



**METRO VANCOUVER REGIONAL DISTRICT
SOLID WASTE AND RECYCLING INDUSTRY ADVISORY COMMITTEE**

**Tuesday, July 9, 2024
2:00 pm – 4:00 pm
A G E N D A**

1. AGENDA

1.1 July 9, 2024 Meeting Agenda

2. MINUTES

2.1 June 11, 2024 Meeting Minutes

3. REPORTS AND ITEMS FOR DISCUSSION

3.1 Follow-up on organics management/capacity

For input/feedback

Designated Speaker: Paul Henderson, General Manager, Solid Waste Services

3.2 Draft Metro Vancouver 5-Year Capital Plan

For input/feedback

Designated Speaker: Paul Henderson, General Manager, Solid Waste Services

3.3 Long-Term Disposal Planning / Vancouver Landfill

For input/feedback

Designated Speaker: Paul Henderson, General Manager, Solid Waste Services

Small group and plenary discussions proposed questions:

- *What infrastructure is most important for Metro Vancouver to prioritize for public investment?*
- *How should the private sector be involved in infrastructure development for the region?*

4. OTHER BUSINESS

4.1 Zero Waste Committee and Other Updates

For information

Designated Speaker: Paul Henderson, General Manager, Solid Waste Services

5. INFORMATION ITEMS

5.1 Regional Waste Flows

5.2 2024 Work Plan

Committee Co-Chairs:

Director Craig Hodge, Zero Waste Committee Vice-Chair

Lori Bryan, Executive Director, Waste Management Association of BC

Membership:

Abrams, Izzie – Waste
Connections of Canada

Bryan, Lori – Waste Management
Association of BC

Collins, James – Tymac Launch
Service Ltd.

Crawford, Jeremy – Waste Control
Services

Deol, Harwant – Super Save Group
Dietrich, Christian – Ecowaste
Industries

Diamant, Jen – Capital Salvage

Furtado, Glen – Cement
Association of Canada

Gontovnick, Jeff – 1-800-GOT-
JUNK?

Hankins, Grant – Canada
Minibins.com Ltd.

JansenVandoorn, Josh – Anaconda
Systems Ltd.

Jessa, Imran – Delta Textiles
Exporters Inc.

Johnson, Gord – Northstar
Kaminski, Jamie – HSR Zero Waste

Kawakami, Sean – Convertus Canada
Ltd.

Kiani, Aiden – Lock-Block Ltd.

Koehn, Leanne – Ridge Meadows
Recycling Society

Lannin, Mike – Super Save Group
MacNeil, Patrick – Wescan Disposal
Ltd.

MacFarlane, Angus – Growing City
Mallari, Achilles – Sierra Waste
Services Ltd.

McAra, Matthew – GFL
Environmental Inc.

McRae, Ralph – Revolution
Infrastructure Inc.

Millman, David – Waste

Management of Canada Corp.

Moucachen, Maya – Merlin Plastics

Pantazopoulos, Dimitri – Waste
Connections of Canada

Prasad, Shad – Cascade Recovery +
Scaldaferri, Fabio – Pacific Mattress

Recycling Inc.

Skei, Dayton – Evergen

Infrastructure Corp.

Sigmund, Sandy – Encorp Pacific
Canada, Return-It

Turner, John – BC Biocarbon Ltd.

Van de Wetering, Jasper –
Heidelberg Materials Canada Ltd.

Vargas, Pinky - Republic Services

Young, Stewart, GFL Environmental
Inc.

Zarbl, Michael - Major Appliance
Recycling Roundtable

Metro Vancouver and City of Vancouver Staff:

Allan, Chris – Metro Vancouver

Belanger, Lynn – City of Vancouver

Henderson, Paul – Metro
Vancouver

Joy, Samantha - Metro Vancouver

Liu, Stephanie – Metro Vancouver

McDermott, Jon – City of Vancouver

Mizan, Zeenia – Metro Vancouver

Underwood, Chris – Metro
Vancouver

Vidler, Lynne – Metro Vancouver

**METRO VANCOUVER REGIONAL DISTRICT
SOLID WASTE AND RECYCLING INDUSTRY ADVISORY COMMITTEE MEETING**

Minutes of the Regular Meeting of the Solid Waste and Recycling Industry Advisory Committee Meeting held at 2:00 p.m. on Tuesday, June 11, 2024, via Zoom Video Conference.

MEMBERS PRESENT:

| | |
|---|---|
| Lori Bryan, Waste Management Assoc. of BC (Co-Chair) | Matthew McAra, GFL Environmental Inc. |
| Craig Hodge, Director, Metro Vancouver Board of Directors (Co-Chair) | Ralph McRae, Revolution Infrastructure Inc. |
| Edwin Berkhof, Evergen Infrastructure Corp. | David Millman, Waste Management of Canada Corp. |
| Jeremy Crawford, Waste Control Services | Maya Moucachen, Merlin Plastics |
| Happy Deol, Super Save Group | Dimitri Pantazopoulos, Waste Connections of Canada |
| Glen Furtado, Cement Association of Canada | Shad Prasad, Cascade Recovery + |
| Grant Hankins, Canada Minibins.com Ltd. | Ken Schultze (Alternate for Fabio Scaldaferrri), Pacific Mattress Recycling Inc. |
| Josh JansenVandoorn, Anaconda Systems Ltd. | Sandy Sigmund, Encorp Pacific Canada, Return-It |
| Gord Johnson, Northstar | John Turner, BC Biocarbon Ltd. |
| Jamie Kaminski, HSR Zero Waste | Jasper Van de Wetering, Heidelberg Materials Canada Ltd. |
| Sean Kawakami, Convertus Canada Ltd. | Pinky Vargas, Republic Services |
| Mike Lannin, Super Save Group | Stewart Young, GFL Environmental Inc. |
| Patrick MacNeil, Wescan Disposal Ltd. | |
| Achilles Mallari, Sierra Waste Services Ltd. | |

MEMBERS ABSENT

| | |
|--|--|
| Izzie Abrams, Waste Connections of Canada | Leanne Koehn, Ridge Meadows Recycling Society |
| James Collins, Tymac Launch Service Ltd. | Aiden Kiani, Lock-Block Ltd. |
| Jen Diamant, Capital Salvage | Angus MacFarlane, Growing City |
| Christian Dietrich, Ecowaste Industries | Michael Zarbl, Major Appliance Recycling Roundtable |
| Jeff Gontovnick, 1-800-GOT-JUNK? | |
| Imran Jessa, Delta Textiles Exporters Inc. | |

METRO VANCOUVER (MV) AND CITY OF VANCOUVER STAFF:

Terry Fulton, Senior Project Engineer, Solid Waste Services
Zack Ha, Administrative Assistant, Solid Waste Services
Paul Henderson, General Manager, Solid Waste Services
Samantha Joy, Engagement Specialist, Solid Waste Services
Karen Storry, Senior Project Engineer, Solid Waste Services
Adrianna Velazquez, Senior Project Engineer, Solid Waste Services
Chris Clarke, Engagement Specialist, Solid Waste Services

PREPARATION OF MINUTES: Justine Wiklo, Raincoast Ventures Ltd.

Solid Waste and Recycling Industry Advisory Committee Meeting

June 11, 2024
2:00 PM – 4:00 PM
Zoom

Agenda

1. Agenda
 - 1.1. June 11, 2024, Meeting Agenda
2. Minutes
 - 2.1. May 14, 2024, Meeting Minutes
3. Reports and Items for Discussion
 - 3.1. Disposal Ban Exemption Pilot Program
For Information and input
Designated speaker: Paul Henderson, Metro Vancouver
 - 3.2. Construction and Demolition Waste Management and Capacity
For input/feedback – small group discussions
Designated speaker: Karen Storry, Senior Project Engineer, Solid Waste
With respect to recycling capacity and product markets:
 - *What is currently working well?*
 - *What could be improved? What should be prioritized?*
 - *What are some examples of different solutions? Are there additional things we should be considering?*
4. Other Business
 - 4.1. Zero Waste Committee Updates
Verbal Update
Designated Speaker: Paul Henderson, General Manager, Solid Waste
5. Information Items
 - 5.1. Regional Waste Flows
 - 5.2. 2024 Work Plan

MEETING MINUTES

Co-Chair Lori Bryan called the meeting to order at 2:03 p.m. and welcomed attendees to the Solid Waste Industry and Recycling Advisory Committee meeting. Participants were reminded to use the Zoom “raised hand” function to provide questions or comments or for any voting that might be required, and to ensure their names were correctly identified in the participant list.

1. AGENDA

1.1 June 11, 2024, Meeting Agenda

Co-Chair Bryan reviewed the June 11, 2024 meeting agenda. No additions were made.

2. MINUTES

2.1 May 14, 2024, Meeting Minutes

Co-Chair Bryan called for any additions or changes to the meeting minutes of May 14, 2024. There were no changes or additions to the meeting minutes of May 14, 2024.

It was noted that the minutes indicate that the feedback summary from the small group and plenary discussions at the May meeting are posted on the Industry Advisory Committee website; however, that information item has not yet been posted. The minutes will be amended and members will be notified by email when the May meeting feedback summary is posted.

3. REPORTS

3.1 Disposal Ban Exemption Pilot Program

Co-Chair Hodge introduced the Disposal Ban Exemption Pilot program that is in development, noting that this is an initiative meant to incentivize recycling at the source. The program is in the design and development stage, so there are opportunities for Industry Advisory Committee members to provide input into the program design, and also participate in the pilot program itself.

Paul Henderson, General Manager, Solid Waste, Metro Vancouver, reviewed information on the Disposal Ban Exemption Pilot Program, noting the following highlights:

- The goal is to develop a pilot program to be implemented in the hauling community that will provide incentives for working with generators and processors.
- We are looking for early input from participants in the industry – specifically, how can haulers demonstrate working with their customers and processors. We want to understand how the hauling community can participate in encouraging more sorting at the source, to get recyclables out of the waste stream.
- The current disposal ban process relies on visual inspections, which has limitations, for instance items in black bags being challenging to see. Dillon Consulting will be conducting interviews to get feedback on the design of the program

Participants were asked to consider if they had any initial ideas on elements that could be included in a pilot program to incentivize haulers to encourage recycling, and the following comments were offered in discussion:

- Previously when hauling a load, if there was a lot of cardboard, it was possible to go into the back of the truck to remove and sort it. This is no longer allowed due to safety

- concerns, which is understandable; however, it would be worthwhile having some the ability to remove recyclable materials from loads before disposing at the site
- For small haulers, the loads are inspected and charged, but the challenge is with large-scale commercial loads
 - Customers need to have additional space to have separate bins for plastics and recyclable materials, and this can be a challenge
 - There is the issue of capacity, with respect to where materials are accepted for recycling
 - With direct hauls from customer recycling, the driver is not going to sort the materials themselves; there are always going to be recyclable materials that do not have anywhere to go, such as some plastics
 - At a processing facility, the cost of recovery, as well as other impacts and safety measures, makes it challenging to remove materials from hauling trucks.
 - Lack of consistency in protocols for sorting - some private facilities will hand-sort materials, while others may have excavators to sort.

It was noted that Metro Vancouver wants to work with haulers and contractors to discuss these challenges and will be reaching out to Industry Advisory Committee members to participate in this pilot program or provide input on program design through an interview with Dillon Consulting.

3.2 Recycling and Organics Capacity and Product Markets

Co-Chair Bryan advised that feedback from the key topic small group discussions is recorded as feedback summaries that will be included in the solid waste management plan update feedback logs for the Idea Generation phase of engagement.

Karen Storry, Senior Engineer, Metro Vancouver, reviewed a presentation on recycling capacity and product markets, noting the following highlights:

- The goal is to increase recycling through additional capacity
- Single family homes have well developed infrastructure and access to recycling; however, access for multifamily and commercial buildings need improvement
- Plastics, paper, and organics make up the majority of recycled materials; there are gaps when it comes to things like mattresses or bulky furniture with these items being inconsistently recycled
- Metro Vancouver has implemented several educational programs and campaigns, which have been used to increase participation and decrease contamination
- A review of regulations is a tool that could be used to increase capacity, such as increased producer responsibility, single-use and plastic waste reduction, and regulation on organic matter recycling. These all have an impact on both the capacity and quality of the market.
- Voluntary standards and guidelines also support increased recycling, such as the Canada Plastics Pact, which works to eliminate plastics that do not have recycling markets
- There is the need for convenience and accessibility, and it is also known there are challenges with land cost and availability.
- Siting and approvals for new facilities can be a lengthy and challenging process to navigate.

Co-Chair Bryan introduced the following questions regarding recycling capacity and product markets for discussion in breakout groups:

- What is currently working well?
- What could be improved? What should be prioritized?
- What are some examples of potential solutions?

Small group discussion took place for 20 minutes. During discussion, it was noted that the feedback summary notes would be shared to the Industry Advisory Committee webpage when they are completed. Members will be notified when the notes are posted.

A plenary discussion continued after the small group sessions, and the following comments were offered:

- In 2013, when municipal organics were introduced, there were three facilities in Delta and Richmond that were processing over 420,000 tonnes of organics.
 - In 2018, one of these facilities shut down, leaving a gap of 250,000 tonnes of capacity, although the Surrey Biofuel opened shortly after
- Metro Vancouver has allowed commercial loads to have up to 25% organics, and many haulers mix organics with waste loads and received no fines; this material is still in the Metro Vancouver waste system and is not being recovered.
- There are capacity issues around the Lower Mainland – space/land, number of receiving facilities, and end use markets.
- A secondary issue is that there is a lot of large particle wood that cannot be recycled
- A priority should be to recycle those 150,000 tonnes or more of organics that are currently in the waste stream
- There is a potential to contract with a third party, to develop additional processing capacity
- If an organization wanted to establish a compost facility an application to the municipality is required; however, siting new facilities is very challenging, not due to regulation but the broader community concerns about having waste facilities in proximity
- The City of Surrey's organics processing facility has been seen as very successful.

Co-Chair Bryan thanked participants for the discussion.

4. OTHER BUSINESS

4.1 Zero Waste Committee Updates

Paul Henderson provided an update noting that The Zero Waste Committee agenda has been published; the meeting is on June 13, 2024. Items on the agenda include:

- Tipping Fee Bylaw updates related to the generator levy
- The draft vision and guiding principles for the solid waste management plan update is going forward for consideration. This has been revised after feedback heard from the Industry Advisory Committee, and other advisory committees

- In the Managers Report, there is a note on a contract extension with Food Mesh food recovery network, as well as information on upcoming Waste-To-Energy Facility operations and maintenance
- An RFP for operation of the Waste-to-Energy Facility will be posted; the current operator does not intend to carry on operations beyond March 2025
- A media event hosted by Renewal Development on June 18, 2024 will feature a project to move houses from a Coquitlam neighbourhood to a First Nations community in Agassiz.
- The new software system for weigh scales is being launched, and provides a range of new benefits:
 - automated license plate reading
 - the ability to email weigh scale tickets
 - PDF invoices
- An inventory of available educational materials and information that is available to haulers is being compiled – Metro Vancouver will share the information once complete..

5. INFORMATION ITEMS

5.1 Regional Waste Flows

5.2 2024 Work Plan

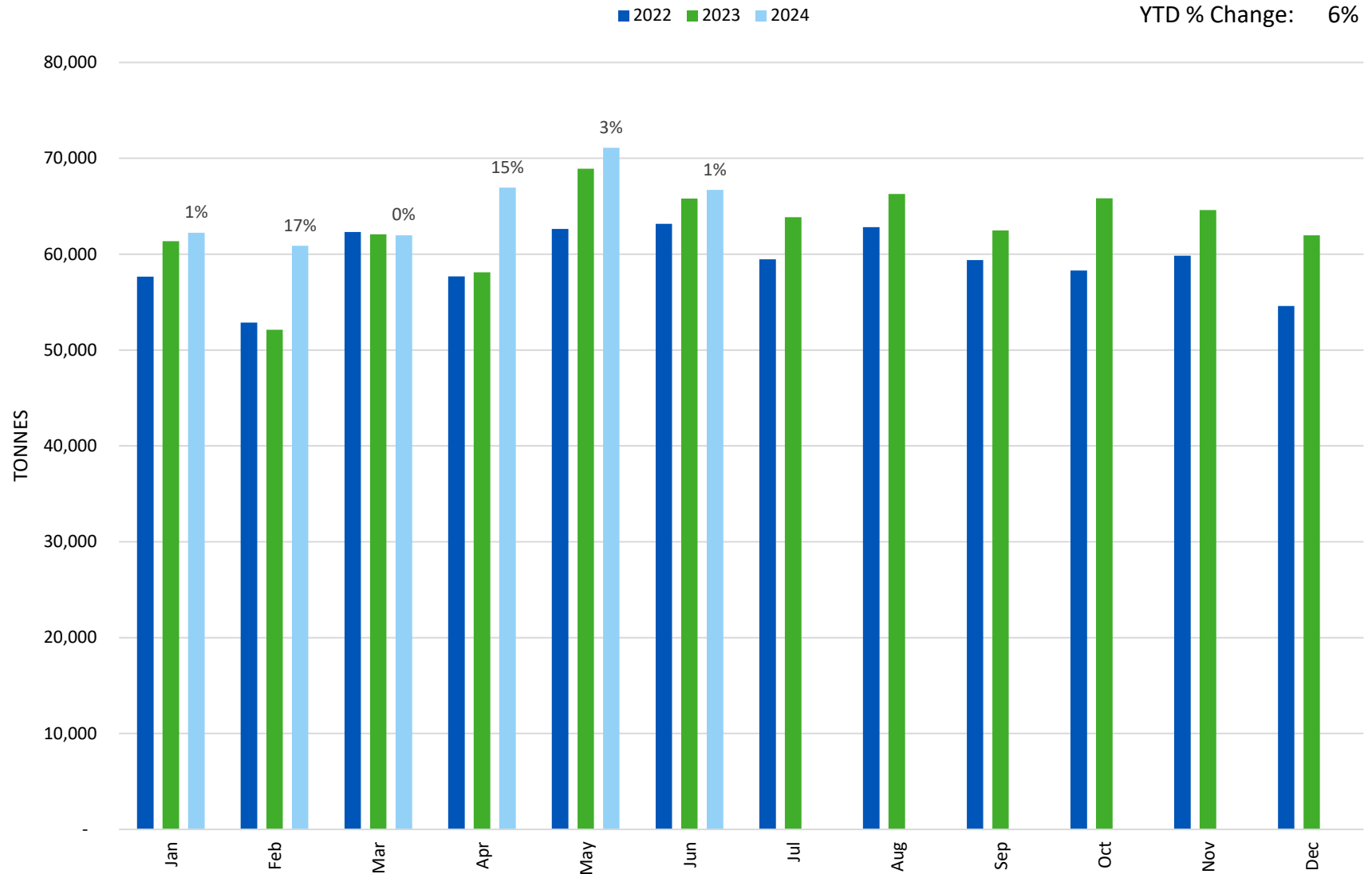
In reference to the information items, Co-Chair Bryan noted all were attached to the agenda package.

ADJOURNMENT

Co-Chair Brian thanked Industry Advisory Committee members for their participation, comments, and feedback, and advised that the next Solid Waste and Recycling Industry Advisory Committee meeting would be held on July 9, 2024, on Zoom, and will cover the topics of long-term disposal planning and Metro Vancouver capital plan.

The Solid Waste and Recycling Industry Advisory Committee meeting adjourned at 3:40 p.m.

Metro Vancouver Waste Quantities* 2022 - 2024**



**Data reconciled to Feb 2024

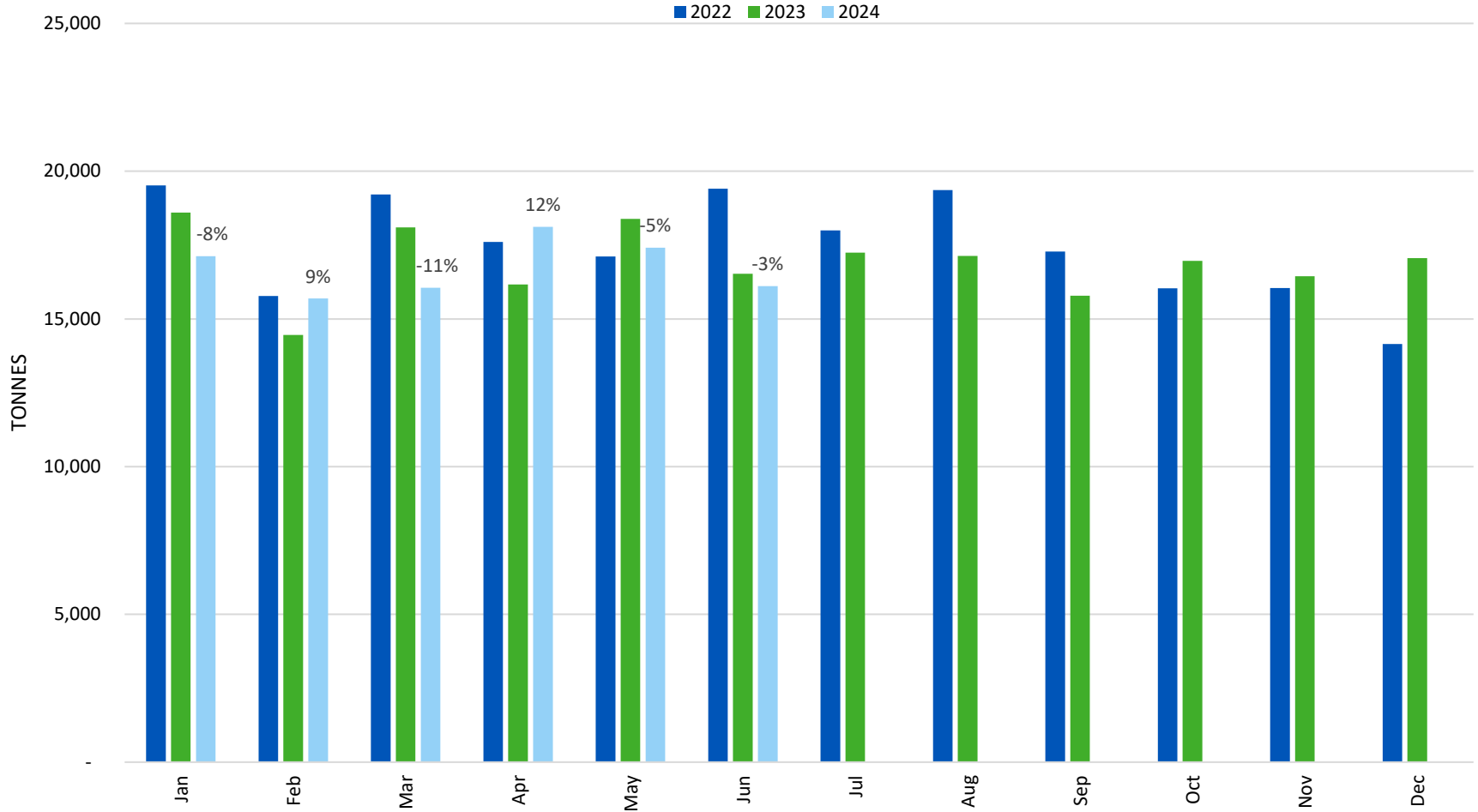
*Metro Vancouver's Six Recycling and Waste Centres & the Waste-to-Energy Facility

City of Vancouver Waste Quantities*

2022 - 2024

(Demo garbage not included)

YTD % Change: -2%



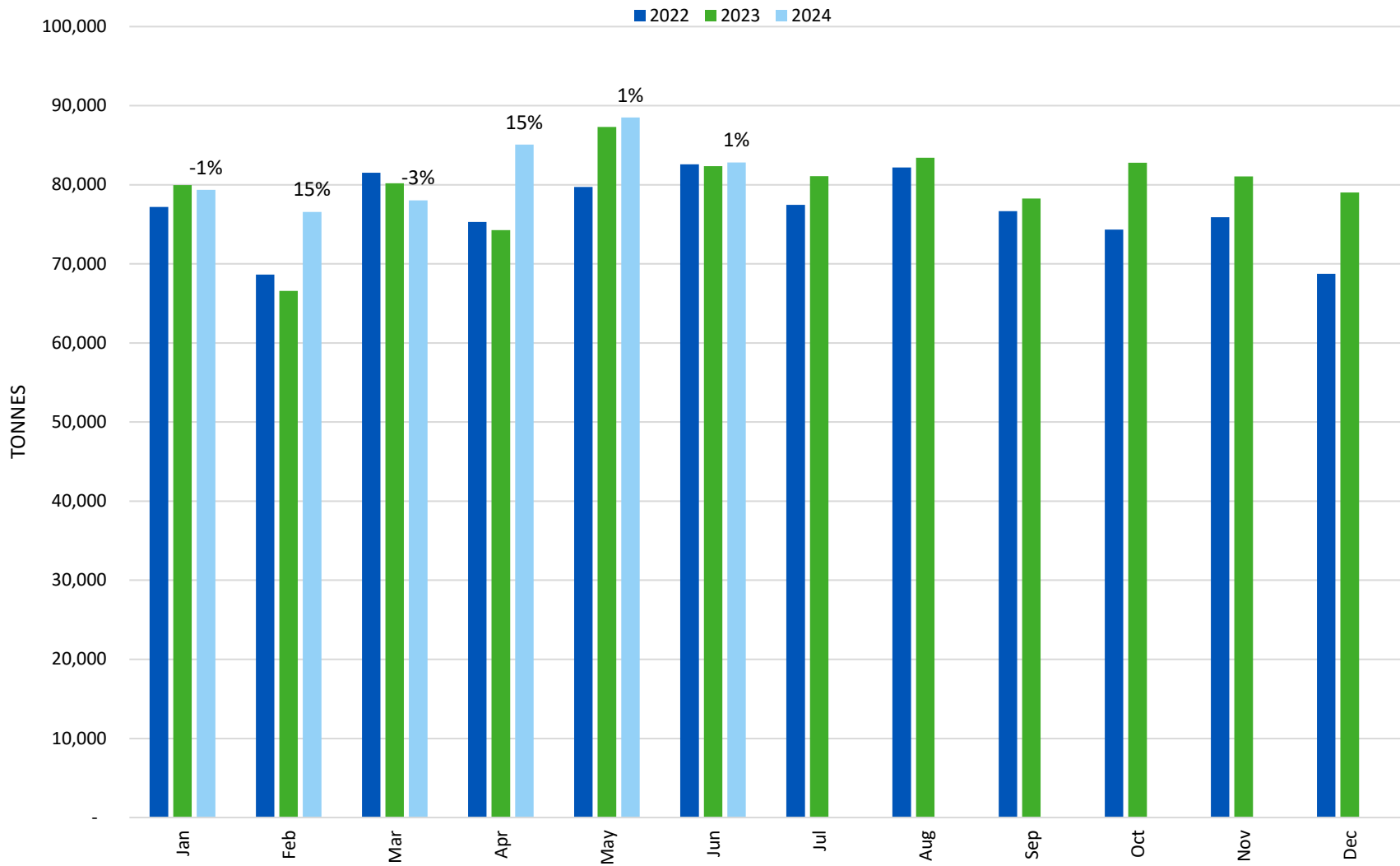
*Vancouver Landfill & Vancouver South Transfer Station

Metro Vancouver and City of Vancouver Waste Quantities

2022 - 2024*

(Demo garbage not included)

YTD % Change: 4%



*Metro Vancouver data reconciled to Feb 2024

SOLID WASTE AND RECYCLING INDUSTRY ADVISORY COMMITTEE 2024 WORK PLAN

July 9, 2024

| Quarter 1 | Status or Scheduled Month | Approach |
|---|---------------------------|------------------------|
| Call for Submissions for 2024 IAC Membership | Complete | Plenary |
| Concrete and Asphalt Recycling Review – Draft Study Scope | Complete | Plenary |
| <i>Integrated Solid Waste and Resource Plan</i> Biennial Report | Complete | Plenary |
| Residuals Management Options Review – Draft Study Scope | Complete | Plenary |
| Quarter 2 | Status or Scheduled Month | Approach |
| Construction and Demolition Waste Management and Capacity | Complete | Small group |
| Co-Chair Election (Nominations in March) | Complete | Plenary |
| Prioritize timeline for solid waste management plan development | Pending | TBD |
| Recycling capacity and product markets (including organics) | Complete | Small group |
| Solid Waste Management Plan Update – Idea Generation: Issue/Opportunity Report Review | Complete | Small group |
| Solid Waste Management Plan Update – Vision and Guiding Principles Report Back | Complete | Small group |
| Quarter 3 | Status or Scheduled Month | Approach |
| Metro Vancouver Capital Budget | In-progress | Small group |
| Vancouver Landfill/Long-term disposal planning (including contingency disposal) | In-progress | Small group |
| Public Education – role of public and private entities | Pending | TBD |
| Generator Levy and Competition | Pending – Sept | Small group |
| Circular Economy and Share/Reuse/Repair ideas | Pending | Small group |
| Quarter 4 | Status or Scheduled Month | Approach |
| Recycling Statistics/Metrics | Pending | Plenary |
| Solid Waste Management Plan Update – Idea Generation | Pending | Small group / workshop |

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Welcome

Burrard Inlet Port Lands



AGENDA

1. Agenda – July 9, 2024
2. Minutes – June 11, 2024
3. Reports and Items for Discussion
4. Other Business
5. Information Items

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Reports

Central Surrey Waste and Recycling Centre



3.1 ORGANICS MANAGEMENT / CAPACITY

Follow-up

- Metro Vancouver receives approximately 60,000 tonnes per year of organics at recycling and waste centres:
 - North Shore Single Family Residential
 - Yard Trimmings
 - North Shore Commercial
- Developing procurement process with goal of entering into a long-term contract for a portion of organics to be managed within a specified radius of United Boulevard



United Boulevard Recycling and Waste Centre Scale

SOLID WASTE SERVICES

2025 – 2029 DRAFT CAPITAL PLAN

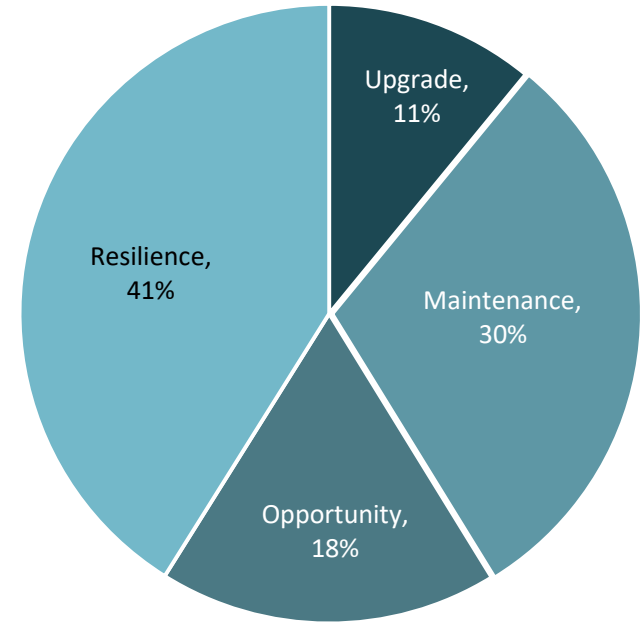
Paul Henderson, P.Eng.
General Manager, Solid Waste Services

Solid Waste and Recycling Industry Advisory Committee Meeting – July 9, 2024



CAPITAL PLAN DRIVERS

| Driver | Outcome | % 2025 - 2029 Capital Plan |
|-------------|---|----------------------------|
| Maintenance | Maintain assets in a state of good repair | 30% |
| Resilience | Minimize impacts resulting from seismic events and climate change | 41% |
| Upgrade | Enhance levels of service | 11% |
| Opportunity | Reduce life-cycle costs and/or achieve Board goals | 18% |



SOLID WASTE

2025 - 2029 Capital Plan Expenditures

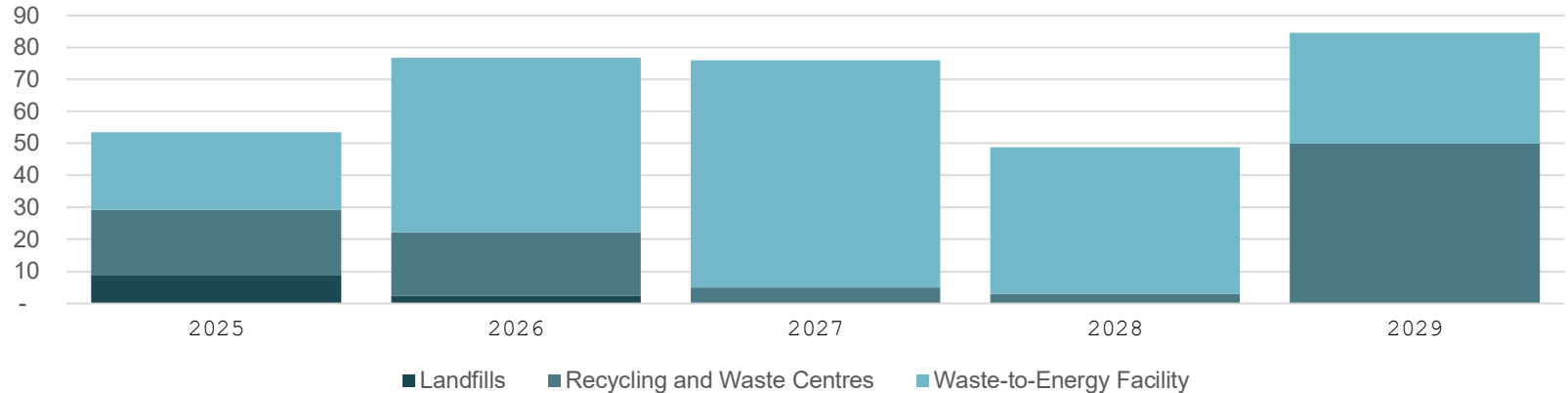
Overview:

- 2025 - 2029 Capital Plan: \$339.9M
- 2025 cash flow: \$53.4M
- 23 projects

Drivers:

- Waste-to-Energy Facility
 - Capital replacement
 - District Energy
- North Surrey and Langley Recycling Depots

2025-2029 Solid Waste Services Capital Plan (\$M)



2025-2029 CAPITAL EXPENDITURES

Key projects in the five year capital plan:

- Waste-to-Energy Facility District Energy project
- North Surrey and Langley recycling depot development
- Biosolids processing
- Waste-to-Energy facility maintenance and capital replacement projects
- Solid Waste Facility Land Purchase



Vancouver Landfill Site Plan

Long Term Disposal Planning / Vancouver Landfill

Paul Henderson, P.Eng.

General Manager Solid Waste Services

Solid Waste and Recycling Industry Advisory Committee Meeting – July 9, 2024

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RESIDENTIAL AND COMMERCIAL/INSTITUTIONAL GARBAGE

| Facility | 2023 Residential, Commercial and Institutional Garbage (tonnes)* |
|--------------------|--|
| Vancouver Landfill | 680,000 |
| Waste-to-Energy** | 220,000 |
| Contingency | 100,000 |
| Overall | 1,000,000 |



* Tonnages are still being finalized

**Waste-to-Energy Facility total was 236,000 tonnes including additional materials such as international waste and treatment plant residuals

2023 VANCOUVER LANDFILL TONNAGE

From 2023 Vancouver Landfill Annual Report

| Materials | Tonnage |
|------------------------------------|----------------|
| Residential and Commercial Garbage | 679,480 |
| Bottom Ash | 38,177 |
| Treatment Plant Residuals | 6,069 |
| Construction and Demolition Waste | 20,932 |
| Total | 743,608 |

SITE PLAN



Location: Delta

Ownership: City of Vancouver

Began Operations: 1966

Total Property: 320 Ha

Landfill Footprint: 225 Ha

Operational Certificate Limit:
750,000 tonnes/year

AGREEMENTS

Tri-Partite Agreement

- Between Vancouver, Metro Vancouver and Delta
- Outlines cost sharing framework
- Outlines benefits to Delta from Metro Vancouver
- Expires 2037

Vancouver-Delta Agreement

- Between Vancouver and Delta
- Outlines benefits to Delta from City of Vancouver
- Expires earlier of 2037 or 20,000,000 tonnes from 1997

VANCOUVER LANDFILL REMAINING CAPACITY PARAMETERS

| Parameter | Value |
|--|---------------------------|
| Waste capacity as of October 1, 1997 | 20 million tonnes |
| Remaining capacity as of December 31, 2022 | 4,913,453 tonnes |
| Year expected to reach 20 million tonnes based on current quantities | Approximately end of 2030 |

NEXT STEPS

- Conversations underway with City of Vancouver and City of Delta
- Physical capacity exceeds 20 million tonnes specified in Vancouver/Delta Agreement
- Delta's intent to renegotiate the financial terms of the relevant agreements in consideration of allowing for continued landfilling to 2037

RESIDUAL WASTE MANAGEMENT OPTIONS REVIEW

Morrison Hershfield has initiated residuals management study

Study objective

- Provide technical information on options for management of residual waste
- Provide an overview of considerations, potential options, and evaluation criteria

Focus Regions to Understand Current Residuals Management Practices

- Canada & United States
- European Union
- Japan
- Australia



TOGETHER
WE MAKE OUR REGION
STRONG

Central Surrey Recycling and Waste Centre

Thank you

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SMALL GROUP DISCUSSIONS

20 minutes

Proposed questions for discussion:

- What infrastructure is most important for Metro Vancouver to prioritize for public investment?
- How should the private sector be involved in infrastructure development for the region?

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Other Business

Ironworkers Memorial Bridge



4.1 ZERO WASTE COMMITTEE UPDATES – JULY

- Notice of Bylaw Violation Enforcement and Dispute Adjudication Bylaw
- Disposal Ban Program update
- Proposed new commercial organics fee
- 2023 waste composition data
- Manager's Report
 - Expanded reuse opportunities at North Shore Recycling and Waste Centre
 - RFQ posted publically for District Energy piping supply and installation

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Information Items



INFORMATION ITEMS

5.1 Regional Waste Flows – June

5.2 Industry Advisory Committee 2024 Work Plan

5.2 2024 WORK PLAN HIGHLIGHTS

Upcoming topics for discussion:



OCTOBER MEETING FORMAT

Idea generation – solid waste management plan update

- Opportunity to engage on the idea generation phase
 - Review discussion questions
 - Address topics that may have been missed during small group discussions

Poll: Would you prefer the October meeting be held virtually or in person?



Vancouver Skyline

Thank you

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