Greater Essex County District School Board
Consolidated Report

2024 Waste Audit

Prepared For:

Rachel Bondy - Energy and Environmental Officer
C 519-796-5718 | T 519-966-0034 X 10560 |
rachel.bondy@publicboard.ca
Greater Essex County District School Board

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Executive Summary

Greater Essex County District School Board retained Waste Reduction Group ("WRG") to conduct a solid, non-hazardous waste audit for the Greater Essex County District School Board (GECDSB) Schools. The audit complied with the Environmental Protection Act, O.Reg. 102/94: Waste Audits and Waste Reduction Work Plans, and O.Reg. 103/94: Industrial, Commercial, and Institutional Source Separation Program.

The objectives of the audit were to determine the composition of the garbage, recycling, and organics streams by point of origin (consolidation of 10 schools), quantify the estimated 2024 annual waste generation, determine the waste diversion and capture rates, identify additional opportunities for waste reduction and diversion, and address any specific concerns identified during the study.

The scope of the waste audit included collecting 22 samples of the Red Box stream, 23 samples of the Blue Box stream and 50 samples of the Garbage stream across 10 schools.

Findings and Conclusions

It should be noted that the conclusions and recommendations provided in this report are based on the waste audit sample results, which are considered representative of the annual quantities for this report. The estimates in this report have yet to account for fluctuations in waste quantities generated daily.

The conclusions discussed below are based on the waste audit findings. It should be noted that the conclusions and recommendations provided in this report are based on the waste audit sample results, which are considered representative of the annual quantities for this report. The estimates in this report have yet to account for fluctuations in waste quantities generated daily.

Sample Composition

- The Garbage stream sample had the highest sample mass (47.99%), followed by the Red Box (28.91%) and the Blue Box stream (23.1%).

Composition By Waste Stream

- **Garbage Stream** - the garbage stream had the highest proportion of sample mass (51.46%) and consisted primarily of organics, paper towels, LDPE #4 plastic film, fine paper, non-recyclable material, and boxboard
- **Red Box** - 28.52% of the total sample mass and consisted primarily of fine paper, cardboard and boxboard.
- **Blue Box** - 20.02% of the total sample mass and consisted primarily of PET #1, aluminum and PP #5.

Composition by Functional Area

- The classrooms generated the highest sample mass (70.98%).
- **Classrooms** - generated the highest sample mass, 70.89%, which consisted primarily of fine paper, cardboard, PET #1, organics, paper towels, and boxboard.
- **Hallways** - generated 9.22% of the total sample mass and consisted primarily of organics, paper towels, PET #1 and LDPE #4 plastic.
- **Cafeteria** - generated 8.6% of the total sample mass and consisted primarily of organics.
- **Office** - generated 5.97% of the total sample mass and consisted primarily of fine paper and paper towels.
- **Washrooms, Gymnasiums, and Outside** - generated 2.47%, 1.5% and 1.25% of the total sample mass, respectively. The material consisted primarily of paper towels and non-recyclable material.l

Contamination

- The contamination rates for the sampled streams were as follows: Garbage stream - 29.94%, Red Box stream - 13.94% and Blue Box stream - 27.05%.
- The **Red Box** sample consisted of 88.5% Red Box material, 9.7% Garbage material and 1.8% Blue Box material.
    - 49.04% of the Red Box sample consisted of fine paper, 19.97% consisted of cardboard, 12.22% consisted of boxboard, 5.93% consisted of paper towels, and 5.19% consisted of kraft paper.
    - Roughly 12% of the Red Box sample was contaminated with garbage or Blue Box material. Contamination in the Red Box stream consisted primarily of paper towels, LDPE #4 plastic film, organics, non-recyclables, PET #1, and aseptic containers.
- The **Blue Box** sample consisted of 82.3% Blue Box material, 14.1% garbage, 3.6% Red Box material, and 0.01% Electronics/Special Items.
    - 35% of the Blue Box sample consisted of PET #1, 13.05% consisted of aluminum, 13% consisted of PP #5, 7.17% consisted of glass, 6.83% consisted of non-recyclables, 6.73% consisted of HDPE #2, 4.38% consisted of aseptic containers, and 3.79% consisted of LDPE #4 plastic
    - Roughly 17% of the Blue Box sample was contaminated with garbage or Red Box material. Contamination consisted primarily of non-recyclable material, LDPE #4 plastic film, fine paper, paper towels, organics, PS #6, boxboard, and cardboard.
- The **garbage** sample consisted of 62.3% garbage material, 24.2% Red Box material, 12.9% Blue Box material, and 0.5% Special items (textiles).
    - The garbage sample consisted primarily of organics (23.97%), paper towels (18.25%), LDPE #4 plastic (9.17%), fine paper (8.16%), non-recyclables (7.85%), boxboard (7.13%), cardboard (5.7%), PET #1 (5.18%) and kraft paper (2.6%).
    - Roughly 37% of the garbage stream sample was contaminated with Red Box material, Blue Box material, or Special items. Contamination in the garbage stream consisted primarily of fine paper, boxboard, cardboard, PET #1, kraft paper, PP #5, aluminum, aseptic containers and HDPE #2 plastic.

Recyclables in the Garbage Stream

- The garbage sample consisted of 16.26% Mandatory Recyclables, 21.47% Other Recyclables, and 62.27% Other (Non-Recyclable) material.
- The **Mandatory Recyclables** in the garbage stream consisted of (in % of total sample mass):
    - Fine paper - 50.2%
    - Cardboard - 35.06
    - Aluminum - 9.69%
    - Glass - 3.73%
    - Steel cans - 1.3%
    - Newspaper - 0.03%
- The **Other Recyclables** in the garbage stream consisted primarily of:
    - Boxboard - 33.22%
    - PET #1 - 24.12%
    - Kraft paper - 12.13%
    - PP#5 - 11.07%
    - Aseptic containers - 4.49%
    - HDPE #2 plastic - 4.29%
- **Estimated Annual Quantities Generated** - 17.86 MT of material are expected to be generated annually on average per school. The materials generated consist primarily of the following materials:
    - Fine paper - 3.3 MT
    - Organics - 2.3 MT
    - Paper towels - 2.03 MT
    - PET #1 - 1.76 MT
    - Cardboard - 1.57 MT
    - Boxboard - 1.3 MT
    - LDPE #4 plastic - 1.04 MT
    - Non-Recyclables - 1.01 MT
- The 2024 **waste diversion rate was calculated to be 48.6%** (below the provincial objective of 60%) based on 8.68 MT of diverted waste and 17.89 MT of total waste generated over 194 school days.
- The overall **Capture Rate is 68.89%** based on a total diverted quantity of 7.68 MT and a total potential divertible quantity of 11.16 MT. The Blue Box capture rate was 71.92%, and the Red Box capture rate was 67.55%. Special items consisted primarily of textiles, which can be diverted from landfill.

Recommendations

Mandatory Recyclables

- **Fine paper — 0.75 MT** of material is estimated to be generated annually through the garbage stream. Diverting this through the Red Box stream could **increase the waste diversion rate by up to 4.2%** and **could increase the capture rate by up to 6.7%.**
- **Cardboard — 0.52 MT** of material is estimated to be generated annually through the garbage stream. Diverting this through the Red Box stream could **increase the waste diversion rate up to 2.93%** and **could increase the capture rate up to 4.7%.**

- **Aluminum — 0.14 MT** of material is estimated to be generated annually through the garbage stream. Diverting this material through the existing Blue Box stream could **increase the waste diversion rate up to 0.81%** and **could increase the capture rate up to 1.29%.**
- **Glass — 0.06 MT** of material is estimated to be generated annually through the garbage stream. Diverting this material through the existing Blue Box stream could **increase the waste diversion rate by up to 0.35%** and **could increase the capture rate by up to 0.5%.**
- **Steel Cans — 0.02 MT** of material is estimated to be generated annually through the garbage stream. Diverting this material through the existing Blue Box stream could **increase the waste diversion rate up to 0.11%** and **could increase the capture rate up to 0.17%.**

Red Box and Blue Box Streams

- **Boxboard** - **0.66 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing Red Box stream could **increase the waste diversion rate by up to 3.67%.**
- **PET #1** - **0.48 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing Blue Box stream could **increase the waste diversion rate by up to 2.66%.**
- **Kraft Paper/Other Fibres** - **0.24 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 1.34%.**
- **PP#5** - **0.22 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 1.22%.**
- **Aseptic containers** - **0.09 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 0.53%.**
- **HDPE #2 plastic** - **0.08 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 0.47%.**

Add Organics Diversion Program

Organics generated in the garbage stream accounted for 2.2 MT of material annually. Diverting this material through a new organics diversion program **could increase waste diversion by up to 12.33%**.

Paper towels generated in the garbage stream accounted for 1.68 MT of material annually. Diverting this material through a new organics diversion program **could increase waste diversion by up to 9.39%**.

LDPE #4 plastics generated in the garbage stream accounted for 0.84 MT of material annually. Diverting this material from landfill **could increase waste diversion by up to 4.72%**.

Dedicated Receptacles and Update Signage

Waste diversion rates could be improved by implementing dedicated receptacles with clear signage to encourage waste separation at the source. Provide dedicated receptacles with signage and pictograms as a clear message to staff and students to separate divertible materials from landfill waste at the source. Pictograms can provide examples of the types of waste suitable for the waste collection stream. Divertible material should be consolidated into a centralized location and picked up by a dedicated contractor.

Promoting Culture

A committee is recommended to oversee waste reduction and sustainability and promote a culture of waste diversion. Educate students and staff on the importance of waste diversion and communicate the corporate goals for waste diversion and sustainability. Create a positive message around the benefits of waste diversion and the individual's role.

- Support and encourage purchasing and using “environmentally friendly,” reusable or recyclable materials, packaging, and/or recycled content.
- Ensure an Environmental Policy is visible in common areas throughout the building and continue to emphasize the facility’s commitment to environmental stewardship through its training program and green or environmental initiatives.
- Encourage staff and students to prioritize bringing reusable containers, water bottles, and coffee cups.
- Promote and highlight current environmental programs and efforts through newsletters, posters, and/or bulletin boards for waste management.

Continuous Monitoring and Process Improvement

Track year-over-year waste diversion change capture rates and communicate progress to staff and students to encourage further participation/engagement.

Continuous monitoring and reporting for this site annually and comparison with year-over-year changes would provide insight into trends, which can be used as a basis for policy decisions regarding solid waste management for future projects. Further refinements to programs/processes can be made, and adherence to provincial requirements can be achieved.

1. Introduction

Greater Essex District School Board retained Waste Reduction Group ("WRG") to conduct a solid, non-hazardous waste audit for the Greater Essex County District (GECDSB) Schools. The audit complied with the Environmental Protection Act, O.Reg. 102/94: Waste Audits and Waste Reduction Work Plans, and O.Reg. 103/94: Industrial, Commercial, and Institutional Source Separation Program.

1.1 Purpose and Objectives

The purpose of the waste audit was to comply with Ontario Regulation 102/94 – Waste Audits and Waste Reduction Work Plans Part XI, which requires educational institutions to conduct a waste audit covering the waste generated by the establishment operating at the site and prepare and implement a waste reduction work plan on an annual basis to confirm compliance with Ontario Regulation 103/94 – IC&I Source Separation Programs.

The objectives are as follows:

- Determine the composition of the Red Box, Blue Box and Garbage streams by point of origin (consolidation of 10 schools),
- Quantify the estimated 2024 annual waste generation for all waste streams based on audit data and the number of days in the school year,
- Determine the waste diversion and capture rates,
- Identify additional opportunities for waste reduction and diversion; and
- Address any specific concerns identified during the study.

The Site is considered to apply to O.Reg. 103./94 – Educational Institutions.

2. Scope of Work

To meet the objectives outlined above, the following activities were undertaken by WRG:

- Collected 22 samples of the Red Box stream, 23 samples of the Blue Box stream and 50 samples of the Garbage stream across 10 schools.
- Sorted samples at each school into predetermined categories as set out by WRG (detailed in Appendix A: List of Categories)
- Determined the total quantity of waste diverted from landfill through current reduction, reuse, and recycling programs implemented at the school. Quantities were calculated using sample mass multiplied by the number of school days per year;
- Completed a waste audit report summarizing the audit findings and provided recommendations for increased waste diversion efficiency.
- Conducted site tours accompanied by site personnel and interviewed staff to obtain information on existing waste diversion practices.

3. Sampling Methodology

Between November 4th and 15th, WRG received 22 samples of the Red Box stream, 23 samples of the Blue Box stream and 50 samples of the Garbage stream across 10 schools. The samples were collected from the following functional areas and waste streams.

Table 1: Sample Summary

Functional Area	Blue Box	Garbage	Red Box	Total
Cafeteria	1	7	1	**9**
Classroom	6	5	6	**17**
Classrooms	4	5	4	**13**
Gym	1	4		**5**
Gymnasium		1		**1**
Hall	1	2	1	**4**
Hallway	4	6	4	**14**
Office	5	9	7	**21**
Outside		1		**1**
Washroom		6		**6**
Washrooms		4		**4**
Total	**22**	**50**	**23**	**95**

Qualified WRG staff sorted the materials using containers to keep them separate. Waste was sorted into individual material categories and weighed using a calibrated scale (Appendix B: Scale Calibration Certificate). It was then re-bagged and disposed of in an appropriate waste container.

4. Waste Audit Findings

A total of 920.13 kg of sample materials was collected for the waste audit. The following sections summarize the site tour findings and analyze the sample composition.

4.1 Site Tour

During the tour of the schools, the following observations were made by WRG representatives:

- The schools implement garbage, Blue Box, and Red Box streams and collect specialty materials, including hazardous waste and medical equipment.
- Dedicated bins were available for each stream
- Signage was observed to be limited.

An analysis of the sample composition is provided in the following sections.

4.2 Sample Composition by Sampled Stream

Based on the audit findings, the Garbage stream sample had the highest sample mass (47.99%), followed by the Red Box (28.91%) and the Blue Box stream (23.1%). The figure below shows the sample composition by material and sampled stream.

Table 2: Sample Composition by Sampled Stream and Material (in kg and % of total sample by mass)

Material	Red Box	Blue Box	Garbage	Total
Fine Paper	13.99%	0.33%	4.20%	**18.51%**
Organics	0.34%	0.20%	12.34%	**12.88%**
Paper Towels/Compostable Fibres	1.69%	0.27%	9.39%	**11.36%**
PET #1	0.22%	7.01%	2.66%	**9.89%**
Cardboard	5.70%	0.14%	2.93%	**8.77%**
Boxboard	3.48%	0.15%	3.67%	**7.31%**
LDPE (#4) Plastic Films	0.38%	0.76%	4.72%	**5.85%**
Non-Recyclables	0.26%	1.37%	4.04%	**5.66%**
PP #5	0.03%	2.60%	1.22%	**3.85%**
Aluminum	0.02%	2.61%	0.81%	**3.44%**
Kraft Paper/Other Fibres	1.48%	0.01%	1.34%	**2.83%**
HDPE Plastic Containers #2	0.00%	1.35%	0.47%	**1.82%**
Glass	0.02%	1.44%	0.31%	**1.77%**
Aseptic Containers	0.20%	0.88%	0.53%	**1.61%**
Polystyrene #6	0.01%	0.18%	0.52%	**0.71%**
Coffee Cups	0.20%	0.08%	0.32%	**0.59%**
Gable Top Containers	0.02%	0.19%	0.32%	**0.53%**
Cold Beverage Wax-Lined Paper Cups	0.05%	0.02%	0.38%	**0.46%**
Steel Cans	0.00%	0.33%	0.11%	**0.44%**
Other Plastics #7	0.00%	0.06%	0.19%	**0.26%**
Textiles	0.00%	0.00%	0.25%	**0.26%**
Moulded Pulp	0.19%	0.02%	0.01%	**0.22%**
Scrap Wood	0.00%	0.00%	0.21%	**0.21%**
Newspaper	0.20%	0.00%	0.00%	**0.21%**
Scrap Metal	0.00%	0.00%	0.17%	**0.17%**
PPE	0.00%	0.01%	0.12%	**0.13%**
Diapers	0.00%	0.00%	0.12%	**0.12%**
Electronic Waste	0.00%	0.00%	0.05%	**0.05%**
Plastic Strapping	0.03%	0.00%	0.00%	**0.04%**
Bubble Wrap/Shrink Wrap	0.00%	0.00%	0.03%	**0.03%**
Styrofoam	0.00%	0.00%	0.01%	**0.02%**
Composite Cans	0.00%	0.00%	0.01%	**0.01%**
Batteries	0.00%	0.00%	0.00%	**0.00%**
Total	**28.52%**	**20.02%**	**51.46%**	**100.00%**

Notable observations are described below:

- **Garbage Stream** - the garbage stream had the highest proportion of sample mass (51.46%) and consisted primarily of organics, paper towels, LDPE #4 plastic film, fine paper, non-recyclable material, and boxboard
- **Red Box** - 28.52% of the total sample mass and consisted primarily of fine paper, cardboard and boxboard.
- **Blue Box** - 20.02% of the total sample mass and consisted primarily of PET #1, aluminum and PP #5.

4.3 Sample Composition by Functional Area

The classrooms generated the highest sample mass (70.98%). The figure below shows the sample composition by material and functional area.

Table 3: Sample Composition by Functional Area and Material (in kg and % of total sample by mass)

Material	Cafeteria	Classrooms	Gymnasium	Hallways	Office	Outside	Washrooms	Total
Fine Paper	0.12%	16.28%	0.05%	0.34%	1.63%	0.09%	0.00%	**18.51%**
Organics	2.77%	6.52%	0.39%	2.03%	0.94%	0.02%	0.21%	**12.88%**
Paper Towels/Compostable Fibres	1.06%	6.12%	0.02%	1.25%	1.09%	0.27%	1.57%	**11.36%**
PET #1	0.81%	7.36%	0.37%	1.12%	0.20%	0.00%	0.03%	**9.89%**
Cardboard	0.37%	7.71%	0.10%	0.29%	0.28%	0.02%	0.00%	**8.77%**
Boxboard	0.62%	5.56%	0.02%	0.58%	0.50%	0.02%	0.00%	**7.31%**
LDPE (#4) Plastic Films	1.13%	2.81%	0.03%	1.11%	0.23%	0.48%	0.06%	**5.85%**
Non-Recyclables	0.37%	3.34%	0.38%	0.81%	0.33%	0.08%	0.34%	**5.66%**
PP #5	0.29%	3.11%	0.00%	0.29%	0.09%	0.05%	0.02%	**3.85%**
Aluminum	0.34%	2.62%	0.00%	0.35%	0.08%	0.04%	0.00%	**3.44%**
Kraft Paper/Other Fibres	0.13%	2.24%	0.00%	0.18%	0.15%	0.09%	0.03%	**2.83%**
HDPE Plastic Containers #2	0.16%	1.47%	0.00%	0.13%	0.06%	0.00%	0.00%	**1.82%**
Glass	0.07%	1.43%	0.03%	0.12%	0.09%	0.00%	0.03%	**1.77%**
Aseptic Containers	0.08%	1.38%	0.01%	0.08%	0.05%	0.01%	0.00%	**1.61%**
Polystyrene #6	0.08%	0.41%	0.06%	0.07%	0.08%	0.00%	0.00%	**0.71%**
Coffee Cups	0.02%	0.42%	0.00%	0.08%	0.07%	0.00%	0.01%	**0.59%**
Gable Top Containers	0.04%	0.33%	0.00%	0.09%	0.03%	0.04%	0.00%	**0.53%**
Cold Beverage Wax-Lined Paper Cups	0.05%	0.28%	0.00%	0.10%	0.01%	0.00%	0.02%	**0.46%**
Steel Cans	0.04%	0.34%	0.00%	0.05%	0.00%	0.00%	0.00%	**0.44%**
Other Plastics #7	0.01%	0.19%	0.01%	0.04%	0.00%	0.00%	0.00%	**0.26%**
Textiles	0.01%	0.16%	0.00%	0.05%	0.00%	0.02%	0.02%	**0.26%**
Moulded Pulp	0.00%	0.19%	0.00%	0.02%	0.00%	0.00%	0.00%	**0.22%**
Scrap Wood	0.00%	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.21%**
Newspaper	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.21%**
Scrap Metal	0.02%	0.10%	0.00%	0.00%	0.05%	0.00%	0.00%	**0.17%**
PPE	0.00%	0.10%	0.00%	0.02%	0.00%	0.00%	0.00%	**0.13%**
Diapers	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	**0.12%**
Electronic Waste	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.05%**
Plastic Strapping	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.04%**
Bubble Wrap/Shrink Wrap	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.03%**
Styrofoam	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.02%**
Composite Cans	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.01%**
Batteries	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
Total	**8.60%**	**70.98%**	**1.50%**	**9.22%**	**5.97%**	**1.25%**	**2.47%**	**100.00%**

Notable observations are described below:

- **Classrooms** generated the highest sample mass, 70.89%, primarily consisting of fine paper, cardboard, PET #1, organics, paper towels, and boxboard.
- **Hallways** - generated 9.22% of the total sample mass and consisted primarily of organics, paper towels, PET #1 and LDPE #4 plastic.
- **Cafeteria** - generated 8.6% of the total sample mass and consisted primarily of organics.
- **Office** - generated 5.97% of the total sample mass and consisted primarily of fine paper and paper towels
- **Washrooms, Gymnasiums, and Outside** - generated 2.47%, 1.5% and 1.25% of the total sample mass, respectively. The material consisted primarily of paper towels and non-recyclable material.

4.4 Sample Composition and Contamination

The contamination rates for the sampled streams across the 10 schools sampled were as follows: Garbage stream - 37.73%, Red Box stream - 11.51% and Blue Box stream - 17.73%. The figures below show the contamination rate by the sampled stream and functional area.

Figure 1a: Contamination Rate by Sampled Stream

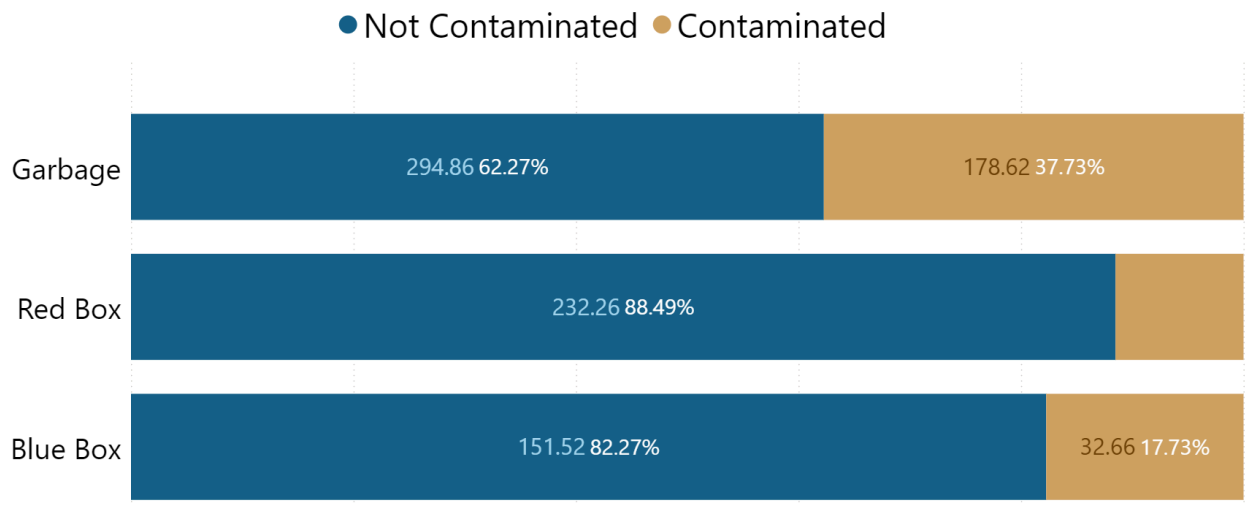
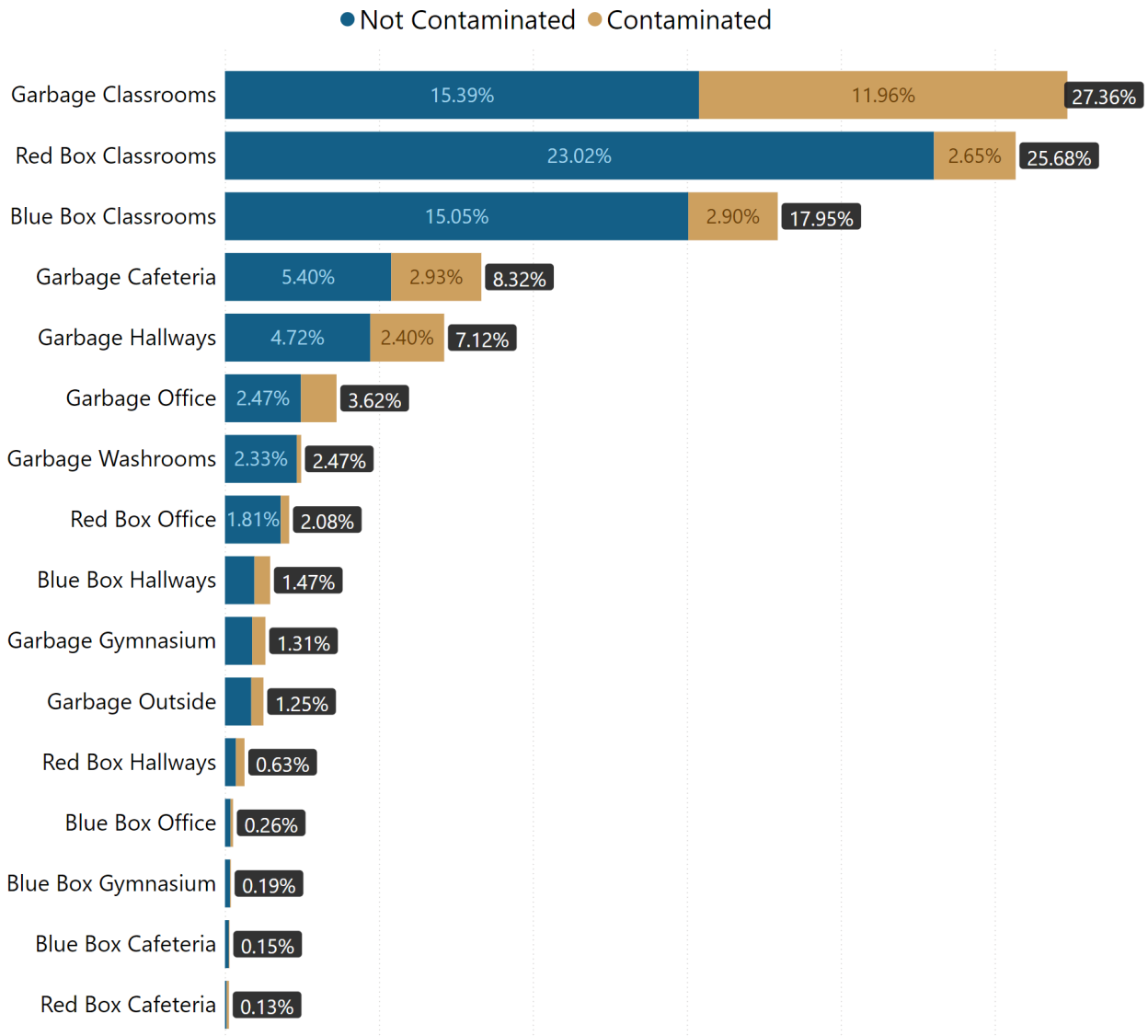


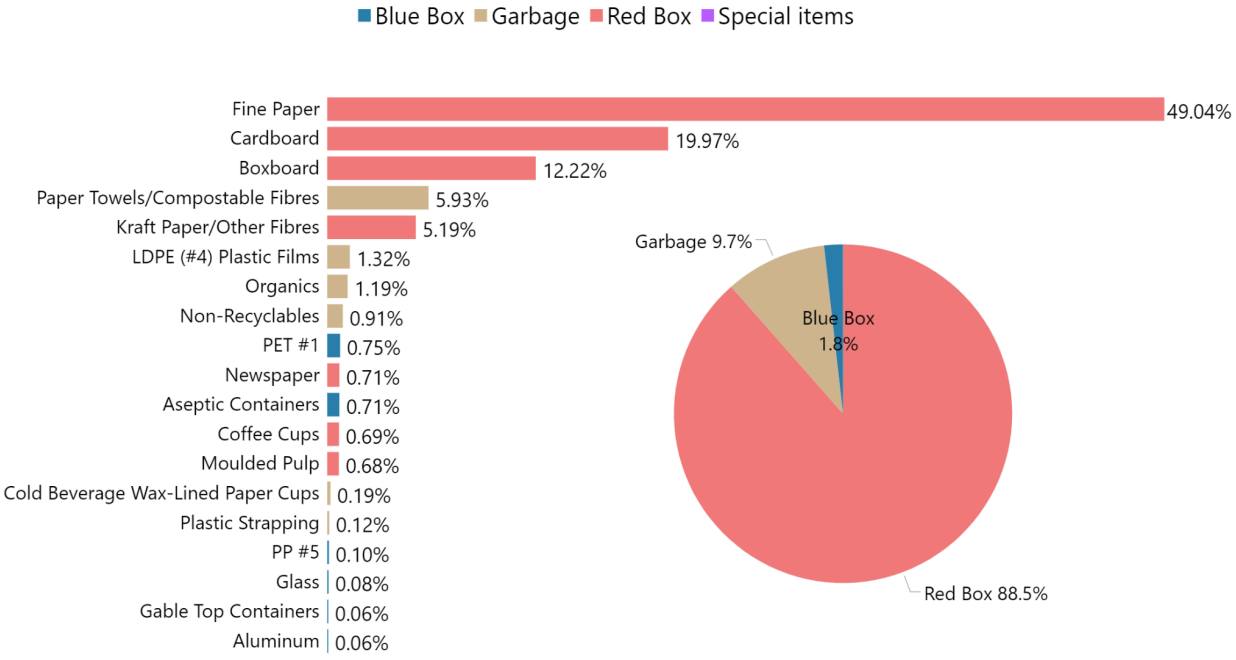
Figure 1b: Contamination Rate by Sampled Stream and Functional Area



4.4.1 Red Box Sample Composition and Contamination

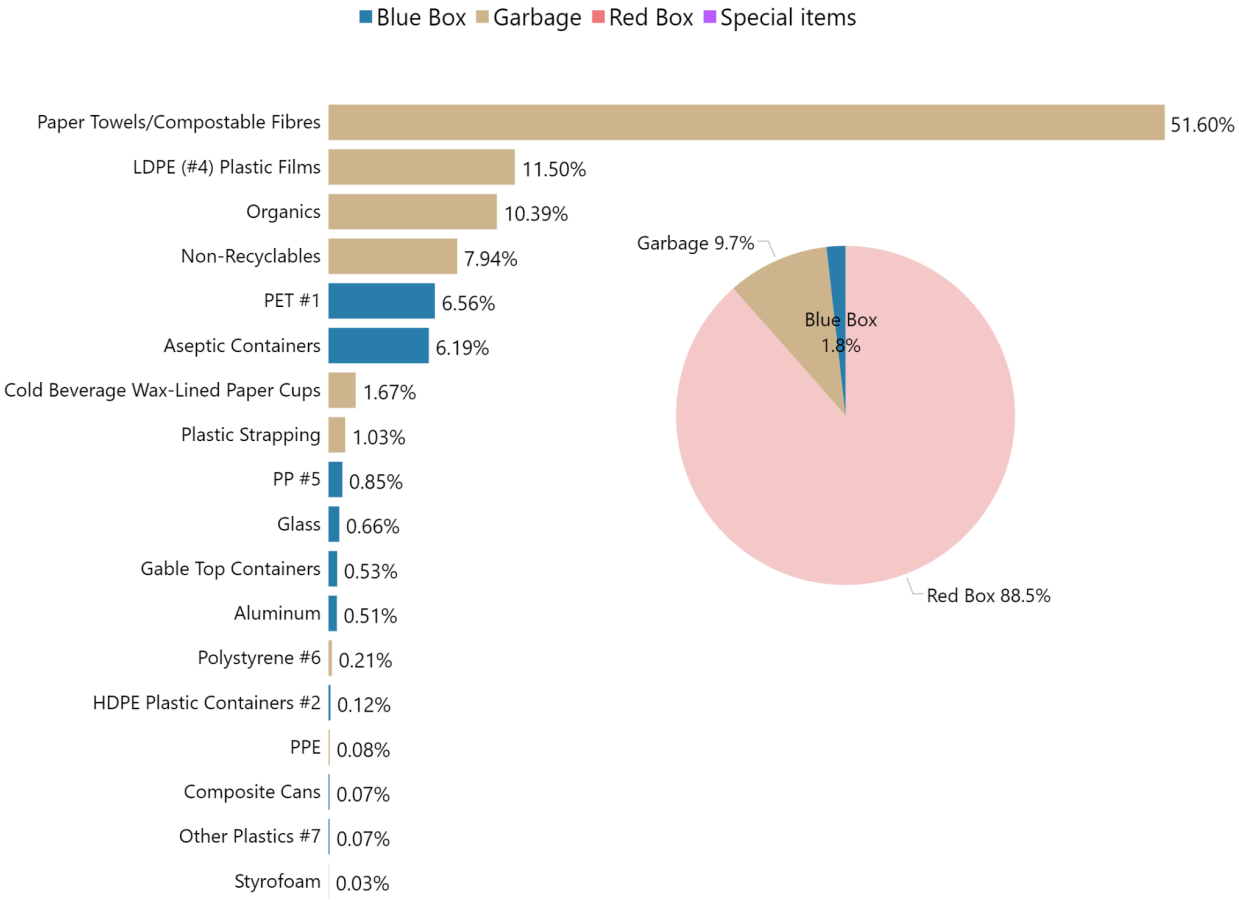
The Red Box sample consisted of 88.5% Red Box material, 9.7% Garbage material and 1.8% Blue Box material. The sample composition is shown in the figure below.

Figure 2a: Red Box Sample Composition (kg and % of sample stream)



Roughly 12% of the Red Box sample was contaminated with garbage and Blue Box material. The breakdown of contamination is shown in the figure below.

Figure 2b: Red Box Sample Contamination
(kg and % of sample stream)



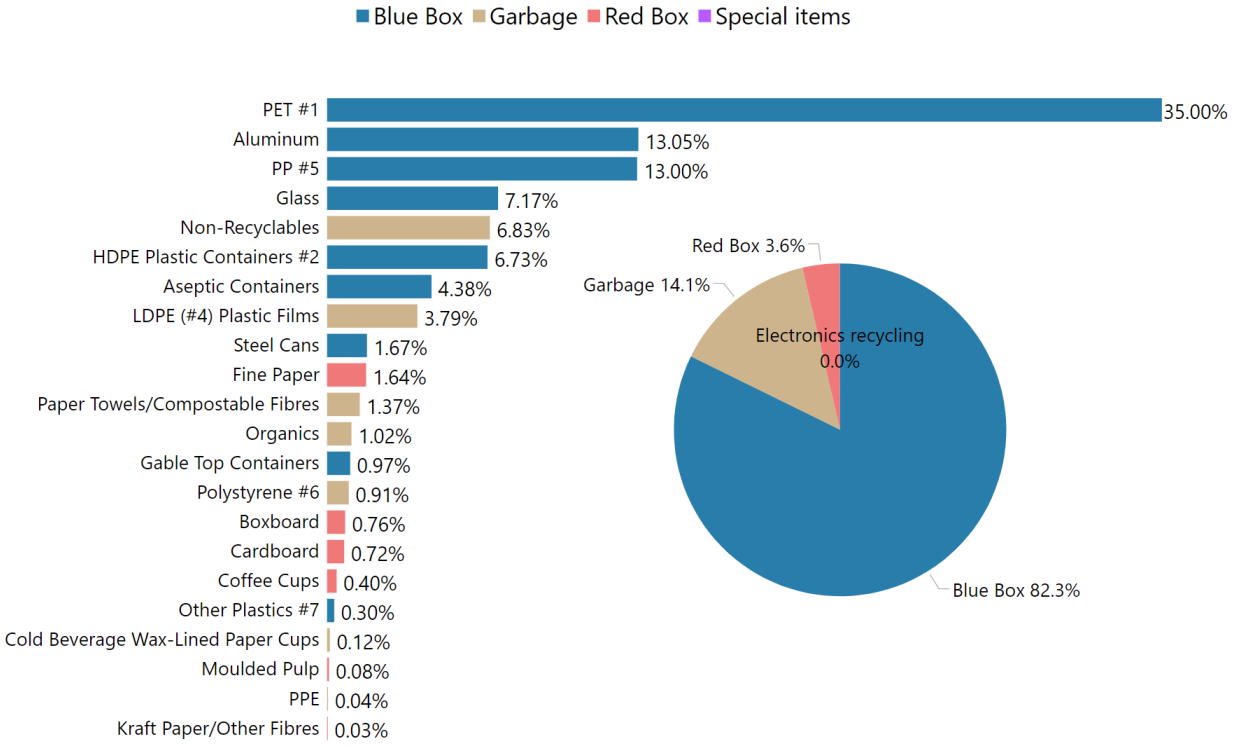
Notable Observations

- The Red Box sample consisted of 88.5% Red Box material, 9.7% Garbage material and 1.8% Blue Box material.
- 49.04% of the Red Box sample consisted of fine paper, 19.97% consisted of cardboard, 12.22% consisted of boxboard, 5.93% consisted of paper towels, and 5.19% consisted of kraft paper.
- Roughly 12% of the Red Box sample was contaminated with garbage or Blue Box material. Contamination in the Red Box stream consisted primarily of paper towels, LDPE #4 plastic film, organics, non-recyclables, PET #1, and aseptic containers.

4.4.2 Blue Box Sample Composition and Contamination

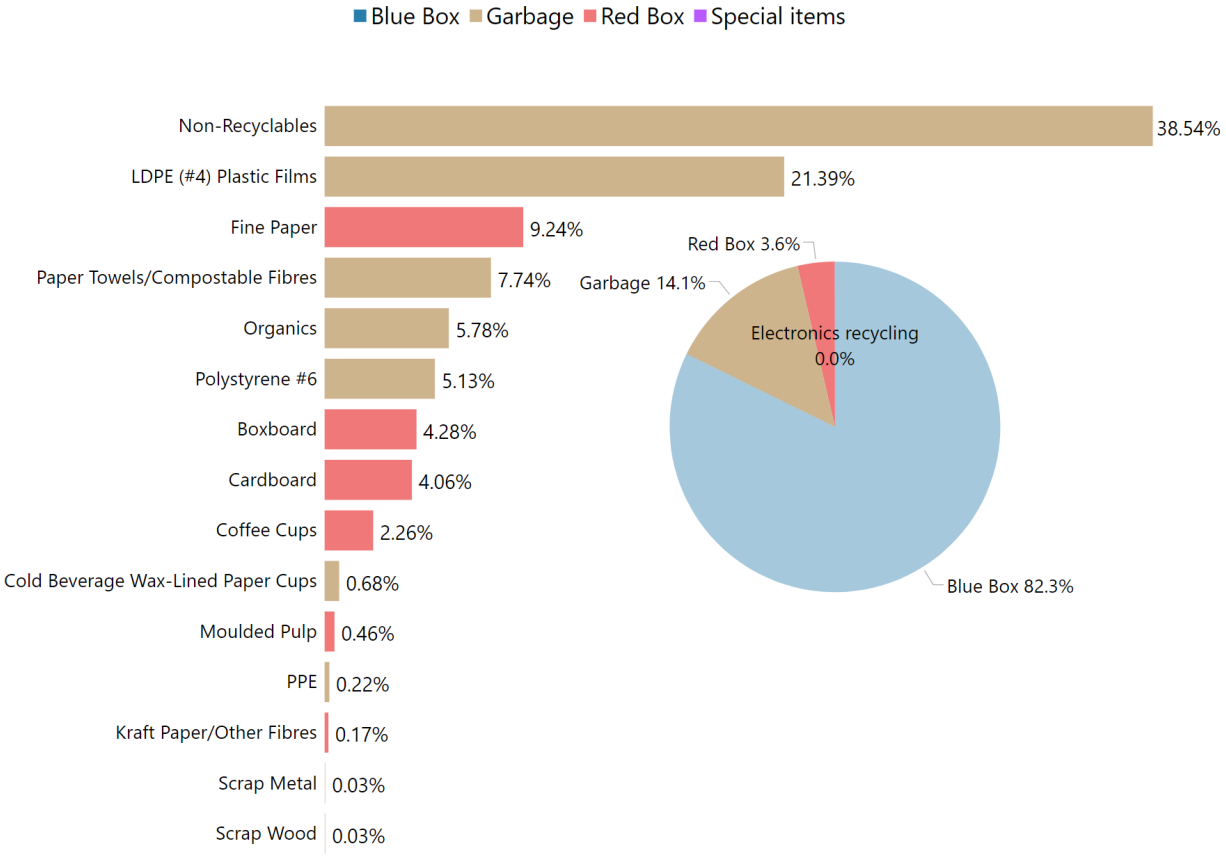
The Blue Box sample consisted of 82.3% Blue Box material, 14.1% garbage, 3.6% Red Box material, and 0.01% Electronics/Special Items. The sample composition is shown in the figure below.

Figure 3a: Blue Box Sample Composition
(kg and % of sample stream)



Roughly 17% of the Blue Box sample was contaminated with garbage or Red Box material. The breakdown of contamination is shown in the figure below.

Figure 3b: Blue Box Sample Contamination (kg and % of sample stream)



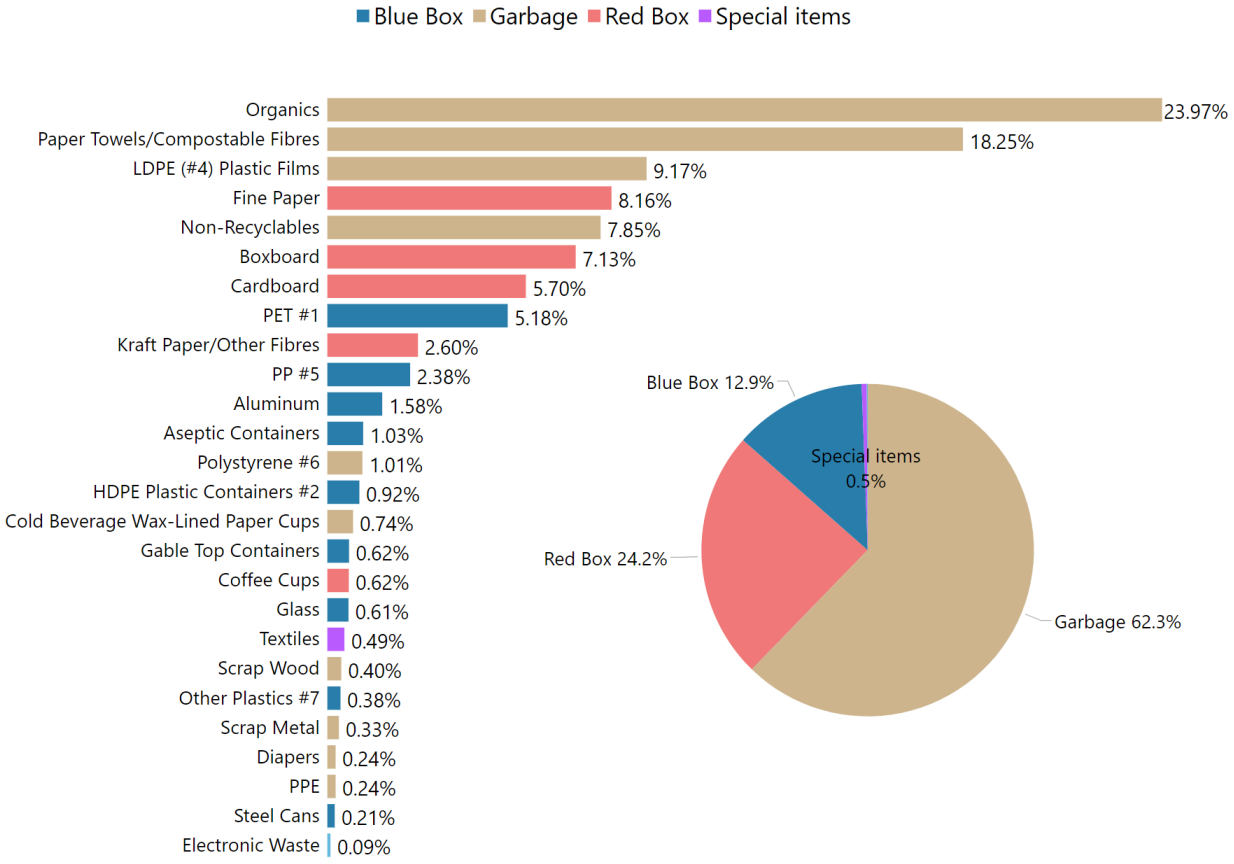
Notable Observations

- The Blue Box sample consisted of 82.3% Blue Box material, 14.1% garbage, 3.6% Red Box material, and 0.01% Electronics/Special Items.
- 35% of the Blue Box sample consisted of PET #1, 13.05% consisted of aluminum, 13% consisted of PP #5, 7.17% consisted of glass, 6.83% consisted of non-recyclables, 6.73% consisted of HDPE #2, 4.38% consisted of aseptic containers, and 3.79% consisted of LDPE #4 plastic
- Roughly 17% of the Blue Box sample was contaminated with garbage or Red Box material. Contamination consisted primarily of non-recyclable material, LDPE #4 plastic film, fine paper, paper towels, organics, PS #6, boxboard, and cardboard.

4.4.3 Garbage Sample Composition and Contamination

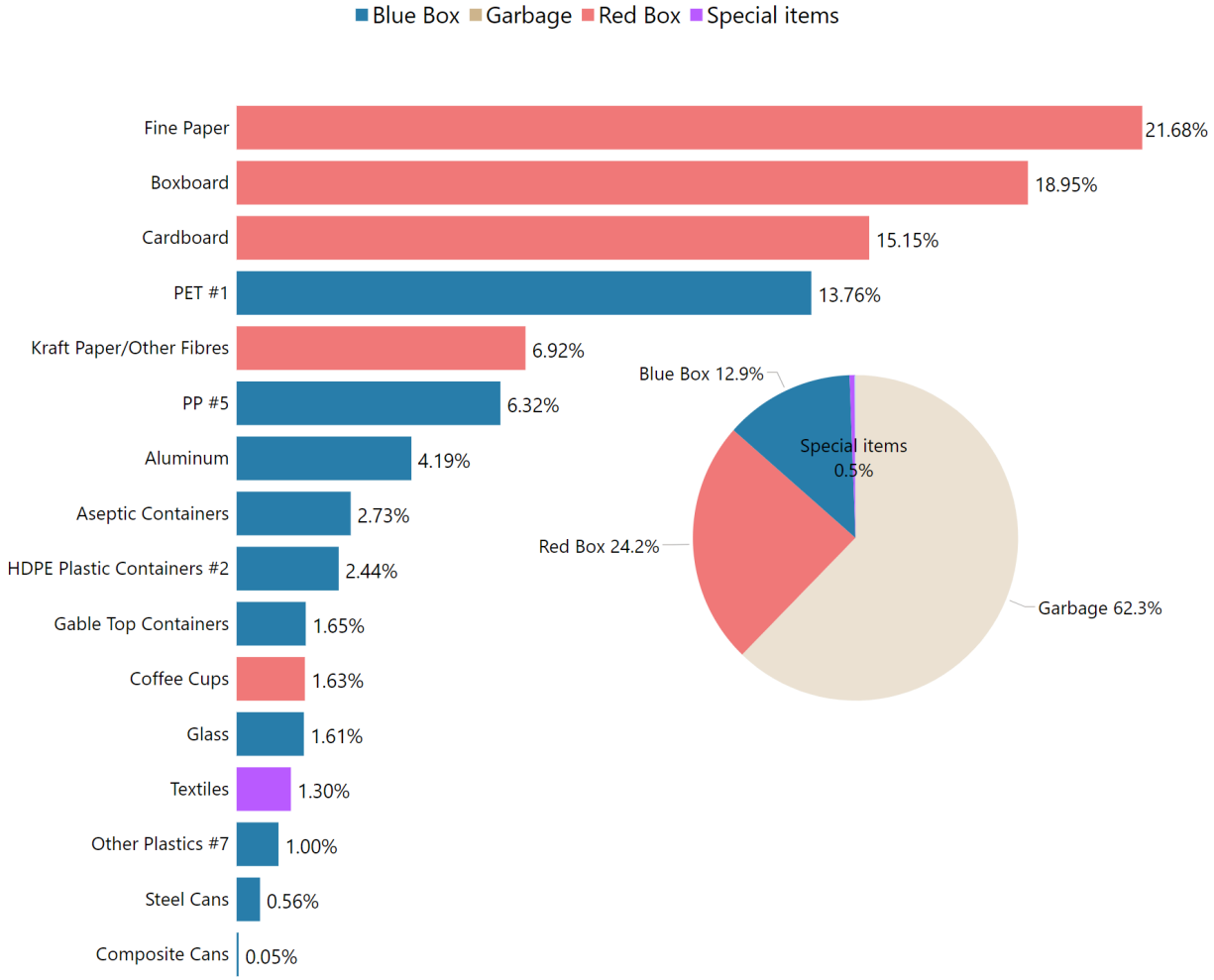
The garbage sample consisted of 62.3% garbage material, 24.2% Red Box material, 12.9% Blue Box material, and 0.5% Special items (textiles). The sample composition is shown in the figure below.

Figure 4a: Garbage Sample Composition
(% of total sample mass and kg)



Roughly 37% of the garbage stream sample was contaminated with Red Box material, Blue Box material, or Special items (textiles). A breakdown of the contamination is shown in the figure below.

Figure 4b: Garbage Sample Contamination
(% of total sample mass and kg)



Notable Observations

- The garbage sample consisted of 62.3% garbage material, 24.2% Red Box material, 12.9% Blue Box material, and 0.5% Special items (textiles).
- The garbage sample consisted primarily of organics (23.97%), paper towels (18.25%), LDPE #4 plastic (9.17%), fine paper (8.16%), non-recyclables (7.85%), boxboard (7.13%), cardboard (5.7%), PET #1 (5.18%) and kraft paper (2.6%).
- Roughly 37% of the garbage stream sample was contaminated with Red Box material, Blue Box material, or Special items. Contamination in the garbage stream consisted primarily of fine paper, boxboard, cardboard, PET #1, kraft paper, PP #5, aluminum, aseptic containers and HDPE #2 plastic.

4.5 Recyclables in the Garbage Stream

Based on the waste sample composition analysis, Mandatory Recyclables and Other Recyclables were identified in the garbage stream. The garbage sample consisted of 16.26%

Mandatory Recyclables, 21.47% Other Recyclables, and 62.27% Other (Non-Recyclable) material.

A description of the recyclable materials subject to O.Reg. 103/94 is provided below.

Mandatory Recyclables

O.Reg.193/04 requires that schools source separate the following materials (at a minimum):

- Aluminum food and beverage cans
- Cardboard (corrugated)
- Fine paper
- Glass food and beverage bottles/jars
- Newsprint
- Steel food and beverage cans

Other Recyclables

This includes any material eligible for recycling or that can be diverted from landfills. Other Recyclables include the following materials:

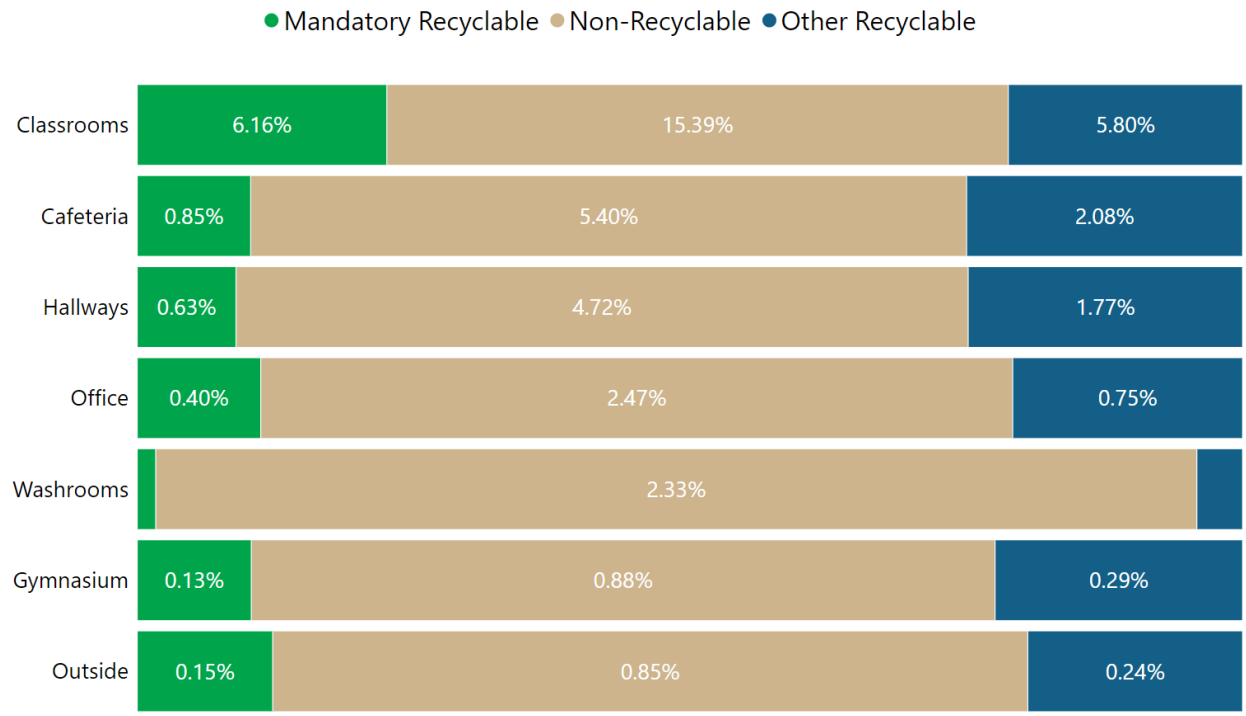
- Aseptic containers
- Batteries
- Boxboard
- Coffee Cups
- Composite Cans
- Electronics Waste
- Gable top containers
- HDPE #2 plastic containers
- Kraft paper/other fibres
- Lightbulbs
- Molded pulp
- Other plastics #7
- PET #1
- PP #5
- Printer toner/cartridges
- Scrap wood
- Scrap metal
- Textiles

Other (Non-Recyclables)

Includes all other non-recyclable materials.

Below is an analysis of the garbage sample composition by material and material type (Mandatory Recyclables, Other Recyclables, and Non-Recyclables).

Figure 5: Ratio of Recyclables in Garbage Stream by Type of Recyclable Organized by Functional Area



The breakdown of recyclables in the garbage stream by material is shown in the figures below.

Table 4: Breakdown of Mandatory Recyclables in the Garbage Stream by Material (in kg and % of garbage sample mass)

O.Reg 103/94 Type	Garbage
Mandatory Recyclable	**100.00%**
Fine Paper	50.20%
Cardboard	35.06%
Aluminum	9.69%
Glass	3.73%
Steel Cans	1.30%
Newspaper	0.03%
Total	**100.00%**

Table 5: Breakdown of Other Recyclables in Garbage Sample by Material (in kg and % of garbage sample mass)

O.Reg 103/94 Type	Garbage
Other Recyclable	**100.00%**
Boxboard	33.22%
PET #1	24.12%
Kraft Paper/Other Fibres	12.13%
PP #5	11.07%
Aseptic Containers	4.79%
HDPE Plastic Containers #2	4.29%
Gable Top Containers	2.90%
Coffee Cups	2.86%
Textiles	2.28%
Other Plastics #7	1.76%
Electronic Waste	0.41%
Composite Cans	0.08%
Moulded Pulp	0.07%
Batteries	0.01%
Total	**100.00%**

Notable observations are discussed below:

- The garbage sample consisted of 16.26% Mandatory Recyclables, 21.47% Other Recyclables, and 62.27% Other (Non-Recyclable) material.
- The Mandatory Recyclables in the garbage stream consisted of (in % of total sample mass):
    - Fine paper - 50.2%
    - Cardboard - 35.06
    - Aluminum - 9.69%
    - Glass - 3.73%
    - Steel cans - 1.3%
    - Newspaper - 0.03%
- The Other Recyclables in the garbage stream consisted primarily of:
    - Boxboard - 33.22%
    - PET #1 - 24.12%
    - Kraft paper - 12.13%
    - PP#5 - 11.07%
    - Aseptic containers - 4.49%
    - HDPE #2 plastic - 4.29%

4.6 Estimated Annual Quantities Generated

The annual quantity was calculated using the following equation based on 194 days in the school year. The average sample mass was calculated using material from the 10 audited schools and extrapolated to 194 school days.

Each material's estimated annual quantities were calculated and provided in the table below.

Table 6: Estimated Annual Quantities by Material

Material	Average Annual Garbage Quantity (MT)	Average Annual Red Box Quantity (MT)	Average Annual Blue Box Quantity (MT)	Total Generated on Average Per School (MT)	%
Fine Paper	0.75	2.50	0.06	3.30	18.51%
Organics	2.20	0.06	0.04	2.30	12.88%
Paper Towels/Compostable Fibres	1.68	0.30	0.05	2.03	11.35%
PET #1	0.48	0.04	1.25	1.76	9.88%
Cardboard	0.52	1.02	0.03	1.57	8.77%
Boxboard	0.66	0.62	0.03	1.30	7.30%
LDPE (#4) Plastic Films	0.84	0.07	0.14	1.04	5.85%
Non-Recyclables	0.72	0.05	0.24	1.01	5.66%
PP #5	0.22	0.01	0.46	0.69	3.85%
Aluminum	0.14	0.00	0.47	0.61	3.44%
Kraft Paper/Other Fibres	0.24	0.26	0.00	0.50	2.82%
Glass	0.06	0.00	0.28	0.35	1.93%
HDPE Plastic Containers #2	0.08	0.00	0.24	0.33	1.82%
Aseptic Containers	0.09	0.04	0.16	0.29	1.61%
Polystyrene #6	0.08	0.00	0.03	0.11	0.62%
Coffee Cups	0.06	0.04	0.01	0.11	0.59%
Gable Top Containers	0.06	0.00	0.03	0.09	0.53%
Cold Beverage Wax-Lined Paper Cups	0.07	0.01	0.00	0.08	0.46%
Steel Cans	0.02	0.00	0.06	0.08	0.44%
Other Plastics #7	0.03	0.00	0.01	0.05	0.26%
Textiles	0.04	0.00	0.00	0.05	0.26%
Scrap Wood	0.04	0.00	0.00	0.04	0.21%
Newspaper	0.00	0.04	0.00	0.04	0.21%
Moulded Pulp	0.00	0.03	0.00	0.04	0.20%
Scrap Metal	0.03	0.00	0.00	0.03	0.17%
Diapers	0.02	0.00	0.00	0.02	0.14%
PPE	0.02	0.00	0.00	0.02	0.13%
Electronic Waste	0.01	0.00	0.00	0.01	0.05%
Bubble Wrap/Shrink Wrap	0.01	0.00	0.00	0.01	0.03%
Styrofoam	0.00	0.00	0.00	0.00	0.02%
Composite Cans	0.00	0.00	0.00	0.00	0.01%
Plastic Strapping	0.00	0.00	0.00	0.00	0.01%
Batteries	0.00	0.00	0.00	0.00	0.00%
Lightbulbs	0.00	0.00	0.00	0.00	0.00%
Printer Toners	0.00	0.00	0.00	0.00	0.00%
Total	**9.18**	**5.08**	**3.60**	**17.86**	**100.00%**

Notable Observations are discussed below:

- 17.86 MT of material are expected to be generated annually on average per school. The materials generated consist primarily of the following materials:
    - Fine paper - 3.3 MT
    - Organics - 2.3 MT
    - Paper towels - 2.03 MT
    - PET #1 - 1.76 MT
    - Cardboard - 1.57 MT
    - Boxboard - 1.3 MT
    - LDPE #4 plastic - 1.04 MT
    - Non-Recyclables - 1.01 MT

5.0 Performance Metrics

5.1 Waste Diversion Rate

Waste diversion is the percentage of waste materials a facility diverts from landfills due to reducing, reuse and recycling (3Rs) programs versus the total amount of waste generated (3Rs plus landfill waste). The Ministry of the Environment, Conservation and Parks defines the Waste Diversion rate calculation as follows:

$$\text{Waste Diversion Rate} = \frac{\text{Total Waste Diverted (3Rs)}}{\text{Total Waste Generated}} \times 100$$

Table 7: Waste Diversion Rate

Year	Garbage Quantity (MT)	Red Box Quantity (MT)	Blue Box Quantity (MT)	Total Generated on Average Per School (MT)	Waste Diversion Rate
2024	9.18	5.08	3.60	17.86	48.60%

The 2024 **waste diversion rate was calculated to be 48.6%** (below the provincial objective of 60%) based on 8.68 MT of diverted waste and 17.89 MT of total waste generated over 194 school days.

5.2 Capture Rate

The capture rate is the proportion of divertible waste materials successfully diverted from disposal compared to the total amount of divertible waste materials generated. It measures the effectiveness of existing recycling programs.

The Recycling Council of Ontario defines the Capture Rate calculation as follows:

$$\text{Capture Rate} = \frac{\text{Total Divertible Material Captured (3Rs)}}{\text{Total Divertible Material Generated}} \times 100$$

Below are the capture rates for all divertible materials included in existing waste diversion programs at the Site.

Table 8: Capture Rates for Diversion Programs

Diversion Program	Garbage Quantity (MT)	Red Box Quantity (MT)	Blue Box Quantity (MT)	Total Generated on Average Per School (MT)	Capture Rate
Red Box	2.23	4.50	0.13	6.86	67.55%
Blue Box	1.19	0.09	2.96	4.25	71.92%
Special items	0.04	0.00	0.00	0.05	1.61%
Electronics recycling	0.01	0.00	0.00	0.01	0.00%
Total	**3.47**	**4.59**	**3.09**	**11.16**	**68.89%**

The overall **Capture Rate is 68.89%** based on a total diverted quantity of 7.68 MT and a total potential divertible quantity of 11.16 MT. The Blue Box capture rate was 71.92%, and the Red Box capture rate was 67.55%. Special items consisted primarily of textiles, which can be diverted from landfill.

6.0 Waste Audit Summary and Waste Reduction Work Plan

Refer to Appendix F for the Waste Audit Summary and the Waste Reduction Work Plan.

According to O.Reg.102/94, the Waste Reduction Work Plan or a plan summary must be posted at the facility where employees can review it. If a summary is posted, the entire Work Plan should also be made available for review by any employee upon request.

7.0 Findings and Conclusions

The conclusions discussed below are based on the waste audit findings. It should be noted that the conclusions and recommendations provided in this report are based on the waste audit sample results, which are considered representative of the annual quantities for this report. The estimates in this report have yet to account for fluctuations in waste quantities generated daily.

Sample Composition

- The Garbage stream sample had the highest sample mass (47.99%), followed by the Red Box (28.91%) and the Blue Box stream (23.1%).

Composition By Waste Stream

- **Garbage Stream** - the garbage stream had the highest proportion of sample mass (51.46%) and consisted primarily of organics, paper towels, LDPE #4 plastic film, fine paper, non-recyclable material, and boxboard

- **Red Box** - 28.52% of the total sample mass and consisted primarily of fine paper, cardboard and boxboard.
- **Blue Box** - 20.02% of the total sample mass and consisted primarily of PET #1, aluminum and PP #5.

Composition by Functional Area

- The classrooms generated the highest sample mass (70.98%).
- **Classrooms** generated the highest sample mass, 70.89%, primarily consisting of fine paper, cardboard, PET #1, organics, paper towels, and boxboard.
- **Hallways** - generated 9.22% of the total sample mass and consisted primarily of organics, paper towels, PET #1 and LDPE #4 plastic.
- **Cafeteria** - generated 8.6% of the total sample mass and consisted primarily of organics.
- **Office** - generated 5.97% of the total sample mass and consisted primarily of fine paper and paper towels
- **Washrooms, Gymnasiums, and Outside** - generated 2.47%, 1.5% and 1.25% of the total sample mass, respectively. The material consisted primarily of paper towels and non-recyclable material

<u>Contamination</u>

- The contamination rates for the sampled streams were as follows: Garbage stream - 29.94%, Red Box stream - 13.94% and Blue Box stream - 27.05%.
- The **Red Box** sample consisted of 88.5% Red Box material, 9.7% Garbage material and 1.8% Blue Box material.
    - 49.04% of the Red Box sample consisted of fine paper, 19.97% consisted of cardboard, 12.22% consisted of boxboard, 5.93% consisted of paper towels, and 5.19% consisted of kraft paper.
    - Roughly 12% of the Red Box sample was contaminated with garbage or Blue Box material. Contamination in the Red Box stream consisted primarily of paper towels, LDPE #4 plastic film, organics, non-recyclables, PET #1, and aseptic containers.
- The **Blue Box** sample consisted of 82.3% Blue Box material, 14.1% garbage, 3.6% Red Box material, and 0.01% Electronics/Special Items.
    - 35% of the Blue Box sample consisted of PET #1, 13.05% consisted of aluminum, 13% consisted of PP #5, 7.17% consisted of glass, 6.83% consisted of non-recyclables, 6.73% consisted of HDPE #2, 4.38% consisted of aseptic containers, and 3.79% consisted of LDPE #4 plastic
    - Roughly 17% of the Blue Box sample was contaminated with garbage or Red Box material. Contamination consisted primarily of non-recyclable material, LDPE #4 plastic film, fine paper, paper towels, organics, PS #6, boxboard, and cardboard.
- The **garbage** sample consisted of 62.3% garbage material, 24.2% Red Box material, 12.9% Blue Box material, and 0.5% Special items (textiles).
    - The garbage sample consisted primarily of organics (23.97%), paper towels (18.25%), LDPE #4 plastic (9.17%), fine paper (8.16%), non-recyclables (7.85%), boxboard (7.13%), cardboard (5.7%), PET #1 (5.18%) and kraft paper (2.6%).

- Roughly 37% of the garbage stream sample was contaminated with Red Box material, Blue Box material, or Special items. Contamination in the garbage stream consisted primarily of fine paper, boxboard, cardboard, PET #1, kraft paper, PP #5, aluminum, aseptic containers and HDPE #2 plastic.

Recyclables in the Garbage Stream

- The garbage sample consisted of 16.26% Mandatory Recyclables, 21.47% Other Recyclables, and 62.27% Other (Non-Recyclable) material.
- The **Mandatory Recyclables** in the garbage stream consisted of (in % of total sample mass):
  - Fine paper - 50.2%
  - Cardboard - 35.06
  - Aluminum - 9.69%
  - Glass - 3.73%
  - Steel cans - 1.3%
  - Newspaper - 0.03%
- The **Other Recyclables** in the garbage stream consisted primarily of:
  - Boxboard - 33.22%
  - PET #1 - 24.12%
  - Kraft paper - 12.13%
  - PP#5 - 11.07%
  - Aseptic containers - 4.49%
  - HDPE #2 plastic - 4.29%

Estimated Annual Quantities Generated

- 17.86 MT of material are expected to be generated annually on average per school. The materials generated consist primarily of the following materials:
  - Fine paper - 3.3 MT
  - Organics - 2.3 MT
  - Paper towels - 2.03 MT
  - PET #1 - 1.76 MT
  - Cardboard - 1.57 MT
  - Boxboard - 1.3 MT
  - LDPE #4 plastic - 1.04 MT
  - Non-Recyclables - 1.01 MT

Waste Diversion Rate

- The 2024 **waste diversion rate was calculated to be 48.6%** (below the provincial objective of 60%) based on 8.68 MT of diverted waste and 17.89 MT of total waste generated over 194 school days.

Capture Rate

- The overall **Capture Rate is 68.89%** based on a total diverted quantity of 7.68 MT and a total potential divertible quantity of 11.16 MT. The Blue Box capture rate was 71.92%, and the Red Box capture rate was 67.55%. Special items consisted primarily of textiles, which can be diverted from landfill.

8 Recommendations

Based on the conclusions, the following recommendations are tied to the conclusions discussed in the previous section.

The Site diverts 48.6% of generated waste through existing programs, below the provincial objective of 60%. The capture rate is 68.89%. There are opportunities to improve the waste diversion rate and capture rate further.

8.1 Improve Existing Waste Diversion Programs

Improving the following existing diversion programs could improve waste diversion and capture rates.

Mandatory Recyclables

- **Fine paper — 0.75 MT** of material is estimated to be generated annually through the garbage stream. Diverting this through the Red Box stream could **increase the waste diversion rate by up to 4.2%** and **could increase the capture rate by up to 6.7%.**
- **Cardboard — 0.52 MT** of material is estimated to be generated annually through the garbage stream. Diverting this through the Red Box stream could **increase the waste diversion rate up to 2.93%** and **could increase the capture rate up to 4.7%.**
- **Aluminum — 0.14 MT** of material is estimated to be generated annually through the garbage stream. Diverting this material through the existing Blue Box stream could **increase the waste diversion rate up to 0.81%** and **could increase the capture rate up to 1.29%.**
- **Glass — 0.06 MT** of material is estimated to be generated annually through the garbage stream. Diverting this material through the existing Blue Box stream could **increase the waste diversion rate by up to 0.35%** and **could increase the capture rate by up to 0.5%.**
- **Steel Cans — 0.02 MT** of material is estimated to be generated annually through the garbage stream. Diverting this material through the existing Blue Box stream could **increase the waste diversion rate up to 0.11%** and **could increase the capture rate up to 0.17%.**

Red Box and Blue Box Streams

- **Boxboard - 0.66 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing Red Box stream could **increase the waste diversion rate by up to 3.67%.**
- **PET #1 - 0.48 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing Blue Box stream could **increase the waste diversion rate by up to 2.66%.**

- **Kraft Paper/Other Fibres** - **0.24 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 1.34%.**
- **PP#5** - **0.22 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 1.22%.**
- **Aseptic containers** - **0.09 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 0.53%.**
- **HDPE #2 plastic** - **0.08 MT** of material is estimated to be generated annually through the garbage stream. Diverting this quantity through the existing streams could **increase the waste diversion rate by up to 0.47%.**

8.2 Add Organics/Paper Towels Diversion Programs

Organics generated in the garbage stream accounted for 2.2 MT of material annually. Diverting this material through a new organics diversion program **could increase waste diversion by up to 12.33%**.

Paper towels generated in the garbage stream accounted for 1.68 MT of material annually. Diverting this material through a new organics diversion program **could increase waste diversion by up to 9.39%**.

LDPE #4 plastics generated in the garbage stream accounted for 0.84 MT of material annually. Diverting this material from landfill **could increase waste diversion by up to 4.72%**.

8.3 Dedicated Receptacles and Update Signage

Waste diversion rates could be improved by implementing dedicated receptacles with clear signage to encourage waste separation at the source. Provide dedicated receptacles with signage and pictograms as a clear message to staff and students to separate divertible materials from landfill waste at source. Pictograms can provide examples of the types of waste suitable for the waste collection stream. Divertible material should be consolidated into a centralized location and picked up by a dedicated contractor.

8.4 Promoting Culture

A committee is recommended to oversee waste reduction and sustainability and promote a culture of waste diversion. Educate students and staff on the importance of waste diversion and communicate the corporate goals for waste diversion and sustainability. Create a positive message around the benefits of waste diversion and the individual's role.

- Support and encourage purchasing and using “environmentally friendly,” reusable or recyclable materials, packaging, and/or recycled content.
- Ensure an Environmental Policy is visible in common areas throughout the building and continue to emphasize the facility’s commitment to environmental stewardship through its training program and green or environmental initiatives.

- Encourage staff and students to prioritize bringing reusable containers, water bottles, and coffee cups.
- Promote and highlight current environmental programs and efforts through newsletters, posters, and/or bulletin boards for waste management.

8.5 Continuous Monitoring and Process Improvement

Track year-over-year changes in waste diversion capture rates and communicate progress to staff and students to encourage further participation/engagement.

Continuous monitoring and reporting for this site annually and comparison with year-over-year changes would provide insight into trends, which can be used as a basis for policy decisions regarding solid waste management for future projects. Further refinements to programs/processes can be made, and adherence to provincial requirements can be achieved.

Appendices

Appendix A: List of Categories

Material Category	Description
1. Paper and Paper Products	
Fine Paper	Includes mixed fine papers, writing paper, office paper, copy paper, bills and statements, ad mail, lottery tickets, receipts, envelopes, promotional cards, promotional calendars, printed information found within packaged products, etc. • Also includes softcover books, booklets, magazines, catalogues, calendars, flyers, and inserts.
Newsprint	Major daily and weekly newspapers and community newspapers. Does not include flyers and inserts.
Shredded Confidential Papers	Any paper that has been shredded.
Boxboard	Single-layered paperboard and fibre board with no corrugation. This includes cereal boxes, shoe boxes, cores from toilet paper, paper towels, gift wrap, etc.
Kraft Paper	Kraft paper bags and wrap, grocery or retail bags, potato bags, pet food bags, etc. Includes brown, white, and coloured kraft paper and bags. No bags with bonded plastic or foil lining.
Corrugated Cardboard	Waxed or unwaxed corrugated cardboard containers. Includes moulded pulp materials such as egg cartons, drink trays, other trays, etc.
Gable Top Containers	Polycoat containers with a gable-shaped top are used for milk, juice, some foods, etc.
Aseptic Containers	Tetra-pak-type polycoat packaging containers are used for juice, milk, soups and broths, alternative milk beverages, and alcoholic beverages.
Composite Cans	Spiral-wound cans with paper walls and plastic or metal tops or bottoms. They contain frozen juice, Pringles chips, dough, some raisins, etc.

Coffee Cups	All cups and containers used for hot/cold beverages and food (without a plastic oHot Primarily, hot/cold food and beverage containers are common in the fast food industry. Includes paper-based cups with a plastic lining, water cooler cups, freezer boxes, etc.
2. Plastic	
#1 Polyethylene Terephthalate (PET)	All PET #1 plastics. This includes clear or coloured thermoform packaging, beverage bottles, and non-beverage bottles used for food and non-food items such as dish soap, shampoo, mouthwash, window cleaner, and floor cleaner. ● Does not include Black Plastics.
#2 High-Density Polyethylene (HDPE)	All HDPE #2 plastics. Includes natural and coloured bottles, jugs, and containers for beverages, food items, and non-food items such as laundry soap, shampoo, bleach, vinegar, pill bottles, etc. ● Does not include Black Plastics.
#4 Low-Density Polyethylene (LDPE) Films	All #4 LDPE plastic films. This includes soft, "stretchy" PE plastic used for items such as produce bags, water bottle overwraps, garbage bags, kitchen liners, blue or clear recycling bags, sandwich and freezer bags, etc. ● Does not include Black Plastics.
#5 Polypropylene (PP)	All #5 PP plastics. Includes clear and coloured food containers, jugs, jars, take-out beverage cups, bottles, and jars for food items. ● Does not include Black Plastics.
#6 Non-Expanded Polystyrene (PS)	All Non-Expanded (rigid) #6 PS plastics. Includes clear or coloured rigid food trays, clamshells, cup lids, yogurt cups, CD and DVD cases only (no disk), etc. ● Does not include Black Plastics.
Other Recyclable Plastics (#3, 4, 7)	All other recyclable plastics (#3, 4, 7). Includes clear and coloured bottles, jugs, jars, and containers.
3. Glass/Metal	

Glass:	All clear and coloured glass. Includes bottles and containers for food, beverages, cosmetics, toiletries, household pharmaceutical products, candle jars, etc. • Does not include non-recyclable glass such as windowpane glass, plates, drinking glasses, figures, or incandescent light bulbs.
Aluminum	All aluminum containers and foils. Includes food and beverage containers, rigid aluminum trays (pie plates, baking trays, etc.), empty aerosol containers, and containers for hair products, tubes, etc. • Does not include full or partially full pressurized cans.
Steel	All steel containers. Includes food and beverage containers, empty spray cans (for cooking oil, whipped cream, etc.), and empty paint cans. • Does not include full or partially full pressurized cans.
4. Organics	
Organic Food Waste	All edible and non-edible organic waste from food items. Includes untouched and leftover bakery, meat & fish, dried food, fruits & vegetables, dairy, and other foods.
Other Organics:	All other organic materials that are not derived from food items. Includes yard waste, grass clippings, small wood waste, pet waste, diapers and sanitary products, certified compostable plastic bin liners, and other compostable papers.
Compostable fibres	Include paper towels, paper napkins, toilet paper, facial tissues, etc.
5. Operational waste	
Other metals,	Scrap metals, copper pipes, hardware, etc. Includes multi-material items that are mainly metal.

Non-Treated Wood	Non-treated wood materials. Includes skids/pallets, wooden furniture, etc. • Does not include branches, brush, or wood chips.
Batteries	All single-use and rechargeable batteries. Includes Alkaline-Manganese, Lithium, Silver Oxide, Zinc Air, Zinc-Carbon, etc.
Printer Toners	All ink cartridges and printer toners.
E-Waste	All waste is from electrical and electronic equipment (WEEE). Anything that is battery-operated and/or can be plugged into an electrical outlet. Includes computer/IT equipment, telecom equipment, TV & audio equipment, small kitchen appliances, wires/chargers /adapters, cocks, gadgets, etc.
Plastic Strapping	This is All-Plastic Strapping material. It is used to bundle products for retail sales and can come in various colours and plastic materials.
6. Non-Recyclable Waste	
Non-Recyclable/Garbage	All other non-recyclable waste materials are not classified elsewhere. Includes hazardous waste, coffee cups, black plastics, and expanded polystyrene, all described below. Includes chip bags, furnace filters, laminated papers, rigid or durable plastics, non-recyclable glass, dust, single-use cleaning wipes, single-use coffee pods, plastic straws and cutlery, materials too small to process, etc.
Hazardous Wastes	All hazardous wastes are not classified elsewhere. Includes full or partially full pressurized cans, paints, and oil containers. • Also includes fluorescent light bulbs and tubes, medical sharps and syringes, mercury-containing devices, pharmaceuticals, antifreeze, fertilizers, solvents, pesticides, etc. • Also includes all other liquid or non-liquid items with signal words such as "Poison," "Danger," "Warning," "Caution," and "Precautionary Statements."

Cold Beverage Wax-Lined Cups	All cups and containers have a plastic or wax lining. Multiple-layered, primarily fibre, hot/cold food and beverage containers are common in the fast food industry. This includes paper-based cups with a plastic lining, water cooler cups, freezer boxes, etc.
Black Plastics	Includes all Black Plastics #1-7 and unmarked. • Also includes rigid, durable, and expanded Black Plastics and black plastic bags.
Expanded Polystyrene	This includes white, coloured, and black polystyrene foam packaging for food trays, clamshells, etc., as well as foam packaging for "peanuts" and foam blocks used to protect boxed products.

Appendix B: Scale Calibration Certificate

CANADIAN SCALE COMPANY LIMITED

CALIBRATION CERTIFICATE

DATE: July 05 2024 **SR #** 52342

CUSTOMER:
Waste Reduction Group
214 Merton St. # 101
Toronto ON

REMARKS

This is to certify that the following scale has been tested and verified in relation to the Standards maintained by **CANADIAN SCALE COMPANY LIMITED**, with test weights traceable to the Legal Metrology Laboratories of, Industry Canada and National Research Council, Canada.

Western model - EWH150
Capacity - 150 kg
S/N - 202104114

CANADIAN SCALE COMPANY LIMITED is an Authorized Service Provider of Measurement Canada

Technician's signature

wrg | waste reduction group Inc.
+416 823 4554 | admin@wastereductiongroup.ca

Measurement Canada Authorized Service Provider – Fournisseur de services autorisé de Mesures Canada

CANADIAN SCALE COMPANY LIMITED
305 Horner Avenue, Toronto, ON M8W 1Z4
1-800-461-0634 www.canscale.com

Appendix C (Red Box and Blue Box Samples): Detailed Sample Composition for Audited Schools

(Note: higher intensity of **blue** highlighting indicates higher sample weight/percent)

Sampled Stream	Red Box										Blue Box												Total	
Functional Area	Cafeteria		Classrooms		Hallways		Office		Total		Cafeteria		Classrooms		Gymnasium		Hallways		Office		Total			
O.Reg 103/94 Type	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%
Mandatory Recyclable	**0.44**	**0.05%**	**165.68**	**18.01%**	**2.70**	**0.29%**	**14.52**	**1.58%**	**183.34**	**19.93%**	**0.40**	**0.04%**	**40.63**	**4.42%**	**0.49**	**0.05%**	**2.18**	**0.24%**	**0.98**	**0.11%**	**44.66**	**4.85%**	**228.00**	**24.78%**
Aluminum	0.00	0.00%	0.12	0.01%	0.03	0.00%	0.01	0.00%	**0.16**	**0.02%**	0.14	0.02%	21.71	2.36%	0.01	0.00%	1.96	0.21%	0.23	0.02%	**24.04**	**2.61%**	**24.19**	**2.63%**
Cardboard	0.20	0.02%	48.89	5.31%	1.56	0.17%	1.76	0.19%	**52.41**	**5.70%**	0.00	0.00%	1.10	0.12%	0.22	0.02%	0.01	0.00%	0.00	0.00%	**1.33**	**0.14%**	**53.74**	**5.84%**
Fine Paper	0.24	0.03%	114.81	12.48%	0.91	0.10%	12.75	1.39%	**128.71**	**13.99%**	0.00	0.00%	2.60	0.28%			0.01	0.00%	0.41	0.04%	**3.02**	**0.33%**	**131.72**	**14.32%**
Glass	0.00	0.00%	0.00	0.00%	0.20	0.02%	0.00	0.00%	**0.20**	**0.02%**	0.00	0.00%	12.44	1.35%	0.26	0.03%	0.21	0.02%	0.30	0.03%	**13.21**	**1.44%**	**13.41**	**1.46%**
Newspaper	0.00	0.00%	1.86	0.20%	0.00	0.00%	0.01	0.00%	**1.87**	**0.20%**	0.00	0.00%	0.00	0.00%			0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	**1.87**	**0.20%**
Steel Cans	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	0.26	0.03%	2.78	0.30%			0.00	0.00%	0.04	0.00%	**3.08**	**0.33%**	**3.08**	**0.33%**
Non-Recyclable	**0.67**	**0.07%**	**20.44**	**2.22%**	**2.28**	**0.25%**	**2.10**	**0.23%**	**25.49**	**2.77%**	**0.22**	**0.02%**	**21.42**	**2.33%**	**0.04**	**0.00%**	**3.97**	**0.43%**	**0.31**	**0.03%**	**25.95**	**2.82%**	**51.43**	**5.59%**
Cold Beverage Wax-Lined Paper Cups	0.01	0.00%	0.33	0.04%	0.16	0.02%	0.00	0.00%	**0.51**	**0.05%**	0.01	0.00%	0.16	0.02%	0.01	0.00%	0.04	0.00%	0.01	0.00%	**0.22**	**0.02%**	**0.73**	**0.08%**
LDPE (#4) Plastic Films	0.26	0.03%	2.37	0.26%	0.61	0.07%	0.24	0.03%	**3.47**	**0.38%**	0.20	0.02%	5.86	0.64%	0.03	0.00%	0.86	0.09%	0.03	0.00%	**6.98**	**0.76%**	**10.45**	**1.14%**
Non-Recyclables	0.01	0.00%	2.05	0.22%	0.14	0.01%	0.20	0.02%	**2.40**	**0.26%**	0.00	0.00%	9.89	1.07%			2.46	0.27%	0.23	0.02%	**12.57**	**1.37%**	**14.97**	**1.63%**
Organics	0.26	0.03%	1.60	0.17%	1.12	0.12%	0.16	0.02%	**3.14**	**0.34%**	0.01	0.00%	1.34	0.15%			0.54	0.06%	0.00	0.00%	**1.89**	**0.20%**	**5.02**	**0.55%**
Paper Towels/Compostable Fibres	0.12	0.01%	13.74	1.49%	0.24	0.03%	1.48	0.16%	**15.58**	**1.69%**	0.00	0.00%	2.48	0.27%			0.03	0.00%	0.02	0.00%	**2.53**	**0.27%**	**18.10**	**1.97%**
Plastic Strapping	0.00	0.00%	0.30	0.03%	0.00	0.00%	0.01	0.00%	**0.31**	**0.03%**	0.00	0.00%	0.00	0.00%			0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	**0.31**	**0.03%**
Polystyrene #6	0.00	0.00%	0.04	0.00%	0.02	0.00%	0.01	0.00%	**0.06**	**0.01%**	0.01	0.00%	1.61	0.17%			0.04	0.00%	0.02	0.00%	**1.67**	**0.18%**	**1.74**	**0.19%**
PPE	0.01	0.00%	0.01	0.00%	0.00	0.00%	0.01	0.00%	**0.02**	**0.00%**	0.00	0.00%	0.06	0.01%			0.01	0.00%	0.00	0.00%	**0.07**	**0.01%**	**0.10**	**0.01%**
Scrap Metal	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	0.00	0.00%	0.01	0.00%			0.00	0.00%	0.00	0.00%	**0.01**	**0.00%**	**0.01**	**0.00%**
Scrap Wood	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	0.00	0.00%	0.01	0.00%			0.00	0.00%	0.00	0.00%	**0.01**	**0.00%**	**0.01**	**0.00%**
Styrofoam	0.00	0.00%	0.01	0.00%	0.00	0.00%	0.00	0.00%	**0.01**	**0.00%**	0.00	0.00%	0.00	0.00%			0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	**0.01**	**0.00%**
Other Recyclable	**0.08**	**0.01%**	**50.13**	**5.45%**	**0.86**	**0.09%**	**2.57**	**0.28%**	**53.64**	**5.83%**	**0.74**	**0.08%**	**103.11**	**11.21%**	**1.23**	**0.13%**	**7.36**	**0.80%**	**1.13**	**0.12%**	**113.57**	**12.34%**	**167.21**	**18.17%**
Aseptic Containers	0.01	0.00%	1.47	0.16%	0.01	0.00%	0.39	0.04%	**1.87**	**0.20%**	0.01	0.00%	8.02	0.87%	0.01	0.00%	0.02	0.00%	0.01	0.00%	**8.07**	**0.88%**	**9.94**	**1.08%**
Batteries	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%			0.02	0.00%	0.00	0.00%	**0.02**	**0.00%**	**0.02**	**0.00%**
Boxboard	0.02	0.00%	30.31	3.29%	0.37	0.04%	1.37	0.15%	**32.06**	**3.48%**	0.00	0.00%	0.80	0.09%			0.58	0.06%	0.02	0.00%	**1.40**	**0.15%**	**33.46**	**3.64%**
Coffee Cups	0.01	0.00%	1.40	0.15%	0.02	0.00%	0.38	0.04%	**1.81**	**0.20%**	0.00	0.00%	0.63	0.07%			0.11	0.01%	0.00	0.00%	**0.74**	**0.08%**	**2.55**	**0.28%**
Composite Cans	0.00	0.00%	0.02	0.00%	0.00	0.00%	0.00	0.00%	**0.02**	**0.00%**	0.00	0.00%	0.00	0.00%			0.00	0.00%	0.00	0.00%	**0.00**	**0.00%**	**0.02**	**0.00%**
Gable Top Containers	0.01	0.00%	0.14	0.01%	0.01	0.00%	0.00	0.00%	**0.16**	**0.02%**	0.00	0.00%	1.78	0.19%			0.01	0.00%	0.00	0.00%	**1.79**	**0.19%**	**1.95**	**0.21%**
HDPE Plastic Containers #2	0.00	0.00%	0.04	0.00%	0.00	0.00%	0.00	0.00%	**0.04**	**0.00%**	0.00	0.00%	11.68	1.27%			0.53	0.06%	0.18	0.02%	**12.39**	**1.35%**	**12.43**	**1.35%**
Kraft Paper/Other Fibres	0.02	0.00%	12.93	1.40%	0.26	0.03%	0.41	0.04%	**13.62**	**1.48%**	0.00	0.00%	0.03	0.00%			0.01	0.00%	0.02	0.00%	**0.06**	**0.01%**	**13.67**	**1.49%**
Moulded Pulp	0.01	0.00%	1.63	0.18%	0.15	0.02%	0.00	0.00%	**1.79**	**0.19%**	0.00	0.00%	0.15	0.02%			0.00	0.00%	0.00	0.00%	**0.15**	**0.02%**	**1.94**	**0.21%**
Other Plastics #7	0.00	0.00%	0.02	0.00%	0.00	0.00%	0.00	0.00%	**0.02**	**0.00%**	0.00	0.00%	0.55	0.06%			0.01	0.00%	0.00	0.00%	**0.56**	**0.06%**	**0.58**	**0.06%**
PET #1	0.00	0.00%	1.95	0.21%	0.03	0.00%	0.01	0.00%	**1.98**	**0.22%**	0.68	0.07%	55.98	6.08%	1.22	0.13%	5.70	0.62%	0.88	0.10%	**64.46**	**7.01%**	**66.44**	**7.22%**
PP #5	0.01	0.00%	0.22	0.02%	0.02	0.00%	0.01	0.00%	**0.26**	**0.03%**	0.05	0.01%	23.50	2.55%	0.01	0.00%	0.38	0.04%	0.01	0.00%	**23.94**	**2.60%**	**24.20**	**2.63%**
Textiles	0.00	0.00%	0.02	0.00%	0.00	0.00%	0.00	0.00%	**0.02**	**0.00%**	0.00	0.00%	0.00	0.00%			0.01	0.00%	0.01	0.00%	**0.02**	**0.00%**	**0.04**	**0.00%**
Total	**1.19**	**0.13%**	**236.25**	**25.68%**	**5.84**	**0.63%**	**19.18**	**2.08%**	**262.46**	**28.52%**	**1.36**	**0.15%**	**165.16**	**17.95%**	**1.75**	**0.19%**	**13.50**	**1.47%**	**2.42**	**0.26%**	**184.18**	**20.02%**	**446.64**	**48.54%**

Appendix C (Garbage Samples): Detailed Sample Composition for Audited Schools

(Note: higher intensity of **blue** highlighting indicates higher sample weight/percent)

Sampled Stream	Garbage																Total	
Functional Area	Cafeteria		Classrooms		Gymnasium		Hallways		Office		Outside		Washrooms		Total			
O.Reg 103/94 Type	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%	kg	%
Mandatory Recyclable	**7.80**	**0.85%**	**56.67**	**6.16%**	**1.24**	**0.13%**	**5.80**	**0.63%**	**3.70**	**0.40%**	**1.40**	**0.15%**	**0.36**	**0.04%**	**76.98**	**8.37%**	**76.98**	**8.37%**
Aluminum	2.98	0.32%	2.31	0.25%	0.04	0.00%	1.24	0.13%	0.47	0.05%	0.40	0.04%	0.03	0.00%	**7.46**	**0.81%**	**7.46**	**0.81%**
Cardboard	3.21	0.35%	20.92	2.27%	0.70	0.08%	1.14	0.12%	0.82	0.09%	0.20	0.02%	0.00	0.00%	**26.99**	**2.93%**	**26.99**	**2.93%**
Fine Paper	0.86	0.09%	32.36	3.52%	0.50	0.05%	2.25	0.24%	1.84	0.20%	0.80	0.09%	0.04	0.00%	**38.64**	**4.20%**	**38.64**	**4.20%**
Glass	0.62	0.07%	0.70	0.08%	0.00	0.00%	0.68	0.07%	0.57	0.06%	0.00	0.00%	0.30	0.03%	**2.87**	**0.31%**	**2.87**	**0.31%**
Newspaper	0.00	0.00%	0.02	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	**0.02**	**0.00%**	**0.02**	**0.00%**
Steel Cans	0.14	0.02%	0.36	0.04%	0.00	0.00%	0.50	0.05%	0.00	0.00%	0.00	0.00%	0.00	0.00%	**1.00**	**0.11%**	**1.00**	**0.11%**
Non-Recyclable	**49.65**	**5.40%**	**141.63**	**15.39%**	**8.14**	**0.88%**	**43.42**	**4.72%**	**22.70**	**2.47%**	**7.86**	**0.85%**	**21.46**	**2.33%**	**294.86**	**32.05%**	**294.86**	**32.05%**
Bubble Wrap/Shrink Wrap	0.01	0.00%	0.21	0.02%	0.00	0.00%	0.01	0.00%	0.01	0.00%	0.00	0.00%	0.00	0.00%	**0.24**	**0.03%**	**0.24**	**0.03%**
Cold Beverage Wax-Lined Paper Cups	0.49	0.05%	2.05	0.22%	0.02	0.00%	0.68	0.07%	0.06	0.01%	0.01	0.00%	0.19	0.02%	**3.50**	**0.38%**	**3.50**	**0.38%**
Diapers	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	1.12	0.12%	**1.12**	**0.12%**	**1.12**	**0.12%**
LDPE (#4) Plastic Films	9.95	1.08%	17.64	1.92%	0.27	0.03%	8.76	0.95%	1.80	0.20%	4.44	0.48%	0.55	0.06%	**43.41**	**4.72%**	**43.41**	**4.72%**
Non-Recyclables	3.44	0.37%	18.84	2.05%	3.51	0.38%	4.90	0.53%	2.58	0.28%	0.72	0.08%	3.16	0.34%	**37.15**	**4.04%**	**37.15**	**4.04%**
Organics	25.21	2.74%	57.02	6.20%	3.58	0.39%	17.03	1.85%	8.48	0.92%	0.22	0.02%	1.97	0.21%	**113.50**	**12.34%**	**113.50**	**12.34%**
Paper Towels/Compostable Fibres	9.59	1.04%	40.07	4.35%	0.16	0.02%	11.25	1.22%	8.49	0.92%	2.45	0.27%	14.41	1.57%	**86.42**	**9.39%**	**86.42**	**9.39%**
Plastic Strapping	0.00	0.00%	0.01	0.00%	0.00	0.00%	0.01	0.00%	0.01	0.00%	0.01	0.00%	0.00	0.00%	**0.03**	**0.00%**	**0.03**	**0.00%**
Polystyrene #6	0.75	0.08%	2.11	0.23%	0.59	0.06%	0.55	0.06%	0.74	0.08%	0.01	0.00%	0.03	0.00%	**4.77**	**0.52%**	**4.77**	**0.52%**
PPE	0.03	0.00%	0.82	0.09%	0.01	0.00%	0.18	0.02%	0.03	0.00%	0.00	0.00%	0.05	0.00%	**1.12**	**0.12%**	**1.12**	**0.12%**
Scrap Metal	0.14	0.02%	0.89	0.10%	0.00	0.00%	0.04	0.00%	0.50	0.05%	0.00	0.00%	0.00	0.00%	**1.57**	**0.17%**	**1.57**	**0.17%**
Scrap Wood	0.00	0.00%	1.89	0.21%	0.00	0.00%	0.00	0.00%	0.01	0.00%	0.00	0.00%	0.00	0.00%	**1.90**	**0.21%**	**1.90**	**0.21%**
Styrofoam	0.05	0.01%	0.07	0.01%	0.00	0.00%	0.01	0.00%	0.00	0.00%	0.01	0.00%	0.00	0.00%	**0.14**	**0.01%**	**0.14**	**0.01%**
Other Recyclable	**19.14**	**2.08%**	**53.41**	**5.80%**	**2.71**	**0.29%**	**16.28**	**1.77%**	**6.94**	**0.75%**	**2.24**	**0.24%**	**0.94**	**0.10%**	**101.65**	**11.05%**	**101.65**	**11.05%**
Aseptic Containers	0.70	0.08%	3.22	0.35%	0.12	0.01%	0.68	0.07%	0.02	0.00%	0.12	0.01%	0.02	0.00%	**4.87**	**0.53%**	**4.87**	**0.53%**
Batteries	0.00	0.00%	0.01	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.01	0.00%	**0.02**	**0.00%**	**0.02**	**0.00%**
Boxboard	5.73	0.62%	20.01	2.17%	0.17	0.02%	4.42	0.48%	3.17	0.34%	0.22	0.02%	0.04	0.00%	**33.76**	**3.67%**	**33.76**	**3.67%**
Coffee Cups	0.13	0.01%	1.81	0.20%	0.01	0.00%	0.65	0.07%	0.25	0.03%	0.01	0.00%	0.05	0.01%	**2.91**	**0.32%**	**2.91**	**0.32%**
Composite Cans	0.02	0.00%	0.05	0.01%	0.01	0.00%	0.01	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	**0.09**	**0.01%**	**0.09**	**0.01%**
Electronic Waste	0.00	0.00%	0.40	0.04%	0.00	0.00%	0.01	0.00%	0.00	0.00%	0.01	0.00%	0.00	0.00%	**0.42**	**0.05%**	**0.42**	**0.05%**
Gable Top Containers	0.40	0.04%	1.11	0.12%	0.00	0.00%	0.82	0.09%	0.25	0.03%	0.37	0.04%	0.01	0.00%	**2.95**	**0.32%**	**2.95**	**0.32%**
HDPE Plastic Containers #2	1.47	0.16%	1.78	0.19%	0.01	0.00%	0.67	0.07%	0.42	0.05%	0.01	0.00%	0.01	0.00%	**4.36**	**0.47%**	**4.36**	**0.47%**
Kraft Paper/Other Fibres	1.21	0.13%	7.67	0.83%	0.01	0.00%	1.40	0.15%	0.96	0.10%	0.83	0.09%	0.25	0.03%	**12.33**	**1.34%**	**12.33**	**1.34%**
Moulded Pulp	0.01	0.00%	0.00	0.00%	0.00	0.00%	0.02	0.00%	0.04	0.00%	0.00	0.00%	0.01	0.00%	**0.07**	**0.01%**	**0.07**	**0.01%**
Other Plastics #7	0.08	0.01%	1.21	0.13%	0.12	0.01%	0.32	0.03%	0.04	0.00%	0.00	0.00%	0.02	0.00%	**1.79**	**0.19%**	**1.79**	**0.19%**
PET #1	6.74	0.73%	9.78	1.06%	2.22	0.24%	4.58	0.50%	0.93	0.10%	0.01	0.00%	0.27	0.03%	**24.52**	**2.66%**	**24.52**	**2.66%**
PP #5	2.57	0.28%	4.93	0.54%	0.04	0.00%	2.23	0.24%	0.85	0.09%	0.50	0.05%	0.14	0.02%	**11.26**	**1.22%**	**11.26**	**1.22%**
Textiles	0.09	0.01%	1.44	0.16%	0.00	0.00%	0.48	0.05%	0.01	0.00%	0.16	0.02%	0.14	0.02%	**2.32**	**0.25%**	**2.32**	**0.25%**
Total	**76.60**	**8.32%**	**251.70**	**27.36%**	**12.08**	**1.31%**	**65.50**	**7.12%**	**33.34**	**3.62%**	**11.50**	**1.25%**	**22.77**	**2.47%**	**473.48**	**51.46%**	**473.48**	**51.46%**

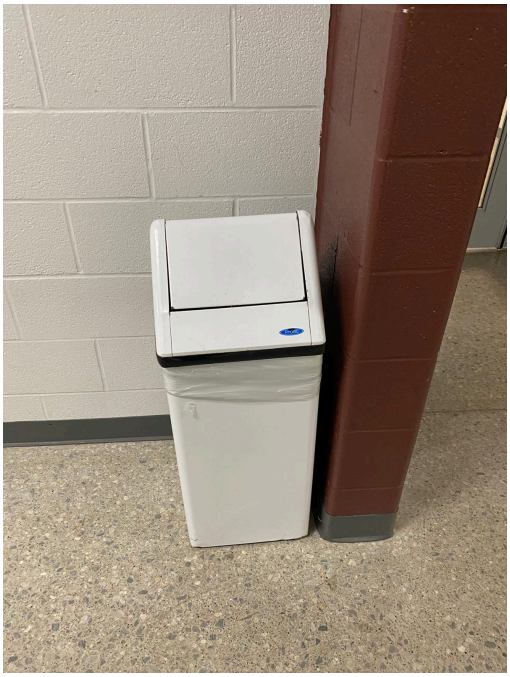
Appendix D: Estimated Annual Quantities Generated by Material

O.Reg 103/94 Type	Average Annual Garbage Quantity (MT)	Average Annual Red Box Quantity (MT)	Average Annual Blue Box Quantity (MT)	Total Generated on Average Per School (MT)	%
Non-Recyclable	**5.71**	**0.49**	**0.50**	**6.70**	**37.51%**
Organics	2.20	0.06	0.04	2.30	12.88%
Paper Towels/Compostable Fibres	1.68	0.30	0.05	2.03	11.35%
LDPE (#4) Plastic Films	0.84	0.07	0.14	1.04	5.85%
Non-Recyclables	0.72	0.05	0.24	1.01	5.66%
Polystyrene #6	0.08	0.00	0.03	0.11	0.62%
Cold Beverage Wax-Lined Paper Cups	0.07	0.01	0.00	0.08	0.46%
Scrap Wood	0.04	0.00	0.00	0.04	0.21%
Scrap Metal	0.03	0.00	0.00	0.03	0.17%
Diapers	0.02	0.00	0.00	0.02	0.14%
PPE	0.02	0.00	0.00	0.02	0.13%
Bubble Wrap/Shrink Wrap	0.01	0.00	0.00	0.01	0.03%
Styrofoam	0.00	0.00	0.00	0.00	0.02%
Plastic Strapping	0.00	0.00	0.00	0.00	0.01%
Mandatory Recyclable	**1.50**	**3.56**	**0.89**	**5.95**	**33.30%**
Fine Paper	0.75	2.50	0.06	3.30	18.51%
Cardboard	0.52	1.02	0.03	1.57	8.77%
Aluminum	0.14	0.00	0.47	0.61	3.44%
Glass	0.06	0.00	0.28	0.35	1.93%
Steel Cans	0.02	0.00	0.06	0.08	0.44%
Newspaper	0.00	0.04	0.00	0.04	0.21%
Other Recyclable	**1.97**	**1.04**	**2.20**	**5.21**	**29.19%**
PET #1	0.48	0.04	1.25	1.76	9.88%
Boxboard	0.66	0.62	0.03	1.30	7.30%
PP #5	0.22	0.01	0.46	0.69	3.85%
Kraft Paper/Other Fibres	0.24	0.26	0.00	0.50	2.82%
HDPE Plastic Containers #2	0.08	0.00	0.24	0.33	1.82%
Aseptic Containers	0.09	0.04	0.16	0.29	1.61%
Coffee Cups	0.06	0.04	0.01	0.11	0.59%
Gable Top Containers	0.06	0.00	0.03	0.09	0.53%
Other Plastics #7	0.03	0.00	0.01	0.05	0.26%
Textiles	0.04	0.00	0.00	0.05	0.26%
Moulded Pulp	0.00	0.03	0.00	0.04	0.20%
Electronic Waste	0.01	0.00	0.00	0.01	0.05%
Composite Cans	0.00	0.00	0.00	0.00	0.01%
Batteries	0.00	0.00	0.00	0.00	0.00%
Lightbulbs	0.00	0.00	0.00	0.00	0.00%
Printer Toners	0.00	0.00	0.00	0.00	0.00%
Total	**9.18**	**5.08**	**3.60**	**17.86**	**100.00%**

Appendix E: Site Photographs

Site Tour - typical red box, blue box and garbage receptacles in classrooms

Site Tour - typical garbage receptacle in the classroom

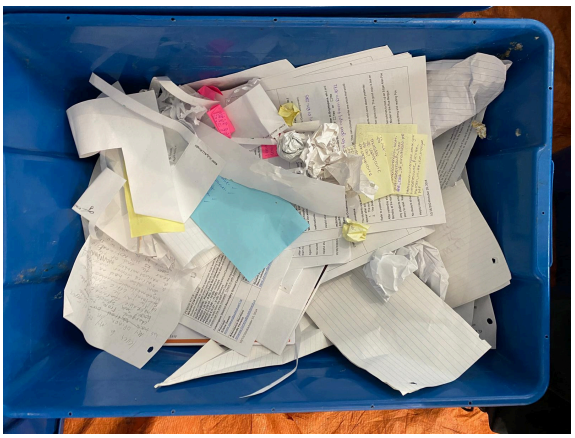


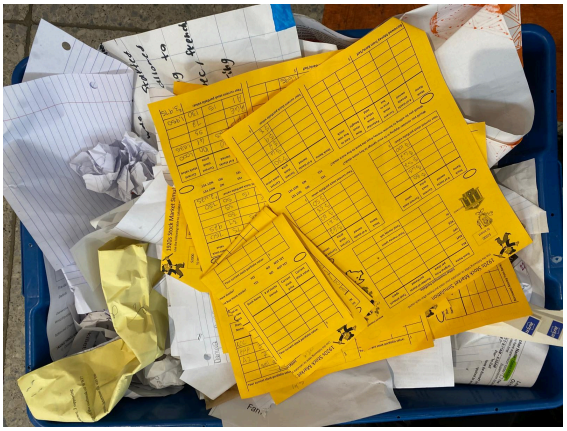
Site Tour - typical garbage receptacle in hallways

Site tour - typical Blue Box and Red Box receptacles in hallways

Waste audit - paper towels in the garbage stream in the classroom

Waste audit - organics in the garbage stream in the classroom





Waste audit - fine paper in the Red Box in the classrooms

Waste audit - boxboard in the garbage streams in the cafeteria, classrooms and hallways

Waste audit - PET #1 in the Blue Box in the classrooms

Waste audit - aluminum in the garbage stream

Waste audit - LDPE #2 plastic in garbage stream in the cafeteria and outside garbage receptacles

Appendix F: School Calendar

Greater Essex County District School Board

Ontario

Student Calendar 2024-2025

Elementary and Secondary

Elementary and Secondary PA Days	Secondary Only PA Days	Holidays
Elementary Only PA Days	Exam Days (Grades 9-12)	Break

SEPTEMBER

S	M	T	W	T	F	S
25	26	27	28	29	30	31
1	2	3$_1$	4$_2$	5$_3$	6$_4$	7
8	9$_5$	10$_1$	11$_2$	12$_3$	13$_4$	14
15	16$_5$	17$_1$	18$_2$	19$_3$	20	21
22	23$_4$	24$_5$	25$_1$	26$_2$	27$_3$	28
29	30$_4$					

OCTOBER

S	M	T	W	T	F	S
		1$_5$	2$_1$	3$_2$	4$_3$	5
6	7$_4$	8$_5$	9$_1$	10$_2$	11	12
13	14	15$_3$	16$_4$	17$_5$	18$_1$	19
20	21$_2$	22$_3$	23$_4$	24$_5$	25$_1$	26
27	28$_2$	29$_3$	30$_4$	31$_5$		

NOVEMBER

S	M	T	W	T	F	S
					1$_1$	2
3	4$_2$	5$_3$	6$_4$	7$_5$	8$_1$	9
10	11$_2$	12$_3$	13$_4$	14$_5$	15	16
17	18$_1$	19$_2$	20$_3$	21$_4$	22$_5$	23
24	25$_1$	26$_2$	27$_3$	28$_4$	29$_5$	30

DECEMBER

S	M	T	W	T	F	S
1	2$_1$	3$_2$	4$_3$	5$_4$	6$_5$	7
8	9$_1$	10$_2$	11$_3$	12$_4$	13$_5$	14
15	16$_1$	17$_2$	18$_3$	19$_4$	20$_5$	21
22	23	24	25	26	27	28
29	30	31				

JANUARY

S	M	T	W	T	F	S
			1	2	3	4
5	6$_1$	7$_2$	8$_3$	9$_4$	10$_5$	11
12	13$_1$	14$_2$	15$_3$	16$_4$	17	18
19	20$_5$	21$_1$	22$_2$	23$_3$	24$_4$	25
26	27$_5$	28$_1$	29$_2$	30$_3$	31$_4$	

FEBRUARY

S	M	T	W	T	F	S
						1
2	3$_5$	4$_1$	5$_2$	6$_3$	7$_4$	8
9	10$_5$	11$_1$	12$_2$	13$_3$	14	15
16	17	18$_4$	19$_5$	20$_1$	21$_2$	22
23	24$_3$	25$_4$	26$_5$	27$_1$	28$_2$	

MARCH

S	M	T	W	T	F	S
						1
2	3$_3$	4$_4$	5$_5$	6$_1$	7$_2$	8
9	10	11	12	13	14	15
16	17$_3$	18$_4$	19$_5$	20$_1$	21$_2$	22
23	24$_3$	25$_4$	26$_5$	27$_1$	28$_2$	29
30	31$_3$					

APRIL

S	M	T	W	T	F	S
		1$_4$	2$_5$	3$_1$	4$_2$	5
6	7$_3$	8$_4$	9$_5$	10$_1$	11$_2$	12
13	14$_3$	15$_4$	16$_5$	17$_1$	18	19
20	21	22$_2$	23$_3$	24$_4$	25$_5$	26
27	28$_1$	29$_2$	30$_3$			

May

S	M	T	W	T	F	S
				1$_4$	2$_5$	3
4	5$_1$	6$_2$	7$_3$	8$_4$	9$_5$	10
11	12$_1$	13$_2$	14$_3$	15$_4$	16$_5$	17
18	19	20$_1$	21$_2$	22$_3$	23$_4$	24
25	26$_5$	27$_1$	28$_2$	29$_3$	30$_4$	31

June

S	M	T	W	T	F	S
1	2$_5$	3$_1$	4$_2$	5$_3$	6	7
8	9$_4$	10$_5$	11$_1$	12$_2$	13$_3$	14
15	16$_4$	17$_5$	18$_1$	19$_2$	20$_3$	21
22	23$_4$	24$_5$	25$_1$	26$_2$	27	28
29	30					

Important Dates	
First Day of Classes	September 3rd
Last Day of Classes	June 26th
194 Instructional Days	Large numbers in black
Elementary 5 Day Cycle (1-5)	Small numbers in black

Elem. and Sec. PA Days	Elementary PA Days	Secondary PA Days	Exam Days (Grades 9-12)
September 20th	January 17th	January 31st	January 24th—30th
October 11th	June 6th	April 25th	June 20th—26th
November 15th			
February 14th			
June 27th			

Holidays and Breaks			
Labour Day	September 2nd	March Break	March 10th—14th
Thanksgiving	October 14th	Good Friday	April 18th
Holiday Break	Dec. 23rd—Jan. 3rd	Easter	April 21st
Family Day	February 17th	Victoria Day	May 19th

GREATER ESSEX COUNTY District School Board

Building Tomorrow Together

Appendix G: Waste Audit and Reduction Work Plan