



June 22, 2022

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

Dear Mr. Copp,

Re: Initial Performance Audit
Otter Lake Waste Processing & Disposal Facility

In May 2022, Strum Consulting was retained by Mirror Nova Scotia Limited (Mirror) to oversee an Initial 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 Initial Performance Audit is to establish a baseline for future waste auditing purposes. This letter report provides a summary of the Initial Performance Audit completed on May 19, 2022.

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) compostable waste not exceeding ten percent (10%) of the total amount of municipal solid waste landfilled, by mass. Prior to the deactivation of the FEP and WSF, the submitted Compliance Plan must include details of how Performance Targets will be achieved. The Compliance Plan also outlines how Performance Audits will be completed as a means to quantify the presence of compostable waste banned from landfill disposal which is being received at Otter Lake.

Given the above, Performance Audits will be completed to characterize the composition of compostable waste in the incoming residential waste stream and to assess compliance with Performance Targets. To establish a baseline for future Performance Audits, an Initial Performance Audit was completed which is detailed in this report.

Engineering • Surveying • Environmental

Head Office
Railside, 1355 Bedford Hwy.
Bedford, NS B4A 1C5
t. 902.835.5560 (24/7)
f. 902.835.5574

Antigonish Office
3-A Vincent's Way
Antigonish, NS B2G 2X3
t. 902.863.1465 (24/7)
f. 902.863.1389

Moncton Office
45 Price Street
Moncton, NB E1A 3R1
t. 1.855.770.5560 (24/7)
f. 902.835.5574

St. John's Office
#E120 - 120 Torbay Road
St. John's, NL A1A 2G8
t. 709.738.8478 (24/7)
f. 709.738.8494

Methodology

The methodology followed for the Initial 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; Rall 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 areas 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 would be sampled. One sample from each of the eight curbside collection areas and one sample from condos were assessed as part of the Initial Performance Audit.

The selected loads were visually inspected on the top floor upon arrival and photographs were taken as shown in the attached photo log. 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

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. Sections containing significant amounts of construction waste or bulky items were avoided. Containers shown in Photo 2 (Attachment 1) were used to collect a sample between 90 and 135 kg. This data, as well as dates/times and categorization of materials, were recorded by Strum staff during the Performance Audit.

Photographs (Attachment 1) of the auditing process, records documenting the identifying information of each vehicle sampled (scale tickets - Attachment 2), and the Performance Audit Record field data sheets (Attachment 3) are 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	Whole vegetables, fruit, meat, fish, leftover food waste, egg shells, peels, oils, bones, fat, packaged food if most of 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 other garbage.

Sorting Procedure

The sorting team consisted of three to five Mirror staff. All staff was briefed on the sorting protocols, including familiarity with example materials for each sorting category. Strum staff was designated as "Lead" and was 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 weighted 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.

Initial Performance Audit Summary

A summary of the May 2022 Initial Performance Audit completed at Otter Lake is provided below in Table C. As previously mentioned, the Initial 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.

Table C: Initial Performance Audit Results

Waste Collection Area	Category Percentage (%)					
	Garbage/Residue	Fibre - Newsprint/Paper	Fibre - Corrugated Cardboard	Organics - Food/Putrescible Waste	Organics - Yard Waste	Total Compostable Waste
1	83.97%	1.67%	0.49%	13.07%	0.17%	15.40%
2	88.99%	1.94%	1.41%	7.09%	0.00%	10.44%
3	95.96%	1.07%	1.73%	1.07%	0.00%	3.87%
4	96.37%	0.81%	1.90%	0.56%	0.00%	3.27%
5	93.49%	0.27%	0.14%	5.55%	0.38%	6.34%
6	96.33%	0.73%	1.27%	1.35%	0.04%	3.39%
7	95.67%	0.12%	1.24%	2.60%	0.00%	3.96%
8	92.72%	1.80%	2.30%	2.80%	0.00%	6.90%
Condos	89.64%	0.59%	0.81%	6.80%	2.34%	10.54%

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

The above-noted data collected during the May 2022 Initial Performance Audit will be utilized to establish a baseline for future waste auditing purposes.

Using the data in Table C above, the total compostable waste percentage ranged from a minimum of 3.27% (Area 4) to a maximum of 15.4% (Area 1), with a mean of 7.12% based on only nine (9) samples being collected during the May 2022 Initial Performance Audit. As additional sampling will be completed during future audits, it is expected that the statistical data will vary as more data becomes available.

Overall Compostable Waste

As shown in Table D below, given the compostable waste percentage per area calculated during the May 2022 Initial Performance Audit 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 (3,918.84 tonnes) and the three year waste average total (48,923.20 tonnes), the Compostable Waste Percentage is calculated to be 8.01%.

Table D: Estimated Annual Compostable Waste

Waste Collection Area	Three Year Waste Average (Tonnes)	Three Year Waste Average (% Total)	Total Compostable Waste % from May 2022 Audit	Estimated Annual Compostable Waste (Tonnes)
1	9918.30	20.27%	15.4%	1527.42
2	6866.42	14.04%	10.44%	716.85
3	4358.45	8.91%	3.87%	168.67
4	5304.70	10.84%	3.27%	173.46
5	8372.02	17.11%	6.34%	530.79
6	5130.17	10.49%	3.39%	173.96
7	2962.13	6.05%	3.96%	117.30
8	3383.67	6.92%	6.90%	233.47
Condos	2627.33	5.37%	10.54%	276.92
TOTAL	48923.20	100.00%	N/A	3918.84
Compostable Waste Percentage = (3918.84/48923.20) X 100 = 8.01%				

Notes: 1. Data used to calculate three year average provided by Mirror and included tonnage from the fiscal years 2019/2020, 2020/2021, and 2021/2022.

By completing a statistical analysis of the data in Table D above, the Estimated Annual Compostable Waste per area ranged from a minimum of 117.30 tonnes (Area 7) to a maximum of 1527.42 tonnes (Area 1), with a mean of 435.43 tonnes and standard deviation of 454.97 tonnes.

At 95% confidence interval, the Estimated Average Annual Compostable Waste tonnage per area is calculated to be between 85.71 tonnes (lower bound) and 785.15 tonnes (upper bound). The confidence interval was calculated by subtracting/adding the calculated 95% confidence level (349.72) from the mean (435.43 tonnes). By dividing the lower bound (85.71 tonnes) and upper bound (785.15 tonnes) of the 95% confidence interval by the Total Estimated Annual Compostable Waste (3,918.84 tonnes), and multiplying the values by 100, the percentage of Estimated Annual Compostable Waste is calculated to be between 2.19% and 20.04%.

The above noted statistical analysis is based on the nine samples collected during the May 2022 Initial Performance Audit. As additional sampling will be completed during future audits, it is expected that the statistical data will vary as more data becomes available. As noted previously, the data collected during the May 2022 Initial Performance Audit will be utilized to establish a baseline for future waste auditing purposes.

Closure

This report was prepared by [REDACTED] Field Coordinator and reviewed by [REDACTED], Project Manager. 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.

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

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the prior written consent of Consultant to use and rely upon the Report and the Information. Any damages arising from improper use of the Report or parts thereof shall be borne by the party making such use.

ATTACHMENT 1
PHOTO LOG



Photo 1: Waste collection vehicle unloading waste collected from HRM collection area 1. Photo taken on May 16, 2022.



Photo 2: Waste audit sample collected from HRM collection area 1. Photo taken on May 19, 2022 during waste audit.



Photo 3: Food Waste bin #1 sorted from HRM collection area 1. Photo taken May 19, 2022 during waste audit.



Photo 4: Food waste bin #2 sorted from HRM collection area 1. Photo taken May 19, 2022 during waste audit.



Photo 5: Fiber-OCC sorted from HRM collection area 1.
Photo taken May 19, 2022 during waste audit.



Photo 6: Fiber- Newspaper/Paper bin #1 sorted from HRM collection area 1.
Photo taken May 19, 2022 during waste audit.



Photo 7: Fiber- Newspaper/Paper bin #2 sorted from HRM collection area 1.
Photo taken May 19, 2022 during waste audit.



Photo 8: Garbage/Residue sorted from HRM collection area 1.
Photo taken May 19, 2022 during waste audit.



Photo 9: Waste pile from HRM collections area 2.
Photo collected May 13, 2022



Photo 10: Waste audit sample from HRM collection area 2.
Photo collected May 13, 2022.



Photo 11: Waste audit sample collected from HRM collection area 2.
Photo taken on May 19, 2022 during waste audit.



Photo 12: Food waste bin sorted from HRM collection area 2.
Photo taken May 19, 2022 during waste audit.



Photo 13: Fiber – Newspaper/ Paper bin sorted from HRM collection area 2.
Photo taken May 19, 2022 during waste audit.



Photo 14: Fiber – OCC bin sorted from HRM collection area 2.
Photo taken May 19, 2022 during waste audit.



Photo 15: Weighing of Garbage/Residue bin sorted from HRM collection area 2.
Photo taken May 19, 2022 during waste audit.



Photo 16: Waste audit sample collected from HRM collection area 3.
Photo taken on May 19, 2022 during waste audit.



Photo 17: Waste collection vehicle unloading waste collected from HRM collection area 3. Photo taken on May 12, 2022.



Photo 18: Waste audit sample from HRM collection area 3. Photo collected May 12, 2022.



Photo 19: Food waste bin sorted from HRM collection area 3. Photo taken May 19, 2022 during waste audit.



Photo 20: Fiber – Newspaper/ Paper bin sorted from HRM collection area 3. Photo taken May 19, 2022 during waste audit.



Photo 21: Fiber – OCC bin #1 sorted from HRM collection area 3.
Photo taken May 19, 2022 during waste audit.



Photo 22: Fiber – OCC bin #2 sorted from HRM collection area 3.
Photo taken May 19, 2022 during waste audit.



Photo 23: Weighing of Garbage/Residue bin sorted from HRM collection area 3.
Photo taken May 19, 2022 during waste audit.



Photo 24: Waste audit sample collected from HRM collection area 4.
Photo taken on May 19, 2022 during waste audit.



Photo 25: Waste collection vehicle unloading waste collected from HRM collection area 4. Photo taken on May 13, 2022.

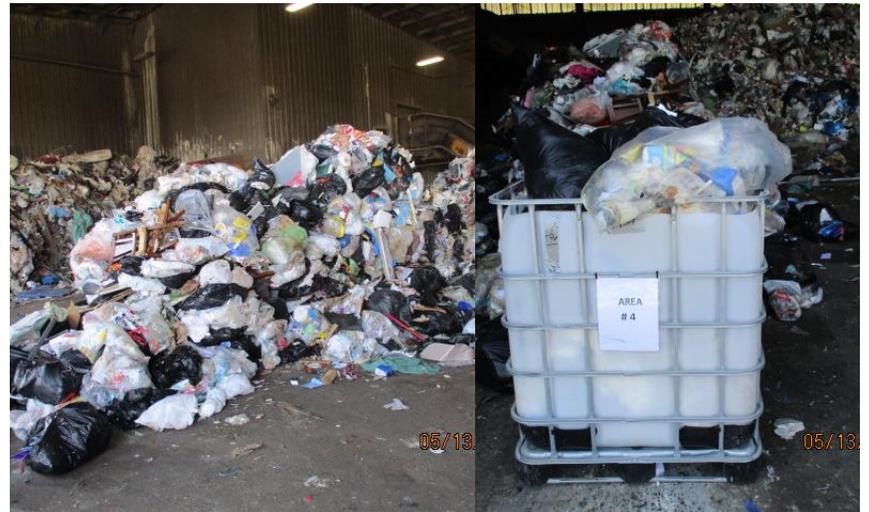


Photo 26: Waste audit sample from HRM collection area 4. Photo collected May 13, 2022.



Photo 27: Food waste bin sorted from HRM collection area 4. Photo taken May 19, 2022 during waste audit.



Photo 28: Fiber – Newspaper/ Paper bin sorted from HRM collection area 4. Photo taken May 19, 2022 during waste audit.



Photo 29: Fiber – OCC bin #1 sorted from HRM collection area 4.
Photo taken May 19, 2022 during waste audit.



Photo 30: Fiber – OCC bin #2 sorted from HRM collection area 4.
Photo taken May 19, 2022 during waste audit.



Photo 31: Weighing of Garbage/Residue bin sorted from HRM collection area 4.
Photo taken May 19, 2022 during waste audit.



Photo 32: Weighing of waste audit sample collected from HRM collection area 5.
Photo taken on May 19, 2022 during waste audit.



Photo 33: Waste collection vehicle unloading waste collected from HRM collection area 5. Photo taken on May 16, 2022.



Photo 34: Waste audit sample from HRM collection area 5. Photo collected May 16, 2022.



Photo 35: Food waste bin separated from HRM collection area 5. Photo taken May 19, 2022 during waste audit.



Photo 36: Fiber – Newspaper/ Paper bin sorted from HRM collection area 5. Photo taken May 19, 2022 during waste audit.



Photo 37: Fiber – OCC bin sorted from HRM collection area 5.
Photo taken May 19, 2022 during waste audit.



Photo 38: Yard waste bin sorted from HRM collection area 5.
Photo taken May 19, 2022 during waste audit.



Photo 39: Garbage/Residue bin sorted from HRM collection area 5.
Photo taken May 19, 2022 during waste audit.



Photo 40: Weighing of waste audit sample collected from HRM collection area 6.
Photo taken on May 19, 2022 during waste audit.



Photo 41: Waste collection vehicle unloading waste collected from HRM collection area 6. Photo taken on May 16, 2022.



Photo 42: Waste audit sample from HRM collection area 6. Photo collected May 16, 2022.



Photo 43: Food waste bin separated from HRM collection area 6. Photo taken May 19, 2022 during waste audit.



Photo 44: Fiber – Newspaper/ Paper bin sorted from HRM collection area 6. Photo taken May 19, 2022 during waste audit.



Photo 45: Fiber – OCC bin sorted from HRM collection area 6.
Photo taken May 19, 2022 during waste audit.



Photo 46: Yard waste bin sorted from HRM collection area 6.
Photo taken May 19, 2022 during waste audit.



Photo 47: Garbage/Residue bin sorted from HRM collection area 6.
Photo taken May 19, 2022 during waste audit.



Photo 48: Weighing of waste audit sample collected from HRM collection area 7.
Photo taken on May 19, 2022 during waste audit.



Photo 49: Waste collection vehicle unloading waste collected from HRM collection area 7. Photo taken on May 12, 2022.



Photo 50: Waste audit sample from HRM collection area 7. Photo collected May 12, 2022.



Photo 51: Food waste bin separated from HRM collection area 7. Photo taken May 19, 2022 during waste audit.



Photo 52: Fiber – Newspaper/ Paper bin sorted from HRM collection area 7. Photo taken May 19, 2022 during waste audit.



Photo 53: Fiber – OCC bin #1 sorted from HRM collection area 7.
Photo taken May 19, 2022 during waste audit.



Photo 54: Fiber – OCC bin #2 sorted from HRM collection area 7.
Photo taken May 19, 2022 during waste audit.



Photo 55: Garbage/Residue bin sorted from HRM collection area 7.
Photo taken May 19, 2022 during waste audit.



Photo 56: Weighing of waste audit sample collected from HRM collection area 8.
Photo taken on May 19, 2022 during waste audit.



Photo 57: Waste collection vehicle unloading waste collected from HRM collection area 8. Photo taken on May 12, 2022.



Photo 58: Waste audit sample from HRM collection area 8. Photo collected May 12, 2022.



Photo 59: Food waste bin separated from HRM collection area 8. Photo taken May 19, 2022 during waste audit.



Photo 60: Fiber – Newspaper/ Paper bin sorted from HRM collection area 8. Photo taken May 19, 2022 during waste audit.



Photo 61: Fiber – OCC bin #1 sorted from HRM collection area 8.
Photo taken May 19, 2022 during waste audit.



Photo 62: Fiber – OCC bin #2 sorted from HRM collection area 8.
Photo taken May 19, 2022 during waste audit.



Photo 63: Garbage/Residue bin sorted from HRM collection area 8.
Photo taken May 19, 2022 during waste audit.



Photo 64: Weighing of waste audit sample collected from HRM collection area 9.
Photo taken on May 19, 2022 during waste audit.



Photo 65: Waste collection vehicle unloading waste collected from HRM collection area 9. Photo taken on May 13, 2022.



Photo 66: Waste audit sample from HRM collection area 9. Photo collected May 13, 2022.



Photo 67: Food waste bin separated from HRM collection area 9. Photo taken May 19, 2022 during waste audit.



Photo 68: Fiber – Newspaper/ Paper bin sorted from HRM collection area 9. Photo taken May 19, 2022 during waste audit.



Photo 69: Fiber – OCC bin sorted from HRM collection area 9.
Photo taken May 19, 2022 during waste audit.



Photo 70: Yard waste bin sorted from HRM collection area 9.
Photo taken May 19, 2022 during waste audit.



Photo 71: Garbage/Residue bin sorted from HRM collection area 8.
Photo taken May 19, 2022 during waste audit.



Photo 72: Empty waste audit collection bin. Photo taken May 19, 2022
after successful completion of waste audit waste audit.

ATTACHMENT 2
SCALE TICKETS

Halifax Regional Municipality

Vehicle ID: RE1044
License Plate: 57-424-D
Waste Type: residential
Origin: 1 HALIFAX

Invoice: 0400927
Royal Environmental Group

Scale Slip: 075699
05/16/2022 11:33:03
Clerk: JLC

Gross Weight: 21,910 (kg)
Tare Weight: 16,630 (kg)
Net Weight: 5,280 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: RE2091
License Plate: PR41474
Waste Type: residential
Origin: 2 DARTMOUTH
Invoice: 0400927
Royal Environmental Group

Scale Slip: 075649
05/13/2022 11:02:24
Clerk: JLC

Gross Weight: 23,580 (kg)
Tare Weight: 16,140 (kg)
Net Weight: 7,440 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: RE2105
License Plate: 44-096-D
Waste Type: residential
Origin: 3 BEDFORD/HAMMONDS PLAINS
Invoice: 0400927
Royal Environmental Group

Scale Slip: 075606
05/12/2022 11:57:46
Clerk: JLC

Gross Weight: 24,630 (kg)
Tare Weight: 16,070 (kg)
Net Weight: 8,560 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

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

Scale Slip: 075656
05/13/2022 11:56:04
Clerk: JLC

Gross Weight: 25,600 (kg)
Tare Weight: 16,880 (kg)
Net Weight: 8,720 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: RE1035
License Plate: 55-579-D
Waste Type: residential
Origin: 5 SACKVILLE/FALL RIVER
Invoice: 0400927
Royal Environmental Group

Scale Slip: 075715
05/16/2022 14:40:48
Clerk: JLC

Gross Weight: 24,210 (kg)
Tare Weight: 16,530 (kg)
Net Weight: 7,680 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: RE1041
License Plate: 57-421-D
Waste Type: residential
Origin: 6 COLE HARBOUR/EASTERN PASSAGE
Invoice: 0400927

Royal Environmental Group

Scale Slip: 075700
05/16/2022 12:06:08
Clerk: JLC

Gross Weight: 26,090 (kg)
Tare Weight: 16,600 (kg)
Net Weight: 9,490 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: MW6830
License Plate: 56483D
Waste Type: residential

Origin: PRESTON/LAWRENCETOWN/LAKE ECHO

Invoice: 0188466
MILLER WASTE SYSTEMS

Scale Slip: 075621
05/12/2022 14:48:58
Clerk: JLC

Gross Weight: 20,590 (kg)
Tare Weight: 19,610 (kg)
Net Weight: 980 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: ES4038
License Plate: 48770D
Waste Type: residential
Origin: 8 EASTERN COUNTY
Invoice: 0028092
EASTERN SHORE CARTAGE

Scale Slip: 075626
05/12/2022 15:33:51
Clerk: JLC

Gross Weight: 20,770 (kg)
Tare Weight: 15,700 (kg)
Net Weight: 5,070 (kg)

Total: \$0.00
\$0.00

Halifax Regional Municipality

Vehicle ID: MW4117
License Plate: 50123D
Waste Type: residential
Origin: BEDFORD SACKVILLE CONDOS

Invoice: 0188466
MILLER WASTE SYSTEMS

Scale Slip: 075648
05/13/2022 10:56:33
Clerk: JLC

Gross Weight: 19,660 (kg) MAN WT
Tare Weight: 17,360 (kg)
Net Weight: 2,300 (kg)

Total: \$0.00
\$0.00

ATTACHMENT 3
FIELD DATA SHEETS

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 1
 DATE Thursday, May 19, 2022
 TIME 9 AM - 9:45 AM

SUPERVISOR NAME Patrick Avery (Strum)
 SORTER NAMES George Brown
 Dez Smith
 Patrick Barringer

GROSS SAMPLE WEIGHT (KG) 193.50
 BIN WEIGHT (KG) 50.00
 TRASH SAMPLE NET WEIGHT (KG) 143.50
 # OF BULK WASTE OBSERVED 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	1.) 38.00 2.) 50.00	125.00	83.50	120.50
Fibre - Newsprint/Paper	1.10	2.75	1.85	2.40
Fibre - Corrugated Cardboard	1.10	1.80	N/A	0.70
Food/Putrescible Waste	1.10	16.50	4.45	18.75
Yard Waste	1.10	1.35	N/A	0.25

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	208.50	88.00	120.50	83.97
Fibre - Newsprint/Paper	4.60	2.20	2.40	1.67
Fibre - Corrugated Cardboard	1.80	1.10	0.70	0.49
Food/Putrescible Waste	20.95	2.20	18.75	13.07
Yard Waste	1.35	1.10	0.25	0.17
LOST MASS UPON FINAL WEIGH-IN (KG)			0.90	0.63

FIELD NOTES: One bag had an abundance of food waste. Two different sized empty bins used for garbage/residue.

Weighscale Ticket Information

Truck Number/ID RE1044
 Collection Area 1 Halifax
 Date 5/16/2022
 Ticket Time 11:33:03
 Gross Weight (kg) 21,910
 Tare Weight (kg) 16,630
 Net Weight (kg) 5,280

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 2
 DATE Thursday, May 19, 2022
 TIME 10:55 AM - 11:15 AM

SUPERVISOR NAME Patrick Avery (Strum)

 SORTER NAMES Aaron Deveaux
 George Brown
 Dez Smith
 Patrick Barringer

GROSS SAMPLE WEIGHT (KG) 165.00
 BIN WEIGHT (KG) 51.50
 TRASH SAMPLE NET WEIGHT (KG) 113.50
 # OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	50.50	151.00	N/A	101.00
Fibre - Newsprint/Paper	1.10	3.30	N/A	2.20
Fibre - Corrugated Cardboard	1.10	2.70	N/A	1.60
Food/Putrescible Waste	1.10	9.15	N/A	8.05
Yard Waste	1.10	1.10	N/A	0.00

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	151.00	50.50	101.00	88.99
Fibre - Newsprint/Paper	3.30	1.10	2.20	1.94
Fibre - Corrugated Cardboard	2.70	1.10	1.60	1.41
Food/Putrescible Waste	9.15	1.10	8.05	7.09
Yard Waste	1.10	1.10	0.00	0.00
LOST MASS UPON FINAL WEIGH-IN (KG)			0.65	0.57

Weighscale Ticket Information

Truck Number/ID RE2091
 Collection Area 2 Dartmouth
 Date 5/13/2022
 Ticket Time 11:02:24
 Gross Weight (kg) 23,580
 Tare Weight (kg) 16,140
 Net Weight (kg) 7,440

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 3
DATE Thursday, May 19, 2022
TIME 11:18 AM - 11:40 AM

SUPERVISOR NAME Patrick Avery (Strum)

SORTER NAMES Aaron Deveaux
 George Brown
 Dez Smith
 Patrick Barringer

GROSS SAMPLE WEIGHT (KG) 187.00
BIN WEIGHT (KG) 51.00
TRASH SAMPLE NET WEIGHT (KG) 136.00
OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	51.50	182.00	N/A	130.50
Fibre - Newsprint/Paper	1.10	2.55	N/A	1.45
Fibre - Corrugated Cardboard	1.10	2.10	2.45	2.35
Food/Putrescible Waste	1.10	2.55	N/A	1.45
Yard Waste	1.10	1.10	N/A	0.00

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	182.00	51.50	130.50	95.96
Fibre - Newsprint/Paper	2.55	1.10	1.45	1.07
Fibre - Corrugated Cardboard	2.10	1.10	2.35	1.73
Food/Putrescible Waste	2.55	1.10	1.45	1.07
Yard Waste	1.10	1.10	0.00	0.00
LOST MASS UPON FINAL WEIGH-IN (KG)			0.25	0.18

Weighscale Ticket Information

Truck Number/ID RE2105
 Collection Area 3 Bedford/Hammonds Plains
 Date 5/12/2022
 Ticket Time 11:57:46
 Gross Weight (kg) 24,630
 Tare Weight (kg) 16,070
 Net Weight (kg) 8,560

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 4
DATE Thursday, May 19, 2022
TIME 11:40 AM - 12:00 PM

SUPERVISOR NAME Patrick Avery (Strum)

SORTER NAMES Aaron Deveaux
 George Brown
 Dez Smith
 Patrick Barringer

GROSS SAMPLE WEIGHT (KG) 175.00
BIN WEIGHT (KG) 51.00
TRASH SAMPLE NET WEIGHT (KG) 124.00
OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	51.00	170.50	N/A	119.50
Fibre - Newsprint/Paper	1.10	2.10	N/A	1.00
Fibre - Corrugated Cardboard	1.10	2.40	2.15	2.35
Food/Putrescible Waste	1.10	1.80	N/A	0.70
Yard Waste	1.10	1.10	N/A	0.00

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	170.50	51.00	119.50	96.37
Fibre - Newsprint/Paper	2.10	1.10	1.00	0.81
Fibre - Corrugated Cardboard	4.55	1.10	2.35	1.90
Food/Putrescible Waste	1.80	1.10	0.70	0.56
Yard Waste	1.10	1.10	0.00	0.00
LOST MASS UPON FINAL WEIGH-IN (KG)			0.45	0.36

Weighscale Ticket Information

Truck Number/ID GFL007
 Collection Area 4 Western County
 Date 5/13/2022
 Ticket Time 11:56:04
 Gross Weight (kg) 25,600
 Tare Weight (kg) 16,880
 Net Weight (kg) 8,720

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 5
 DATE Thursday, May 19, 2022
 TIME 10:05 AM - 10:30 AM

SUPERVISOR NAME Patrick Avery (Strum)

SORTER NAMES Frankie Jackson
 George Brown
 Dez Smith
 Patrick Barringer

GROSS SAMPLE WEIGHT (KG) 196.00
 BIN WEIGHT (KG) 50.00
 TRASH SAMPLE NET WEIGHT (KG) 146.00
 # OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	50.00	186.50	N/A	136.50
Fibre - Newsprint/Paper	1.10	1.50	N/A	0.40
Fibre - Corrugated Cardboard	1.10	1.30	N/A	0.20
Food/Putrescible Waste	1.10	9.20	N/A	8.10
Yard Waste	1.10	1.65	N/A	0.55

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	186.50	50.00	136.50	93.49
Fibre - Newsprint/Paper	1.50	1.10	0.40	0.27
Fibre - Corrugated Cardboard	1.30	1.10	0.20	0.14
Food/Putrescible Waste	9.20	1.10	8.10	5.55
Yard Waste	1.65	1.10	0.55	0.38
		LOST MASS UPON FINAL WEIGH-IN (KG)	0.25	0.17

Weighscale Ticket Information

Truck Number/ID RE1035
 Collection Area 5 Sackville/Fall River
 Date 5/16/2022
 Ticket Time 14:40:48
 Gross Weight (kg) 24,210
 Tare Weight (kg) 16,530
 Net Weight (kg) 7,680

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 6
DATE Thursday, May 19, 2022
TIME 10:30 AM - 10:50 AM

SUPERVISOR NAME Patrick Avery (Strum)

SORTER NAMES Frankie Jackson
 George Brown
 Dez Smith
 Patrick Barringer

GROSS SAMPLE WEIGHT (KG) 173.00
BIN WEIGHT (KG) 50.50
TRASH SAMPLE NET WEIGHT (KG) 122.50
OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	50.00	168.00	N/A	118.00
Fibre - Newsprint/Paper	1.10	2.00	N/A	0.90
Fibre - Corrugated Cardboard	1.10	2.65	N/A	1.55
Food/Putrescible Waste	1.10	2.75	N/A	1.65
Yard Waste	1.10	1.15	N/A	0.05

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	168.00	50.00	118.00	96.33
Fibre - Newsprint/Paper	2.00	1.10	0.90	0.73
Fibre - Corrugated Cardboard	2.65	1.10	1.55	1.27
Food/Putrescible Waste	2.75	1.10	1.65	1.35
Yard Waste	1.15	1.10	0.05	0.04
LOST MASS UPON FINAL WEIGH-IN (KG)			0.35	0.29

Weighscale Ticket Information

Truck Number/ID RE1041
 Collection Area 6 Cole Harbour/Eastern Passage
 Date 5/16/2022
 Ticket Time 12:06:08
 Gross Weight (kg) 26,090
 Tare Weight (kg) 16,600
 Net Weight (kg) 9,490

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 7
DATE Thursday, May 19, 2022
TIME 12:35 PM - 12:55 PM

SUPERVISOR NAME Patrick Avery (Strum)

SORTER NAMES Patrick B.
 Aaron Deveaux
 Dez Smith
 George Brown
 Frankie Jackson

GROSS SAMPLE WEIGHT (KG) 211.50
BIN WEIGHT (KG) 50.00
TRASH SAMPLE NET WEIGHT (KG) 161.50
OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	51.00	205.50	N/A	154.50
Fibre - Newsprint/Paper	1.10	1.30	N/A	0.20
Fibre - Corrugated Cardboard	1.10	2.60	1.60	2.00
Food/Putrescible Waste	1.10	5.30	N/A	4.20
Yard Waste	1.10	1.10	N/A	0.00

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	205.50	51.00	154.50	95.67
Fibre - Newsprint/Paper	1.30	1.10	0.20	0.12
Fibre - Corrugated Cardboard	4.20	2.20	2.00	1.24
Food/Putrescible Waste	5.30	1.10	4.20	2.60
Yard Waste	1.10	1.10	0.00	0.00
LOST MASS UPON FINAL WEIGH-IN (KG)			0.60	0.37

Weighscale Ticket Information

Truck Number/ID MW6830
 Collection Area Preston/Lawrencetown/Lake Echo
 Date 5/12/2022
 Ticket Time 14:48:58
 Gross Weight (kg) 20,590
 Tare Weight (kg) 19,610
 Net Weight (kg) 980

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA 8
 DATE Thursday, May 19, 2022
 TIME 1:00 PM - 1:10 PM

SUPERVISOR NAME Patrick Avery (Strum)

SORTER NAMES Patrick B.
 Aaron Deveaux
 Dez Smith
 George Brown
 Frankie Jackson

GROSS SAMPLE WEIGHT (KG) 181.00
 BIN WEIGHT (KG) 50.50
 TRASH SAMPLE NET WEIGHT (KG) 130.50
 # OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	50.00	171.00	N/A	121.00
Fibre - Newsprint/Paper	1.10	3.45	N/A	2.35
Fibre - Corrugated Cardboard	1.10	2.20	3.00	3.00
Food/Putrescible Waste	1.10	4.75	N/A	3.65
Yard Waste	1.10	1.10	N/A	0.00

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	171.00	50.00	121.00	92.72
Fibre - Newsprint/Paper	3.45	1.10	2.35	1.80
Fibre - Corrugated Cardboard	5.20	1.10	3.00	2.30
Food/Putrescible Waste	4.75	1.10	3.65	2.80
Yard Waste	1.10	1.10	0.00	0.00
LOST MASS UPON FINAL WEIGH-IN (KG)			0.50	0.38

Weighscale Ticket Information

Truck Number/ID ES4038
 Collection Area 8 Eastern County
 Date 5/12/2022
 Ticket Time 15:33:51
 Gross Weight (kg) 20,770
 Tare Weight (kg) 15,700
 Net Weight (kg) 5,070

PERFORMANCE AUDIT RECORD

WASTE COLLECTION AREA Condos
 DATE Thursday, May 19, 2022
 TIME 1:10 PM - 1:30 PM

SUPERVISOR NAME Patrick Avery (Strum)

 SORTER NAMES Patrick B.
 Aaron Deveaux
 Dez Smith
 George Brown
 Frankie Jackson

GROSS SAMPLE WEIGHT (KG) 161.50
 BIN WEIGHT (KG) 50.50
 TRASH SAMPLE NET WEIGHT (KG) 111.00
 # OF BULK WASTE ITEMS 0

MATERIAL	EMPTY BIN WEIGHT (KG)	GROSS TOTAL SEPARATED SAMPLE WEIGHT (KG)		NET SAMPLE WEIGHT (KG)
		BIN 1	BIN 2	
Garbage/Residue	50.50	150.00	N/A	99.50
Fibre - Newsprint/Paper	1.10	1.75	N/A	0.65
Fibre - Corrogated Cardboard	1.10	2.00	3.00	0.90
Food/Putrescible Waste	1.10	8.65	N/A	7.35
Yard Waste	1.10	3.70	N/A	2.60

MATERIAL	GROSS SAMPLE WEIGHT (KG)	TOTAL WEIGHT OF BINS (KG)	NET SAMPLE WEIGHT (KG)	WASTE (%)
Garbage/Residue	150.00	50.50	99.50	89.64
Fibre - Newsprint/Paper	1.75	1.10	0.65	0.59
Fibre - Corrogated Cardboard	2.00	1.10	0.90	0.81
Food/Putrescible Waste	8.65	1.10	7.55	6.80
Yard Waste	3.70	1.10	2.60	2.34
LOST MASS UPON FINAL WEIGH-IN (KG)			-0.20	-0.18

FIELD NOTES: A clean-up of the work area is expected to have caused the additional mass reported.

Weighscale Ticket Information

Truck Number/ID MW4117
 Collection Area Bedford Sackville Condos
 Date 5/13/2022
 Ticket Time 10:56:33
 Gross Weight (kg) 19,660
 Tare Weight (kg) 17,360
 Net Weight (kg) 2,300