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March 18, 2024

Mr. Steve Copp
Mirror Nova Scotia Limited
600 Otter Lake Drive
Lakeside, NS   B3T 2E2

Dear Mr. Copp,

Re: February 2024 Performance Audit
**   Otter Lake Waste Processing & Disposal Facility**

In February 2024, Strum Consulting was retained by Mirror Nova Scotia Limited (Mirror) to oversee a Performance Audit at the Otter Lake Waste Processing & Disposal Facility (Otter Lake) located at 600 Otter Lake Drive in Lakeside, NS.

The purpose of the Quarterly Performance Audit is to characterize the incoming residential waste stream and assess the percentage of compostable waste in this stream by mass. The audit also captures the incoming percentage of white goods and household hazardous waste (HHW). This letter report provides a summary of the Performance Audit completed on February 7, 2024, and includes a statistical analysis of the quarterly performance audit data collected during the 2023/24 fiscal year (May 2023, August 2023, November 2023, and February 2024)

Summary
Based on 10 samples being collected during the February Performance Audit, the total compostable waste percentage per area ranged from a minimum of 6.06% to a maximum of 18.59%. The total weighted Compostable Waste Percentage for the February 2024 Audit is calculated to be 14.64%.

Using the combined data collected during the May 2023, August 2023, November 2023, and February 2024 Performance Audits, the total compostable waste percentage ranged from a minimum of 4.11% to a maximum of 39.25%. For the four quarterly audits completed since May 2023, using the calculated 95% confidence interval, the percentage of Estimated Annual Compostable Waste is calculated to be between 9.19% and 14.08%, with a total weighted Compostable Waste Percentage value of 11.64%.

Background
In March 2022, Nova Scotia Environment & Climate Change (NSECC) issued an updated Municipal Approval for Otter Lake, allowing the Front End Processor and Waste Stabilization Facility (FEP/WSF) to be deactivated upon the submission and acceptance of a Compliance Plan in accordance with the Approval requirements.

As per the Approval, the Performance Targets for Otter Lake include (but are not limited to) a long-term goal of compostable waste not exceeding 10% of the total amount of municipal solid waste landfilled, by mass. In September 2023, NSECC approved the following timeline for working towards this long-term Performance Target of maximum per cent compostable waste in the garbage stream:

- March 31, 2024 - 11.61% Compostable Waste
- March 31, 2025 - 10.81% Compostable Waste
- March 31, 2026 - 10.0% Compostable Waste

The Compliance Plan outlines how Quarterly Performance Audits will be completed as a means to quantify the presence of compostable waste being received in the residential waste stream at Otter Lake. White goods and HHW were added to the audits based on comments received from NSECC after their review of the draft Compliance Plan.

Methodology

The methodology followed for the February 2024 Performance Audit reflects best practices identified in the Divert NS Waste Audit Manual and Field Procedures Guide (2017), as well as site specific processes established by Halifax Regional Municipality (HRM) and is summarized below.

Sample Load Identification

Residential curbside collection is divided into eight collection areas in HRM and condominium properties which are also considered to be residential. The geographic descriptions of the various areas are described in Table A, below.

Table A: Collection Area Descriptions

Waste Collection Area	Area Description
1	Halifax (former city limits); Spryfield
2	Dartmouth (former city limits)
3	Bedford; Hammonds Plains; Pockwock
4	Beechville-Timberlea; Herring Cove; Prospect; Peggy's Cove; St. Margaret's Bay to Hubbards
5	Sackville; Beaver Bank; Fall River; Waverley, Wellington; Dutch Settlement
6	Cole Harbour; Westphal; Cherry Brook; Eastern Passage; Cow Bay
7	Porters Lake; Lawrencetown; Chezzetcook; Lake Echo; Preston
8	Middle Musquodoboit; Musquodoboit Harbour; Elderbank; Sheet Harbour; Eastern Shore
Condos	Multi-residential style properties located in various communities

Based on residential curbside collection schedules for each specific collection area and the scheduled audit date and time, sample loads are selected ahead of time by HRM staff. A random number generator is used to choose which vehicle will be sampled.

The Alberta Provincial Waste Characterization Framework (2005) was reviewed and used to guide the number and weight of the samples to be collected. A minimum annual sample number of 40 samples is recommended, and as such, two samples from collection Area 5 and one sample from all other curbside

collection areas (Areas 1-4, 6-8, and Condos), for a total of 10 samples, were assessed as part of the February 2024 Performance Audit. To avoid skewing the annual data, any duplicate samples are averaged to give a single value per area for each audit.

The selected loads were visually inspected at the tip face upon arrival and photographs were taken as shown in the attached photo log (Attachment 1). The following information was recorded for each load:

- Collection vehicle and route numbers
- Date/Time of arrival
- Date/Time sample taken
- Gross and tare weight of truck
- Weight of sample
- Number/type of bulky items observed
- Names of persons taking the sample
- Date/Time of sorting

Sample Size
Photographs of the auditing process are provided as Attachment 1. Once emptied from the vehicle, multiple sections of the load were selected in order to draw a sample that was representative of the load. Each sample was to contain a mix of clear and black bags. Containers shown in Photo 2 (Attachment 1) were used to collect a sample between 90 and 135 kg.

Records documenting the identifying information of each vehicle sampled (scale tickets - Attachment 2) and the Performance Audit Record field data sheets (Attachment 3) are also attached to this report.

Material Categories
The categories that were used to define the different types of compostable waste are consistent with the Approval and are outlined below in Table B.

Table B: Compostable Waste Sorting Categories

Category	Sub-Category	Examples
Fibre	Newsprint/Paper	The Chronicle Herald, The Coast, Masthead News, The Cobequid/Dartmouth/Cole Harbour Wire, flyers
	Corrugated Cardboard/Boxboard	Consumer boxes (e.g., from appliances, storage, filing, and shipping)
Organics	Food Waste (Putrescible)	Whole vegetables, fruit, meat, fish, leftover food waste, eggshells, peels, oils, bones, fat, packaged food if most of if it consists of food
	Yard Waste	Grass, leaves, brush, branches, wood chips, soil

Materials which did not fall into one of the above noted categories were counted, weighed, and categorized as one of the following:

- Other garbage
- HHW including lead-acid (automotive) batteries, post-consumer paint products, ethylene glycol, used oil, used glycol, used oil filters, glycol containers, and oil containers.
- White goods (items such as toasters, microwaves, and coffee makers that would be mostly composed of metal materials that can be disposed of in garbage bags). It should be noted that the majority of white goods are not marketable from a recycling perspective.

Sorting Procedure

The sorting team consisted of several Mirror staff. All staff were briefed on the sorting protocols, including familiarity with example materials for each sorting category. Strum staff were designated as "Lead" and responsible for quality control and data collection.

The audit space consisted of an open area set up with tables for sorting waste materials, containers clearly labeled for each of the waste categories, and digital scales for weighing the waste materials. The containers used for sorting were weighed prior to commencing the audit and recorded on the data sheets to allow for net sample weights to be determined.

To maintain consistency, the Lead was responsible for weighing and recording the data on dedicated data sheets for each area, each time a container was filled. The process continued for each respective area until the full sample was properly sorted and weighed.

Previous Assessments

A baseline was developed through previous Performance Audits that were completed for the 2022/23 fiscal year in May 2022 (report dated June 22, 2022), August 2022 (report dated November 4, 2022), November 2022 (report dated February 2, 2023), and February 2023 (report dated April 6, 2023). Using the combined data collected during the 2022/23 quarterly Performance Audits, the total weighted Compostable Waste Percentage value of 12.41% was found.

Performance Audits for the 2023/24 fiscal year began in May 2023 (report dated June 26, 2023), with additional assessment completed in August 2023 (report dated October 30, 2023) and November 2023 (report dated January 9, 2024).

February 2024 Performance Audit Summary

A summary of the February 2024 Performance Audit completed at Otter Lake is provided below in Table C. The February 2024 Performance Audit field data sheets containing the data collected respective to each waste collection area during the audit are attached to this report as Attachment 3.

February 2024 Performance Audit, Otter Lake Waste Processing & Disposal Facility
Mr. Steve Copp
Mirror Nova Scotia Limited

March 18, 2024

Project # 22-8641

Table C: February 2024 Performance Audit Results

Waste Collection Area	Category Percentage (%)							
	Garbage/ Residue	HHW	White Goods	Fibre - Newsprint/ Paper	Fibre - Corrugated Cardboard	Organics - Food/ Putrescible Waste	Organics - Yard Waste	Total Compostable Waste
1	79.74%	0.97%	0.09%	3.61%	3.26%	11.45%	0.26%	18.59%
2	82.27%	0.00%	0.89%	5.52%	3.45%	7.00%	0.00%	15.96%
3	81.48%	0.00%	0.81%	6.30%	3.11%	8.15%	0.07%	17.63%
4	84.42%	0.90%	1.31%	1.41%	1.21%	9.95%	0.40%	12.96%
5A	82.35%	0.08%	3.29%	2.20%	6.27%	4.71%	0.08%	13.25%
5B	81.46%	0.33%	1.75%	1.08%	3.74%	11.31%	0.00%	16.13%
6	90.30%	0.00%	0.85%	1.94%	2.67%	3.88%	0.00%	8.48%
7	91.60%	0.09%	2.25%	0.69%	1.99%	3.38%	0.00%	6.06%
8	82.18%	0.59%	0.20%	2.18%	2.38%	11.98%	0.00%	16.53%
Condos	85.45%	0.75%	0.28%	2.35%	1.88%	9.20%	0.19%	13.62%

Notes:

1. Total compostable waste percentage based on aggregate of four compostable waste category percentages.

Using the data in Table C above, the total compostable waste percentage ranged from a minimum of 6.06% (Area 7) to a maximum of 18.59% (Area 1), based on the 10 samples collected during the February 2024 Performance Audit.

Average Total Compostable Waste Percentage

A summary of the Total Compostable Waste percentage for the May 2023, August 2023, November 2023, and February 2024 Performance Audits completed at Otter Lake is provided below in Table D. Using this data, the Average Total Compostable Waste percentage was calculated for each area.

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February 2024 Performance Audit, Otter Lake Waste Processing & Disposal Facility
Mr. Steve Copp
Mirror Nova Scotia Limited

March 18, 2024

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Table D: Average Total Compostable Waste Percentage

Waste Collection Area	May 2023 Total Compostable Waste	Aug. 2023 Total Compostable Waste	Nov. 2023 Total Compostable Waste	Feb. 2024 Total Compostable Waste	Average Total Compostable Waste Per Area
1	11.23%*	4.11%	9.67%	18.59%	10.90%
2	10.10%	4.27%**	14.58%	15.96%	11.23%
3	15.89%	5.08%	18.72%	17.63%	14.33%
4	26.53%	9.63%	10.79%	12.96%	14.98%
5	6.28%	4.33%	10.86%***	14.69%****	9.04%
6	6.75%	4.40%	16.49%	8.48%	9.03%
7	5.00%	6.26%	7.23%	6.06%	6.14%
8	5.37%	12.47%	17.98%	16.53%	13.09%
Condos	39.25%	18.52%	19.49%	13.62%	22.72%

Notes:

1. * May 2023 Total Compostable Waste percentage for Area 1 is based on average of the two samples (1A and 1B) collected during the May 2023 waste audit.
2. ** August 2023 Total Compostable Waste percentage for Area 2 is based on average of the two samples (2A and 2B) collected during the August 2023 waste audit.
3. *** November 2023 Total Compostable Waste percentage for Area 5 is based on average of the two samples (5A and 5B) collected during the November 2023 waste audit.
4. **** February 2024 Total Compostable Waste percentage for Area 5 is based on average of the two samples (5A and 5B) collected during the November 2023 waste audit.

Using the data in Table D above, the average total compostable waste percentage ranges from a minimum of 6.14% (Area 7) to a maximum of 22.72% (Condos), based on a total of 40 samples being collected during the May 2023, August 2023, November 2023, and February 2024 Performance Audits.

Overall Compostable Waste

February 2024

As shown in Table E below, given the February 2024 total compostable waste percentage per area and the three-year average of waste tonnage per area, the estimated compostable waste tonnage per year has been calculated. Using the total of the Estimated Annual Compostable Waste (7280.17 tonnes) and the three-year waste average total (49733.08 tonnes), the weighted Compostable Waste Percentage is calculated to be 14.64%. Supporting data is provided as Table 1 (Attachment 4).

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February 2024 Performance Audit, Otter Lake Waste Processing & Disposal Facility   **March 18, 2024**
Mr. Steve Copp
Mirror Nova Scotia Limited   **Project # 22-8641**

Table E: Estimated Annual Compostable Waste based on February 2024 Data

Waste Collection Area	Three Year Waste Average (Tonnes)	February 2024 Total Compostable Waste	Estimated Annual Compostable Waste (Tonnes)
1	10130.91	18.59%	1883.34
2	6958.87	15.96%	1110.64
3	4479.73	17.63%	789.78
4	5415.09	12.96%	701.80
5	8615.57	14.69%*	1265.68
6	5242.25	8.48%	444.80
7	2989.28	6.06%	181.17
8	3408.18	16.53%	563.53
Condos	2493.20	13.62%	339.45
TOTAL	**49733.08**	**N/A**	**7280.17**
Weighted Compostable Waste Percentage = (7280.17/49733.08) X 100 = 14.64%			

Notes:
1. Data used to calculate three-year average provided by Mirror and included tonnage from the fiscal years 2020/2021, 2021/2022, and 2022/2023.
2. *February 2024 Total Compostable Waste percentage for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

May 2023, August 2023, November 2023, and February 2024

As shown in Table F below, given the average (May 2023, August 2023, November 2023, and February 2024) total compostable waste percentage per area and the three-year average of waste tonnage per area, the estimated compostable waste tonnage per year has been calculated. Using the totals of the Estimated Annual Compostable Waste (5787.23 tonnes) and the three-year waste average total (49,733.08 tonnes), the weighted Compostable Waste Percentage is calculated to be 11.64%. Supporting data is provided as Table 2 (Attachment 4).

Using the totals of the Estimated Annual Food/Putrescible Waste (3445.37 tonnes) and the three-year waste average total (49,733.08 tonnes), the weighted Food/Putrescible Waste Percentage is calculated to be 6.93%. Supporting data is provided as Table 6 (Attachment 4).

Table F: Estimated Annual Compostable Waste based on May 2023, August 2023, November 2023, and February 2024 Data

Waste Collection Area	Three Year Waste Average (Tonnes)	Three Year Waste Average (% Total)	Average Total Compostable Waste % Per Area	Estimated Annual Compostable Waste (Tonnes)
1	10130.91	20.37%	10.90%	1104.27
2	6958.87	13.99%	11.23%	781.48
3	4479.73	9.01%	14.33%	641.95
4	5415.09	10.89%	14.98%	811.18
5	8615.57	17.32%	9.04%	778.85
6	5242.25	10.54%	9.03%	473.38
7	2989.28	6.01%	6.14%	183.54
8	3408.18	6.85%	13.09%	446.13
Condos	2493.20	5.01%	22.72%	566.46
TOTAL	**49733.08**	**100.00%**	**N/A**	**5787.23**
Compostable Waste Percentage = (5787.23/49733.08) X 100 = 11.64%				

Notes:
1. Data used to calculate three-year average provided by Mirror and included tonnage from the fiscal years 2020/2021, 2021/2022, and 2022/2023.

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Descriptive Statistics

A descriptive statistical analysis was completed on the Estimated Annual Compostable Waste tonnage and the Estimated Annual Food/Putrescible Waste calculated per area from the May 2023, August 2023, November 2023, and February 2024 Performance Audit. The statistical analysis was completed using the Microsoft Excel Analysis ToolPak Descriptive Statistics analysis tool. Supporting data for the statistical analysis is provided as Tables 1 – 8 (Attachment 4).

Compostable Waste

At 95% confidence interval, the Estimated Average Annual Compostable Waste tonnage per area is calculated to be between 507.76 tonnes (lower bound) and 778.21 tonnes (upper bound). The confidence interval was calculated by subtracting/adding the calculated 95% confidence level (135.23) from the mean (642.98 tonnes).

By multiplying the lower bound (507.76 tonnes) and the upper bound (778.21 tonnes) of the 95% confidence interval by nine (for each area), the Total Estimated Annual Compostable Waste would have a calculated range from 4569.81 tonnes to 7003.89 tonnes. By dividing the lower and upper range of the Total Estimated Annual Compostable Waste by the three-year waste average total (49733.08 tonnes), and multiplying the values by 100%, the percentage of Estimated Annual Compostable Waste is calculated to be between 9.19% and 14.08%.

Food/Putrescible Waste

At 95% confidence interval, the Estimated Average Annual Food/Putrescible Waste tonnage per area is calculated to be between 299.88 tonnes (lower bound) and 461.99 tonnes (upper bound). The confidence interval was calculated by subtracting/adding the calculated 95% confidence level (81.06) from the mean (380.94 tonnes).

By multiplying the lower bound (299.88 tonnes) and the upper bound (461.99 tonnes) of the 95% confidence interval by nine (for each area), the Total Estimated Annual Food/Putrescible Waste would have a calculated range from 2698.89 tonnes to 4157.94 tonnes. By dividing the lower and upper range of the Total Estimated Annual Food/Putrescible Waste by the three-year waste average total (49733.08 tonnes), and multiplying the values by 100%, the percentage of Estimated Annual Food/Putrescible Waste is calculated to be between 5.43% and 8.36%. The weighted Food Waste percentage is calculated to be 6.93%. Supporting data is provided as Table 6 (Attachment 4).

The above noted statistical analyses are based on a total of 40 samples collected during the May 2023, August 2023, November 2023, and February 2024 Performance Audits. As additional sampling will be completed during future audits, it is expected that the statistical data will vary as more data becomes available.

Closure

This report was prepared by ███████████████, Junior Environmental Geoscientist, and was reviewed by ███████████████, Senior Environmental Geoscientist. Should additional information become available, Strum requests that this information be brought to our attention immediately so that we can re-assess the conclusions presented in this report.

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February 2024 Performance Audit, Otter Lake Waste Processing & Disposal Facility
Mr. Steve Copp
Mirror Nova Scotia Limited

March 18, 2024

Project # 22-8641

This Report and any use of the Report is subject to the terms herein (see attached Statement of Qualifications and Limitations).

If you have any questions, please contact us.

Thank you,

Statement of Qualifications and Limitations

This Report (the "Report") has been prepared by Strum Consulting ("Consultant") for the benefit of Mirror Nova Scotia Limited ("Client") in accordance with the agreement between Consultant and Client, including the scope of work detailed therein (the "Agreement").

The information, data, recommendations, and conclusions contained in the Report (collectively, the "Information"):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations")
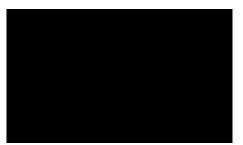- represents Consultant's professional judgement in light of the Limitations and industry standards for the preparation of similar reports
- may be based on information provided to consultant which has not been independently verified
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued
- must be read as a whole and sections thereof should not be read out of such context
- was prepared for the specific purposes described in the Report and the Agreement
- in the case of subsurface, environmental, or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time

Consultant shall be entitled to rely upon the accuracy and completeness of information that was provided and has no obligation to update such information. Consultant accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental, or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

Consultant agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but Consultant makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

The Report is to be treated as confidential and may not be used or relied upon by third parties, except:

- as agreed in writing by Consultant and Client
- as required by law
- for use by governmental reviewing agencies

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ATTACHMENT 1
PHOTOGRAPH LOG

Photo 1: Waste audit sample collected from HRM collection Area 1.
Photo taken on February 7, 2024, during waste audit.

Photo 2: HHW waste bin sorted from HRM collection Area 1.
Photo taken on February 7, 2024, during waste audit.

Photo 3: Sorting process and food waste bin of HRM collection Area 1.
Photo taken on February 7, 2024, during waste audit.

Photo 4: Newsprint/paper waste bin sorted from HRM collection Area 1.
Photo taken on February 7, 2024, during waste audit.

Photo 5: Waste load collected from HRM collection Area 2.
Photo taken on February 2, 2024.

Photo 6: Waste audit sample collected from HRM collection Area 2.
Photo taken on February 7, 2024, during waste audit.

Photo 7: Sorting process and white goods waste bin of HRM collection Area 2.
Photo taken on February 7, 2024, during waste audit.

Photo 8: Food waste bin sorted from HRM collection Area 2.
Photo taken on February 7, 2024, during waste audit.

Photo 9: Waste collection vehicle unloading waste collected from HRM Area 3.
Photo collected January 30, 2024.

Photo 10: Waste audit sample from HRM collection Area 3.
Photo taken on February 7, 2024, during waste audit.

Photo 11: Yard waste bin sorted from HRM collection Area 3.
Photo taken on February 7, 2024, during waste audit.

Photo 12: Food waste bin sorted from HRM collection Area 3.
Photo taken on February 7, 2024, during waste audit.

Photo 13: Waste pile from HRM collection Area 4.
Photo taken on February 1, 2024.

Photo 14: Waste audit sample from HRM collection Area 4.
Photo taken on February 7, 2024, during waste audit.

Photo 15: HHW waste sorted from HRM collection Area 4.
Photo taken on February 7, 2024, during waste audit.

Photo 16: OCC waste sorted from HRM collection Area 4.
Photo taken on February 7, 2024, during waste audit.

Photo 17: Waste collection vehicle unloading waste collected from HRM Area 5A. Photo taken on February 6, 2024.

Photo 18: Waste audit sample from HRM collection Area 5A (extra load). Photo taken on February 7, 2024, during waste audit.

Photo 19: Snow weighed out from HRM collection Area 5A (extra load). Photo taken on February 7, 2024, during waste audit.

Photo 20: Food waste bin sorted from HRM collection Area 5A (extra load). Photo taken on February 7, 2024, during waste audit.

Photo 21: Waste pile from HRM collection Area 5B.
Photo taken on January 25, 2024.

Photo 22: Waste audit sample from HRM collection Area 5B (extra load).
Photo taken on February 7, 2024, during waste audit.

Photo 23: White goods waste sample from HRM collection Area 5B (extra load).
Photo taken on February 7, 2024, during waste audit.

Photo 24: Food waste sample from HRM collection Area 5B (extra load).
Photo taken on February 7, 2024, during waste audit.

Photo 25: Waste audit sample collected from HRM collection Area 6. Photo taken on February 7, 2024, during waste audit.

Photo 26: White goods waste bin separated from HRM collection Area 6. Photo taken on February 7, 2024, during waste audit.

Photo 27: OCC waste bin separated from HRM collection Area 6. Photo taken on February 7, 2024, during waste audit.

Photo 28: Newsprint/paper waste bin separated from HRM collection Area 6. Photo taken on February 7, 2024, during waste audit.

Photo 29: Waste pile from HRM collection Area 7.
Photo taken on January 31, 2024.

Photo 30: Waste from HRM collection Area 7.
Photo taken on February 7, 2024, during waste audit.

Photo 31: HHW waste bin separated from HRM collection Area 7.
Photo taken on February 7, 2024, during waste audit.

Photo 32: White goods waste bin sample from HRM collection Area 7.
Photo taken on February 7, 2024, during waste audit.

Photo 33: Waste audit sample from HRM collection Area 8. Photo taken on January 30, 2024.

Photo 34: Paper waste sample from HRM collection Area 8 following sorting. Photo taken on February 7, 2024, during waste audit.

Photo 35: Food waste bin separated from HRM collection Area 8. Photo taken on February 7, 2024, during waste audit.

Photo 36: OCC waste sample from HRM collection Area 8 following sorting. Photo taken on February 7, 2024, during waste audit.

Photo 37: Waste audit sample from HRM collection Area 9 (Condos). Photo taken on February 7, 2024, during waste audit.

Photo 38: Food waste sample from HRM collection Area 9 (Condos) following sorting. Photo taken on February 7, 2024, during waste audit.

Photo 39: Yard waste sample from HRM collection Area 9 (Condos) following sorting. Photo taken on February 7, 2024, during waste audit.

Photo 40: OCC waste sample from HRM collection Area 9 (Condos) following sorting. Photo taken on February 7, 2024, during waste audit.

ATTACHMENT 2
SCALE TICKETS

Halifax Regional Municipality

Scale Slip:	091803
	01/24/2024 15:05:49
Clerk:	DMS
Gross Weight:	19,210 (kg)
Tare Weight:	16,590 (kg)
Net Weight:	2,620 (kg)

Vehicle ID:	RE1034
License Plate:	56-949-D
Waste Type:	residential
Origin:	1 HALIFAX
Invoice:	0400927
	Royal Environmental Group

Total: $0.00
$0.00

Halifax Regional Municipality

Scale Slip:	091983
	02/02/2024 13:32:03
Clerk:	Shelley
Gross Weight:	22,190 (kg)
Tare Weight:	16,150 (kg)
Net Weight:	6,040 (kg)
Total:	$0.00
	$0.00

Vehicle ID:	RE2082
License Plate:	44-088-D
Waste Type:	residential
Origin:	2 DARTMOUTH
Invoice:	0400927
	Royal Environmental Group

Halifax Regional Municipality

Scale Slip:	091896
	01/30/2024 13:02:32
Clerk:	DMS
Gross Weight:	27,640 (kg)
Tare Weight:	16,850 (kg)
Net Weight:	10,790 (kg)
Total:	$0.00
	$0.00

Vehicle ID:	RE1040
License Plate:	57420D
Waste Type:	residential
Origin:	3 BEDFORD/HAMMONDS PLAINS
Invoice:	0400927
	Royal Environmental Group

Halifax Regional Municipality

Scale Slip:	091958
	02/01/2024 14:30:46
Clerk:	Shelley
Gross Weight:	24,950 (kg)
Tare Weight:	16,970 (kg)
Net Weight:	7,980 (kg)

Vehicle ID:	GFL007
License Plate:	45362D
Waste Type:	residential
Origin:	4 WESTERN COUNTY
Invoice:	0402150
	GFL Environmental Inc

	$0.00
Total:	$0.00

Halifax Regional Municipality

Scale Slip:	091835
	01/25/2024 13:12:15
Clerk:	Shelley
Gross Weight:	25,500 (kg)
Tare Weight:	16,570 (kg)
Net Weight:	8,930 (kg)
Total:	$0.00
	$0.00

Vehicle ID:	RE1028
License Plate:	56-387-D
Waste Type:	residential
Origin:	5 SACKVILLE/FALL RIVER
Invoice:	0400927
	Royal Environmental Group

Halifax Regional Municipality

Vehicle ID:	RE1031
License Plate:	55-319-D
Waste Type:	residential
Origin:	5 SACKVILLE/FALL RIVER
Invoice:	0400927
	Royal Environmental Group

Scale Slip:	092001
	02/06/2024 11:57:01
Clerk:	DMS
Gross Weight:	22,420 (kg)
Tare Weight:	16,690 (kg)
Net Weight:	5,730 (kg)
	$0.00
Total:	$0.00

Halifax Regional Municipality

Scale Slip:	091766
	01/23/2024 14:42:26
Clerk:	DMS
Gross Weight:	23,490 (kg)
Tare Weight:	15,970 (kg)
Net Weight:	7,520 (kg)

Vehicle ID:	RE2087
License Plate:	44-077-D
Waste Type:	residential
Origin:	6 COLE HARBOUR/EASTERN PASSAGE
Invoice:	0400927
	Royal Environmental Group

Total:	$0.00
	$0.00

Halifax Regional Municipality

Scale Slip:	091924	
	01/31/2024 12:31:11	
Clerk:	DMS	
Gross Weight:	24,520 (kg)	
Tare Weight:	17,150 (kg)	
Net Weight:	7,370 (kg)	
Total:		$0.00
		$0.00

Vehicle ID:	MW9524
License Plate:	56246D
Waste Type:	residential
Origin:	7 PRESTON/LAWRENCETOWN/LK ECHO
Invoice:	0188466
	MILLER WASTE SYSTEMS

Halifax Regional Municipality

Scale Slip:	091910
	01/30/2024 15:29:18
Clerk:	DMS

Gross Weight:	23,130 (kg)
Tare Weight:	17,150 (kg)
Net Weight:	5,980 (kg)

Total: $0.00
$0.00

Vehicle ID:	ES8183
License Plate:	51811D
Waste Type:	residential
Origin:	8 EASTERN COUNTY
Invoice:	0028092
	EASTERN SHORE CARTAGE

Halifax Regional Municipality

		Scale Slip:	091720
			01/22/2024 11:30:52
		Clerk:	DMS
Vehicle ID:	RE1056	Gross Weight:	21,920 (kg)
License Plate:	43-742-D	Tare Weight:	18,050 (kg)
Waste Type:	residential	Net Weight:	3,870 (kg)
Origin:	DARTMOUTH CONDOS		
Invoice:	0400927		$0.00
	Royal Environmental Group	Total:	$0.00

ATTACHMENT 3
FIELD DATA SHEETS

Performance Audit Record

Date	February 7, 2024		Name of Supervisor	Callum Drever
Area	Area 1		Number of Sorters	5

Weighscale Ticket Information

Truck Number/ID	RE1034	
Collection Area	Halifax	
Date	24-Jan-24	
Ticket Time	15:05:49	
Gross Weight	19,210	KG
Tare Weight	16,590	KG
Net Weight	2,620	KG

Weigth of Gross Sample   163.5   KG

Weight of Tote Bin   50.0   KG   Date of Audit of Sample   07-Feb-24

Net Sample of Trash   113.5   KG   Sample Audit Time Started   9:00 AM

Number of Bulkies Observed   0   Sample Audit Time Completed   9:55 AM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)			Net Sample (KG)	Compostables (%)
		1	2	3		
Garbage/Residue	50.0	140.5	-	-	90.5	79.74%
Fibre - Newsprint/Paper	3.3	3.5	2.6	1.3	4.1	3.61%
Fibre - OCC	2.2	4.1	1.8	-	3.7	3.26%
Food/Putrescible Waste	2.2	12.3	2.9	-	13.0	11.45%
Yard Waste	1.1	1.4	-	-	0.3	0.26%
HHW	1.1	2.2	-	-	1.1	0.97%
White Goods	1.1	1.2	-	-	0.1	0.09%
Lost or Gained Mass	Combined Weight Following Sorting				0.00	
	163.5					

Notes:

Performance Audit Record

Date February 7, 2024

Name of Supervisor Callum Drever

Area Area 2

Number of Sorters 5

Weighscale Ticket Information

Truck Number/ID	RE2082	
Collection Area	Dartmouth	
Date	02-Feb-24	
Ticket Time	13:32:03	
Gross Weight	22,190	KG
Tare Weight	16,150	KG
Net Weight	6,040	KG

Weigth of Gross Sample 152.5 KG

Weight of Tote Bin 51.0 KG

Date of Audit of Sample 07-Feb-24

Net Sample of Trash 101.5 KG

Sample Audit Time Started 10:15 AM

Number of Bulkies Observed 0

Sample Audit Time Completed 10:50 AM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)		Net Sample (KG)	Compostables (%)
		1	2		
Garbage/Residue	51.0	134.5	-	83.5	82.27%
Fibre - Newsprint/Paper	2.2	7.8	-	5.6	5.52%
Fibre - OCC	3.3	3.1	3.7	3.5	3.45%
Food/Putrescible Waste	1.1	8.2	-	7.1	7.00%
Yard Waste	0.0	-	-	0.0	0.00%
HHW	0.0	-	-	0.0	0.00%
White Goods	1.1	2.0	-	0.9	0.89%
Lost or Gained Mass	Combined Weight Following Sorting			-0.33	
	152.0				

Notes:

Performance Audit Record

Date	February 7, 2024		**Name of Supervisor**	Callum Drever
Area	Area 3		**Number of Sorters**	5

Weighscale Ticket Information

Truck Number/ID	RE1040	
Collection Area	Bedford/Hammonds Plains	
Date	30-Jan-24	
Ticket Time	13:02:32	
Gross Weight	27,640	KG
Tare Weight	16,850	KG
Net Weight	10,790	KG

Weigth of Gross Sample	186.0	KG		
Weight of Tote Bin	51.0	KG	**Date of Audit of Sample**	07-Feb-24
Net Sample of Trash	135.0	KG	**Sample Audit Time Started**	10:15 AM
Number of Bulkies Observed	0		**Sample Audit Time Completed**	10:50 AM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)			Net Sample (KG)	Compostables (%)
		1	2	3		
Garbage/Residue	51.0	161.0	-	-	110.0	81.48%
Fibre - Newsprint/Paper	3.3	7.5	2.0	2.3	8.5	6.30%
Fibre - OCC	3.3	2.6	2.5	2.4	4.2	3.11%
Food/Putrescible Waste	1.1	12.1	-	-	11.0	8.15%
Yard Waste	1.1	1.2	-	-	0.1	0.07%
HHW	0.0	-	-	-	0.0	0.00%
White Goods	1.1	2.2	-	-	1.1	0.81%
Lost or Gained Mass	Combined Weight Following Sorting				0.00	
	186.0					

Notes:

Performance Audit Record

Date	February 7, 2024	**Name of Supervisor**	Callum Drever
Area	Area 4	**Number of Sorters**	5

Weighscale Ticket Information

Truck Number/ID	GFL007	
Collection Area	Western County	
Date	02-Feb-24	
Ticket Time	14:30:46	
Gross Weight	24,950	KG
Tare Weight	16,790	KG
Net Weight	7,980	KG

Weigth of Gross Sample	149.5	KG		
Weight of Tote Bin	50.0	KG	**Date of Audit of Sample**	07-Feb-24
Net Sample of Trash	99.5	KG	**Sample Audit Time Started**	11:50 AM
Number of Bulkies Observed	0		**Sample Audit Time Completed**	1:00 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)		Net Sample (KG)	Compostables (%)
		1	**2**		
Garbage/Residue	50.0	134.0	-	84.0	84.42%
Fibre - Newsprint/Paper	2.2	2.3	1.3	1.4	1.41%
Fibre - OCC	2.2	2.0	1.4	1.2	1.21%
Food/Putrescible Waste	2.2	6.8	5.3	9.9	9.95%
Yard Waste	1.1	1.5	-	0.4	0.40%
HHW	1.1	2.0	-	0.9	0.90%
White Goods	2.2	1.8	1.7	1.3	1.31%
Lost or Gained Mass	Combined Weight Following Sorting			0.00	
	149.5				

Notes:

Performance Audit Record

Date	February 7, 2024	**Name of Supervisor**	Callum Drever
Area	Area 5A	**Number of Sorters**	5

Weighscale Ticket Information

Truck Number/ID	RE1031	
Collection Area	Sackville/Fall River	
Date	06-Feb-24	
Ticket Time	11:57:01	
Gross Weight	22,420	KG
Tare Weight	16,690	KG
Net Weight	5,730	KG

Weigth of Gross Sample	203.0	KG		
Weight of Tote Bin	53.0	KG	**Date of Audit of Sample**	07-Feb-24
Net Sample of Trash	127.5	KG	**Sample Audit Time Started**	1:00 PM
Number of Bulkies Observed	0		**Sample Audit Time Completed**	1:40 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)			Net Sample (KG)	Compostables (%)
		1	2	3		
Garbage/Residue	53.0	158.0	-	-	105.0	82.35%
Fibre - Newsprint/Paper	2.2	3.3	1.7	-	2.8	2.20%
Fibre - OCC	3.3	6.8	3.0	1.5	8.0	6.27%
Food/Putrescible Waste	2.2	3.2	5.0	-	6.0	4.71%
Yard Waste	1.1	1.2	-	-	0.1	0.08%
HHW	1.1	1.2	-	-	0.1	0.08%
White Goods	1.1	5.3	-	-	4.2	3.29%
Lost or Gained Mass	Combined Weight Following Sorting				-0.49	
	202.0					

Notes:

Large amount of snow was found in tote after intially weighing sample. Snow was then shovelled and weighed into a black tote and found the weight of snow to be 22.5 Kg.

That was deducted from the initially weighed net trash sample of 150.0 Kg, to get the 127.5 Kg of net trash. Snow is considered the reason for the discrepancy between initial

and final weights

Performance Audit Record

Date	February 7, 2024		**Name of Supervisor**	Callum Drever
Area	Area 5B		**Number of Sorters**	5

Weighscale Ticket Information

Truck Number/ID	RE1028	
Collection Area	Sackville/Fall River	
Date	25-Jan-24	
Ticket Time	13:12:15	
Gross Weight	25,500	KG
Tare Weight	16,570	KG
Net Weight	8,930	KG

Weigth of Gross Sample	170.8	KG		
Weight of Tote Bin	50.5	KG	**Date of Audit of Sample**	07-Feb-24
Net Sample of Trash	120.3	KG	**Sample Audit Time Started**	1:40 PM
Number of Bulkies Observed	0		**Sample Audit Time Completed**	2:20 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)		Net Sample (KG)	Compostables (%)
		1	**2**		
Garbage/Residue	50.5	148.5	-	98.0	81.46%
Fibre - Newsprint/Paper	2.2	3.5	-	1.3	1.08%
Fibre - OCC	3.3	3.7	4.1	4.5	3.74%
Food/Putrescible Waste	2.2	4.7	11.1	13.6	11.31%
Yard Waste	0.0	-	-	0.0	0.00%
HHW	1.1	1.5	-	0.4	0.33%
White Goods	2.2	1.6	2.7	2.1	1.75%
Lost or Gained Mass	Combined Weight Following Sorting			-0.18	
	170.5				

Notes:

Performance Audit Record

Date: February 7, 2024

Name of Supervisor: Callum Drever

Area: Area 6

Number of Sorters: 5

Weighscale Ticket Information

Truck Number/ID	RE2087
Collection Area	Cole Harbour/ Eastern Passage
Date	23-Jan-24
Ticket Time	14:42:26
Gross Weight	23,490 KG
Tare Weight	15,970 KG
Net Weight	7,520 KG

Weigth of Gross Sample: 132.0 KG

Weight of Tote Bin: 49.5 KG

Date of Audit of Sample: 07-Feb-24

Net Sample of Trash: 82.5 KG

Sample Audit Time Started: 2:20 PM

Number of Bulkies Observed: 0

Sample Audit Time Completed: 2:55 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)		Net Sample (KG)	Compostables (%)
		1	2		
Garbage/Residue	49.5	124.0	-	74.5	90.30%
Fibre - Newsprint/Paper	2.2	2.1	1.7	1.6	1.94%
Fibre - OCC	2.2	2.2	2.2	2.2	2.67%
Food/Putrescible Waste	1.1	4.3	-	3.2	3.88%
Yard Waste	0.0	-	-	0.0	0.00%
HHW	0.0	-	-	0.0	0.00%
White Goods	1.1	1.8	-	0.7	0.85%
Lost or Gained Mass	Combined Weight Following Sorting			0.00	
	132.0				

Notes:

Performance Audit Record

Date	February 7, 2024	**Name of Supervisor**	Callum Drever
Area	Area 7	**Number of Sorters**	5

Weighscale Ticket Information

Truck Number/ID	MW9524
Collection Area	Preston/ Lawrencetown/Lake Echo
Date	31-Jan-24
Ticket Time	12:31:11
Gross Weight	24,520 KG
Tare Weight	17,150 KG
Net Weight	7,370 KG

Weigth of Gross Sample	165.0 KG		
Weight of Tote Bin	49.5 KG	**Date of Audit of Sample**	07-Feb-24
Net Sample of Trash	115.5 KG	**Sample Audit Time Started**	2:55 PM
Number of Bulkies Observed	0	**Sample Audit Time Completed**	3:25 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)		Net Sample (KG)	Compostables (%)
		1	2		
Garbage/Residue	49.5	155.3	-	105.8	91.60%
Fibre - Newsprint/Paper	2.2	1.5	1.5	0.8	0.69%
Fibre - OCC	2.2	2.7	1.8	2.3	1.99%
Food/Putrescible Waste	1.1	5.0	-	3.9	3.38%
Yard Waste	0.0	-	-	0.0	0.00%
HHW	1.1	1.2	-	0.1	0.09%
White Goods	2.2	1.2	3.6	2.6	2.25%
Lost or Gained Mass	Combined Weight Following Sorting			0.00	
	165.0				

Notes:

Non-yard waste was contained in the yard waste bin post sorting that was considered to be garbage instead, it was weighed (6.8 Kg) and added to initial

total separated garbage weight (148.5 Kg)

Performance Audit Record

Date February 7, 2024

Name of Supervisor Callum Drever

Area Area 8

Number of Sorters 5

Weighscale Ticket Information

Truck Number/ID	ES8183
Collection Area	Eastern County
Date	30-Jan-24
Ticket Time	15:29:18
Gross Weight	23,130 KG
Tare Weight	17,150 KG
Net Weight	5,980 KG

Weigth of Gross Sample 151.0 KG

Weight of Tote Bin 50.0 KG

Date of Audit of Sample 07-Feb-24

Net Sample of Trash 101.0 KG

Sample Audit Time Started 3:25 PM

Number of Bulkies Observed 0

Sample Audit Time Completed 3:55 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)			Net Sample (KG)	Compostables (%)
		1	2	3		
Garbage/Residue	50.0	133.0	-	-	83.0	82.18%
Fibre - Newsprint/Paper	2.2	3.0	1.4	-	2.2	2.18%
Fibre - OCC	3.3	2.5	1.9	1.3	2.4	2.38%
Food/Putrescible Waste	2.2	2.5	11.8	-	12.1	11.98%
Yard Waste	0.0	-	-	-	0.0	0.00%
HHW	1.1	1.7	-	-	0.6	0.59%
White Goods	1.1	1.3	-	-	0.2	0.20%
Lost or Gained Mass	Combined Weight Following Sorting				0.00	
	151.0					

Notes:

Performance Audit Record

Date	February 7, 2024	**Name of Supervisor**	**Callum Drever**
Area	Area 9	**Number of Sorters**	4

Weighscale Ticket Information

Truck Number/ID	RE1056	
Collection Area	Halifax Condos	
Date	22-Jan-24	
Ticket Time	11:30:52	
Gross Weight	21,920	KG
Tare Weight	18,050	KG
Net Weight	3,870	KG

Weigth of Gross Sample	157.0	KG		
Weight of Tote Bin	50.5	KG	**Date of Audit of Sample**	07-Feb-24
Net Sample of Trash	106.5	KG	**Sample Audit Time Started**	3:55 PM
Number of Bulkies Observed	0		**Sample Audit Time Completed**	4:30 PM

Material	Empty Bin Weight (KG)	Total Separated Sample Weights (KG)		Net Sample (KG)	Compostables (%)
		1	**2**		
Garbage/Residue	50.5	141.5	-	91.0	85.45%
Fibre - Newsprint/Paper	2.2	4.7	-	2.5	2.35%
Fibre - OCC	2.2	4.2	-	2.0	1.88%
Food/Putrescible Waste	1.1	10.9	-	9.8	9.20%
Yard Waste	1.1	1.3	-	0.2	0.19%
HHW	1.1	1.9	-	0.8	0.75%
White Goods	1.1	1.4	-	0.3	0.28%
Lost or Gained Mass	**Combined Weight Following Sorting**			0.00	
	157.0				

Notes:

ATTACHMENT 4
SUPPORTING DATA

Waste Collection Area	% Organics From February 7, 2024 Waste Audit	Average Based On Previous Three Fiscal Years (Tonnes)	Estimated Annual Compostable Waste (Tonnes)
1	18.59%	10130.91	1883.34
2	15.96%	6958.87	1110.64
3	17.63%	4479.73	789.78
4	12.96%	5415.09	701.80
5	14.69%	8615.57	1265.68
6	8.48%	5242.25	444.80
7	6.06%	2989.28	181.17
8	16.53%	3408.18	563.53
Condos	13.62%	2493.20	339.45
TOTAL		49733.08	7280.17

Mean	13.84%	-	808.91
Min	6.06%	-	181.17
Max	18.59%	-	1883.34

Compostable Waste Percentage	(7280.17/49733.08)*100% = 14.64%

Notes: % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

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Waste Collection Area	% Organics From May 17, 2023 Waste Audit	% Organics From September 7, 2023 Waste Audit	% Organics From November 22, 2023 Waste Audit	% Organics From February 7, 2024 Waste Audit	% Organics Average	Average Based On Previous Three Fiscal Years (Tonnes)	Estimated Annual Compostable Waste (Tonnes)
1	11.23%	4.11%	9.67%	18.59%	10.90%	10130.91	1104.27
2	10.10%	4.27%	14.58%	15.96%	11.23%	6958.87	781.48
3	15.89%	5.08%	18.72%	17.63%	14.33%	4479.73	641.95
4	26.53%	9.63%	10.79%	12.96%	14.98%	5415.09	811.18
5	6.28%	4.33%	10.86%	14.69%	9.04%	8615.57	778.85
6	6.75%	4.40%	16.49%	8.48%	9.03%	5242.25	473.38
7	5.00%	6.26%	7.23%	6.06%	6.14%	2989.28	183.54
8	5.37%	12.47%	17.98%	16.53%	13.09%	3408.18	446.13
Condos	39.25%	18.52%	19.49%	13.62%	22.72%	2493.20	566.46
					TOTAL	49733.08	5787.23

Mean	12.38%	-	643.03
Min	6.14%	-	183.54
Max	22.72%	-	1104.27

Compostable Waste Percentage	(5787.23/49733.08)*100% = 11.64%

Notes:

1. % Organic for Area 1 based on average of the two samples (1-3 and 1) collected during the May 2023 waste audit.

2. % Organic for Area 2 is based on average of the two samples (2A and 2B) collected during the August 2023 waste audit.

3. % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the November 2023 waste audit.

4. % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

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Audit	Waste Collection Area	% Organics	Average Waste Based On Previous Three Fiscal Years (Tonnes)	Estimated Annual Compostable Waste (Tonnes)
May 2023 Performance Audit	1	11.23%	10130.91	1137.70
	2	10.10%	6958.87	702.85
	3	15.89%	4479.73	711.83
	4	26.53%	5415.09	1436.62
	5	6.28%	8615.57	541.06
	6	6.75%	5242.25	353.85
	7	5.00%	2989.28	149.46
	8	5.37%	3408.18	183.02
	Condos	39.25%	2493.20	978.58
August 2023 Performance Audit	1	4.11%	10130.91	416.38
	2	4.27%	6958.87	297.14
	3	5.08%	4479.73	227.57
	4	9.63%	5415.09	521.47
	5	4.33%	8615.57	373.05
	6	4.40%	5242.25	230.66
	7	6.26%	2989.28	187.13
	8	12.47%	3408.18	425.00
	Condos	18.52%	2493.20	461.74
November 2023 Performance Audit	1	9.67%	10130.91	979.66
	2	14.58%	6958.87	1014.60
	3	18.72%	4479.73	838.61
	4	10.79%	5415.09	584.29
	5	10.86%	8615.57	935.65
	6	16.49%	5242.25	864.45
	7	7.23%	2989.28	216.12
	8	17.98%	3408.18	612.79
	Condos	19.49%	2493.20	485.92
February 2024 Performance Audit	1	18.59%	10130.91	1883.34
	2	15.96%	6958.87	1110.64
	3	17.63%	4479.73	789.78
	4	12.96%	5415.09	701.80
	5	14.69%	8615.57	1265.68
	6	8.48%	5242.25	444.80
	7	6.06%	2989.28	181.17
	8	16.53%	3408.18	563.53
	Condos	13.62%	2493.20	339.45
Mean		12.38%	-	642.98
Min		4.11%	-	149.46
Max		39.25%	-	1883.34

Notes:
1. % Organic for Area 1 based on average of the two samples (1-3 and 1) collected during the May 2023 waste audit.
2. % Organic for Area 2 is based on average of the two samples (2A and 2B) collected during the August 2023 waste audit.
3. % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the November 2023 waste audit.
4. % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

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Table 4: Compostable Waste Descriptive Statistics   **_Project 22-8641_**

Mean	642.9830319
Standard Error	66.6105972
Median	552.2942742
Mode	#N/A
Standard Deviation	399.6635832
Sample Variance	159730.9797
Kurtosis	1.252992488
Skewness	1.071402409
Range	1733.872169
Minimum	149.464
Maximum	1883.336169
Sum	23147.38915
Count	36
Confidence Level(95.0%)	135.2267015
Upper Confidence Interval	778.2097334
Lower Confidence Interval	507.7563305

Waste Collection Area	% Food Waste From February 7, 2024 Waste Audit	Average Based On Previous Three Fiscal Years (Tonnes)	Estimated Annual Food Waste (Tonnes)
1	11.45%	10130.91	1160.37
2	7.00%	6958.87	486.78
3	8.15%	4479.73	365.02
4	9.95%	5415.09	538.79
5	8.01%	8615.57	689.72
6	3.88%	5242.25	203.34
7	3.38%	2989.28	100.94
8	11.98%	3408.18	408.31
Condos	9.20%	2493.20	229.42
	TOTAL	49733.08	4182.67

Mean	8.11%	-	464.74
Min	3.38%	-	100.94
Max	11.98%	-	1160.37

Food Waste Percentage	(4182.67/49733.08)*100% = 8.41%

Notes: % Food waste for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

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Waste Collection Area	% Food Waste From May 17, 2023 Waste Audit	% Food Waste From September 7, 2023 Waste Audit	% Food Waste From November 22, 2023 Waste Audit	% Food Waste From February 7, 2024 Waste Audit	% Food Waste Average	Average Based On Previous Three Fiscal Years (Tonnes)	Estimated Annual Food Waste (Tonnes)
1	4.56%	2.42%	5.56%	11.45%	6.00%	10130.91	607.85
2	3.72%	2.96%	8.75%	7.00%	5.61%	6958.87	390.39
3	10.56%	4.11%	14.01%	8.15%	9.21%	4479.73	412.58
4	12.42%	7.76%	7.33%	9.95%	9.36%	5415.09	506.85
5	1.97%	3.90%	5.80%	8.01%	4.92%	8615.57	423.89
6	5.04%	2.83%	10.95%	3.88%	5.67%	5242.25	297.24
7	2.41%	2.05%	3.57%	3.38%	2.85%	2989.28	85.19
8	1.79%	9.12%	14.75%	11.98%	9.41%	3408.18	320.71
Condos	32.20%	11.11%	11.77%	9.20%	16.07%	2493.20	400.66
					TOTAL	49733.08	3445.37

Mean	7.68%	-	382.82
Min	2.85%	-	85.19
Max	16.07%	-	607.85

Compostable Waste Percentage	(3445.37/49733.08)*100% = 6.93%

Notes:

1. % Food waste for Area 1 based on average of the two samples (1-3 and 1) collected during the May 2023 waste audit.

2. % Food waste for Area 2 is based on average of the two samples (2A and 2B) collected during the August 2023 waste audit.
3. % Food waste for Area 5 is based on average of the two samples (5A and 5B) collected during the November 2023 waste audit.
4. % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

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Audit	Waste Collection Area	% Food Waste	Average Waste Based On Previous Three Fiscal Years (Tonnes)	Estimated Annual Compostable Waste (Tonnes)
May 2023 Performance Audit	1	4.56%	10130.91	461.97
	2	3.72%	6958.87	258.87
	3	10.56%	4479.73	473.06
	4	12.42%	5415.09	672.55
	5	1.97%	8615.57	169.73
	6	5.04%	5242.25	264.21
	7	2.41%	2989.28	72.04
	8	1.79%	3408.18	61.01
	Condos	32.20%	2493.20	802.81
August 2023 Performance Audit	1	2.42%	10130.91	245.17
	2	1.99%	6958.87	138.48
	3	4.11%	4479.73	184.12
	4	7.76%	5415.09	420.21
	5	3.90%	8615.57	336.01
	6	2.83%	5242.25	148.36
	7	2.05%	2989.28	61.28
	8	9.12%	3408.18	310.83
	Condos	11.11%	2493.20	276.99
November 2023 Performance Audit	1	5.56%	10130.91	563.28
	2	8.75%	6958.87	608.90
	3	14.01%	4479.73	627.61
	4	7.33%	5415.09	396.93
	5	5.80%	8615.57	499.70
	6	10.95%	5242.25	574.03
	7	3.57%	2989.28	106.72
	8	14.75%	3408.18	502.71
	Condos	11.77%	2493.20	293.45
February 2024 Performance Audit	1	11.45%	10130.91	1160.37
	2	7.00%	6958.87	486.78
	3	8.15%	4479.73	365.02
	4	9.95%	5415.09	538.79
	5	8.01%	8615.57	689.72
	6	3.88%	5242.25	203.34
	7	3.38%	2989.28	100.94
	8	11.98%	3408.18	408.31
	Condos	9.20%	2493.20	229.42
	Mean	7.65%	-	380.94
	Min	1.79%	-	61.01
	Max	32.20%	-	1160.37

Notes:
1. % Food waste for Area 1 based on average of the two samples (1-3 and 1) collected during the May 2023 waste audit.
2. % Food waste for Area 2 is based on average of the two samples (2A and 2B) collected during the August 2023 waste audit.
3. % Food waste for Area 5 is based on average of the two samples (5A and 5B) collected during the November 2023 waste audit.
4. % Organic for Area 5 is based on average of the two samples (5A and 5B) collected during the February 2024 waste audit.

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Mean	380.93542
Standard Error	39.9280695
Median	350.5111335
Mode	#N/A
Standard Deviation	239.568417
Sample Variance	57393.02642
Kurtosis	1.681989254
Skewness	0.999792918
Range	1099.362124
Minimum	61.006422
Maximum	1160.368546
Sum	13713.67512
Count	36
Confidence Level(95.0%)	81.05829045
Upper Confidence Interval	461.9937105
Lower Confidence Interval	299.8771296