

AGENDA,
Virtual Meeting, Community Monitoring Committee
 7:00 p.m., Sunday, September 20, 2026

	Agenda Item	Action	Materials Included
	Call to Order		
1.0	Approval of the agenda with/without additions	Decision	• Agenda
2.0	Approval of the March 25, 2026 minutes with/without amendments	Decision	• Minutes of the March 25, 2026 meeting
3.0	Members of the public in attendance invited to address the CMC with comments, questions, or submissions	Information/ Discussion	
4.0	Chair welcomes newest member to the CMC, Chile Frank-Udemgba	Information	• Introduction
5.0	Request to approve legal bill from Derek Brett, Enterprise Law Group, for legal advice to CMC in the amount of \$1853.07	Decision	• Copy of the bill • Copy of the legal advice received
6.0	Report by CMC's Liaison Assistant re the integrity of the HRM's figures submitted to the Department of Environment and Climate Change in support of the current compliance plan	Discussion	• Otter Lake Compostable Waste Annual Percentage Calculations
7.0	Director of Halifax Solid Waste Resources' response to questions from CMC's Environmental Consultant re HRM's plans to seek provincial permission to conduct performance audits without a third-party	Discussion re CMC & HRM perspectives and MOU	• Correspondence between Dir. Solid Waste Resources and Chair, June 25, June 30 and July 10

	auditor and change the target metric for organic waste entering the landfill	implications	• Copy of response from Dir. of Solid Waste Resources, Aug. 26
8.0	Adjournment		



CMC Minutes, Annual General Meeting
6:30 p.m. Thursday, March 25, 2026
The Pavilion, The Links at Brunello, Timberlea

CMC Members Present: Chair Reg Rankin, Tekena Warikubu, Andrew Giles, John Cascadden, Nancy Hartling, , Peter Lund, Channing Davis

Others Present: Shannon Betts, Jordan Vallis, Steve Copp, Justin Hawco, Rick Grant, Jason Timms, Betsy Chambers, Phil MacKenzie

1.0 A motion to approve the agenda as circulated was moved by Peter Lund, seconded by Nancy Hartling. Motion carried.

2.0 The Chair in his end-of- fiscal- year remarks noted CMC's new challenge will be to establish a set of principles and a new mechanism, in partnership with HRM, should the front-end processor and waste stabilization facility be taken off standby and scrapped. The decommissioning of this equipment will likely follow once HRM meets the Department of Environment and Climate Change's directive to limit the amount of organics by mass entering the landfill to 10%. Area residents in the communities surrounding the Otter Lake Landfill site, he said, need assurance that satisfactory checks and balances will be in place to ensure the landfill operation does not impede the prosperity of the growing residential and commercial area. He noted the front-end processor and waste stabilization facility were written into the 1999 contract between the Halifax Waste Resource Society (HWRS) and HRM, which created the CMC.

3.0 The Chair introduced the six HWRS-appointees elected to sit on the CMC for the 2026-2027 fiscal year: Reg Rankin, Andrew Giles, Peter Lund, Nancy Hartling, John Cascadden and Channing Davis and asked the meeting to confirm their appointments. The group was chosen at the HWRS Annual General Meeting that immediately preceded the CMC Annual General Meeting. The six-member group was confirmed as members of the CMC in a motion moved by John Cascadden, seconded by Andrew Giles. Motion carried.

4.0 Reg Rankin, the outgoing Chair, removed himself from the chairmanship of the meeting in favour of the Administrator who called for nominees to fill the office of Chair for fiscal 2026-2027. Reg Rankin was nominated by John Cascadden and

seconded by Nancy Hartling. There being no other nominees, Reg Rankin was acclaimed as Chair of the CMC for 2026-2027 in accordance with the 1999 agreement of the HWRS and HRM, and Mr. Rankin resumed his role as Chair of the meeting.

5.0 A motion was moved by Andrew Giles, seconded by John Cascadden to adopt the minutes of the January 22, 2026 CMC meeting. Motion carried.

6.0 In the absence of any members of the public in attendance to address the CMC with comments and/or questions, the Chair moved to item 8.0 on the agenda.

8.0 CMC's Environmental Consultant Phil MacKenzie explained that he outlined the circulated formal procedure proposed for posting on the CMC website to detail the process for laying an odour complaint in relation to the operations of the Otter Lake landfill. He noted that nowhere on the HRM website did he spot a link to submit an odour complaint.

Shannon Betts, Director of Solid Waste for HRM, responded that the circulated document followed existing procedure but generally citizens are simply urged to report any incident to 311. The reaction to complaints is already speedy, but efforts are being made to reduce any lag time between the notification that goes to the HRM engineering team and the people on site at the Otter Lake facility operated by Mirror Nova Scotia. The sooner the complaint is made known the faster investigations can proceed. Steve Copps, the Mirror Nova Scotia manager at the landfill, said his team responds immediately to odour complaints, even after normal working hours or on weekends.

John Cascadden suggested the proposed protocol was useful to alert citizens with odour complaints to the kind of questions they will be asked when they make a 311 call. Ms. Betts responded that odour complaints to 311 are followed up with staff calls to the initiator of the complaint, which gives them time to add information details they might have initially forgotten or overlooked. Mr. Copps said the preference is for all complaints to go through 311 but added no complaint is dismissed if it arrives by a different route.

The Chair turned to item 7.0 on the agenda after Andrew Giles' noted that it had been skipped in favour of item 8.0.

7.0 The Chair suggested more monitoring and some signage would discourage litter accumulating along the Greenhead Road, east of Otter Lake. Ms. Betts said the road is an easement owned by the province, which has an agreement with the ATV Association of Nova Scotia to maintain that trail. Therefore HRM does not have the authority to block the road off. Instead, she suggested signage could be added asking anyone who observes debris dumping along the route to call 311 and report it. Those reports would enable an investigation. The recent complaint about the trail was the

first of its kind that HRM had received on that trail but she said HRM is interested in ensuring there are not more.

John Cascadden moved that HRM contacts the province to gather more information on littering along the Greenhead Road and that a standard operating procedure for odour complaints be placed on the CMC website. Channing Davis seconded the motion. Motion carried.

9.0 Jordan Vallis, Manager, Engineering and Contract Services, Solid Waste Resources circulated a two-page Otter Lake Operations/Compliance Plan — 2025 in Review, indicating among other data that the overall percentage of compostable waste for fiscal 2025-2026 was 10.35% - only .35% short of the 10% goal set by the Department of Environment and Climate Change. (The two-page document is attached.)

While there were no odour complaints in 2025, Mr. Vallis noted there were seven in 2026. Nancy Hartling suggested that they might really be related to nearby Goodwood but erroneously attributed to the Otter Lake facility. Mr. Vallis confirmed that Goodwood was currently beset by a number of odour generators, which might explain the increase in complaints.

Many factors, Ms. Betts pointed out, contributed to the tonnage figures for residential garbage. While HRM has increased its population and the amount of household garbage per capita is rising, the tonnage of residential garbage stayed about the same. The figures show that residents are putting effort into garbage diversion efforts and the programs promoting them are paying off.

Mr. Vallis and his team, she said, were preparing the annual report to the Department of Environment and Climate Change. It will be at the department's discretion as to what will be expected of HRM to ensure it remains in compliance with the 10% target in the future.

If the front-end processor and waste stabilization facility are fully decommissioned, Andrew Giles asked whether the CMC was obliged to inform the public. The Chair said that would be a decision of the CMC, dependent on HRM's communications.

Continuous waste diversion from the landfill was a key principle of Otter Lake facility operations, but it cannot be achieved without technology, said John Cascadden. He suggested any new technology will require front-end processing for refined sorting and he pointed out if the current equipment is removed it will cost more to reconstitute it. HalifACT 2050, he recounted, stated greater diversification and diversion are goals and at one point the goal was 100% diversion.

Rather than get into specifics at this meeting, the Chair suggested developing mutually agreed principles between CMC and HRM over the next four-to-six weeks that could

be set out in a memorandum of understanding.

Recently, the Chair said, several ideas for operational changes at the Otter Lake Landfill had been raised in a very preliminary way with him. The concepts, which needed further refinement, would involve amendments to the 1999 contractual agreement between HRM and the HWRS if they were to proceed. He suggested the HRM Director of Solid Waste Resources and the CMC Chair should develop a memorandum of understanding for CMC's consideration and for potential forwarding to the HWRS for action. That process, he said, could chart the way forward. Ms. Betts said she was open to the idea but declined to commit to discussions until HRM had its meeting with the Department of Environment and Climate Change.

John Cascadden moved, seconded by Andrew Giles, that CMC and HRM aspire to reach an MOU on principles of waste management at the Otter Lake facility. Motion carried.

10.0 The FluxLab item was deferred indefinitely, there being nothing new to report. HRM's Director of Solid Waste Shannon Betts offered to share any reports her office receives on work done in the fall of 2025 at the Otter Lake landfill by the SFX university-based FluxLab . The work was part of a broader Canadian study on methane in landfills.

11.0 No questions were raised about the details of CMC's proposed operating budget submitted to HRM for the 2026-2027 fiscal year. The HRM budget is awaiting Council approval.

12.0 The Chair proposed to re-instate Channing Davis, an HWRS-appointed CMC member, as part of the ad hoc Technical Advisory Group. He had been removed at the last meeting to enable an HRM appointee to be added to the three-member group erroneously filled by three HWRS-appointees. The Chair suggested the addition of a fourth member, in addition to the three set out in the TAG's terms of reference, would be permissible because the group was advisory to the CMC Environmental Consultant rather than a formal committee of the CMC. By a consensus of the meeting, Channing Davis was re-instated as a member of the TAG.

13.0 Andrew Giles moved a motion to adjourn. The meeting adjourned at 8:27 p.m.

Otter Lake Operations/Compliance Plan – 2025 in Review

- 48,108 tonnes of residential garbage received
- 940 tonnes of metal recycled from bulky collection and pulled from the tip face
- 20,710 tonnes of daily cover used: rock, clay and alternative (processed C&D)
- No odour complaints in 2025
 - 7 Odour Complaints 2026

Item	Units	2023	2024	2025
Residential Garbage Disposal	tonnes	48,820	48,930	48,108
Leachate Generation	Litres	81,828,000	56,584,062	37,845,450
Cubic Feet of Landfill Gas Flared	SCF	224,627,540	376,206,710	377,205,840

Compliance Plan Outreach

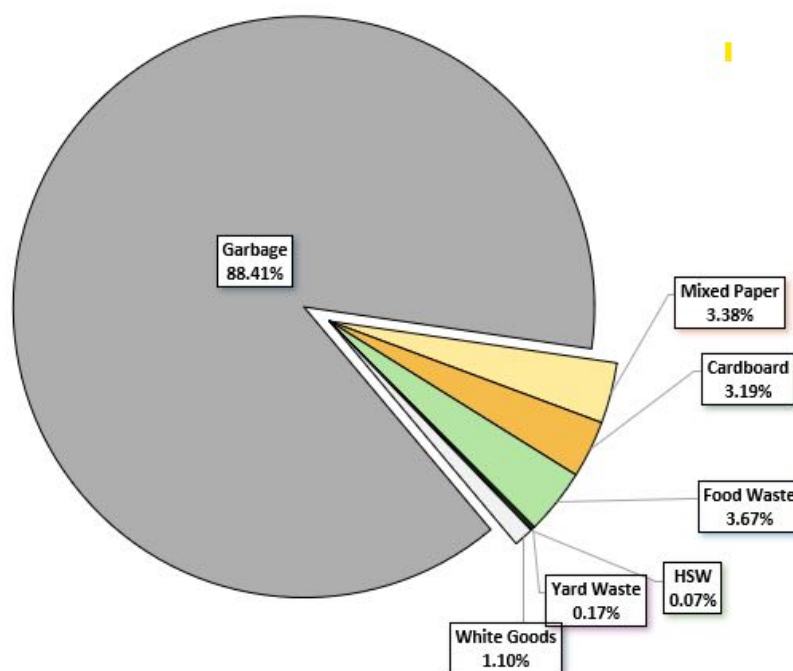
- 41 Residential WDRs to haulers regarding non-compliant items arriving in residential waste including, bulky scrap metal/appliances, leaf & yard waste.
- 2,850 curbside households visited with curbside feedback monitoring
- Targeted education visits including door-to-door at specific condo properties sampled in audits.
- Multi-media campaigns including: Social media, billboard, radio, digital screens



Performance Audits – Summary of Results

Area	% Compostable Waste			
	2022-23	2023-24	2024-25	2025-26
Target	N/A	11.61%	10.81%	10.00%
Areas 1-8 Curbside	12.34%	11.05%	10.53%	10.04%
Condos	13.75%	22.72%	30.69%	16.76%
All Areas Total	12.41%	11.64%	11.51%	10.35%

Performance Audit – 2025/2026 Results



Estimates based on Performance Audits	Units	2022	**2023	2024	2025
Total % "Compostable"	%	12.41%	11.64%	11.50%	10.35%
→ % that is Green Cart in Garbage	%	7.42%	7.28%	6.33%	3.38%
→ % that is Paper + Cardboard in Garbage	%	4.99%	4.36%	5.17%	6.97%
Estimated Tonnes Green Cart Waste going to Landfill	tonnes	3,556	3,513	2,891	1,833
Residential Green Cart Capture Rate	%	91.4%	91.1%	92.4%	95.30%
Estimated Tonnes HSW going to Landfill	tonnes	196	87	40	36

Standard Operating Procedure (SOP)

Odour Complaint Reporting Process

Version: 1.0 - Effective Date: February 25, 2026

1. Purpose

This Standard Operating Procedure (SOP) defines the official process for reporting, investigating, documenting, and following up on odour complaints associated with the Otter Lake Waste Management Facility.

2. Scope

This SOP applies to all odour complaints believed to originate from the Otter Lake Waste Management Facility, including public reporting channels, operator response requirements, regulatory oversight, and CMC review.

3. Reporting Channels

Two reporting channels are outlined in the following sections as a formal odour complaint may be filed with HRM either by Phone or electronically over E-mail.

By Phone

Given that odour events frequently occur in the evening (e.g., temperature inversions, low wind conditions), best practice as defined by this SOP is to:

- Report odour directly at the time of occurrence, even if after hours. (After-hours calls are logged and will still be actioned.)

Members of the public may report odour complaints by calling the HRM Service Centre:

Dial: #311

Important to Note:

- HRM 311 Service Hours: Monday to Friday, 8:00 AM – 4:30 PM
- Closed: Evenings, weekends, and statutory holidays
- These are the standard staffed intake hours for live operator service.

Should an odour event occurs outside 311 operating hours, the typical escalation pathways shall be:

1. Call HRM 311 contact centre and leave a voicemail.
 - When dialing 311 outside regular contact centre hours the system will route you to after-hours urgent service for issues such as waste management facility odour concerns. This is the designated after-hours line for HRM urgent municipal concerns.

OTTER LAKE LANDFILL COMMUNITY MONITORING COMMITTEE (CMC)

2. Call Mirror Nova Scotia (Facility Operator) – 902-453-3490
3. Nova Scotia Environment and Climate Change (NSECC) – 1-877-936-8476

Online

For Halifax Regional Municipality (HRM) landfill-related odour complaints, residents may submit odour complaints at any time via e-mail to the posted 311 Contact Centre e-mail address:

contactus@311.halifax.ca

It is suggested to utilize the following e-mail template when contacting the 311 Contact Centre on-line:

Odour Complaint Email Template

(For submission to contactus@311.halifax.ca)

Subject: Odour Complaint – [Your Area] – [Date]

Hello,

I would like to report an odour concern in my area.

Location:

(Street name or nearest intersection)

Date & Time Observed:

(When it started and whether it is ongoing)

Description of Odour:

(For example: garbage, rotten eggs, sewage, chemical, etc.)

Strength of Odour:

(Mild / Moderate / Strong)

Duration:

(How long it lasted or if still ongoing)

Wind Direction (if known):

(e.g., calm, light wind from west, etc.)

This odour has *[not occurred before / happened previously on the following dates: ____]*.

Please log this complaint and provide a service request number for tracking.

Thank you,

[Full Name]

[Address or general area]

[Phone number or email]

4. Mandatory Operator Response Requirements

Upon receipt of a complaint, the Approval Holder (Mirror) must:

1. Conduct immediate investigation of the cause.
2. Record complainant details and time of complaint.
3. Record wind direction, wind speed, temperature, and humidity.
4. Document corrective actions taken.
5. Provide records to NSECC upon request.

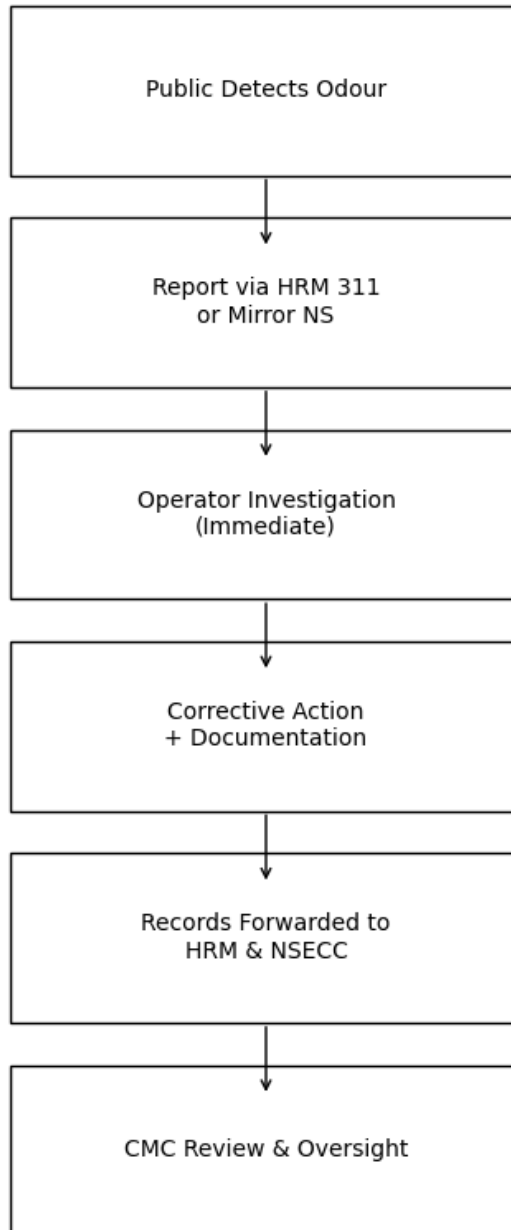
5. Regulatory Oversight

NSECC retains regulatory authority and may require additional monitoring, mitigation measures, or quantitative odour limits if off-site impacts are deemed excessive.

6. Role of the CMC

The Otter Lake Landfill Community Monitoring Committee reviews complaint summaries, monitors trends, and may escalate systemic concerns to HRM and NSECC.

Odour Complaint Reporting Flowchart

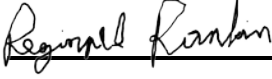


OTTER LAKE LANDFILL COMMUNITY MONITORING COMMITTEE (CMC)

Standard Operating Procedure Approval Signatures

Signature / Date

CMC Chair

 04-10-2026

Name: Reg Rankin

CMC Environmental Consultant Engineer

 02-25-2026

Name: Phil MacKenzie, PEng

Revision History

Version	Date	Description of Change	Approved By
1.0	2026-02-25	Initial Issue	CMC

Introducing Chile Frank-Udemgba BSc, PSM™ , PMP®

Chile Frank-Udemgba is the newest member of CMC, and the Sept.20 meeting will be her first with us. We received notification of her appointment from HRM on May 6, 2026, following completion of their selection process for volunteer members to HRM-associated boards and committees. Her term runs until Nov.30, 2027 — the same end-date shared by our other HRM appointees: Christa Schnare and Tekena Warikubu.

She replaces Hailey MacKinnon, the HRM appointee who completed her term with us in November 2025.

Chile is a project manager and product ownership analyst. Currently she works for Management and Procurement Support Services, Nova Scotia Department of Fisheries and Aquaculture, where she is involved in infrastructure upgrades to provincially owned fish hatcheries.

I trust you will make her welcome.

Betsy Chambers
Administrator CMC
Sept.06, 2026

Enterprise Law Group

Reginald Rankin

July 23, 2026

RE: 163; Otter Lake Matter

Invoice: 417

FEES

Date	Description	Task	Hours	Amount
2026-07-21	Phone conferencing with CMC Chair re: HRM-related case issues; conferencing with CMC Chair re: same; reviewing of CMC-HRM agreements and historic correspondence; researching of consultation issues; drafting of legal opinion correspondence re: CMC-HRM consultation issue; emailing to/from CMC Chair re: same. (Reduced from 4.1)	BW	3.60	1,620.00
Total FEES			3.60	\$1,620.00

EXPENSES

Date	Description	Activity	Amount
2026-07-21	Photocopies 22 x 0.25	ph	5.50
Total EXPENSES			\$5.50

New Charges	\$1,625.50
HST	\$227.57
Total	\$1,853.07

Balance Due	\$1,853.07
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Enterprise Law Group

Per:

Derek Brett

CC:

Evans, Meredith

Brett, Derek B.



July 21, 2026

VIA ELECTRONIC MAIL
(rankinreginald@gmail.com)

Community Monitoring Committee
Attention: Reginald Rankin – Chair

RE: Legal Opinion – Halifax Regional Municipality’s (“HRM”) Consultation Obligations Under the Community Monitoring Agreement

Dear Reg,

Thank you for forwarding the recent correspondence, together with several other documents including, but not limited to, the February 5, 2021, legal opinion prepared by Patterson Law; the June and July 2026 correspondence exchanged with HRM’s Shannon Betts; the original 1999 Agreement for Community Monitoring of Solid Waste Facilities; and Amendment No. 1 executed in 2023. I carefully reviewed each of these materials. I also listened, both late-last week and earlier today, to your oral description of events and situational dynamics.

Having now completed my review, I believe the Community Monitoring Committee's concerns are well-founded. Moreover, I am of the opinion that the issue presently confronting the Committee extends beyond a disagreement respecting the appropriate percentage of putrescible material permitted within the Otter Lake Landfill. Rather, the more significant issue concerns whether HRM is complying with the consultation obligations imposed upon it under the governing Agreement. In my opinion, that question should now become the principal focus.

The Agreement establishes considerably more than a passive advisory relationship between HRM and the Community Monitoring Committee. When read as a whole, it creates an ongoing governance structure intended to ensure that the Committee participates meaningfully in matters affecting the operation of the Otter Lake facilities. The Agreement repeatedly requires cooperation, information sharing, consultation and joint development of operational procedures. It does not contemplate that HRM will independently formulate positions affecting the operation of the facilities and subsequently advise the Committee of the outcome.

In particular, Article 6.04 obligates HRM to appoint representatives to meet with representatives designated by the Committee for the purpose of attempting to develop, in good

faith, operational procedures respecting matters including waste composition measurements, diversion effectiveness, testing protocols and other operational issues. Likewise, Articles 7 and 8 recognize the Committee's continuing role in monitoring facility operations, receiving operational information, making representations to governmental authorities and reporting to Council respecting matters affecting the landfill's operation. Collectively, those provisions establish an expectation of active engagement, not passive notification.

Against that contractual framework, I find the recent correspondence from HRM to be concerning. Ms. Betts' correspondence indicates that HRM anticipates discussions with the Nova Scotia Department of Environment and Climate Change respecting future compliance requirements, potential changes to audit methodology and possible revisions to the existing ten-percent (10%) putrescible metric. At the same time, HRM indicates only that it will "continue to engage with the Committee as appropriate."

In my respectful opinion, those two propositions are not legally equivalent. Meaningful consultation requires that the Committee possess an opportunity to participate in the development of HRM's position before that position is advanced to another decision-maker. Simply advising the Committee of discussions occurring with the Province, or updating the Committee after HRM has developed its negotiating position, cannot reasonably be characterized as consultation within the ordinary meaning of that term or within the context of the Agreement.

The distinction is significant. If HRM first develops its position with the Province and subsequently returns to the Committee merely to advise it of those discussions, the Committee's contractual role risks becoming entirely reactive. Such an approach would substantially diminish the very governance structure established under the 1999 Agreement, as amended.

I also remain persuaded that the February 5, 2021, legal opinion prepared by Barrister-Solicitor Anna-Marie Manley continues to provide important guidance. Her opinion correctly concluded that changes affecting the essential obligations established under the Agreement would not properly constitute consultation under the Agreement itself but would instead require renegotiation of the Agreement between HRM and the Halifax Waste/Resource Society.

While the present issue is somewhat different from the specific question addressed in 2021, the underlying contractual principle remains the same. The current concern is not simply whether HRM may ultimately seek changes respecting the operation of the FEP/WSF or acceptable putrescible levels. Rather, the concern is whether HRM may effectively negotiate or formulate those proposed changes with the Province while bypassing the collaborative consultation process established under the Agreement. In my professional opinion, that course of conduct would be inconsistent with both the express language and the evident purpose of the Agreement.

Furthermore, I believe the principles of Canadian contract law reinforces that conclusion. Modern Canadian jurisprudence recognizes an organizing principle of good-faith contractual performance together with a duty requiring contracting parties to exercise their contractual rights honestly and consistently with the purposes underlying their agreement. Where a contract establishes a collaborative decision-making process, one party cannot meaningfully preserve that

relationship while simultaneously excluding the other party from the very discussions that the contract contemplates.

At this stage, I believe there exists a substantial basis for asserting that HRM is positioning itself to consult principally with the Province while reducing the Community Monitoring Committee to an informational role. Whether that conduct ultimately constitutes a completed breach will depend upon how HRM proceeds during the coming weeks and months. However, in my opinion, HRM is approaching a point at which its conduct could constitute a material breach of its contractual obligations if meaningful consultation with the Committee does not occur before substantive discussions with the Province continue.

For that reason, I believe the Committee should insist that HRM immediately clarify its position. Specifically, HRM should confirm, in writing, that no proposals respecting acceptable putrescible thresholds, audit methodology, operational requirements or the future status of the FEP/WSF will be advanced to the Province until meaningful consultation has first occurred with the Community Monitoring Committee in accordance with the governing Agreement. Should HRM decline to provide that assurance, or should it continue discussions with the Province without engaging the Committee in a meaningful manner directed toward achieving a common understanding, I believe the Committee's concerns will become substantially more compelling.

Finally, I believe it is appropriate to address the question of litigation. In my opinion, the Community Monitoring Committee and the Halifax Waste/Resource Society should now begin seriously contemplating legal proceedings to compel HRM's compliance with its contractual obligations.

I do not suggest that litigation should immediately commence. However, I believe the circumstances now warrant preparation for that possibility. Indeed, given the present course adopted by HRM, I question whether informal correspondence alone will be sufficient to preserve the Committee's contractual rights. If HRM proceeds to formulate positions with the Province without first complying with its consultation obligations, judicial intervention may ultimately become the only effective mechanism through which the contractual governance framework established in 1999 can be preserved.

Should that become necessary, remedies could include declaratory relief respecting the interpretation of the Agreement, injunctive relief restraining further unilateral action pending compliance with the Agreement, and any additional relief that the Court considers just in the circumstances. I also believe there exists a respectable argument that HRM's conduct would be inconsistent with both the express provisions of the Agreement and the duty of good faith applicable to contractual performance.

Accordingly, my recommendation is twofold. First, HRM should immediately receive formal correspondence requiring written confirmation that meaningful consultation with the Community Monitoring Committee will occur before HRM advances any further proposals to the Province respecting putrescible thresholds, audit methodology or the future operation of the FEP/WSF.

Second, the Halifax Waste/Resource Society should begin preparing for the possibility of litigation should HRM refuse to provide those assurances or continue upon its present course. In my respectful opinion, the circumstances now justify treating litigation not as a remote possibility, but as a realistic and prudent option for enforcing the contractual rights established under the Agreement.

Please let me know if you would like to discuss these issues further. I remain available to assist both the Community Monitoring Committee and the Halifax Waste/Resource Society in determining the most appropriate course forward.

Sincerely,

/s/ Derek B. Brett

DEREK B. BRETT

Grant Media Services Limited

Otter Lake Compostable Waste Annual Percentage Calculations

Strum Consulting's March 2026 report indicates a compostable waste percentage of 10.35% based on calculations from four quarterly reports.

Waste Collection Area	Three Year Waste Average (Tonnes)	Three Year Waste Average (% Total)	Average Total Compostable % Per Area	Estimated Annual Compostable Waste (Tonnes)
1	9886.00	20.39%	10.28%	1016.40
2	6744.75	13.91%	11.82%	797.50
3	4435.01	9.15%	9.54%	423.18
4	5337.22	11.01%	8.03%	428.49
5	8633.03	17.81%	9.83%	848.24
6	5075.21	10.47%	8.36%	424.40
7	2894.99	5.97%	9.39%	271.89
8	3230.78	6.66%	13.32%	430.30



Page 7

February 2026 Performance Audit, Otter Lake Waste Processing & Disposal Facility
Mr. Steve Copp
Mirror Nova Scotia Limited

March 23, 2026

Project # 22-8641

Waste Collection Area	Three Year Waste Average (Tonnes)	Three Year Waste Average (% Total)	Average Total Compostable % Per Area	Estimated Annual Compostable Waste (Tonnes)
Condos	2242.28	4.63%	16.76%	375.89
Total	48479.27	100.00%	N/A	5016.28
Compostable Waste Percentage = (5016.28/48479.27) X 100 = 10.35%				

Notes:

1. Data used to calculate three-year average provided by Mirror and included tonnage from the fiscal years 2022/2023, 2023/2024, and 2024/2025.

I'll come back to this table in a moment. The 10.35% calculation is based on incomplete information. Strum's February, 2026 quarterly audit explained that due to weather there was no collection from zone 8 and so it was not included in the fourth quarter audit.

Zone 8 includes Middle Musquodoboit; Musquodoboit Harbour; Elderbank; Sheet Harbour; Eastern Shore. As you can see in Table the line for Zone 8 is blank.

FEBRUARY 2026 PERFORMANCE AUDIT SUMMARY

A summary of the February 2026 Performance Audit completed at Otter Lake is provided below in Table C. The February 2026 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: February 2026 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
1A	84.26%	0.00%	0.00%	3.81%	2.44%	8.63%	0.00%	14.87%
1B	85.15%	0.00%	1.29%	3.27%	5.45%	5.84%	0.00%	14.55%
2	89.10%	0.00%	2.56%	3.27%	1.54%	3.21%	0.13%	8.14%
3	89.51%	0.00%	0.00%	1.85%	1.73%	5.68%	0.00%	9.26%
4	93.04%	0.00%	0.00%	1.01%	3.99%	2.22%	0.00%	7.22%
5	86.13%	0.00%	1.39%	1.75%	6.50%	3.43%	0.00%	11.68%
6	85.80%	0.00%	0.00%	3.14%	3.14%	7.63%	0.00%	13.91%
7	89.69%	0.00%	0.00%	1.24%	4.02%	4.02%	0.00%	9.28%
8	-	-	-	-	-	-	-	-
Condos	70.91%	0.00%	0.00%	3.09%	10.36%	14.91%	0.00%	28.36%

Notes:

1. Total compostable waste percentage based on aggregate of four compostable waste category percentages.
2. No sample was collected from Area 8 during the February 2026 audit due to inclement weather.

Using the data in Table C above, the total compostable waste percentage ranged from a minimum of 7.22% (Area 4) to a maximum of 28.36% (Condos), based on the nine samples collected during the February 2026 Performance Audit. As noted previously, a sample was not collected from Area 8 during the February 2026 audit due to inclement weather.

Table D: Average Total Compostable Waste

Waste Collection Area	Three Year Waste Average (Tonnes)	May 2025 Total Compostable Waste	August 2025 Total Compostable Waste	November 2025 Total Compostable Waste	February 2026 Total Compostable Waste	Average Total Compostable Waste Per Area
1	9886.00	9.40%	10.05%	6.95%	14.71****	10.28%
2	6744.75	11.82%	17.70%	9.64%***	8.14%	11.82%
3	4435.01	5.17%	11.74%**	12.00%	9.26%	9.54%
4	5337.22	7.58%	12.41%	4.91%	7.22%	8.03%



February 2026 Performance Audit, Otter Lake Waste Processing & Disposal Facility
Mr. Steve Copp
Mirror Nova Scotia Limited

March 23, 2026
Project # 22-8641

Waste Collection Area	Three Year Waste Average (Tonnes)	May 2025 Total Compostable Waste	August 2025 Total Compostable Waste	November 2025 Total Compostable Waste	February 2026 Total Compostable Waste	Average Total Compostable Waste Per Area
5	8633.03	8.26%*	11.30%	8.06%	11.68%	9.83%
6	5075.21	5.30%	6.82%	7.42%	13.91%	8.36%
7	2894.99	2.54%	8.83%	16.92%	9.28%	9.39%
8	3230.78	9.90%	11.76%	18.29%	-	13.32%
Condos	2242.28	17.05%	6.95%	14.70%	28.36%	16.76%

Notes:

1. Data used to calculate three-year average provided by Mirror and included tonnage from the fiscal years 2022/2023, 2023/2024, and 2024/2025.
2. No sample was collected from Area 8 during the February 2026 audit due to inclement weather.
3. * May 2025 Total Compostable Waste percentage for Area 5 is based on average of the two samples (5A and 5B) collected during the May 2025 waste audit.
4. ** August 2025 Total Compostable Waste percentage for Area 3 is based on average of the two samples (3A and 3B) collected during the August 2025 waste audit.
5. *** November 2025 Total Compostable Waste percentage for Area 2 is based on average of the two samples (2A and 2B) collected during the November 2025 waste audit.
6. **** February 2026 Total Compostable Waste percentage for Area 1 is based on average of the two samples (1A and 1B) collected during the February 2026 waste audit.

Based on the data in Table D above, the average total compostable waste percentage ranges from a minimum of 8.03% (Area 4) to a maximum of 16.76% (Condos).

On table D, all zones except 8 have their Average total waste percentage calculated for the year averaged on four quarters. Zone 8 total compostable waste for 2024-25 was calculated based on based on three quarters. A more precise annual average annual waste percentage couldn't be calculated because of the missing fourth quarter data.

That reflects on the actual tonnage entering the landfill as shown in table E. There are no entries on the line for zone 8 on that table.

Table E: Estimated Annual Compostable Waste based on February 2026 Data

Waste Collection Area	Three Year Waste Average (Tonnes)	February 2026 Total Compostable Waste	Estimated Annual Compostable Waste (Tonnes)
1	9886.00	14.71*	1454.60
2	6744.75	8.14%	549.09
3	4435.01	9.26%	410.65
4	5337.22	7.22%	385.09
5	8633.03	11.68%	1008.24
6	5075.21	13.91%	705.72
7	2894.99	9.28%	268.61
8	-	-	-
Condos	2242.28	28.36%	635.99
Total	45248.49	N/A	5418.00
Compostable Waste Percentage = (5418.00/45248.49) X 100 = 11.97%			

Notes:

1. Data used to calculate three-year average provided by Mirror and included tonnage from the fiscal years 2022/2023, 2023/2024, and 2024/2025.
2. * February 2026 Total Compostable Waste percentage for Area 1 is based on average of the two samples (1A and 1B) collected during the November 2025 waste audit.
3. No sample was collected from Area 8 during the February 2026 audit due to inclement weather.

However, when calculating the Estimate Annual Compostable tonnage and percentage for the 2024-25 year, a calculation is again made for zone 8 based on three audits while all other zones and condos are based on 4 quarterly audits.

Waste Collection Area	Three Year Waste Average (Tonnes)	Three Year Waste Average (% Total)	Average Total Compostable % Per Area	Estimated Annual Compostable Waste (Tonnes)
1	9886.00	20.39%	10.28%	1016.40
2	6744.75	13.91%	11.82%	797.50
3	4435.01	9.15%	9.54%	423.18
4	5337.22	11.01%	8.03%	428.49
5	8633.03	17.81%	9.83%	848.24
6	5075.21	10.47%	8.36%	424.40
7	2894.99	5.97%	9.39%	271.89
8	3230.78	6.66%	13.32%	430.30



February 2026 Performance Audit, Otter Lake Waste Processing & Disposal Facility
Mr. Steve Copp
Mirror Nova Scotia Limited

March 23, 2026
Project # 22-8641

Waste Collection Area	Three Year Waste Average (Tonnes)	Three Year Waste Average (% Total)	Average Total Compostable % Per Area	Estimated Annual Compostable Waste (Tonnes)
Condos	2242.28	4.63%	16.76%	375.89
Total	48479.27	100.00%	N/A	5016.28
Compostable Waste Percentage = (5016.28/48479.27) X 100 = 10.35%				

Notes:

1. Data used to calculate three-year average provided by Mirror and included tonnage from the fiscal years 2022/2023, 2023/2024, and 2024/2025.

According to the calculations, 430.3 tonnes of compostable waste enter the Otter Lake Landfill each year. However, in the absence of fourth quarter information, that is based on incomplete information and may not be entirely accurate although the process is considered acceptable.

In the May audit, zone 8 had the second highest percentage behind condos but was below 10% its estimated annual contribution to the landfill was 319.85 tonnes to the landfill.

In the August audit, zone 8 had the third highest percentage and at 11.76% was beyond 10% and its annual landfill contribution was estimated to be 380.09 tonnes.

In the November audit, zone 8 had the highest at 18.29% and it was estimated that it contributed 590.91 tonnes of compostable waste annually to the landfill.

Another factor to be considered is that in the fourth quarter, five of the remaining 8 districts including condos experienced spikes in the volume of compostable waste going into the landfill and four were over the 10 per cent.

I plugged zone 8's November numbers in for the fourth quarter just to see how the statistics would be impacted. I realize that that is not acceptable and Jordan Vallis reinforced that when we met earlier this month. However, I just wanted to test how that would affect the numbers.

When November's numbers were used for the fourth quarter in zone 8, the average total compostable waste in tonnage would be 470.44 tonnes not 430.3 and the compostable waste percentage would be 10.43 not 10.35.

Again, making up numbers to insert in a blank quarter is unacceptable but the test reveals how important it is to have all four quarters counted to get an accurate percentage of the organic waste entering the landfill each year.

This past year is not an anomaly. The exact same thing happened in the fourth quarter of last year for the same zone, zone 8. Winter weather prevented the February collection there and affected the numbers in the same way.

From: Reg Rankin rankinreginald@gmail.com
Subject: Re: HRM Solid Waste Update to CMC
Date: June 25, 2026 at 6:00 PM
To: Shannon Betts bettss@halifax.ca
Cc: Betsy Chambers betsy.chambers@ns.sympatico.ca

RR

Thank you Shannon for your below correspondence below– received late today.

It is my intention to respond to you by this Monday, June 29th.

For your information, I have copied your email to our CMC Administrator , as noted above.

Reg
Chair, CMC

Sent from my iPhone

On Jun 25, 2026, at 5:38PM, Betts, Shannon <bettss@halifax.ca> wrote:

Good afternoon Reg,

Please find below an update on where things currently stand with the Otter Lake Compliance Plan and potential next steps.

First, I want to emphasize that HRM continues to share the same goals as the Community Monitoring Committee, consistent with the original agreement. Ensuring the facility is operated in a sound, responsible manner that protects the surrounding community remains our priority. Transparency and maintaining a strong relationship with the CMC are important to us, and we will continue to engage with the committee as appropriate.

The annual Compliance Plan report has been submitted and is under review by NSECC. While we do not have a timeline, we anticipate conversations with the province whether any modifications or conditions may be set within the operating approval. In the meantime, we will continue to conduct quarterly audits and conduct follow-up as usual. As discussed, continued representation from the CMC during audits is requested. Additionally, the idle state of the FEP/WSF infrastructure will be maintained until further direction is given.

I can share that it is our intention to request flexibility from NSECC in how future audits are conducted (e.g., removing the requirement for a third-party auditor), and to shift metrics from 10% composition to one that more accurately reflects the success of our diversion programs (e.g., green cart capture rate). We expect discussions will also include expectations around the future of the FEP/WSF.

Once we have an indication of any conditions from NSECC, Solid Waste

Resources will be required to update Regional Council to seek formal direction on any recommendations. We do not anticipate that happening until late 2026 or early 2027. As expressed above, we will include engagement with CMC as appropriate throughout that process.

Please feel free to reach out if you have any questions or would like to discuss any of this further. I am also happy to discuss with the committee at a future meeting.

Best regards,

Shannon

SHANNON BETTS
SHE/HER

DIRECTOR
SOLID WASTE RESOURCES | PUBLIC WORKS

C. 902.476.2470

HALIFAX



The Halifax Regional Municipality is located in Mi'kma'ki, the ancestral and traditional lands of the Mi'kmaq people. The municipality acknowledges the Peace and Friendship Treaties signed in this Territory and recognizes that we are all Treaty People.

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Chair, Community Monitoring Committee
PO Box 213
Lakeside Nova Scotia, B3T 1M6

Ms. Shannon Betts
Director, Halifax Solid Waste
Halifax Regional Municipality
(via email)

June 30, 2026

Dear Shannon,

Further to your email of June 25, which I was pleased to receive, I want to draw your attention to the perspectives of the CMC and The Halifax Waste Resource Society (HWRS).

Should HRM contemplate changes to either the Front End Processor (FEP) / Waste Stabilization Facility (WSF), the long-standing legal advice provided to the HWRS, a party to the governing February 1999 Agreement for Community Monitoring of Solid Waste Facilities, states: *"Under the terms of the Agreement, HRM is required to ensure that only Acceptable Waste (as defined in the Agreement) may be disposed at the Otter Lake Landfill. In doing so, HRM committed to front end processing of incoming waste to remove putrescible material."*

We strongly contend, that this cited legal opinion, a copy of which I believe you have, remains unchanged. Our legal counsel concluded that in her considered opinion: *"The parties to the Agreement (HRM and the Society) may agree to amend the terms of the Agreement. However, that process would not be a consultation under the Agreement, but instead a renegotiation of the Agreement's terms."*

Consequently, the CMC and HWRS respectfully request that any changes to the status quo, either in the conduct of the quarterly performance audits or the amount of organic waste permitted to enter the landfill, be matters for renegotiation in coming months with the HWRS under the 1999 Agreement.

Both the CMC - and the HWRS - stand ready to renegotiate the terms of the Agreement.

In the meantime, we cannot consent to HRM relying on the Nova Scotia Department of Environment and Climate Change (NSDECC) to issue an "approval" that would permit the HRM to remove or dismantle the FEP/WSF facilities, now maintained in a "hot-idle"

position, in readiness to be reactivated. If this were to happen without having renegotiated the terms of the 1999 Agreement, we believe HRM would be in violation of its 1999 Agreement with the HWRS.

You may be aware, through the inquiries of our Liaison Assistant, we also have concerns about incomplete data that went into the weighted compostable waste percentage of 10.35% reported to the NSDECC for May 2025, August 2025, November 2025 and February 2026. We are endeavouring to sort this out with Jordan Vallis.

In light of your June 25 email, the HWRS and CMC expect to hold a joint open meeting in July to which HRM will be invited to state and discuss its intentions concerning greater flexibility in how future audits are conducted, and the changes sought in the amount of allowable organic material by mass entering the landfill, now targeted at 10% by the NSDECC.

Should the CMC fail to receive prior assurance from HRM that a re-negotiation of the 1999 Agreement will take place in relation to HRM's objectives in this regard, immediately following the open session, separate in-camera sessions will be held for CMC members and staff, and for the HWRS to discuss arising legal issues.

It would be a great disappointment to the membership of the CMC and to the HWRS if HRM decided to act in breach of the 1999 Agreement, which was signed in good faith by the HWRS, representing the interests of the residents and communities surrounding the Otter Lake landfill.

Sincerely,

A handwritten signature in black ink, appearing to read 'Reginald Rankin', written in a cursive style.

Reg Rankin
Chair, CMC
President, HWRS



July 10, 2026

Reg Rankin
Chair
Community Monitoring Committee

Reg.

Thank you for your letter, dated June 30, 2026 in which you share the current perspectives of the CMC and HWRS.

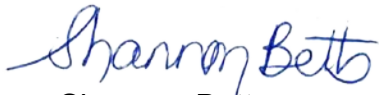
There are a few items in your letter which I would like to clarify. First, the annual Compliance Plan report is currently under review by the Nova Scotia Environment and Climate Change (NSECC). Until NSECC provides HRM with any recommendations or directives resulting from its review, HRM staff will not be moving forward, nor proposing future changes to any process or any agreements. Any changes or updates would first require direction from Regional Council, and given NSECC continued review, no such Council direction has been sought or received.

Second, my June 25, 2026 correspondence to you did not indicate that HRM was seeking removal of the FEP/WSF. Any determinations regarding the FEP/WSF will be made after the NSECC review has concluded and will be subject to Council approval.

With respect to the July 23 in-person meeting of the CMC, I am open to attending and be prepared to discuss the difference between the current 10% composition metric and diversion measures such as capture rates, as well as the intent behind exploring options for the audit process. However, discussion regarding the future of the FEP/WSF and any need to renegotiate the 1999 agreement or establish an MOU would, in my opinion, be premature at this time as I would have no direction from Council on next steps.

I reiterate the same messages I had in my correspondence to you – that HRM shares the same goals as the CMC. Ensuring the facility is operated in a sound, responsible manner that protects the surrounding community remains HRM's priority. Transparency and maintaining a strong relationship with the CMC are important to HRM, and HRM will continue to engage with the committee as appropriate.

Sincerely,

A handwritten signature in blue ink that reads "Shannon Betts". The signature is fluid and cursive, with the first name "Shannon" and last name "Betts" clearly distinguishable.

Shannon Betts

Director
Solid Waste Resources | Public Works
Halifax Regional Municipality

Cell 902.476.2470
Email bettss@halifax.ca



August 26, 2026

Community Monitoring Committee Members
c/o Reg Rankin, Chair

Dear CMC Members,

Please find below responses to the environmental questions submitted to my attention via email on July 22, 2026. For reference, I have also attached the Otter Lake Compliance Report 2025 which was submitted to Nova Scotia Environment and Climate Change (NSECC) and shared with the CMC on May 21, 2026.

1. What specific shortcomings has HRM identified with the existing 10% putrescible/compostable waste composition metric that are causing HRM to consider an alternative measure such as capture rate?

The percent-based metric is a ratio of the identified materials to the total garbage stream. As such, it is not a direct measurement of the actual quantity of organic material being landfilled.

Because the metric is influenced by fluctuations in the quantity of acceptable waste¹ (garbage) arriving at the Otter Lake Facility, the percent changes can disproportionately represent changes in the actual tonnage of organics received. As shown in the table below, between 2022 and 2023, the percent of compostable material declined by 0.77%, while the estimated tonnage of organics only decreased by 1%. Between 2023 and 2024, the percentage declined by just 0.14%, while the estimated tonnage of organics decreased by nearly 18%.

¹ For example, new diversion programs through extended producer responsibility or an influx of waste generation resulting from flooding can affect the garbage stream but have no impact to generation of organics.

	2022	2023	2024	2025
% Compostable	12.41%	11.64%	11.50%	10.35%
Decrease in % vs previous year		- 0.77%	- 0.14%	- 1.15%
Estimated Tonnes of Organics	3,556	3,513	2,891	1,833
Decrease in tonnes vs previous year		- 1.0%	- 17.7%	- 36.6%
Green Cart Capture Rate	91.4%	91.1%	92.4%	95.3%

HRM recognizes that capture rate measures the proportion of organics diverted from landfill rather than the proportion remaining in the garbage stream. Comparing organics captured in the green cart to total organics generated provides a more direct indication of performance and more clearly identify opportunities for improvement. As shown in the table above, an estimated 4.7% of household organics generated in 2025 were landfilled, compared to 8.6% in 2022. This improvement was achieved through the targeted action items outlined in the Compliance Plan and had a direct impact on the actual quantity of organic material present in the waste stream.

That said, because these metrics are derived from the same underlying data, the percentage ratio, capture rate, and estimated tonnes could all continue to be calculated and reported.

2. How exactly would HRM propose calculating a capture rate, including what waste streams would be included in the numerator and denominator and what data would be used to establish those quantities?

HRM already calculates and reports green cart capture rates and generation rates to NSECC. Capture rate is calculated using residential green cart tonnage as the numerator. The denominator consists of the residential green cart tonnage plus the estimated tonnage of green cart material identified through landfill audits. These numbers together equal the total estimated quantity of organics material generated, based on the assumption that all organics are disposed either in the green cart or the garbage.

Additional information on capture rate calculations is provided in Section 4.3 of the 2025 Compliance Report.

3. How would a capture rate metric provide equivalent or better environmental protection than directly measuring the percentage of putrescible material actually arriving at Otter Lake?

As noted in Response 1, neither the percent-based metric nor a capture rate directly measures the actual amount of putrescible material arriving at the Otter Lake Facility.

Environmental protection is not measured by either of these metrics, but rather through the comprehensive monitoring of indicators including landfill gas generation, odour management, leachate treatment and the operational practices and infrastructure in place to manage these factors.

Improved outcomes are achieved by identifying where unacceptable materials are entering the waste stream (i.e., specific curbside collection areas or condo properties) and then implementing targeted education and enforcement measures to improve source separation.

4. Has HRM or NSECC already developed, modelled or evaluated any alternative thresholds, capture-rate targets, audit methodologies or other compliance metrics? If so, can those technical analyses and supporting data be provided to the CMC for review?

HRM has not developed alternate thresholds or targets. No alternate audit methodologies or compliance metrics have been reviewed outside of what is reflected in this response. HRM is also not aware of any alternative methodologies or targets currently being developed or evaluated by NSECC.

At present, the only solid waste metric reported through HRM's [Strategic Performance Snapshot](#) (which is unrelated to the Compliance Plan) is per capita waste disposal. Because this metric includes residential, commercial, and industrial waste sources, it is difficult for many residents to relate directly to their own impact.

Staff are evaluating additional key performance indicators that may better communicate individual and household contributions to waste diversion. Examples could include tonnes of garbage or organics generated per household, or organics capture rates. Any changes to performance reporting would be considered through HRM's business planning process.

5. When HRM refers to wanting greater flexibility in the audit process, what specific components of the existing audit methodology does HRM believe should change — sampling frequency, sample size, timing, waste classification, weighing procedures, calculation methodology, or something else?

HRM does not intend to seek changes to core audit methodologies currently in place.

HRM would like the requirement for a third-party auditor to be removed as we believe this requirement creates unnecessary costs, scheduling conflicts and can delay reporting timelines. HRM and MIRROR both have in-house expertise capable of conducting these audits and the necessary data analysis. Members of the CMCM and CMC technical consultants continue to be welcome to attend these audits for oversight.

Related to waste classification, HRM would like the materials currently classified by NSECC as "compostable" to be reported separately by waste stream, such as recycling (paper and cardboard) and green cart material (food waste, yard waste, and soiled food paper). While paper and cardboard will degrade in a landfill environment and are a priority for diversion, HRM's position is that they should not be classified as compostable within the audit methodology. To further clarify, it is not the intention that any waste streams currently reported would be removed, just that they would be broken into separate categories.

6. Can you address the CMC's concern that the underlying dataset is incomplete?

This concern relates to a missed sample resulting from winter collection cancellations in Area 8. Consistent with standard waste audit practices, Strum addressed the missing sample by averaging samples from the three available audits (instead of four). This is a recognized and accepted approach in waste audit data analysis.

For context, if an average value based on previous years' Area 8 samples had been incorporated into the dataset of the fourth audit, the overall percentage of organics would have increased by 0.01% from 10.35% to 10.36%.

This example also highlights a potential benefit of greater flexibility within the audit process, as audits could be rescheduled when significant weather events are forecast. This is not always possible when working with a third-party vendor.

7. In contemplating a change to the 10% metric, has HRM evaluated what effect allowing a greater proportion of putrescible material into the landfill could have on landfill-gas generation, odour, leachate characteristics and other environmental performance indicators?

For clarity, proposing a change to the metric does not mean that HRM is seeking a less stringent diversion target. HRM's broader diversion objectives and initiatives remain unchanged and continue independently of the Compliance Plan metric.

A different metric also would not alter how audit data is used to identify trends, respond to areas of concern, or guide education and enforcement activities. As demonstrated by the increasing capture rates and declining estimated tonnes of organics entering the landfill, HRM's education, and enforcement programs are proving to be effective.

8. What technical information does HRM expect to receive from NSECC's current Compliance Plan review, and will the complete technical findings, recommendations and supporting information from that review be provided to the CMC before HRM develops its response or proposes operational changes?

For clarity, NSECC is not reviewing the Compliance Plan itself. Rather, it is reviewing the 2025 Compliance Plan Report. Any information or feedback provided will be at NSECC's discretion as the regulatory and oversight authority. At this stage, it would be premature to speculate on the nature or scope of any findings or recommendations that may result from their review.

HRM will provide opportunity for the CMC to review information and engage in discussion as recommendations are developed for presentation to Regional Council.

I hope this has provided some clarity around the questions posed. Please let me know if there are any outstanding or additional points which need to be addressed.

Sincerely,



Shannon Betts

Director
Solid Waste Resources | Public Works
Halifax Regional Municipality

Cell 902.476.2470
Email shannon.betts@halifax.ca

Compliance Report

2025

Otter Lake Waste Processing & Disposal Facility

Compliance Plan Reporting Requirement

Submitted to NS Environment and Climate Change

Prepared by:

Halifax Regional Municipality

April 30, 2026

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Executive Summary

This 2025 Otter Lake Compliance Report provides a summary and analysis of the results for Year 4 of the Otter Lake Landfill Compliance Plan. Overall, HRM finished the year at 10.35% compostable waste, marginally falling short of the Performance Target of 10.00% by 0.35%. However, when curbside residential collection (Areas 1-8) is assessed separately from multi-residential properties (Area 9 - Condominiums), the curbside program achieved a weighted average of 10.04% compostable waste, effectively meeting the target. In contrast, condominiums (also called “condos”) recorded 16.76% compostable waste and did not meet the target. It should be noted that of that 10.35% compostable waste identified in the garbage stream, only 3.81% consisted of green cart program materials (i.e., organic materials or organics), while the remaining 6.54% can be attributed to recyclable paper and cardboard that is now handled by Extended Producer Responsibility (EPR).

HRM continues to note that the “% Compostable Waste” target established by NSECC, made up of both Green Cart and Recycling program materials, is a dynamic (moving) target that cannot reliably guide or measure solid waste system performance. Since it is a ratio derived from characterization audits, changes to either the numerator or denominator can influence the final number. As a result, the target (% Compostable) is influenced not only by the amount of compostable material disposed, but also by fluctuations in non-organic wastes sent to landfill. For example, the % Compostable Waste value will decrease if additional non-compostable garbage is landfilled (i.e., the denominator gets larger), even when the quantity of organics remains unchanged. From a mathematical perspective, this greatly limits the metric’s usefulness as a measure of program success.

Instead, HRM relies on capture and generation rates to more accurately assess the effectiveness of the green cart program in diverting organics from landfill, using performance audits to identify trends and inform targeted education. Across all years of the Compliance Plan, HRM’s green cart program has consistently achieved capture rates above 90%, including periods prior to the closure of the FEP/WSF. Further, the overall capture rate increased from 91.39% in 2022 prior to the Compliance Plan, to 95.26% in 2025, indicating that only around 4.74% of total generated residential green cart materials were disposed of as garbage in 2025.

This represents an exceptionally high residential capture rate when compared to similar Canadian cities such as Saskatoon¹ (52.3% capture), Ottawa² (41% capture), and Hamilton³ (48.8% capture).

From a strictly quantitative perspective, the estimated tonnage of green cart material landfilled has declined significantly, decreasing from approximately 4,100 tonnes in 2019 (prior to the closure of the FEP and WSF) to 1,833 tonnes in 2025. This represents a 55% reduction over six years, including a 37% decrease compared to 2024, in spite of the population increase that HRM has seen. On a per-household basis, the kilograms per household (kg/hh) of green cart waste going into the landfill has fallen from 23.3 kg/hh in 2022 when the FEP was open, down to 11.8kg/hh in 2025.

Green Cart Waste in Landfill		
Year	Status	kg/hh
2019	FEP/WSF Open	27.7
2022	FEP/WSF Open	23.3
2025	FEP/WSF Closed	11.8

¹ <https://pub-saskatoon.escribemeetings.com/filestream.ashx?DocumentId=219930>

² <https://engage.ottawa.ca/12201/widgets/214079/documents/164793>

³ Extracted from 2023 RPRA Datacall Statistics at <https://rprr.ca/programs/about-the-datacall/>

Table of Contents

Executive Summary	3
Section 1 – Introduction	1
Section 2 – 2025/26 Performance Audits	2
2.1 Background	2
2.2 Performance Audit Results for 2025/26	3
2.2.1 Compostable Waste	3
2.2.2 Household Special Waste (HSW) and Small White Goods	5
2.2.3 Total Results	6
Section 3 – 2025 Compliance Plan Diversion Measures	7
3.1 NEW: Public Education and Curbside Enforcement Plan	7
3.2 Public Education	8
Food Isn't Garbage Campaign	8
Feedback Monitoring – Compostable Waste, HSW, Small White Goods	8
3.2 HSW Promotion and Education	11
3.3 Curbside Enforcement	12
3.3.1 New stickering categories	12
3.3.2 Curbside Monitoring	12
3.4 Landfill Operations - WDRs	13
Section 4 - Analysis	14
4.1 Compliance Plan Results	14

4.2 Curbside Collections vs. Multi-residential	16
4.3 How HRM Uses the Audit Data – Capture and Generation Rates	17
Section 5 – Next Steps	19
Section 6 – Progress Summary: Halifax Solid Waste Strategy	20
ATTACHMENTS	21

Tables

Table 1 - Collection Area Descriptions and Performance Audit Sample Frequency.....	3
Table 2 - Performance Audit Compostable Materials Results for 2025/26 by Area.....	4
Table 3 - Comparison of % Compostable Waste for Year 4 (2025/26) to Prior Years.....	4
Table 4 - Comparison of Performance Audit Results to Baseline for HSW and Small White Goods, by Area	5
Table 5 - Comparison of 2025/26 Weighted Averages for HSW and Small White Goods to Prior Years.....	5
Table 6 - Summary of Feedback Monitoring for 2025.....	9
Table 7 - Stickers Counts for 2022 to 2025 - Compostable Waste and Cardboard	12
Table 8 - Residential WDRs for 2025 in comparison to previous years.....	13
Table 9 - Breakout of Fibre, Food, and Yard Wastes in the Performance Audits for 2025/26	14
Table 10 - Materials breakdown comparison for the previous two years	14
Table 11 - Analysis of Year 3 Performance Audit Results to the Baseline Year	15
Table 12 - Weighted % compostable waste for curbside collection (condos removed).....	16
Table 13 - Weighted % compostable waste for condominiums	16
Table 14 – Residential green cart generation and capture rates for 2025	17
Table 15 - Green cart program capture rates for 2022 to 2025	18
Table 16 – Residential green cart materials estimated to be going to landfill, in metric tonnes..	18
Table 17 - Compliance Plan Strategy for 2026	19

Figures

Figure 1 – Weighted Average Fraction by Material Type for 2025/26 Performance Audits.....	6
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Section 1 – Introduction

On March 22, 2022 Nova Scotia Environment and Climate Change (NSECC) issued an updated Municipal Approval (2008-065580-07) for the Otter Lake Waste Processing & Disposal Facility (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.

Approval Condition 16 states:

16. Performance and Limits

- a. *The Performance Targets for this Facility include:*
 - i. *Compostable waste shall not exceed ten percent (10%) of total amount of municipal solid waste landfilled, by mass;*
 - ii. *White Goods and bulky wastes that can be recycled and that can be safely removed from the solid waste delivery vehicle or the RDF tipping face shall be removed and stored in accordance with the approved Operations and Maintenance Manual;*
 - iii. *Dangerous/Waste Dangerous Goods/Household Hazardous Wastes that are visible and can be safely removed from the solid waste delivery vehicle or the RDF tipping face shall be removed and stored in accordance with the approved Operations and Maintenance Manual.*

Approval Condition 21 outlines the requirements for achieving Performance Targets as follows:

21. Site Specific Conditions

- a. *Prior to the discontinuation of the use of the FEP and WSF, the Approval Holder(s) shall submit to the Department a Compliance Plan detailing how the facility will achieve its Performance Targets, complete with milestone dates.*

On November 30, 2022, NSECC notified HRM of the acceptance of the Compliance Plan. Following the four baseline Performance Audits (May 2022 to Feb 2023), the Municipality developed and submitted milestone dates and interim targets to NSECC in March of 2023. On September 20th, 2023, NSECC accepted the Municipality's timeline to work toward the long-term target of 10% compostable waste in the garbage stream as follows:

Milestone Date	HRM Designation	Interim Performance Target
Baseline	Year 1 (Baseline)	Compostable Waste at 12.41%
March 31, 2024	Year 2	Compostable Waste at 11.61%
March 31, 2025	Year 3	Compostable Waste at 10.81%
March 31, 2026	Year 4	Compostable Waste at 10.00%

This report is intended to satisfy the reporting requirements for both the operating approval and the September 20, 2023 letter from NSECC requiring an annual Compliance Report, including:

- The annual composition of Compostable Waste in the incoming residential stream, both total and per HRM sub-area, including in comparison to the baseline year total and accepted targets;
- The annual composition and type of banned⁴ materials not removed at the tipping face of the RDF, based upon Performance Audits;
- Providing progress updates for activities identified in the Compliance Plan to promote the reduction and diversion of waste from the landfill; and,
- Identifying how activities in the Compliance Plan will be focused during the next reporting year for capturing and diverting materials based on HRM's analysis of the results of the Performance Audit.

Section 2 – 2025/26 Performance Audits

2.1 Background

Performance Audits are completed in accordance with Approval Condition 21.e., which states:

21. Site Specific Conditions

- e. *The Approval Holder(s) shall conduct Performance Audits of the incoming Municipal Solid Waste, noting specifically the volumes at the RDF tipping face, to track compliance with the Facility's Performance Targets and Compliance Plan.*
 - I. *The Approval Holder(s) shall conduct Performance Audits at a minimum frequency of once per quarter.*
 - II. *The Approval Holder(s) shall conduct the first Performance Audit within ninety (90) days of the effective day of this approval.*
 - III. *As per Condition 3.i.) the Approval Holder(s) shall immediately notify the Department of a non-compliance determination from a Performance Audit.*
 - IV. *At the direction of the Department, the Approval Holder(s) shall retain the services of a third-party to conduct the Performance Audits.*

⁴ As noted under the Solid Waste - Resource Management Regulations, Schedule "B"

A standard Performance Audit process was established, as detailed in the Compliance Plan⁵, to characterize the current composition of Compostable Waste in the incoming residential waste stream and to assess progress toward Performance Targets set in the Compliance Plan.

The number of samples per collection area for the 2025/26 Performance Audits is shown in Table 1, with the annual minimums in brackets. Due to weather-related cancellations for waste collections, no sample was able to be taken in Area 8 for the February 2026 event, and no recovery was possible due to concurrent cancellations of curbside collection. As such, the number of samples for Area 8 is one fewer than required. Calculations and analyses for Area 8 were based on the three available audits (May, August, and November 2025).

Table 1 - Collection Area Descriptions and Performance Audit Sample Frequency

Collection Area	Area Description	# of Samples (annual minimum)
Area 1	Halifax (former city limits), Spryfield	5 (5)
Area 2	Dartmouth (former city limits)	5 (5)
Area 3	Bedford, Hammonds Plains, Pockwock	5 (5)
Area 4	Beechville-Timberlea, Herring Cove and all areas west (Prospect, Peggy's Cove, St. Margaret's Bay to Hubbards)	4 (4)
Area 5	Sackville, Beaver Bank, Fall River, Waverley, Wellington, Dutch Settlement	5 (5)
Area 6	Cole Harbour, Westphal, Cherry Brook, Eastern Passage, Cow Bay and Area	4 (4)
Area 7	Porters Lake, Lawrencetown, Chezzetcook, Lake Echo, Preston, and Area	4 (4)
Area 8	Middle Musquodoboit, Elderbank, Musquodoboit Harbour, Sheet Harbour and Eastern Shore	3 (4)
Condos	Multi-residential style properties located in various communities.	4 (4)
Total Minimum # of Samples		39 (40)

2.2 Performance Audit Results for 2025/26

2.2.1 Compostable Waste

The Performance Audit reports supplied by Strum have been attached to this report. The quarterly and annual results for percent compostable waste are summarized in Table 2. The

⁵ https://cdn.halifax.ca/sites/default/files/documents/home-property/garbage-recycling-green-cart/2022-11-22-otter-lake-compliance-plan-final-updated_redacted_encr.pdf

total weighted average per cent compostable materials for the 2025/26 fiscal year is 10.35%, which is 0.35% above the March 31, 2026 Performance Target of 10.00%.

Table 2 - Performance Audit Compostable Materials Results for 2025/26 by Area

Collections Area	% Compostable Waste				2025/26 Average
	May 2025	August 2025	November 2025	February 2026	
Area 1	9.40%	10.05%	6.95%	14.70%	10.28%
Area 2	11.82%	17.70%	9.64%	8.14%	11.82%
Area 3	5.17%	11.74%	12.00%	9.26%	9.54%
Area 4	7.58%	12.41%	4.91%	7.22%	8.03%
Area 5	8.26%	11.30%	8.06%	11.68%	9.83%
Area 6	5.30%	6.82%	7.42%	13.91%	8.36%
Area 7	2.54%	8.83%	16.92%	9.28%	9.39%
Area 8	9.95%	11.76%	18.29%	-	13.34%
Condos	17.05%	6.95%	14.70%	28.36%	16.76%
Total Weighted % Compostable Waste⁶	8.50%	11.31%	9.52%	11.97%	10.35%

Table 3 summarizes and compares the Year 4 results for fiscal year 2025/26 to the previous two years. A more detailed analysis is available in Section 4.

Table 3 - Comparison of % Compostable Waste for Year 4 (2025/26) to Prior Years

% Compostable Waste Comparison - 2025/26 to Prior				
Collection Area	2022/23 Baseline	2023/24	2024/25	2025/26
1 - Halifax	15.15%	10.90%	11.19%	10.28%
2 - Dartmouth	14.50%	11.23%	10.44%	11.82%
3 - Bedford/Hammonds Plains	14.59%	14.33%	12.57%	9.54%
4 - Western County	9.30%	14.98%	9.91%	8.03%
5 - Sackville/Beaver Bank/Fall River/Waverley	11.70%	9.04%	9.91%	9.83%
6 - Cole Harbour/Eastern Passage/Cow Bay	9.42%	9.03%	9.33%	8.36%
7 - Porters Lake/Preston/Lake Echo	8.90%	6.14%	7.65%	9.39%
8 - Eastern Shore/Musquodoboit Valley	10.55%	13.09%	13.06%	13.32%
Condos	13.75%	22.72%	30.62%	16.76%
Total Weighted % Compostable Waste	12.41%	11.64%	11.50%	10.35%

⁶ Total Weighted % Compostable Waste as calculated by Strum (see attached reports for methodology)

2.2.2 Household Special Waste (HSW) and Small White Goods

As part of the Compliance Plan, the characterization of Household Special Waste (HSW) and Small White Goods was added to the Performance Audits, beginning on November 28, 2022. Table 4 compares the 2025/26 Performance Audit results for both HSW and Small White Goods for each area to the prior years of 2022/23 (Baseline Year), 2023/24 (Year 2), and 2024/25 (Year 3), with Table 5 comparing the overall annual weighted averages to the prior years. Overall, HSW trended downward, dropping 12.5% over 2025/26, for a total reduction of 86.3% in comparison to the start of the Compliance Plan. Small White Goods also trended down in 2025/26, dropping 36.0%, for a total reduction of 32.5% in comparison to the first year of the Compliance Plan.

Table 4 - Comparison of Performance Audit Results to Baseline for HSW and Small White Goods, by Area

Area	HSW				Small White Goods			
	2022/23	2023/24	2024/25	2025/26	2022/23	2023/24	2024/25	2025/26
	Baseline	Year 2	Year 3	Year 4	Baseline	Year 2	Year 3	Year 4
Area 1	0.50%	0.29%	0.04%	0.00%	0.88%	0.87%	1.23%	0.30%
Area 2	0.18%	0.00%	0.02%	0.10%	3.10%	1.47%	1.75%	1.40%
Area 3	0.26%	0.12%	0.11%	0.10%	1.26%	0.81%	1.24%	0.50%
Area 4	1.78%	0.23%	0.09%	0.10%	0.45%	0.91%	1.94%	0.50%
Area 5	0.11%	0.12%	0.14%	0.20%	1.78%	1.14%	1.93%	2.50%
Area 6	0.50%	0.19%	0.14%	0.10%	1.44%	0.69%	0.99%	0.50%
Area 7	0.16%	0.27%	0.06%	0.00%	0.79%	1.16%	1.64%	2.80%
Area 8	0.24%	0.17%	0.04%	0.00%	4.17%	1.53%	3.91%	0.90%
Condos	1.31%	0.22%	0.08%	0.00%	1.13%	0.71%	2.01%	0.30%

Table 5 - Comparison of 2025/26 Weighted Averages for HSW and Small White Goods to Prior Years

Material	2022/23	2023/24	2024/25	2025/26
HSW	0.51%	0.18%	0.08%	0.07%
Small White Goods	1.63%	1.04%	1.72%	1.10%

2.2.3 Total Results

Figure 1 displays the Performance Audit Results for 2025/26 for all wastes sampled. Overall, approximately 3.67% of the weighted average was Food/Putrescible waste, with 3.38% mixed paper, 3.19% cardboard, 0.17% yard waste, 1.1% white goods, 0.07% HSW, and 88.41% other wastes. Overall, Food and Yard Waste (Green cart⁷) decreased to 3.81% from 6.33% in the previous year, whereas Fibre (Recycling) increased to 6.57% from 5.17% in 2024/25. Overall, the ratio of degradable waste to other wastes decreased by 1.12%.

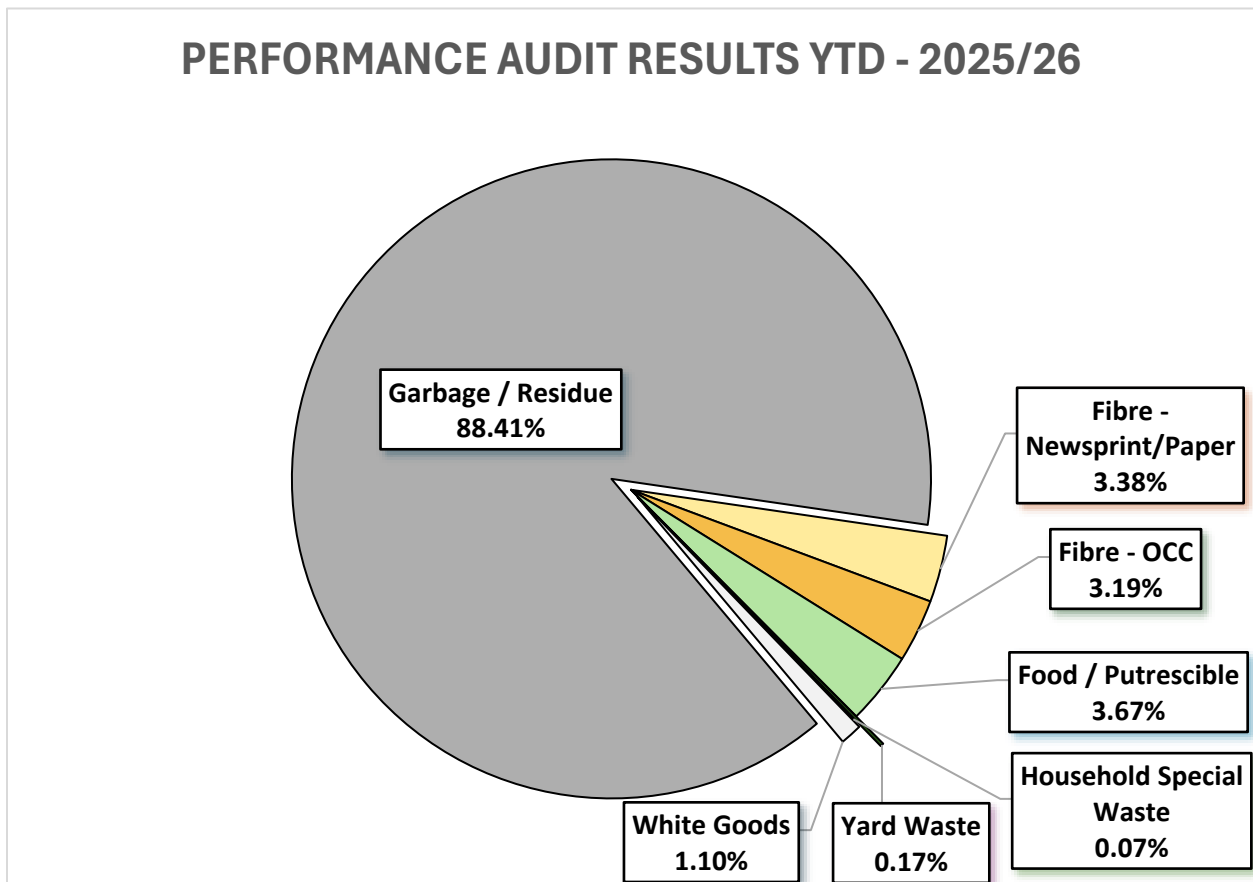


Figure 1 – Weighted Average Fraction by Material Type for 2025/26 Performance Audits

⁷ <https://www.halifax.ca/home-property/garbage-recycling-green-cart/green-carts-leaf-yard-material>

Section 3 – 2025 Compliance Plan Diversion Measures

3.1 NEW: Public Education and Curbside Enforcement Plan

HRM's education and enforcement response to results from Performance Audits was refined and improved during the 2024/25 Compliance Plan Year, and its implementation continues. This process is intended to be flexible, and is reviewed quarterly for effectiveness and to ensure that it is still meeting the intent of the Compliance Plan response. HRM's response to Performance Audits according to the plan is as follows:

- A response team meets, consisting of the Manager of Engineering and Contract Services, Manager of Education and Promotion, Manager of Collection Services, education staff, and the Contract Coordinator (solid waste engineer).
- Performance Audit results are reviewed along with other data, including the truck routes where samples were taken from, to identify residential areas and condominium buildings that require further education and monitoring.
- Results for each collection area are assessed for action according to the following criteria, although the response remains flexible as needed:
 - Equal to or below interim target – Good result, no immediate action required.
 - Within 0-5% of interim target – Geotargeted social media advertising and a Halifax Recycles app campaign focused on the collection areas above target.
 - Within 5-10% of interim target – Combination of geotargeted social media advertising and app campaign.
 - For results greater than 10% above the interim target percentage:
 - Curbside Hauler Audit in which HRM staff are on-site to review waste hauler performance in properly stickering and rejecting non-conforming waste.
 - Feedback Monitoring is conducted the following collection week after the Curbside Hauler Audit, which can include on-site curbside review of resident waste and door-to-door information packages delivered by educators. In the case of condominium buildings, this includes door-to-door visits to each unit in a building.
- Response team discusses additional strategies for repeat areas that may include enhanced education campaigns.
- Education on specific subjects is also given to residents for items audited in the Compliance Plan. Examples include education on the HRM Recycles' Facebook⁸ site and "Ask Ally" series⁹ on YouTube, addressing identified issues and trends at our Recycling 101 booths across the municipality, and what goes where presentations at apartment buildings, condos and schools.

⁸ <https://www.facebook.com/HalifaxRecycles/>

⁹ <https://www.youtube.com/playlist?list=PL881F39154B29FE39>

3.2 Public Education

Food Isn't Garbage Campaign

As part of the Compliance Plan, HRM implemented an ongoing *Food Isn't Garbage* campaign in 2022 to promote reducing and diverting Compostable Waste. This campaign has been promoted via organic unpaid social media posts and media interviews, as well as through paid advertisements including social media, print, radio, billboards, cinema, and bus shelters. This has been incorporated into operational messaging and education initiatives such as school presentations and community events.

The Food Isn't Garbage campaign continued throughout 2025 with the following:

- Geotargeted HFX Recycles App notifications and social media messaging to residents in areas with a high amount of compostable waste in the Performance Audits.
- Radio ads, on Virgin and Q104.
- Pattison Digital Display Ads along Upper Water St., Duke St., and Barrington St.
- Advertising and promotion, including advertisements that have been placed on Cineplex Screens, billboards, and bus shelters throughout HRM, as well as promoting through media interviews regarding food waste. In 2025, this was expanded to office towers, including Barrington Tower, Purdy's Wharf, and Metropolitan Place, as well as a number of others, advertisements being placed in Pattison Elevators in 10 locations over a 6 week period as well as Spotify advertisements.
- Continuing to support business and schools.
- The use of marketing materials, including Food Isn't Garbage labels, for business visits.
- Webinars – 30-minute monthly webinars are offered on-demand to the public focusing on reducing food waste.
- Various ads using Google, Bell Media Mobile Ads, Post Media digital screenings, The Coast, and others.
- Regular social media posts – Facebook posts promoting the reduction and diversion of food waste (What Goes Where Wednesday, etc.). Topics included, but weren't limited to, vape batteries, aerosol cans, unused medications, used oil, and many others.

Feedback Monitoring – Compostable Waste, HSW, Small White Goods

Feedback Monitoring as part of the Compliance Plan consists of targeted waste education to specific geographical areas of the municipality based on Performance Audit results, including providing door to door education packages and targeted social media campaigns. In 2025, based on the Performance Audit results, HRM conducted feedback monitoring in geographical areas with elevated Compostable Waste in the garbage stream as summarized in Table 6.

Table 6 - Summary of Feedback Monitoring for 2025

	Date	Area	Streets/Units	Total # of residences/ units monitored:	Total # of residences to receive letters:	Total # of residences to receive stickers:	Total # of stickers issued:
Q1	Jan 09, 2025	Area 3: Bedford Condos	61 Nelson's Landing - 79 Units 174-178 Rutledge St. - 36 Units 118-122 Rutledge St. - 36 Units	151	EDUCATION PACKAGES		
	Jan 28, 2025	Area 3: Hammonds Plains (Kingswood)	Voyageur, St George's, Crestfield, Seth Aaron, Verge, Brenda, Kingswood, George Samuel, Ramar, Anahid, Cresco, Matthew, Lakefront	300	12	12	14
Q2	Mar 26, 2025	Area 4: Western County, Hatchet Lake	Prospect (west of Mills), Old Coach, McDonald Lake, Forest Glade, Fiddle, Park, Prospect River, Eagleview, Brookside, Jarret, Lakewood, Northcliffe	150	10	9	14
	Apr 04, 2025	Area 6: Cole Harbour (Cherry Brook)	MacLaughlin, Cherry Brook, Riley, Bundy, Lake Major, Old German, Chamberlain, Neilson	200	19	19	31
	Apr 07, 2025	Area 2: Dartmouth (Ellenvale)	Lucien, Whynette, Spar, Cross, Dewhurst, Topsail, Skyvue, Grimes, Stuart Harris, Owens, Digby	350	45	46	81
	Apr 10, 2025	Area 3: Bedford Condos	411 Shore Dr - 14 Units 211 Hammonds Plains Rd. - 36 Units 41 Moirs Mill Rd. - 41 Units 212 & 220 Waterfront Dr. - 77 Units	168	EDUCATION PACKAGES		

Date		Area	Streets/Units	Total # of residences/ units monitored:	Total # of residences to receive letters:	Total # of residences to receive stickers:	Total # of stickers issued:
Q2	Apr 25, 2025	Area 3: Bedford (Glen Moir)	Brookshire, Convoy, Arthur Lismer, Basinview, Meadowbrook, Orchard, Monarch	350	38	37	55
	May 01, 2025	Area 5B: Lower Sackville	Old Beaver Bank, Gloria, Dorothy, Douglas, Lois, Irene, Hillside, Davis, Rosebank	250	32	29	41
Q3	Jun 30, 2025	Area 2: Dartmouth (Portland Hills)	Streets Bounded by Portland, Portland Hills, Portland Estates	300	36	34	53
	Jul 31, 2025	Area 2: Dartmouth Condos	347 Portland Hills Dr. - 42 Units 621 Portland Hills & 52 Whitehall - 100 Units 73 Collins Grove - 12 Units 75 Collins Grove - 56 Units	210	EDUCATION PACKAGES		
Q4	Sep 23, 2025	Area 2: Dartmouth (Portland Estates)	Streets Bounded by Russel Lake Dr, Eisener Blvd, Rosehill Dr, Diana, Race Ave	250	25	24	41
	Sep 24, 2025	Area 2: Western County (Hatchet Lake)	Streets Bounded by Fiddle Pkwy and Forest Glade Dr, Brookside Rd, Northcliffe Loop	300	29	25	50
	Oct 21, 2025	Area 3B: Hammonds Plains	Streets Bounded by St George Blvd, Voyageur Way Including Cul De Sacs on Voyageur	150	15	14	21
TOTAL				3,129	261	249	401

3.2 HSW Promotion and Education

HRM provides a Household Special Waste (HSW) program to capture special wastes that are generated in homes. The program includes a permanent HSW Depot located at 20 Horseshoe Lake Drive in the Bayer's Lake Business Park. It is open on most Saturdays from 9:00 am to 4:00 pm. Additionally, the Municipality hosts mobile HSW Depot events each year to service residents in communities across HRM to provide easier access to the program. In 2025, HRM held 17 mobile events across Halifax, including suburban and rural areas such as Musquodoboit Harbour, St. Margaret's Bay, Fall River, Brookside, and Eastern Passage. Locations and amounts collected have been previously provided to NSECC in annual reporting for the HSW facility.

In 2025, HRM continued its modified implementation of HSW messaging into its education strategy to promote the proper management of HSW materials, including:

1. Paid social media posts on HSW Alternative Disposal Options focusing on: paint, medication, batteries, lightbulbs, motor oil and antifreeze, and propane tanks.
2. Webinars: 30-minute webinars offered on-demand to the public, focusing on proper management of HSW materials and disposal options for items such as fuel, paint, and electronics. We generally receive 3-4 requests for webinars per year. This information is also incorporated into our What Goes Where presentations.
3. *Halifax Recycles*¹⁰ social media posts (ongoing throughout 2025) – regular Facebook posts to promote proper management of HSW. Examples of topics covered in 2025 include:
 - a. Paper (16 posts with over 130 000 combined views);
 - b. Yard waste (2 posts with 140,856 combined views);
 - c. Needles and sharps (4 posts with 3,609 combined views);
 - d. Electronics (2 posts with 3,256 combined views);
 - e. Batteries (5 posts with 77,175 combined views);
 - f. Aerosol cans and left over paint (3 posts with 4204 combined views);
 - g. Used motor oil (17 Mobile HSW posts with 8500 combined views; and,
 - h. Regular advertising of 2025 Mobile HSW Event locations.
4. Continuing HSW Alternatives Advertisement through the promotion of stewardship programs, such as Call2Recycle, EPRA, UOMA, and Product Care.
5. Ongoing promotion of stewardship programs such as Call2Recycle, Paint recycling, UOMA, and Tire Recycling
6. Additional promotion, such as Christmas waste sorting and food reduction on Global Morning News

¹⁰ <https://www.facebook.com/HalifaxRecycles/>

3.3 Curbside Enforcement

3.3.1 New stickering categories

New categories were introduced on collection education rejection stickers in late 2022 related to Compostable Waste and cardboard in the garbage stream. In 2025, these stickers accounted for approximately 12% of all curbside rejections as summarized in Table 7. HRM continues to work with contracted haulers to review inspection protocols for the presence of banned materials in the garbage stream through curbside monitoring, hauler education sessions, and feedback from Performance Audit results.

Table 7 - Stickering Counts for 2022 to 2025 - Compostable Waste and Cardboard

Totals	New/Modified Rejection Stickers		Total from New Stickers	Total Stickers All Categories
	Compostable Waste Rejections	Unacceptable Materials Rejections (Cardboard)		
2022 (Nov-Dec)	286	298	584	4,928
2023	1,391	1,850	3,241	16,710
2024	795	1,549	2,344	13,646
2025	1,045	1,923	2,968	25,509

3.3.2 Curbside Monitoring

HRM's Operations Team regularly complete curbside monitoring to audit waste hauler performance in applying education rejection stickers. Using the daily collection route logs submitted by contracted haulers, HRM staff compare where education rejection stickers have been applied by the hauler against HRM staff observations. Any discrepancies are used to provide feedback or training to the contracted hauler and to assess performance to take necessary steps to increase compliance. Curbside Monitoring was conducted at all curbside residences in Table 6, typically two weeks prior to Feedback Monitoring (i.e., the previous garbage collection day).

3.4 Landfill Operations - WDRs

Waste Discrepancy Reports (WDRs) for residential waste were implemented as part of the Compliance Plan, and are used as a warning and load rejection mechanism, as well as to facilitate follow-up with residential haulers. Visually identified white goods or bulky wastes that can be recycled and that can be safely removed from the working face are removed with the use of heavy equipment, noting that HRM provides separate collection services for white goods and metals.

In 2025, a total of 40 WDRs were issued, as summarized in Table 8. In some cases, WDRs were issued for more than one issue (i.e., one WDR could contain a notice for both compostable waste and scrap metal).

Table 8 - Residential WDRs for 2025 in comparison to previous years

Item	2023	2024	2025
Hot Water Tank/heater/cooler	12	3	0
BBQ/Lawnmower/Heavy Scrap	20	8	4
Appliances (Stove, Dryer, etc.)	11	2	7
Propane Tank	4	1	0
A/C UNIT	3	0	0
Fridge/Freezer/Mini Fridge	3	1	0
Metal Bathtub	1	2	1
C&D/Wood/Pallets	0	0	3
LYW/Organics	22	6	24
Recyclables	1	3	0
HSW	0	0	1
Total	77	26	40

Section 4 - Analysis

4.1 Compliance Plan Results

To focus strategies within the Compliance Plan toward meeting the Performance Target, Performance Audit results are analyzed granularly and divided out by waste stream. Table 9 displays the average % materials by area, broken out by total fibre (cardboard and mixed paper), food and putrescible waste, and leaf and yard waste. Overall, the ratio of recyclable, dry fibre (cardboard and paper) has been increasing as food and yard wastes decrease. For 2025/26, Condos had higher amounts of food waste in comparison to other areas, whereas Areas 1, 2, 8, and Condos had a higher ratio of fibre waste.

Table 9 - Breakout of Fibre, Food, and Yard Wastes in the Performance Audits for 2025/26

Collection Area	2024/25 % Compostable by Material			
	Total Fibre	Food/ Putrescible Waste	Yard Waste	% Total
1 – Halifax	7.22%	3.02%	0.00%	10.24%
2 – Dartmouth	7.97%	3.78%	0.08%	11.82%
3 – Bedford/Hammonds Plains	5.33%	4.21%	0.00%	9.54%
4 – Western County**	5.06%	2.97%	0.00%	8.03%
5 – Sackville/Beaverbank/ Fall River/Waverley	6.60%	3.17%	0.05%	9.83%
6 – Cole Harbour/Eastern Passage/Cow Bay	4.96%	3.40%	0.00%	8.36%
7 – Porters Lake/Preston/Lake Echo	4.17%	5.12%	0.10%	9.39%
8 - Eastern Shore, Musquodoboit Valley	8.35%	3.12%	1.85%	13.32%
Condos (Dartmouth)	8.69%	7.59%	0.48%	16.76%

Table 10 shows a comparison of the breakdown of fibre, food/putrescible waste, and LYW for the past two years of the Compliance Plan. Overall, food and yard wastes continue to trend downward, with paper trending upward in some areas.

Table 10 - Materials breakdown comparison for the previous two years

Collection Area	Fibre	Fibre	Food	Food	LYW	LYW
	2024/25	2025/26	2024/25	2025/26	2024/25	2025/26
1 – Halifax	7.16%	7.22%	3.89%	3.02%	0.15%	0.00%
2 – Dartmouth	4.29%	7.97%	6.05%	3.78%	0.10%	0.08%
3 – Bedford/Hammonds Plains	5.73%	5.33%	6.80%	4.21%	0.04%	0.00%
4 – Western County	4.24%	5.06%	5.64%	2.97%	0.02%	0.00%
5 – Sackville/Beaverbank/Fall River/Waverley	4.32%	6.60%	5.57%	3.17%	0.03%	0.05%
6 – Cole Harbour/Eastern Passage/Cow Bay	4.40%	4.96%	4.92%	3.40%	0.02%	0.00%
7 – Porters Lake/Preston/Lake Echo	3.74%	4.17%	3.85%	5.12%	0.06%	0.10%
8 - Eastern Shore, Musquodoboit Valley	4.95%	8.35%	8.10%	3.12%	0.00%	1.85%
Condominiums (Condos)	7.16%	8.69%	22.62%	7.59%	0.84%	0.48%

Table 11 compares the per cent Compostable Waste in Year 4 to previous years of the Compliance Plan, reflecting the progress of individual areas in meeting the Performance Target.

Table 11 - Analysis of Year 3 Performance Audit Results to the Baseline Year

% Compostable Waste Comparison					
Area and Description	2022/23 Baseline	Year 2 2023/24	Year 3 2024/25	Year 4 2025/26	Trend
1 - Halifax	15.15%	10.90%	11.19%	10.28%	↓
2 - Dartmouth	14.50%	11.23%	10.44%	11.82%	↑
3 - Bedford/Hammonds Plains	14.59%	14.33%	12.57%	9.54%	↓
4 - Western County	9.30%	14.98%	9.91%	8.03%	↓
5 - Sackville/Beaver Bank/Fall River/Waverley	11.70%	9.04%	9.91%	9.83%	↓
6 - Cole Harbour/Eastern Passage/Cow Bay	9.42%	9.03%	9.33%	8.36%	↓
7 - Porters Lake/Preston/Lake Echo	8.90%	6.14%	7.65%	9.39%	↑
8 - Eastern Shore/Musquodoboit Valley*	10.55%	13.09%	13.06%	13.32%	→
Condominiums (Condos)	13.75%	22.72%	30.62%	16.76%	↓
Total Weighted % Compostable	12.41%	11.64%	11.50%	10.35%	↓

Greater than 10% above performance target (>11%)
Within 10% of performance target (Between 10-11%)
Meeting performance target (<10%)

Based on the results of the Performance Audits in 2024/25, Areas 3, 4, 5, 6, and 7 are meeting the 2025 Target of 10.00%, with Area 1 within 10% of the target. Collection areas 2, 8, and Condos are above the Performance Target, with Areas 1, and Condos trending downward in comparison to their results in 2022/23 and 2023/24. Area 8 remains relatively unchanged, outlining the challenges in rural areas.

4.2 Curbside Collections vs. Multi-residential

Waste diversion in multi-residential households is a common challenge throughout Nova Scotia for a number of reasons, including space constraints and the anonymity of communal waste rooms¹¹. Due to the different challenges and ways those two residential sectors are educated, data was analyzed to view curbside collections and multi-residential housing (Condos) separately.

Table 12 below shows that when viewing only curbside collection (Areas 1 to 8), the weighted compostable average is 10.04%, which nearly meets the target of 10.00%. However, when viewing condominiums on their own in Table 13, the weighted average is 16.76% and has been increasing annually. Although condominiums consist of only 4.6% of the waste stream by tonnage, they are actually responsible for nearly 8% of the food, yard, and fibre waste going into the landfill.

Table 12 - Weighted % compostable waste for curbside collection (condos removed)

Waste Collection Area	Three Year Waste Average (tonnes)	Average Total Compost per Area	Estimated Annual Compostable Waste
1 - Halifax	9,886.00	10.28%	1016.15
2 - Dartmouth	6,744.75	11.82%	797.50
3 - Bedford/Hammonds Plains	4,435.01	9.54%	423.18
4 - Western County	5,337.22	8.03%	428.49
5 - Sackville/Beaver Bank/Fall River/Waverley	8,633.03	9.83%	848.24
6 - Cole Harbour/Eastern Passage/Cow Bay	5,075.21	8.36%	424.40
7 - Porters Lake/Preston/Lake Echo	2,894.99	9.39%	271.89
8 - Eastern Shore/Musquodoboit Valley*	3,230.78	13.32%	430.30
Total	46,237		4,640.14
Weighted Compostable Average:			↓10.04%

Table 13 - Weighted % compostable waste for condominiums

Area	% Compostable Waste		
	Baseline 2022/23	Year 2 2023/24	Year 3 2024-25
Condominiums (Condos)	13.75%	22.72%	↓16.76%

¹¹ <https://divertns.ca/sites/default/files/researchreportsfiles/2022-05/Best%20Practices%20to%20Improve%20Apartment%20Building%20Waste%20Management%20-%20Drew%20DeCoste%2C%20Dalhousie%20University.pdf>

4.3 How HRM Uses the Audit Data – Capture and Generation Rates

The Compliance Plan sets a target on certain degradable wastes in the garbage stream at the landfill, called “% Compostable Waste” in the Compliance Plan, which is the ratio of food, yard, and fibre wastes to the other types of garbage going to landfill. However, this % Compostable number is a ratio, and so will change based on the amounts of “other waste” contained within the 89.65% in Figure 1 of Section 2.2.3. For example, if more non-compostable waste is landfilled, the denominator gets larger. This makes the % Compostable Waste seem lower, even if there is no change in the amount of Compostable Waste going to landfill. This is because the % Compostable Waste number is a ratio that concentrates on the garbage stream as the denominator, which is an amount with many outside influences.

In order to understand the full effects of both the Compliance Plan and HRM’s other waste initiatives on diversion, the capture and generation rates of HRM’s green cart materials are taken into context¹² in Table 14. As the majority of fibre seen in the audits (cardboard and office/mixed paper) are clean recycling and not actually “compostable” (i.e., not accepted in the composting program), this analysis will concentrate on the food/putrescible and yard wastes accepted in HRM’s green cart program. Capture rates for organics are calculated by dividing the tonnages of green cart materials going to the composting facility by the total tonnage of residential green cart materials going to the composting facility and the landfill (i.e., generated).

Table 14 – Residential green cart generation and capture rates for 2025

Collection Area	2025 Total Green Cart Materials Generated kg/hh	2025 Green Cart Materials to Compost Facility kg/hh	2025 Green Cart Capture Rate
1 - Halifax	291	282	96.92%
2 - Dartmouth	285	274	96.15%
3 - Bedford/Hammonds Plains	301	288	95.70%
4 - Western County	224	215	96.01%
5 - Sackville/Beaver Bank/Fall River/Waverley	262	252	95.87%
6 - Cole Harbour/Eastern Passage/Cow Bay	280	268	95.80%
7 - Porters Lake/Preston/Lake Echo	191	176	91.71%
8 - Eastern Shore/Musquodoboit Valley	88	68	77.29%
Condos	88	69	78.90%
Total/Average	248	237	95.26%

¹² A capture rate review on recycling is not possible as HRM does not have data regarding tonnages of residential fibre entering the recycling facility.

Table 14 shows that the capture rate for all collection areas is 95.3%. The majority of areas, 1 through 7, are all above a 90% capture rate, with Condos and Area 8 considerably lower at 78.9% and 77.3%, respectively. Upon review, Area 8 and condominiums have a lower generation rate of compostable waste, but also a low capture rate. In these two areas where education on proper diversion would be of more benefit, the lower numbers are reflective of the challenges seen in rural areas and multi-residential buildings. Table 15 below compares the green cart program capture rates for 2022 to 2025. Overall, the capture of green cart organics increased from 91.4% in 2022 to 95.3% in 2024. Generally, the capture rate for HRM's green cart program has remained above 90% capture of source separated organics (SSO) since prior to the closure of the FEP and WSF in late 2022.

Table 15 - Green cart program capture rates for 2022 to 2025

Collection Area	2022	2023	2024	2025
1 - Halifax	92.10%	93.70%	95.80%	96.92%
2 - Dartmouth	92.20%	94.40%	93.40%	96.15%
3 - Bedford/Hammonds Plains	90.40%	90.40%	92.70%	95.70%
4 - Western County	91.70%	84.30%	92.30%	96.01%
5 - Sackville/Beaver Bank/Fall River/Waverley	92.10%	93.70%	92.70%	95.87%
6 - Cole Harbour/Eastern Passage/Cow Bay	93.20%	93.30%	93.80%	95.80%
7 - Porters Lake/Preston/Lake Echo	90.80%	94.80%	92.90%	91.71%
8 - Eastern Shore/Musquodoboit Valley	69.80%	63.10%	63.20%	77.29%
Condos	81.20%	64.90%	65.50%	78.90%
Total Weighted Average Capture Rate	91.4%	91.1%	92.4%	95.3%

In November, 2020, Dillon Consulting wrote an FEP/WSF Closure Report¹³ on behalf of Mirror NS, which stated that the estimated tonnage of organics going to the Otter Lake Landfill had fallen from over 30,000 tonnes per year in 2004, to 4,100 tonnes in 2019. When comparing the tonnages of residential green cart materials estimated to be going into the landfill in Table 16, tonnages have decreased from approximately 4,100 tonnes in 2019, down to 1,833 tonnes in 2025, culminating in a 55.3% decrease over 6 years.

Table 16 – Residential green cart materials estimated to be going to landfill, in metric tonnes

Est. tonnes Green Cart Waste in Garbage				
2019	2022	2023	2024	2025
4,109	3,556	3,513	2,891	1,833

¹³ https://cdn.halifax.ca/sites/default/files/documents/home-property/garbage-recycling-green-cart/2020-11-30%20Dillon%20Report%20FEP-WSF%20Closure%20Review%20-%20Update%20-%2030Nov2020_Redacted.pdf

Section 5 – Next Steps

Based on the above information, as well as observations made during the various Compliance Plan activities, Table 17 details how the Compliance Plan will be further focused in 2026.

Table 17 - Compliance Plan Strategy for 2026

Analysis or Observation	Targeted Response
Challenges in rural areas, such as Area 8, in terms of education, enforcement, and monitoring.	HRM is developing a Rural Communications Strategy that will outline a range of communication approaches and tactics for effectively reaching suburban and rural community members. This strategy will include the communities within Area 8 and will be integrated into Compliance Plan responses as tools and options become available.
Challenges in multi-residential condominiums (“Condos”) in terms of education, enforcement, and monitoring.	As part of the Solid Waste Strategy review, HRM is advancing a number of initiatives to address lower diversion rates in condominiums. These include involving Solid Waste staff as reviewers for new and renovated developments to support proper waste infrastructure design, as well as the development of Solid Waste Design Guidelines for multi-residential and commercial buildings.
	As part of the Solid Waste Strategy review, HRM is exploring the implementation of a mandatory clear bag program for all commercial properties (including condominiums and apartment buildings). This initiative requires amendments to the solid waste by-law.
An increase in paper and cardboard waste.	HRM has developed and launched a “Paper Isn’t Garbage” campaign, building on the success of the “Food Isn’t Garbage” campaign launched in 2022, with the intent to increase the diversion of recyclable paper and cardboard.
Ongoing: Tailored messaging based on observations in the audits.	HRM will continue to deliver targeted education informed by trends observed in Performance Audits, including messaging related to small kitchen appliances and recyclable paper products.

Section 6 – Progress Summary: Halifax Solid Waste Strategy

HRM Solid Waste has completed Phase 1 of the Solid Waste Strategy Review, and consultant reports are posted to the HRM Shape Your City website¹⁴. Phase 1 was approved in Council¹⁵ on June 13, 2024, with direction given to proceed with Phase 2.

Phase 2 included partner and public consultation on the strategy, specifically for:

- IC&I clear bag policy
- Opportunities to improve waste management in multi-residential properties
- Policy approaches to improve textile diversion
- Garbage/organics automated cart collection
- Opportunities to increase reuse and diversion of construction and demolition waste
- Circular economy initiatives
- Litter abatement

HRM is now in the process of writing the final Strategy document, for presentation to Halifax Regional Council in 2026.

¹⁴ <https://www.shapeyourcityhalifax.ca/solid-waste-strategy-review>

¹⁵ <https://cdn.halifax.ca/sites/default/files/documents/city-hall/regional-council/240709rc1541.pdf>

ATTACHMENTS

1. May 2025 Performance Audit
2. August 2025 Performance Audit
3. November 2025 Performance Audit
4. February 2026 Performance Audit

<https://www.halifax.ca/otterlake>