, Metals, Plastic)	7.45	10.00%	3.44	22.57%
Organics	15.32	20.55%	0.90	5.91%
WEEE	0.00	0.00%	0.00	0.00%
MHSW	23.85	32.00%	1.68	11.01%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	17.40	23.34%	1.45	9.53%
Total	**74.54**	**100.00%**	**15.22**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	33.29	44.66%	12.09	79.45%
Recyclables	17.97	24.11%	11.19	73.55%
Organics	15.32	20.55%	0.90	5.91%
WEEE	0.00	0.00%	0.00	0.00%
Total Non-Divertible Waste Materials	41.25	55.34%	3.13	20.55%
Total	**74.54**	**100.00%**	**15.22**	**100.00%**

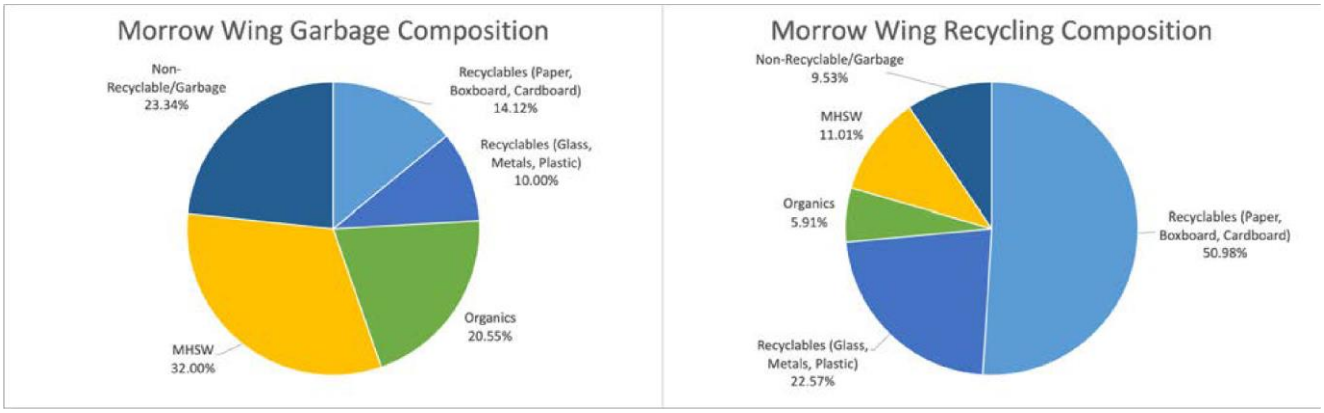

Figure 7: The composition of the Garbage (left) and Recycling (right) streams were determined for the Morrow Wing.

4.3.5. Waste Composition of the Glendale Hospital Wing

An estimated 46.77 tonnes/yr of the Garbage stream and 14.34 tonnes/yr of the Recycling stream were determined for the Glendale hospital wing. Table 10 and Figure 8 below provide a detailed breakdown of both the Garbage and Recycling streams.

The Glendale hospital wing's Garbage stream was observed to contain a large amount of MHSW (32.95%) as well as Non-Recyclable Garbage (24.13%). The stream was also observed to contain 26.62% of Recyclables and 16.3% of Organics, for a total of 42.92% of divertible materials.

The Glendale hospital wing's Recycling stream was observed to contain mainly divertible materials (78.26%) including Recyclables (75.17%) and Organics (3.09%). Non-divertible materials included MHSW (14.09%) and Non-Recyclable Garbage (21.74%).

Table 10: Composition breakdown of the Garbage and Recycling streams for the Glendale hospital wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	6.60	14.11%	8.25	57.49%
Recyclables (Glass, Metals, Plastic)	5.85	12.51%	2.54	17.68%
Organics	7.62	16.30%	0.44	3.09%
WEEE	0.00	0.00%	0.00	0.00%
MHSW	15.41	32.95%	2.02	14.09%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	11.28	24.13%	1.10	7.65%
Total	**46.77**	**100.00%**	**14.34**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	20.07	42.92%	11.23	78.26%
Recyclables	12.45	26.62%	10.78	75.17%
Organics	7.62	16.30%	0.44	3.09%
WEEE	0.00	0.00%	0.00	0.00%
Total Non-Divertible Waste Materials	26.70	57.08%	3.12	21.74%
Total	**46.77**	**100.00%**	**14.34**	**100.00%**

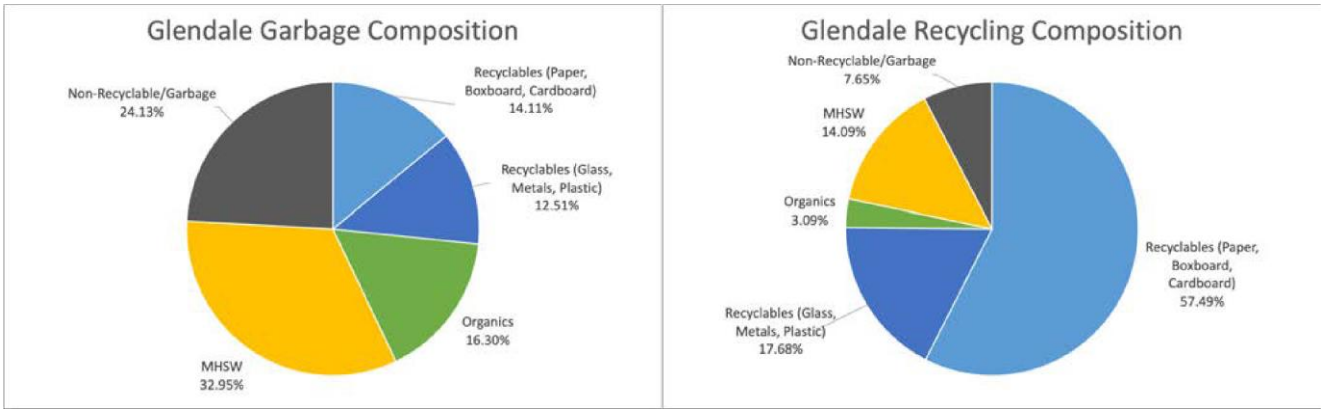

Figure 8: The composition of the Garbage (left) and Recycling (right) streams were determined for the Glendale hospital wing.

4.3.6. Waste Composition of the Glendale/Barnicke Hospital Wing

The Glendale/Barnicke hospital wing was determined to generate an annual amount of 30.69 tonnes/yr of Garbage stream material and 13.43 tonnes/yr of Recycling stream material. A detailed breakdown of each stream's composition can be found in Table 11 Figure 9 below.

Over half (56.86%) of the Glendale/Barnicke hospital wing's Garbage stream was determined to be composed of non-divertible materials, including Non-Recyclable Garbage (26.08%), MHSW (30.79%). It was observed that the remainder of the stream was composed of divertible Recyclables (23.63%), Organics (18.73%), and WEEE (0.78%).

The Recycling stream was determined to be composed primarily of Recyclables (79.24%). Small amounts of Organics (1.81%), MHSW (8.47%), and Non-Recyclable Garbage (10.48%) were also observed. Overall, 81.05% of the stream was determined to be divertible.

Table 11: Composition breakdown of the Garbage and Recycling streams for the Glendale/Barnicke hospital wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	4.67	15.22%	6.97	51.91%
Recyclables (Glass, Metals, Plastic)	2.58	8.41%	3.67	27.32%
Organics	5.75	18.73%	0.24	1.81%
WEEE	0.24	0.78%	0.00	0.00%
MHSW	9.45	30.79%	1.14	8.47%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	8.00	26.08%	1.41	10.48%
Total	**30.69**	**100.00%**	**13.43**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	13.24	43.14%	10.88	81.05%
Recyclables	7.25	23.63%	10.64	79.24%
Organics	5.75	18.73%	0.24	1.81%
WEEE	0.24	0.78%	0.00	0.00%
Total Non-Divertible Waste Materials	17.45	56.86%	2.54	18.95%
Total	**30.69**	**100.00%**	**13.43**	**100.00%**

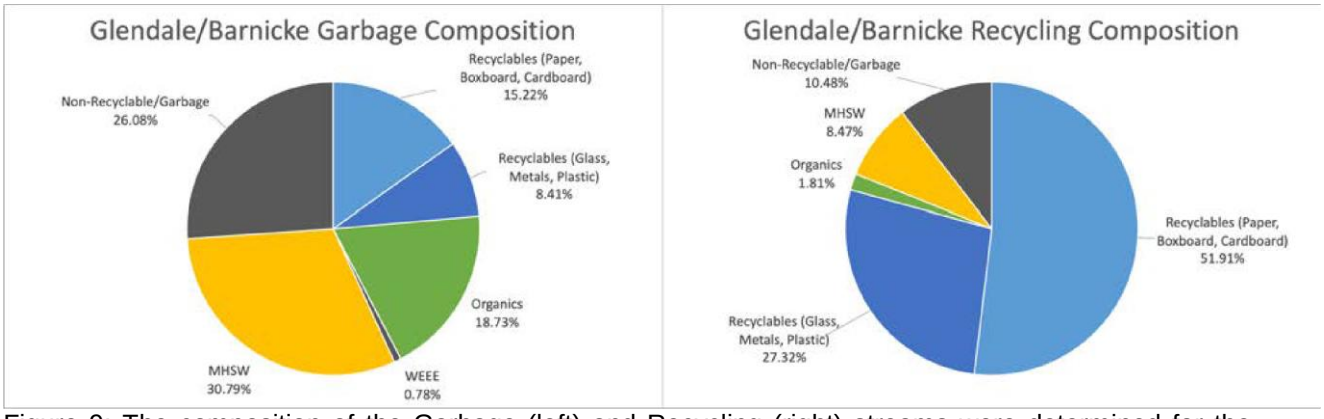

Figure 9: The composition of the Garbage (left) and Recycling (right) streams were determined for the Glendale/Barnicke hospital wing.

4.3.7. Waste Composition of the East Hospital Wing

Samples from the East hospital wing were also analyzed and determined to dispose 269.13 tonnes/yr of material into the Garbage stream and 61.38 tonnes/yr of material into the Recycling stream. A detailed breakdown of the composition of the Garbage and Recycling streams can be found in Table 12 Figure 10, below.

Approximately half (53.99%) of the Garbage stream was determined to be divertible, including 29.88% of Recyclables, 23.72% of Organics, and 0.39% of WEEE. The remainder of the stream was observed to contain MHSW (26.97%), and Non-Recyclable Garbage (19.04%).

In the Recycling stream, 74.65% was determined to be composed of divertible Recyclables (70.44%) and Organics (4.21%). The remainder of the stream was composed of MHSW (16.21%) and Non-Recyclable Garbage (9.14%).

Table 12: Composition breakdown of the Garbage and Recycling streams for the East hospital wing.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	46.76	17.37%	32.63	53.16%
Recyclables (Glass, Metals, Plastic)	33.65	12.50%	10.61	17.28%
Organics	63.84	23.72%	2.58	4.21%
WEEE	1.06	0.39%	0.00	0.00%
MHSW	72.57	26.97%	9.95	16.21%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	51.25	19.04%	5.61	9.14%
Total	**269.13**	**100.00%**	**61.38**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	145.31	53.99%	45.82	74.65%
Recyclables	80.41	29.88%	43.24	70.44%
Organics	63.84	23.72%	2.58	4.21%
WEEE	1.06	0.39%	0.00	0.00%
Total Non-Divertible Waste Materials	123.83	46.01%	15.56	25.35%
Total	**269.13**	**100.00%**	**61.38**	**100.00%**

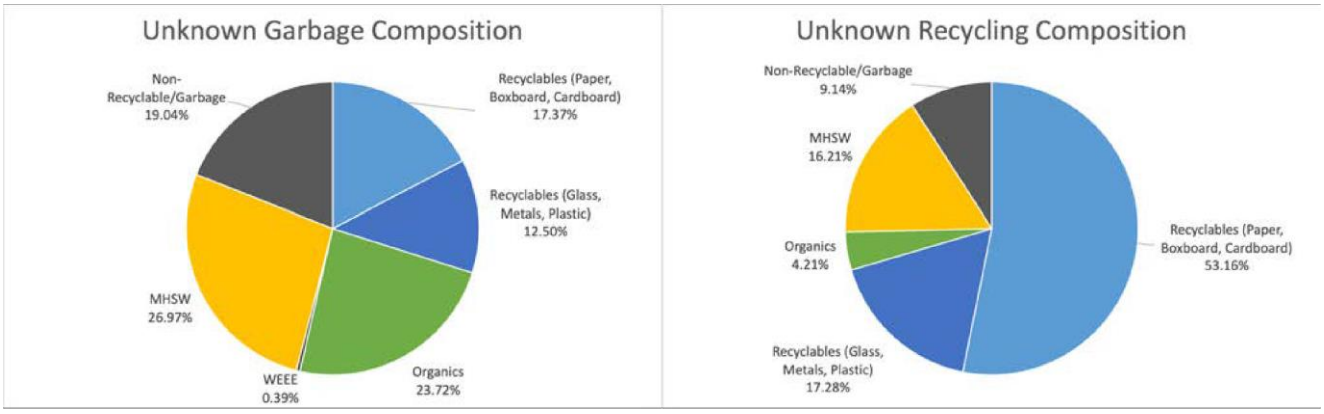

Figure 10: The composition of the Garbage (left) and Recycling (right) streams were determined for the East hospital wing.

4.3.8. 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 all hospital wings to determine the overall Garbage stream composition. Likewise, the waste materials in the Recycling stream were combined for all hospital wings to determine the overall Recycling stream composition.

Table 13: Composition of the Garbage and Recycling streams for all St. Joseph's Health Centre hospital wings.

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	94.45	16.88%	74.68	51.80%
Recyclables (Glass, Metals, Plastic)	66.33	11.85%	28.98	20.10%
Organics	117.43	20.99%	6.07	4.21%
WEEE	1.72	0.31%	0.03	0.02%
MHSW	162.87	29.11%	20.52	14.23%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	116.74	20.86%	13.90	9.64%
Total	**559.53**	**100.00%**	**144.18**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	279.93	50.03%	109.76	76.12%
Recyclables	160.78	28.73%	103.66	71.89%
Organics	117.43	20.99%	6.07	4.21%
WEEE	1.72	0.31%	0.03	0.02%
Total Non-Divertible Waste Materials	279.61	49.97%	34.43	23.88%
Total	**559.53**	**100.00%**	**144.18**	**100.00%**

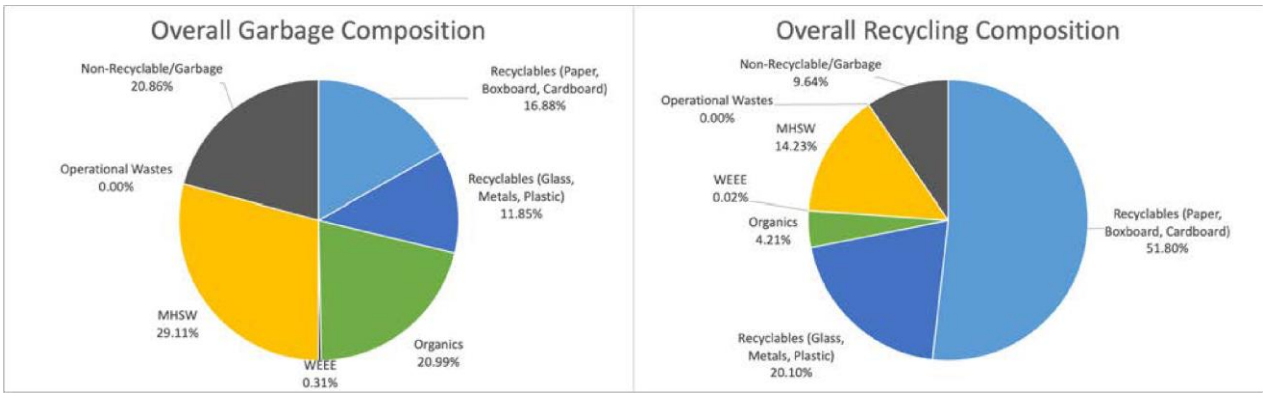

Figure 11: The overall composition of the Garbage stream (left) and the overall composition of the Recycling stream (right) were determined.

An estimated total of 559.53 tonnes of waste was disposed into the Garbage stream during the reporting period. From this amount, 279.93 tonnes (50.03%) were determined to be divertible through existing waste diversion programs including 28.73% of Recyclables (papers, plastics, metals, and glass), 20.99% of Organics (food and non-food waste organics), and 0.31% of WEEE. A large amount of the Garbage stream was determined to be comprised of MHSW (29.11%), whereas 20.86% was determined to be Non-Recyclable Garbage.

An estimated total of 144.18 tonnes of waste was disposed into the Recycling stream during the reporting period. The majority of the stream was composed of divertible materials, including 71.89% of Recyclables (papers, plastics, metals, and glass), 4.21% of Organics (food and non-food waste organics) and 0.02% of WEEE. The remainder of the stream was observed to be comprised of MHSW (14.23%) and Non-Recyclable Garbage (9.64%).

4.3.9. 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 Glendale/Barnicke hospital wing was determined to have the highest diversion rate of 24.11% and lowest Recycling stream contamination rate of 20.76%. The lowest diversion rate was observed in the Morrow hospital wing, which had a diversion rate of 12.47 % and a contamination rate of 26.45%.

The highest contamination rate of 38.60% was observed in the Barnicke hospital wing, which was observed to have a diversion rate of 14.42%. The lowest contamination rate was observed in the Glendale/Barnicke hospital wing.

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 (%)
East	61.38	330.51	43.24	13.08%	29.56%
OLM	9.57	41.67	6.70	16.07%	30.03%
Barnicke	10.27	43.74	6.31	14.42%	38.60%
Sunnyside	19.97	92.80	14.80	15.95%	25.87%
Morrow Wing	15.22	89.76	11.19	12.47%	26.45%
Glendale	14.34	61.12	10.78	17.64%	24.83%
Glendale/Barnicke	13.43	44.12	10.64	24.11%	20.76%
Total	**144.18**	**703.72**	**103.66**	**14.73%**	**28.11%**

5. Conclusions & Recommendations

5.1. Summary of Analysis

The following conclusions can be made based on the estimated waste generated by St. Joseph's Health Centre.

- **Annual Waste Generation**: It is estimated that St. Joseph's Health Centre generated a total of 772.59 tonnes of waste during the calendar year of 2020. The majority of this waste (72.42%) is attributed to the Garbage waste stream that is destined for landfill disposal. Comingled Recycling accounted for 18.66% of this waste, while Organics accounted for 2.51%, Operational Wastes accounted for 6.15%, and E-Waste accounted for 0.26%.

- **Waste Diversion**: Out of all the waste generated at the hospital, 172.53 tonnes of waste were diverted through existing waste diversion programs. This equates to a diversion rate of 22.33%.

- **OLM Composition:** This hospital wing was determined to generate 41.67 tonnes of waste per year. The Garbage stream comprised of 32.10 tonnes of waste, with 56% divertible materials and 44% of non-divertible waste. The Recycling stream comprised of 9.57 tonnes of waste and was found to have a contamination rate of 30.03%. The waste diversion rate was determined to be 16.07%.

- **Barnicke Composition:** This hospital wing was determined to generate 43.74 tonnes of waste per year. The Garbage stream comprised of 33.47 tonnes of waste, with 46% divertible materials and 54% of non-divertible waste. The Recycling stream comprised of 10.27 tonnes of waste and was found to have a contamination rate of 38.60%. The waste diversion rate was determined to be 14.42%.

- **Sunnyside Composition**: This hospital wing was determined to generate 92.80 tonnes of waste per year. The Garbage stream comprised of 72.83 tonnes of waste, with 48% divertible materials and 53% of non-divertible waste. The Recycling stream comprised of 19.97 tonnes of waste and was found to have a contamination rate of 25.87%. The waste diversion rate was determined to be 15.95%.

- **Morrow Composition:** This hospital wing was determined to generate 89.76 tonnes of waste per year. The Garbage stream comprised of 74.54 tonnes of waste, with 45% divertible materials and 55% of non-divertible waste. The Recycling stream comprised of 15.22 tonnes of waste and was found to have a contamination rate of 26.45%. The waste diversion rate was determined to be 12.47%.

- **Glendale Composition:** This hospital wing was determined to generate 61.12 tonnes of waste per year. The Garbage stream comprised of 46.77 tonnes of waste, with 43% divertible materials and 57% of non-divertible waste. The Recycling stream comprised of 14.34 tonnes of waste and was found to have a contamination rate of 24.83%. The waste diversion rate was determined to be 17.64%.

- **Glendale/Barnicke Composition:** This hospital wing was determined to generate 44.12 tonnes of waste per year. The Garbage stream comprised of 30.69 tonnes of waste, with 43% divertible materials and 57% of non-divertible waste. The Recycling stream

comprised of 13.43 tonnes of waste and was found to have a contamination rate of 20.76%. The waste diversion rate was determined to be 24.11%.

- **East Composition:** This hospital wing was determined to generate 330.51 tonnes of waste per year. The Garbage stream comprised of 269.13 tonnes of waste, with 54% divertible materials and 46% of non-divertible waste. The Recycling stream comprised of 61.38 tonnes of waste and was found to have a contamination rate of 29.56%. The waste diversion rate was determined to be 13.08%.

- **Overall Composition**: A significant portion of the Garbage stream was determined to be divertible, with 28.73% composed of Recyclables, 20.99% composed of Organics, and 0.31% composed of WEEE. The Recycling stream was determined to have an overall contamination rate of 28.11%.

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 28.73% of the overall composition. A large amount of organic material was observed in the Garbage stream (20.99%) and a small amount in the Recycling stream (4.21%). 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 (0.26% and 6.15%, 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 162.87 tonnes of hazardous waste (MHSW), which accounted for 29.11% of the stream. The Recycling stream was determined to contain 20.52 tonnes, or 14.23% 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 25, 2021 and March 26, 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. Joseph's health Centre – 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 24th, 2021 and March 25th, 2021
Collection Location: St. Joseph's Health Centre
Collection Address: 30 The Queensway, Toronto, ON
Building Notes:

Our Lady of Mercy Hospital Wing

	OLM					OLM					Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage (kg)					Recycling (kg)					Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**NICU**	**1L**	**2L**	**3L**	**4L**	**NICU**	**1L**	**2L**	**3L**	**4L**						
Recyclables - Paper																
Boxboard	0.50	1.20	1.43	1.34	1.39	0.43	0.72	1.46	0.72	0.42	2.14	1.37	3.51	6.65%	14.31%	8.41%
Gable Top	0.12	0.24	0.10	0.38	0.15	0.03	0.06	0.15	0.43	0.04	0.37	0.26	0.63	1.14%	2.72%	1.50%
Molded Pulp	0.12	0.12	0.10	0.76	0.31	0.05	0.12	0.26	0.10	0.08	0.52	0.22	0.73	1.61%	2.27%	1.76%
Kraft Paper	0.06	0.12	0.20	0.38	0.05	0.06	0.12	0.20	0.10	0.08	0.30	0.20	0.50	0.93%	2.13%	1.20%
Aseptic Containers	0.06	0.12	0.10	0.19	0.02	0.03	0.06	0.05	0.05	0.04	0.18	0.08	0.26	0.56%	0.87%	0.63%
Cardboard	0.87	1.68	1.49	0.57	1.01	0.50	1.20	0.77	0.95	2.50	2.05	2.16	4.21	6.38%	22.57%	10.10%
Mixed Fine Paper	0.37	0.48	1.64	0.76	0.62	0.19	0.36	0.50	0.48	0.39	1.41	0.70	2.11	4.40%	7.28%	5.06%
Recyclables - Plastic & Metals																
HDPE Other	0.31	0.72	1.02	0.38	0.77	0.15	0.36	0.14	0.14	0.35	1.17	0.42	1.59	3.64%	4.36%	3.81%
Expanded Polystyrene	0.06	0.24	0.10	0.19	0.08	0.02	0.06	0.03	0.02	0.00	0.25	0.05	0.29	0.76%	0.48%	0.70%
Polystyrene Rigid	0.06	0.12	0.10	0.10	0.06	0.02	0.03	0.05	0.00	0.00	0.16	0.04	0.20	0.50%	0.37%	0.47%
Other Plastic Bottles, Jugs & Jars	0.06	0.24	0.10	0.38	0.25	0.12	0.24	0.36	0.19	0.12	0.38	0.38	0.75	1.18%	3.92%	1.81%
PET Beverage	0.06	0.24	0.10	0.38	0.03	0.14	0.24	0.20	0.38	0.23	0.30	0.44	0.73	0.93%	4.56%	1.76%
Non-alcohol Aluminum Cans	0.06	0.24	0.10	0.57	0.02	0.09	0.12	0.15	0.10	0.04	0.36	0.18	0.55	1.13%	1.91%	1.31%
Other Polyethylene Plastic Bags & Films	0.87	1.68	0.82	0.95	0.02	0.06	0.06	0.15	0.19	0.12	1.58	0.21	1.80	4.93%	2.22%	4.31%
Organics - Food & Non-food											0.00	0.00				
Tissue	0.99	2.16	1.64	1.14	0.77	0.00	0.00	0.00	0.00	0.00	2.45	0.00	2.45	7.62%	0.00%	5.87%
Sanitary	0.87	1.92	1.84	0.95	0.93	0.00	0.00	0.00	0.00	0.08	2.37	0.03	2.40	7.40%	0.29%	5.77%
Organic Waste - Food	0.62	1.50	1.23	1.62	0.46	0.17	0.30	0.05	0.14	0.19	1.98	0.31	2.30	6.18%	3.27%	5.51%
Electronic/Electrical Waste	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.04	0.02	0.05	0.12%	0.16%	0.13%
Other Household Special Waste - Medical Waste	1.61	2.58	2.15	2.10	1.54	0.29	0.54	0.46	0.00	0.35	3.64	0.60	4.24	11.34%	6.26%	10.18%
Medical Gown	1.98	3.60	2.66	1.62	1.85	0.42	0.78	0.61	0.00	0.50	4.27	0.84	5.12	13.32%	8.82%	12.28%
Garbage - Non-recyclable/Other Waste																
Rigid Food Packaging	0.06	0.12	0.45	0.00	0.15	0.00	0.00	0.00	0.00	0.10	0.29	0.04	0.32	0.89%	0.38%	0.78%
Plastic Cutlery	0.06	0.12	0.10	0.10	0.06	0.00	0.00	0.01	0.00	0.00	0.16	0.00	0.16	0.50%	0.04%	0.40%
Textile	0.06	0.12	0.10	0.00	0.15	0.05	0.06	0.05	0.14	0.00	0.16	0.11	0.27	0.50%	1.15%	0.65%
Cold Beverage Paper Cups	0.06	0.12	0.10	0.10	0.05	0.02	0.06	0.03	0.05	0.02	0.16	0.06	0.22	0.48%	0.64%	0.52%

Hot Beverage Paper Cups	0.25	0.48	0.20	0.57	0.15	0.12	0.24	0.10	0.10	0.08	0.61	0.23	0.84	1.89%	2.43%	2.01%
Other Plastic Bags & Films	0.06	0.12	0.20	0.19	0.15	0.02	0.03	0.05	0.14	0.04	0.27	0.10	0.37	0.83%	1.06%	0.88%
PPE - Masks & Gloves	2.11	3.60	1.25	3.24	2.01	0.12	0.24	0.26	0.33	0.45	4.45	0.51	4.96	13.87%	5.35%	11.91%
Single Use Wipe	0.06	0.12	0.00	0.10	0.00	0.00	0.00	0.03	0.00	0.02	0.10	0.02	0.12	0.32%	0.17%	0.28%
Total Weight	**12.38**	**23.97**	**19.47**	**19.07**	**13.05**	**3.10**	**5.99**	**6.13**	**4.77**	**6.23**	**32.10**	**9.57**	**41.67**	**100.00%**	**100.00%**	**100.00%**

Material Stream	**Amount (tonnes/yr)**	**Distribution (%)**
Garbage	32.10	77.03%
Recycling	9.57	22.97%
Total	**41.67**	**100.00%**

Material Categories	**Garbage (tonnes/yr)**	**Recycling (tonnes/yr)**	**Total (tonnes/yr)**	**Total (%)**
Recyclables (Paper, Boxboard, Cardboard)	6.96	4.99	11.95	28.67%
Recyclables (Glass, Metals, Plastic)	4.20	1.71	5.90	14.17%
Organics	6.80	0.34	7.14	17.15%
WEEE	0.04	0.02	0.05	0.13%
MHSW	7.92	1.44	9.36	22.46%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	6.19	1.07	7.26	17.43%
Total	**32.10**	**9.57**	**41.67**	**100.00%**

Material Categories	**Garbage (tonnes/yr)**	**Composition (%)**	**Recycling (tonnes/yr)**	**Composition (%)**
Recyclables (Paper, Boxboard, Cardboard)	6.96	21.67%	4.99	52.14%
Recyclables (Glass, Metals, Plastic)	4.20	13.08%	1.71	17.82%
Organics	6.80	21.20%	0.34	3.56%
WEEE	0.04	0.12%	0.02	0.16%
MHSW	7.92	24.66%	1.44	15.08%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	6.19	19.28%	1.07	11.23%
Total	**32.10**	**100.00%**	**9.57**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	17.99	56.06%	7.05	73.69%
Recyclables	11.15	34.75%	6.70	69.97%
Organics	6.80	21.20%	0.34	3.56%
WEEE	0.04	0.12%	0.02	0.16%
Total Non-Divertible Waste Materials	14.11	43.94%	2.52	26.31%
Total	**32.10**	**100.00%**	**9.57**	**100.00%**

Barnicke Hospital Wing

	Barnicke			Barnicke			Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage (kg)			Recycling (kg)			Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**2B ICU/OR**	**2BPACU**	**CYSTO**	**2B ICU/OR**	**2BPACU**	**CYSTO**						
Recyclables - Paper												
Boxboard	2.55	0.43	1.83	0.64	0.14	0.91	1.76	0.62	2.37	5.25%	6.02%	5.43%
Gable Top	1.02	0.14	0.30	0.25	0.04	0.23	0.54	0.19	0.73	1.60%	1.85%	1.66%
Molded Pulp	1.02	0.14	0.30	0.38	0.07	0.38	0.54	0.30	0.84	1.60%	2.97%	1.92%
Kraft Paper	1.02	0.14	0.00	0.25	0.11	0.30	0.42	0.24	0.67	1.27%	2.37%	1.53%
Aseptic Containers	0.51	0.14	0.00	0.13	0.04	0.08	0.24	0.09	0.33	0.71%	0.85%	0.75%
Cardboard	2.55	0.72	2.74	2.55	0.72	1.14	2.19	1.61	3.81	6.56%	15.68%	8.70%
Mixed Fine Paper	1.53	0.87	0.91	0.89	0.14	0.38	1.21	0.52	1.73	3.61%	5.04%	3.94%
Recyclables - Plastic & Metals												
HDPE Other	0.04	1.15	0.00	2.76	0.11	0.83	0.44	1.35	1.79	1.30%	13.16%	4.09%
Expanded Polystyrene	0.51	0.14	0.15	0.00	0.04	0.30	0.29	0.12	0.42	0.88%	1.19%	0.95%
Polystyrene Rigid	0.51	0.14	0.30	0.00	0.04	0.00	0.35	0.01	0.36	1.05%	0.13%	0.83%
Other Plastic Bottles, Jugs & Jars	0.51	0.43	0.91	0.38	0.14	0.23	0.68	0.28	0.95	2.02%	2.68%	2.18%
PET Beverage	0.51	0.58	0.30	0.76	0.18	0.38	0.51	0.48	0.99	1.52%	4.71%	2.27%
Non-alcohol Aluminum Cans	1.02	0.29	0.30	0.13	0.07	0.15	0.59	0.13	0.72	1.76%	1.25%	1.64%
Other Polyethylene Plastic Bags & Films	1.53	0.72	1.52	0.38	0.14	0.46	1.38	0.36	1.74	4.12%	3.50%	3.97%
Organics - Food & Non-food												
Tissue	2.03	1.30	2.04	1.03	0.00	0.70	1.96	0.63	2.59	5.86%	6.15%	5.92%
Sanitary	2.04	0.43	1.22	0.00	0.00	0.00	1.35	0.00	1.35	4.03%	0.00%	3.08%
Organic Waste - Food	1.02	0.58	0.61	0.00	0.11	0.30	0.81	0.15	0.96	2.41%	1.47%	2.19%
Electronic/Electrical Waste	0.25	0.00	0.15	0.00	0.04	0.00	0.15	0.01	0.16	0.44%	0.13%	0.37%
Other Household Special Waste - Medical Waste	9.69	2.02	5.18	1.91	0.40	0.69	6.16	1.09	7.26	18.42%	10.64%	16.59%
Medical Gown	8.35	1.23	4.57	1.15	0.56	0.69	5.16	0.87	6.04	15.43%	8.50%	13.80%
Garbage - Non-recyclable/Other Waste												
Rigid Food Packaging	0.51	0.00	0.03	0.00	0.04	0.04	0.20	0.03	0.22	0.59%	0.26%	0.51%
Plastic Cutlery	0.25	0.04	0.00	0.00	0.02	0.00	0.11	0.01	0.12	0.33%	0.06%	0.26%
Textile	0.00	0.03	0.00	0.51	0.14	0.00	0.01	0.24	0.25	0.03%	2.32%	0.57%
Cold Beverage Paper Cups	0.51	0.00	0.00	0.13	0.02	0.04	0.19	0.07	0.25	0.56%	0.65%	0.58%
Hot Beverage Paper Cups	0.83	0.36	0.61	0.64	0.05	0.08	0.66	0.28	0.94	1.96%	2.73%	2.14%
Other Plastic Bags & Films	1.02	0.43	0.30	0.25	0.04	0.15	0.64	0.16	0.80	1.92%	1.58%	1.84%

PPE - Masks & Gloves	6.63	1.88	4.87	0.64	0.22	0.30	4.88	0.42	5.31	14.59%	4.12%	12.13%
Single Use Wipe	0.00	0.07	0.12	0.00	0.00	0.00	0.07	0.00	0.07	0.21%	0.00%	0.16%
Total Weight	**47.95**	**14.43**	**29.30**	**15.77**	**3.61**	**8.76**	**33.47**	**10.27**	**43.74**	**100.00%**	**100.00%**	**100.00%**

Material Stream	**Amount (tonnes/yr)**	**Distribution (%)**
Garbage	33.47	76.51%
Recycling	10.27	23.49%
Total	**43.74**	**100.00%**

Material Categories	**Garbage (tonnes/yr)**	**Recycling (tonnes/yr)**	**Total (tonnes/yr)**	**Total (%)**
Recyclables (Paper, Boxboard, Cardboard)	6.89	3.57	10.47	23.93%
Recyclables (Glass, Metals, Plastic)	4.23	2.73	6.97	15.93%
Organics	4.11	0.78	4.89	11.19%
WEEE	0.15	0.01	0.16	0.37%
MHSW	11.33	1.97	13.29	30.39%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	6.75	1.20	7.96	18.20%
Total	**33.47**	**10.27**	**43.74**	**100.00%**

Material Categories	**Garbage (tonnes/yr)**	**Composition (%)**	**Recycling (tonnes/yr)**	**Composition (%)**
Recyclables (Paper, Boxboard, Cardboard)	6.89	20.60%	3.57	34.78%
Recyclables (Glass, Metals, Plastic)	4.23	12.64%	2.73	26.62%
Organics	4.11	12.29%	0.78	7.61%
WEEE	0.15	0.44%	0.01	0.13%
MHSW	11.33	33.84%	1.97	19.14%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	6.75	20.18%	1.20	11.72%
Total	**33.47**	**100.00%**	**10.27**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	15.38	45.97%	7.10	69.14%
Recyclables	11.12	33.24%	6.31	61.40%
Organics	4.11	12.29%	0.78	7.61%
WEEE	0.15	0.44%	0.01	0.13%
Total Non-Divertible Waste Materials	18.08	54.03%	3.17	30.86%
Total	**33.47**	**100.00%**	**10.27**	**100.00%**

Sunnyside Hospital Wing

	Sunnyside										Sunnyside										Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage (kg)										Recycling (kg)										Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**9S**	**8S**	**7S**	**6S**	**5S**	**4S**	**3S**	**2S**	**1S**	**BS**	**9S**	**8S**	**7S**	**6S**	**5S**	**4S**	**3S**	**2S**	**1S**	**BS**						
Recyclables - Paper																										
Boxboard	0.54	1.00	0.22	0.44	0.75	1.02	0.85	0.00	0.00	0.25	0.54	0.88	0.25	0.55	0.75	0.95	0.92	1.22	2.34	0.35	1.85	3.19	5.04	2.54%	15.98%	5.43%
Gable Top	0.36	0.50	0.00	0.00	0.19	0.25	0.28	0.18	0.31	0.13	0.09	0.06	0.08	0.07	0.19	0.06	0.07	0.09	0.00	0.03	0.81	0.28	1.08	1.11%	1.38%	1.16%
Molded Pulp	0.72	0.50	0.44	0.15	0.56	0.13	0.14	0.09	0.31	0.13	0.14	0.13	0.17	0.18	0.33	0.06	0.07	0.14	0.78	0.06	1.16	0.75	1.91	1.59%	3.75%	2.06%
Kraft Paper	0.54	1.25	0.33	0.00	0.56	0.00	0.27	0.18	0.00	0.13	0.27	0.43	0.19	0.15	0.23	0.13	0.14	0.14	0.31	0.06	1.19	0.75	1.94	1.64%	3.76%	2.09%
Aseptic Containers	0.18	0.00	0.11	0.15	0.19	0.00	0.14	0.09	0.16	0.06	0.05	0.00	0.03	0.04	0.09	0.06	0.07	0.05	0.31	0.03	0.39	0.27	0.66	0.54%	1.33%	0.71%
Cardboard	0.45	0.50	0.44	0.88	0.94	1.52	1.70	1.10	3.74	0.76	0.90	1.13	0.33	0.73	1.08	1.14	1.34	0.87	2.89	0.60	4.39	4.02	8.41	6.03%	20.13%	9.07%
Mixed Fine Paper	0.54	1.00	0.33	0.59	0.56	0.89	0.85	0.55	0.62	0.25	0.41	0.38	0.36	0.29	0.51	0.38	0.35	0.28	0.31	0.19	2.26	1.26	3.52	3.10%	6.33%	3.80%
Recyclables - Plastic & Metals																										
HDPE Other	0.18	0.50	0.11	0.00	0.56	0.63	0.00	0.46	0.94	0.00	1.23	0.25	0.08	0.07	0.33	0.25	0.35	0.28	0.16	0.16	1.23	1.16	2.39	1.70%	5.79%	2.58%
Expanded Polystyrene	0.09	0.00	0.06	0.00	0.19	0.13	0.14	0.09	0.16	0.13	0.02	0.03	0.03	0.00	0.05	0.03	0.07	0.05	0.16	0.02	0.36	0.16	0.52	0.49%	0.82%	0.56%
Polystyrene Rigid	0.09	0.00	0.00	0.00	0.19	0.13	0.14	0.09	0.16	0.13	0.02	0.03	0.03	0.04	0.05	0.03	0.11	0.02	0.00	0.02	0.34	0.12	0.46	0.46%	0.62%	0.50%
Other Plastic Bottles, Jugs & Jars	0.18	0.50	0.17	0.59	0.56	0.13	0.14	0.09	0.31	0.13	0.14	0.25	0.03	0.15	0.28	0.19	0.28	0.23	0.31	0.16	1.02	0.73	1.76	1.40%	3.68%	1.89%
PET Beverage Non-alcohol	0.18	1.00	0.28	0.59	0.56	0.13	0.14	0.09	0.16	0.06	0.14	0.25	0.19	0.18	0.33	0.25	0.35	0.23	0.00	0.13	1.16	0.75	1.91	1.60%	3.75%	2.06%
Aluminum Cans	0.18	0.50	0.06	0.15	0.19	0.13	0.14	0.09	0.16	0.13	0.05	0.19	0.06	0.04	0.14	0.19	0.14	0.14	0.23	0.06	0.63	0.45	1.07	0.86%	2.25%	1.16%
Other Polyethylene Plastic Bags & Films	0.81	1.00	0.33	0.44	0.75	1.78	1.98	1.29	1.56	0.00	0.09	0.13	0.17	0.18	0.19	0.25	0.14	0.09	0.31	0.95	3.63	0.91	4.54	4.98%	4.56%	4.89%
Organics - Food & Non-food																										
Tissue	0.90	2.51	0.67	1.47	1.31	2.28	2.83	1.47	2.65	1.13	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	6.28	0.22	6.50	8.63%	1.08%	7.00%
Sanitary	0.72	1.75	1.00	0.00	0.75	2.03	1.98	1.47	0.00	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	4.00	5.49%	0.00%	4.31%
Organic Waste - Food	0.54	1.00	0.33	1.03	1.12	1.27	1.41	0.92	1.87	0.63	0.14	0.52	0.00	0.00	0.00	0.38	0.00	0.28	0.00	0.22	3.70	0.56	4.26	5.08%	2.81%	4.59%
Electronic/Electrical Waste	0.00	0.25	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.24	0.33%	0.00%	0.26%
Other Household Special Waste - Medical Waste	3.42	4.21	1.67	1.32	2.37	3.30	3.67	2.57	4.06	1.71	0.00	0.00	0.00	0.37	0.00	0.57	0.71	0.37	0.00	0.28	10.33	0.84	11.17	14.18%	4.20%	12.03%
Medical Gown	3.69	4.38	1.72	1.91	2.25	4.06	4.52	2.94	5.30	2.11	0.45	1.44	0.00	0.26	0.00	0.00	0.99	0.51	0.00	0.44	12.01	1.49	13.50	16.48%	7.46%	14.54%
Garbage - Non-recyclable/Other Waste																										
Rigid Food Packaging	0.18	0.25	0.11	0.15	0.19	0.13	0.14	0.09	0.16	0.06	0.00	0.00	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.02	0.55	0.73%	0.12%	0.60%
Plastic Cutlery	0.09	0.13	0.06	0.29	0.19	0.13	0.14	0.09	0.16	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.49	0.09	0.57	0.67%	0.43%	0.62%
Textile	0.00	0.00	0.11	0.15	0.19	0.13	0.14	0.09	0.16	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.03	0.37	0.05	0.42	0.51%	0.26%	0.46%
Cold Beverage Paper Cups	0.09	0.00	0.11	0.15	0.00	0.13	0.14	0.09	0.16	0.06	0.05	0.00	0.00	0.00	0.00	0.06	0.04	0.02	0.16	0.02	0.34	0.12	0.46	0.46%	0.62%	0.50%
Hot Beverage Paper Cups	0.27	0.25	0.33	1.32	0.56	0.51	0.57	0.37	0.94	0.25	0.09	0.19	0.03	0.04	0.00	1.05	0.21	0.14	0.00	0.13	1.96	0.68	2.64	2.69%	3.41%	2.84%
Other Plastic Bags & Films	0.36	0.75	0.22	0.73	0.94	0.13	0.14	0.09	0.31	0.06	0.18	0.13	0.11	0.11	0.05	0.03	0.42	0.02	0.00	0.02	1.36	0.39	1.75	1.87%	1.95%	1.89%
PPE - Masks & Gloves	2.52	1.75	1.78	1.62	2.06	4.06	4.80	2.94	4.99	2.14	0.14	0.25	0.19	0.18	0.09	0.25	0.28	0.14	0.00	0.09	10.46	0.59	11.06	14.37%	2.97%	11.91%
Single Use Wipe	0.18	0.00	0.00	0.00	0.19	0.13	0.14	0.09	0.16	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.35	0.11	0.46	0.47%	0.57%	0.49%
Total Weight	**18.02**	**25.51**	**11.10**	**14.39**	**18.85**	**25.12**	**27.54**	**17.63**	**29.48**	**11.89**	**5.15**	**6.71**	**2.36**	**3.67**	**4.68**	**6.34**	**7.06**	**5.33**	**9.36**	**4.03**	**72.83**	**19.97**	**92.80**	**100.00%**	**100.00%**	**100.00%**

Material Stream	Amount (tonnes/yr)	Distribution (%)
Garbage	72.83	78.48%
Recycling	19.97	21.52%
Total	**92.80**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Recycling (tonnes/yr)	Total (tonnes/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	12.05	10.51	22.56	24.31%
Recyclables (Glass, Metals, Plastic)	8.36	4.29	12.65	13.63%
Organics	13.98	0.78	14.76	15.90%
WEEE	0.24	0.00	0.24	0.26%
MHSW	22.34	2.33	24.66	26.58%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	15.86	2.06	17.92	19.31%
Total	**72.83**	**19.97**	**92.80**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	12.05	16.55%	10.51	52.65%
Recyclables (Glass, Metals, Plastic)	8.36	11.48%	4.29	21.48%
Organics	13.98	19.20%	0.78	3.89%
WEEE	0.24	0.33%	0.00	0.00%
MHSW	22.34	30.67%	2.33	11.66%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	15.86	21.78%	2.06	10.32%
Total	**72.83**	**100.00%**	**19.97**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	34.63	47.55%	15.58	78.02%
Recyclables	20.41	28.03%	14.80	74.13%
Organics	13.98	19.20%	0.78	3.89%
WEEE	0.24	0.33%	0.00	0.00%
Total Non-Divertible Waste Materials	38.20	52.45%	4.39	21.98%
Total	**72.83**	**100.00%**	**19.97**	**100.00%**

Morrow Wing

	Morrow Wing							Morrow Wing							Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage (kg)							Recycling (kg)							Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**1M**	**2M**	**3M**	**4M**	**5M**	**6M**	**7M**	**1M**	**2M**	**3M**	**4M**	**5M**	**6M**	**7M**						
Recyclables - Paper																				
Boxboard	1.18	0.00	0.84	2.02	0.41	0.35	1.12	1.65	0.94	0.51	1.76	0.41	0.41	1.23	2.16	2.53	4.69	2.90%	16.59%	5.22%
Gable Top	0.47	0.00	0.19	0.25	0.06	0.12	0.56	0.12	0.07	0.05	0.13	0.03	0.03	0.07	0.60	0.18	0.78	0.81%	1.18%	0.87%
Molded Pulp	0.47	0.29	0.37	0.25	0.06	0.12	0.84	0.18	0.14	0.09	0.13	0.04	0.06	0.14	0.88	0.29	1.16	1.18%	1.88%	1.30%
Kraft Paper	0.47	0.29	0.19	0.25	0.06	0.12	0.56	0.24	0.14	0.09	0.25	0.06	0.06	0.07	0.71	0.33	1.04	0.95%	2.19%	1.16%
Aseptic Containers	0.24	0.14	0.19	0.25	0.06	0.06	0.28	0.06	0.07	0.05	0.06	0.01	0.01	0.04	0.44	0.11	0.56	0.60%	0.73%	0.62%
Cardboard	2.83	1.44	0.93	3.02	0.71	0.83	0.84	2.06	1.37	0.93	2.21	0.56	0.47	1.48	3.87	3.31	7.18	5.19%	21.77%	8.00%
Mixed Fine Paper	1.41	0.87	0.37	1.01	0.35	0.24	0.84	0.71	0.43	0.23	0.76	0.18	0.18	0.28	1.86	1.01	2.87	2.49%	6.63%	3.20%
Recyclables - Plastic & Metals																				
HDPE Other	1.18	0.00	0.37	0.00	0.30	0.00	0.00	0.59	0.36	0.23	0.63	0.15	0.16	0.42	0.67	0.93	1.60	0.90%	6.10%	1.79%
Expanded Polystyrene	0.24	0.14	0.19	0.50	0.06	0.00	0.14	0.06	0.04	0.02	0.06	0.01	0.01	0.04	0.46	0.09	0.55	0.62%	0.59%	0.62%
Polystyrene Rigid	0.24	0.14	0.19	0.50	0.06	0.00	0.14	0.06	0.04	0.02	0.06	0.01	0.01	0.04	0.46	0.09	0.55	0.62%	0.59%	0.62%
Other Plastic Bottles, Jugs & Jars	0.24	0.14	0.09	0.50	0.06	0.00	0.14	0.47	0.29	0.19	0.50	0.12	0.12	0.35	0.43	0.74	1.17	0.58%	4.89%	1.31%
PET Beverage	0.24	0.14	0.09	0.50	0.12	0.00	0.14	0.47	0.22	0.19	0.50	0.12	0.15	0.25	0.45	0.69	1.14	0.61%	4.53%	1.27%
Non-alcohol Aluminum Cans	0.24	0.14	0.19	0.50	0.06	0.06	0.28	0.35	0.22	0.14	0.38	0.09	0.10	0.14	0.54	0.52	1.05	0.72%	3.41%	1.17%
Other Polyethylene Plastic Bags & Films	3.30	1.73	1.12	2.52	0.83	0.83	1.83	0.18	0.11	0.09	0.25	0.06	0.06	0.28	4.43	0.38	4.81	5.95%	2.47%	5.36%
Organics - Food & Non-food																				
Tissue	3.77	2.31	1.68	4.54	0.94	1.06	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.04	0.00	6.04	8.10%	0.00%	6.73%
Sanitary	3.30	1.73	1.31	4.03	0.94	0.94	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.19	0.00	5.19	6.96%	0.00%	5.78%
Organic Waste - Food	2.36	1.44	0.93	3.02	1.02	0.59	1.83	0.71	0.00	0.28	0.76	0.18	0.19	0.35	4.09	0.90	4.99	5.48%	5.91%	5.55%
Electronic/Electrical Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Other Household Special Waste - Medical Waste	7.65	4.04	2.52	7.06	3.42	1.54	3.65	0.00	0.00	0.42	0.00	0.27	0.24	0.00	10.90	0.34	11.24	14.63%	2.21%	12.52 %
Medical Gown	9.19	4.91	2.61	9.20	2.18	1.77	5.62	0.00	1.73	0.65	0.00	0.00	0.44	0.84	12.95	1.34	14.29	17.37%	8.80%	15.92 %
Garbage - Non-recyclable/Other Waste																				
Rigid Food Packaging	0.24	0.72	0.09	1.26	0.06	0.06	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.94	1.26%	0.00%	1.04%
Plastic Cutlery	0.24	0.14	0.09	0.25	0.06	0.06	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.36	0.48%	0.00%	0.40%
Textile	0.24	0.14	0.09	0.25	0.06	0.06	0.14	0.12	0.07	0.05	0.13	0.03	0.06	0.07	0.36	0.19	0.55	0.48%	1.25%	0.61%
Cold Beverage Paper Cups	0.24	0.14	0.09	0.25	0.06	0.24	0.14	0.06	0.04	0.02	0.06	0.01	0.01	0.07	0.42	0.10	0.53	0.57%	0.67%	0.59%
Hot Beverage Paper Cups	0.94	2.02	0.37	1.01	0.24	0.24	0.70	0.47	0.22	0.19	0.50	0.10	0.09	0.14	2.01	0.62	2.64	2.70%	4.10%	2.94%
Other Plastic Bags & Films	0.24	0.72	0.09	0.25	0.06	0.30	0.14	0.06	0.04	0.02	0.06	0.01	0.01	0.04	0.66	0.09	0.75	0.88%	0.59%	0.83%

PPE - Masks & Gloves	8.48	4.91	3.36	8.06	2.60	2.18	4.07	0.00	0.25	0.19	0.50	0.07	0.06	0.14	12.29	0.44	12.73	16.48%	2.92%	14.18 %
Single Use Wipe	0.24	0.14	0.09	0.25	0.06	0.06	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.36	0.48%	0.00%	0.40%
Total Weight	**49.81**	**28.86**	**18.66**	**51.53**	**14.89**	**11.80**	**28.66**	**8.60**	**6.78**	**4.66**	**9.70**	**2.54**	**2.95**	**6.46**	**74.54**	**15.22**	**89.76**	**100.00 %**	**100.00 %**	**100.00 %**

Material Stream	Amount (tonnes/yr)	Distribution (%)
Garbage	74.54	83.04%
Recycling	15.22	16.96%
Total	**89.76**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Recycling (tonnes/yr)	Total (tonnes/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	10.52	7.76	18.28	20.37%
Recyclables (Glass, Metals, Plastic)	7.45	3.44	10.89	12.13%
Organics	15.32	0.90	16.22	18.07%
WEEE	0.00	0.00	0.00	0.00%
MHSW	23.85	1.68	25.53	28.44%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	17.40	1.45	18.85	21.00%
Total	**74.54**	**15.22**	**89.76**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	10.52	14.12%	7.76	50.98%
Recyclables (Glass, Metals, Plastic)	7.45	10.00%	3.44	22.57%
Organics	15.32	20.55%	0.90	5.91%
WEEE	0.00	0.00%	0.00	0.00%
MHSW	23.85	32.00%	1.68	11.01%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	17.40	23.34%	1.45	9.53%
Total	**74.54**	**100.00%**	**15.22**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	33.29	44.66%	12.09	79.45%
Recyclables	17.97	24.11%	11.19	73.55%
Organics	15.32	20.55%	0.90	5.91%
WEEE	0.00	0.00%	0.00	0.00%
Total Non-Divertible Waste Materials	41.25	55.34%	3.13	20.55%
Total	**74.54**	**100.00%**	**15.22**	**100.00%**

Glendale Hospital Wing

	Glendale								Glendale								Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage (kg)								Recycling (kg)								Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**7G**	**6G**	**5G**	**4G**	**3G**	**2G**	**1G**	**BG**	**7G**	**6G**	**5G**	**4G**	**3G**	**2G**	**1G**	**BG**						
Recyclables - Paper																						
Boxboard	0.22	0.29	1.64	0.87	0.55	0.30	0.78	0.31	0.54	0.54	0.60	0.87	0.51	0.68	0.84	0.69	1.81	1.92	3.73	3.87%	13.41%	6.11%
Gable Top	0.11	0.14	0.07	0.11	0.00	0.15	0.26	0.00	0.08	0.04	0.11	0.05	0.05	0.04	0.13	0.09	0.31	0.22	0.52	0.66%	1.50%	0.86%
Molded Pulp	0.05	0.43	0.00	0.33	0.18	0.45	0.26	0.12	0.14	0.07	0.11	0.16	0.14	0.19	0.26	0.16	0.67	0.45	1.12	1.43%	3.12%	1.83%
Kraft Paper	0.11	0.29	0.15	0.11	0.00	0.23	0.13	0.00	0.11	0.11	0.11	0.22	0.23	0.15	0.36	0.12	0.37	0.51	0.88	0.79%	3.59%	1.45%
Aseptic Containers	0.05	0.00	0.00	0.11	0.09	0.23	0.13	0.12	0.05	0.02	0.13	0.05	0.09	0.04	0.06	0.06	0.27	0.19	0.46	0.57%	1.31%	0.75%
Cardboard	0.54	0.72	0.00	0.66	0.92	0.53	0.91	0.87	1.20	0.76	0.65	1.07	0.80	0.83	1.13	0.59	1.88	2.57	4.45	4.02%	17.90%	7.28%
Mixed Fine Paper	0.43	0.14	0.00	0.66	0.64	0.38	0.91	0.37	0.24	0.27	0.87	0.38	3.91	0.13	0.49	0.25	1.29	2.39	3.68	2.76%	16.67%	6.03%
Recyclables - Plastic & Metals																						
HDPE Other	0.54	0.14	0.00	0.00	0.00	0.00	0.78	0.12	0.08	0.11	0.64	0.22	0.14	0.11	0.19	0.09	0.58	0.58	1.16	1.24%	4.04%	1.90%
Expanded Polystyrene	0.05	0.07	0.45	0.11	0.28	0.08	0.26	0.06	0.00	0.04	0.02	0.05	0.48	0.02	0.06	0.03	0.49	0.26	0.75	1.06%	1.80%	1.23%
Polystyrene Rigid	0.16	0.00	0.00	0.00	0.09	0.23	0.13	0.00	0.00	0.04	0.02	0.05	0.05	0.02	0.03	0.03	0.22	0.09	0.31	0.48%	0.61%	0.51%
Other Plastic Bottles, Jugs & Jars	0.33	0.29	0.07	0.22	0.18	0.53	0.13	0.12	0.08	0.14	0.19	0.14	0.23	0.13	0.13	0.12	0.68	0.43	1.11	1.46%	2.96%	1.82%
PET Beverage	0.43	0.72	0.60	0.22	0.09	0.23	0.13	0.25	0.14	0.22	0.19	0.11	0.21	0.15	0.32	0.16	0.97	0.54	1.52	2.08%	3.78%	2.48%
Non-alcohol Aluminum Cans	0.16	0.14	0.45	0.00	0.46	0.08	0.26	0.06	0.03	0.05	0.04	0.05	0.11	0.32	0.06	0.09	0.59	0.28	0.87	1.26%	1.95%	1.42%
Other Polyethylene Plastic Bags & Films	0.33	0.58	0.45	1.31	1.29	0.91	0.78	0.69	0.08	0.04	0.48	0.11	0.07	0.06	0.10	0.06	2.31	0.36	2.67	4.93%	2.53%	4.37%
Organics - Food & Non-food																						
Tissue	1.08	1.30	1.64	2.19	0.92	0.98	2.33	1.25	0.19	0.00	0.00	0.00	0.00	0.00	0.03	0.00	4.27	0.08	4.35	9.12%	0.57%	7.12%
Sanitary	0.54	0.00	0.00	0.00	0.00	1.21	0.00	0.19	0.16	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.71	0.08	0.79	1.51%	0.55%	1.29%
Organic Waste - Food	0.27	1.01	0.89	1.53	0.73	0.83	1.17	0.81	0.05	0.18	0.00	0.11	0.16	0.17	0.10	0.00	2.65	0.28	2.93	5.66%	1.97%	4.79%
Electronic/Electrical Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%
Other Household Special Waste - Medical Waste	1.19	2.60	2.60	3.28	2.76	2.27	3.24	2.06	0.00	0.29	0.00	0.44	0.39	0.00	0.71	0.27	7.30	0.76	8.07	15.61%	5.33%	13.20%
Medical Gown	2.01	2.02	2.38	3.72	3.40	1.97	4.80	1.93	0.00	0.40	0.37	0.68	0.57	0.44	0.81	0.17	8.11	1.26	9.37	17.34%	8.76%	15.33%
Garbage - Non-recyclable/Other Waste																						
Rigid Food Packaging	0.00	0.00	0.07	0.00	0.00	0.08	0.13	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.10	0.01	0.11	0.22%	0.06%	0.18%
Plastic Cutlery	0.00	0.00	0.07	0.00	0.00	0.08	0.13	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.10	0.01	0.11	0.22%	0.06%	0.18%
Textile	0.05	0.07	0.00	0.00	0.00	0.08	0.13	0.06	0.05	0.04	0.00	0.11	0.00	0.02	0.10	0.00	0.14	0.12	0.26	0.31%	0.80%	0.42%
Cold Beverage Paper Cups	0.00	0.07	0.07	0.00	0.09	0.08	0.00	0.06	0.00	0.02	0.00	0.03	0.02	0.02	0.03	0.00	0.14	0.04	0.18	0.29%	0.30%	0.30%
Hot Beverage Paper Cups	0.22	0.87	0.15	1.53	0.55	0.23	0.13	0.44	0.05	0.11	0.04	0.14	0.11	0.06	0.10	0.00	1.50	0.22	1.72	3.21%	1.54%	2.81%
Other Plastic Bags & Films	0.11	0.07	0.22	0.44	0.73	0.08	0.39	0.06	0.05	0.02	0.11	0.03	0.02	0.02	0.16	0.02	0.77	0.16	0.92	1.64%	1.10%	1.51%

PPE - Masks & Gloves	1.84	2.39	2.23	3.93	3.58	2.42	4.02	2.43	0.11	0.13	0.19	0.38	0.16	0.19	0.23	0.11	8.34	0.54	8.88	17.83%	3.79%	14.54%
Single Use Wipe	0.00	0.07	0.07	0.11	0.00	0.08	0.13	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.19	0.41%	0.00%	0.31%
Total Weight	**10.85**	**14.46**	**14.28**	**21.42**	**17.54**	**14.68**	**22.42**	**12.48**	**3.45**	**3.62**	**4.86**	**5.46**	**8.53**	**3.78**	**6.48**	**3.12**	**46.77**	**14.34**	**61.12**	**100.00%**	**100.00%**	**100.00%**

Material Stream	**Amount (tonnes/yr)**	**Distribution (%)**
Garbage	46.77	76.53%
Recycling	14.34	23.47%
Total	**61.12**	**100.00%**

Material Categories	**Garbage (tonnes/yr)**	**Recycling (tonnes/yr)**	**Total (tonnes/yr)**	**Total (%)**
Recyclables (Paper, Boxboard, Cardboard)	6.60	8.25	14.85	24.29%
Recyclables (Glass, Metals, Plastic)	5.85	2.54	8.39	13.72%
Organics	7.62	0.44	8.07	13.20%
WEEE	0.00	0.00	0.00	0.00%
MHSW	15.41	2.02	17.43	28.53%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	11.28	1.10	12.38	20.26%
Total	**46.77**	**14.34**	**61.12**	**100.00%**

Material Categories	**Garbage (tonnes/yr)**	**Composition (%)**	**Recycling (tonnes/yr)**	**Composition (%)**
Recyclables (Paper, Boxboard, Cardboard)	6.60	14.11%	8.25	57.49%
Recyclables (Glass, Metals, Plastic)	5.85	12.51%	2.54	17.68%
Organics	7.62	16.30%	0.44	3.09%
WEEE	0.00	0.00%	0.00	0.00%
MHSW	15.41	32.95%	2.02	14.09%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	11.28	24.13%	1.10	7.65%
Total	**46.77**	**100.00%**	**14.34**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	20.07	42.92%	11.23	78.26%
Recyclables	12.45	26.62%	10.78	75.17%
Organics	7.62	16.30%	0.44	3.09%
WEEE	0.00	0.00%	0.00	0.00%
Total Non-Divertible Waste Materials	26.70	57.08%	3.12	21.74%
Total	**46.77**	**100.00%**	**14.34**	**100.00%**

Glendale/Barnicke Hospital Wing

	Glendale/Barnicke			Glendale/Barnicke			Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage			Recycling			Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**Ground ER**	**MHESU**	**Supertrack**	**Ground ER**	**MHESU**	**Supertrack**						
Recyclables - Paper												
Boxboard	0.00	0.47	1.38	3.34	0.97	0.94	0.67	1.92	2.59	2.19%	14.28%	5.87%
Gable Top	1.22	0.16	0.63	0.30	0.04	0.06	0.73	0.15	0.88	2.37%	1.10%	1.99%
Molded Pulp	0.81	0.16	0.75	0.20	0.12	0.19	0.63	0.19	0.81	2.04%	1.38%	1.84%
Kraft Paper	1.22	0.78	0.00	0.51	0.12	1.19	0.73	0.66	1.39	2.37%	4.93%	3.15%
Aseptic Containers	0.41	0.16	0.50	0.20	0.04	0.13	0.39	0.13	0.52	1.26%	1.00%	1.18%
Cardboard	0.00	0.00	1.13	3.65	3.82	1.38	0.41	3.23	3.64	1.34%	24.03%	8.25%
Mixed Fine Paper	0.81	1.25	1.00	0.71	0.70	0.50	1.12	0.70	1.81	3.64%	5.19%	4.11%
Recyclables - Plastic & Metals												
HDPE Other	0.00	0.00	0.50	1.11	0.39	0.25	0.18	0.64	0.82	0.60%	4.77%	1.86%
Expanded Polystyrene	0.41	0.00	0.25	0.10	0.00	0.06	0.24	0.06	0.30	0.78%	0.45%	0.68%
Polystyrene Rigid	0.20	0.00	0.50	0.05	0.00	0.13	0.26	0.06	0.32	0.84%	0.48%	0.73%
Other Plastic Bottles, Jugs & Jars	0.00	0.62	0.50	1.67	0.39	0.25	0.41	0.84	1.25	1.34%	6.28%	2.84%
PET Beverage	0.00	0.94	0.25	1.67	0.55	0.28	0.43	0.91	1.34	1.41%	6.79%	3.05%
Non-alcohol Aluminum Cans	0.41	0.62	0.25	0.25	0.31	0.16	0.47	0.26	0.73	1.52%	1.96%	1.65%
Other Polyethylene Plastic Bags & Films	0.00	0.00	1.63	2.08	0.19	0.16	0.59	0.89	1.48	1.93%	6.60%	3.35%
Organics - Food & Non-food												
Tissue	3.65	3.12	1.75	0.10	0.00	0.00	3.11	0.04	3.14	10.13%	0.28%	7.13%
Sanitary	0.81	0.94	1.00	0.00	0.00	0.00	1.00	0.00	1.00	3.27%	0.00%	2.27%
Organic Waste - Food	2.43	1.56	0.50	0.25	0.31	0.00	1.64	0.21	1.84	5.34%	1.54%	4.18%
Electronic/Electrical Waste	0.41	0.00	0.25	0.00	0.00	0.00	0.24	0.00	0.24	0.78%	0.00%	0.54%
Other Household Special Waste - Medical Waste	5.27	4.52	3.63	0.00	0.66	0.53	4.90	0.44	5.33	15.95%	3.25%	12.09%
Medical Gown	5.27	4.83	2.38	1.27	0.00	0.66	4.55	0.70	5.26	14.83%	5.23%	11.91%
Garbage - Non-recyclable/Other Waste												
Rigid Food Packaging	0.00	0.16	0.25	0.81	0.00	0.03	0.15	0.31	0.46	0.48%	2.29%	1.03%
Plastic Cutlery	0.20	0.00	0.13	0.00	0.00	0.00	0.12	0.00	0.12	0.39%	0.00%	0.27%
Textile	0.00	0.16	0.00	0.05	0.00	0.00	0.06	0.02	0.08	0.19%	0.14%	0.17%
Cold Beverage Paper Cups	0.00	0.16	0.13	0.05	0.08	0.03	0.10	0.06	0.16	0.33%	0.43%	0.36%
Hot Beverage Paper Cups	0.20	2.34	0.38	0.35	0.16	0.09	1.06	0.22	1.28	3.47%	1.64%	2.91%
Other Plastic Bags & Films	1.22	0.47	0.13	0.05	0.08	0.03	0.66	0.06	0.72	2.15%	0.43%	1.63%
PPE - Masks & Gloves	6.28	5.14	4.13	0.46	1.36	0.22	5.68	0.74	6.42	18.49%	5.54%	14.55%
Single Use Wipe	0.20	0.16	0.13	0.00	0.00	0.00	0.18	0.00	0.18	0.57%	0.00%	0.40%
Total Weight	31.40	28.67	24.02	19.24	10.29	7.26	**30.69**	**13.43**	**44.12**	**100.00%**	**100.00%**	**100.00%**

Material Stream	Amount (tonnes/yr)	Distribution (%)
Garbage	30.69	69.57%
Recycling	13.43	30.43%
Total	**44.12**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Recycling (tonnes/yr)	Total (tonnes/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	4.67	6.97	11.64	26.39%
Recyclables (Glass, Metals, Plastic)	2.58	3.67	6.25	14.17%
Organics	5.75	0.24	5.99	13.58%
WEEE	0.24	0.00	0.24	0.54%
MHSW	9.45	1.14	10.59	24.00%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	8.00	1.41	9.41	21.33%
Total	**30.69**	**13.43**	**44.12**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	4.67	15.22%	6.97	51.91%
Recyclables (Glass, Metals, Plastic)	2.58	8.41%	3.67	27.32%
Organics	5.75	18.73%	0.24	1.81%
WEEE	0.24	0.78%	0.00	0.00%
MHSW	9.45	30.79%	1.14	8.47%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	8.00	26.08%	1.41	10.48%
Total	**30.69**	**100.00%**	**13.43**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	13.24	43.14%	10.88	81.05%
Recyclables	7.25	23.63%	10.64	79.24%
Organics	5.75	18.73%	0.24	1.81%
WEEE	0.24	0.78%	0.00	0.00%
Total Non-Divertible Waste Materials	17.45	56.86%	2.54	18.95%
Total	**30.69**	**100.00%**	**13.43**	**100.00%**

East Hospital Wing

	East Wing								Estimated Annual Generation (tonnes/yr)			Composition (%)		
	Garbage (kg)				Recycling (kg)				Garbage	Recycling	Total	Garbage	Recycling	Total
Generation Point	**6E**	**Hemo**	**Kitchen**	**Unknown**	**6E**	**Hemo**	**Kitchen**	**Unknown**						
Recyclables - Paper														
Boxboard	1.24	3.75	6.47	21.92	1.31	3.28	0.00	23.29	12.18	10.18	22.36	4.53%	16.58%	6.77%
Gable Top	0.31	0.47	0.00	5.48	0.15	0.47	0.00	2.74	2.28	1.23	3.51	0.85%	2.00%	1.06%
Molded Pulp	0.31	2.34	6.47	2.74	0.39	0.70	0.00	1.37	4.33	0.90	5.23	1.61%	1.46%	1.58%
Kraft Paper	0.15	3.28	2.59	5.48	0.23	0.47	0.00	2.74	4.20	1.26	5.45	1.56%	2.05%	1.65%
Aseptic Containers	0.15	0.47	2.59	2.74	0.08	0.23	0.00	1.37	2.17	0.61	2.79	0.81%	1.00%	0.84%
Cardboard	2.32	3.75	3.23	32.88	1.47	4.69	0.00	31.51	15.40	13.75	29.14	5.72%	22.40%	8.82%
Mixed Fine Paper	1.08	2.34	2.59	10.96	0.54	1.41	0.00	10.96	6.20	4.71	10.91	2.30%	7.68%	3.30%
Recyclables - Plastic & Metals														
HDPE Other	1.08	2.34	1.29	16.44	0.31	1.29	0.00	1.37	7.72	1.08	8.81	2.87%	1.77%	2.66%
Expanded Polystyrene	0.15	0.47	1.29	5.48	0.08	0.12	0.00	0.00	2.70	0.07	2.77	1.00%	0.12%	0.84%
Polystyrene Rigid	0.15	0.47	0.00	5.48	0.08	0.12	0.00	0.00	2.23	0.07	2.30	0.83%	0.12%	0.70%
Other Plastic Bottles, Jugs & Jars	0.77	2.34	2.59	5.48	0.31	0.82	0.00	12.33	4.08	4.91	8.99	1.52%	8.00%	2.72%
PET Beverage	0.46	3.28	0.00	2.74	0.39	1.05	0.00	4.11	2.37	2.03	4.39	0.88%	3.30%	1.33%
Non-alcohol Aluminum Cans	0.15	0.47	1.94	5.48	0.15	0.59	0.00	4.11	2.94	1.77	4.71	1.09%	2.88%	1.42%
Other Polyethylene Plastic Bags & Films	2.16	5.16	2.59	21.92	0.12	0.35	0.00	1.37	11.62	0.67	12.29	4.32%	1.09%	3.72%
Organics - Food & Non-food														
Tissue	1.85	8.44	4.53	38.36	0.00	0.00	0.00	0.00	19.41	0.00	19.41	7.21%	0.00%	5.87%
Sanitary	0.31	4.69	0.00	52.06	0.00	0.00	0.00	0.00	20.83	0.00	20.83	7.74%	0.00%	6.30%
Organic Food Waste	1.85	3.75	20.70	38.36	0.31	1.29	0.00	5.48	23.60	2.58	26.19	8.77%	4.21%	7.92%
Electronic/Electrical Waste (WEEE)	0.15	0.00	0.00	2.74	0.00	0.00	0.00	0.00	1.06	0.00	1.06	0.39%	0.00%	0.32%
Other Household Special Waste (MHSW)	4.33	11.25	0.00	87.68	0.50	2.23	0.00	9.59	37.69	4.50	42.19	14.00%	7.33%	12.76%
Medical Gown	4.79	14.06	0.00	76.72	0.62	1.99	0.00	12.33	34.89	5.45	40.34	12.96%	8.88%	12.20%
Garbage - Non-recyclable/Other Waste														
Rigid Food Packaging	0.15	0.47	0.00	2.74	0.00	0.00	0.00	0.00	1.23	0.00	1.23	0.46%	0.00%	0.37%
Plastic Cutlery	0.15	0.47	1.94	2.74	0.00	0.00	0.00	0.00	1.94	0.00	1.94	0.72%	0.00%	0.59%
Textile	0.15	0.47	0.00	2.74	0.08	0.35	0.00	1.37	1.23	0.66	1.88	0.46%	1.07%	0.57%
Cold Beverage Paper Cups	0.15	0.47	1.29	0.00	0.04	0.12	0.00	1.37	0.70	0.56	1.26	0.26%	0.91%	0.38%
Hot Beverage Paper Cups	0.62	1.41	0.00	10.96	0.27	0.82	0.00	6.85	4.74	2.90	7.64	1.76%	4.72%	2.31%
Other Plastic Bags & Films	0.15	0.47	0.00	2.74	0.04	0.12	0.00	0.00	1.23	0.06	1.28	0.46%	0.09%	0.39%

PPE - Masks & Gloves	5.56	16.41	0.00	82.20	0.27	0.82	0.00	2.74	38.02	1.40	39.42	14.13%	2.28%	11.93%
Single Use Wipe	0.15	0.47	2.59	2.74	0.00	0.12	0.00	0.00	2.17	0.04	2.21	0.81%	0.07%	0.67%
Total Weight	**30.91**	**93.76**	**64.68**	**548.00**	**7.73**	**23.44**	**0.00**	**137.00**	**269.13**	**61.38**	**330.51**	**100.00%**	**100.00%**	**100.00%**

Material Stream	Amount (tonnes/yr)	Distribution (%)
Garbage	269.13	81.43%
Recycling	61.38	18.57%
Total	**330.51**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Recycling (tonnes/yr)	Total (tonnes/yr)	Total (%)
Recyclables (Paper, Boxboard, Cardboard)	46.76	32.63	79.39	24.02%
Recyclables (Glass, Metals, Plastic)	33.65	10.61	44.26	13.39%
Organics	63.84	2.58	66.42	20.10%
WEEE	1.06	0.00	1.06	0.32%
MHSW	72.57	9.95	82.52	24.97%
Operational Wastes	0.00	0.00	0.00	0.00%
Non-Recyclable/Garbage	51.25	5.61	56.86	17.20%
Total	**269.13**	**61.38**	**330.51**	**100.00%**

Material Categories	Garbage (tonnes/yr)	Composition (%)	Recycling (tonnes/yr)	Composition (%)
Recyclables (Paper, Boxboard, Cardboard)	46.76	17.37%	32.63	53.16%
Recyclables (Glass, Metals, Plastic)	33.65	12.50%	10.61	17.28%
Organics	63.84	23.72%	2.58	4.21%
WEEE	1.06	0.39%	0.00	0.00%
MHSW	72.57	26.97%	9.95	16.21%
Operational Wastes	0.00	0.00%	0.00	0.00%
Non-Recyclable/Garbage	51.25	19.04%	5.61	9.14%
Total	**269.13**	**100.00%**	**61.38**	**100.00%**
Total Divertible Materials (Recyclables + Organics)	145.31	53.99%	45.82	74.65%
Recyclables	80.41	29.88%	43.24	70.44%
Organics	63.84	23.72%	2.58	4.21%
WEEE	1.06	0.39%	0.00	0.00%
Total Non-Divertible Waste Materials	123.83	46.01%	15.56	25.35%
Total	**269.13**	**100.00%**	**61.38**	**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: Flodina Charles		**Telephone #: 416530-6000 ext 3885**	**Email address: Flodina.charles@unityhealth.to**
Street Address(es) of Entity(ies): 30 The Queensway, Toronto, ON M6R 1B5			
Municipality: Toronto, Ontario			
Type of Entity (check one)			
Retail Shopping Establishments		Hotels and Motels	
Retail Shopping Complexes		Hospitals	X
Office Buildings		Educational Institutions	
Restaurants		Large Manufacturing Establishments	

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

II. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ties):

St. Joseph's Health Centre is a community teaching hospital located at 30 The Queensway, in Toronto, Ontario. It is owned and operated by Unity Health Toronto. The facility is comprised of a central building containing six distinct hospital wings as well as a secondary building adjacent to the central building. The total area of the hospital is 847,905ft. The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year. The hospital employs 2,600 staff, 488 physicians, and provides work for 440 volunteers and 1,000 students.

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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		44.29			-			21.72			22.57	
Gable Top		8.13			-			2.50			5.63	
Molded Pulp		11.80			-			3.09			8.72	
Kraft Paper		11.88			-			3.96			7.92	
Aseptic Containers		5.57			-			1.48			4.08	
Cardboard		60.84			-			30.65			30.19	
Mixed Fine Paper		26.63			-			11.29			15.34	
Recyclables - Plastic & Metals												
HDPE Other		18.16			-			6.16			12.00	
Expanded Polystyrene		5.60			-			0.81			4.79	
Polystyrene Rigid		4.50			-			0.48			4.02	
Other Plastic Bottles, Jugs & Jars		15.99			-			8.31			7.68	
PET Beverage		12.03			-			5.84			6.19	
Non-alcohol Aluminum Cans		9.70			-			3.59			6.10	
Other Polyethylene Plastic Bags & Films		29.32			-			3.78			25.54	
Organics - Food & Non-food												
Tissue		44.48			-			0.97			43.52	
Sanitary		35.56			-			0.11			35.45	
Organic Waste - Food		62.81			-			24.35			38.46	
Waste From Electronic / Electrical Equipment (WEEE)												

Electonic / Electrical Waste		3.77			-			2.05			1.72	
Municipal Hazardous Special Waste (MHSW)												
Other Special Waste - Medical Waste		89.49			-			8.56			80.93	
Medical Gown		93.90			-			11.96			81.94	
Garbage - Non-recyclable/Other Waste												
Rigid Food Packaging		3.83			-			0.40			3.43	
Plastic Cutlery		3.38			-			0.10			3.27	
Textile		3.71			-			1.38			2.33	
Cold Beverage Paper Cups		3.06			-			1.01			2.04	
Hot Beverage Paper Cups		17.70			-			5.16			12.54	
Other Plastic Bags & Films		6.60			-			1.02			5.58	
PPE - Masks & Gloves		88.78			-			4.66			84.12	
Single Use Wipe		3.59			-			0.17			3.42	
Operational Wastes												
Lamp Recycling		0.85			-			0.85			-	
Scrap Metals		5.22			-			5.22			-	
Batteries		1.47			-			1.47			-	
Pallets		39.96			-			39.96			-	
Total Weight		772.59			-			213.06			559.53	

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: *Flodina Charles*	**Title: Manager**	**Date: September 20, 2021**

…/5

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: Flodina Charles		**Telephone #:416 530-6000 ext 3885**	**Email address: Flodina.charles@unityhealth.to**
Street Address(es) of Entity(ies): 30 The Queensway, Toronto, ON M6R 1B5			
Municipality: Toronto, Ontario			
Type of Entity (check one)			
Retail Shopping Establishments		Hotels and Motels	
Retail Shopping Complexes		Hospitals	X
Office Buildings		Educational Institutions	
Restaurants		Large Manufacturing Establishments	

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

VIII. DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ties):

St. Joseph's Health Centre is a community teaching hospital located at 30 The Queensway, in Toronto, Ontario. It is owned and operated by Unity Health Toronto. The facility is comprised of a central building containing six distinct hospital wings as well as a secondary building adjacent to the central building. The total area of the hospital is 847,905ft.. The hospital provides continuous patient care and operates 24 hours each day for all (365) days each year. The hospital employs 2,600 staff, 488 physicians, and provides work for 440 volunteers and 1,000 students.

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IX. **PLANS TO REDUCE, REUSE AND RECYLE 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	"Comingled Recycling Program" Reduce: 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. Reuse: Staff will be encouraged to reuse boxboard materials for storing, moving, shipping materials, and/or other uses when appropriate. Recycle: 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.
Gable Top	"Comingled Recycling Program" Reduce: 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. Reuse: Staff will be encouraged to reuse materials for individual uses when appropriate. Recycle: 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.
Molded Pulp	"Comingled Recycling Program" Reduce: 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. Reuse: Staff will be encouraged to reuse materials for individual uses when appropriate. Recycle: 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.
Kraft Paper	"Comingled Recycling Program" Reduce: 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

	encouraged to make use of reusable beverage containers to reduce the quantity of disposable containers used on site. Reuse: Staff will be encouraged to reuse materials for individual uses when appropriate. Recycle: 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.
Aseptic Containers	"Comingled Recycling Program" Reduce: 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. Reuse: Staff will be encouraged to reuse materials for individual uses when appropriate. Recycle: 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.
Cardboard	"Comingled Recycling Program" Reduce: 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. Reuse: Staff will be encouraged to reuse cardboard materials for storing, moving, shipping materials, and/or other uses when appropriate. Recycle: 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.
Mixed Fine Paper	"Comingled Recycling Program" Reduce: Suppliers, third party partners, and staff will be encouraged to transition to digital records to reduce the use of printed paper. Reuse: 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. Recycle: 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.
Recyclables - Plastic & Metals	
HDPE Other	"Comingled Recycling Program" Reduce: 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.

	Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: 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.
Expanded Polystyrene	"Comingled Recycling Program" Reduce: Suppliers will be encouraged to make use of reusable containers for their products. Reuse: Staff and visitors will be encouraged to use reusable dishware in foodservice areas. Recycle: 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.
Polystyrene Rigid	"Comingled Recycling Program" Reduce: Staff will be encouraged to bring reusable food/beverage containers to reduce the number of disposable containers used on site. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: 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.
Other Plastic Bottles, Jugs & Jars	"Comingled Recycling Program" Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: 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.
PET Beverage	"Comingled Recycling Program" Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: 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.

Non-alcohol Aluminum Cans	"Comingled Recycling Program" Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: 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.
Other Polyethylene Plastic Bags & Films	"Comingled Recycling Program" Reduce: Suppliers will be encouraged to discontinue to the use of disposable film for the shipment of supplies and instead make use of reusable containers. Reuse: Staff and visitors will be encouraged to bring reusable bags on site. Recycle: 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.
Organics - Food & Non-food	
Tissue	"Organics Diversion Program" Reduce: 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. Reuse: Staff will be encouraged to make use of reusable kitchen towels in kitchen, cafeteria, and foodservice areas. Recycle: 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.
Sanitary	No diversion program in place.
Organic Waste - Food	"Organics Diversion Program" Reduce: 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. Reuse: Staff will be encouraged to make use of reusable kitchen towels in kitchen, cafeteria, and foodservice areas. Recycle: 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.
Waste From Electronic / Electrical Equipment (WEEE)	
Electronic / Electrical Waste	"WEEE Recycling Program" Reduce: N/A Reuse: Staff will be encouraged to reuse electronic equipment until end of life. Recycle: Staff will be trained about existing diversion program. Cleaners will be trained of how to dispose of waste appropriately.

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	No diversion program in place. Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: Unity health will consider a partnership with recycling companies that are able to recycle this material.
Plastic Cutlery	No diversion program in place. Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: Unity health will consider a partnership with recycling companies that are able to recycle this material.
Textile	No diversion program in place. Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: Unity health will consider creating a textile donation bin and/or a partnership with recycling companies that are able to recycle this material.
Cold Beverage Paper Cups	No diversion program in place. Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: Unity health will consider a partnership with recycling companies that are able to recycle this material.
Hot Beverage Paper Cups	No diversion program in place. Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: Unity health will consider a partnership with recycling companies that are able to recycle this material.
Other Plastic Bags & Films	No diversion program in place.

	Reduce: 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. Reuse: Staff and visitors will be encouraged to bring reusable containers on site. Recycle: Unity health will consider a partnership with recycling companies that are able to recycle this material.
PPE - Masks & Gloves	No diversion program in place. Reduce: N/A. Reuse: N/A. Recycle: 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.
Single Use Wipe	No diversion program in place.
Operational Wastes	
Lamp Recycling	"Lamp Recycling" Reduce: Staff will be encouraged to purchase durable and long-lasting lighting fixtures to reduce the number of lamps/lightbulbs replaced. Reuse: N/A. Recycle: 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.
Scrap Metals	"Scrap Metal Recycling" Reduce: Staff will be encouraged to purchase durable and long-lasting metal fixtures. Reuse: N/A. Recycle: 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.
Batteries	"Battery Recycling" Reduce: Staff will be encouraged to transition to electrical equipment with rechargeable batteries to reduce the use of disposable batteries. Reuse: N/A. Recycle: 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.
Pallets	"Pallet Recycling" Reduce: Staff will be encouraged to purchase durable and long-lasting pallets to reduce the number of new pallets purchased. Reuse: N/A. Recycle: 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.

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 #
Flodina Charles	**Manager**	**416-530-6000 ext. 3885**

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 in 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:

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-email messages to inform staff of appropriate waste disposal practices.

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.

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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	44.29	Comingled Recycling	8.86		19.93	65
Gable Top	8.13	Comingled Recycling	1.63		3.66	65
Molded Pulp	11.80	Comingled Recycling	2.36		5.31	65
Kraft Paper	11.88	Comingled Recycling	2.38		5.35	65
Aseptic Containers	5.57	Comingled Recycling	1.11		2.50	65
Cardboard	60.84	Comingled Recycling	12.17		27.38	65
Mixed Fine Paper	26.63	Comingled Recycling	5.33		11.98	65
Recyclables - Plastic & Metals						
HDPE Other	18.16	Comingled Recycling	3.63		8.17	65
Expanded Polystyrene	5.60	Comingled Recycling	1.12		2.52	65
Polystyrene Rigid	4.50	Comingled Recycling	0.90		2.03	65
Other Plastic Bottles, Jugs & Jars	15.99	Comingled Recycling	3.20		7.20	65
PET Beverage	12.03	Comingled Recycling	2.41		5.42	65
Non-alcohol Aluminum Cans	9.70	Comingled Recycling	1.94		4.36	65
Other Polyethylene Plastic Bags & Films	29.32	Comingled Recycling	5.86		13.19	65
Organics - Food & Non-food						
Tissue	44.48	Organics Program	8.90		20.02	65
Sanitary	35.56	Organics Program	7.11		16.00	65
Organic Waste - Food	62.81	Organics Program	12.56		28.27	65

Waste From Electronic / Electrical Equipment (WEEE)						
Electronic / Electrical Waste	3.77	E-Waste Recycling			2.45	65
Municipal Hazardous Special Waste (MHSW)						
Other Special Waste - Medical Waste	89.49				58.17	65
Medical Gown	93.90				61.04	65
Garbage - Non-recyclable/Other Waste						
Rigid Food Packaging	3.83		2.30			60
Plastic Cutlery	3.38		2.03			60
Textile	3.71		2.23			60
Cold Beverage Paper Cups	3.06		1.83			60
Hot Beverage Paper Cups	17.70		10.62			60
Other Plastic Bags & Films	6.60		3.96			60
PPE - Masks & Gloves	88.78		53.27			60
Single Use Wipe	3.59		2.15			60
Operational Wastes						
Lamp Recycling	0.85	Lamp Recycling			0.85	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: *Flodina Charles*	**Title:** **Manager**	**Date:** **September 20, 2021**

…/4